

**Tyler Technologies**

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Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs
TS-17-04-B--01-01	* All Forms must be completed, scanned and uploaded to BidSync	<b>Supplier Product Code:</b>	<b>First Offer -</b>	1 / each	Y	Y
Supplier Total					\$0.00	

**Tyler Technologies****Item: \* All Forms must be completed, scanned and uploaded to BidSync****Attachments**

7.1 Attachment C - Total Cost of Ownership Self Hosted Final.xlsx

7.3 Attachment C - Total Cost of Ownership SaaS Final.xlsx

8.1 Attachment\_D\_-\_Legal\_Information.docx

2017 Annual Report Booklet.pdf

SOW\_Tyler Technologies.pdf

City of Pembroke Pines FL - Proposal Response.pdf

4.1 Appendix A Vendor Questionnaire.docx

5.1 Attachment B - Technical Fit.xlsx

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## **APPENDIX D – LEGAL INFORMATION REQUESTED**

### **Tyler Technologies, Inc.**

- Please include a copy of your contracts and agreements, including but not limited to:
  - Software license agreements
  - Maintenance agreements
  - Standard Statement of Work (SOW)
  - Support agreements

**TYLER RESPONSE:** Tyler has provided these documents as a separate attachment.

- Please clearly identify any contract provisions that your organization considers “non-negotiable”.

**TYLER RESPONSE:** Tyler recognizes that there may be clauses of particular importance to the Client that may not be included in the Tyler contract. Tyler is amenable to accommodating the Client’s contract requests by incorporating mutually agreed clauses into the Tyler contract. While Tyler is reluctant to identify any provisions as categorically “non-negotiable”, some provisions such as intellectual property rights and limitation of liability have less flexibility than others.

- Please identify your organization’s contact in your Legal department in order to facilitate efficient and direct communications.

**TYLER RESPONSE:** Rob Kennedy-Jensen, Senior Corporate Attorney

- **Please provide answers to the following questions:**

#### **Licensing terms:**

1. How is the product licensed? Per operating system, active users, enterprise?

**TYLER RESPONSE:** Tyler’s licensing terms are set forth in Section B of its standard contracts. For a client-hosted solution, Tyler grants a perpetual, enterprise-wide license for your internal business purposes. SaaS licensing is not perpetual, and SaaS licensing and fees are based on the number of Defined Users using the Tyler software.



## 2. Any open source software? Identified?

**TYLER RESPONSE:** The only open source technologies used are Oracle Java development environment with Tyler Content Manager and ExecuTime, Apache Tomcat web server hosts Tyler Content Manager, and RedHat WildFly hosts ExecuTime. Nearly all other Tyler applications use industry standard platforms based on the Microsoft stack.

## 3. Any third-party software? How supported & updated?

**TYLER RESPONSE:** The only required third-party software are system requirements such as operating system, and RDBMS. Esri ArcGIS is also required for GIS integration. It is up to the client to support and update all client hosted third party software.

## 4. What features and functionality are covered in the documentation with the software?

### **TYLER RESPONSE:**

#### **Tyler Knowledgebase**

The KnowledgeBase provides users with a single, easily accessible location to find all available documentation related to our software. This tool uses a user-friendly search screen which can be accessed through the Support website. Search criteria include the ability to filter by version, search for key words, include only certain types of documentation, or perform system wide searches. Provided through the KnowledgeBase are process documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises, e-learning classes and much more. More than 90% of the documents available are in MS Word format so that they can be easily customized for use in training materials, custom documentation or process checklists.

#### **TylerU**

Tyler University is an e-learning solution to enhance support and training of your employees. Through this learning management system developed by Tyler Technologies, new and existing employees are provided an on-demand solution to acquire and refresh the skills needed to successfully implement and use your system day-to-day.

Tyler University's core modules include: financials, human resources, payroll and technology. Employees in the finance department can train on a wide range of topics from req-to-check, including requisition entry, creating a change order for a purchase order and purchase order receiving. For the human resources and payroll staff, Tyler University offers courses on the complete payroll process, the power of employee building and applicant tracking. For system administrators, courses include topics on role-based security design, administering the dashboard and role synchronization into Tyler Content Manager.



Courses are being added continuously into Tyler University, making it a vital resource for new employees and cross training your team.

\*Not available for all Tyler solutions and products.

**5. What if vendor bundles or unbundles underlying software with new product(s) having similar functionalities?**

**TYLER RESPONSE:** Tyler provides fully integrated solutions solely designed for the public sector. Master records are shared across multiple products throughout the system. This ensures a single data record is maintained across multiple applications, eliminating the need to “sync” or manually entering duplicate data in multiple areas. With integration information, users can “drill down” from summary to details, and “drill across” to related information in other applications. Finally, integrated applications have the same “look and feel” across most programs—so users learn just one set of conventions that apply everywhere.

**Professional Service Agreement (PSA) for configuration/migration/installation:**

**6. Is the PSA part of an integrated agreement with the software vendor? Or with approved contractors? Or both?**

**TYLER RESPONSE:** One of Tyler’s many strengths is that Tyler provides all implementation services with Tyler personnel, including installation, consulting, training, conversion, support and programming. Subcontractors are not necessary.

**7. If you require the use of approved contractors for services covered by a PSA, please provide a list.**

**TYLER RESPONSE:** Not applicable

**8. If a PSA is with an approved contractor only, how do you warranty the service work?**

**TYLER RESPONSE:** Not applicable

**9. Do you do background checks on contractor’s personnel?**

**TYLER RESPONSE:** Tyler’s hosting, implementation, maintenance, and support services are all performed within the continental United States.



10. Do you or contractors perform any service work offshore?

TYLER RESPONSE: Not applicable

11. What insurance requirements are there for approved contractors?

TYLER RESPONSE: Not applicable

**Acceptance:**

12. What is the time frame for acceptance testing?

TYLER RESPONSE: Client will have a maximum of a thirty (30) calendar day "Test Period" to test the System in a live production environment for, and to report, documented Defects.

13. Process for remediating non-conformance identified in testing?

TYLER RESPONSE: If Client reports a documented Defect during the Test Period, Client will notify Tyler in writing. Tyler will correct the Defect(s) or provide a mutually agreeable plan for future resolution of any Defect(s). A dispute with respect to the plan shall be addressed pursuant to the Dispute Resolution Process of this Agreement. Upon resolution of a Defect during the Test Period, Client may re-perform testing for a maximum of fifteen (15) calendar days. This procedure shall repeat until all Defects have either been resolved or the Client and Tyler, reasonably cooperating, have developed a mutually agreeable schedule for Defect resolution, at which point the Client shall issue Project Closure.

**Representations & Warranty:**

14. What is the term of the initial warranty period? When does it commence (upon acceptance or installation)?

TYLER RESPONSE: Tyler's Software and Services Warranties begin on the Effective Date of the Agreement and extend until Termination or Non-Renewal of the Agreement

15. Identify any contingencies or conditions specific to your willingness to warranty the functional performance requirements identified in Exhibit A.

TYLER RESPONSE: We warrant that the Tyler Software will be without Defect(s) as long as you have a Maintenance and Support Agreement in effect. If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect as set forth in the





Maintenance and Support Agreement. Modification of the software may void the warranty to the software and any obligation Tyler has to maintain or support the software.

**16. Please identify your warranty of:**

a) Ownership and right to license

**TYLER RESPONSE:** Tyler will defend, indemnify, and hold harmless the Client from third-party claims that the Tyler software and/or documentation infringes an intellectual property right in accordance with Section H(1) of Tyler's standard contract.

b) Performance

**TYLER RESPONSE:** We will perform the services in a professional, workmanlike manner, consistent with industry standards. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you

c) Documentation

**TYLER RESPONSE:** Tyler will defend, indemnify, and hold harmless the Client from third-party claims that the Tyler software and/or documentation infringes an intellectual property right in accordance with Section H(1) of Tyler's standard contract

d) Compatibility and Scalability

**TYLER RESPONSE:** Tyler reserves the right to discuss a warranty of compatibility. You may purchase additional products and services at the rates set forth in the Investment Summary for twelve (12) months from the Effective Date, and thereafter at our then-current list price, by executing a mutually agreed addendum. If no rate is provided in the Investment Summary, or those twelve (12) months have expired, you may purchase additional products and services at our then-current list price, also by executing a mutually agreed addendum. The terms of this Agreement will control any such additional purchase(s), unless otherwise specifically provided in the addendum.

e) Interface with existing systems identified in Exhibit A

**TYLER RESPONSE:** Tyler's interfaces are covered by Tyler's Software Warranty (please see Tyler's response to Question 15 above.)



f) Data integrity

**TYLER RESPONSE:** Tyler reserves the right to discuss a warranty for Data integrity.

**17. Are there any “pass through” warranties from third party software?**

**TYLER RESPONSE:** We are authorized by each Developer to grant or transfer the licenses to the third-party Software. The third-party Hardware will be new and unused, and upon payment in full, you will receive free and clear title to the third-party Hardware. You acknowledge that we are not the manufacturer of the third-party Products. We do not warrant or guarantee the performance of the third-party Products. However, we grant and pass through to you any warranty that we may receive from the Developer or supplier of the third-party Products.

**18. What are the remedies for a breach of warranty of performance during the initial warranty period?**

**TYLER RESPONSE:** If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect as set forth in the Maintenance and Support Agreement. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you. If Client believes any delivered software or service does not conform to the warranties in the Agreement, Client may invoke the Dispute Resolution clause of the Agreement.

19. What are the remedies for a breach of the warranty of ownership and right to license (a/k/a IP remedy)?

**TYLER RESPONSE:** If we receive information concerning an infringement or misappropriation claim related to the Tyler Software, we may, at our expense and without obligation to do so, either: (a) procure for you the right to continue its use; (b) modify it to make it non-infringing; or (c) replace it with a functional equivalent, in which case you will stop running the allegedly infringing Tyler Software immediately. Alternatively, we may decide to litigate the claim to judgment, in which case you may continue to use the Tyler Software consistent with the terms of this Agreement.

If an infringement or misappropriation claim is fully litigated and your use of the Tyler Software is enjoined by a court of competent jurisdiction, in addition to paying any adverse final judgment (or settlement to which we consent), we will, at our option, either: (a) procure the right to continue its use; (b) modify it to make it non-infringing; (c) replace it with a functional equivalent; or (d) terminate your license and refund the license fees paid for the infringing Tyler Software, as depreciated on a straight-line basis measured over seven (7) years from the Effective Date. We will pursue those options in the order



listed herein. This section provides your exclusive remedy for third party copyright, patent, or trademark infringement and trade secret misappropriation claims.

### **Maintenance and Service Level Agreement**

20. What is the minimum term that Maintenance will be available for the requested product?

**TYLER RESPONSE:** Provided the Client pays annual maintenance fees on the Tyler software, Tyler will provide maintenance services on the Tyler software for at least five years from contract signing. Tyler will offer support to Client so long as Tyler is making such support generally available to its client base

21. What is the minimum notice for an end of service date?

**TYLER RESPONSE:** We provide maintenance and support services on an annual basis. The initial term commences on the Effective Date, and remains in effect for one (1) year. The term will renew automatically for additional one (1) year terms unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.

22. Please define the Service Level Agreement applicable to availability of system.

23. What remedies for breach of SLA including extending term of maintenance?

**TYLER RESPONSE:** The availability of Tyler Software and any applicable remedy for downtime is set forth in Tyler's Service Level Agreement, which is included as an Exhibit to Tyler's template Agreement provided with its Proposal

24. What is the effect of termination of maintenance services? Are there reinstatement rights?

**TYLER RESPONSE:** The City may terminate maintenance services upon 30 days prior written notice, in which case Tyler's obligations to provide maintenance and support cease. We reserve the right to suspend maintenance and support services as set forth in Exhibit C of Tyler's standard Agreement if you fail to pay undisputed maintenance and support fees within thirty (30) days of our written notice. We will reinstate maintenance and support services only if you pay all past due maintenance and support fees, including all fees for the periods during which services were suspended.



## **Security and Data**

25. What data security program is offered? ISO or other certifications? Data breach notification? Indemnification?

**TYLER RESPONSE:** Tyler Technologies has a documented security incident response plan continually reviewed by our audits. Tyler's Hosting Operations follows security best practices and is subject to annual assurance audits including SOX-404 Financial and IT General Control conducted by an independent CPA firm, SOC 1 Type 2 and SOC 2 Type 2 conducted by an independent. Handling of security breaches, including notification to customers, conforms to applicable state and federal law.

26. If a network connection is established by vendor between any computing environments, how is the security of that connection managed?

**TYLER RESPONSE:** Cisco firewalls with Intrusion Protection System (IPS) module inspect all traffic to only allow connections from Tyler SaaS clients to the datacenter. Connection is established to internet-facing web applications securely over HTTPS. ERP clients are provided a VPN device as an added layer of security for accessing back-office applications through an encrypted tunnel between client site and Tyler data centers.

27. What is your disaster recovery plan?

### **TYLER RESPONSE:**

#### **Tyler SaaS Business Continuity**

Our goal for building hosting infrastructure is no single point of failure. Tyler SaaS hosting server/storage infrastructure is built around enterprise compute systems running virtualized Windows Server and SQL Server. Three Tiers of storage are utilized providing varying levels of performance resiliency. Firewalls, VPN management, routers, and storage are all setup in a highly available configuration. Multiple ISPs are present with diverse paths to the Internet.

Full backups are performed daily of each client's application and database server after normal business hours (21:00-02:00). Tyler's retention policy is to keep daily ERP backups for 30 days, weekly backups for 1 year, and archive monthly backups for prior years. Clients can restore from any of these backups as needed.

Tyler maintains two primary datacenters for hosted customers. One is owned by Tyler, located in Yarmouth, ME, and the other is a colocation facility, DataBank, located in Dallas, TX in the old Federal Reserve Building, originally built to withstand a nuclear disaster. Data is replicated between each data center nightly using an enterprise backup solution through virtual infrastructure snapshots. In the



event of a catastrophic disaster that destroys a datacenter, guaranteed recovery point objective (RPO) and recovery time objective (RTO) are each 24 hours with standard services. Business continuity options with lower RTO and RPO are available for an additional fee.

## TYLER DISASTER RECOVERY FOR ON-PREMISES HOSTED CLIENTS

Tyler Disaster Recovery Services is an optional disaster recovery (DR) service provided by Tyler Technologies that ensures continued access to client hosted Tyler product data in the event of a natural or man-made disaster. Tyler Disaster Recovery Services takes nightly backups of your organization's Tyler product data and, in the event of a disaster declaration, works in conjunction with Tyler Hosting Services to create a temporary hosted environment that can be accessed remotely throughout the disaster event, minimizing lost operating time.

Disaster recovery, also called business continuity, is a form of security planning that protects your organization from (you guessed it) disasters. In the face of a significant negative event, DR shields you against the disruption of your daily workflow and critical processes, even if you lose your data and equipment. Having a viable recovery plan in place when disaster strikes makes all the difference as you work to get back on your feet. Tyler provides an array of disaster recovery services for your Tyler software applications, such as off-site backup, a recovery server, and remote access.

If you have Tyler Disaster Recovery Services in place when the unthinkable happens and a disaster is declared, Tyler staff will be there every step of the way to help you get back on your feet as quickly as possible to protect your financial standing and public image. Your data and Tyler software will be securely stored on our servers while your system is down, and our technical experts will help you through every step of your system's restoration process. Once fully functional, your data and Tyler applications will be transferred back to your organization's server and your citizens will continue to get the great customer service they are accustomed to receiving.

### *Disaster Declaration*

A disaster is defined as an unplanned, natural or man-made event that causes an interruption to vital technology infrastructure or systems, threatening your financial standing or public image. It does not include hardware or network failures that are covered by standard service agreements or repairs that can be made within 24 hours. The disaster can last for a few minutes or several days and can range in scope from a localized server event to a full-scale loss of operating facilities. Provided Tyler has your data, in the event of a disaster, we guarantee you'll be back in business within 24 hours.

When an event occurs that causes your Tyler product system to fail, you should initially contact your typical Tyler Support Team. Tyler Support will work with you to help resolve any issues that might be causing your initial outage. If it is determined while working with Tyler Support that the disaster event will not be quickly remedied, and your site wishes to declare a disaster, Tyler Support will escalate the issue to the Tyler Disaster Recovery Services team.



Disasters should be declared with Tyler Disaster Recovery Services if the disaster event will last longer than 24 hours and any further outage duration is deemed unacceptable to ongoing business operations. Disasters can only be declared Monday through Friday between the hours of 7 a.m. and 7 p.m. CST.

### *Coverage*

Tyler Disaster Recovery Services coverage includes:

- Tyler application data sent to the Tyler Disaster Recovery Services facility every 24 hours
- Data integrity check to ensure data is collected properly
- 24-hour Recovery Point Objective (RPO)
- 24-hour Recovery Time Objective (RTO)
- Emergency response within 2 business hours
- Application availability within 8 business hours
- Hosted services for concurrent users during service activations
- One annual DR test
- General backup/restoration assistance in non-disaster circumstances
- Monthly backup status reports

### **Recovery Point Objective (RPO) & Recovery Time Objective (RTO)**

According to Druva, “[RPO] is the interval of time that might pass during a disruption before the quantity of data lost during that period exceeds the... maximum allowable threshold or ‘tolerance.’ [RTO] is the duration of time and a service level within which a business process must be restored after a disaster...to avoid unacceptable consequences associated with a break in continuity.”

### **Disaster Recovery Test**

Tyler Disaster Recovery Services offers the ability for a site to perform a DR test, which is a scheduled mock test of a disaster event. You can request the test once per calendar year at no additional cost to your Tyler Disaster Recovery Services contract. A DR test will help ensure the protection of site-specific processes that may be impacted by a disaster.

### *How Tyler Disaster Recovery Services Works*

Tyler’s state-of-the-art data center transparently retrieves a copy of your data every night, ensuring your critical users can always process work via modem or by traveling to one of two Tyler locations (Plano, Texas, or Yarmouth, Maine).



The Tyler Disaster Recovery Services team helps you identify critical business processes and users, and define and document recovery procedures, printing solutions, etc. Tyler then provides disaster recovery services for your software applications including:

- Off-site backup: As a supplement to your local system backup, Tyler ensures your information is synched with our data center daily so critical users can always deliver services and access real-time data.
- Recovery server: In the event of any disaster, Tyler will host your data and Tyler applications for easy access while your system is being restored.
- Remote access: Regardless of whether you are at your desk or on the road, your data and Tyler applications are always accessible in real time for critical decision-making and daily customer service.

A database export is transferred every night to a server in Maine using a network efficient sync process that enables the transfer to be completed in minutes, even for extremely large databases. In the event of a disaster, your live database is loaded into an environment on the recovery server and your critical users are set up to access that server. You can access your Tyler disaster recovery environment using an SSL (Secure Socket Layer) VPN client from any remote location with an internet connection or come to one of the two offices and utilize our facilities.

### *Tyler Hosting Services*

Tyler Disaster Recovery Services is a Tyler-hosted cloud solution. Tyler owns and maintains all the necessary hardware at two different locations (Plano, Texas, and Yarmouth, Maine); employs more than 45 full-time staff members to monitor operations 24/7 and provide proactive support; provides multiple layers of security (anti-virus, intrusion protection, security monitoring, and firewalls); and utilizes third-party audits for security validations and to ensure accuracy at all levels.

### **Insurance**

**28. What are limits of your professional liability, CGL (including products/completed operations coverage), and network security and privacy liability coverage?**

**TYLER RESPONSE:** Please see Tyler's Certificate of Insurance included with Tyler's Proposal.



## **Termination**

### **29. Right to approve successor in the event of a change of control?**

**TYLER RESPONSE:** Neither party may assign the contract without the prior written consent of the other party, except that Tyler may, without the prior written consent of the Client, modify its ownership structure, transfer or assign the contract in its entirety to the surviving entity of any merger or consolidation or to any purchaser of substantially all of Tyler's assets.

### **30. Right to terminate for cause?**

**TYLER RESPONSE:** If you believe we have materially breached this Agreement, you will invoke the Dispute Resolution clause set forth in Section I(3). You may terminate this Agreement for cause in the event we do not cure, or create a mutually agreeable action plan to address, a material breach of this Agreement within the thirty (30) day window set forth in Section I(3). In the event of termination for cause, you will pay us for all undisputed fees and expenses related to the software, products, and/or services you have received, or we have incurred or delivered, prior to the effective date of termination.

### **31. Right to transition services and data?**

**TYLER RESPONSE** Upon termination, Tyler will provide a copy of the SQL database (for SaaS Agreements) and reasonably cooperate in providing other services and documentation generally available to other Tyler Clients upon termination. Upon termination, Tyler will provide such services as are mutually agreed to by the parties or as are determined through the dispute resolution process in the parties' contract.



# THRIVE



## ANNUAL REPORT 2017



TYLER TECHNOLOGIES

BUILD TOGETHER  
THRIVE TOGETHER

Annual Report 2017

A thriving community is a fertile landscape where people and businesses grow. It budgets responsibly and uses tax dollars wisely. It builds thoughtfully, shares information freely, and listens responsively. A thriving community empowers its citizens, protects its resources and people, and rallies around its neighbors in times of need. And, a thriving community plans intelligently so future generations can have better lives.

For decades, Tyler Technologies has been an innovative partner, working to make local government more accessible, responsive, and efficient through fully integrated technology and services. Each year, we measure our success not only by our financial performance, but also by the ways in which we’re working with our clients to create thriving communities.

**2017 moved us toward this shared vision of a community in which every citizen thrives.**





PLANO, TX

A LETTER TO  
OUR SHAREHOLDERS

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JOHN S. MARR JR. - CHAIRMAN AND CEO

2017 was another successful year for Tyler Technologies as we achieved new highs in virtually every significant financial measure. Tyler’s GAAP revenues grew 11 percent to \$841 million, and non-GAAP revenues rose 9 percent to \$842 million. Subscription revenues increased 22 percent to \$174 million, and comprised 21 percent of our total revenues. We have achieved greater than 20 percent growth in subscription revenues in 44 of the last 48 quarters. GAAP net income for the year was \$164 million, or \$4.18 per diluted share, up 49 percent. Non-GAAP net income increased 13 percent to \$154 million, or \$3.92 per diluted share.

2017 also marked a year of increased internal investment, as our spend on research and development (R&D) grew 10 percent to \$47 million. With our strong cash flow and a mergers and acquisitions (M&A) market with increasingly high valuation expectations, we believe that investing more of our cash in Tyler’s development initiatives will help us drive revenue growth and generate attractive long-term

returns. We completed three relatively small acquisitions during the year, each of which broadens our product offerings and makes



our existing solutions more competitive. We also significantly increased our capital expenditures in 2017, investing heavily in assets to support our fast-growing cloud

business and completing a major expansion of our Yarmouth, Maine, office facility.

Even with increased R&D expense, we improved our GAAP operating margin 170 basis points to 19.1 percent, and our non-GAAP operating margin expanded 30 basis points to 28 percent. Cash provided from operations grew 2 percent over 2016 to \$196 million. Our balance sheet grew even stronger, as we ended 2017 with \$250 million in cash and investments, and no debt. The strength of our balance sheet positions us well for continued investment in our business

through product development initiatives, while supporting our efforts to seek out strategic acquisitions at reasonable valuations. Our disciplined approach to acquisitions, coupled with discretionary investments in products with high growth potential, solidifies our leadership position across multiple product areas. Investments in product development improve our competitive position as we pursue new business opportunities. They also contribute to our clients’ success by bringing more value to our existing suites of products. Tyler’s breadth of products and depth of expertise in local government, along with our record of consistently investing in our products, gives our clients the benefit of a family of products that is both comprehensive and specialized.

Reaching Milestones

Along with our exceptional financial performance, Tyler reached several milestones in 2017. Bookings for the year were just over \$1 billion, an increase of 15 percent over 2016. As a result, our backlog surpassed \$1 billion

for the first time in our history during the third quarter, ending the year at more than \$1.1 billion, up 18 percent. In addition, we continued to grow our team of talented professionals — the lifeblood of our business — ending the year with more than 4,000 employees.

During 2017, Tyler also executed the largest software contract in our history — a \$36 million agreement with Cook County, Illinois, for Tyler’s Odyssey Case Manager™ and Brazos™ e-citation solutions. With this agreement, we now serve courts in seven of the 10 most populous counties in the nation with Odyssey®. We also added two new statewide Odyssey contracts in Vermont and Kansas.

We’re very pleased with the substantial progress we made in 2017 with our New World™ public safety offering, which we acquired in 2015. Our win rates in the public safety market accelerated as the market embraced our vision for the Tyler Alliance initiative for public safety and courts, advanced with major development projects launched early in the year. Our significant public safety wins included a contract with the city of Orlando, Florida, for Tyler’s New World solution. While the city’s police department had been using a Tyler records management solution, the new agreement for computer-aided dispatch (CAD),

mobile and field-based reporting solutions will connect the city’s fire and police departments on one enterprise-wide system to provide targeted, timely and relevant information to first responders.

The first quarter of 2017 saw two major contracts for appraisal, tax, and related solutions. Tyler signed a \$20.4 million joint agreement with the New York State Department of Taxation and Finance and the New York State Office of Information Technology Services to provide our iasWorld® computer-assisted mass appraisal (CAMA) software and related solutions. In March, Tyler signed a \$7.2 million, five-year software-as-service (SaaS) agreement with Anoka County, Minnesota, for a unified land and tax record management solution that includes

our iasWorld appraisal and tax administration software, Eagle™ land and vital records solution, and Tyler Cashiering™ software. And an \$8 million SaaS contract for iasWorld CAMA, signed in the second quarter with the city of Philadelphia, Pennsylvania, means that Tyler systems will now manage assessments for more than half of the parcels in the commonwealth.

Tyler’s Munis® product expanded into Arkansas with the signing of its first contract in the state — the city of Fort Smith. In Georgia, Tyler signed a \$7.5 million, five-

year SaaS contract for Munis and ExecuTime™ with the Clayton County Public Schools. This agreement expands our presence in Clayton County, located in the suburban Atlanta area, which also uses our Odyssey court solution and seven other Tyler solutions, including appraisal and tax, public safety, and community development.

The Cloud Effect

The mix of new business continued to shift to the cloud in 2017, with subscriptions comprising 37 percent of the total contract value of new software deals, compared to 28 percent in 2016. While the increase of subscriptions in the bookings mix creates a short-term headwind to revenue and margin growth, the higher recurring revenues will ultimately drive greater long-term growth. Since we are not forcing a transition to the cloud but, instead, allow clients to choose whether our on-premises or cloud-based model best meets their needs, we expect the mix of license and subscription agreements to vary from quarter to quarter. We are confident that Tyler has a strong position from which to manage any short-term pressures that come with a long-term shift toward the cloud.

Thriving by Helping Our Clients Thrive

We’re pleased with Tyler’s achievements and results in 2017, which we attribute to our perpetual enhancement of core products and our ongoing exploration of new capabilities to help our clients achieve their goals. Core development and new opportunities support the vision of connected communities that we introduced in 2016 — connecting government organizations to their citizens and other jurisdictions through a thriving digital infrastructure. As our clients thrive, Tyler Technologies will continue to thrive. By staying true to our strategy for growth and executing on our strengths, we look forward to making 2018 another banner year for Tyler Technologies.

*[Signature]*

John S. Marr Jr.  
Chairman and  
Chief Executive Officer  
March 16, 2018

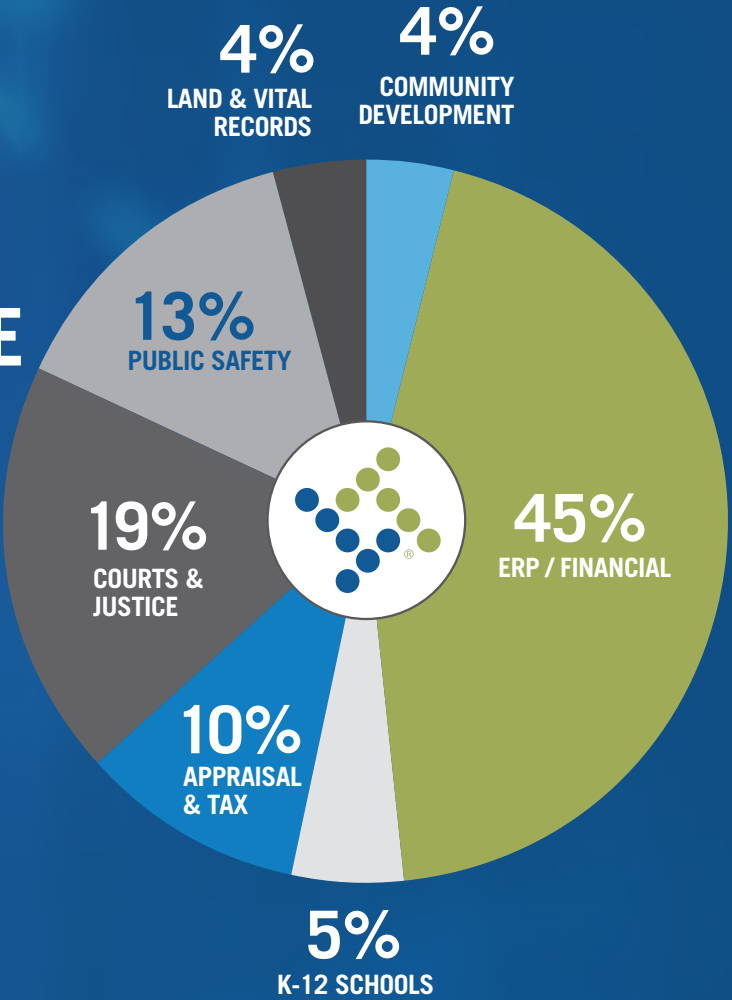


“  
**We continued to grow our  
team of talented professionals  
— the lifeblood of  
our business — ending the  
year with more than 4,000  
employees.**  
”



# THRIVING TOGETHER

REVENUE MIX



SUBSCRIPTIONS

37%  
OF TOTAL NEW SOFTWARE  
CONTRACT VALUE

+ 11%  
compound annual  
organic growth  
in revenues  
2002-2017

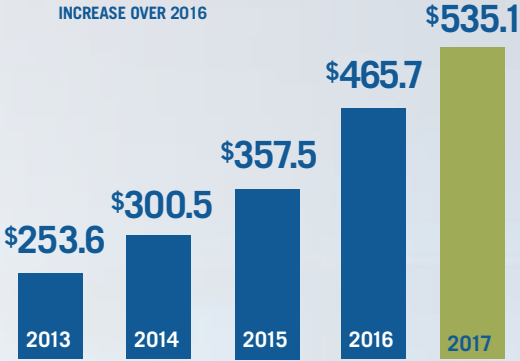
+ 13%  
compound annual  
total growth  
in revenues  
2002-2017

+ 22%  
Subscriptions:  
Fastest growing  
revenue stream  
in 2017

RECURRING REVENUE

IN MILLIONS

+ 15%  
INCREASE OVER 2016



BACKLOG

IN MILLIONS

2013 \$551.7

2014 \$702.0

2015 \$844.5

2016 \$953.3

2017 \$1,121.5

+ 18%  
INCREASE OVER 2016

NON-GAAP  
\$1.29  
GAAP  
\$1.00  
2012

NON-GAAP  
\$1.51  
GAAP  
\$1.13  
2013

NON-GAAP  
\$2.09  
GAAP  
\$1.66  
2014

ANNUAL  
EARNINGS  
per diluted share





## TOTAL REVENUES (GAAP)

IN MILLIONS



## 2017 NON-GAAP NET INCOME

**\$153.9 M** <sup>+13%</sup>  
FROM 2016  
▲▲▲ \$3.92 per diluted share

## 2017 GAAP NET INCOME

**\$163.9 M** <sup>+49%</sup>  
FROM 2016  
▲▲▲ \$4.18 per diluted share

YEAR  
END

CASH AND INVESTMENTS: \$250M  
DEBT: NONE





4 MEASURES OF  
**OUR SUCCESS**

Our goal each year is to make Tyler a stronger and more valuable company than we were the year before. We do this by balancing short-term objectives with long-term strategic investments and initiatives. We benchmark each year against four factors we believe are the keys to our success: financial performance, competitive advantage, value to our clients, and organizational strength.







FINANCIAL  
PERFORMANCE

Tyler’s financial success in 2017 was not buoyed by a single vertical or product. The individual strength of each solution, along with the synergy of all divisions working together, continues to drive growth and earnings.

Balancing Short-Term and Long-Term Objectives

Every year, our leadership team has the task of balancing short-term objectives with the long-term strategic investments and initiatives that have made Tyler a leader in the local government marketplace.

In recent years, Tyler shareholders have reaped the rewards of our sustained double-digit revenue growth, thanks, in part, to strategic acquisitions that supplemented our organic growth and significantly expanded our market presence. The current M&A environment has made it challenging to acquire quality assets at values we find compelling, and so our focus in 2017 was primarily on making internal investments that can be strong catalysts for future growth.

Investing in Our Products

Our adherence to a steady and disciplined course of internal reinvestment over several years of strong growth has allowed us to make significant

enhancements across each of our core product lines. This strategy to invest internally in products and to nurture the investments already made continues to bear fruit.

With the acquisition of New World Systems (NWS) in late 2015, Tyler gained a robust portfolio of software applications that boosted our presence in the public safety market. We launched additional internal investments in these products to integrate them into the Tyler family and to develop expanded features and functionality to enhance the product suite. As evidenced by strong progress in the marketplace in 2017, these investments are driving value. Investments in the public safety organization have led to improved processes and increased client satisfaction, which in turn drove higher win rates in 2017 and solidified Tyler Technologies as an industry leader in public safety.

Tyler has also made significant internal investments in justice solutions that are driving subscription revenues from our e-filing and SaaS subscriptions. In the third quarter, we saw our first subscription revenues from an amended contract with the Administrative

Office of the Illinois Courts, a current statewide e-filing client, for re:Search®, a paperless solution that provides a more efficient way for attorneys, judges, and other constituents to access important case records and documents.

A \$15 million investment in our data centers and infrastructure in 2017 has been validated by strong demand for SaaS subscriptions. This investment in infrastructure also supports future growth for our cloud business.

Assessing Opportunities

In 2016, we undertook an extensive white-space initiative to assess our current solutions, as well as segments of the market we don’t currently serve. Continuing analysis of the competitive landscape assists our senior management team in prioritizing Tyler’s expansion opportunities and determining what we should build internally versus what we should acquire. In 2017, three carefully considered acquisitions added new products to complement our existing lineup.

In May 2017, Tyler acquired Modria, an innovative company specializing in online dispute resolution (ODR), and began integrating Modria® with Tyler’s courts and justice solutions. In December, Tyler signed an agreement with Ohio Court of Claims to provide Modria as an enhancement to Odyssey Case Manager™ and Odyssey File & Serve™. While Modria’s operations did not have a material impact on Tyler’s 2017 revenue or earnings, we are optimistic about the opportunity to create a meaningful recurring revenue stream from ODR, as we did with our industry-leading expansion of e-filing for courts.

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CLIENT STORY  
METCOM 911



The devastating series of wildfires that ravaged the western United States in 2017 showed how quickly a small fire incident can grow into a massive disaster.

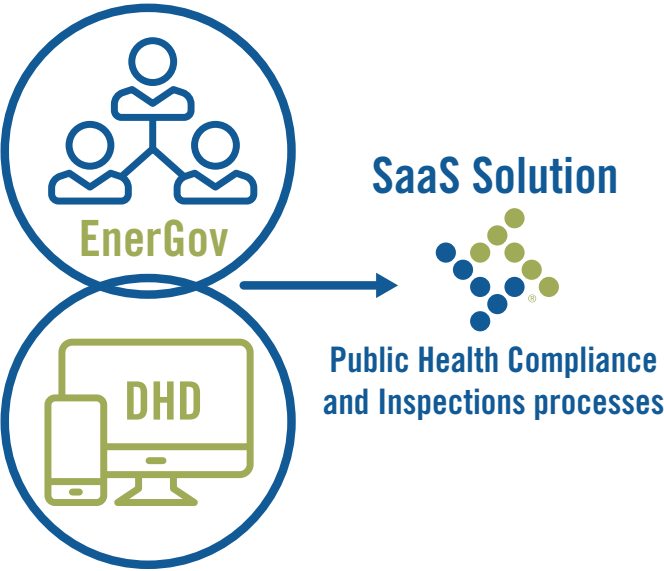
For METCOM 911, the multiagency public dispatch center serving 36 Oregon communities in Marion, Linn, and Clackamas counties, upgrading their computer-aided dispatch (CAD) software to Tyler’s New World™ enterprise CAD system enabled them to enhance the speed and quality of their response to emergencies of all types. The Esri®-powered GIS technology in New World CAD includes robust digital mapping capabilities so dispatchers can send the closest emergency crews to the right location via the quickest route, estimate arrival times, and share other mission-critical information with first responders in real time.

When a lightning-sparked house fire necessitated a region-wide response, METCOM 911 dispatchers were able to efficiently coordinate a collaborative response to the fire while continuing to respond dynamically to other emergencies as they unfolded.





In August, Tyler acquired the assets of Digital Health Department (DHD), a company that provides environmental health software for local governments. DHD software extends Tyler's EnerGov™ enterprise permitting, licensing, and regulatory solution, offering a SaaS solution for public health compliance and inspections processes.



Tyler also acquired audio and digital two-way radio communications technology and related assets from Radio 10-33, LLC, in November. Once integrated with Tyler's public safety solutions, the advanced technology will enable emergency communication centers, law enforcement, fire and EMS crews, and others to monitor, record, instantly play back, and save E-911 transmissions as MP3 or MP4 video files with metadata.

By pursuing selective acquisitions and making significant investments in our products and infrastructure, Tyler is strengthening our position for future growth while continuing to deliver favorable returns to our shareholders.







COMPETITIVE  
ADVANTAGE

To reinforce Tyler’s competitive position, we invested \$47 million in research and development and grew our development team by 6 percent in 2017. The competitive advantage gained by this strategy is evidenced in several ways.

Thriving in Multiple Environments

Tyler’s versatility and strength in both on-premises and hosted environments provides a unique competitive advantage, allowing Tyler solutions to appeal to a broad segment of the market. Tyler clients have the flexibility to implement technology in the way that works best for them.

Building a Digital Infrastructure

A second competitive advantage is Tyler’s development of foundational solutions and processes that provide seamless functionality across multiple Tyler solutions, including:

- Tyler Identity™, a single sign-on authentication engine
- Tyler Atlas™, a map-based location data exchange
- Tyler Payments™, a payment solution for Tyler and third party applications.

All are cloud-based solutions that enable users to access the right information at the right time

through a user-friendly interface. Although these solutions are in different stages of development and deployment, they are providing the foundation for Tyler Nexus and Tyler Alliance —

“  
Together, these  
solutions provide  
a seamless,  
role-based user  
experience.”

Tyler’s initiatives to create a digital infrastructure of connected, best-of-breed products built on a common foundation. Together, these solutions provide a seamless, role-based user experience for local jurisdictions and their constituents alike.

Continuous Product Innovation

A third way in which Tyler advances our competitive position is to continually invest in new products or enhancements such as Tyler EAM™, an enterprise asset management solution.

Tyler EAM enables organizations to track and manage physical assets throughout their life cycle with detailed inventory, preventive maintenance, inspections, on-demand work orders, condition assessments, and more. The first module launched in 2017, providing clients with robust functionality both in the office and in the field, using web-enabled programs and mobile apps that allow personnel on site to easily see their work and manage work orders. This allows for efficient and timely responses to issues like a broken water main or scheduled maintenance on street lights. Tyler EAM integrates with Tyler’s financial and planning, regulatory, and maintenance solutions.

“

CLIENT STORY  
WAYNE COUNTY, MICHIGAN



Choosing a cloud-based solution solved several challenges for Bernard Youngblood, Wayne County, Michigan’s Register of Deeds. He searched for a solution to process, record, and index deeds, land contracts, mortgages, liens, lease agreements, and other vital documents for the county’s almost 2 million citizens.

With more than a half-million documents recorded and imaged each year, plus an index of land transactions dating back to 1703, the solution had to be robust enough to process and image new records, protect data, and alleviate the burden of manual complex systems with limited IT staff.

Youngblood chose Tyler Technologies and Tyler’s Eagle™ land and vital records cloud-based solution to ensure that the trove of approximately 17 million records is securely backed up, lessening the risk of data loss due to a disaster, while reducing IT costs.

Having formed the first Deed Fraud Unit in the nation with the Wayne County sheriff’s and prosecutor’s offices, Youngblood also recognized the value of adding the Eagle Fraud Guard™ online notification system to Eagle’s public access feature, Eagle Self-Service™, to actively protect Wayne County citizens from land record fraud.

“At the end of my exhaustive analysis, it became crystal clear I could only entrust my name and reputation to one vendor and one group of professionals, those of Tyler Technologies.”

— Bernard Youngblood  
Register of Deeds, Wayne County, Michigan





### An Insider's View

Tyler also enjoys a competitive advantage thanks to the high percentage of our employees who have worked in the public sector. Across the organization, approximately 33 percent of the Tyler workforce has been a local government employee at some point in their career, resulting in firsthand knowledge of what our clients experience on a day-to-day basis.

High win rates, investments in our core products, and consistent execution across our business have continued to secure our leadership position in the financial, courts, school, tax, and appraisal arenas. Strategic acquisitions and product development have also bolstered our presence in public safety and justice.

Along with creating  
**additional value**  
for our existing clients,  
with every new client relationship,  
Tyler solidifies our market position  
← and opens →  
**new opportunities**  
to widen our competitive advantage.







VALUE  
TO OUR CLIENTS

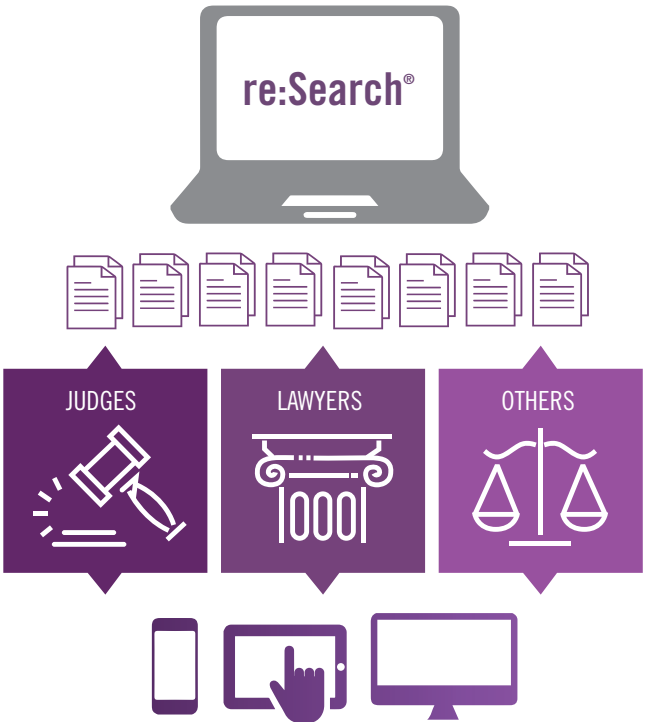
Nothing is more important to Tyler Technologies than building long-term client relationships. We add value for them by gathering feedback and anticipating changing demands for features and functions like mobile technology and paperless processes. And we offer evergreen upgrades and ongoing training to help clients do more with their technology.

Value Through Innovation

One example of an enhancement that is adding value for our clients is Tyler’s New World CrewForce™ mobile application for first responders, which launched in November 2017. Available to licensed users of Tyler’s New World™ public safety solution, the application uses Google® Street View along with Esri®-powered maps to provide emergency personnel with valuable contextual cues to effectively navigate and coordinate their response to a fire, accident, or other emergency. The app acts like a virtual assistant, understanding spoken commands and responding to users in real time. It also enables emergency response crews to estimate arrival times of all responders and to easily communicate with each other via the chat feature. New World

CrewForce supports our commitment to developing leading technology that enhances the ability of our clients to better serve their communities.

Another example of adding value through innovation is the deployment of re:Search®.



This extension of our statewide e-filing solutions for courts is a web-based portal that allows immediate and secure access to a consolidated database of case information, providing attorneys, judges, and other constituents a simple, consistent way to view and obtain case records and documents from counties across a state. re:Search integrates with Odyssey® as well as other case management systems to access court information and provide an efficient way to share important case records and documents at any time and on any device. This solution also offers courts an increased opportunity for fee revenue while improving access and transparency and reducing the need for paper.

Value Through Commitment

A prime example of increasing value to clients has long been Tyler’s perpetual licensing approach, which protects and extends our clients’ investments with regular and significant, yet manageable, software enhancements without additional license fees. Building on that evergreen approach, our EverGuide® initiative — Tyler’s continuous improvement commitment to helping our clients maximize the value of their investment — adds training and consulting to help our clients get the most from their software.

Value Through Community

Tyler’s concern for clients goes beyond business. When hurricanes Harvey, Irma, and Maria barreled toward the Gulf and Atlantic coasts, Puerto Rico, and the U.S. Virgin Islands, Tyler’s disaster recovery team reached out to our 269 clients with contracted disaster recovery services who were in the path of the storms. Our team made sure our clients had



CLIENT STORY  
HORRY COUNTY, SOUTH CAROLINA



The laid-back beach towns and natural beauty of Horry County, South Carolina, are two reasons tourists flock to the region in the summer. But Horry County officials are anything but laid back when it comes to using innovative technology. A thought leader in IT and geographic information system (GIS) technology in the public sector, Timothy Oliver, GIS/IT director for Horry County, is finding new ways to take advantage of Esri® integration with Tyler’s EnerGov™ software.

When Hurricane Matthew threatened to devastate the beaches along the Grand Strand, Oliver’s team used a drone to capture high-quality aerial views of before-and-after images of dunes. Esri’s ArcGIS software quickly integrated the GIS data to calculate the amount of sand loss and erosion caused by the hurricane, cutting filing time for recovery from weeks to days.

A less dramatic but equally important way Horry County is using drone technology with Tyler’s Esri-enabled EnerGov software is to recover storm water fees for new commercial buildings. When an automatic workflow in EnerGov requests a final inspection, an alert is sent to GIS staff, who then know it’s time to fly the drones and map surface data. By identifying new properties upon final inspection, Horry County can begin billing storm water fees in the first month, instead of months or years later. This has resulted in the recovery of a significant amount of revenue for the county each year.





response plans in place and were implementing procedures to secure and recover their critical data with minimal disruption.

More than 800 Tyler clients were affected by the hurricanes, and we've heard many stories about Tyler software's dependable performance during and after the storms. In one Texas region, Tyler's Incode® public safety solutions provided critical functionality to several communities inundated by Harvey's torrential rains that enabled neighboring jurisdictions to coordinate search and rescue efforts, saving almost 200 lives. After the storms, Tyler employees were quick to aid in relief efforts by volunteering their time and making donations to relief organizations. Through any conditions, Tyler employees go above and beyond to serve our clients.

“

**Whenever we have any kind of problem requiring Tyler support, we are treated with respect and a sense of urgency. Each member of your team has always gone above and beyond what is expected to assist us until we reach a solution. I always feel as though I am calling a friend for advice, rather than a call center.**

Permit Service Representative, Missouri City, Texas

”







## ORGANIZATIONAL STRENGTH

A final measure of our success is the strength of the operations organization and the quality of our staff. This proved to be another year in which the dedication, professionalism, and expertise of our employees set Tyler Technologies apart from other companies in our market.

Tyler strives to maintain our core values and create a nurturing environment where all Tyler employees can thrive. This commitment extends to maintaining the physical environment on our campuses as well as to a vibrant corporate culture that embraces social responsibility and advances individual empowerment.

### An Environment That Nurtures

Tyler has made investments in our local office communities by improving and expanding our campuses and making them more environmentally friendly. At our corporate headquarters in Plano, Texas, Tyler installed solar panels backed with batteries, becoming the first company in North Texas to have a commercial solar and storage project. The solar panels will allow Tyler to reduce reliance on the electrical grid and even store sufficient energy for our headquarters to withstand a power outage of several hours.

To accommodate the projected addition of 575 new jobs in Maine within the next decade, Tyler completed a major building expansion of our Yarmouth campus that is home to our ERP & School Division. The four-story addition features new amenities that promote employee well-being and professional development as well as a large client training and development lab. Tyler also purchased a building in Latham, New York, to house a growing staff in our transportation group. These expansions demonstrate our desire to be a good corporate citizen and neighbor in the communities in which we operate, and to create an atmosphere where our employees can flourish.



### Helping Our People Grow

Ensuring that our employees have the opportunity to grow and thrive is a major measure of success. We believe in the strength of a multigenerational, diverse, and empowered workforce.

Tyler’s Leadership Development Program was established to identify and develop leadership talent and create a common developmental experience and process across Tyler. The program works to reinforce our leadership competencies in the culture and will ensure we have leaders ready to rise as opportunities emerge. Leadership candidates were hand selected and have individual leadership development plans in place.

Tyler also hosted our first national Tyler Mesh conference in June 2017. The conference brought together product owners, quality assurance analysts, developers, release managers, software developers, and software operations employees from across the Tyler organization. The conference gave them the opportunity to collaborate face to face, share ideas, hear from leaders, recognize outstanding work, and build rapport. Tyler’s investment in this collaborative conference is already generating valuable returns in terms of the energy, camaraderie, and ideas generated among attendees and presenters.

Another initiative to champion personal and career development for Tyler employees is the Women’s Leadership Network, launched in early 2017. The network was formed to inspire women across the Tyler organization to recognize their potential as individuals, to share common experiences,

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CLIENT STORY  
WASHINGTON COUNTY, PA



Washington County, Pennsylvania, completed its first property reassessment in 35 years with Tyler’s CLT Appraisal Services™ and iasWorld® property appraisal and tax administration software. The assessment encompassed all classes of real property from residential, commercial, and industrial properties to public utilities and agricultural properties.

The time span and shifting market conditions since the last reassessment were cause for major disparities in fair market values across the approximate 117,000 parcels in the county. The value inequities ranged from 10 to 25 percent on the counties existing tax roll, which presented a public relations challenge.

Washington County and Tyler embarked on a community outreach campaign, working to be transparent with the county’s residents about how the values were calculated to avoid misunderstandings about adjustments to taxable values. Tyler provided training to county staff and members of the board of appeals so they could educate their constituents and made presentations to various civic groups and school boards so everyone felt included and informed.





and to connect young talent with mentors. In addition, employees were featured in “Women in Technology,” a yearlong intranet series profiling women who have made significant contributions to Tyler’s success, as nominated and selected by Tyler employees.

Tyler has been recognized across the country for providing a supportive, innovative, and healthy work environment across its many campuses. Tyler was named to “Best Places to Work” lists in Dallas, Phoenix, Detroit, Lubbock, and Maine, including ranking No. 10 on the Maine Biz 2017 “Best Places to Work in Maine” list, and No. 19 on the Dallas Morning News “Top 100 Places to Work 2017” list.



**No. 10 on the Maine Biz 2017  
“Best Places to Work in Maine” list**

**No. 19 on the Dallas Morning News  
“Top 100 Places to Work 2017”**

While it’s gratifying to be recognized externally, Tyler is proudest of our employees’ dedication to client service, keeping relationships strong and enabling us to be bold in our collective vision of transformational government.





IN  
CONCLUSION

Tyler Technologies’ success has always been rooted in the strength of our client relationships and the unmatched level of service every Tyler professional provides. After a significant growth streak in the past several years, we’ve taken full advantage of the current business climate to bring added value to our clients. We’ve also made tremendous progress on developing and implementing technologies that will continue to advance our vision of connected communities in the coming years.

During this period, we’ve built on our successes while adding to our capabilities and increasing our industry-leading position in the public sector. By nurturing and developing our employees and client relationships, Tyler remains confident that our strength is steadfast into the future.

The fundamentals of our strategy remain sound, and our plans to invest in the company at a high level while remaining opportunistic with respect to external investments leave Tyler in a strong position as we enter 2018.

By being a true partner to our clients, Tyler will continue to thrive, our clients will thrive, and our communities will thrive — building a brighter future for our nation and the world.

2017 FINANCIAL INFORMATION

## Reconciliation of GAAP to NON-GAAP Financial Measures (Unaudited)

	2017	2016	2015	2014	2013
<b>Reconciliation of non-GAAP total revenues</b>					
GAAP total revenues	\$840,662	\$756,043	\$591,022	\$493,101	\$416,643
Non-GAAP adjustments:					
Add: Write-downs of acquisition-related deferred revenue	663	15,063	3,186	—	—
Add: Amortization of acquired leases	444	444	37	—	—
Non-GAAP total revenues	\$841,769	\$771,550	\$594,245	\$493,101	\$416,643
<b>Reconciliation of non-GAAP gross profit and margin</b>					
GAAP gross profit	\$399,140	\$355,351	\$277,187	\$233,371	\$193,203
Non-GAAP adjustments:					
Add: Write-downs of acquisition-related deferred revenue	663	15,063	3,186	—	—
Add: Amortization of acquired leases	444	444	37	—	—
Add: Share-based compensation expense included in cost of revenues	9,415	6,548	3,380	2,177	1,509
Add: Amortization of acquired software	21,686	22,235	4,440	1,858	2,078
Non-GAAP gross profit	\$431,348	\$399,641	\$288,230	\$237,406	\$196,790
GAAP gross margin	47.5%	47.0%	46.9%	47.3%	46.4%
Non-GAAP gross margin	51.2%	51.8%	48.5%	48.1%	47.2%
<b>Reconciliation of non-GAAP operating income and margin</b>					
GAAP operating income	\$160,930	\$131,305	\$108,043	\$ 94,822	\$ 67,128
Non-GAAP adjustments:					
Add: Write-downs of acquisition-related deferred revenue	663	15,063	3,186	—	—
Add: Amortization of acquired leases	444	444	37	—	—
Add: Share-based compensation expense	37,348	29,747	20,182	14,819	11,653
Add: Employer portion of payroll tax related to employee stock transactions	1,102	1,001	1,506	514	982
Add: Acquisition-related costs	—	—	5,875	—	—
Add: Amortization of acquired software	21,686	22,235	4,440	1,858	2,078
Add: Amortization of customer and trade name intangibles	13,912	13,731	5,905	4,546	4,517
Non-GAAP adjustments subtotal	\$ 75,155	\$ 82,221	\$ 41,131	\$ 21,737	\$ 19,230
Non-GAAP operating income	\$236,085	\$213,526	\$149,174	\$116,559	\$ 86,358
GAAP operating margin	19.1%	17.4%	18.3%	19.2%	16.1%
Non-GAAP operating margin	28.0%	27.7%	25.1%	23.6%	20.7%
<b>Reconciliation of non-GAAP net income and earnings per share</b>					
GAAP net income	\$163,945	\$109,857	\$ 64,869	\$ 58,940	\$ 39,101
Non-GAAP adjustments:					
Add: Total non-GAAP adjustments to operating income	75,155	82,221	41,131	21,737	19,230
Less: Tax impact related to non-GAAP adjustments	(85,192)	(56,230)	(13,318)	(6,658)	(6,014)
Non-GAAP net income	\$153,908	\$135,848	\$ 92,682	\$ 74,019	\$ 52,317
GAAP earnings per diluted share	\$ 4.18	\$ 2.82	\$ 1.77	\$ 1.66	\$ 1.13
Non-GAAP earnings per diluted share	\$ 3.92	\$ 3.49	\$ 2.54	\$ 2.09	\$ 1.51
<b>Detail of share-based compensation expense</b>					
Cost of software services, maintenance and subscriptions	\$ 9,415	\$ 6,548	\$ 3,380	\$ 2,177	\$ 1,509
Selling, general and administrative expenses	27,933	23,199	16,802	12,642	10,144
Total share-based compensation expense	\$ 37,348	\$ 29,747	\$ 20,182	\$ 14,819	\$ 11,653

## Stock Market Data

Our common stock is traded on the New York Stock Exchange under the symbol “TYL.” At December 31, 2017, we had approximately 1,367 stockholders of record. Most of our stockholders hold their shares in street name; therefore, there are substantially more than 1,367 beneficial owners of our common stock.

The following table shows, for the calendar periods indicated, the high and low sales price per share of our common stock as reported on the New York Stock Exchange.

		High	Low
2016	First Quarter	\$172.50	\$118.16
	Second Quarter	168.19	126.70
	Third Quarter	175.77	159.24
	Fourth Quarter	172.24	139.61
2017	First Quarter	\$166.86	\$142.75
	Second Quarter	178.09	152.00
	Third Quarter	182.49	165.14
	Fourth Quarter	188.22	168.12

We did not pay any cash dividends in 2017 or 2016. Our bank credit agreement contains restrictions on the payment of cash dividends.

We intend to retain earnings for use in the operation and expansion of our business and do not anticipate paying a cash dividend in the foreseeable future.



Selected Financial Data

For the Years Ended December 31,	2017 <sup>(a)</sup>	2016 <sup>(b)</sup>	2015 <sup>(c)</sup>	2014	2013
(In thousands, except per share data)					
STATEMENT OF OPERATIONS DATA:					
Revenues	\$ 840,662	\$ 756,043	\$ 591,022	\$493,101	\$416,643
Cost and expenses:					
Cost of revenues	441,522	400,692	313,835	259,730	223,440
Selling, general and administrative expenses	176,974	167,161	133,317	108,260	98,289
Research and development expense	47,324	43,154	29,922	25,743	23,269
Amortization of customer and trade name intangibles	13,912	13,731	5,905	4,546	4,517
Operating income	160,930	131,305	108,043	94,822	67,128
Other income (expense), net	698	(1,998)	381	(355)	(1,309)
Income before income taxes	161,628	129,307	108,424	94,467	65,819
Income tax (benefit) provision <sup>(a)</sup>	(2,317)	19,450	43,555	35,527	26,718
Net income	163,945	109,857	64,869	58,940	39,101
Net earnings per diluted share	\$ 4.18	\$ 2.82	\$ 1.77	\$ 1.66	\$ 1.13
Weighted average diluted shares <sup>(b)</sup>	39,246	38,961	36,552	35,401	34,590
STATEMENT OF CASH FLOWS DATA:					
Cash flows provided by operating activities <sup>(b)</sup>	\$ 195,755	\$ 191,859	\$ 134,327	\$142,839	\$ 94,297
Cash flows used by investing activities	(85,395)	(50,720)	(398,459)	(11,555)	(25,658)
Cash flows provided (used) by financing activities <sup>(b)</sup>	39,415	(138,075)	91,052	(3,993)	3,831
BALANCE SHEET DATA:					
Total assets	\$1,589,592	\$1,357,945	\$1,356,570	\$569,812	\$444,488
Revolving line of credit	—	10,000	66,000	—	—
Shareholders' equity	1,167,094	915,525	858,857	336,973	246,319

(a) 2017 includes the significant impact of the enactment of the Tax Cuts and Jobs Act ("Tax Act"). The most significant impact of the Tax Act to us is the reduction in the U.S. federal corporate income tax rate from 35% to 21%. The impact of the rate reduction on our 2017 income tax provision is a \$21.6 million tax benefit due to the remeasurement of deferred tax assets and liabilities. Refer to Note – 7 "Income Tax" for further discussion on the impact of the Tax Act.

(b) During 2016, we early adopted Accounting Standards Update ("ASU") No. 2016-09 "Improvements to Employee Share-Based Payment Accounting" requiring the recognition of excess tax benefits or tax deficiencies as a component of income tax expense; these benefits or deficiencies were historically recognized in equity. As the standard requires a prospective method of adoption, our net income in 2016 includes a \$29.6 million income tax benefit due to the adoption that did not occur in the comparable prior periods presented above. In 2016, ASU No. 2016-09 updated the method of calculating diluted shares resulting in the inclusion of 519,000 additional shares in our diluted earnings per share calculation, which is not comparable to the other prior periods presented. The adoption of ASU No. 2016-09 also required excess tax benefits, previously presented as financing activities, to be classified as operating activities. As retrospective adoption for this component of the standard is allowable, we have adjusted all periods presented above to reflect this change in classification.

(c) On November 16, 2015, we completed the acquisition of New World Systems Corporation ("NWS"). Operating results for the twelve months ended December 31, 2015, include \$5.9 million for non-recurring financial advisory, legal, accounting, due diligence, valuation and other expenses necessary to complete the NWS acquisition.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

In addition to historical information, this Annual Report contains forward-looking statements. The forward-looking statements are made in reliance upon safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those reflected in the forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's opinion only as of the date hereof. We undertake no obligation to revise or publicly release the results of any revisions to these forward-looking statements. Readers should carefully review the risk factors described in documents we file from time to time with the Securities and Exchange Commission.

When used in this Annual Report, the words “believes,” “expects,” “anticipates,” “foresees,” “forecasts,” “estimates,” “plans,” “intends,” “continues,” “may,” “will,” “should,” “projects,” “might,” “could” or other similar words or phrases are intended to identify forward-looking statements. Similarly, statements that describe our business strategy, outlook, objectives, plans, intentions or goals also are forward-looking statements.

Overview

General

We provide integrated information management solutions and services for the public sector, with a focus on local governments. We develop and market a broad line of software products and services to address the IT needs of cities, counties, schools and other local government entities. In addition, we provide professional IT services to our clients, including software and hardware installation, data conversion, training and for certain clients, product modifications, along with continuing maintenance and support for clients using our systems. We also provide subscription-based services such as software as a service (“SaaS”), which utilizes the Tyler private cloud, and electronic document filing solutions (“e-filing”), which simplify the filing and management of court related documents. Revenues for e-filing are derived from transaction fees and, in some cases, fixed fee arrangements. We also provide property appraisal outsourcing services for taxing jurisdictions.

Our products generally automate six major functional areas: (1) financial management and education, (2) courts and justice, (3) public safety (4) property appraisal and tax, (5) planning, regulatory and maintenance, and (6) land and vital records management. We report our results in two segments. The Enterprise Software (“ES”) segment provides municipal and county governments and schools with software systems and services to meet their information technology and automation needs for mission-critical “back-office” functions such as: financial management; courts and justice processes; public safety; planning, regulatory and maintenance; and land and vital records management. The Appraisal and Tax (“A&T”) segment provides systems and software that automate the appraisal and assessment of real and personal property as well as property appraisal outsourcing services for local governments and taxing authorities. Property appraisal outsourcing services include: the physical inspection of commercial and residential properties; data collection and processing; computer analysis for property valuation; preparation of tax rolls; community education; and arbitration between taxpayers and the assessing jurisdiction.

Total revenues increased 11% in 2017 compared to 2016.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Recent Acquisitions

On November 29, 2017, we acquired audio and digital two-way radio communications technology and related assets from Radio 10-33, LLC an audio and digital two-way radio communications company. The total purchase price was \$1.4 million.

On August 2, 2017, we acquired substantially all of the assets and assumed certain liabilities of Digital Health Department, Inc. (“DHD”), a company that provides environmental health software, offering a software-as-a-service (SaaS) solution for public health compliance and inspections processes. The total purchase price, net of debt assumed, was \$3.9 million.

On May 30, 2017, we acquired all of the capital stock of Modria.com, Inc., a company that specializes in online dispute resolution for government and commercial entities. The total purchase price, net of debt assumed, was \$7.0 million.

The operating results of these acquisitions are included in our results of operations of the Enterprise Software segment from the date of the acquisition. The impact of these acquisitions, individually and in the aggregate, on our operating results is not material.

On December 22, 2017, the Tax Act was enacted. The Tax Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions for individuals and businesses. For businesses, the Tax Act reduces the U.S. corporate federal tax rate from 35% to 21% and transitions from a worldwide tax system to a territorial tax system. The impact of the rate reduction on our 2017 income tax provision is a \$21.6 million tax benefit due to the remeasurement of deferred tax assets and liabilities. Refer to Note 7 “Income Tax” for further discussion on the impact of the Tax Act.

We monitor and analyze several key performance indicators in order to manage our business and evaluate our financial and operating performance. These indicators include the following:

- **Revenues** – We derive our revenues from five primary sources: sale of software licenses and royalties; subscription-based arrangements; software services; maintenance; and appraisal services. Subscriptions and maintenance are considered recurring revenue sources and comprised approximately 64% of our revenue in 2017. The number of new SaaS clients and the number of existing clients who convert from our traditional software arrangements to our SaaS model are a significant driver to our business, together with new software license sales and maintenance rate increases. In addition, we also monitor our customer base and churn as we historically have experienced very low customer turnover. During 2017, based on our number of customers, turnover was approximately 2%.
- **Cost of Revenues and Gross Margins** – Our primary cost component is personnel expenses in connection with providing software implementation, subscription-based services, maintenance and support, and appraisal services to our clients. We can improve gross margins by controlling headcount and related costs and by expanding our revenue base, especially from those products and services that produce incremental revenue with minimal incremental cost, such as software licenses and royalties, subscription-based services, and maintenance and support. Our appraisal projects are cyclical in nature, and we often employ appraisal personnel on a short-term basis to coincide with the life of a project. As of December 31, 2017, our total employee count increased to 4,069 from 3,831 at December 31, 2016.
- **Selling, General and Administrative (“SG&A”) Expenses** – The primary components of SG&A expenses are administrative and sales personnel salaries and commissions, share-based compensation expense, marketing expense, rent and professional fees. Sales commissions typically fluctuate with revenues and share-based compensation expense generally increases as the market price of our stock increases. Other administrative expenses tend to grow at a slower rate than revenues.

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- **Liquidity and Cash Flows** – The primary driver of our cash flows is net income. Uses of cash include acquisitions, capital investments in property and equipment and discretionary purchases of treasury stock. Our working capital needs are fairly stable throughout the year with the significant components of cash outflows being payment of personnel expenses offset by cash inflows representing collection of accounts receivable and cash receipts from clients in advance of revenue being earned. In recent years, we have also received significant amounts of cash from employees exercising stock options and contributing to our Employee Stock Purchase Plan.
- **Balance Sheet** – Cash, accounts receivable and days sales outstanding and deferred revenue balances are important indicators of our business.

Recent Accounting Guidance not yet Adopted

**Revenue from Contracts with Customers.** On May 28, 2014, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2014-09, “Revenue from Contracts with Customers.” This ASU is the result of a convergence project between the FASB and the International Accounting Standards Board. The core principle behind ASU No. 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for delivering those goods and services. This model involves a five-step process that includes identifying the contract with the customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations in the contract and recognizing revenue when (or as) the entity satisfies the performance obligations. The ASU allows two methods of adoption: a full retrospective approach where three years of financial information are presented in accordance with the new standard, and a modified retrospective approach where the ASU is applied to the most current period presented in the financial statements. We have adopted the new standard effective January 1, 2018 using the full retrospective method which will require each prior reporting period presented to be recast in future issuance of our financial statements. In preparation for adoption of the standard, we have implemented internal controls and key system functionality to enable the preparation of financial information and have reached conclusions on key accounting assessments related to the standard. During the fourth quarter of fiscal 2017, we have substantially completed data conversion activities required to recast our prior period results. We continue to perform an in-depth review of our preliminary results; therefore, we are in the process of completing our analysis necessary to recast prior period results. We do not believe there are any remaining significant implementation topics associated with the adoption of this ASU that have not yet been addressed.

This standard will have a material impact on our consolidated balance sheets and statement of shareholders’ equity. The impact of the standard on consolidated revenue and costs of revenue will be dependent upon the mix of revenue streams due to our accounting for software license fees, allocation of discounts across all performance obligations and to the incremental costs of obtaining a contract. Specifically, under the new standard software license fees under perpetual agreements will no longer be subject to 100% discount allocations from other elements in the contract. Discounts in arrangements will be allocated across all deliverables increasing license revenues and decreasing revenues allocated to other performance obligations. In addition, in most cases, net license fees (total license fees less any allocated discounts) will be recognized at the point in time that control of the software license transfers to the customer versus our current policy of recognizing revenue only to the extent billable per the contractual terms. Time-based license fees currently recognized over the license term will no longer be recognized over the period of the license and will instead be recognized at the point in time that control of the software license transfers to the customer. Revenue related to our software as a service (“SaaS”) offerings, post-contract customer support (“PCS”) renewals and professional services remain substantially unchanged. Due to the complexity of certain contracts, the actual revenue recognition treatment required under the standard will be dependent on contract-specific terms and may vary in some instances from recognition at the time of billing.

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Application of the new standard requires that incremental costs directly related to obtaining a contract (typically sales commissions plus any associated fringe benefits) must be recognized as an asset and expensed on a systematic basis that is consistent with the transfer to the customer of the goods and services to which the asset relates, unless that life is less than one year. Currently, we defer sales commissions and recognize expense over the relevant initial contractual term. With the adoption of the new standard, amortization periods will extend past the initial term.

**Leases.** On February 25, 2016, the FASB issued its new lease accounting guidance in ASU No. 2016-02, “Leases (Topic 842).” Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date:

- A lease liability, which is a lessee’s obligation to make lease payments arising from a lease, measured on a discounted basis; and
- A right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term.

Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach.

The ASU is effective for fiscal years beginning after December 15, 2018, including interim periods therein. Early application is permitted for all business entities upon issuance. We are assessing the financial impact of adopting the new standard; however, we are currently unable to provide a reasonable estimate regarding the financial impact. We will adopt the new standard in fiscal year 2019.

### Outlook

The local government software market continues to be active, and our backlog at December 31, 2017 reached \$1.1 billion, a 18% increase from last year. We expect to continue to achieve solid growth in revenue and earnings. With our strong financial position and cash flow, we plan to continue to make significant investments in product development to better position us to continue to expand our competitive position in the public sector software market over the long term.

### Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenues, cost of revenues and expenses during the reporting period, and related disclosure of contingencies. The Notes to the Financial Statements included as part of this Annual Report describe our significant accounting policies used in the preparation of the financial statements. Significant items subject to such estimates and assumptions include the application of the percentage-of-completion and proportional performance methods of revenue recognition, the carrying amount and estimated useful lives of intangible assets, determination of share-based compensation expense and valuation allowance for receivables. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies require significant judgments and estimates used in the preparation of our financial statements.

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**Revenue Recognition.** We recognize revenues in accordance with the provisions of Accounting Standards Codification (“ASC”) 605, Revenue Recognition and ASC 985-605, Software Revenue Recognition. Our revenues are derived from sales of software licenses and royalties, subscription-based services, appraisal services, maintenance and support, and services that typically range from installation, training and basic consulting to software modification and customization to meet specific customer needs. For multiple element software arrangements, which do not entail the performance of services that are considered essential to the functionality of the software, we generally record revenue when the delivered products or performed services result in a legally enforceable and non-refundable claim. We maintain allowances for doubtful accounts and sales adjustments, which are provided at the time the revenue is recognized. Because most of our customers are governmental entities, we rarely incur a loss resulting from the inability of a customer to make required payments. In a limited number of cases, we encounter a customer who is dissatisfied with some aspect of the software product or our service, and we may offer a “concession” to such customer. In those limited situations where we grant a concession, we rarely reduce the contract arrangement fee, but alternatively may perform additional services, such as additional training or creating additional custom reports. These amounts have historically been nominal. In connection with our customer contracts and the adequacy of related allowances and measures of progress towards contract completion, our project managers are charged with the responsibility to continually review the status of each customer on a specific contract basis. Also, we review, on at least a quarterly basis, significant past due accounts receivable and the adequacy of related reserves. Events or changes in circumstances that indicate that the carrying amount for the allowances for doubtful accounts and sales adjustments may require revision, include, but are not limited to, deterioration of a customer’s financial condition, failure to manage our customer’s expectations regarding the scope of the services to be delivered, and defects or errors in new versions or enhancements of our software products.

We use contract accounting, primarily the percentage-of-completion method, as discussed in ASC 605-35, Construction – Type and Certain Production – Type Contracts, for those software arrangements that involve significant production, modification or customization of the software, or where our software services are otherwise considered essential to the functionality of the software. We measure progress-to-completion primarily using labor hours incurred, or value added. In addition, we recognize revenue using the proportional performance method for our property appraisal projects, some of which can range up to five years. These methods rely on estimates of total expected contract revenue, billings and collections and expected contract costs, as well as measures of progress toward completion. We believe reasonably dependable estimates of revenue and costs and progress applicable to various stages of a contract can be made. At times, we perform additional and/or non-contractual services for little to no incremental fee to satisfy customer expectations. If changes occur in delivery, productivity or other factors used in developing our estimates of expected costs or revenues, we revise our cost and revenue estimates, and any revisions are charged to income in the period in which the facts that give rise to that revision first become known. In connection with these and certain other contracts, we may perform the work prior to when the services are billable and/or payable pursuant to the contract. The termination clauses in most of our contracts provide for the payment for the value of products delivered and services performed in the event of an early termination.

For SaaS arrangements, we evaluate whether the customer has the contractual right to take possession of our software at any time during the hosting period without significant penalty and whether the customer can feasibly maintain the software on the customer’s hardware or enter into another arrangement with a third-party to host the software. If we determine that the customer has the contractual right to take possession of our software at any time during the hosting period without significant penalty and can feasibly maintain the software on the customer’s hardware or enter into another arrangement with a third-party to host the software, we recognize the license, professional services and hosting services revenues pursuant to ASC 985-605, Software Revenue Recognition. For SaaS arrangements that do not meet the criteria for recognition under ASC 985-605, we account for the elements under ASC 605-25, Multiple Element Arrangements using all applicable facts and circumstances, including whether (i) the element has stand-alone value, (ii) there is a general right of return and (iii) the revenue is contingent on delivery of other elements. We allocate the contract value to each element of the arrangement that qualifies for treatment as a separate element based on vendor-specific objective evidence of fair value (“VSOE”), and if VSOE is not available, third-party evidence, and if third-party evidence is unavailable, estimated selling price. For professional services associated with SaaS

Management's Discussion and Analysis of Financial Condition and Results of Operations

arrangements that we determine do not have stand-alone value to the customer or are contingent on delivery of other elements, we recognize the services revenue ratably over the remaining contractual period once hosting has gone live and we may begin billing for the hosting services. We record amounts that have been invoiced in accounts receivable and in deferred revenue or revenues, depending on whether the revenue recognition criteria have been met.

In connection with certain of our contracts, we have recorded retentions receivable or unbilled receivables consisting of costs and estimated profit in excess of billings as of the balance sheet date. Many of the contracts which give rise to unbilled receivables at a given balance sheet date are subject to billings in the subsequent accounting period. We review unbilled receivables and related contract provisions to ensure we are justified in recognizing revenue prior to billing the customer and that we have objective evidence which allows us to recognize such revenue. In addition, we have a sizable amount of deferred revenue, which represents billings in excess of revenue earned. The majority of this liability consists of maintenance billings for which payments are made in advance and the revenue is ratably earned over the maintenance period, generally one year. We also have deferred revenue for those contracts in which we receive a deposit and the conditions in which to record revenue for the service or product have not been met. On a periodic basis, we review by customer the detail components of our deferred revenue to ensure our accounting remains appropriate.

**Intangible Assets and Goodwill.** Our business acquisitions typically result in the creation of goodwill and other intangible asset balances, and these balances affect the amount and timing of future period amortization expense, as well as expense we could possibly incur as a result of an impairment charge. The cost of acquired companies is allocated to identifiable tangible and intangible assets based on estimated fair value, with the excess allocated to goodwill. Accordingly, we have a significant balance of acquisition date intangible assets, including software, customer related intangibles, trade name, leases and goodwill. These intangible assets (other than goodwill) are amortized over their estimated useful lives. We currently have no intangible assets with indefinite lives other than goodwill.

When testing goodwill for impairment quantitatively, we first compare the fair value of each reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds its fair value, a second step is performed to measure the amount of potential impairment. In the second step, we compare the implied fair value of reporting unit goodwill with the carrying amount of the reporting unit's goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized. The fair values calculated in our impairment tests are determined using discounted cash flow models involving several assumptions. The assumptions that are used are based upon what we believe a hypothetical marketplace participant would use in estimating fair value. We base our fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. We evaluate the reasonableness of the fair value calculations of our reporting units by comparing the total of the fair value of all of our reporting units to our total market capitalization.

Our annual goodwill impairment analysis, which we performed quantitatively during the second quarter of 2017, did not result in an impairment charge. During 2017, we did not identify any triggering events that would require an update to our annual impairment review.

All intangible assets (other than goodwill) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of other intangible assets is measured by comparison of the carrying amount to estimated undiscounted future cash flows. The assessment of recoverability or of the estimated useful life for amortization purposes will be affected if the timing or the amount of estimated future operating cash flows is not achieved. Such indicators may include, among others: a significant decline in expected future cash flows; a sustained, significant decline in stock price and market capitalization; a significant adverse change in legal factors or in the business climate; unanticipated competition; and reductions in growth rates. In addition, products, capabilities, or technologies developed by others may render our software products obsolete or non-competitive. Any adverse change in these factors could have a significant impact on the recoverability of goodwill or other intangible assets.

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**Share-Based Compensation.** We have a stock option plan that provides for the grant of stock options to key employees, directors and non-employee consultants. We estimate the fair value of share-based awards on the date of grant using the Black-Scholes option valuation model. Share-based compensation expense includes the estimated effects of forfeitures, which will be adjusted over the requisite service period to the extent actual forfeitures differ, or are expected to differ from such estimates. Changes in estimated forfeitures are recognized in the period of change and will also impact the amount of expense to be recognized in future periods. Forfeiture rate assumptions are derived from historical data.

We estimate stock price volatility at the date of grant based on the historical volatility of our common stock. Estimated option life is determined using the weighted-average period the stock options are expected to be outstanding based primarily on the options' vesting terms, remaining contractual life and the employees' expected exercise based on historical patterns. Determining the appropriate fair-value model and calculating the fair value of share-based awards at the grant date requires considerable judgment, including estimating stock price volatility, expected option life and forfeiture rates.

Analysis of Results of Operations and Other

The following discussion compares the historical results of operations on a basis consistent with GAAP for the years ended December 31, 2017, 2016 and 2015.

Years Ended December 31,	Percentage of Total Revenues		
	2017	2016	2015
Revenues:			
Software licenses and royalties	9.0%	9.8%	10.0%
Subscriptions	20.6	18.9	18.9
Software services	22.3	23.1	23.7
Maintenance	43.0	42.7	41.6
Appraisal services	3.0	3.5	4.2
Hardware and other	2.1	2.0	1.6
Total revenues	100.0	100.0	100.0
Operating Expenses:			
Cost of software licenses, royalties and acquired software	3.0	3.3	1.0
Cost of software services, maintenance and subscriptions	46.1	46.2	48.2
Cost of appraisal services	1.9	2.2	2.7
Cost of hardware and other	1.5	1.3	1.1
Selling, general and administrative expenses	21.1	22.1	22.6
Research and development expense	5.6	5.7	5.1
Amortization of customer and trade name intangibles	1.7	1.8	1.0
Operating income	19.1	17.4	18.3
Other income (expense), net	0.1	(0.3)	0.1
Income before income taxes	19.2	17.1	18.4
Income tax (benefit) provision	(0.3)	2.6	7.4
Net income	19.5%	14.5%	11.0%



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2017 Compared to 2016

Revenues

Software licenses and royalties.

The following table sets forth a comparison of our software licenses and royalties revenue for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
ES	\$67,840	\$68,844	\$(1,004)	(1)%
A&T	7,854	5,462	2,392	44
Total software licenses and royalties revenue	\$75,694	\$74,306	\$ 1,388	2%

Software license and royalties revenue was flat compared to the prior year. Software license revenue declined as a percentage of the revenue mix due to an increase in the percentage of new software clients choosing our subscription-based option, rather than purchasing the software under a traditional perpetual license arrangement.

Although the mix of new contracts between subscription-based and perpetual license arrangements may vary from quarter to quarter and year to year, we expect our longer-term software license growth rate to be negatively impacted by a growing number of customers choosing our subscription-based options, rather than purchasing the software under a traditional perpetual software license arrangement. Subscription-based arrangements result in lower software license revenue in the initial year as compared to perpetual software license arrangements but generate higher overall revenue over the term of the contract. Our new client mix in 2017 was approximately 53% selecting perpetual software license arrangements and approximately 47% selecting subscription-based arrangements compared to a client mix in 2016 of approximately 68% selecting perpetual software license arrangements and approximately 32% selecting subscription-based arrangements.

Subscriptions.

The following table sets forth a comparison of our subscriptions revenue for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
ES	\$165,651	\$135,516	\$30,135	22%
A&T	7,859	7,188	671	9
Total subscriptions revenue	\$173,510	\$142,704	\$30,806	22%

Subscription-based revenue primarily consists of revenue derived from our SaaS arrangements, which utilize the Tyler private cloud. As part of our subscription-based services, we also provide electronic document filing solutions (“e-filing”) that simplify the filing and management of court related documents for courts and law offices. E-filing revenue is derived from transaction fees and fixed fee arrangements.

Subscription-based revenue increased 22% compared to 2016. New SaaS clients as well as existing clients who converted to our SaaS model provided the majority of the subscriptions revenue increase. In 2017, we added 374 new SaaS clients and 88 existing clients elected to convert to our SaaS model. The average contract sizes in 2017 were 64% and 44% higher than 2016 for new clients and clients converting to our SaaS model, respectively. Also, e-filing services contributed approximately \$8.5 million of the subscriptions revenue increase in 2017. The increase in e-filing revenue is attributed to new e-filing clients, as well as increased volumes as the result of several existing clients mandating e-filing.

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Software services.

The following table sets forth a comparison of our software services revenue for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
ES	\$167,934	\$158,478	\$ 9,456	6%
A&T	19,215	16,326	2,889	18
Total software services revenue	\$187,149	\$174,804	\$12,345	7%

Software services revenue primarily consists of professional services billed in connection with implementing our software, converting client data, training client personnel, custom development activities and consulting. New clients who purchase our proprietary software licenses generally also contract with us to provide for the related software services. Existing clients also periodically purchase additional training, consulting and minor programming services. Software services revenue grew 7% compared to the prior year period. This growth is partly due to additions to our implementation and support staff, which increased our capacity to deliver backlog and partially due to completing recognition of a majority of the acquisition-related deferred service revenue that was fair valued at rates below Tyler’s average service rate in prior periods.

Maintenance.

The following table sets forth a comparison of our maintenance revenue for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
ES	\$339,951	\$304,380	\$35,571	12%
A&T	21,618	18,589	3,029	16
Total maintenance revenue	\$361,569	\$322,969	\$38,600	12%

We provide maintenance and support services for our software products and certain third-party software. Maintenance revenue grew 12% compared to the prior year. Maintenance and support revenue increased mainly due to growth in our installed customer base from new software license sales as well as annual maintenance rate increases. In addition, the increase is partially due to completing recognition of a majority of the acquisition-related deferred maintenance revenue that was fair valued at rates below Tyler’s average maintenance rate in prior periods.

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Appraisal services.

The following table sets forth a comparison of our appraisal services revenue for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
ES	\$ —	\$ —	\$ —	—%
A&T	25,023	26,287	(1,264)	(5)
Total appraisal services revenue	\$25,023	\$26,287	\$ (1,264)	(5)%

In 2017, appraisal services revenue decreased 5% compared to the prior year primarily due to the successful completion of several large revaluation projects in mid-2017. The appraisal services business is somewhat cyclical and driven in part by statutory revaluation cycles in various states.

Cost of Revenues and Gross Margins

The following table sets forth a comparison of the key components of our cost of revenues for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Software licenses and royalties	\$ 3,321	\$ 2,964	\$ 357	12%
Acquired software	21,686	22,235	(549)	(2)
Software services, maintenance and subscriptions	387,634	348,939	38,695	11
Appraisal services	16,286	16,411	(125)	(1)
Hardware and other	12,595	10,143	2,452	24
Total cost of revenues	\$441,522	\$400,692	\$40,830	10%

The following table sets forth a comparison of gross margin percentage by revenue type for the years ended December 31:

Gross margin percentage	2017	2016	Change
Software licenses, royalties and acquired software	67.0%	66.1%	0.9%
Software services, maintenance and subscriptions	46.3	45.5	0.8
Appraisal services	34.9	37.6	(2.7)
Hardware and other	28.9	32.3	(3.4)
Overall gross margin	47.5%	47.0%	0.5%

**Software licenses, royalties and acquired software.** Cost of software licenses, royalties and acquired software is primarily comprised of amortization expense for acquired software and third-party software costs. We do not have any direct costs associated with royalties. The gross margin increase of 0.9% is due to higher incremental margins on software license revenues, in part due to slightly lower amortization expense for acquired software resulting from acquisitions.

**Software services, maintenance and subscriptions.** Cost of software services, maintenance and subscriptions primarily consists of personnel costs related to installation of our software, conversion of client data, training client personnel and support activities and various other services such as custom client development and on-going operation of SaaS and e-filing arrangements. In 2017, the software services, maintenance and subscriptions gross margin increased 0.8% compared to the prior year. Our implementation and support staff has grown by 220 employees since December 31, 2016. Many of these additions occurred in early to mid-2017 and are contributing to revenue

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in 2017. Costs related to maintenance and various other services such as SaaS and e-filing typically grow at a slower rate than related revenue due to leverage in the utilization of support and maintenance staff and economies of scale. Reduced recognition of acquisition-related deferred revenue associated with software services and maintenance obligations completed in prior periods also resulted in higher gross margins.

**Appraisal services.** Appraisal services revenue comprised approximately 3.0% of total revenue. The appraisal services gross margin decreased 2.7% compared to 2016 due to the reduction in higher margin projects substantially complete by early 2017 and lower volume of revenues in the current period to cover relatively fixed costs.

Our 2017 blended gross margin increased 0.5% compared to 2016. Our overall gross margin was positively impacted by a product mix that included more higher-margin recurring revenues from subscriptions and maintenance and improved margin on revenues from software licenses offset by the lower-margin revenues from appraisal services as described above.

Selling, General and Administrative Expenses

Selling, general and administrative (“SG&A”) expenses consist primarily of salaries, employee benefits, travel, share-based compensation expense, commissions and related overhead costs for administrative and sales and marketing employees, as well as, professional fees, trade show activities, advertising costs and other marketing related costs. The following table sets forth a comparison of our SG&A expenses for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Selling, general and administrative expenses	\$176,974	\$167,161	\$9,813	6%

SG&A as a percentage of revenue was 21.1% in 2017 compared to 22.1% in 2016. SG&A expense increased approximately 6% mainly due to compensation costs related to increased staff levels, merit increases and higher stock compensation expense. We have added 28 employees mainly to our sales and finance teams since December 31, 2016. In addition, our 2017 stock compensation expense rose \$4.7 million, mainly due to increases in our stock price over the last few years.

Research and Development Expense

Research and development expense consists primarily of salaries, employee benefits and related overhead costs associated with new product development. The following table sets forth a comparison of our research and development expense for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Research and development expense	\$47,324	\$43,154	\$4,170	10%

Research and development expense consists mainly of costs associated with development of new products and technologies from which we do not currently generate revenue, as well as costs related to the ongoing development efforts for Microsoft Dynamics AX. Our contractual research and development commitment to develop public sector functionality for Microsoft Dynamics AX was amended in March 2016, which significantly reduced our development commitment through March 2018. However, we will continue to provide sustained engineering and technical support for the public sector functionality within Dynamics AX. License and maintenance royalties for all applicable domestic and international sales of Dynamics AX to public sector entities will continue under the terms of the contract.



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Research and development expense increased 10% in 2017 compared to the prior year period, mainly due to research and development efforts related to new Tyler product development initiatives, primarily in our public safety solutions, offset by reduced development efforts for Microsoft Dynamics AX. As a result of the Microsoft Dynamics AX amendment, we have redeployed certain development resources to enhance functionality on several existing solutions and these costs are being recorded in cost of revenues – software services, maintenance and subscriptions.

Amortization of Customer and Trade Name Intangibles

Acquisition intangibles are comprised of the excess of the purchase price over the fair value of net tangible assets acquired that is allocated to acquired software, leases and customer and trade name intangibles. The remaining excess purchase price is allocated to goodwill that is not subject to amortization. Amortization expense related to acquired software is included with cost of revenues, while amortization expense of customer and trade name intangibles is recorded as operating expense. The estimated useful lives of both customer and trade name intangibles range from five to 25 years. The following table sets forth a comparison of amortization of customer and trade name intangibles for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Amortization of customer and trade name intangibles	\$13,912	\$13,731	\$181	1%

Amortization of customer and trade name intangibles increased due to the impact of intangibles added with several small acquisitions completed in 2016 and 2017.

Estimated annual amortization expense relating to customer and trade name acquisition intangibles, excluding acquired software for which the amortization expense is recorded as cost of revenues, for the next five years is as follows (in thousands):

2018	\$13,819
2019	12,534
2020	11,402
2021	11,282
2022	10,792

Amortization expense relating to acquired leases will be recorded as a reduction to hardware and other revenue and is expected to be \$425,000 in 2018, \$373,000 in 2019, \$313,000 in 2020, \$312,000 in 2021, \$312,000 in 2022 and \$1.0 million thereafter.

Other

The following table sets forth a comparison of other income (expense), net for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Other income (expense), net	\$698	\$(1,998)	\$2,696	N/M

Other income (expense) is comprised of interest expense and non-usage and other fees associated with our revolving credit agreement as well as interest income from invested cash. Other income (expense), net decrease compared to the prior period is attributed to significantly lower debt levels in the current period, as we repaid all borrowings under the revolving line of credit in January 2017, and correspondingly higher levels of cash investments.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Income Tax (Benefit) Provision

The following table sets forth a comparison of our income tax provision for the years ended December 31:

(\$ in thousands)	2017	2016	Change	
			\$	%
Income tax (benefit) provision	\$(2,317)	\$19,450	\$(21,767)	(112)%
Effective income tax rate	(1.4)%	15.0%		

The decrease in the income tax provision during 2017 was primarily driven by the enactment of the Tax Act which reduced the statutory U.S. federal corporate income tax rate from 35% to 21%. The impact of the rate reduction on our 2017 income tax provision is a \$21.6 million tax benefit due to the remeasurement of deferred tax assets and liabilities. See Note 7 – “Income Tax” for additional information related to the Tax Act. The income tax provision is also lower due to the increase in the excess tax benefits from stock option exercises as compared to prior period. We experienced significant stock option exercise activity in 2017 and 2016 that generated excess tax benefits of \$40.6 million and \$29.6 million, respectively.

The change in the effective income tax rate in 2017 compared to 2016 is also primarily attributable to the impact of the Tax Act and the changes in excess tax benefits related to stock option exercises realized. Excluding the impact of the Tax Act and the excess tax benefits, our income tax provision and effective tax rate in 2017 would have been \$59.9 million and 37.1%, respectively. Excluding the excess tax benefits, our income tax provision and effective tax rate in 2016 would have been \$49.0 million and 37.9%, respectively.

The effective income tax rates in both 2017 and 2016 differed from the statutory United States federal corporate income tax rate of 35% due to state income taxes, the domestic production activities deduction, the research tax credit, non-deductible share-based compensation expense, disqualifying incentive stock option dispositions, and non-deductible business expenses.

2016 Compared to 2015

Revenues

On November 16, 2015, we acquired NWS, which provides public safety and financial solutions for local governments. In May 2015, we acquired a company which provides mobile hand-held solutions primarily to law enforcement agencies for field accident reporting and electronically issuing citations. The results of their operations are included in our ES segment from their respective dates of acquisition. For comparative purposes, we have provided explanations for changes in operations to exclude results of operations for these acquisitions noting the exclusion.

Software licenses and royalties.

The following table sets forth a comparison of our software licenses and royalties revenue for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
ES	\$68,844	\$54,376	\$14,468	27%
A&T	5,462	4,632	830	18
Total software licenses and royalties revenue	\$74,306	\$59,008	\$15,298	26%

Management's Discussion and Analysis of Financial Condition and Results of Operations

Excluding the results of acquisitions, software license revenue increased 3% compared to the prior year. The majority of this growth was due to a more active marketplace as the result of improvement in local government economic conditions, as well as our increasingly strong competitive position, which we attribute in part to our investment in product development in recent years. This increase was offset somewhat by lower sales to our existing customer base for courts and justice related add-on solutions that assist and support the transition to a paperless environment. By the end of 2015, the majority of our courts and justice clients had implemented these add-on solutions.

Although the mix of new contracts between subscription-based and perpetual license arrangements may vary from quarter to quarter and year to year, our longer-term software license growth rate is negatively impacted by a growing number of customers choosing our subscription-based options, rather than purchasing the software under a traditional perpetual software license arrangement. Subscription-based arrangements result in lower software license revenue in the initial year as compared to perpetual software license arrangements but generate higher overall revenue over the term of the contract. Our new client mix in 2016 was approximately 68% selecting perpetual software license arrangements and approximately 32% selecting subscription-based arrangements compared to a client mix in 2015 of approximately 76% selecting perpetual software license arrangements and approximately 24% selecting subscription-based arrangements. 250 new clients entered into subscription-based software arrangements in 2016 compared to 134 new clients in 2015.

Subscriptions.

The following table sets forth a comparison of our subscriptions revenue for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
ES	\$135,516	\$107,090	\$28,426	27%
A&T	7,188	4,843	2,345	48
Total subscriptions revenue	\$142,704	\$111,933	\$30,771	27%

Subscription-based revenue primarily consists of revenue derived from our SaaS arrangements, which utilize the Tyler private cloud. As part of our subscription-based services, we also provide electronic document filing solutions (“e-filing”) that simplify the filing and management of court related documents for courts and law offices. E-filing revenue is derived from transaction fees and fixed fee arrangements.

Excluding acquisitions, subscription-based revenue increased 24% compared to 2015. E-filing services contributed approximately \$4.9 million of the subscriptions revenue increase in 2016. Most of the e-filing revenue increase related to several statewide contracts, several of which implemented mandatory electronic filing during 2015 and throughout 2016. New SaaS clients as well as existing clients who converted to our SaaS model provided the remainder of the subscriptions revenue increase. In 2016, we added 250 new SaaS clients and 53 existing clients elected to convert to our SaaS model. The average contract sizes in 2016 were 1% and 9% higher than 2015 for new clients and clients converting to our SaaS model, respectively.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Software services.

The following table sets forth a comparison of our software services revenue for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
ES	\$158,478	\$129,068	\$29,410	23%
A&T	16,326	10,784	5,542	51
Total software services revenue	\$174,804	\$139,852	\$34,952	25%

Software services revenue primarily consists of professional services billed in connection with implementing our software, converting client data, training client personnel, custom development activities and consulting. New clients who purchase our proprietary software licenses generally also contract with us to provide for the related software services. Existing clients also periodically purchase additional training, consulting and minor programming services. Excluding the results of acquisitions, software services revenue grew 11% compared to the prior year period. This growth is partly due to additions to our implementation and support staff, which increased our capacity to deliver backlog, and a contract mix that included more custom development and other services.

Maintenance.

The following table sets forth a comparison of our maintenance revenue for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
ES	\$304,380	\$227,586	\$76,794	34%
A&T	18,589	17,951	638	4
Total maintenance revenue	\$322,969	\$245,537	\$77,432	32%

We provide maintenance and support services for our software products and certain third-party software. Excluding the results of acquisitions, maintenance revenue grew 9% compared to the prior year. Maintenance and support revenue increased mainly due to growth in our installed customer base from new software license sales as well as annual maintenance rate increases.

Appraisal services.

The following table sets forth a comparison of our appraisal services revenue for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
ES	\$ —	\$ —	\$ —	—%
A&T	26,287	25,065	1,222	5
Total appraisal services revenue	\$26,287	\$25,065	\$1,222	5%

The appraisal services business is somewhat cyclical and driven in part by statutory revaluation cycles in various states. In 2016, appraisal services revenue increased 5% compared to prior year primarily due to the Franklin County, Ohio, revaluation project, which began late in the fourth quarter of 2015.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Cost of Revenues and Gross Margins

The following table sets forth a comparison of the key components of our cost of revenues for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Software licenses and royalties	\$ 2,964	\$ 1,632	\$ 1,332	82%
Acquired software	22,235	4,440	17,795	N/M
Software services, maintenance and subscriptions	348,939	285,340	63,599	22
Appraisal services	16,411	15,922	489	3
Hardware and other	10,143	6,501	3,642	56
Total cost of revenues	\$400,692	\$313,835	\$86,857	28%

The following table sets forth a comparison of gross margin percentage by revenue type for the years ended December 31:

Gross margin percentage	2016	2015	Change
Software licenses, royalties and acquired software	66.1%	89.7%	(23.6)%
Software services, maintenance and subscriptions	45.5	42.6	2.9
Appraisal services	37.6	36.5	1.1
Hardware and other	32.3	32.5	(0.2)
Overall gross margin	47.0%	46.9%	0.1%

**Software licenses, royalties and acquired software.** Cost of software licenses, royalties and acquired software is primarily comprised of amortization expense for acquired software and third-party software costs. We do not have any direct costs associated with royalties. In 2016, our software licenses, royalties and acquired software gross margin percentage declined compared to the prior year due to much higher amortization expense for acquired software resulting from our acquisition of NWS. Excluding the results of NWS, our software license, royalties and acquired software gross margin was 93.9% in 2016 compared to 93.6% in 2015.

**Software services, maintenance and subscriptions.** Cost of software services, maintenance and subscriptions primarily consists of personnel costs related to installation of our software, conversion of client data, training client personnel and support activities and various other services such as custom client development and on-going operation of SaaS and e-filing arrangements. In 2016, the software services, maintenance and subscriptions gross margin increased 2.9% compared to the prior year. Our implementation and support staff grew by 169 employees in 2016. To support sales growth, we began making significant investments in our implementation and support staff in early 2015. Since December 31, 2014, excluding acquisitions, we added 369 implementation and support employees. These additions contributed to the revenue growth in 2016. In addition, the NWS revenue mix included a lower proportion of software services compared to Tyler's historical revenue mix, which also benefited the gross margin. Costs related to maintenance and various other services such as SaaS and e-filing typically grow at a slower rate than related revenue due to leverage in the utilization of support and maintenance staff and economies of scale. Maintenance and subscription price increases also resulted in slightly higher gross margins.

**Appraisal services.** Appraisal services revenue comprised approximately 3.5% of total revenue. The appraisal services gross margin increased 1.1% compared to 2015. A high proportion of the costs of appraisal services revenue are variable, as we often hire temporary employees to assist in appraisal projects, whose term of employment generally ends with the projects' completion.

Our 2016 blended gross margin remained consistent compared to 2015. Our overall gross margin was positively impacted by improved utilization of our support and maintenance staff; however, this benefit was offset by amortization expense for acquired software related to the NWS acquisition.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Selling, General and Administrative Expenses

The following table sets forth a comparison of selling, general and administrative expenses for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Selling, general and administrative expenses	\$167,161	\$133,317	\$33,844	25%

SG&A as a percentage of revenue was 22.1% in 2016 compared to 22.6% in 2015. In 2015, our SG&A expense included approximately \$5.9 million for financial advisory, legal, accounting, due diligence, valuation and other various expenses necessary to complete the NWS acquisition. Excluding NWS transaction costs and SG&A from acquisitions, SG&A expense increased approximately 12% mainly due to compensation costs related to increased staff levels, higher stock compensation expense and increased commission expense as a result of higher sales. We added 22 employees mainly to our sales and finance teams in 2016. In addition, our 2016 stock compensation expense rose \$6.4 million, mainly due to increases in our stock price over the last few years.

Research and Development Expense

The following table sets forth a comparison of our research and development expense for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Research and development expense	\$43,154	\$29,922	\$13,232	44%

Research and development expense consists mainly of costs associated with development of new products and technologies from which we do not currently generate revenue, as well as costs related to the ongoing development efforts for Microsoft Dynamics AX. Our contractual research and development commitment to develop public sector functionality for Microsoft Dynamics AX was amended in March 2016, which significantly reduced our development commitment through March 2018. However, we will continue to provide sustained engineering and technical support for the public sector functionality within Dynamics AX. License and maintenance royalties for all applicable domestic and international sales of Dynamics AX to public sector entities will continue under the terms of the contract.

Excluding the results of acquisitions, research and development expense increased 1.5% in 2016 compared to the prior year period, mainly due to research and development efforts related to new Tyler product development initiatives. As a result of the Microsoft Dynamics AX amendment, we also redeployed certain development resources to enhance functionality on several existing solutions and these costs were recorded in cost of sales – software services, maintenance and subscriptions.

Amortization of Customer and Trade Name Intangibles

The following table sets forth a comparison of amortization of customer and trade name intangibles for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Amortization of customer and trade name intangibles	\$13,731	\$5,905	\$7,826	133%

Amortization of customer and trade name intangibles increased substantially from the comparable prior year periods due to the acquisition of NWS in November 2015.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Other

The following table sets forth a comparison of other (expense) income, net for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Other (expense) income, net	\$ (1,998)	\$381	\$ (2,379)	N/M

Other (expense) income is comprised of interest expense and non-usage and other fees associated with our revolving credit agreement as well as interest income from invested cash. In 2015, we had significantly higher invested cash balances and no outstanding debt until we completed the NWS acquisition on November 16, 2015.

Income Tax Provision

The following table sets forth a comparison of our income tax provision for the years ended December 31:

(\$ in thousands)	2016	2015	Change	
			\$	%
Income tax provision	\$19,450	\$43,555	\$ (24,105)	(55)%
Effective income tax rate	15.0%	40.2%		

The decrease in the income tax provision during 2016 was primarily driven by the adoption of ASU No. 2016-09, which requires the excess tax benefits from stock option exercises to be recognized as a reduction of the income tax provision, whereas they previously were accounted for as an increase to shareholders’ equity. The adoption of ASU No. 2016-09 resulted in a \$29.6 million decrease in our full year 2016 provision for income taxes.

Excluding the excess tax benefits, our income tax provision and effective tax rate in 2016 would have been \$49.0 million and 37.9%, respectively.

The effective income tax rates in both 2016 and 2015 also differed from the statutory United States federal income tax rate of 35% due to state income taxes, the domestic production activities deduction, non-deductible share-based compensation expense, disqualifying incentive stock option dispositions, and non-deductible business expenses. We realized a lower domestic production activities deduction as a result of taxable income limitations and non-deductible transaction costs related to the NWS acquisition negatively impacted our 2015 effective tax rate. In the past few years a relatively high amount of excess tax benefits related to stock option exercises have resulted in a reduction in our qualified manufacturing activities deduction. The qualified manufacturing activities deduction can be limited to a certain level of taxable income on the tax return. Therefore, any significant items that reduce taxable income, such as excess tax benefits on stock options, can reduce the amount of the qualified manufacturing activities deduction. We experienced significant stock option exercise activity in 2016 and 2015 that generated excess tax benefits of \$29.6 million and \$45.3 million, respectively.

Management's Discussion and Analysis of Financial Condition and Results of Operations

FINANCIAL CONDITION AND LIQUIDITY

As of December 31, 2017, we had cash and cash equivalents of \$185.9 million compared to \$36.2 million at December 31, 2016. We also had \$63.8 million invested in investment grade corporate bonds, municipal bonds and asset-backed securities as of December 31, 2017. These investments mature between 2017 through 2021 and we intend to hold these investments until maturity. Cash and cash equivalents consist of cash on deposit with several domestic banks and money market funds. As of December 31, 2017, we had no outstanding borrowings and one outstanding letter of credit totaling \$0.5 million in favor of a client contract. The letter of credit guarantees our performance under the contract and expires in 2018. We believe our revolving line of credit, cash from operating activities, cash on hand and access to the credit markets provide us with sufficient flexibility to meet our long-term financial needs.

The following table sets forth a summary of cash flows for the years ended December 31:

(\$ in thousands)	2017	2016	2015
Cash flows provided (used) by:			
Operating activities	\$195,755	\$ 191,859	\$ 134,327
Investing activities	(85,395)	(50,720)	(398,459)
Financing activities	39,415	(138,075)	91,052
Net increase (decrease) in cash and cash equivalents	\$149,775	\$ 3,064	\$(173,080)

Net cash provided by operating activities continues to be our primary source of funds to finance operating needs and capital expenditures. Other potential capital resources include cash on hand, public and private issuances of debt or equity securities, and bank borrowings. It is possible that our ability to access the capital and credit markets in the future may be limited by economic conditions or other factors. We currently believe that cash provided by operating activities, cash on hand and available credit are sufficient to fund our working capital requirements, capital expenditures, income tax obligations, and share repurchases for at least the next twelve months.

In 2017, operating activities provided cash of \$195.8 million compared to \$191.9 million in 2016. Operating activities that provided cash were primarily comprised of net income of \$163.9 million, non-cash depreciation and amortization charges of \$53.9 million and non-cash share-based compensation expense of \$37.3 million. Working capital, excluding cash, increased approximately \$63.6 million mainly due to higher accounts receivable related to annual maintenance and subscription billings as well as milestone billings for several contracts, timing of income tax payments, and the deferred taxes associated with stock option activity during the period. These increases were offset slightly by the growth in deferred revenue balances and timing of payments of payroll related taxes and vendor invoices.

In general, changes in the balance of deferred revenue are cyclical and primarily driven by the timing of our maintenance renewal billings. Our renewal dates occur throughout the year but our largest renewal cycles occur in the second and fourth quarters.

Days sales outstanding in accounts receivable were 94 days at December 31, 2017, compared to 93 days at December 31, 2016. DSO is calculated based on quarter-end accounts receivable (excluding long-term receivables, but including unbilled receivables) divided by the quotient of annualized quarterly revenues divided by 360 days.

Investing activities used cash of \$85.4 million in 2017 compared to \$50.7 million in 2016. We invested \$59.8 million and received \$28.8 million in proceeds from investment grade corporate bonds, municipal bonds and asset-backed securities with maturity dates ranging from 2017 through 2021. Approximately \$43.1 million was invested in property and equipment. We purchased an office building in Latham, New York for approximately \$2.9 million and paid \$2.1 million for building improvements. We paid \$19.4 million for construction to expand our office building in Yarmouth, Maine. We also made three small acquisitions with a combined cash purchase price of \$11.3 million. The remaining additions were for computer equipment, furniture and fixtures in support of internal growth, particularly with respect to our cloud-based offerings. These expenditures were funded from cash generated from operations.



Management's Discussion and Analysis of Financial Condition and Results of Operations

In 2016, we made a small acquisition for approximately \$7.4 million and paid \$2.0 million related to the working capital holdback in connection with the NWS acquisition. We invested \$20.3 million in investment grade corporate and municipal bonds. We purchased an office building in Falmouth, Maine, that was previously leased from an entity owned by an executive's father and brother, for approximately \$9.7 million and paid \$8.0 million for construction to expand our office building in Yarmouth, Maine. The remaining use of cash was for capital expenditures related to computer equipment, furniture and fixtures in support of internal growth, particularly with respect to growth in our cloud-based offerings. These expenditures were funded from cash generated from operations.

In 2015, we completed the acquisition of NWS for the purchase price of \$337.5 million in cash, of which \$4.0 million was accrued at December 31, 2015, and 2.1 million shares of Tyler common stock valued at \$362.8 million. Also, we completed a small acquisition with a purchase price of \$6.1 million in cash and 12,500 shares of Tyler common stock valued at \$1.5 million and we made a \$15.0 million investment in convertible preferred stock representing a 20% interest in Record Holdings Pty Limited. We also invested \$30.9 million in investment grade corporate and municipal bonds. The remaining use of cash was for capital expenditures related to computer equipment, furniture and fixtures in support of internal growth, particularly with respect to growth in our cloud-based offerings. These expenditures were funded from cash generated from operations, cash on hand and bank borrowings.

Financing activities provided cash of \$39.4 million in 2017 compared to cash used of \$138.1 million in 2016. Financing activities in 2017 were comprised of \$10.0 million net payments on our revolving line of credit offset by collections of \$56.9 million from stock option exercises and employee stock purchase plan activity. We also purchased approximately 44,000 shares of our common stock for an aggregate purchase price of \$6.6 million.

Financing activities in 2016 were comprised of \$56.0 million net payments on our revolving line of credit offset somewhat by collections of \$29.8 million from stock option exercises and employee stock purchase plan activity. We also purchased approximately 882,000 shares of our common stock for an aggregate purchase price of \$112.7 million, of which \$860,000 was accrued at December 31, 2016. Cash provided by financing activities in 2015 resulted from net borrowings of \$66.0 million and collections of \$27.8 million from stock option exercises and employee stock purchase plan activity. We also purchased approximately 5,400 shares of our common stock for an aggregate purchase price of \$645,000 in 2015 and paid \$2.1 million in debt issuance costs.

On May 11, 2016, our board of directors authorized the repurchase of an additional 1.5 million shares of Tyler common stock. The repurchase program, which was approved by our board of directors, was announced in October 2002, and was amended at various times from 2003 through 2016. As of December 31, 2017, we had remaining authorization to repurchase up to 2.0 million additional shares of our common stock. Our share repurchase program allows us to repurchase shares at our discretion. Market conditions influence the timing of the buybacks and the number of shares repurchased, as well as the volume of employee stock option exercises. Share repurchases are generally funded using our existing cash balances and borrowings under our credit facility and may occur through open market purchases and transactions structured through investment banking institutions, privately negotiated transactions and/or other mechanisms. There is no expiration date specified for the authorization and we intend to repurchase stock under the plan from time to time.

On November 16, 2015, we entered into a \$300.0 million Credit Agreement (the "Credit Facility") with the various lenders party thereto and Wells Fargo Bank, National Association, as Administrative Agent. The Credit Facility provides for a revolving credit line of up to \$300.0 million, including a \$10.0 million sublimit for letters of credit. The Credit Facility matures on November 16, 2020. Borrowings under the Credit Facility may be used for general corporate purposes, including working capital requirements, acquisitions and share repurchases. Borrowings under the Credit Facility bear interest at a rate of either (1) Wells Fargo Bank's prime rate (subject to certain higher rate determinations) plus a margin of 0.25% to 1.00% or (2) the 30, 60, 90 or 180 day LIBOR rate plus a margin of 1.25% to 2.00%. As of

Management's Discussion and Analysis of Financial Condition and Results of Operations

December 31, 2017, our interest rate was 4.75% under the prime rate option or approximately 2.78% under the 30-day LIBOR option. The Credit Facility is secured by substantially all of our assets. The Credit Facility requires us to maintain certain financial ratios and other financial conditions and prohibits us from making certain investments, advances, cash dividends or loans, and limits incurrence of additional indebtedness and liens. As of December 31, 2017, we were in compliance with those covenants.

As of December 31, 2017, we had no outstanding borrowings and had unused borrowing capacity of \$299.5 million under the Credit Facility. We paid interest of \$804,000 in 2017, \$1.9 million in 2016, and \$223,000 in 2015.

We paid income taxes, net of refunds received, of \$36.0 million in 2017, \$30.2 million in 2016, and \$27.3 million in 2015. In 2017, we experienced significant stock option exercise activity that generated net tax benefits of \$40.6 million and reduced tax payments accordingly. In 2016 and 2015, excess tax benefits were \$29.6 million and \$45.3 million, respectively.

The Tax Act, enacted on December 22, 2017, reduced the U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018. We expect that the Tax Act will have a positive impact on liquidity in future years due to the decrease in the U.S. corporate income tax rate.

We anticipate that 2018 capital spending will be between \$22 million and \$25 million, including approximately \$1 million related to real estate. We expect the majority of the other capital spending will consist of computer equipment and software for infrastructure replacements and expansion. We currently do not expect to capitalize significant amounts related to software development in 2018, but the actual amount and timing of those costs, and whether they are capitalized or expensed may result in additional capitalized software development. Capital spending is expected to be funded from existing cash balances, cash flows from operations and borrowings under our revolving line of credit.

From time to time we engage in discussions with potential acquisition candidates. In order to pursue such opportunities, which could require significant commitments of capital, we may be required to incur debt or to issue additional potentially dilutive securities in the future. No assurance can be given as to our future acquisition opportunities and how such opportunities will be financed.

We lease office facilities, as well as transportation, computer and other equipment used in our operations under non-cancelable operating lease agreements expiring at various dates through 2025. Most leases contain renewal options and some contain purchase options.

Summarized in the table below are our obligations to make future payments under our Credit Facility and lease obligations at December 31, 2017 (in thousands):

	2018	2019	2020	2021	2022	Thereafter	Total
Revolving line of credit	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Lease obligations	5,428	4,201	3,644	2,366	812	499	16,950
Total future payment obligations	\$5,428	\$4,201	\$3,644	\$2,366	\$812	\$499	\$16,950

As of December 31, 2017, we do not have any off-balance sheet arrangements, guarantees to third-parties or material purchase commitments, except for the operating lease commitments listed above.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Capitalization

At December 31, 2017, our capitalization consisted of no outstanding borrowings and \$1.2 billion of shareholders' equity.

Quantitative And Qualitative Disclosures About Market Risk.

Market risk represents the risk of loss that may affect us due to adverse changes in financial market prices and interest rates.

In 2017, our effective average interest rate for borrowings was 2.20%. As of December 31, 2017, our interest rate was 4.75% under the prime rate option or approximately 2.78% under the 30-day LIBOR option. The Credit Facility is secured by substantially all of our assets. Loans under the Credit Facility bear interest, at Tyler's option, at a per annum rate of either (1) the Wells Fargo Bank prime rate (subject to certain higher rate determinations) plus a margin of 0.25% to 1.00% or (2) the 30, 60, 90 or 180-day LIBOR rate plus a margin of 1.25% to 2.00%.

As of December 31, 2017, we had no outstanding borrowings under the Credit Facility and therefore are not subject to any interest risk.

Controls and Procedures

Controls And Procedures.

**Evaluation of Disclosure Controls and Procedures** – We maintain disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act) designed to provide reasonable assurance that the information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. These include controls and procedures designed to ensure that this information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosures. Management, with the participation of the chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2017. Based on this evaluation, the chief executive officer and chief financial officer have concluded that our disclosure controls and procedures were effective as of December 31, 2017.

**Management's Report on Internal Control Over Financial Reporting** – Tyler's management is responsible for establishing and maintaining effective internal control over financial reporting as defined in Securities Exchange Act Rule 13a-15(f). Tyler's internal control over financial reporting is designed to provide reasonable assurance to Tyler's management and board of directors regarding the preparation and fair presentation of published financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management assessed the effectiveness of Tyler's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on our assessment, we concluded that, as of December 31, 2017, Tyler's internal control over financial reporting was effective based on those criteria.

Tyler's internal control over financial reporting as of December 31, 2017 has been audited by Ernst & Young LLP, the independent registered public accounting firm who also audited Tyler's financial statements. Ernst & Young's attestation report on Tyler's internal control over financial reporting appears on page 44 hereof.

**Changes in Internal Control Over Financial Reporting** – During the quarter ended December 31, 2017, there were no changes in our internal control over financial reporting, as defined in Securities Exchange Act Rule 13a-15(f), that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Tyler Technologies, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Tyler Technologies, Inc. (the Company) as of December 31, 2017 and 2016, the related consolidated statements of comprehensive income, cash flows and shareholders’ equity for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control–Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 21, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company’s auditor since 1966.

Dallas, Texas  
February 21, 2018

Ernst + Young LLP

Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Tyler Technologies, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Tyler Technologies, Inc.’s internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control–Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Tyler Technologies, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of comprehensive income, shareholders’ equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and our report dated February 21, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Ernst + Young LLP

Dallas, Texas  
February 21, 2018

Consolidated Statements of Comprehensive Income

For the years ended December 31,	2017	2016	2015
(In thousands, except per share amounts)			
Revenues:			
Software licenses and royalties	\$ 75,694	\$ 74,306	\$ 59,008
Subscriptions	173,510	142,704	111,933
Software services	187,149	174,804	139,852
Maintenance	361,569	322,969	245,537
Appraisal services	25,023	26,287	25,065
Hardware and other	17,717	14,973	9,627
Total revenues	840,662	756,043	591,022
Cost of revenues:			
Software licenses and royalties	3,321	2,964	1,632
Acquired software	21,686	22,235	4,440
Software services, maintenance and subscriptions	387,634	348,939	285,340
Appraisal services	16,286	16,411	15,922
Hardware and other	12,595	10,143	6,501
Total cost of revenues	441,522	400,692	313,835
Gross profit	399,140	355,351	277,187
Selling, general and administrative expenses	176,974	167,161	133,317
Research and development expense	47,324	43,154	29,922
Amortization of customer and trade name intangibles	13,912	13,731	5,905
Operating income	160,930	131,305	108,043
Other income (expense), net	698	(1,998)	381
Income before income taxes	161,628	129,307	108,424
Income tax (benefit) provision	(2,317)	19,450	43,555
Net income	\$163,945	\$109,857	\$ 64,869
Earnings per common share:			
Basic	\$ 4.40	\$ 3.01	\$ 1.90
Diluted	\$ 4.18	\$ 2.82	\$ 1.77

See accompanying notes.

Consolidated Balance Sheets

December 31,	2017	2016
(In thousands, except par value and share amounts)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 185,926	\$ 36,151
Accounts receivable (less allowance for losses of \$5,427 in 2017 and \$3,396 in 2016)	227,127	200,334
Short-term investments	43,159	20,273
Prepaid expenses	27,252	21,039
Income tax receivable	11,339	2,895
Other current assets	1,997	2,268
Total current assets	496,800	282,960
Accounts receivable, long-term	7,536	2,480
Property and equipment, net	152,315	124,268
Other assets:		
Goodwill	657,987	650,237
Other intangibles, net	236,444	267,259
Non-current investments and other assets	38,510	30,741
	\$1,589,592	\$1,357,945
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 8,174	\$ 7,295
Accrued liabilities	64,675	55,989
Deferred revenue	309,461	298,217
Total current liabilities	382,310	361,501
Revolving line of credit	—	10,000
Deferred revenue, long-term	1,274	2,140
Deferred income taxes	38,914	68,779
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, \$10.00 par value; 1,000,000 shares authorized; none issued	—	—
Common stock, \$0.01 par value; 100,000,000 shares authorized; 48,147,969 shares issued in 2017 and 2016	481	481
Additional paid-in capital	626,867	556,663
Accumulated other comprehensive loss, net of tax	(46)	(46)
Retained earnings	599,821	435,876
Treasury stock, at cost; 10,262,182 and 11,381,733 shares in 2017 and 2016, respectively	(60,029)	(77,449)
Total shareholders' equity	1,167,094	915,525
	\$1,589,592	\$1,357,945

See accompanying notes.



Consolidated Statements of Shareholders' Equity

For the years ended December 31, 2017, 2016 and 2015

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Treasury Stock		Total Shareholders' Equity
	Shares	Amount				Shares	Amount	
(In thousands)								
Balance at December 31, 2014	48,148	\$481	\$201,389	\$(46)	\$261,150	(14,679)	\$(126,001)	\$ 336,973
Net income	—	—	—	—	64,869	—	—	64,869
Issuance of shares pursuant to stock compensation plan	—	—	4,332	—	—	1,118	18,828	23,160
Stock compensation	—	—	20,182	—	—	—	—	20,182
Issuance of shares pursuant to employee stock purchase plan	—	—	3,879	—	—	43	792	4,671
Federal income tax benefit related to exercise of stock options	—	—	45,314	—	—	—	—	45,314
Treasury stock purchases	—	—	—	—	—	(5)	(645)	(645)
Issuance of shares for acquisition	—	—	332,659	—	—	2,149	31,674	364,333
Balance at December 31, 2015	48,148	481	607,755	(46)	326,019	(11,374)	(75,352)	858,857
Net income	—	—	—	—	109,857	—	—	109,857
Issuance of shares pursuant to stock compensation plan	—	—	(82,273)	—	—	827	105,800	23,527
Stock compensation	—	—	29,747	—	—	—	—	29,747
Issuance of shares pursuant to employee stock purchase plan	—	—	1,434	—	—	47	4,802	6,236
Treasury stock purchases	—	—	—	—	—	(882)	(112,699)	(112,699)
Balance at December 31, 2016	48,148	481	556,663	(46)	435,876	(11,382)	(77,449)	915,525
Net income	—	—	—	—	163,945	—	—	163,945
Issuance of shares pursuant to stock compensation plan	—	—	28,174	—	—	1,113	21,671	49,845
Stock compensation	—	—	37,348	—	—	—	—	37,348
Issuance of shares pursuant to employee stock purchase plan	—	—	4,682	—	—	51	2,362	7,044
Treasury stock purchases	—	—	—	—	—	(44)	(6,613)	(6,613)
Balance at December 31, 2017	48,148	\$481	\$626,867	\$(46)	\$599,821	(10,262)	\$ (60,029)	\$1,167,094

See accompanying notes.

Consolidated Statements of Cash Flows

For the years ended December 31,

	2017	2016	2015
(In thousands)			
Cash flows from operating activities:			
Net income	\$163,945	\$ 109,857	\$ 64,869
Adjustments to reconcile net income to cash provided by operations:			
Depreciation and amortization	53,925	50,301	19,574
Share-based compensation expense	37,348	29,747	20,182
Provision for losses – accounts receivable	4,110	4,484	1,756
Deferred income tax benefit	(29,865)	(28,939)	(7,956)
Changes in operating assets and liabilities, exclusive of effects of acquired companies:			
Accounts receivable	(35,558)	(30,227)	(28,172)
Income tax receivable	(8,444)	18,185	24,255
Prepaid expenses and other current assets	(5,897)	2,229	(3,054)
Accounts payable	878	387	652
Accrued liabilities	6,050	10,717	490
Deferred revenue	9,263	25,118	41,731
Net cash provided by operating activities	195,755	191,859	134,327
Cash flows from investing activities:			
Cost of acquisitions, net of cash acquired	(11,344)	(9,394)	(339,961)
Purchase of cost method investment	—	—	(15,000)
Purchase of marketable security investments	(59,779)	(20,316)	(31,907)
Proceeds from marketable security investments	28,786	16,837	900
Additions to property and equipment	(43,057)	(37,726)	(12,501)
(Increase) decrease in other	(1)	(121)	10
Net cash used by investing activities	(85,395)	(50,720)	(398,459)
Cash flows from financing activities:			
(Decrease) increase in net borrowings on revolving line of credit	(10,000)	(56,000)	66,000
Purchase of treasury shares	(7,474)	(111,838)	(645)
Contributions from employee stock purchase plan	7,044	6,236	4,671
Proceeds from exercise of stock options	49,845	23,527	23,160
Debt issuance costs	—	—	(2,134)
Net cash provided (used) by financing activities	39,415	(138,075)	91,052
Net increase (decrease) in cash and cash equivalents	149,775	3,064	(173,080)
Cash and cash equivalents at beginning of period	36,151	33,087	206,167
Cash and cash equivalents at end of period	\$185,926	\$ 36,151	\$ 33,087

See accompanying notes.

Notes to Consolidated Financial Statements

(Tables in thousands, except per share data)

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description Of Business

We provide integrated software systems and related services for the public sector, with a focus on local governments. We develop and market a broad line of software solutions and services to address the information technology (“IT”) needs of cities, counties, schools and other local government entities. In addition, we provide professional IT services, including software and hardware installation, data conversion, training, and for certain customers, product modifications, along with continuing maintenance and support for customers using our systems. We also provide subscription-based services such as software as a service (“SaaS”) arrangements, which utilize the Tyler private cloud, and electronic document filing solutions (“e-filing”). In addition, we provide property appraisal outsourcing services for taxing jurisdictions.

Principles Of Consolidation

The consolidated financial statements include our parent company and two subsidiaries, which are wholly-owned. All significant intercompany balances and transactions have been eliminated in consolidation. Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions, and other events and circumstances from non-owner sources and includes all components of net income (loss) and other comprehensive income (loss). We had no items of other comprehensive income (loss) during the years ended December 31, 2017, 2016 and 2015.

Cash And Cash Equivalents

Cash in excess of that necessary for operating requirements is invested in short-term, highly liquid, income-producing investments. Investments with original maturities of three months or less are classified as cash and cash equivalents, which primarily consist of cash on deposit with several banks and money market funds. Cash and cash equivalents are stated at cost, which approximates market value.

Revenue Recognition

We earn revenue from software licenses, royalties, subscription-based services, software services, post-contract customer support (“PCS” or “maintenance”), hardware, and appraisal services.

Software Arrangements:

For the majority of our software arrangements, we provide services that range from installation, training, and basic consulting to software modification and customization to meet specific customer needs. If the arrangement does not require significant production, modification or customization or where the software services are not considered essential to the functionality of the software, revenue is recognized when all of the following conditions are met

- persuasive evidence of an arrangement exists
- delivery has occurred
- our fee is fixed or determinable
- collectability is probable

Notes to Consolidated Financial Statements

For multiple element arrangements, each element of the arrangement is analyzed and we allocate a portion of the total arrangement fee to the elements based on the relative fair value of the element using vendor-specific objective evidence of fair value (“VSOE”), regardless of any separate prices stated within the contract for each element. Fair value is considered the price a customer would be required to pay if the element was sold separately based on our historical experience of stand-alone sales of these elements to third-parties. For PCS, we use renewal rates for continued support arrangements to determine fair value. For software services, we use the fair value we charge our customers when those services are sold separately. We monitor our transactions to determine that we maintain and periodically revise VSOE to reflect fair value. In software arrangements in which we have the fair value of all undelivered elements but not of a delivered element, we apply the “residual method,” in compliance with Accounting Standards Codification (“ASC”) 985-605, Software Revenue Recognition. Under the residual method, if the fair value of all undelivered elements is determinable, the fair value of the undelivered elements is deferred and the remaining portion of the arrangement fee is allocated to the delivered element(s) and is recognized as revenue assuming the other revenue recognition criteria are met. In software arrangements in which we do not have VSOE for all undelivered elements, revenue is deferred until fair value is determined or all elements for which we do not have VSOE have been delivered. Alternatively, if sufficient VSOE does not exist and the only undelivered element is services that do not involve significant modification or customization of the software, the entire fee is recognized over the period during which the services are expected to be performed.

Software Licenses and Royalties

We recognize the revenue allocable to software licenses and specified upgrades upon delivery of the software product or upgrade to the customer, unless the fee is not fixed or determinable or collectability is not probable. If the fee is not fixed or determinable, software license revenue is generally recognized as payments become due from the customer. If collectability is not considered probable, revenue is recognized when the fee is collected. Arrangements that include software services, such as training or installation, are evaluated to determine whether those services are essential to the product’s functionality.

A majority of our software arrangements involve “off-the-shelf” software. We consider software to be off-the-shelf software if it can be added to an arrangement with minor changes in the underlying code and it can be used by the customer for the customer’s purpose upon installation. For off-the-shelf software arrangements, we recognize the software license fee as revenue after delivery has occurred, customer acceptance is reasonably assured, that portion of the fee represents a non-refundable enforceable claim and is probable of collection, and the remaining services such as training are not considered essential to the product’s functionality.

For arrangements that involve significant production, modification or customization of the software, or where software services are otherwise considered essential, we recognize revenue using contract accounting and apply the provisions of the Construction type and Production type Contracts as discussed in ASC 605-35. We generally use the percentage-of-completion method to recognize revenue from these arrangements. We measure progress-to-completion primarily using labor hours incurred, or value added. The percentage-of-completion method generally results in the recognition of reasonably consistent profit margins over the life of a contract because we have the ability to produce reasonably dependable estimates of contract billings and contract costs. We use the level of profit margin that is most likely to occur on a contract. If the most likely profit margin cannot be precisely determined, the lowest probable level of profit margin in the range of estimates is used until the results can be estimated more precisely. These arrangements are often implemented over an extended time period and occasionally require us to revise total cost estimates. Amounts recognized in revenue are calculated using the progress-to-completion measurement after giving effect to any changes in our cost estimates. Changes to total estimated contract costs, if any, are recorded in the period they are determined. Estimated losses on uncompleted contracts are recorded in the period in which we first determine that a loss is apparent. For arrangements that include new product releases for which it is difficult to estimate final profitability except to assume that no loss will ultimately be incurred, we recognize revenue under the completed contract method. Under the completed contract method, revenue is recognized only when a contract is completed or substantially complete. Historically these amounts have been immaterial.

Notes to Consolidated Financial Statements

We recognize royalty revenue when earned under the terms of our third party royalty arrangements, provided the fees are considered fixed or determinable and realization of payment is probable. Currently, our third party royalties are variable in nature and such amounts are not considered fixed or determinable until we receive notice of amounts earned. Typically, we receive notice of royalty revenues earned on a quarterly basis in the immediate quarter following the royalty reporting period.

Software Services

Some of our software arrangements include services considered essential for the customer to use the software for the customer’s purposes. For these software arrangements, both the software license revenue and the services revenue are recognized as the services are performed using the percentage-of-completion contract accounting method. When software services are not considered essential, the fee allocable to the service element is recognized as revenue as we perform the services.

Computer Hardware Equipment

Revenue allocable to computer hardware equipment is recognized when we deliver the equipment and collection is probable.

Post-Contract Customer Support

Our customers generally enter into PCS agreements when they purchase our software licenses. PCS includes telephone and online support, bug fixes, and rights to upgrades on a when-and-if available basis. Our PCS agreements are typically renewable annually. Revenue allocated to PCS is recognized on a straight-line basis over the period the PCS is provided. All significant costs and expenses associated with PCS are expensed as incurred.

Subscription-Based Services:

Subscription-based services consist of revenues derived from SaaS arrangements, which utilize the Tyler private cloud, and electronic filing transactions.

For SaaS arrangements, we evaluate whether the customer has the contractual right to take possession of our software at any time during the hosting period without significant penalty and whether the customer can feasibly maintain the software on the customer’s hardware or enter into another arrangement with a third-party to host the software. In cases where the customer has the contractual right to take possession of our software at any time during the hosting period without significant penalty and the customer can feasibly maintain the software on the customer’s hardware or enter into another arrangement with a third-party to host the software, we recognize the license, professional services and hosting services revenues pursuant to ASC 985-605, Software Revenue Recognition.

For SaaS arrangements that do not meet the criteria for recognition under ASC 985-605, we account for the elements under ASC 605-25, Multiple Element Arrangements, using all applicable facts and circumstances, including whether (i) the element has stand-alone value, (ii) there is a general right of return and (iii) the revenue is contingent on delivery of other elements. We allocate contract value to each element of the arrangement that qualifies for treatment as a separate element based on VSOE, and if VSOE is not available, third-party evidence, and if third-party evidence is unavailable, estimated selling price. We recognize hosting services ratably over the term of the arrangement, which range from one to ten years but are typically for a period of five to seven years. For professional services associated with SaaS arrangements that we determine do not have stand-alone value to the customer or are contingent on delivery of other elements, we recognize the services revenue ratably over the remaining contractual period once we have provided the customer access to the software and we may begin billing for hosting services. We record amounts that have been invoiced in accounts receivable and in deferred revenue or revenues, depending on whether the revenue recognition criteria have been met.

Notes to Consolidated Financial Statements

Electronic filing transaction fees primarily pertain to documents filed with the courts by attorneys and other third-parties via our e-filing services and retrieval of filed documents via our access services. The elements for these arrangements are accounted for under ASC 605-25. For each document filed with a court, the filer generally pays a transaction fee and a court filing fee to us and we remit a portion of the transaction fee and the filing fee to the court. We record as revenue the transaction fee, while the portion of the transaction fee remitted to the courts is recorded as cost of sales as we are acting as a principal in the arrangement. Court filing fees collected on behalf of the courts and remitted to the courts are recorded on a net basis and thus do not affect the statement of comprehensive income. In some cases, we are paid on a fixed fee basis and recognize the revenue ratably over the contractual period.

Costs of performing services under subscription-based arrangements are expensed as incurred, except for certain direct and incremental contract origination and set-up costs associated with SaaS arrangements. Such direct and incremental costs are capitalized and amortized ratably over the related SaaS hosting term.

Appraisal Services:

For our property appraisal projects, we recognize revenue using the proportional performance method of revenue recognition since many of these projects are implemented over one to three year periods and consist of various unique activities. Under this method of revenue recognition, we identify each activity for the appraisal project, with a typical project generally calling for bonding, office set up, training, routing of map information, data entry, data collection, data verification, informal hearings, appeals and project management. Each activity or act is specifically identified and assigned an estimated cost. Costs which are considered to be associated with indirect activities, such as bonding costs and office set up, are expensed as incurred. These costs are typically billed as incurred and are recognized as revenue equal to cost. Direct contract fulfillment activities and related supervisory costs such as data collection, data entry and verification are expensed as incurred. The direct costs for these activities are determined and the total contract value is then allocated to each activity based on a consistent profit margin. Each activity is assigned a consistent unit of measure to determine progress towards completion and revenue is recognized for each activity based upon the percentage complete as applied to the estimated revenue for that activity. Progress for the fulfillment activities is typically based on labor hours or an output measure such as the number of parcel counts completed for that activity. Estimated losses on uncompleted contracts are recorded in the period in which we first determine that a loss is apparent.

Allocation of Revenue in Statements of Comprehensive Income

In our statements of comprehensive income, we allocate revenue to software licenses, software services, maintenance and hardware and other based on the VSOE of fair value for elements in each revenue arrangement and the application of the residual method for arrangements in which we have established VSOE of fair value for all undelivered elements. In arrangements where we are not able to establish VSOE of fair value for all undelivered elements, revenue is first allocated to any undelivered elements for which VSOE of fair value has been established. We then allocate revenue to any undelivered elements for which VSOE of fair value has not been established based upon management’s best estimate of fair value of those undelivered elements and apply a residual method to determine the license fee. Management’s best estimate of fair value of undelivered elements for which VSOE of fair value has not been established is based upon the VSOE of similar offerings and other objective criteria.

Other

The majority of deferred revenue consists of unearned maintenance revenue that has been billed based on contractual terms in the underlying arrangement with the remaining balance consisting of payments received in advance of revenue being earned under software licensing, subscription-based services, software and appraisal services and hardware installation. Unbilled revenue is not billable at the balance sheet date but is recoverable over the remaining life of the contract through billings made in accordance with contractual agreements. The termination clauses in our contracts generally provide for the payment for the value of products delivered and services performed in the event of an early termination.

## Notes to Consolidated Financial Statements

Prepaid expenses and other current assets include direct and incremental costs such as commissions associated with arrangements for which revenue recognition has been deferred. Such costs are expensed at the time the related revenue is recognized.

### Use of Estimates

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States (“GAAP”) requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include the application of the percentage-of-completion and proportional performance methods of revenue recognition, the carrying amount and estimated useful lives of intangible assets, determination of share-based compensation expense and valuation allowance for receivables. Actual results could differ from estimates.

### Property and Equipment, Net

Property, equipment and purchased software are recorded at original cost and increased by the cost of any significant improvements after purchase. We expense maintenance and repairs when incurred. Depreciation and amortization is calculated using the straight-line method over the shorter of the asset’s estimated useful life or the term of the lease in the case of leasehold improvements. For income tax purposes, we use accelerated depreciation methods as allowed by tax laws.

### Research and Development Costs

We expensed research and development costs of \$47.3 million during 2017, \$43.2 million during 2016, and \$29.9 million during 2015.

### Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred taxes arise because of different treatment between financial statement accounting and tax accounting, known as “temporary differences.” We record the tax effect of these temporary differences as “deferred tax assets” (generally items that can be used as a tax deduction or credit in the future periods) and “deferred tax liabilities” (generally items that we received a tax deduction for, which have not yet been recorded in the income statement). The deferred tax assets and liabilities are measured using enacted tax rules and laws that are expected to be in effect when the temporary differences are expected to be recovered or settled. A valuation allowance would be established to reduce deferred tax assets if it is more likely than not that a deferred tax asset will not be “realized.” On December 22, 2017, the Tax Cuts and Jobs Act (the “Tax Act”) was enacted into law. The Tax Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions for individuals and businesses. For businesses, the Tax Act reduces the corporate U.S. federal tax rate from a maximum of 35% to a flat 21% rate and transitions from a worldwide tax system to a territorial tax system. Under ASC 740 Income Taxes, the effects of changes in tax rates and laws are recognized in the period in which the new legislation is enacted. In the case of U.S. corporate federal income taxes, the enactment date is the date the bill becomes law (i.e., upon presidential signature). See Note 7 – “Income Tax” for further discussion related to the Tax Act.

### Share-Based Compensation

We have a stock option plan that provides for the grant of stock options to key employees, directors and non-employee consultants. Stock options generally vest after three to six years of continuous service from the date of grant and have a contractual term of 10 years. We account for share-based compensation utilizing the fair value recognition pursuant to ASC 718, Stock Compensation. See Note 9 – “Share-Based Compensation” for further information.

## Notes to Consolidated Financial Statements

### Goodwill and Other Intangible Assets

#### Goodwill

Goodwill represents the excess of the purchase price over the fair value of net assets acquired, including identifiable intangible assets, in connection with our business combinations. Upon acquisition, goodwill is assigned to the reporting unit that is expected to benefit from the synergies of the business combination, which is the reporting unit to which the related acquired technology is assigned. A reporting unit is the operating segment, or a business unit one level below that operating segment, for which discrete financial information is prepared and regularly reviewed by executive management. We assess goodwill for impairment annually as of April, or more frequently whenever events or changes in circumstances indicate its carrying value may not be recoverable.

When testing goodwill for impairment quantitatively, we first compare the fair value of each reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds its fair value, a second step is performed to measure the amount of potential impairment. In the second step, we compare the implied fair value of reporting unit goodwill with the carrying amount of the reporting unit’s goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized. The fair values calculated in our impairment tests are determined using discounted cash flow models involving several assumptions. The assumptions that are used are based upon what we believe a hypothetical marketplace participant would use in estimating fair value. We evaluate the reasonableness of the fair value calculations of our reporting units by comparing the total of the fair value of all of our reporting units to our total market capitalization.

Our annual goodwill impairment analysis, which we performed quantitatively during the second quarter of 2017, did not result in an impairment charge.

#### Other Intangible Assets

We make judgments about the recoverability of purchased intangible assets other than goodwill whenever events or changes in circumstances indicate that an impairment may exist. Customer base and acquired software each comprise approximately half of our purchased intangible assets other than goodwill. We review our customer turnover each year for indications of impairment. Our customer turnover has historically been very low. There have been no significant impairments of intangible assets in any of the periods presented. If indications of impairment are determined to exist, we measure the recoverability of assets by a comparison of the carrying amount of the asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the assets exceeds their estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the assets exceeds the fair value of the assets.

#### Impairment of Long-Lived Assets

We periodically evaluate whether current facts or circumstances indicate that the carrying value of our property and equipment or other long-lived assets to be held and used may not be recoverable. If such circumstances are determined to exist, we measure the recoverability of assets to be held and used by a comparison of the carrying amount of the asset or appropriate grouping of assets and the estimated undiscounted future cash flows expected to be generated by the assets. If the carrying amount of the assets exceeds their estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposed group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet. There have been no significant impairments of long-lived assets in any of the periods presented.



Notes to Consolidated Financial Statements

Costs of Computer Software

We capitalize software development costs upon the establishment of technological feasibility and prior to the availability of the product for general release to customers. Software development costs primarily consist of personnel costs and rent for related office space. We begin to amortize capitalized costs when a product is available for general release to customers. Amortization expense is determined on a product-by-product basis at a rate not less than straight-line basis over the product's remaining estimated economic life. We have not capitalized any internal software development costs in any of the periods presented.

Fair Value of Financial Instruments

Cash and cash equivalents, accounts receivables, accounts payables, short-term obligations and certain other assets at cost approximate fair value because of the short maturity of these instruments. The fair value of our revolving line of credit approximates book value as of December 31, 2017, because our interest rates reset approximately every 30 days or less. See Note 6 – “Revolving Line of Credit” for further discussion.

As of December 31, 2017, we have \$63.8 million in investment grade corporate bonds, municipal bonds and asset-backed securities with maturity dates ranging from 2017 through 2021. We intend to hold these bonds to maturity and have classified them as such. We believe cost approximates fair value because of the relatively short duration of these investments. The fair values of these securities are considered Level II as they are based on inputs from quoted prices in markets that are not active or from other observable market data. These investments are included in short-term investments and non-current investments and other assets.

As of December 31, 2017, we have \$15.0 million invested in convertible preferred stock representing a 20% interest in Record Holdings Pty Limited, a privately held Australian company specializing in digitizing the spoken word in court and legal proceedings. The investment in convertible preferred stock is accounted under the cost method because the Company does not have the ability to exercise significant influence over the investee and the securities do not have readily determinable fair values. Our investment is carried at cost less any impairment write-downs. Annually, the Company's cost method investments are assessed for impairment. The Company does not reassess the fair value of cost method investments if there are no identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investments. This investment is included in non-current investments and other assets in the accompanying consolidated balance sheets.

Concentrations of Credit Risk and Unbilled Receivables

Financial instruments that potentially subject us to significant concentrations of credit risk consist principally of cash and cash equivalents, accounts receivable from trade customers, and investments in marketable securities. Our cash and cash equivalents primarily consists of operating account balances and money market funds, which are maintained at several major domestic financial institutions and the balances often exceed insured amounts. As of December 31, 2017, we had cash and cash equivalents of \$185.9 million. We perform periodic evaluations of the credit standing of these financial institutions.

Concentrations of credit risk with respect to receivables are limited due to the size and geographical diversity of our customer base. Historically, our credit losses have not been significant. As a result, we do not believe we have any significant concentrations of credit risk as of December 31, 2017.

We maintain allowances for doubtful accounts and sales adjustments, which are provided at the time the revenue is recognized. Since most of our customers are domestic governmental entities, we rarely incur a loss resulting from the inability of a customer to make required payments. Events or changes in circumstances that indicate that the carrying amount for the allowances for doubtful accounts and sales adjustments may require revision, include, but are not limited to, deterioration of a customer's financial condition, failure to manage our customer's expectations regarding the scope of the services to be delivered, and defects or errors in new versions or enhancements of our software products.

Notes to Consolidated Financial Statements

The following table summarizes the changes in the allowances for doubtful accounts and sales adjustments:

Years Ended December 31,	2017	2016	2015
Balance at beginning of year	\$ 3,396	\$ 1,640	\$ 1,725
Provisions for losses – accounts receivable	4,110	4,484	1,756
Collection of accounts previously written off	—	—	153
Deductions for accounts charged off or credits issued	(2,079)	(2,728)	(1,994)
Balance at end of year	\$ 5,427	\$ 3,396	\$ 1,640

The termination clauses in most of our contracts provide for the payment for the value of products delivered or services performed in the event of early termination. Our property appraisal outsourcing service contracts can range up to three years and, in a few cases, as long as five years, in duration. In connection with these contracts, as well as certain software service contracts, we may perform work prior to when the software and services are billable and/or payable pursuant to the contract. We have historically recorded such unbilled receivables (costs and estimated profit in excess of billings) in connection with (1) property appraisal services contracts accounted for using proportional performance accounting in which the revenue is earned based upon activities performed in one accounting period but the billing normally occurs subsequently and may span another accounting period; (2) software services contracts accounted for using the percentage-of-completion method of revenue recognition using labor hours as a measure of progress towards completion in which the services are performed in one accounting period but the billing for the software element of the arrangement may be based upon the specific phase of the implementation; (3) software revenue for which we have objective evidence that the customer-specified objective criteria has been met but the billing has not yet been submitted to the customer; (4) some of our contracts provide for an amount to be withheld from a progress billing (generally between 5% and 20% retention) until final and satisfactory project completion is achieved; and (5) in a limited number of cases, we may grant extended payment terms, generally to existing customers with whom we have a long-term relationship and favorable collection history.

We have recorded unbilled receivables of \$42.6 million and \$33.6 million at December 31, 2017 and 2016, respectively. Included in unbilled receivables are retention receivables of \$7.2 million and \$5.0 million at December 31, 2017 and 2016, respectively, and these retentions become payable upon the completion of the contract or completion of our fieldwork and formal hearings. Unbilled receivables and retention receivables expected to be collected in excess of one year have been included with accounts receivable, long-term portion in the accompanying consolidated balance sheets.

Indemnification

Most of our software license agreements indemnify our customers in the event that the software sold infringes upon the intellectual property rights of a third-party. These agreements typically provide that in such event we will either modify or replace the software so that it becomes non-infringing or procure for the customer the right to use the software. We have recorded no liability associated with these indemnifications, as we are not aware of any pending or threatened infringement actions that are possible losses. We believe the estimated fair value of these intellectual property indemnification clauses is minimal.

We have also agreed to indemnify our officers and board members if they are named or threatened to be named as a party to any proceeding by reason of the fact that they acted in such capacity. We maintain directors' and officers' liability insurance coverage to protect against any such losses. We have recorded no liability associated with these indemnifications. Because of our insurance coverage, we believe the estimated fair value of these indemnification agreements is minimal.



Notes to Consolidated Financial Statements

Reclassifications

Certain amounts for previous years have been reclassified to conform to the current year presentation.

New Accounting Pronouncements

Recent Accounting Guidance not yet Adopted

**Revenue from Contracts with Customers.** On May 28, 2014, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2014-09, “Revenue from Contracts with Customers.” This ASU is the result of a convergence project between the FASB and the International Accounting Standards Board. The core principle behind ASU No. 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for delivering those goods and services. This model involves a five-step process that includes identifying the contract with the customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations in the contract and recognizing revenue when (or as) the entity satisfies the performance obligations. The ASU allows two methods of adoption: a full retrospective approach where three years of financial information are presented in accordance with the new standard, and a modified retrospective approach where the ASU is applied to the most current period presented in the financial statements. We have adopted the new standard effective January 1, 2018 using the full retrospective method which will require each prior reporting period presented to be recast in future issuance of our financial statements. In preparation for adoption of the standard, we have implemented internal controls and key system functionality to enable the preparation of financial information and have reached conclusions on key accounting assessments related to the standard. During the fourth quarter of fiscal 2017, we have substantially completed data conversion activities required to recast our prior period results. We continue to perform an in-depth review of our preliminary results; therefore, we are in the process of completing our analysis necessary to recast prior period results. We do not believe there are any remaining significant implementation topics associated with the adoption of this ASU that have not yet been addressed.

This standard will have a material impact on our consolidated balance sheets and statement of shareholders' equity. The impact of the standard on consolidated revenue and costs of revenue will be dependent upon the mix of revenue streams due to our accounting for software license fees, allocation of discounts across all performance obligations and to the incremental costs of obtaining a contract. Specifically, under the new standard software license fees under perpetual agreements will no longer be subject to 100% discount allocations from other elements in the contract. Discounts in arrangements will be allocated across all deliverables increasing license revenues and decreasing revenues allocated to other performance obligations. In addition, in most cases, net license fees (total license fees less any allocated discounts) will be recognized at the point in time that control of the software license transfers to the customer versus our current policy of recognizing revenue only to the extent billable per the contractual terms. Time-based license fees currently recognized over the license term will no longer be recognized over the period of the license and will instead be recognized at the point in time that control of the software license transfers to the customer. Revenue related to our software as a service (“SaaS”) offerings, post-contract customer support (“PCS”) renewals and professional services remain substantially unchanged. Due to the complexity of certain contracts, the actual revenue recognition treatment required under the standard will be dependent on contract-specific terms and may vary in some instances from recognition at the time of billing.

Application of the new standard requires that incremental costs directly related to obtaining a contract (typically sales commissions plus any associated fringe benefits) must be recognized as an asset and expensed on a systematic basis that is consistent with the transfer to the customer of the goods and services to which the asset relates, unless that life is less than one year. Currently, we defer sales commissions and recognize expense over the relevant initial contractual term. With the adoption of the new standard, amortization periods will extend past the initial term.

Notes to Consolidated Financial Statements

**Leases.** On February 25, 2016, the FASB issued its new lease accounting guidance in ASU No. 2016-02, “Leases (Topic 842).” Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date:

- A lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and
- A right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.

Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach.

The ASU is effective for fiscal years beginning after December 15, 2018, including interim periods therein. Early application is permitted for all business entities upon issuance. We are assessing the financial impact of adopting the new standard; however, we are currently unable to provide a reasonable estimate regarding the financial impact. We will adopt the new standard in fiscal year 2019.

(2) ACQUISITIONS

2017

On November 29, 2017, we acquired audio and digital two-way radio communications technology and related assets from Radio 10-33, LLC. The total purchase price was \$1.4 million, all of which was paid in cash.

On August 2, 2017, we acquired substantially all of the assets and assumed certain liabilities of Digital Health Department, Inc. (“DHD”), a company that provides environmental health software, offering a software-as-a-service (SaaS) solution for public health compliance and inspections processes. The total purchase price, net of debt assumed, was \$3.9 million, all of which was paid in cash.

The purchase price allocations for the acquisitions noted above are not yet complete. As of December 31, 2017, the preliminary estimates of fair values assumed at the acquisition dates for intangibles, liabilities, deferred revenue, and related deferred taxes are subject to change as valuations are finalized.

On May 30, 2017, we acquired all of the capital stock of Modria.com, Inc., a company that specializes in online dispute resolution for government and commercial entities. The total purchase price, net of debt assumed, was \$7.0 million, of which \$6.1 million was paid in cash and \$0.9 million was accrued as of December 31, 2017. As of December 31, 2017, the purchase price allocation for this acquisition is complete and our balance sheet reflects the allocation of the purchase price to the assets acquired based on their fair value at the date of acquisition. The fair value of the assets and liabilities acquired are based on valuations using Level III, unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The operating results of these acquisition are included in our results of operations of the Enterprise Software segment from their respective dates of acquisition. The impact of these acquisitions, individually and in the aggregate, on our operating results, assets and liabilities is not material.

Notes to Consolidated Financial Statements

2016

On May 31, 2016, we acquired all of the capital stock of ExecuTime Software, LLC, a leading provider of time, attendance, and advanced scheduling software solutions. The total purchase price, net of debt assumed, was \$7.4 million. The fair value of the assets and liabilities acquired are based on valuations using Level III, unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. The operating results of this acquisition are included in our results of operations of the Enterprise Software segment from the date of the acquisition. The impact of this acquisition on our operating results is not material.

2015

On November 16, 2015, we acquired all of the capital stock of New World Systems Corporation (“NWS”), which provides public safety and financial solutions for local governments. The purchase price, net of cash acquired of \$22.5 million, was comprised of \$337.5 million in cash, of which \$4.0 million was accrued at December 31, 2015, and 2.1 million shares of Tyler common stock valued at \$362.8 million, based on the closing price on November 16, 2015. We also incurred fees of approximately \$5.9 million for financial advisory, legal, accounting, due diligence, valuation and other various services necessary to complete the acquisition. These fees were expensed in 2015 and are included in selling, general and administrative expenses.

In 2016, we paid \$2.0 million related to the working capital holdback of \$4.0 million and reduced the accrued liability. Our final valuation of the fair market value of NWS’ assets and liabilities resulted in adjustments to the preliminary opening balance sheet. These adjustments related to a reduction in deferred revenue and related deferred income taxes and additional reserves for accounts receivable and contingencies resulting in a net decrease to goodwill of approximately \$7.4 million.

On May 29, 2015, we acquired all of the capital stock of Brazos Technology Corporation (“Brazos”), which provides mobile hand held solutions, primarily to law enforcement agencies, for field accident reporting and electronically issuing citations. The purchase price, net of cash acquired of \$312,000 and including debt assumed of \$733,000, was \$6.1 million in cash and 12,500 shares of Tyler common stock valued at \$1.5 million.

The operating results of NWS and Brazos are included with the operating results of the Enterprise Software segment from their respective dates of acquisition. The fair value of the assets and liabilities acquired are based on valuations using Level III, unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

(3) PROPERTY AND EQUIPMENT, NET

Property and equipment, net consists of the following at December 31:

	Useful Lives (years)	2017	2016
Land	—	\$ 9,958	\$ 9,958
Building and leasehold improvements	5-39	116,214	94,924
Computer equipment and purchased software	3-5	72,531	55,627
Furniture and fixtures	5	24,834	19,897
Transportation equipment	5	476	447
		224,013	180,853
Accumulated depreciation and amortization		(71,698)	(56,585)
Property and equipment, net		\$152,315	\$124,268

Depreciation expense was \$17.3 million during 2017, \$13.4 million during 2016, and \$9.1 million during 2015.

Notes to Consolidated Financial Statements

In 2017, we purchased an office building in Latham, New York for approximately \$2.9 million and paid \$2.1 million for improvements to that building. We also paid \$19.4 million for construction to expand our office building in Yarmouth, Maine.

In 2016, we purchased an office building in Falmouth, Maine, that was previously leased from an entity owned by an executive's father and brother, for approximately \$9.7 million, and paid \$8.0 million for construction to expand our office building in Yarmouth, Maine.

We own office buildings in Bangor, Falmouth and Yarmouth, Maine; Lubbock and Plano, Texas; Troy, Michigan; Latham, New York; and Moraine, Ohio. We lease space in some of these buildings to third-party tenants. These leases expire between 2019 and 2025 and are expected to provide rental income of approximately \$1.5 million during 2018, \$1.4 million during 2019, \$1.4 million during 2020, \$1.4 million during 2021, \$1.5 million during 2022, and \$4.3 million thereafter. Rental income from third-party tenants was \$1.5 million in 2017, \$1.7 million in 2016, and \$0.9 million in 2015.

(4) GOODWILL AND OTHER INTANGIBLE ASSETS

Other intangible assets and related accumulated amortization consists of the following at December 31:

	2017	2016
Gross carrying amount of acquisition intangibles:		
Customer related intangibles	\$ 187,717	\$ 186,231
Acquired software	179,466	176,096
Trade names	11,435	11,065
Leases acquired	3,694	3,694
	382,312	377,086
Accumulated amortization	(145,868)	(109,827)
Total intangibles, net	\$ 236,444	\$ 267,259

Total amortization expense for intangibles was \$36.0 million in 2017, \$36.4 million in 2016, and \$10.3 million during 2015.

The allocation of acquisition intangible assets is summarized in the following table:

	December 31, 2017			December 31, 2016		
	Gross Carrying Amount	Weighted Average Amortization Period	Accumulated Amortization	Gross Carrying Amount	Weighted Average Amortization Period	Accumulated Amortization
Non-amortizable intangibles:						
Goodwill	\$657,987	—	\$ —	\$650,237	—	\$ —
Amortizable intangibles:						
Customer related intangibles	187,717	15 years	64,375	186,231	15 years	51,491
Acquired software	179,466	7 years	76,800	176,096	7 years	55,115
Trade names	11,435	11 years	3,768	11,065	12 years	2,740
Leases acquired	3,694	10 years	925	3,694	9 years	481

Notes to Consolidated Financial Statements

The changes in the carrying amount of goodwill for the two years ended December 31, 2017 are as follows:

	Enterprise Software	Appraisal and Tax	Total
Balance as of 12/31/2015	\$647,109	\$6,557	\$653,666
Goodwill acquired with acquisitions	3,943	—	3,943
Purchase price adjustments related to purchase of NWS	(7,372)	—	(7,372)
Balance as of 12/31/2016	643,680	6,557	650,237
Goodwill acquired with acquisitions	7,750	—	7,750
Balance as of 12/31/2017	\$651,430	\$6,557	\$657,987

Estimated annual amortization expense related to acquired leases will be recorded as a reduction to hardware and other revenue and is expected to be \$425,000 in 2018, \$373,000 in 2019, \$313,000 in 2020, \$312,000 in 2021, \$312,000 in 2022 and \$1.0 million thereafter. Estimated annual amortization expense related to acquisition intangibles, including acquired software, for which the amortization expense is recorded as cost of revenues, is as follows:

2018	\$35,278
2019	33,920
2020	32,495
2021	32,136
2022	28,665

(5) ACCRUED LIABILITIES

Accrued liabilities consist of the following at December 31:

	2017	2016
Accrued wages, bonuses and commissions	\$43,688	\$38,996
Other accrued liabilities	20,987	16,993
	\$64,675	\$55,989

(6) REVOLVING LINE OF CREDIT

On November 16, 2015, we entered into a \$300.0 million Credit Agreement (the “Credit Facility”) with the various lenders party thereto and Wells Fargo Bank, National Association, as Administrative Agent. The Credit Facility provides for a revolving credit line of up to \$300.0 million, including a \$10.0 million sublimit for letters of credit. The Credit Facility matures on November 16, 2020. Borrowings under the Credit Facility may be used for general corporate purposes, including working capital requirements, acquisitions and share repurchases.

Borrowings under the Credit Facility bear interest at a rate of either (1) Wells Fargo Bank’s prime rate (subject to certain higher rate determinations) plus a margin of 0.25% to 1.00% or (2) the 30, 60, 90 or 180-day LIBOR rate plus a margin of 1.25% to 2.00%. As of December 31, 2017, our interest rate was 4.75% under the prime rate option or approximately 2.78% under the 30-day LIBOR option. The Credit Facility is secured by substantially all our assets. The Credit Facility requires us to maintain certain financial ratios and other financial conditions and prohibits us from making certain investments, advances, cash dividends or loans, and limits incurrence of additional indebtedness and liens. As of December 31, 2017, we were in compliance with those covenants.

Notes to Consolidated Financial Statements

As of December 31, 2017, we had no outstanding borrowings and had unused borrowing capacity of \$299.5 million under the Credit Facility. In addition, as of December 31, 2017, we had one outstanding letter of credit for \$0.5 million in favor of a client contract. The letter of credit guarantees our performance under the contract and expires in 2018.

We paid interest of \$804,000 in 2017, \$1.9 million in 2016, and \$223,000 in 2015.

(7) INCOME TAX

The income tax (benefit) provision on income from operations consists of the following:

Years Ended December 31,	2017	2016	2015
Current:			
Federal	\$ 22,882	\$ 41,366	\$44,841
State	4,666	7,023	6,670
	27,548	48,389	51,511
Deferred	(29,865)	(28,939)	(7,956)
	\$ (2,317)	\$ 19,450	\$43,555

Reconciliation of the U.S. statutory income tax rate to our effective income tax expense rate for operations follows:

Years Ended December 31,	2017	2016	2015
Federal income tax expense at statutory rate	\$ 56,570	\$ 45,257	\$37,949
State income tax, net of federal income tax benefit	4,824	4,807	3,715
Domestic production activities deduction	(2,617)	(3,947)	(466)
Excess tax benefits related to stock option exercises	(40,624)	(29,582)	—
Tax Act adjustments	(21,625)	—	—
Tax credits	(3,578)	—	—
Non-deductible business expenses	4,573	2,979	2,414
Other, net	160	(64)	(57)
	\$ (2,317)	\$ 19,450	\$43,555

On December 22, 2017, the Tax Act was enacted into law. The Tax Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions for individuals and businesses. For businesses, the Tax Act reduces the U.S. corporate federal tax rate from a maximum of 35% to a flat 21% rate and transitions from a worldwide tax system to a territorial tax system. The Tax Act also adds many new provisions including changes to bonus depreciation, the deduction for executive compensation and a tax on global intangible low-taxed income (GILTI). The most significant impact of the Tax Act to us is the reduction in the U.S. federal corporate income tax rate from 35% to 21%. The impact of the rate reduction on our 2017 income tax provision is a \$21.6 million tax benefit due to the remeasurement of deferred tax assets and liabilities. We have reported provisional amounts for the income tax effects of the Tax Act for which the accounting is incomplete but a reasonable estimate could be determined. There were no specific impacts of the Tax Act that could not be reasonably estimated which we accounted for under prior tax law. Based on a continued analysis of the estimates and further guidance on the application of the law, it is anticipated that additional revisions may occur throughout the allowable measurement period. Overall, the changes due to the Tax Act will favorably affect income tax expense and future U.S. earnings.

Due to the adoption of ASU No. 2016-09 in 2016, federal and state excess tax benefits from stock option exercises for years subsequent to 2015 are reflected as a reduction of the provision for income taxes, whereas they were previously accounted for as an increase to shareholders’ equity.

Notes to Consolidated Financial Statements

The tax effects of the major items recorded as deferred tax assets and liabilities as of December 31 are:

	2017	2016
Deferred income tax assets:		
Operating expenses not currently deductible	\$ 11,232	\$ 18,721
Stock option and other employee benefit plans	15,932	19,665
Total deferred income tax assets	27,164	38,386
Deferred income tax liabilities:		
Intangible assets	(60,189)	(103,754)
Property and equipment	(5,699)	(3,207)
Other	(190)	(204)
Total deferred income tax liabilities	(66,078)	(107,165)
Net deferred income tax liabilities	\$(38,914)	\$ (68,779)

Although realization is not assured, we believe it is more likely than not that all the deferred tax assets will be realized. Accordingly, we believe no valuation allowance is required for the deferred tax assets. However, the amount of the deferred tax asset considered realizable could be adjusted in the future if estimates of reversing taxable temporary differences are revised. There were no unrecognized tax benefits during any of the reported periods.

We are subject to U.S. federal tax, as well as income tax of multiple state, local and foreign jurisdictions. We are routinely subject to income tax examinations by these taxing jurisdictions, but we do not have a history of, nor do we expect any, material adjustments to result from these examinations. During 2017, the Internal Revenue Service issued a “no change” letter upon completion of their examination of our 2012 tax year. With few exceptions, major U.S. federal, state and foreign jurisdictions are no longer subject to examinations for years before 2013. As of February 20, 2018, no significant adjustments have been proposed by any taxing jurisdiction.

We paid income taxes, net of refunds received, of \$36.0 million in 2017, \$30.2 million in 2016, and \$27.3 million in 2015.

(8) SHAREHOLDERS’ EQUITY

The following table details activity in our common stock:

	Years Ended December 31,					
	2017		2016		2015	
	Shares	Amount	Shares	Amount	Shares	Amount
Stock option exercises	1,113	\$ 49,845	827	\$ 23,527	1,118	\$ 23,160
Purchases of common stock	(44)	(6,613)	(882)	(112,699)	(5)	(645)
Employee stock plan purchases	51	7,044	47	6,236	43	4,671
Shares issued for acquisitions	—	—	—	—	2,149	364,333

As of February 20, 2018, we had authorization from our board of directors to repurchase up to 2.0 million additional shares of our common stock.

Notes to Consolidated Financial Statements

(9) SHARE-BASED COMPENSATION

Share-Based Compensation Plan

We have a stock option plan that provides for the grant of stock options to key employees, directors and non-employee consultants. Stock options generally vest after three to six years of continuous service from the date of grant and have a contractual term of 10 years. Once options become exercisable, the employee can purchase shares of our common stock at the market price on the date we granted the option. We account for share-based compensation utilizing the fair value recognition pursuant to ASC 718, Stock Compensation.

As of December 31, 2017, there were 2.1 million shares available for future grants under the plan from the 20.0 million shares previously approved by the shareholders.

Determining Fair Value of Stock Compensation

**Valuation and Amortization Method.** We estimate the fair value of share-based awards granted using the Black-Scholes option valuation model. We amortize the fair value of all awards on a straight-line basis over the requisite service periods, which are generally the vesting periods.

**Expected Life.** The expected life of awards granted represents the period of time that they are expected to be outstanding. The expected life represents the weighted-average period the stock options are expected to be outstanding based primarily on the options’ vesting terms, remaining contractual life and the employees’ expected exercise based on historical patterns.

**Expected Volatility.** Using the Black-Scholes option valuation model, we estimate the volatility of our common stock at the date of grant based on the historical volatility of our common stock.

**Risk-Free Interest Rate.** We base the risk-free interest rate used in the Black-Scholes option valuation model on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term equal to the expected life of the award.

**Expected Dividend Yield.** We have not paid any cash dividends on our common stock in more than ten years and we do not anticipate paying any cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero in the Black-Scholes option valuation model.

**Expected Forfeitures.** We use historical data to estimate pre-vesting option forfeitures. We record share-based compensation only for those awards that are expected to vest.

The following weighted average assumptions were used for options granted:

Years Ended December 31,	2017	2016	2015
Expected life (in years)	6.0	6.0	6.0
Expected volatility	28.1%	29.3%	28.3%
Risk-free interest rate	2.0%	1.8%	1.7%
Expected forfeiture rate	—%	—%	1.7%



Notes to Consolidated Financial Statements

The following table summarizes share-based compensation expense related to share-based awards which is recorded in the statements of comprehensive income:

Years Ended December 31,	2017	2016	2015
Cost of software services, maintenance and subscriptions	\$ 9,415	\$ 6,548	\$ 3,380
Selling, general and administrative expenses	27,933	23,199	16,802
Total share-based compensation expenses	37,348	29,747	20,182
Tax benefit	(40,624)	(30,059)	(5,986)
Net (increase) decrease in net income	\$ (3,276)	\$ (312)	\$14,196

Stock Option Activity

Options granted, exercised, forfeited and expired are summarized as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at December 31, 2014	5,537	\$ 44.61		
Granted	747	145.71		
Exercised	(1,118)	20.71		
Forfeited	(2)	19.61		
Outstanding at December 31, 2015	5,164	64.43		
Granted	846	147.25		
Exercised	(827)	28.43		
Forfeited	(27)	95.33		
Outstanding at December 31, 2016	5,156	83.64		
Granted	824	176.26		
Exercised	(1,113)	44.80		
Forfeited	(50)	134.83		
Outstanding at December 31, 2017	4,817	107.91	7	\$334,940
Exercisable at December 31, 2017	2,355	78.40	6	\$232,366

We had unvested options to purchase 2.4 million shares with a weighted average grant date exercise price of \$136.51 as of December 31, 2017, and unvested options to purchase 2.8 million shares with a weighted average grant date exercise price of \$104.91 as of December 31, 2016. As of December 31, 2017, we had \$88.2 million of total unrecognized compensation cost related to unvested options, net of expected forfeitures, which is expected to be amortized over a weighted average amortization period of 3.2 years.

Other information pertaining to option activity was as follows during the twelve months ended December 31:

	2017	2016	2015
Weighted average grant-date fair value of stock options granted	\$ 55.56	\$ 46.89	\$ 45.17
Total intrinsic value of stock options exercised	137,699	103,703	149,542

Notes to Consolidated Financial Statements

Employee Stock Purchase Plan

Under our Employee Stock Purchase Plan (“ESPP”) participants may contribute up to 15% of their annual compensation to purchase common shares of Tyler. The purchase price of the shares is equal to 85% of the closing price of Tyler shares on the last day of each quarterly offering period. As of December 31, 2017, there were 797,000 shares available for future grants under the ESPP from the 2.0 million shares previously approved by the stockholders.

(10) EARNINGS PER SHARE

Basic earnings and diluted earnings per share data were computed as follows:

Years Ended December 31,	2017	2016	2015
Numerator for basic and diluted earnings per share:			
Net income	\$163,945	\$109,857	\$64,869
Denominator:			
Weighted-average basic common shares outstanding	37,273	36,448	34,137
Assumed conversion of dilutive securities:			
Stock options	1,973	2,513	2,415
Denominator for diluted earnings per share – Adjusted weighted-average shares	39,246	38,961	36,552
Earnings per common share:			
Basic	\$ 4.40	\$ 3.01	\$ 1.90
Diluted	\$ 4.18	\$ 2.82	\$ 1.77

Stock options representing the right to purchase common stock of 1,343,000 shares in 2017, 786,000 shares in 2016, and 417,000 shares in 2015 were not included in the computation of diluted earnings per share because their inclusion would have had an anti-dilutive effect.

(11) LEASES

We lease office facilities for use in our operations, as well as transportation, computer and other equipment. Most of our leases are non-cancelable operating lease agreements and they expire at various dates through 2025. In addition to rent, the leases generally require us to pay taxes, maintenance, insurance and certain other operating expenses.

Rent expense was approximately \$6.9 million in 2017, \$6.7 million in 2016, and \$7.2 million in 2015, which included rent expense associated with related party lease agreements of \$150,000 in 2017, \$330,000 in 2016, and \$1.8 million in 2015.

Future minimum lease payments under all non-cancelable leases at December 31, 2017 are as follows:

Years Ending December 31,	
2018	\$ 5,428
2019	4,201
2020	3,644
2021	2,366
2022	812
Thereafter	499
Total	\$16,950



Notes to Consolidated Financial Statements

(12) EMPLOYEE BENEFIT PLANS

We provide a defined contribution plan for the majority of our employees meeting minimum service requirements. The employees can contribute up to 30% of their current compensation to the plan subject to certain statutory limitations. We contribute up to a maximum of 3% of an employee’s compensation to the plan. We made contributions to the plan and charged operating results \$7.9 million during 2017, \$6.9 million during 2016, and \$5.3 million during 2015.

(13) COMMITMENTS AND CONTINGENCIES

Other than routine litigation incidental to our business, there are no material legal proceedings pending to which we are party or to which any of our properties are subject.

(14) SEGMENT AND RELATED INFORMATION

We are a major provider of integrated information management solutions and services for the public sector, with a focus on local and state governments.

We provide our software systems and services and appraisal services through four business units, which focus on the following products:

- financial management, education and planning, regulatory and maintenance software solutions;
- financial management, municipal courts, and land and vital records management software solutions;
- courts and justice and public safety software solutions; and
- appraisal and tax software solutions and property appraisal services.

In accordance with ASC 280-10, Segment Reporting, the financial management, education and planning, regulatory and maintenance software solutions unit; financial management, municipal courts and land and vital records management software solutions unit; and the courts and justice and public safety software solutions unit meet the criteria for aggregation and are presented in one reportable segment, Enterprise Software (“ES”). The ES segment provides municipal and county governments and schools with software systems and services to meet their information technology and automation needs for mission-critical “back-office” functions such as financial management and courts and justice and public safety processes. The Appraisal and Tax (“A&T”) segment provides systems and software that automate the appraisal and assessment of real and personal property as well as property appraisal outsourcing services for local governments and taxing authorities. Property appraisal outsourcing services include: the physical inspection of commercial and residential properties; data collection and processing; computer analysis for property valuation; preparation of tax rolls; community education; and arbitration between taxpayers and the assessing jurisdiction.

We evaluate performance based on several factors, of which the primary financial measure is business segment operating income. We define segment operating income for our business units as income before noncash amortization of intangible assets associated with their acquisition, interest expense and income taxes. Segment operating income includes intercompany transactions. The majority of intercompany transactions relate to contracts involving more than one unit and are valued based on the contractual arrangement. Segment operating income for corporate primarily consists of compensation costs for the executive management team and certain accounting and administrative staff and share-based compensation expense for the entire company. Corporate segment operating income also includes revenues and expenses related to a company-wide user conference. The accounting policies of the reportable segments are the same as those described in Note 1, “Summary of Significant Accounting Policies.”

Notes to Consolidated Financial Statements

Segment assets include net accounts receivable, prepaid expenses and other current assets and net property and equipment. Corporate assets consist of cash and investments, prepaid insurance, intangibles associated with acquisitions, deferred income taxes and net property and equipment mainly related to unallocated information and technology assets.

ES segment capital expenditures included \$24.4 million in 2017 and \$17.7 million in 2016 for the expansion of existing buildings and purchases of buildings and land.

For the year ended December 31, 2017	Enterprise Software	Appraisal and Tax	Corporate	Totals
Revenues				
Software licenses and royalties	\$ 67,840	\$ 7,854	\$ —	\$ 75,694
Subscriptions	165,651	7,859	—	173,510
Software services	167,934	19,215	—	187,149
Maintenance	339,951	21,618	—	361,569
Appraisal services	—	25,023	—	25,023
Hardware and other	13,094	10	4,613	17,717
Intercompany	10,425	—	(10,425)	—
Total revenues	\$764,895	\$81,579	\$ (5,812)	\$ 840,662
Depreciation and amortization expense	44,517	760	8,648	53,925
Segment operating income	228,254	20,238	(51,964)	196,528
Capital expenditures	28,096	1,181	16,341	45,618
Segment assets	\$338,965	\$44,464	\$1,206,163	\$1,589,592

For the year ended December 31, 2016	Enterprise Software	Appraisal and Tax	Corporate	Totals
Revenues				
Software licenses and royalties	\$ 68,844	\$ 5,462	\$ —	\$ 74,306
Subscriptions	135,516	7,188	—	142,704
Software services	158,478	16,326	—	174,804
Maintenance	304,380	18,589	—	322,969
Appraisal services	—	26,287	—	26,287
Hardware and other	11,942	16	3,015	14,973
Intercompany	6,742	—	(6,742)	—
Total revenues	\$685,902	\$73,868	\$ (3,727)	\$ 756,043
Depreciation and amortization expense	43,962	984	5,355	50,301
Segment operating income	190,817	18,286	(41,832)	167,271
Capital expenditures	23,843	1,432	11,448	36,723
Segment assets	\$295,260	\$31,769	\$1,030,916	\$1,357,945

Notes to Consolidated Financial Statements

For the year ended December 31, 2015	Enterprise Software	Appraisal and Tax	Corporate	Totals
Revenues				
Software licenses and royalties	\$ 54,376	\$ 4,632	\$ —	\$ 59,008
Subscriptions	107,090	4,843	—	111,933
Software services	129,068	10,784	—	139,852
Maintenance	227,586	17,951	—	245,537
Appraisal services	—	25,065	—	25,065
Hardware and other	6,935	12	2,680	9,627
Intercompany	4,025	—	(4,025)	—
Total revenues	\$529,080	\$63,287	\$ (1,345)	\$ 591,022
Depreciation and amortization expense	15,413	867	3,294	19,574
Segment operating income	141,401	15,477	(38,490)	118,388
Capital expenditures	6,112	646	6,746	13,504
Segment assets	\$265,877	\$22,283	\$1,068,410	\$1,356,570

Reconciliation of reportable segment operating income to the Company's consolidated totals:	Years Ended December 31,		
	2017	2016	2015
Total segment operating income	\$196,528	\$167,271	\$118,388
Amortization of acquired software	(21,686)	(22,235)	(4,440)
Amortization of customer and trade name intangibles	(13,912)	(13,731)	(5,905)
Other income (expense), net	698	(1,998)	381
Income before income taxes	\$161,628	\$129,307	\$108,424

Notes to Consolidated Financial Statements

(15) QUARTERLY FINANCIAL INFORMATION (unaudited)

The following table contains selected financial information from unaudited statements of income for each quarter of 2017 and 2016:

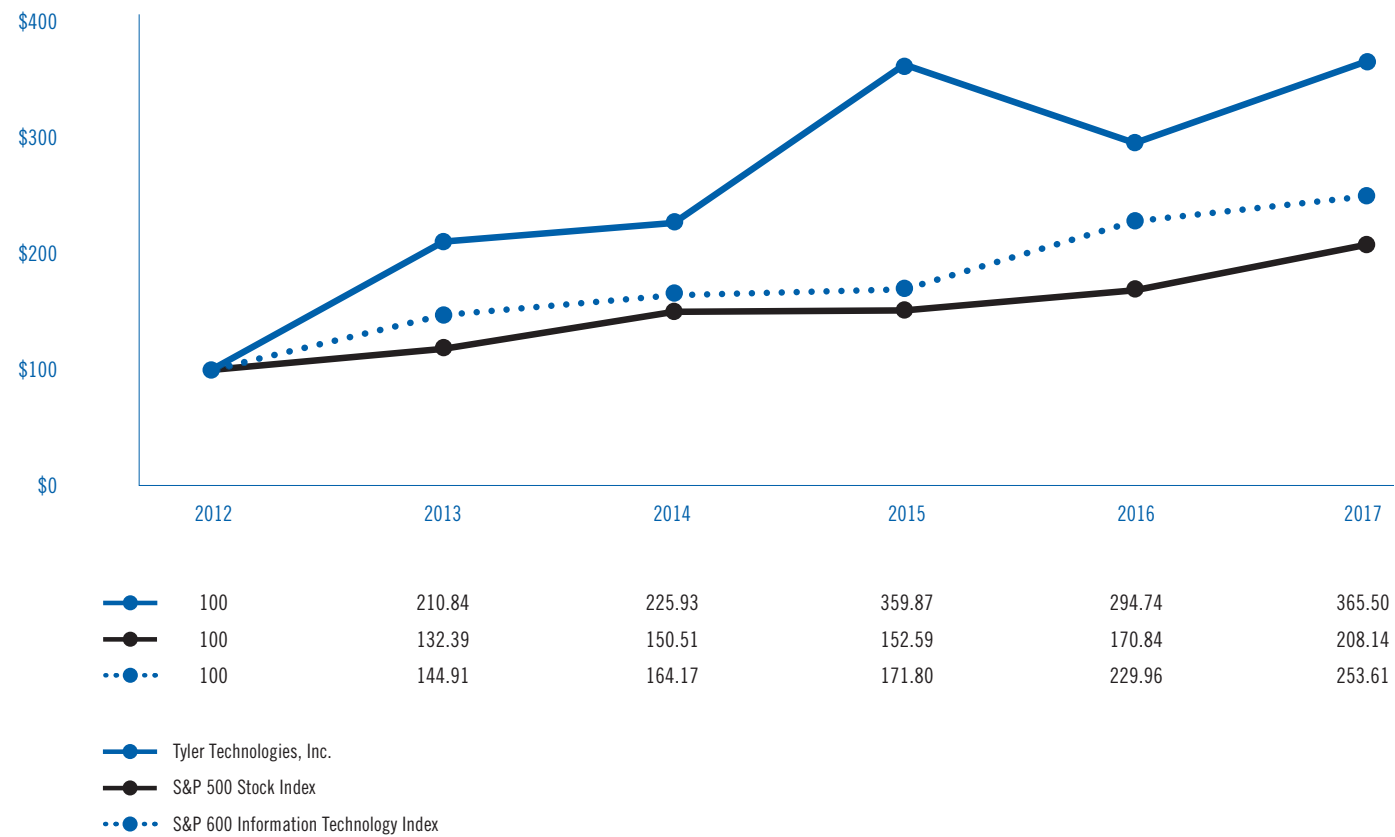
	Quarters Ended							
	2017				2016			
	Dec. 31 <sup>(a)</sup>	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
Revenues	\$217,851	\$214,146	\$209,123	\$199,542	\$193,281	\$194,497	\$188,972	\$179,293
Gross profit	105,500	103,429	95,863	94,348	92,817	93,480	86,936	82,118
Income before income taxes	45,173	43,522	36,974	35,959	35,119	36,419	30,195	27,574
Net income	61,798	38,263	31,578	32,306	31,196	35,430	25,007	18,224
Earnings per diluted share	\$ 1.56	\$ 0.97	\$ 0.81	\$ 0.83	\$ 0.80	\$ 0.91	\$ 0.65	\$ 0.47
Shares used in computing diluted earnings per share	39,499	39,342	39,201	38,932	38,975	39,062	38,738	39,071

(a) Fourth quarter 2017 includes the significant impact of the enactment of the Tax Act. The most significant impact of the Tax Act to us is the reduction in the U.S. federal corporate income tax rate from 35% to 21%. The impact of the rate reduction on our 2017 income tax provision is a \$21.6 million tax benefit due to the remeasurement of deferred tax assets and liabilities. Refer to Note 7 – “Income Tax” for further discussion on the impact the Tax Act.

Performance Graph

The following table compares total shareholder returns for Tyler over the last five years to the Standard and Poor’s 500 Stock Index and the Standard and Poor’s 600 Information Technology Index assuming a \$100 investment made on December 31, 2012. Each of the three measures of cumulative total return assumes reinvestment of dividends. The stock performance shown on the graph below is not necessarily indicative of future price performance.

COMPARISON OF CUMULATIVE FIVE YEAR TOTAL RETURN



STOCKHOLDER INFORMATION

CORPORATE OFFICERS

John S. Marr Jr.  
Chairman of the Board  
Chief Executive Officer

H. Lynn Moore Jr.  
President

Brian K. Miller  
Executive Vice President  
Chief Financial Officer and Treasurer

Matthew B. Bieri  
Chief Information Officer

S. Brett Cate  
Chief Sales Officer

Samantha B. Crosby  
Chief Marketing Officer

Abigail M. Diaz  
Chief Legal Officer and Secretary

Bruce E. Graham  
Chief Strategy Officer

Jeffrey S. Green  
Chief Technology Officer

Robert J. Sansone  
Chief Human Resources Officer

W. Michael Smith  
Chief Accounting Officer

BOARD OF DIRECTORS

John S. Marr Jr.<sup>1</sup>  
Chairman of the Board  
Chief Executive Officer  
Tyler Technologies, Inc.

H. Lynn Moore Jr.<sup>1</sup>  
President  
Tyler Technologies, Inc.

Donald R. Brattain<sup>2, 3, 4</sup>  
President  
Brattain and Associates, LLC

Glenn A. Carter<sup>3, 4</sup>  
Retired Chief Executive Officer  
DataProse, Inc.

Brenda A. Cline<sup>2, 3</sup>  
Executive Vice President  
Kimbell Art Foundation

J. Luther King Jr.<sup>2, 4</sup>  
Chief Executive Officer  
Luther King Capital Management

Daniel M. Pope  
Mayor  
City of Lubbock, Texas

Dustin R. Womble<sup>1</sup>  
Retired Executive Vice President  
Tyler Technologies, Inc.

<sup>1</sup>Executive Committee

<sup>2</sup>Audit Committee

<sup>3</sup>Nominating and Governance Committee

<sup>4</sup>Compensation Committee

CORPORATE HEADQUARTERS

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Plano, Texas 75024  
972.713.3700  
www.tylertech.com

TRANSFER AGENT AND REGISTRAR

American Stock Transfer & Trust Company  
6201 15th Avenue  
Brooklyn, New York 11219  
800.937.5449  
718.236.2641 fax  
help@astfinancial.com

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP  
Dallas, Texas

ANNUAL MEETING OF STOCKHOLDERS

Wednesday, May 9, 2018  
9:30 a.m. Central Time  
Renaissance Dallas at Plano Legacy West  
6007 Legacy Drive  
Plano, Texas 75024

CERTIFICATIONS

We submitted an unqualified Annual CEO Certification to the New York Stock Exchange (NYSE) as required by the NYSE Listed Company rules. We also filed with the Securities and Exchange Commission the Chief Executive Officer and Chief Financial Officer certifications required under Section 302 of the Sarbanes-Oxley Act as exhibits to our Annual Report on Form 10-K.

INVESTOR INFORMATION

Our annual report on Form 10-K is available on the company's website at www.tylertech.com.

A copy of the Form 10-K or other information may also be obtained by contacting the Investor Relations Department at corporate headquarters.

INVESTOR RELATIONS

972.713.3714  
info@tylertech.com

COMMON STOCK

Listed on the New York Stock Exchange under the symbol "TYL"



OPERATIONAL LEADERSHIP

ENTERPRISE GROUP

Andrew D. Teed  
President  
Enterprise Group  
Appraisal & Tax Division

Christopher P. Hepburn  
President  
ERP & School Division

Dane L. Womble  
President  
Local Government Division

JUSTICE GROUP

D. Bret Dixon  
President  
Justice Group

Bruce E. Graham  
President  
Courts & Justice Division

Greg T. Sebastian  
President  
Public Safety Division



Empowering people who serve the public®



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972.713.3700 | [tylertech.com](http://tylertech.com)

# Statement of Work – Generic Sample

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*Tyler Technologies*

**Phil Sharp**

One Tyler Drive, Yarmouth, ME 04096

Tyler Technologies, Inc.

[www.tylertech.com](http://www.tylertech.com)

Revised: 6/27/2018



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# 1 Executive Summary

## 1.1 Project Overview

The Statement of Work (SOW) documents the Project Scope, methodology, roles and responsibilities, implementation Stages, and deliverables for the implementation of Tyler products.

The Project goals are to offer the Client the opportunity to make the Client more accessible and responsive to external and internal customer needs and more efficient in its operations through:

- Streamlining, automating, and integrating business processes and practices
- Providing tools to produce and access information in a real-time environment
- Enabling and empowering users to become more efficient, productive and responsive
- Successfully overcoming current challenges and meeting future goals

## 1.2 Product Summary

Below, is a summary of the products included in this Project, as well as reference to the Client's functional area utilizing the Tyler product(s). Refer to the Implementation Stages section of this SOW for information containing detailed service components.

[PRODUCT]	[APPLICATION]
ExecuTime	Advance Scheduling
ExecuTime	Time & Attendance
Tyler Content Manager	Document Management
Munipems	Financial Management
Munis	Procurement
Munis	Human Resources & Payroll
Munis	Utility Billing
Munis	Accounts Receivable and Collections
Munis	Asset Maintenance
Munis	Asset Performance

## 1.3 Project Timeline

The Project Timeline establishes a start and end date for each Phase of the Project. Developed during the Initiate & Plan Stage and revised as mutually agreed to, if needed, the timeline accounts for resource availability, business goals, size and complexity of the Project, and task duration requirements.

## 1.4 Project Methodology Overview

Tyler bases its implementation methodology on the Project Management Institute's (PMI) Process Groups (Initiating, Planning, Executing, Monitoring & Controlling, and Closing). Using this model, Tyler developed a 6-stage process specifically designed to focus on critical project success measurement factors.

Tailored specifically for Tyler's public sector clients, the project methodology contains Stage acceptance Control Points throughout each Phase to ensure adherence to Scope, budget, timeline controls, effective communications, and quality standards. Clearly defined, the project methodology repeats consistently across Phases, and is scaled to meet the Client's complexity, and organizational needs.

SAMPLE

## 2 Project Governance

The purpose of this section is to define the resources required to adequately establish the business needs, objectives, and priorities for the Project; communicate the goals to other project participants; and provide support and guidance to accomplish these goals. Project governance also defines the structure for issue escalation and resolution, Change Control review and authority, and organizational Change Management activities.

The preliminary governance structure establishes a clear escalation path when issues and risks require escalation above the project manager level. Further refinement of the governance structure, related processes, and specific roles and responsibilities occurs during the Initiate & Plan Stage.

The path below illustrates an overall team perspective where Tyler and the Client collaborate to resolve project challenges according to defined escalation paths. In the event project managers do not possess authority to determine a solution, resolve an issue, or mitigate a risk, Tyler implementation management and the Client steering committee become the escalation points to triage responses prior to escalation to the Client and Tyler executive sponsors. As part of the escalation process, each project governance tier presents recommendations and supporting information to facilitate knowledge transfer and issue resolution. The Client and Tyler executive sponsors serve as the final escalation point.

### 2.1 Client Governance

Depending on the Client's organizational structure and size, the following governance roles may be filled by one or more people:

#### 2.1.1 Client Project Manager

The Client's project manager(s) coordinate project team members, subject matter experts, and the overall implementation schedule and serves as the primary point of contact with Tyler. The Client project manager(s) will be responsible for reporting to the Client steering committee and determining appropriate escalation points.

#### 2.1.2 Steering Committee

The Client steering committee understands and supports the cultural change necessary for the Project and fosters an appreciation of the Project's value throughout the organization. Oversees the Client project manager(s) and the Project as a whole and through participation in regular internal meetings, the Client steering committee remains updated on all project progress, project decisions, and achievement of project milestones. The Client steering committee also provides support to the Client project manager(s) by communicating the importance of the Project to all impacted departments. The Client steering committee is responsible for ensuring the Project has appropriate resources, provides strategic direction to the project team, for making timely decisions on critical project issues or policy decisions. The Client steering committee also serves as primary level of issue resolution for the Project.



### 2.1.3 Executive Sponsor(s)

The Client's executive sponsor provides support to the Project by allocating resources, providing strategic direction, and communicating key issues about the Project and the Project's overall importance to the organization. When called upon, the executive sponsor also acts as the final authority on all escalated project issues. The executive sponsor engages in the Project, as needed, in order to provide necessary support, oversight, guidance, and escalation, but does not participate in day-to-day project activities. The executive sponsor empowers the Client steering committee, project manager(s), and functional leads to make critical business decisions for the Client.

## 2.2 Tyler Governance

### 2.2.1 Tyler Project Manager

The Tyler project manager(s) have direct involvement with the Project and coordinates Tyler project team members, subject matter experts, the overall implementation schedule, and serves as the primary point of contact with the Client. As requested by the Client, the Tyler project manager(s) provide regular updates to the Client's steering committee and other Tyler governance members.

### 2.2.2 Tyler Implementation Management

Tyler implementation management has indirect involvement with the Project and is part of the Tyler escalation process. Tyler project manager(s) consult implementation management on issues and outstanding decisions critical to the Project. Implementation management works toward a solution with the Tyler project manager(s) or with the Client management, as appropriate. Tyler executive management is the escalation point for any issues not resolved at this level. The name(s) and contact information for this resource will be provided and available to the project team.

### 2.2.3 Tyler Executive Management

Tyler executive management has indirect involvement with the Project and is part of the Tyler escalation process. This team member offers additional support to the project team and collaborates with other Tyler department managers, as needed, in order to escalate and facilitate implementation project tasks and decisions. The name(s) and contact information for this resource will be provided and available to the project team.

## 2.3 Acceptance and Acknowledgment Process

All Deliverables and Control Points must be accepted or acknowledged following the process below. Acceptance requires a formal sign-off while acknowledgement may be provided without formal sign-off at the time of delivery. The following process will be used for accepting or acknowledging Deliverables and Control Points:

- The Client shall have five (5) business days from the date of delivery, or as otherwise mutually agreed upon by the parties in writing, to accept or acknowledge each Deliverable or Control Point. If the Client does not provide acceptance or acknowledgement within five (5) business

days, or the otherwise agreed upon timeframe, not to be unreasonably withheld, Tyler deems the Deliverable or Control Point as accepted.

- If the Client does not agree the particular Deliverable or Control Point meets requirements, the Client shall notify Tyler project manager(s), in writing, with reasoning within five (5) business days, or the otherwise agreed-upon timeframe, not to be unreasonably withheld, of receipt of the Deliverable.
- Tyler shall address any deficiencies and redeliver the Deliverable or Control Point. The Client shall then have two (2) business days from receipt of the redelivered Deliverable or Control Point to accept or again submit written notification of reasons for rejecting the milestone. If the Client does not provide acceptance or acknowledgement within two (2) business days, or the otherwise agreed upon timeframe, not to be unreasonably withheld, Tyler deems the Deliverable or Control Point as accepted.

## 3 Overall Project Assumptions

### 3.1 Project, Resources and Scheduling

- Project activities will begin after the Agreement has been fully executed.
- The Client has the ability allocate additional internal resources if needed. The Client also ensures the alignment of their budget and Scope expectations.
- The Client and Tyler ensure that the assigned resources are available, they buy-into the change process, and they possess the required business knowledge to complete their assigned tasks successfully. Should there be a change in resources, the replacement resource should have a comparable level of availability, buy-in, and knowledge.
- Tyler and Client provide adequate resources to support the efforts to complete the Project as scheduled and within the constraints of the Project budget.
- Abbreviated timelines and overlapped Phases can result in Project delays if there are not sufficient resources assigned to complete all required work as scheduled.
- Changes to Project Plan, availability of resources or changes in Scope may result in schedule delays, which may result in additional charges to the Project.
- Tyler provides a written agenda and notice of any prerequisites to the Client project manager(s) ten (10) business days prior to any scheduled on site or remote sessions.
- Tyler provides notice of any prerequisites to the Client project manager(s) a minimum of ten (10) business days prior to any key deliverable due dates.
- Client users complete prerequisites prior to applicable scheduled activities.
- Tyler provides guidance for configuration and processing options available within the Tyler software. The Client is responsible for making decisions based on the options available.
- In the event the Client may elect to add and/or modify current business policies during the course of this Project, such policy changes are solely the Client's responsibility to define, document, and implement.
- The Client makes timely Project related decisions in order to achieve scheduled due dates on tasks and prepare for subsequent training sessions. Decisions left unmade may affect the schedule, as each analysis and implementation session builds on the decisions made in prior sessions.
- Tyler considers additional services out of Scope and requires additional time and costs be requested via Change Request approved through the Change Control process.
- The Client will respond to information requests in a comprehensive and timely manner, in accordance with the Project Plan.

### 3.2 Data Conversion

- The Client is readily able to product the data files needed for conversion from the Legacy System in order to provide them to Tyler on the specified due date(s).
- Each Legacy System data file submitted for conversion includes all associated records in a single approved file layout.
- The Client understands the Legacy System data extract(s) must be provided to Tyler in the same format each time unless changes are mutually agreed upon in advance. If not, negative impacts to the schedule, budget, and resource availability may occur and/or data in the new system may be incorrect.

- During this process, the Client may need to correct data scenarios in the Legacy System prior to the final data pull. This is a complex activity and requires due diligence by the Client to ensure all data pulled includes all required data and the Tyler system contains properly mapped data.

### 3.3 Data Exchanges, Modifications, Forms and Reports

- The Client ensures the 3rd party data received conforms to a Tyler standard format.
- The 3rd party possesses the knowledge of how to program their portion of the interaction and understands how to manipulate the data received.
- Client is on a supported, compatible version of the 3<sup>rd</sup> party software or Tyler standard Data Exchange tools may not be available.
- The Client is willing to make reasonable business process changes rather than expecting the product to conform to every aspect of their current system/process.
- Any Modification requests not expressly stated in the contract are out of Scope. Modifications requested after contract signing have the potential to change cost, Scope, schedule, and production dates for project Phases. Modification requests not in Scope must follow the Project Change Control process.

### 3.4 Hardware and Software

- Tyler will initially Install the most current generally available version of the purchased Tyler software.
- The Client will provide network access for Tyler modules, printers, and Internet access to all applicable Client and Tyler project staff.
- The Client has in place all hardware, software, and technical infrastructure necessary to support the Project.
- The Client's system hardware and software meet Tyler standards to ensure sufficient speed and operability of Tyler software. Tyler will not support use of software if the Client does not meet minimum standards of Tyler's published specifications.

### 3.5 Education

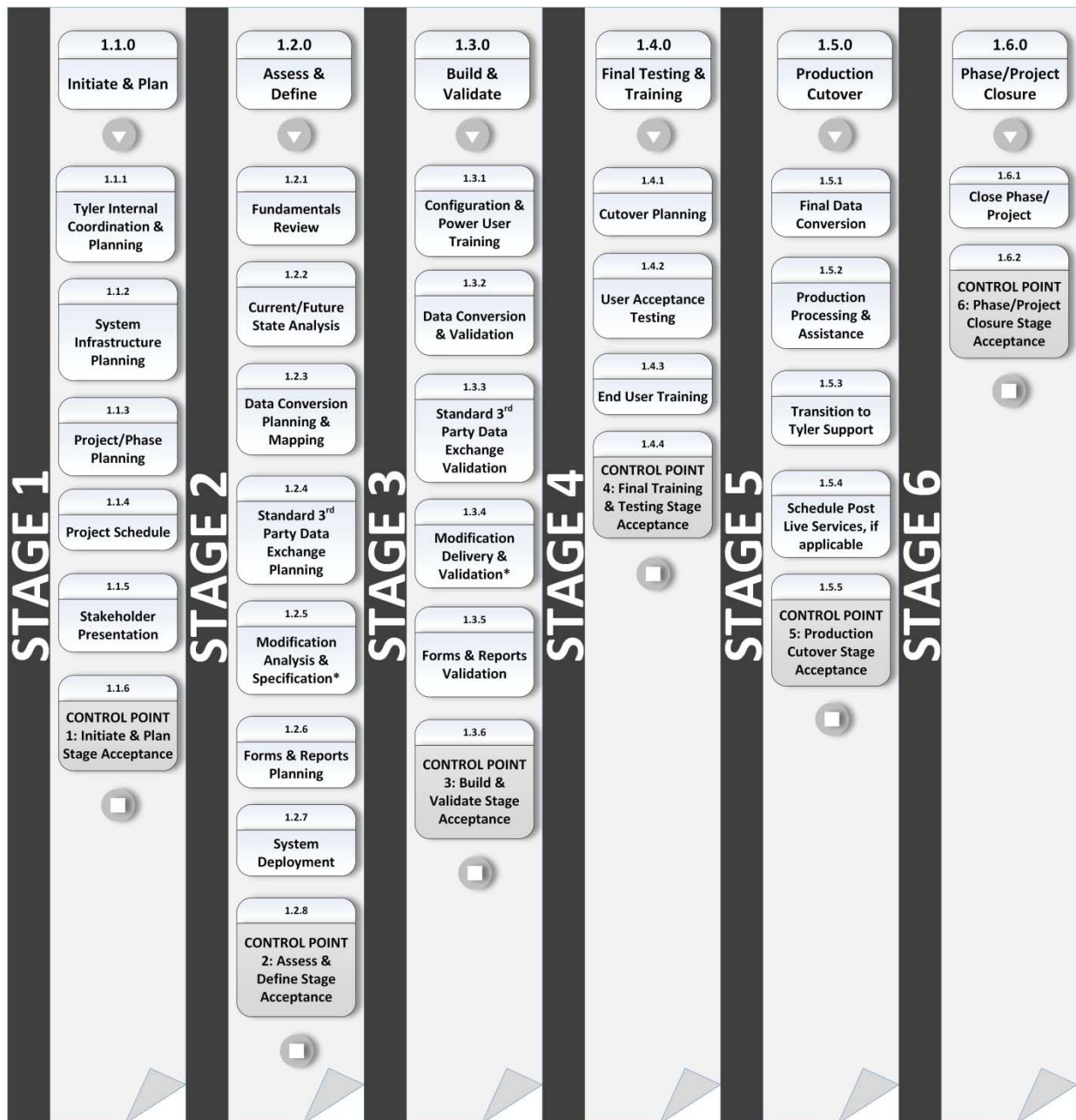
- Throughout the Project lifecycle, the Client provides a training room for Tyler staff to transfer knowledge to the Client's resources, for both onsite and remote sessions. The Client will provide staff with a location to practice what they have learned without distraction. If Phases overlap, the Client will provide multiple training facilities to allow for independent sessions scheduling without conflict.
- The training room is set up in a classroom setting. The Client determines the number of workstations in the room. Tyler recommends every person attending a scheduled session with a Tyler Consultant or Trainer have their own workstation. However, Tyler requires there be no more than two (2) people at a given workstation.
- The Client provides a workstation which connects to the Tyler system for the Tyler trainer conducting the session. The computer connects to a Client provided projector, allowing all attendees the ability to actively engage in the training session.
- Users performing user acceptance testing (UAT) have attended all applicable training sessions prior to performing UAT.



## 4 Implementation Stages

### 4.1 Work Breakdown Structure (WBS)

The Work Breakdown Structure (WBS) is a hierarchical representation of a Project or Phase broken down into smaller, more manageable components. The top-level components are called “Stages” and the second level components are called “work packages.” The work packages, shown below each Stage, contain the high-level work to be done. The detailed Project Plan, developed during Initiate & Plan and finalized during Assess & Define, will list the tasks to be completed within each work package. Each Stage ends with a “Control Point”, confirming the work performed during that Stage of the Project.



\* - If included in project scope

## 4.2 Initiate & Plan (Stage 1)

The Initiate & Plan Stage creates a foundation for the Project through identification of Client and Tyler Project Management teams, development of implementation management plans, and the provision and discussion of system infrastructure requirements. Client participation in gathering information is critical. Tyler Project Management teams present initial plans to stakeholder teams at Stage end.

### 4.2.1 Tyler Internal Coordination & Planning

Prior to Project commencement, Tyler management staff assigns project manager(s). Tyler provides the Client with initial Project documents used in gathering basic information, which aids in preliminary planning and scheduling. Client participation in gathering requested information by provided deadlines ensures the Project moves forward in a timely fashion. Internally, the Tyler project manager(s) coordinate with sales to ensure transfer of vital information from the sales process prior to scheduling a Project Planning Meeting with the Client's team. During this step, Tyler will work with the Client to establish the date(s) for the Project/Phase Planning session.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 1	Tyler Internal Coordination & Planning																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Assign Tyler project manager	A	R	I						I			I								
Provide initial Project documents to Client	A	I	R						C			I								
Sales to Implementation knowledge transfer	A	I	R						C											
Internal planning and phase coordination		A	R					C												

## 4.2.2 System Infrastructure Planning

The Client provides, purchases or acquires hardware according to hardware specifications provided by Tyler and ensures it is available at the Client's site. The Client completes the system infrastructure audit, ensuring vital system infrastructure information is available to the Tyler implementation team, and verifies all hardware compatibility with Tyler solutions.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 1	System Infrastructure Planning																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Provide system hardware specifications			I					R	A			I						C		
Make hardware available for Installation			I					C				A						R		
Install system hardware, if applicable			I					C				A						R		
Complete system infrastructure audit			I					C				A						R		



### 4.2.3 Project/Phase Planning

Project and Phase planning provides an opportunity to review the contract, software, data conversions and services purchased, identify Applications to implement in each Phase (if applicable), and discuss implementation timeframes. The Tyler project manager(s) deliver an Implementation Management Plan, which is mutually agreeable by Client and Tyler.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 1		Project/Phase Planning																			
		TYLER								CLIENT											
TASKS		Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Perform Project/Phase Planning			A	R								I	C	C			–				
Deliver implementation management plan			A	R									C	C	I						

## 4.2.4 Project Schedule

Client and Tyler will mutually develop an initial Project Schedule. The initial schedule includes, at minimum, enough detail to begin Project activities while the detailed Project Plan/schedule is being developed and refined.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 1	Project Schedule																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Develop initial Project Schedule		A	R	I								C	I	I						
Deliver Project Plan and schedule for Project Phase		A	R	I						I	I	C	C	I	I	I				
Client reviews Project Plan & initial schedule			C							I	A	R	C	C		C				
Client approves Project Plan & initial schedule			I							I	A	R	C	C	I	I		I	I	I

## 4.2.5 Stakeholder Presentation

Client stakeholders join Tyler project manager(s) to communicate successful Project criteria, Project goals, Deliverables, a high-level milestone schedule, and roles and responsibilities of Project participants.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 1		Stakeholder Presentation																			
		TYLER								CLIENT											
TASKS		Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
	Present overview of Project Deliverables, Project Schedule and roles and responsibilities		A	R	I					I	I	I	C	I	I	I	I		I	I	I
	Communicate successful Project criteria and goals			I							R	C	A	C	I	I	C	I	I		

## 4.2.6 Control Point 1: Initiate & Plan Stage Acceptance

Acceptance criteria for this Stage includes completion of all criteria listed below. Advancement to the Assess & Define Stage is dependent upon Tyler's receipt of the Stage Acceptance.

### 4.2.6.1 Initiate & Plan Stage Deliverables

- Implementation Management Plan
  - Objective: Update and deliver baseline management plans to reflect the approach to the Client's Project.
  - Scope: The Implementation Management addresses how communication, quality control, risks/issues, resources and schedules, and Software Upgrades (if applicable) will be managed throughout the lifecycle of the Project.
  - Acceptance criteria: Client reviews and acknowledges receipt of Implementation Management Plan.
- Project Plan/Schedule
  - Objective: Provide a comprehensive list of tasks, timelines and assignments related to the Deliverables of the Project.
  - Scope: Task list, assignments and due dates
  - Acceptance criteria: Client acceptance of schedule based on Client resource availability and Project budget and goals.

### 4.2.6.2 Initiate & Plan Stage Acceptance Criteria

- Hardware Installed
- System infrastructure audit complete and verified
- Implementation Management Plan delivered
- Project Plan/Schedule delivered; dates confirmed
- Stakeholder Presentation complete



## 4.3 Assess & Define (Stage 2)

The primary objective of Assess & Define is to gather information about current Client business processes and translate the material into future business processes using Tyler Applications. Tyler uses a variety of methods for obtaining the information, all requiring Client collaboration. The Client shall provide complete and accurate information to Tyler staff for analysis and understanding of current workflows and business processes.

### 4.3.1 Fundamentals Review

Fundamentals Review provides functional leads and Power Users an overall understanding of software capabilities prior to beginning current and future state analysis. The primary goal is to provide a basic understanding of system functionality, which provides a foundation for upcoming conversations regarding future state processing. Tyler utilizes a variety of methods for completing fundamentals training including the use of eLearning, videos, documentation, and walkthroughs.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Assess & Define																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Schedule fundamentals review & provide fundamentals materials & prerequisites, if applicable		A	R	I								C	I		I				I	
Complete fundamentals materials review and prerequisites			I									A	R		I				C	
Ensure all scheduled attendees are present			I	I							A	R	C		I					
Facilitate fundamentals review			A	R								I	I		I					

### 4.3.2 Current/Future State Analysis

Client and Tyler evaluate current state processes, options within the new software, pros and cons of each option based on current or desired state, and make decisions about future state configuration and processing.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Current/Future State Analysis																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Provide Current/Future State analysis materials to the Client, as applicable		A	R	I								C	I		I					
Conduct Current & Future State analysis			A	R								I	C	I	C					
Provide pros and cons of Tyler software options			A	R								I	C	I	C					
Make Future State Decisions according to due date in the Project Plan			I	I							C	A	R	I	C	I				
Record Future State decisions			A	R								I	C	I	C					

### 4.3.3 Data Conversion Planning & Mapping

This entails the activities performed to prepare to convert data from the Client's Legacy System Applications to the Tyler system. Tyler staff and the Client work together to complete Data Mapping for each piece of data (as outlined in the Agreement) from the Legacy System to a location in the Tyler system.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Data Conversion Planning & Mapping																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Review contracted data conversion(s) options			A	R	I							C	C		C			C		
Map data from Legacy System to Tyler system			I	C	I							A	C		C			R		
Pull conversion data extract			I		I							A	C		C			R		
Run balancing Reports for data pulled and provide to Tyler			I		I							A	C		R			I		
Review and approve initial data extract		A	I	C	R							I						I		
Correct issues with data extract, if needed			I	C	C							A	C		C			R		

#### 4.3.4 Standard 3rd Party Data Exchange Planning

Standard Data Exchange tools are available to allow clients to get data in and out of the Tyler system with external systems. Data exchange tools can take the form of Imports and Exports, and Interfaces.

A Standard Interface is a real-time or automated exchange of data between two systems. This could be done programmatically or through an API. It is Tyler's responsibility to ensure the Tyler programs operate correctly. It is the Client's responsibility to ensure the third party program operates or accesses the data correctly.

The Client and Tyler project manager(s) will work together to define/confirm which Data Exchanges are needed (if not outlined in the Agreement). Tyler will provide a file layout for each Standard Data Exchange.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Standard 3 <sup>rd</sup> Party Data Exchange Planning																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Review Standard or contracted Data Exchanges			A	R								C	I		I			C		
Define or confirm needed Data Exchanges			I	C								A	C		C			R		



### 4.3.5 Modification Analysis & Specification, if contracted

Tyler staff conducts additional analysis and develops specifications based on information discovered during this Stage. The Client reviews the specifications and confirms they meet Client's needs prior to acceptance. Out of Scope items or changes to specifications after acceptance may require a Change Request.

Tyler's intention is to minimize Modifications by using Standard functionality within the Application, which may require a Client business process change. It is the responsibility of the Client to detail all of their needs during the Assess and Define Stage. Tyler will write up specifications (for Client approval) for contracted program Modifications. Upon approval, Tyler will make the agreed upon Modifications to the respective program(s). Once the Modifications have been delivered, the Client will test and approve those changes during the Build and Validate Stage.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Modification Analysis & Specification, if contracted																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Analyze contracted modified program requirements			A	C			R					C	C	I	C			C		
Develop specification document(s)	A		I	C			R					I	I		I			I		
Review specification document(s); provide changes to Tyler, if applicable			I	C			C					A	R	I	C			C		
Sign-off on specification document(s) and authorize work			I				I				A	R	C	I	I			C		

### 4.3.6 Forms & Reports Planning

Client and Tyler project manager(s) review Forms and Report needs. Items that may be included in the Agreement are either Standard Forms and Reports or known/included Modification(s). Items not included in the Agreement could be either Client-developed Reports or a newly discovered Modification that will require a Change Request.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	Forms & Reports Planning																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Review required Forms output			A	R									C	I	C			I		
Review and complete Forms options and submit to Tyler			I			I						A	R		C					
Review in Scope Reports			A	R								I	C		C					
Identify additional Report needs			I	C								A	R		C					
Add applicable tasks to Project schedule	A	R	I			C						C	I		I			I		

### 4.3.7 System Deployment

The Tyler Technical Services team Installs Tyler Applications on the server (hosted or client-based) and ensures the platform operates as expected.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 2	System Deployment																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Install contracted software on server	A		I					R				—						C		
Ensure platform operates as expected	A		I					R				—						C		

### 4.3.8 Control Point 2: Assess & Define Stage Acceptance

Acceptance criteria for this Stage includes completion of all criteria listed below. Advancement to the Build & Validate Stage is dependent upon Tyler's receipt of the Stage Acceptance.

#### 4.3.8.1 Assess & Define Stage Deliverables

- Completed analysis Questionnaire
  - Objective: Gather and document information related to Client business processes for current/future state analysis as it relates to Tyler approach/solution.
  - Scope: Provide comprehensive answers to all questions on Questionnaire(s).
  - Acceptance criteria: Client acceptance of completed Questionnaire based on thoroughness of capturing all Client business practices to be achieved through Tyler solution.
- Data conversion summary and specification documents
  - Objective: Define data conversion approach and strategy.
  - Scope: Data conversion approach defined, data extract strategy, conversion and reconciliation strategy.
  - Acceptance criteria: Data conversion document(s) delivered to the Client, reflecting complete and accurate conversion decisions.
- Modification specification documents, if contracted
  - Objective: Provide comprehensive outline of identified gaps, and how the modified program meets the Client's needs.
  - Scope: Design solution for Modification.
  - Acceptance criteria: Client accepts Modified Specification Document(s) and agrees that the proposed solution meets their requirements.
- Completed Forms options and/or packages
  - Objective: Provide specifications for each Client in Scope form, Report and output requirements.
  - Scope: Complete Forms package(s) included in agreement and identify Report needs.
  - Acceptance criteria: Identify Forms choices and receive supporting documentation.
- Installation checklist
  - Objective: Installation of purchased Tyler software.
  - Scope: Tyler will conduct an initial coordination call, perform an installation of the software included in the Agreement, conduct follow up to ensure all tasks are complete, and complete server system administration training, unless the Client is hosted.
  - Acceptance criteria: Tyler software is successfully installed and available to authorized users, Client team members are trained on applicable system administration tasks.

#### 4.3.8.2 Assess & Define Stage Acceptance Criteria

- Tyler software is installed.



- Fundamentals review is complete.
- Required Form information complete and provided to Tyler.
- Current/Future state analysis completed; Questionnaires delivered and reviewed.
- Data conversion mapping and extractions completed and provided to Tyler.

SAMPLE

## 4.4 Build & Validate (Stage 3)

The objective of the Build & Validate Stage is to prepare the software for use in accordance with the Client's needs identified during the Assess and Define Stage, preparing the Client for Final Testing and Training.

### 4.4.1 Configuration & Power User Training

Tyler staff collaborates with the Client to complete software configuration based on the outputs of the future state analysis performed during the Assess and Define Stage. Tyler staff will train the Client Power Users to prepare them for the Validation of the software. The Client collaborates with Tyler staff iteratively to Validate software configuration.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 3	Build & Validate																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Perform configuration			A	R								I	R		I					
Power User process and Validation training			A	R								I	C	I	C				I	
Validate configuration			I	C								A	C		R			C		

## 4.4.2 Data Conversion & Validation

Tyler completes an initial review of the converted data for errors. With assistance from the Client, the Tyler Data Conversion Team addresses items within the conversion program to provide the most efficient data conversion possible. With guidance from Tyler, the Client reviews specific data elements within the system and identifies and Reports discrepancies in writing. Iteratively, Tyler collaborates with the Client to address conversion discrepancies prior to acceptance.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 3	Data Conversion & Validation																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Write and run data conversion program against Client data		A	I	C	R													C		
Complete initial review of data errors		A	I	C	R							I	I					C		
Review data conversion and submit needed corrections			I	C	I							A	C		R			C		
Revise conversion program(s) to correct error(s)		A	I	C	R							I	I		C			C		

### 4.4.3 Standard 3rd Party Data Exchange Validation

Tyler provides training on Data Exchange(s) and the Client tests each Data Exchange.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 3	Standard 3 <sup>rd</sup> Party Data Exchange Validation																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Train Data Exchange(s) processing in Tyler software			A	R								C	I	I	I			C	I	
Coordinate 3 <sup>rd</sup> Party Data Exchange activities			I	I								A	C		C			R		
Test all Standard 3 <sup>rd</sup> party Data Exchange(s)			I	C								A	C	I	R			C		



#### 4.4.4 Modification Delivery & Validation, if contracted

Tyler delivers in Scope Modification(s) to the Client for preliminary testing. Final acceptance will occur during the Final Testing and Training Stage.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 3	Modification Delivery & Validation, if contracted																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Develop and deliver contracted modified program(s)		A	I	C	I		R					I	C	I	C			I		C
Test contracted modified program(s) in isolated database			I	C			C					A	C		R			C		
Report discrepancies between specification and delivered contracted modified program(s)			I	I			I					A	R		C			C		
Make corrections to contracted modified program(s) as required		A	I	C	I		R					I	C		C			I		

### 4.4.5 Forms & Reports Validation

Tyler provides training on Standard Forms/Reports and the Client tests each Standard Form/Report.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 3		Forms & Reports Validation																			
		TYLER								CLIENT											
TASKS		Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Standard Forms & Report training				A	R								I	C		C			I		
Test Standard Forms & Reports				I	C		C						A	C		R			C		

### 4.4.6 Control Point 3: Build & Validate Stage Acceptance

Acceptance criteria for this Stage includes all criteria listed below. Advancement to the Final Testing & Training Stage is dependent upon Tyler's receipt of the Stage Acceptance.

#### 4.4.6.1 Build & Validate Stage Deliverables

- Initial data conversion
  - Objective: Convert Legacy System data into Tyler system.
  - Scope: Data conversion program complete; deliver converted data for review.
  - Acceptance criteria: Initial error log available for review.
- Data conversion verification document
  - Objective: Provide instructions to the Client to verify converted data for accuracy.
  - Scope: Provide self-guided instructions to verify specific data components in Tyler system.
  - Acceptance criteria: Client accepts data conversion delivery; Client completes data issues log.
- Installation of Modifications on the Client's server(s) \*except for hosted Clients
  - Objective: Deliver Modification(s) in Tyler software.
  - Scope: Program for Modification is complete and available in Tyler software, Modification testing.
  - Acceptance criteria: Delivery of Modification(s) results in objectives described in the Client-signed specification.
- Standard Forms & Reports Delivered
  - Objective: Provide Standard Forms & Reports for review.
  - Scope: Installation of all Standard Forms & Reports included in the Agreement.
  - Acceptance criteria: Standard Forms & Reports available in Tyler software for testing in Stage 4.

#### 4.4.6.2 Build & Validate Stage Acceptance Criteria

- Application configuration completed.
- Standard Forms & Reports delivered and available for testing in Stage 4.
- Data conversions (except final pass) delivered.
- Standard 3<sup>rd</sup> party Data Exchange training provided.
- Modifications delivered and available for testing in Stage 4.
- The Client and Tyler have done a review of primary configuration areas to Validate completeness and readiness for testing and acceptance in Stage 4.

## 4.5 Final Testing & Training (Stage 4)

During Final Testing and Training, Tyler and the Client review the final Cutover plan. A critical Project success factor is the Client understanding the importance of Final Testing and Training and dedicating the resources required for testing and training efforts in order to ensure a successful Production Cutover.

### 4.5.1 Cutover Planning

Client and Tyler project manager(s) discuss final preparations and critical dates for Production Cutover. Tyler delivers a Production Cutover Checklist to outline Cutover tasks to help prepare the Client for success.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 4	Cutover Planning																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Cutover Planning Session		A	R	C							I	C	C	C	C			C	C	
Develop Production Cutover Checklist		A	R	C						I	I	C	C	I	I			C		

## 4.5.2 User Acceptance Testing (UAT)

The Client performs User Acceptance Testing to verify software readiness for day-to-day business processing. Tyler provides a Test Plan for users to follow to ensure proper Validation of the system.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 4	User Acceptance Testing (UAT)																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Deliver Test Plan for User Acceptance Testing		A	R	C								I	I							
Perform User Acceptance Testing			I	C							A	R	C	C	C	I	I	C	I	
Accept modified program(s), if applicable			I	I			I				A	R	C	I	C			C		
Validate Report performance			I	C		C						A	C		R			C		



### 4.5.3 End User Training

End Users attend training sessions to learn how to utilize Tyler software. Training focuses primarily on day-to-day Client processes that will be delivered via group training, webinar, eLearnings and/or live training sessions.

Unless stated otherwise in the Agreement, Tyler provides one occurrence of each scheduled training or implementation topic with up to the maximum number of users as defined in the Agreement, or as otherwise mutually agreed. Client users who attended the Tyler sessions may train any Client users not able to attend the Tyler sessions or additional sessions may be contracted at the applicable rates for training.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 4	End User Training																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Conduct user training sessions			A	R								C	I		I	I		I	I	
Conduct additional End User training sessions			I								I	A	C	I	R	I	I	I	I	

## 4.5.4 Control Point 4: Final Testing & Training Stage Acceptance

Acceptance criteria for this Stage includes all criteria listed below. Advancement to the Production Cutover Stage is dependent upon Tyler's receipt of the Stage Acceptance.

### 4.5.4.1 Final Testing & Training Stage Deliverables

- Production Cutover checklist
  - Objective: Provide a detailed checklist outlining tasks necessary for production Cutover.
  - Scope: Dates for final conversion, date(s) to cease system processing in Legacy System, date(s) for first processing in Tyler system, contingency plan for processing.
  - Acceptance criteria: Definition of all pre-production tasks, assignment of owners and establishment of due dates.
- User Acceptance Test Plan
  - Objective: Provide testing steps to guide users through testing business processes in Tyler software.
  - Scope: Testing steps for Standard business processes.
  - Acceptance criteria: Testing steps have been provided for Standard business processes.

### 4.5.4.2 Final Testing & Training Stage Acceptance Criteria

- Production Cutover Checklist delivered and reviewed.
- Modification(s) tested and accepted, if applicable.
- Standard 3<sup>rd</sup> party Data Exchange programs tested and accepted.
- Standard Forms & Reports tested and accepted.
- User acceptance testing completed.
- End User training completed.

## 4.6 Production Cutover (Stage 5)

Client and Tyler resources complete tasks as outlined in the Production Cutover Plan and the Client begins processing day-to-day business transactions in the Tyler software. Following Production Cutover, the Client transitions to the Tyler support team for ongoing support of the Application.

### 4.6.1 Final Data Conversion, if applicable

The Client provides final data extract and Reports from the Legacy System for data conversion and Tyler executes final data conversion. The Client may need to manually enter into the Tyler system any data added to the Legacy System after final data extract.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 5	Final Data Conversion, if applicable																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Provide final data extract			C		I						I	A	C	I	I	I	I	R		
Provide final extract balancing Reports			I		I							A	C		R			I		
Convert and deliver final pass of data		A	I	I	R							I	I		I			C		
Validate final pass of data			I	C	C						I	A	C		R			C		
Load final conversion pass to Production environment			I		I						I	A	C	I	C			R		

## 4.6.2 Production Processing & Assistance

Tyler staff collaborates with the Client during Production Cutover activities. The Client transitions to Tyler software for day-to day business processing.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 5	Production Processing & Assistance																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Production processing			C	C						I	I	A	R	R	R	R	R	R	I	I
Provide production assistance			A	R				C				I	C	C	C	C	C	C		

### 4.6.3 Transition to Tyler Support

Tyler project manager(s) introduce the Client to the Tyler Support team, who provides the Client with day-to-day assistance following Production Cutover.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 5	Transition to Tyler Support																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Develop internal support plan			I								A	R	C	C	C	C		C	C	C
Conduct transfer to Support meeting	A	I	C					R				C	C	C	C	I	I	C	I	I



#### 4.6.4 Schedule Post-Production Services, if applicable

Tyler provides post-production services if included in the Agreement. Prior to scheduling services, the Tyler project manager(s) collaborate with Client project manager(s) to identify needs.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 5	Schedule Post-Production Services, if applicable																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Identify topics for post-production services			C	C								A	R	I	C				I	
Schedule services for post-production topics		A	R	I								C	C	I	C				I	

## 4.6.5 Control Point 5: Production Cutover Stage Acceptance

Acceptance criteria for this Stage includes all criteria listed below. Advancement to the Phase/Project Closure Stage is dependent upon Tyler's receipt of this Stage Acceptance.

### 4.6.5.1 Production Cutover Stage Deliverables

- Final data conversion, if applicable
  - Objective: Ensure (in Scope) Legacy System data is available in Tyler software in preparation for production processing.
  - Scope: Final passes of all conversions completed in this Phase.
  - Acceptance criteria: Data is available in production environment.
- Support transition documents
  - Objective: Define strategy for on-going Tyler support.
  - Scope: Define support strategy for day-to-day processing, conference call with Client Project Manager(s) and Tyler support team, define roles and responsibilities, define methods for contacting support.
  - Acceptance criteria: the Client receives tools to contact support and understands proper support procedures.

### 4.6.5.2 Production Cutover Stage Acceptance Criteria

- Final data conversion(s) delivered.
- Processing is being done in Tyler production.
- Transition to Tyler support is completed.
- Post-live services have been scheduled, if applicable.

## 4.7 Phase/Project Closure (Stage 6)

Project or Phase closure signifies full implementation of all products purchased and encompassed in the Phase or Project. The Client moves into the next cycle of their relationship with Tyler (next Phase of implementation or long-term relationship with Tyler Support).

### 4.7.1 Close Phase/Project

The Client and Tyler project manager(s) review the list of outstanding Project activities and develop a plan to address them. The Tyler project manager(s) review the Project budget and status of each contract Deliverable with the Client project manager(s) prior to closing the Phase or Project.

RACI MATRIX KEY: **R** = Responsible **A** = Accountable **C** = Consulted **I** = Informed

STAGE 6	Close Phase/Project																			
	TYLER									CLIENT										
TASKS	Tyler Executive Manager	Tyler Implementation Manager	Tyler Project Manager	Tyler Implementation Consultant	Tyler Data Conversion Experts	Tyler Forms & Reports Experts	Tyler Modification Programmers	Tyler Technical Support	Tyler Sales	Client Executive Sponsor	Client Steering Committee	Client Project Manager	Client Functional Leads	Client Change Management Leads	Client Power Users	Client Department Heads	Client End Users	Client Technical Leads	Client Project Toolset Coordinator	Client Upgrade Coordinator
Review outstanding Project activities and develop action plan		A	R	C								C	C	I	C	I		C		
Review Project budget and status of contract Deliverables		A	R							I	I	C								

## 4.7.2 Control Point 6: Phase/Project Closure Stage Acceptance

Acceptance criteria for this Stage includes all criteria listed below. This is the final acceptance for the Phase/Project.

### 4.7.2.1 Phase/Project Closure Stage Deliverables

- Phase/Project reconciliation report
  - Objective: Provide comparison of contract Scope and Project budget.
  - Scope: Contract Scope versus actual, analysis of services provided and remaining budget, identify any necessary Change Requests or Project activity.
  - Acceptance criteria: Acceptance of services and budget analysis and plan for changes, if needed.

### 4.7.2.2 Phase/Project Closure Stage Acceptance Criteria

- Outstanding Phase or Project activities have been documented and assigned.
- Phase/final Project budget has been reconciled.
- Tyler Deliverables for the Phase/Project are complete.

## 5 Roles and Responsibilities

### 5.1 Tyler Roles and Responsibilities

Tyler assigns project manager(s) prior to the start of each Phase of the Project. The project manager(s) assign additional Tyler resources as the schedule develops and as needs arise. One person may fill multiple project roles.

#### 5.1.1 Tyler Executive Management

- Provides clear direction for Tyler staff on executing on the Project Deliverables to align with satisfying the Client's overall organizational strategy.
- Authorizes required project resources.
- Resolves all decisions and/or issues not resolved at the implementation management level as part of the escalation process.
- Offers additional support to the project team and is able to work with other Tyler department managers in order to escalate and facilitate implementation project tasks and decisions.
- Acts as the counterpart to the Client's executive sponsor.

#### 5.1.2 Tyler Implementation Management

- Acts as the counterpart to the Client steering committee.
- Assigns initial Tyler project personnel.
- Works to resolve all decisions and/or issues not resolved at the Project Management level as part of the escalation process.
- Attends Client steering committee meetings as necessary.
- Provides support for the project team.
- Provides management support for the Project to ensure it is staffed appropriately and staff have necessary resources.
- Monitors project progress including progress towards agreed upon goals and objectives.

#### 5.1.3 Tyler Project Manager

The Tyler project manager(s) provides oversight of the Project, coordination of resources between departments, management of the project budget and schedule, effective risk and issue management, and is the primary point of contact for all Project related items.

- Contract Management
  - Validates contract compliance throughout the Project.
  - Ensures Deliverables meet contract requirements.
  - Acts as primary point of contact for all contract and invoicing questions.
  - Prepares and presents contract milestone sign-offs for acceptance by Client project manager(s).
  - Coordinates Change Requests, if needed, to ensure proper Scope and budgetary compliance.
- Planning



- Update and deliver Implementation Management Plan.
- Defines project tasks and resource requirements.
- Develops initial project schedule and full scale Project Plan .
- Collaborates with Client project manager(s) to plan and schedule project timelines to achieve on-time implementation.
- Implementation Management
  - Tightly manages Scope and budget of Project; establishes process and approval matrix with the Client to ensure Scope changes and budget planned versus actual are transparent and handled effectively and efficiently.
  - Establishes and manages a schedule and resource plan that properly supports the Project Plan that is also in balance with Scope/budget.
  - Establishes risk/issue tracking/reporting process between the Client and Tyler and takes all necessary steps to proactively mitigate these items or communicates with transparency to the Client any items that may impact the outcomes of the Project.
  - Collaborates with the Client's project manager(s) to establish key business drivers and success indicators that will help to govern project activities and key decisions to ensure a quality outcome of the project.
  - Sets a routine communication plan that will aide all project team members, of both the Client and Tyler, in understanding the goals, objectives, current status and health of the project.
- Team Management
  - Acts as liaison between project team and Tyler manager(s).
  - Identifies and coordinates all Tyler resources across all applications, Phases, and activities including development, forms, installation, reports, implementation, and billing.
  - Provides direction and support to project team.
  - Builds partnerships among the various stakeholders, negotiating authority to move the Project forward.
  - Manages the appropriate assignment and timely completion of tasks as defined in the Project Plan, task list, and Production Cutover Checklist.
  - Assesses team performance and adjusts as necessary.
  - Interfaces closely with Tyler developers to coordinate program Modification activities.
  - Coordinates with in Scope 3<sup>rd</sup> party providers to align activities with ongoing project tasks.

#### 5.1.4 Tyler Implementation Consultant

- Completes tasks as assigned by the Tyler project manager(s).
- Performs problem solving and troubleshooting.
- Follows up on issues identified during sessions.
- Documents activities for on site services performed by Tyler.
- Provides conversion Validation and error resolution assistance.
- Recommends guidance for testing Forms and Reports.
- Tests software functionality with the Client following configuration.
- Assists during Production Cutover process and provides production support until the Client transitions to Tyler Support.
- Provides product related education.

- Effectively facilitates training sessions and discussions with Client and Tyler staff to ensure adequate discussion of the appropriate agenda topics during the allotted time.
- Conducts training (configuration, process, conversion Validation) for Power Users and the Client's designated trainers for End Users.
- Clearly documents homework tasks with specific due dates and owners, supporting and reconciling with the final Project Plan.
- Keeps Tyler project manager(s) proactively apprised of any and all issues which may result in the need for additional training, change in schedule, change in process decisions, or which have the potential to adversely impact the success of the Project prior to taking action.

### 5.1.5 Tyler Sales

- Provide sales background information to Implementation during Project initiation.
- Support Sales transition to Implementation.
- Provide historical information, as needed, throughout implementation.

### 5.1.6 Tyler Software Support

- Manages incoming client issues via phone, email, and online customer incident portal.
- Documents and prioritizes issues in Tyler's Customer Relationship Management (CRM) system.
- Provides issue analysis and general product guidance.
- Tracks issues and tickets to timely and effective resolution.
- Identifies options for resolving reported issues.
- Reports and escalates defects to Tyler Development.
- Communicates with the Client on the status and resolution of reported issues.

### 5.1.7 Tyler Subject Matter Expert

- Possesses both a broad and deep understanding of the functionality within Tyler software products for his/her functional area(s).
- Provides confident recommendations regarding configuration decisions and business process best practices using Tyler's products based on his/her experience and expertise implementing Tyler software products with similar organizations.
- Provides conversion consulting and mapping assistance.
- Follows up on issues identified during sessions.
- Documents activities for on site services.
- Clearly documents homework tasks with specific due dates and owners, supporting and reconciling with the final Project schedule.
- Keeps Tyler project manager(s) proactively apprised of any and all issues which may result in the need for additional training needs, change in schedule, change in process decisions, or which have the potential to adversely impact the success of the Project prior to taking action.
- Performs gap analysis and documents non-contracted Modifications requests.

## 5.2 Client Roles and Responsibilities

Client resources will be assigned prior to the start of each Phase of the project. One person may be assigned to multiple project roles.

### 5.2.1 Client Executive Sponsor

- Provides clear direction for the Project and how the Project applies to the organization's overall strategy.
- Champions the Project at the executive level to secure buy-in.
- Authorizes required Project resources.
- Resolves all decisions and/or issues not resolved at the Client steering committee level as part of the escalation process.
- Actively participates in organizational change communications.

### 5.2.2 Client Steering Committee

- Works to resolve all decisions and/or issues not resolved at the project manager level as part of the escalation process.
- Attends all scheduled steering committee meetings.
- Provides support for the project team.
- Assists with communicating key project messages throughout the organization.
- Prioritizes the project within the organization.
- Provides management support for the project to ensure it is staffed appropriately and staff have necessary resources.
- Monitors project progress including progress towards agreed upon goals and objectives.
- Has the authority to approve or deny changes impacting the following areas:
  - Cost
  - Scope
  - Schedule
  - Project Goals
  - Client Policies

### 5.2.3 Client Project Manager

The Client shall assign project manager(s) prior to the start of this Project with overall responsibility and authority to make decisions related to project Scope, scheduling, and task assignment, and communicates decisions and commitments to the Tyler project manager(s) in a timely and efficient manner. When the Client project manager(s) do not have the knowledge or authority to make decisions, he or she engages the correct resources from Client to participate in discussions and make decisions in a timely fashion to avoid Project delays.

- Contract Management
  - Validates contract compliance throughout the Project.
  - Ensures invoicing and Deliverables meet contract requirements.
  - Acts as primary point of contact for all contract and invoicing questions.
  - Signs off on contract milestone acknowledgment documents.
  - Collaborates on and approves Change Requests, if needed, to ensure proper Scope and budgetary compliance.
- Planning

- Review and acknowledge Implementation Management Plan.
- Defines project tasks and resource requirements for Client project team.
- Collaborates in the development and approval of the initial Project Plan and Project Plan.
- Collaborates with Tyler project manager(s) to plan and schedule Project timelines to achieve on-time implementation.
- Implementation Management
  - Tightly manages Project budget and Scope and collaborates with Tyler project manager(s) to establish a process and approval matrix to ensure Scope changes and budget planned versus actual are transparent and handled effectively and efficiently.
  - Collaborates with Tyler project manager to establish and manage a schedule and resource plan that properly supports the Project Plan, as a whole, that is also in balance with Scope/budget.
  - Collaborates with Tyler Project manager(s) to establishes risk/issue tracking/reporting process between the Client and Tyler and takes all necessary steps to proactively mitigate these items or communicates with transparency to Tyler any items that may impact the outcomes of the Project.
  - Collaborates with Tyler Project manager(s) to establish key business drivers and success indicators that will help to govern Project activities and key decisions to ensure a quality outcome of the Project.
  - Routinely communicates with both Client staff and Tyler, aiding in the understanding of goals, objectives, current status, and health of the Project by all team members.
- Team Management
  - Acts as liaison between project team and stakeholders.
  - Identifies and coordinates all Client resources across all modules, Phases, and activities including data conversions, forms design, hardware and software installation, reports building, and satisfying invoices.
  - Provides direction and support to project team.
  - Builds partnerships among the various stakeholders, negotiating authority to move the Project forward.
  - Manages the appropriate assignment and timely completion of tasks as defined in the Project Plan, task list, and Production Cutover Checklist.
  - Assesses team performance and takes corrective action, if needed.
  - Provides guidance to Client technical teams to ensure appropriate response and collaboration with Tyler Technical Support Teams to ensure timely response and appropriate resolution.
  - Coordinates in Scope 3<sup>rd</sup> party providers to align activities with ongoing Project tasks.

## 5.2.4 Client Functional Leads

- Makes business process change decisions under time sensitive conditions.
- Communicates existing business processes and procedures to Tyler consultants.
- Assists in identifying business process changes that may require escalation.
- Attends and contributes business process expertise for current/future state analysis sessions.
- Identifies and includes additional subject matter experts to participate in Current/Future State Analysis sessions.

- Provides business process change support during Power User and End User training.
- Completes performance tracking review with client project team on End User competency on trained topics.
- Provides Power and End Users with dedicated time to complete required homework tasks.
- Act as an ambassador/champion of change for the new process.
- Identifies and communicates any additional training needs or scheduling conflicts to Client project manager.
- Prepares and Validates Forms.
- Actively participates in all aspects of the implementation, including, but not limited to, the following key activities:
  - Task completion
  - Stakeholder Presentation
  - Implementation Management Plan development
  - Schedule development
  - Maintenance and monitoring of risk register
  - Escalation of issues
  - Communication with Tyler project team
  - Coordination of Client resources
  - Attendance at scheduled sessions
  - Change Management activities
  - Modification specification, demonstrations, testing and approval assistance
  - Conversion Analysis and Verification Assistance
  - Decentralized End User Training
  - Process Testing
  - User Acceptance Testing

### 5.2.5 Client Power Users

- Participate in Project activities as required by the project team and project manager(s).
- Provide subject matter expertise on Client business processes and requirements.
- Act as subject matter experts and attend current/future state and validation sessions as needed.
- Attend all scheduled training sessions.
- Participate in all required post-training processes as needed throughout Project.
- Participate in Conversion Validation.
- Test all Application configuration to ensure it satisfies business process requirements.
- Become Application experts.
- Participate in User Acceptance Testing.
- Adopt and support changed procedures.
- Complete all Deliverables by the due dates defined in the Project Plan.
- Demonstrate competency with Tyler products processing prior to Production Cutover.
- Provide knowledge transfer to Client staff during and after implementation.

### 5.2.6 Client End Users

- Attend all scheduled training sessions.
- Become proficient in Application functions related to job duties.
- Adopt and utilize changed procedures.



- Complete all Deliverables by the due dates defined in the Project Plan.
- Utilize software to perform job functions at and beyond Production Cutover.

### 5.2.7 Client Technical Support

- Coordinates updates and releases with Tyler as needed.
- Coordinates the copying of source databases to training/testing databases as needed for training days.
- Extracts and transmits conversion data and control reports from Client's Legacy System per the conversion schedule set forth in the Project Plan.
- Coordinates and adds new users and printers and other Peripherals as needed.
- Validates all users understand log-on process and have necessary permission for all training sessions.
- Coordinates Interface development for Client third party Data Exchanges.
- Develops or assists in creating Reports as needed.
- Ensures onsite system hardware meets specifications provided by Tyler.
- Assists with software Installation as needed.

### 5.2.8 Client Upgrade Coordinator

- Becomes familiar with the Software Upgrade process and required steps.
- Becomes familiar with Tyler's releases and updates.
- Utilizes Tyler Community to stay abreast of the latest Tyler releases and updates, as well as the latest helpful tools to manage the Client's Software Upgrade process.
- Assists with the Software Upgrade process during implementation.
- Manages Software Upgrade activities post-implementation.
- Manages Software Upgrade plan activities.
- Coordinates Software Upgrade plan activities with Client and Tyler resources.
- Communicates changes affecting users and department stakeholders.
- Obtains department stakeholder sign-offs to upgrade production environment.

### 5.2.9 Client Project Toolset Coordinator

- Ensures users have appropriate access to Tyler project toolsets such as Tyler University, Tyler Community, Tyler Product Knowledgebase, SharePoint, etc.
- Conducts training on proper use of toolsets.
- Validates completion of required assignments using toolsets.

### 5.2.10 Client Change Management Lead

- Validates users receive timely and thorough communication regarding process changes.
- Provides coaching to supervisors to prepare them to support users through the project changes.
- Identifies the impact areas resulting from project activities and develops a plan to address them proactively.
- Identifies areas of resistance and develops a plan to reinforce the change.
- Monitors post-production performance and new process adherence.

SAMPLE

## 6 Glossary

Word or Term	Definition
<b>Accountable</b>	The person who is ultimately accountable for decisions being made on a task.
<b>Application</b>	A computer program designed to perform a group of coordinated functions, tasks or activities for the benefit of the user.
<b>Build Blueprint</b>	A document recording future state decisions intended to allow Tyler to satisfy business needs/requirements during the Build & Validate Stage through configuration and setups to develop the final solution. A means for the Client to Validate what was agreed to be in Scope has been Delivered.
<b>Business Requirements Document</b>	A specification document used to describe Client requirements not available through Tyler software functionality, which will lead to a Modification with Client acceptance.
<b>Change Control</b>	A systematic approach for managing change governing how Change Requests will be received, assessed and acted on.
<b>Change Management</b>	An approach for ensuring that changes are thoroughly and smoothly implemented and that the lasting benefits of change are achieved. The focus is on the global impact of change with an intense focus on people and how individuals and teams move from the current situation to the new one.
<b>Change Request</b>	A form used as part of the Change Control process whereby changes in the Scope of work, timeline, resources, and/or budget are revised and agreed upon by participating parties.
<b>Consulted</b>	Anyone who must be consulted with prior to a decision being made and/or the task being completed
<b>Consumables</b>	Items that are used on a recurring basis, usually by Peripherals. Examples: paper stock or scanner cleaning kits.
<b>Control Point</b>	Occurring at the end of each Stage, the Control Point serves as a formal client review point. Project progress cannot continue until the client acknowledges the agreed upon Deliverables of the Stage have been met, or agree on an action plan to make the Deliverable acceptable and move to next Stage while executing final steps of current Stage.
<b>Data Exchange</b>	A term used to reference Imports and Exports, and Interfaces which allow data to be exchanged between an external system and Tyler software.
<b>Data Mapping</b>	The process of mapping fields from the Legacy System to the appropriate location in the new system from one or more sources.
<b>Deliverable</b>	A tangible or intangible object/document produced as a result of the Project that is intended to be delivered to a client (either internal or external) or vendor at a specific time.
<b>End User</b>	The person for whom the software is designed to use on a day-to-day basis.

<b>Forms</b>	A document which is typically printed on a template background and only captures data for one record per page. Forms are provided to entity customers whether internal (employees) or external (citizens).
<b>Imports and Exports</b>	A process within the system that a user is expected to run to consume (Import) or produce (Export) a specifically defined file format/layout.
<b>Informed</b>	Anyone who will be updated when decisions are made or a task is completed.
<b>Install</b>	References the initial Installation of software files on client servers and preparing the software for use during configuration. The version currently available for general release will always be used during the initial Install.
<b>Interface</b>	A real-time or automated exchange of data between two systems.
<b>Legacy System</b>	The system from which a client is converting.
<b>Modification</b>	Modification of software program package to provide individual client requirements documented within the Scope of the Agreement.
<b>Peripherals</b>	An auxiliary device that connects to and works with the computer in some way. Examples: mouse, keyboard, scanner, external drive, microphone, speaker, webcam, and digital camera.
<b>Phase</b>	A portion of the Project in which specific set of related products are typically implemented. Phases each have an independent start, Production Cutover and closure dates but use the same Implementation Plans as other Phases within the Project. Phases may overlap or be sequential and may have the same Tyler project manager and Tyler project team or different individuals assigned.
<b>Power User</b>	An experienced client person or group who is (are) an expert(s) in the client business processes, as well as knowledgeable in the requirements and acceptance criteria.
<b>Production Cutover</b>	The Client is using the Tyler software to conduct daily operations.
<b>Project</b>	The Project includes all implementation activity from Plan & Initiate to Closure for all products, Applications and functionality included in a single Agreement. The Project may be broken down into multiple Phases.
<b>Project Plan</b>	The Project Plan serves as the master roadmap for the Project. The Project Plan will be the detailed task list of the essential activities to be performed to complete the Project. Each activity will have owner(s), participant(s) if applicable, start date, and due dates. The Project Plan is a living document and will be updated quarterly with the detailed tasks for the next future quarter; only high-level tasks with rough timeframes will be plotted out beyond this.

<b>Project Planning Meeting</b>	Occurs during the Plan & Initiate Stage to coordinate with the Client project manager to discuss Scope, information needed for project scheduling and resources.
<b>RACI</b>	A chart describing level of participation by various roles in completing tasks or Deliverables for a Project or process. Also known as a responsibility assignment matrix (RAM) or linear responsibility chart (LRC).
<b>Reports</b>	Formatted to return information related to multiple records in a structured format. Information is typically presented in both detail and summary form for a user to consume.
<b>Responsible</b>	The person who will be completing the task.
<b>Scope</b>	Products and services that are included in the Agreement.
<b>Software Upgrade</b>	References the act of updating software files to a newer software release.
<b>Stage</b>	The top-level components of the WBS. Each Stage is repeated for individual Phases of the Project and requires acknowledgement before continuing to the next Stage. Some tasks in the next Stage may begin before the prior Stage is complete.
<b>Stakeholder Presentation</b>	Representatives of the Tyler implementation team will meet with key client representatives to present high level Project expectations and outline how Tyler and the Client can successfully partner to create an environment for a successful implementation.
<b>Standard</b>	Included in the base software (out of the box) package.
<b>Statement of Work (SOW)</b>	Document which will provide supporting detail to the Agreement defining Project -specific activities and Deliverables Tyler will provide to the client.
<b>Validation (or to validate)</b>	The process of testing and approving that a specific Deliverable, process, program or product is working as expected.
<b>Work Breakdown Structure (WBS)</b>	A hierarchical representation of a Project or Phase broken down into smaller, more manageable components.



## 7 Munis Conversion Summary

### 7.1 Accounting COA

- Chart of Accounts segments, objects, character codes, project codes (if applicable), organization codes (if applicable), control accounts budget rollups, fund attributes, due to/due from accounts
- Requires the use of a Tyler provided spreadsheet for design and entry of the data to be converted

### 7.2 Accounting - Actuals

- Summary account balances
- Up to 3 years

### 7.3 Accounting - Budgets

- Original budget, budget adjustments, revised budget summaries for accounts
- Up to 3 years

### 7.4 Animal License Master

- Animal, name, breed, color, rabies date, registration fee, paid amount

### 7.5 Animal License - Bills

- Animal license billing information

### 7.6 Accounts Payable Master

- Vendor Master file including names, addresses, SSN/FID, contacts, phone numbers
- Multiple remittance addresses
- Year-to-date 1099 amounts

### 7.7 Accounts Payable - Invoices

- Invoice header data containing general information for the invoice
- Invoice detail data containing line-specific information for the invoice

### 7.8 Accounts Payable - Checks

- Check header data including vendor, warrant, check number, check date, overall check amount, GL cash account and clearing information
- Check detail data including related document and invoice numbers for each check

## 7.9 Contracts

- Contract header detail with many fields available to convert including fiscal year and period, vendor number, department code, description, enforcement method code, dates for award, approval, entry and expiration, retention information, user-defined type and review codes, status code, user id for entry and approver. Additional fields are also available.
- Contract detail including line item account and amount detail

## 7.10 Capital Assets Master

- Asset description, status, acquisition quantity, date and amount, codes for asset class, subclass, department, custodian, flags for capitalization and depreciation, estimated life, serial number, model, model year, depreciation method, life-to-date depreciation amount, last depreciation date, disposal information (if any), purchase information, if any (vendor, PO, Invoice)

## 7.11 General Billing CID

- Customer information

## 7.12 General Billing – Recurring Invoices

- General Billing Invoices that are sent on a regular basis
- Header records with general information about the invoice
- Detail records with line-specific information

## 7.13 General Billing – Bills

- Unlimited history of open and closed invoices
- General Ledger information so open invoices can be processed in Munis

## 7.14 Inventory Master

- General master data includes item, description, commodity code, purchase vendor and date, date received, GL information, hazard code, etc. Location master includes item, location, bin, various quantities (on-hand, last, committed, standard purchase, re-order), lead time; count, count date, and variance; GL information; plus many accumulator buckets (MTD/YTD/SOY/SOM/LY received /issued /adjusted /cost /value), etc. FIFO data includes item, location, date, qty-received, unit cost, and quantity on hand.

## 7.15 EnerGov Licensing & Regulatory Management

- Includes the following modules: Cashier (Invoice & Payment/Reversal transactions), Contacts (Name & Address), Business (Name and Address), Business License, Tax Remittance, Professional License with Certifications and the respective Inspection records. NOTE: This does not cover attachments. Business License includes Business, License Type, Classification,

Status, Description, Year, District, Issued By, Date, Parcel, Address, Contacts, Notes, Fees, Activities and Additional Info. Tax Remittance includes Business, Type, Status, Description, District, Date, Parcel, Address, Contacts, Notes, Invoices, Additional Info and Payments. Professional License includes Contact with Certifications, License Type, Classification, Status, Description, District, Issued By, Dates, Parcel, Addresses, Contact, Notes, Fees and Additional Info.

## 7.16 EnerGov Permitting & Land Management

- Includes the following modules: Cashier (Invoice & Payment/Reversal transactions), Contacts (Name & Address), Permit, Plan, Projects, Notes and the respective Inspection records. Permit includes Permit type, Work Class, Status, District, Square Feet, Valuation, Description, Dates, Parcel, Addresses, Zones, Contacts, Notes, Activities, Fees, and Additional Information (Custom Fields). Plan includes Plan Type, Work class, Status, Description, District, Assigned To, Square Feet, Valuation, Dates, Parcels, Address, Zones, Contacts, Notes, Activities, Fees, Holds and Additional Info. Projects includes Project Type, Name, Status, District, Description, Date, Parcel, Address, Contacts, Notes, Fees, Holds and Additional Information. Inspections include Inspection Type, Status, Dates, Checklist, Address, Notes, Inspectors, Parcel, Contacts, Fees and Additional Information.

## 7.17 Project Grant Accounting

- Segments, account strings and fund string allocation table
- Requires the use of a Tyler provided (Chart of Accounts) spreadsheet for design and entry of the data to be converted

## 7.18 Project Grant Accounting – Budget

- Original project ledger budget amounts
- Up to 3 years

## 7.19 Project Grant Accounting - Actuals

- Summary project ledger string balances
- Up to 3 years

## 7.20 Purchase Orders

- Open purchase orders header data including vendor, buyer, date, accounting information, etc.
- Open purchase orders detail data including line item descriptions, quantities, amounts, etc.

## 7.21 Payroll

- Payroll Employee Master data including data such as name, address, SSN, legacy employee ID, date of birth, hire date, activity status (such as active/inactive), leave/termination code and date, phone(s), e-address, marital status, gender, race, personnel status (such as full-

time, part-time, etc.), highest degree, advice-delivery (print/email/both) and check location, plus primary group, job, location, and account information

## 7.22 Payroll - Deductions

- Employee Deductions - including employee ID, deduction codes, tax information, and direct deposit information

## 7.23 Payroll – Accrual Balances

- Employee Accrual Balances including Vacation, Holiday, and other Leave balances
- Start of year balance, earned to date, used to date

## 7.24 Payroll – Accumulators

- YTD, QTD, MTD amounts for employee pay and deductions
- Needed for mid-calendar-year go-live
- May not be needed if converting earnings/deductions history

## 7.25 Payroll – Check History

- Up to 5 years, additional years must be quoted. We convert amounts for earnings and deductions in employee check history, check number and date.

## 7.26 Payroll – Earning/Deduction Hist.

- Up to 5 years, additional years must be quoted. Earning and deduction history broken down by individual codes (earnings and deduction) and amounts per pay period, the detail of these lines, sums the check history in opt 4.

## 7.27 Payroll – Applicant Tracking

- Application requisition applicant master data, plus applicant references, certifications, education, skills, tests, work history, and interviews

## 7.28 Payroll – PM Action History

- A variety of Personnel actions, such as job or salary changes and dates these events occurred.

## 7.29 Payroll – Position Control

- Position, description, status, job code, bargaining group, location, number of employees allowed for each, FTE percentage, GL account, and max/min grade and step

## 7.30 Payroll – State Retirement Tables

- Specific state-required data, plus related service years information, when appropriate
- Needed for some states

## 7.31 Payroll – Certifications

- Certification area and certification type codes, certification number and effective date, expiration date, and required-by date, codes for certification level and subjects

## 7.32 Payroll – Education

- Codes, for institution, type of degree, and area(s) of study

## 7.33 Utility Billing

- Account Master data including previous and current customer owner information- address info, phone, fax, SSN number, FID number, account status, parcel number, location street, apartment, Client, state, zip, book number, read sequence, account start and end date, EFT bank information

## 7.34 Utility Billing –Services

- Service data for each account including service codes, status, type, factor, condo units, bill cycle codes, budget information, winter usage, meter readings( current and previous), meter usage (current and previous), sales tax information

## 7.35 Utility Billing –Assessments

- Assessments are improvement costs that are spread across to property owner
- Utility Billing conversion option 4 (balance forward AR) must also be purchased in order to convert assessments

## 7.36 Utility Billing –Consumption History

- History of meter readings, usage, read dates, usage days, bill amounts, bill dates, read codes

## 7.37 Utility Billing –Balance Forward AR

- Total balance due on the account, or by charge code
- If late penalties will be applied in Munis after the conversion, balance forward amounts must be converted by charge code



### 7.38 Utility Billing –Service Orders

- Service Orders data associated with accounts, including meter repairs, checks for leaky meter, reread a meter due to high reading

### 7.39 Utility Billing –Backflow

- Account information, backflow device information, backflow type, and backflow violations

SAMPLE

CITY OF PEMBROKE PINES, FL

RFP # TS-17-04-B “ERP SYSTEM SOFTWARE  
AND IMPLEMENTATION

JULY 17, 2018

Tyler Technologies, Inc.  
Tim Vickers  
Senior Sales Executive  
Phone: 919-744-5885  
Email: [tim.vickers@tylertech.com](mailto:tim.vickers@tylertech.com)

Subject to restrictions on disclosure identified on following page



## RESTRICTIONS ON DISCLOSURE

This proposal from Tyler Technologies, Inc. (“Tyler”) contains proprietary and confidential information, including trade secrets, belonging to Tyler or Tyler’s partners. Tyler is submitting this proposal on the express condition that the following portions, if included, will not be duplicated, disclosed, or otherwise made available, except for internal evaluation purposes:

- Response to the Functional Requirements, or “Checklist”
- Line-item pricing (total proposed contract amount may be disclosed)
- Screen shots
- Customized Statement of Work/Implementation Plan

Each of these sections, if included, has separately been labeled “Proprietary and Confidential – Subject to Restrictions on Disclosure.”

To the extent disclosure of those portions is requested or ordered, Tyler requires written notice of the request or order. If disclosure is subject to Tyler’s permission, Tyler will grant that permission in writing, in Tyler’s sole discretion. If disclosure is subject to a court or other legal order, Tyler will take whatever action Tyler deems necessary to protect its proprietary and confidential information, and will assume all responsibility and liability associated with that action.

Tyler agrees that any portions not listed above and marked accordingly are to be made available for public disclosure, as required under applicable public records laws and procurement processes.

## TRADEMARKS DISCLAIMER

Because of the nature of this proposal, third-party hardware and software products may be mentioned by name. These names may be trademarked by the companies that manufacture the products. It is not Tyler’s intent to claim these names or trademarks as our own.

July 17, 2018



City of Pembroke Pines  
Purchasing Division  
8300 South Palm Drive  
Pembroke Pines, FL 33025

One Tyler Drive  
Yarmouth, ME 04096

P: 800.772.2260  
F: 207.781.2459

RE: Response to RFP

Dear Purchaser:

Tyler Technologies, Inc. (Tyler Technologies) is pleased to respond to City of Pembroke Pines' Request for Proposal dated Thursday, June 7, 2018, for ERP System Software and Implementation. The attached proposal will detail our complete offering, including:

- Munis software applications
- Necessary consultation to define scope of services
- Implementation of software and services
- Training on, and support of, provided software and services

In presenting the enclosed proposal, Tyler Technologies warrants that it is unaware of any known conflict of interest in responding to, or submitting, said proposal in response to City of Pembroke Pines' RFP. Tyler Technologies also warrants that it complies, and acts in accordance, with:

- Federal Executive Orders relating to the enforcement of civil rights
- Federal Codes regarding Anti-discrimination in Employment
- Title 6, Civil Rights Act of 1964
- Requirements of the Americans with Disabilities Act of 1990 for work performed due to this RFP

This proposal and cost schedule shall be valid and binding for 120 days following the RFP due date. Except as set forth in this proposal, this proposal may be released in part or in total as public information in accordance with the requirements of the laws covering same.

One or more individuals in the Tyler Technologies Contracts Department have read and accepted the terms and conditions of the RFP and any amendments, except as modified by, taken exception to, or otherwise set forth in Tyler Technologies' proposal.

If you have any questions related to this proposal, please feel free to contact:

Tim Vickers, Sr. Account Executive  
919-744-5885  
[tim.vickers@tylertech.com](mailto:tim.vickers@tylertech.com)

Phil Sharp  
Strategic Account Manager  
[phil.sharp@tylertech.com](mailto:phil.sharp@tylertech.com)

Tyler Technologies, Inc. is a publicly traded corporation (NYSE: TYL)  
EIN: 75-2303920

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Abigail Diaz", written over a faint, larger signature.

Abigail Diaz  
Chief Legal Officer, Tyler Technologies, Inc.

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## Section 2 VENDOR COMPANY OVERVIEW

### 1. Approximate Number of Customers, Geographic Focus and Users similar to City of Pembroke Pines in base size

Tyler Technologies (NYSE: TYL) is a leading provider of end-to-end information management solutions and services for local governments. Tyler partners with clients to empower the public sector — cities, counties, schools and other government entities — to become more efficient, more accessible and more responsive to the needs of their constituents. Tyler's client base includes more than 15,000 local government offices in all 50 states, Canada, the Caribbean, the United Kingdom and other international locations.

### 2. Approximate Number of Companies, Geographic Focus and Users in an industry similar to City of Pembroke Pines

Today, Tyler Technologies enjoys exciting and forward thinking business relationships with more than 90 Florida counties, cities, towns, schools and agencies. An additional 1,600 entities across the United States leverage our unique and flexible Enterprise Resource Planning software set facilitating highly automated and efficient end user communities. Our sole public-sector focus offers a proven 30+ year recipe to empower both employees and citizens in the ever evolving and complex need for a consonant single system of record and transparent data.

## Section 3      INDUSTRY REFERENCES

### Tab 3 – Industry References

Please provide a minimum of three references (similar in size and industry) that the City of Pembroke Pines can contact to learn more about the vendors' proposed solution. References should include the following information:

1. Company Name
2. Company Contact Person
3. Contact email and Phone Information
4. Summary of Reference's Usage of Product, including modules implemented, integration with third-party products, etc.

#### 1. Reference Contact Information

**Name of Firm, City, County or Agency:** City of Miramar

**Address:** 2300 Civic Center Place

**City/State/Zip:** Miramar, FL 33025

**Contact Name:** Clayton Jenkins

**Title:** Director of information Technology

**E-Mail Address:** CDJenkins@miramarfl.gov

**Telephone:** 954-602-3098

**Fax:** 954-602-3530

#### Project Information

**Name and location of the project:** City of Miramar

**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

18 – 24 months

**Completion (Anticipated) Date:** Core Project Completed, Ancillary add-on applications added as needed.

**Size of project:** \$260 Million Budget; 1,100 employees

**Cost of project:** Not Disclosed

**Work for which staff was responsible:** Tyler Technologies handled all phases/ stages of the software install, deployment, implementation and on-going annual support with the assistance of Miramar city staff and project management.

**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment

**The results/deliverables of the project:** City of Miramar is a fully live ERP solution client using Financials, Human Capital Management, Payroll and Revenue solution set.

**2. Reference Contact Information****Name of Firm, City, County or Agency:** City of Melbourne, FL**Address:** 900 E. Strawbridge Ave**City/State/Zip:** Melbourne, FL 32901**Contact Name:** Sondra D'Angelo**Title:** Assistant Finance Director**E-Mail Address:** [sondra.dangelo@mlbfl.org](mailto:sondra.dangelo@mlbfl.org)**Telephone:** 321-608-7010**Fax:** N/A**Project Information****Name and location of the project:** City of Melbourne**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

18 – 36 months

**Completion (Anticipated) Date:** Core Project Completed, Ancillary add-on applications added as needed.**Size of project:** \$165 Million Budget; 1,000 employees**Cost of project:** Not Disclosed**Work for which staff was responsible:** Tyler Technologies handled all phases/ stages of the software install, deployment, implementation and on-going annual support with the assistance of Melbourne city staff and project management.**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment**The results/deliverables of the project:** City of Melbourne is a fully live ERP solution client using Financials, Human Capital Management, Payroll and Revenue solution set.**3. Reference Contact Information****Name of Firm, City, County or Agency:** City of Hartford, CT**Address:** 550 Main St.**City/State/Zip:** Hartford, CT 06103**Contact Name:** Mary Phippen**Title:** ERP Application Manager**E-Mail Address:** [pippm001@hartford.gov](mailto:pippm001@hartford.gov)**Telephone:** 860-757-9430**Fax:** 860-757-9430**Project Information****Name and location of the project:** City of Hartford, CT**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

24 – 36 months

**Completion (Anticipated) Date:** Core Project Completed, Ancillary add-on applications added as needed.

**Size of project:** \$800 Million Budget; 7,000 employees

**Cost of project:** Not Disclosed

**Work for which staff was responsible:** Tyler Technologies handled all phases/ stages of the software install, deployment, implementation and on-going annual support with the assistance of Hartford city and public schools staff and project management.

**Contract Type:** Software License and Annual Maintenance Contract; SaaS Deployment

**The results/deliverables of the project:** City of Hartford and Hartford City Public Schools are both fully live ERP solution clients using Financials, Human Capital Management, Payroll and Revenue solution set.

**4. Reference Contact Information**

**Name of Firm, City, County or Agency:** City of Tulsa, OK

**Address:** 175 E. 2<sup>nd</sup> Street

**City/State/Zip:** Tulsa, OK 74103

**Contact Name:** John Galchick

**Title:** ERP/IT Project Manager

**E-Mail Address:** jgalchik@cityoftulsa.org

**Telephone:** 405-297-2424

**Fax:** 918-596-7550

**Project Information**

**Name and location of the project:** City of Tulsa

**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

24-36 months

**Completion (Anticipated) Date:** Calendar year 2019

**Size of project:** \$600 Million Budget; 4,500 employees

**Cost of project:** Not Disclosed

**Work for which staff was responsible:** Tyler Technologies is handling all phases/stages of the software install, deployment, implementation and on-going annual support with the assistance of Tulsa city staff and project management.

**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment

**The results/deliverables of the project:** City of Tulsa is currently involved in ongoing implementation of their ERP solution.



**5. Reference Contact Information****Name of Firm, City, County or Agency:** City of Mobile, AL**Address:** 205 Government St.**City/State/Zip:** Mobile, AL 36633**Contact Name:** Sue Farni**Title:** Information Technology Director**E-Mail Address:** sue@cityofmobile.org**Telephone:** 251-208-7830**Fax:** 334-208-7576**Project Information****Name and location of the project:** City of Mobile**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

18-24 months

**Completion (Anticipated) Date:** Calendar Year 2018**Size of project:** \$340 Million Budget; 2,600 employees**Cost of project:** Not Disclosed**Work for which staff was responsible:** Tyler Technologies is handling all phases/stages of the software install, deployment, implementation and on-going annual support with the assistance of Mobile city staff and project management.**Contract Type:** Software License and Annual Maintenance Contract; SaaS Deployment**The results/deliverables of the project:** City of Mobile is a live ERP solution client using Financials, Human Capital Management and Payroll. City of Mobile is currently involved in ongoing implementation of their Tyler EnerGov Land Use Management and Planning solution.**6. Reference Contact Information****Name of Firm, City, County or Agency:** St. Louis County, MO**Address:** 41 S. Central Ave.**City/State/Zip:** Clayton, MO 63105**Contact Name:** Jennifer Keating**Title:** ERP Project Manager**E-Mail Address:** jkeating@stlouisco.com**Telephone:** 314-615-5044**Fax:** 314-615-4623**Project Information****Name and location of the project:** St. Louis County, MO**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

24 - 36 months

**Completion (Anticipated) Date:** Core Project Completed, Ancillary add-on applications added as needed.

**Size of project:** \$640 Million Budget; 4,200 employees

**Cost of project:** Not Disclosed

**Work for which staff was responsible:** Tyler Technologies is handling all phases/stages of the software install, deployment, implementation and on-going annual support with the assistance of St. Louis County staff and project management.

**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment

**The results/deliverables of the project:** St. Louis County, MO is a live ERP solution client using Financials, Human Capital Management and Payroll.

**7. Reference Contact Information**

**Name of Firm, City, County or Agency:** City of Sunrise, FL

**Address:** 10770 W. Oakland Park Blvd.

**City/State/Zip:** Sunrise, FL 33351

**Contact Name:** Ms. Laurie Gagner

**Title:** Director of Information Technology

**E-Mail Address:** lgagner@sunrisefl.gov

**Telephone:** 954-746-3663

**Fax:** N/A

**Project Information**

**Name and location of the project:** City of Sunrise, FL

**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

24 - 36 months

**Completion (Anticipated) Date:** 18 months

**Size of project:** \$250 Million Budget; 1,300 employees

**Cost of project:** Not Disclosed

**Work for which staff was responsible:** Tyler Technologies is handling all phases/stages of the software install, deployment, implementation and on-going annual support with the assistance of City of Sunrise staff and project management.

**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment

**The results/deliverables of the project:** City of Sunrise is currently involved in ongoing implementation of their ERP solution.

**8. Reference Contact Information****Name of Firm, City, County or Agency:** City of Clearwater, FL**Address:** 112 S Osceola Ave**City/State/Zip:** Clearwater, FL 33756**Contact Name:** Ms. Billie Kirkpatrick**Title:** ERP Project Manager**E-Mail Address:** billiekirkpatrick@myclearwater.com**Telephone:** 727-562-4669**Fax:** N/A**Project Information****Name and location of the project:** City of Clearwater, FL**Nature of the firm's responsibility on the project:**

ERP Software

Data Conversion

Change Management

Implementation

On-Going Technical Support

**Project duration:**

12 Months

**Completion (Anticipated) Date:**

24 Months

**Size of project:** \$360 Million Budget; 2,200 employees**Cost of project:** Not Disclosed**Work for which staff was responsible:** Tyler Technologies is handling all phases/stages of the software install, deployment, implementation and on-going annual support with the assistance of City of Clearwater staff and project management.**Contract Type:** Software License and Annual Maintenance Contract; On Premise Deployment**The results/deliverables of the project:** City of Clearwater is currently involved in ongoing implementation of their ERP solution. They are now live on core Munis Financials and have optioned to move ahead with replacement of city PeopleSoft HR/Payroll applications.

### 3.1 MUNIS ACCOUNT SUCCESS

Please reference Munis Account Success on the following pages.

Since 1966, Tyler clients span the United States, Canada, and the Caribbean—from small towns, schools, municipal boards, and utility districts to large cities, counties, and statewide school districts. What is the formula for this success? Tyler incorporates what we learn from *all* clients, resulting in a robust, technically advanced, fully integrated 360-degree solution: Munis. Combined with in-house PMI® certified implementation teams and HDI-CSR® certified support staff, it's no wonder Munis is one of the most widely selected ERP solutions on the market today.

**But don't just take our word for it—look at who's joined the Munis family in the last two years:**

City of Bentonville, AR	City of Wichita, KS	Salem Area Mass Transit District, OR
City of Glendale, AZ	City of Paducah, KY	City of Bartlesville, OK
City of Goodyear, AZ	Ascension Parish, LA	City of Tulsa, OK
City of Kingman, AZ	Baton Rouge/East Baton Rouge Parish, LA	Cleveland County, OK
City of Scottsdale, AZ	IDEA Public Schools (LA), LA	Blair County, PA
Coconino County, AZ	IDEA Public Schools (New Orleans), LA	Butler Area School District, PA
Phoenix-Mesa Gateway Airport, AZ	St. Bernard Parish, LA	Exeter Township, PA
Town of Gilbert, AZ	St. John the Baptist Parish, LA	Lehigh County, PA
City of Berkeley, CA	St. Tammany Parish, LA	Pittsburgh Public Schools, PA
City of Carson, CA	Terrebonne Parish School Board, LA	Radnor Township, PA
City of Cathedral City, CA	Town of Littleton, MA	Upper Darby Township, PA
City of Chino Hills, CA	Casco Bay Island Transit, ME	City of Pawtucket, RI
City of Fontana, CA	Greater Portland Transit District, ME	Berkeley County School District, SC
City of Long Beach, CA	Portland Public Schools, ME	Spartanburg County, SC
City of Lompoc, CA	Town of Windham, ME	Town of Fort Mill, SC
City of Poway, CA	Queen Anne's County, MD	Minnehaha County, SD
City of Rancho Mirage, CA	City of Portland, ME	Blount County, TN
City of Rancho Palos Verdes, CA	Grand Ledge Public School District, MI	Knox County Schools, TN
City of San Ramon, CA	West Shore Educational Service District, MI	Sumner County School District, TN
City of Santa Fe Springs, CA	City of Independence, MO	Andrews Center Behavioral Healthcare, TX
Helix Water District, CA	Jackson County Municipal Authority, MS	Bluebonnet Trails Community Services, TX
Plumas County, CA	Vicksburg Warren School District, MS	City of Amarillo, TX
San Bernardino County, CA	Cabarrus Health Alliance, NC	City of Coppell, TX
Santa Margarita Water District, CA	City of New Bern, NC	City of Duncanville, TX
Visalia Unified School District, CA	City of Wilmington, NC	City of Farmers Branch, TX
City of Milford, CT	Craven County, NC	City of Odessa, TX
Gunnison County, CO	Harnett County, NC	City of Wichita Falls, TX
Routt County, CO	Town of Morehead City, NC	Community Independent School District, TX
Summit County, CO	Town of Morrisville, NC	Grayson County, TX
Town of Castle Rock, CO	Town of Nags Head, NC	Gulf Coast Waste Disposal Authority, TX
City of Dover, DE	City of Hastings, NE	IDEA Public Schools, TX
Bay County Tax Collector, FL	City of Concord, NH	Metropolitan Area EMS Authority, TX
City of Dunedin, FL	Town of Exeter, NH	South Texas Independent School District, TX
City of Fernandina Beach, FL	Town of Newmarket, NH	Wichita County, TX
City of Jacksonville Beach, FL	City of Carlsbad, NM	City of Clearfield, UT
City of Ormond Beach, FL	City of Clovis, NM	Davis County, UT
City of Riviera Beach, FL	City of Santa Fe, NM	Bedford County, VA
City of Winter Park, FL	Los Alamos County, NM	City of Fredericksburg, VA
City of Zephyrhills, FL	San Juan County, NM	City of Suffolk, VA
Collier County Sheriff's Office, FL	City of Carson City, NV	City of Williamsburg, VA
Lee County Sheriff's Office, FL	Lewis County, NY	Hampton City Schools, VA
Marion County, FL	Oswego County, NY	New Kent County, VA
Bulloch County, GA	Town of Bedford, NY	Pulaski County, VA
Cartersville City Schools, GA	Town of Guilderland, NY	Rappahannock-Rapidan Community, VA
Clayton County, GA	Town of Orchard Park, NY	Riverside Regional Jail, VA
Clayton County Public Schools, GA	Town of West Seneca, NY	Rockbridge County Public Schools, VA
DeKalb County School District, GA	Athens County, OH	Town of Purcellville, VA
Henry County, GA	City of Centerville, OH	York County, VA
Jackson County, GA	City of Fairborn, OH	City of Burien, WA
Bonneville County, ID	City of Gahanna, OH	City of Kirkland, WA
City of Effingham, IL	City of New Albany, OH	Lewis County, WA
City of Peoria, IL	Columbus Metropolitan Library, OH	City of Richland, WA
City of Naperville, IL	Northwest Ohio Area Cooperative, OH	Spokane International Airport, WA
City of Rolling Meadows, IL	City of Mentor, OH	Clark County, WI
City of Urbana, IL	Trumbull County, OH	City of Appleton, WI
Village of Gurnee, IL	Warren County, OH	Dodge County, WI
Village of Niles, IL	City of Norman, OK	Green County, WI
Village of Westmont, IL	Muscogee Creek Nation, OK	Jefferson County, WI
Village of Oswego, IL	City of Corvallis, OR	Outagamie County, WI
City of Fishers, IN	City of Gresham, OR	Washington County, WI
Gary Public Transportation Corp, IN	Clackamas Fire District, OR	Cheyenne Board of Public Utilities, WY
City of Hutchinson, KS	Crook County, OR	

## Section 4 BUSINESS REQUIREMENTS AND FUNCTIONAL QUESTIONS

Tab 4 –Business Requirements and Functional Questions:

During the RFQ process, vendors reviewed and provided a response to your proposed solution's ability to meet the requirements identified thus far. Upon review of the responses submitted, the Evaluation Committee has prepared a list of questions outlined in RFP Attachment A (attached word document) of this RFP, requesting additional information about the proposed solutions.

Note: The Evaluation Committee will also take the Functional Requirements submitted in the RFQ process into consideration when scoring this section.

### 4.1 ATTACHMENT A / VENDOR QUESTIONNAIRE FUNCTIONAL QUESTIONS

Please reference Attachment A / Vendor Questionnaire Functional Questions on the following pages.



## Appendix A – Vendor Questionnaire Functional Questions

Upon review of the RFQ responses to the requirements we are asking the vendors to provide additional information and clarification to the following questions.

In the solution proposed please answer the following:

1. Clearly define all 3<sup>rd</sup> party/bolt on products in your response by name/software/company and explain the relationship.
  - a) Have you used this 3rd party before?
  - b) Describe the integration process.
  - c) Who is responsible for customization and customer service of the 3rd party bolt on?

**TYLER RESPONSE:** Tyler Technologies is excited to reply to the City of Pembroke Pines Bid#TS-04-B ERP System Software and Implementation as a natively integrated ERP System. All software offerings submitted as part of this bid opportunity are Tyler products.

Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.

### *File-based integration*

Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.

Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.

## App Connectors

Munis includes a variety of App Connectors; pre-packaged web service integrations providing plug-and-play support with specific third-party applications. Tyler develops and maintains all App Connectors, requiring no development expertise from the client to configure.

## Munis API Suite

Tyler has extensive experience utilizing web services and APIs for application integrations. Historically, Munis APIs were provided to individual clients as part of their contract or statement of work. In 2018, Tyler's Munis Open API initiative was created to provide consistent, developer friendly, well documented, integration points through industry best practices. The Munis Open API Suite will include a library of exposable application programming interfaces (APIs), and API Recipes for integrating external applications with Munis. Comprehensive developer API documentation and resources will also be provided through Tyler's Developer Portal.

Munis APIs are a collection of API resources (or endpoints) packaged together per product module, e.g., General Ledger, Accounts Receivable. All Munis APIs conform to OpenAPI 3.0 specifications for Representational State Transfer (RESTful) based architecture and use OAuth2 protocol for user authorization. REST is the industry preferred standard for API development and scales very well since the client and server are loosely coupled. With REST, the server is free to change the exposed resources without breaking existing resources. Data can be exchanged in a flexible format using either JSON (default) or XML.

API recipes included with Munis APIs are designed to make integrations more accessible. Recipes provide an aide to developers creating their own integrations. While Munis APIs are specific to a single module, an API Recipe includes a combination of API resources commonly used to accomplish a specific integration.

Tyler's web-based Developer Portal provides developers with documentation and testing resources for APIs and API Recipes through an industry standard experience built on Swagger UI and API framework. Documentation includes an explanation of all resources available within each module API, including associated operations and data elements. Developers can view examples of API calls and responses and test calls in an interactive manner.

2. . Does the ERP system allow for different rules/calculations/etc. based on what collective bargaining agreement an employee is under (as well as different rules based on date of hire for members of the same union)?
  - a. How does the ERP system allow for retirees to be included in the data base?

**TYLER RESPONSE:** Yes, this can be accomplished. Employees would be classified with a different Group/BU in which different rules can be applied.

There are various ways to classify retired employees. Retirees will exist within Employee Master and can be identified using Employee Groups, Personnel Status, etc. A separate employee status is available for retirees who are classified as benefits only. Benefits only employees can be processed separately from the standard payroll.

3. We understand that each vendor had a few items that were “Not Supported” in their proposal. We would like more detail on those items from the vendor. Why is the requirement not supported? We want to make sure they understand the requirement, (what we are asking for) and what they mean by not supported.

**TYLER RESPONSE:** Please see the attached updated version of Attachment M - Functional Requirements. The comments highlighted in yellow denote those that differ from the initial RFQ submission with the exception of ID’s 941-1135.

The Public Safety requirements ranging from 941 through 1135 now include responses based strictly on available functionality within the ERP system. As noted in the comments, some of the requirements would be covered with Tyler’s Public Safety software, but this is not included with our core ERP solution.

Please note that upon further review and in cadence with our Munis ERP standard version upgrades, improved functionality. The requirements for ID’s 98, 339, 347, 348, and 415 have been updated to “Out of the box.”

Lastly, as noted in the comments, ID’s 645, and 884-940 are not supported as Tyler does not offer a Student Information Systems solution for the State of Florida, but we are happy to review possible integration with other parties in the market.

4. We would like the SIS companies to explain their position and how they expect to incorporate with another ERP software since they do not offer any of the other requirements.

**TYLER RESPONSE:** Tyler Technologies is not bidding a SIS system as part of this RFP Reply.

5. We would like the vendors to tell us how much time they typically need to provide the evaluation committee an appropriate overview of their product.

**TYLER RESPONSE:** Tyler Technologies typically responds to more than 100 formal ERP RFP’s each year. A significant number of these projects and related evaluations are facilitated with public sector

consulting agencies. In our wide industry experience, we would suggest at least a three-day demonstration/product overview for the City. These presentations are traditionally 8:30am to 5:00PM affairs with additional follow up as needed. We are happy to work with both Panorama and the City to create an agenda that works for you based on requested RFP functionality.

6. If you're utilizing a 3rd party bolt on for SIS solution, which vendor would you propose?
  - a. Explain your experience and relationship with vendor.

**TYLER RESPONSE:** Tyler Technologies does not offer a SIS Solution for the Florida marketplace. Our core ERP application set, Munis, can and will offer core financial, human capital management and payroll solutions for both the Finance and Payroll offices of the Pembroke Pines Charter Schools. We are open and willing to communicate and discuss any necessary or applicable integrations with a selected SIS offeror.

## Section 5 TECHNICAL STANDARDS AND CAPABILITIES

Tab 5 – Technical Standards and Capabilities:

Please describe the technical capabilities of your proposed solution in your response to Attachment B.

### 5.1 ATTACHMENT B / TECHNICAL FIT

Please reference Attachment B / Technical Fit on the following pages.





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Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
<b>Network Infrastructure</b>		
<b>1 Network Protocols and Remote Access; Interoperability</b>		
<p>Please provide an overview of the product capacity in terms of network protocols. Information here includes overview of LAN, WAN, Data Center and Network Services.</p>	Notes ==>	All traffic between end user and server is over TCP/IP / HTTPS.
<b>2 Authentication</b>		
<p>Please describe how authentication is managed by the product. Authentication is how authorized users are allowed in and unauthorized users are kept out of the system. Industry standards include: SSL, LDAP, Active Directory, Single Sign-on.</p>	Notes ==>	<p>Microsoft Active Directory is used and required for authentication with select on-premises hosted Tyler ERP applications. Tyler SaaS hosted clients can use Active Directory authentication with select Tyler applications, though an existing Azure AD or ADFS [1] environment is required. SaaS hosted applications not supported with clients Active Directory use unique, Tyler provided credentials. The setup and maintenance of client Active Directory, Azure AD, and/or ADFS environment is the responsibility of the client.</p> <p>[1] Microsoft ADFS for OpenID with Windows Server 2016 forest functional level recommended when using ADFS; ADFS WS-Federation with Windows Server 2012 forest functional level also supported.</p>
<b>3 Server Hardware and OS</b>		
<p>Please describe server hardware and operating system options. Server types include IBM iSeries (AS/400), Intel, AMD, HP x86, HP RISC, Dell x86, other. Server deployments include physical servers and virtual servers. Virtual server technologies include VMWare and Microsoft Hyper-V. Server Operating Systems (OS) include Windows and Linux</p>	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
<b>4 Storage Sizing and Requirements</b>		
<p>Please provide an overview of typical storage needs for the product based on a given baseline. Configurations include server-attached storage and SAN's (Storage Area Networks). Storage requirements are often a function of transaction volumes and archiving policies as well as numbers of instances and users, but please provide some bench marks as a starting point.</p>	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
<b>5 System Administration and Availability</b>		



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CONSULTING SOLUTIONS

Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Notes ==>	Description of Capacity
<p>Please provide a brief overview of the administration needs and options for the product. Relevant issues include: backups; backup methods, disaster recovery, upgrades, service packs, fixes; code layers; physical servers, virtual servers; Support for 8x5, 24x7 or other scheduled timeframe for system availability.</p>		<p>Common application administration of Tyler applications includes user and security administration, printer, workflow, and release update administration. On-premises clients must also perform general server operating system maintenance and basic database administration tasks.</p> <p>Much of Tyler application administration has been designed in such a way that clients can opt for a single department centrally administer tasks such as workflow and security or choose to decentralize administration to other departments. For example, sites can choose to have security administration of all users in the Payroll Department managed by a Payroll administrator or all Workflow specific to the Finance Department managed by someone in that department rather than a single department, such as the IT Department, managing all user security and workflow administration.</p> <p>In addition, Tyler offers a Systems Management support service for on-premises clients. This provides operating system and database administration services, such as installations, upgrades, routine maintenance, and database tuning by a specialized department of Tyler support technicians.</p> <p>Server environment deployment and configuration also plays a role in how much time is required maintaining the system. For example, clients who choose a virtualized, high-availability configuration with off-site replication requires additional resources than clients who opt for a standard dedicated solution. Clients hosted with Tyler SaaS, will see even more limited need for onsite technical resources as nearly all aspects of administration including maintenance of operating system, databases, release updates and backup maintenance are the responsibility of dedicated Tyler SaaS Support Engineers.</p>
<p><b>6 System Performance</b></p> <p>Please describe an overview of performance considerations that may be applicable to the product including topics such as response times for data searches, data queries; transaction commits, reports should all be good. Bottlenecks may include processor power, memory; communication channels; network speeds; gateway and router bottlenecks; remote connectivity issues; security issues; application logic; page file or virtual memory settings. Performance can be influenced by issues throughout the full technology stack which includes: Applications, Middleware, Database, Operating System, Virtual Machine, Servers, Storage</p>		<p>Tyler provides fully scalable solutions to meet the requirements of all organizations, regardless of size, and can grow to meet increasing demands. Tyler's applications perform well on modest networks with a handful of users—or on large, distributed networks with hundreds of users. Tyler applications have features to ensure large organizations run effectively. And smaller clients don't outgrow Tyler solutions—they easily expand to meet clients changing needs.</p> <p>Tyler applications are based on an n-tier architecture and can scale both vertically or horizontally eliminating limitations for user growth. Based on client feedback and experience, internal testing and running our own SaaS hosting service, we have learned to tailor Tyler applications specific to a client based on their size and needs.</p>
<p><b>7 Cloud Hosting and Services</b></p> <p>Please describe the options available in terms of hosting strategies. Topics to cover may include remote servers, managed services, single-tenant or multi-tenant SAAS; cloud services integrated with traditional, on premise systems.</p> <p>Additionally, please describe how the product may function in a situation where field office locations have poor connectivity or periods of connectivity blackout.</p>		<p>Tyler is proposing on-premises and Tyler SaaS hosting options. All applications are real-time web applications and require a network connection between end-user and application server (regardless of where it's hosted). Tyler applications also include several mobile apps that do have "store and forward" capabilities, allowing users to continue work without internet access.</p>
<b>Solution Architecture</b>		
<b>8 Software Architecture</b>		



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Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
Please provide an overview of the product architecture. Topics to consider include technology stack layers, # of tiers, runtime stack, SDK, development tools, middleware, development frameworks, procedural languages, server OS, databases, server types, scalability strategies.	Notes ==>	Tyler applications are multi-tiered, typically consisting of a 3-tier architecture; web, application, and database tiers. Tyler applications are deployed exclusively on industry leading Microsoft stack of technologies, utilizing Windows Server, SQL Server, Active Directory, Internet Information Services, Office, SQL Server Reporting Services, and SQL Server Analysis Services. Most industry standard server deployments are supported including bare-metal and virtualized environments, high availability configurations, and dedicated testing environments. All Tyler applications can also be hosted in the cloud by leveraging Tyler's SaaS hosting service.
<b>9 Supported Databases</b>		
Please describe databases supported. Supported database types may include: SQL Server (2005, 2008); Oracle, MySQL, DB2, Postgres, Other; Important database attributes may include Integration Services, Reporting Services, Analysis Services	Notes ==>	Microsoft SQL Server 2012, 2014, 2016, 2017.
<b>10 Development, Configuration and Customization Environments</b>		
Relevant terminology includes: Personalization, Customization, Configuration, Code Layers, UDFs, UDTs, User Exits, SDK, Protection from upgrades, Upgrade Maintenance, Form Customization, Reports Customization, Search Customization, Data Validation, Alerts, Gap Analysis, Data Dictionary	Notes ==>	<p>Release Updates - Tyler deploys industry leading technology and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy. Application upgrades for on-premises clients are installed by Tyler Systems Management support services. Tyler SaaS hosted clients request and schedule a time convenient for them to have application upgrades installed by SaaS support engineers during off hours.</p> <p>End-users must be out of the entire application during the upgrade process. The time it takes to apply these upgrades can vary significantly depending on number variables such as modules owned, and database size and can range anywhere between 1 hour to an entire business day. All releases are cumulative allowing clients to can upgrade to the latest application version directly.</p> <p>Some Tyler applications also include incremental software updates that can clients can install themselves. These tools can be used to manually install individual updates or scheduled to install all available updated automatically. The typical install time for this update type can vary depending on the number updates applied, but typically ranges from a couple minutes to an hour.</p> <p>Tyler provides a dedicated Test application environment with most deployments to install new updates. Tyler highly recommends clients use this environment to familiarize themselves with new features and enhancements prior to installing to the Production environment.</p> <p>Customization - Tyler applications are developed as commercial off-the-shelf (COTS) solutions and include various levels of configuration and customization. All configuration and customization tools are application-based allowing end-users and administrators alike to tailor the system to their specific business needs. In addition, by using application-based tools, all customizations are retained upon system upgrade eliminating timely re-tooling, conversions or re-programming typically required from other systems.</p> <p>Data Dictionary Data dictionaries are provided for Munis and EnerGov database views. These are made available to all clients with a valid maintenance agreement or those who sign a non-disclosure agreement (NDA).</p>
<b>11 Client Types including Web Interfaces and Portals</b>		
Please describe client types applicable to the product. Relevant attributes include: Thick, Thin, Browser Based, Citrix, Terminal Services, Authentication; Netbooks, iPads, Smartphones (iPhone, Android, Blackberry, Windows Mobile), Macintosh, Browser Add-On's, if any. Data Collections devices may include: MES (Manufacturing Execution Systems); Bar Code Readers, Scales, RFID, Intermec, Symbol, WinWedge, Touch Screens, RF Handhelds.	Notes ==>	Refer to Tyler System Specifications attachment.
<b>12 Workflow and Business Process Modeling Platform</b>		



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Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Please provide an overview of the product capabilities in terms of configuration of workflows. Workflow and Business Process Modeling Platform include methods for collaboration and communication.	Notes ==>	<p>Tyler applications feature integrated, real-time workflow to help clients automate common tasks such as approval requests, notifications, and alerts. Workflow can be setup for nearly any process available in Tyler applications and include a number customization options to meet each client's unique business requirements.</p> <p>Workflow rules can include one or hundreds of users and / or roles for a single process. Hierarchies can also be easily configured so specific users are only involved after other specified users have already approved or been notified first. Some Tyler applications also include the ability to define contingencies so that users are only included in workflow if specific data conditions are met for a particular process. For example, if a requisition created in the financial system is over a certain dollar amount only require approval from the Finance Director, or time off requests from a specific department only notify the respective department supervisor.</p> <p>To prevent gridlock paper-based workflow practices sometimes experience, alternate approvers can also be defined. If a workflow approver is out of the office for example, another user can be set as a "proxy" to handle all approval requests until the original user has returned. In select applications, an alternate approver can also be included in the workflow process so that after a specified time of no activity (hours, days, months, etc.), the workflow process is automatically forwarded to another user.</p> <p>Workflow users can receive, and with select applications, take action on, notifications, approval requests, and alerts a number of ways including in the application, automated emails, and, with some Tyler applications, Workflow mobile apps.</p> <p>Finally, integrated auditing ensures both workflow processes and the actual changes to workflow rules are tracked to be reviewed at any time.</p>
<b>13 Data Migration and Conversion</b>		
Please provide a brief overview of tools and methods accompanying the product with regard to data migration. Data migration provisions include: Table Schemas, Migration Templates, Migration Programs, Test Scripts, Static, Transactional, History. Considerations include data object calls; API's, Web Services; Data Validation; Bridge file formats; Data conversion will vary for master setup data vs. transactional data.	Notes ==>	<p>Tyler has a complete data conversion service and department that can write custom data conversion programs to convert history records from a legacy system. This service is a standard component of all Tyler implementations.</p>
<b>14 Interfaces / System Integration</b>		
Please provide an overview of the product capabilities in terms of interfaces and integration with other applications. Interface devices may include: .CSV, .XLS, XML, EDI, Connectors, APIs, Messaging; Web Services; Integration Hubs	Notes ==>	<p>Munis</p> <p>Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.</p> <p>Full Integrated ERP Solution</p> <p>When evaluating a new ERP system, it is very common clients are looking to replace several disparate systems with a single, integrated ERP solution. Since every Munis application is integrated with one another, sharing a single database, many existing interfaces are commonly eliminated when moving from several disparate systems. For example with Munis, an employee raise initiated by a Human Resources personnel action, automatically updates Payroll and the General Ledger.</p> <p>File-based integration</p> <p>Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.</p> <p>Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.</p> <p>Microsoft Office Integration</p> <p>Tyler applications are designed to easily integrate with the Microsoft Office suite.</p> <p>Data can be exported to Microsoft Word directly from many Tyler applications. Some applications even leverage Word's mail merge functionality allowing users to easily create and maintain form templates for completely customized presentation of application data. Word Mail Merge exports are also automatically archived in Tyler Content Manager for quick retrieval at any time.</p> <p>Applications include a variety of integrations with Microsoft Excel. Users can easily export application data directly to Microsoft Excel from most applications. Excel exports aren't just raw data dumps; exported data maintains the same formatting as the application including dates and currency data. Many exports include a link back to the corresponding record in application. Microsoft Excel is also one of many formats supported for bulk data exports and imports, which can also be scheduled for automated processing. Munis also includes an add-in to process Next Year Budget Entry directly in Excel using web services, saving from having to retrain users on basic application navigation each budget season.</p> <p>Finally, many Tyler applications include integration with Microsoft Exchange calendars for appointments, meetings, and vacation requests. Email notifications and alerts can be</p>
<b>15 Security</b>		



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Technical Area	Notes ==>	Description of Capacity
Please describe the features present with the product in terms of security. Features may include: User Accounts, Roles, Groups, Functions, Tasks, Screen/Field/Data Levels, Copy, Password Expiration, User-defined fields, user-defined tables; user, field level security, record level security; user authentication; process security		<p>Tyler applications employ a comprehensive Role Based Access Control (RBAC) security model to facilitate the management of application access through groups of permissions - roles - and assigning those roles to any number of users. This allows administrators to maintain access for multiple users who may share common responsibilities simultaneously rather than on an individual, user basis.</p> <p>Roles can be created and customized to offer an extremely flexible level of access control within each application suite. This includes product, module and menu item access (i.e. what programs can users open), functional access (i.e. what processes can users perform) and finally, record-based and, where available, field level access (i.e. what data can users see). Role permissions can also span multiple modules within each application providing easy administration for those individuals who may "wear multiple hats". If overlapping or conflicting permissions are applied to a user, the highest priority / least restrictive access is granted to that user.</p> <p>Once application roles are created, user accounts are added to the system, either manually or imported from Active Directory and roles are then assigned to a user, providing access to the system. All of this is done using easy-to-use, integrated applications, requiring very little technical expertise.</p> <p><i>Traditionally, application security is centrally administered by a city IT department. While this is still possible with the Tyler applications, a unique and useful feature commonly</i></p>
<b>16 Forms and Report Generation</b>		
Please describe the reporting capabilities present with the product and the general breakdown of reporting options. Please note that this item overlaps with functional requirements. Report types include scheduled and on-demand, graphical and tabular. Output methods include dashboard, preview, print, export (.pdf, .xls, .csv, more). Financial reports need to provide for rollups, consolidations, and drill-downs. Related terms include: SSRS, Data Warehousing, BI, Analytics, OLAP, KPI's.		<p>Munis</p> <p>Public sector entities need multiple ways to get information out of their ERP software. That's why Munis provides more than just traditional paper-based reports for accessing and using critical information. It is designed to provide you with the information you need in the format you want—instantly.</p> <p>Nearly every application screen throughout Munis includes the ability to create a report of the current dataset using a variety of output options (print, PDF, Word, Excel). An integrated "query wizard" can be used to guide users through the selection process to create complex queries. These queries can be saved for future and even shared with fellow users to quickly and easily access pre-defined searches at moment's notice. Leveraging the integrated Munis Scheduler, reports can also be scheduled to automate delivery and printing.</p> <p>Munis Analytics and Reporting includes several tools to help clients improve data management, analysis, information sharing, and delivery. Dashboards and Central applications provide immediate, out-of-the-box views of key information that can be configured by user based on role and preference. Robust Microsoft Office integration provides seamless data exports to familiar Office formats for further analysis.</p> <p>Support for industry-leading business intelligence and ad hoc reporting tools offer even further flexibility and customization while still using existing application permissions. Munis database cubes, built on Microsoft SQL Server Analysis Services, allow you to make better business decisions by easily viewing comparisons, patterns, and trends with Microsoft Excel PivotTable and PivotChart reports. Create, manage, and setup subscriptions to complex, interactive reports with SQL Server Reporting Services and deliver them in a variety of formats.</p> <p>Tyler CAFR Statement Builder simplifies the development of your Comprehensive Annual Financial Report (CAFR), create audit-ready CAFR statements and schedules, streamlining the process from year to year. Additionally, Tyler employs a dedicated Munis State Reporting team responsible for ensuring you maintain compliance with state and federal reporting mandates.</p> <p>EnerGov</p> <p>Strategic business performance management tools empower decision-makers by giving managers and executives the ability to analyze and report against various benchmarks in order to readily identify trends, inefficiencies, redundancies, etc. while monitoring important operational drivers of agency performance. Tyler recognizes the value in on-demand performance indicators &amp; reporting mechanisms and, as such, provides several native BI resource tools that facilitate process automation, data analysis and disaggregation within the EnerGov Enterprise framework including:</p>
<b>17 Software Upgrades</b>		





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Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Notes ==>	Description of Capacity
<p>Please describe the current and known future state directions of software updates. Attributes include: Frequency (Major Releases, Service Packs), Notification, Customization Impact, Push/Pull, Back Release Support, Availability of next Major Release; Fat client upgrades; Length of support; Schema updates</p>		<p>Munis</p> <p>Tyler deploys industry leading technology and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy. This includes a continuous stream of significant yet manageable updates deployed over the life of the application with minimal disruption to our clients. Application updates are provided in the following formats:</p> <p>Technology Releases (e.g. XXXX.X.X V12, XXXX.X.X V13) are typically released every 3-4 years and represent the baseline for product release, integrating technological advances, and system-wide user-interface improvements. These releases go through full process/system testing and the Early Adopter program, are only available to a limited number of clients, and only receive a single Year End Update.</p> <p>Feature Releases (e.g. 2017.1.X VXX, 2018.1.X VXX) are released annually after the initial Technology Release. These releases contain a wide variety of features including strategic enhancements, contractual modifications, client funded enhancements, and legislative changes. Feature Releases typically receive 3 Year End Updates.</p> <p>Final Releases represent the last Feature Release in a Technology Release family and typically receive 4 Year End Updates.</p> <p>Service Packs (e.g. XXXX.X.1, XXXX.X.2) are a bundle of software corrections for a given release. Service Packs are deployed through Tyler's Managed Internet Update (MIU) and installed by the client. The MIU allows clients to download and install Service Packs and individual critical software corrections. Updates can be applied on-demand or scheduled be installed automatically.</p> <p>Year End Updates are a special Service Pack that includes specific updates required for year-end W2 and 1099 processing. These updates are deployed through Tyler's Managed Internet Update (MIU) and installed by the client.</p> <p>All other applications</p> <p>Tyler application updates are released every quarter, in January, April, July and October. Occasionally, high priority issues arise between releases which results in a mid-release service pack which can be applied on top of the most recently released version.</p>
<p><b>18 Error Handling</b></p> <p>Please provide an overview of error notification functionality in the product. Relevant terms include: Alerts, Alarms, Delivery, Logs, Debugging, On-Line, Audit Trails, Rollback, Tracing, Event Viewer</p>		<p>Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who looked at what and when.</p>
<p><b>19 Open Source Components</b></p> <p>Please describe the product capability in terms of open source components. Relevant issues include: Open Source tools in technology stack, user groups, community forums, community wikis; community-contributed source code and enhancements; user conferences - what's available</p>		<p>The only open source technologies used are Oracle Java development environment with Tyler Content Manager and ExecuTime, Apache Tomcat web server hosts Tyler Content Manager, and RedHat WildFly hosts ExecuTime. Nearly all other Tyler applications use industry standard platforms based on the Microsoft stack.</p>
<p><b>20 3rd Party Modules</b></p> <p>Please describe any current third party components that may be present based on the information about the client needs provided in the RFI. Common Third Party modules include: Credit Card Authorization, Freight Carrier Integration, EDI, Financial Reporting, Warehouse Management, International Shipping Docs, Sale and Use Tax Engine, PLM, CAD - What's needed and proposed?</p>		<p>Refer to Tyler System Specifications attachment for third-party requirements</p>
<b>Skills</b>		
<p><b>21 Training</b></p>		



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Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Notes ==>	Description of Capacity
<p>Please provide a basic overview of training methods that accompany implementation of the product. Implementations typically have two main training seasons: 1) Applications Training for the Core Team and Developers (done near the beginning of the Project); 2) End User Training (done near the end of the project); Training options include: Classroom Off-site, On-site, On-line, Technical, End User, Train The Trainer.</p>		<p>Tyler provides 3 types of training: (1) high-level process and application training designed to prepare Functional Leads (new process decision-makers) with the intent being to give Functional Leads enough information and understanding to make initial re-engineered process decisions for testing and training in subsequent steps; (2) Core User training, which is a variety of training types including formal classroom training on application processes, side-by-side issue resolution training, conversion validation training, testing training and execution, report writing, cubes, and configuration training; (3) End User Training (done near the end of the phase) - which includes formal classroom training onsite and open labs for central office end users and the City's trainers who will conduct training for decentralized end users.</p>
<p><b>22 Skill Set Requirements</b></p> <p>Please provide an overview of the types of skillsets (in-house to the client) that are ideal for implementation and on-going operations of the product. Project and IT Roles for Implementation may include: Project Manager, Screen Developers; Report Developers; Database DBA; EDI Specialist; System Admin; Help Desk. Roles that are more technical often have require skills that are specific to the technology stack and the application software.</p>	<p>Notes ==&gt;</p>	<ul style="list-style-type: none"> <li>-Project Manager - lead City resources, contract administration, partners with Tyler PM, issue resolution</li> <li>-Steering Committee - representation from City Leadership, escalation points, work with Project Manager and Project Sponsor to resolve issues</li> <li>-Project Sponsor - authorize project, provide resources and leadership throughout, support change management</li> <li>-Functional Leads - participate in process re-engineering, make new process decisions, reinforce new processes, determine workflow approval process, handle workflow actions</li> <li>-Core Users - provide process expertise, attend training, learn new processes &amp; applications, learn configuration options, test processes, validate data conversions, learn ad hoc reporting, provide support to other City users once issue vetted by Help Desk and Tyler Support not required</li> <li>-End Users - attend training, practice new processes, learn information access and extraction methods</li> <li>-Change Management Lead - work with Tyler Change Management Lead, work with Tyler, City Sponsor, and other City resources to roll-out Change Management Plan, and ensure adoption of new processes and procedures</li> <li>-IT - provide crosswalk assistance and extract legacy data, maintain security and permissions options, basic database administration</li> <li>-EDI Specialist - minimal technical skill requirement based on Tyler's flexible interface options</li> <li>-Help Desk - route calls, first determining if it requires Tyler Support assistance or if it is a procedural issue that can be answered by a City resource, monitor Tyler's Support portal</li> </ul>
<b>Other</b>		
<p><b>23 Help and System Documentation</b></p> <p>Please describe options typically provide in terms of training and help documentation. Help System methods and attributes include: Contextual, On-line, Wiki-based Manuals, Forums, wiki-based</p>	<p>Notes ==&gt;</p>	<p>Munis applications include a context sensitive online help function that provides field level and procedural information to assist your resources in completing program tasks. When you are in a program and select the help function, the program displays a field level description of all data elements on the screen, as well as processing options for that program. It is formatted to provide you with a general overview of the program or the selected program screen, descriptions of the fields on the screen, and procedures for completing the tasks within the program. The online help function also includes a table of contents, from which you can select help for other programs within a product. This tool is linked to the Munis Knowledgebase, allowing for immediate access to additional information and resources directly from the Help screen. There are also links to Munis Technical Support for ease in requesting assistance from a Munis expert. Our online help functionality is not customizable to clients currently.</p> <p>The Online Help Menu also ties directly into Tyler University which allows you to either take a structured course right in a Munis program or will walk you through the completion of the task you've sought help on. Tyler has developed its own inline Learning Management System (LMS), under the brand Tyler University. Tyler U is provided at no additional charge and will continue to grow and be updated with each new release of Munis. One of the options in Tyler U is to use the functionality to have its teaching capability instruct users 'on-the-fly', or mid-process. Tyler U can also teach processes from the beginning and contains an entire library of pre-requisites, coursework that Tyler Consultants will assign to users prior to attending analysis or training sessions.</p> <p>What makes Tyler U so invaluable in the learning process is that it overlays the City's Production, Train, and Test databases. This means that the coursework is using the City's actual data that is specific to the user's work. In addition, it does not require user management, usernames, or passwords since the classes are taken directly from the Munis programs and the associated user permissions. Tyler U also submits a weekly report on classes taken and provides the information directly so an assessment can be performed as to the level of study and difficulty that is ongoing.</p> <p>Finally, Tyler also maintains a complete set of documentation that is available to all users through the Munis KnowledgeBase. The Munis KnowledgeBase provides users with a single, easily accessible location to find all existing documentation on the Munis product and other widely used technology products that integrate with Munis. Included are procedure documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises and much more. Clients also have the ability to upload and submit their own customized documentation, creating a single online repository for all ERP related documents.</p>



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Technical Area		Description of Capacity
<b>24 Audit and Compliance</b>		
<p>Please include audit standards and capabilities that are native to the product. Audit and Compliance standards and attributes to consider include: FDA, SOX, ISO, Audit Logs (From/To/When/Who), IP Address, ERES, userid, date/time stamps, legal numbering; transaction types, transaction ID; System should help to prevent audit problems and provide a foundation for rapid response to ad hoc audit needs</p>	<p><b>Notes ==&gt;</b></p>	<p>Auditing</p> <p>Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who looked at what and when.</p> <p>Tyler SaaS Data Center Security</p> <p>Using key card and cameras, access to Tyler SaaS data centers is restricted to authorized personnel only. Entry attempts into the data center are audited on a regular basis by internal staff and external auditors.</p> <p>Cisco firewalls with Intrusion Protection System (IPS) module inspect all traffic to only allow connections from Tyler SaaS clients to the datacenter. Connection is established to internet-facing web applications securely over HTTPS. ERP clients are provided a VPN device as an added layer of security for accessing back-office applications through an encrypted tunnel between client site and Tyler data centers.</p> <p>ERP application access through the VPN device Traffic is encrypted using AES-256 bit, SHA-1 and Diffie Hellman group 2 for keying of the pre-shared secret. The keys are re-generated every 8 hours and we use perfect forward secrecy in the key process. Once they data comes out of the VPN, all traffic is thrown back into the firewall and checked against an ACL for source, destination and allowed services. The VPN device is included with the Tyler SaaS service and is installed and configured at the client site. In addition to the added layer of security, this device also provides Tyler application access to client intranet resources such as printers, third-party systems, and network filesystems.</p> <p>Application access must be explicitly granted by administrators. Application authentication is handled using Tyler SaaS Active Directory maintained by Client administrators. Direct database access is only granted upon request via read-only ODBC connection for ad-hoc reporting. Although hardware is shared with multiple SaaS clients, application environments are segregated per client, eliminating any possibility of accessing another client's data.</p> <p>Tyler's Hosting Operations follows security best practices and is subject to annual assurance audits. These include SOX-404 Financial and IT General Control conducted by an independent CPA firm, SOC 1 Type 2 and SOC 2 Type 2 conducted by an independent AICPA firm, and PCI Security Council PA-DSS and PCI-DSS validation for Tyler's payment and payment gateway applications.</p>
<b>25 Technical Support</b>		
<p>Please include a brief description of the support strategy and offerings that are typical of product implementation. Support attributes and cost variable may include: Annual Maintenance, % of Net/Gross License, Hours/Time Zones of Coverage, Escalation Process, On-line service ticket entry and monitoring, Phone Support, 24x7, 8x5, etc.; first level response, escalations.</p>	<p><b>Notes ==&gt;</b></p>	<p>Please reference Question 6.10 in the response document for our Technical Support Overview.</p>

## Section 6 PROPOSED IMPLEMENTATION STRATEGY

### Tab 6 – Proposed Implementation Strategy:

Please describe your recommended implementation approach beginning with the implementation of the Utilities Function for your proposed solution, including the following:

### 6.1 IMPLEMENTATION METHODOLOGY

#### 1. Implementation methodology

#### Tyler Implementation Methodology

Tyler's implementation is a fully integrated approach that is based on the principles of the Project Management Institute and our 30+ years of experience of implementing our products in the public sector. Over these 30+ years, we have continuously adjusted to improve our process and develop tools and technologies to make the implementation experience more intuitive and effective. We've incorporated feedback from hundreds of clients, consultants, and partners and regularly perform evaluations of lessons learned and the ever-changing public sector needs.all to craft a transformative and customer experience focused approach to ERP Projects.

Since it's not enough to expect that software, or traditional software implementation alone, can provide the complete organizational evolution, we incorporate additional elements that are essential to successful organizations:

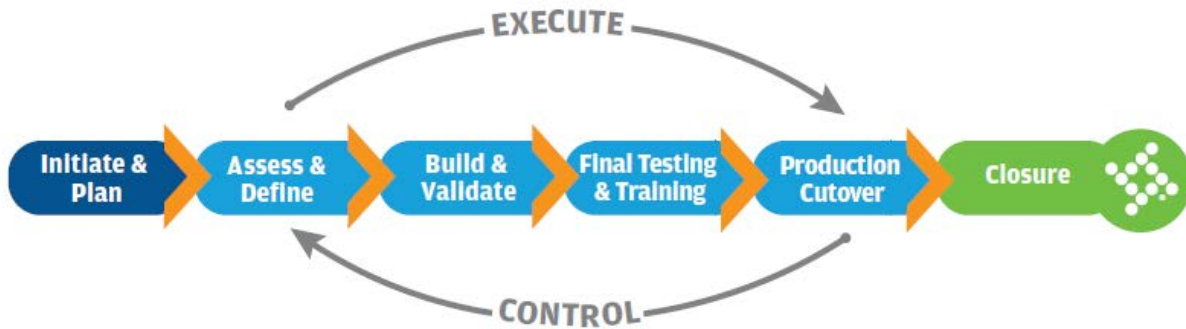
- Achieving both the upfront visioning work of business re-engineering with integrated change management based on customer experience *and*
- Post-live efficiency onsite support, measurement and process adjustment for the City's ability to achieve full circle vision and ROI

Our ability to achieve this full spectrum approach is a benefit directly resulting from the fact that we staff all project positions using seasoned Tyler professionals. Whether filling project management, business re-engineering consulting, system design, training, testing, technical, change management, or the dozens of other roles that are part of our solution, the City can rely on a level of Tyler software expertise and Public-Sector experience and focus that is unsurpassed in the marketplace.

#### Evolution Process Overview

The project life cycle follows a six-stage, iterative approach with established control points for acceptance of stage activities, deliverables, and project progress. Throughout each stage, risk, quality, and change management have major roles in all activities, guided by Management Plans established collaboratively during project initiation. Utilizing the five process groups outlined in the

PMI's *PMBOK® (Project Management Body of Knowledge) Guide* — Initiating, Planning, Executing, Monitoring and Controlling, and Closing, we apply them to our six stages, as shown below:



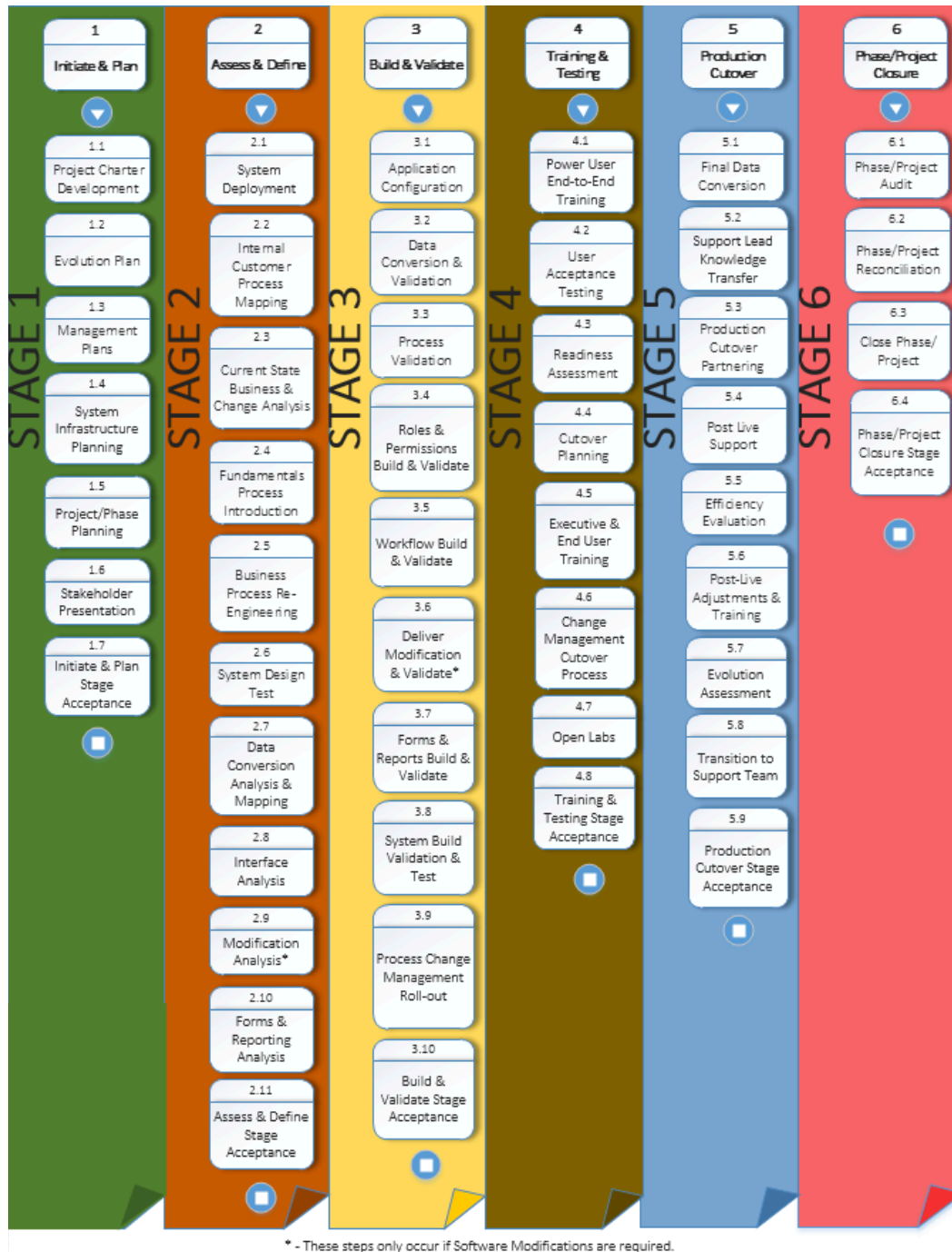
Given the significance of the City's Project Goals and the desire to implement Utility Billing at the beginning of the project, we recommend an overlapped, phased approach to the project. Starting with General Ledger, Utility Billing, and Core Financials, we'll establish early success through:

- Newly designed Chart of Accounts in keeping with Florida requirements
- Early go live of the General Ledger with full integration to legacy systems
- On time roll-out of Utility Billing and Collections
- Simultaneous roll-out of Core Financials to provide procedural and reporting foundation throughout the organization
- increased system integration and the elimination of unneeded 3<sup>rd</sup> Party and/or shadow systems
- reduced utilization of the legacy system
- shifting a large portion of the City's operation to an integrated and innovative technology

The additional benefit of this phased approach is that the Change Management aspect of the project will be fully matured early in Phase 1, shaping the Evolution education well in advance of subsequent phases.

## Evolution Process Defined

The Project Management Institute (PMI) utilizes a Work Breakdown Structure (WBS) to depict overall project work. Tyler uses this key PMI tool to show our implementation approach in greater detail, based on the six stages defined above.





### Stage 1: Initiate & Plan

Tyler believes that partnership is the key to any successful project, and as such, begins the work with the development, or editing, of a Project Charter ([DED-01](#)). This, and the Statement of Work, developed along with the contract, form the foundation from which we move forward with all project activities. The Tyler Project Manager works directly with the City's Project Manager to finalize the Project Charter and achieve authorization to move forward from the City's executive sponsor.

One of the most important steps in planning, although often left to goal statements related to broad project outcomes, is the creation of an Evolution Plan ([DED-02](#)). From Tyler's perspective, this plan must outline the vision for the goals at a more detailed level, including the expected elements of business process change, technology change, cultural change, and constituency impact. Using this plan as the guide, we will measure progress, report to Stakeholders, and ultimately determine success.

As the Project Team partnership continues to grow, baseline Implementation Management Plans ([DED-03](#)) are developed and taken to a robust level, factoring in any specific information that has been gathered as part of the initial planning steps. These plans are maintained throughout the project and made part of visible activities and reporting through the Project SharePoint portal that Tyler hosts, allowing for risk, communication, quality and other plan components to be actively monitored.

Once conflict dates for City resources have been collected, a fully detailed Project Plan ([DED-04](#)) is developed in MS Project. The plan reflects all tasks, milestones, personnel, dependencies, and the critical path, along with other relevant information. While the plan is managed in MS Project, we also provide customized views on the Project SharePoint site, allowing other City personnel access to appropriate information without needing MS Project expertise.

At the same time, final planning for the system infrastructure concludes and the Tyler Project Manager develops the Project Plan in collaboration with the City Project Manager. As the City and Tyler Project Team is further engaged as a unified group, and the Initiate & Plan Stage nears conclusion, a formal Stakeholder Presentation is made to all selected project stakeholders.

### Stage 1 - Initiate & Plan Deliverables

<b>Deliverable Name:</b> Project Charter	<b>DED-01</b>
<b>Objective:</b> Provide written authorization, management support, set clear expectations, communicate a clear business case for the project	
<b>Scope:</b> All products and services in the Agreement	
<b>Format:</b> MS Word	
<b>Outline:</b> The Project Charter format will be based on PMI Methodology and will contain the following key sections: <ul style="list-style-type: none"> <li>• Authorizations</li> </ul>	

<ul style="list-style-type: none"> <li>• Overview</li> <li>• Project Background &amp; Business Case</li> <li>• Specific Key Resources Assigned to Project</li> <li>• Proposed Start and End Dates</li> <li>• Key Milestones and Deliverables</li> </ul>
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Provide input for Project Charter content</li> <li>• Review and authorize Project Charter</li> <li>• Review and accept DED-01</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Lead development of Project Charter</li> <li>• Solicit information for content</li> <li>• Write Project Charter Using Provided Material</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Project Charter accurately reflects the content discussed</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> Evolution Plan	<b>DED-02</b>
<b>Objective:</b> Provide written outline of the steps and key activities required in transforming the Client from current to future state.	
<b>Scope:</b> Products and services in the Agreement, as well as post live assessment and reinforcement techniques, continuing education, and onboarding.	
<b>Format:</b> MS Word	
<b>Outline:</b> The Evolution Plan format will contain the following key sections: <ul style="list-style-type: none"> <li>• Overview of Project Goals</li> <li>• Current and Future State Delta Assessment</li> <li>• Major Steps in Evolution Process</li> <li>• Expected Outcome</li> <li>• Roles and Responsibilities</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Provide input for Evolution Plan</li> <li>• Review and authorize Evolution Plan</li> <li>• Review and accept DED-02</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Own development of Evolution Plan</li> <li>• Solicit information for content, current/future state delta</li> <li>• Write Evolution Plan using provided material and assessment</li> </ul>	
<b>Acceptance Criteria:</b>	

- The Evolution Plan adequately describes a process for achieving project goals, long term organizational change, and full utilization of tools as recommended
- The respective Tyler and Client project team members have resolved all material content and/or quality issues.
- The deliverable is free of formatting and spelling errors.

<b>Deliverable Name:</b> Implementation Management Plans	<b>DED-03</b>
<b>Objective:</b> To provide guidance for changes, issues, and other project challenges.	
<b>Scope:</b> Customized management plans to reflect Client's specific project approach. Management plans will document specific project management processes that are agreed upon between Client and Tyler Project Manager. The management plans will include all information and procedures for all phases of the project.	
<b>Format:</b> MS Word / SharePoint	
<b>Outline:</b> The management plan document will be a compilation of the following management plan subsets: <ul style="list-style-type: none"> <li>• Scope Management Plan <ul style="list-style-type: none"> <li>• Scope Management Approach</li> <li>• Scope Management Roles and Responsibilities</li> <li>• Scope Verification</li> <li>• Scope Control</li> <li>• Scope Change</li> </ul> </li> <li>• Communication Management Plan <ul style="list-style-type: none"> <li>• Communications Planning</li> <li>• Information Distribution</li> <li>• Communication Roles and Responsibilities</li> </ul> </li> <li>• Resource Management Plan <ul style="list-style-type: none"> <li>• Project Team List</li> <li>• Physical Resource Requirements</li> <li>• Facility Resource Matrix</li> <li>• Human Resources Requirements Matrix</li> </ul> </li> <li>• Education Management Plan <ul style="list-style-type: none"> <li>• Education Program Goals</li> <li>• Education Objectives</li> <li>• Assumptions &amp; Risks</li> <li>• Training Plan</li> <li>• Timeline</li> <li>• Roles &amp; Responsibilities</li> </ul> </li> <li>• Quality Management Plan <ul style="list-style-type: none"> <li>• Quality Approach</li> <li>• Quality Planning</li> </ul> </li> </ul>	

<ul style="list-style-type: none"> <li>• Issue Resolution</li> <li>• Quality Assurance</li> <li>• Quality Control</li> <li>• Quality Control Checklist</li> <li>• Release Management Plan               <ul style="list-style-type: none"> <li>• Release Upgrade Assessment Procedures</li> <li>• Release Upgrade Management Procedures</li> <li>• Release Upgrade Testing and Control Procedures</li> <li>• Release Upgrade Communications</li> <li>• Release Upgrade Future Planning</li> </ul> </li> </ul>
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Collaborate in the development of acceptable management plans</li> <li>• Review and authorize management plans</li> <li>• Review submitted management plans for accuracy</li> <li>• Communicate management plans to Project Team, as needed</li> <li>• Collaborate in changes to management plans, as needed</li> <li>• Review and Accept DED03</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Lead development of management plans using baseline template</li> <li>• Collaborate with Client to develop acceptable management plans</li> <li>• Write management plans to reflect decisions</li> <li>• Collaborate in changes to management plans, as needed</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• Implementation Management Plans contain all of the required components and accurately reflect decisions</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> Project Plan	<b>DED-04</b>
<b>Objective:</b> Full Project Plan with Task list, task owners, due dates, and predecessors for successful management of the project.	
<b>Scope:</b> All products and services included in the Agreement for the duration of the Project	
<b>Format:</b> Developed and maintained in MS Project. Scheduling and task lists then uploaded to the Tyler-provided Project SharePoint site.	
<b>Outline:</b> The project plan will follow the Implementation Methodology WBS and contain all WBS tasks, tasks necessary for completion of WBS tasks, deliverables, milestones, review/acceptance periods, and other key project events. The Project Plan will contain, at a minimum: <ul style="list-style-type: none"> <li>• Project's activities and tasks</li> <li>• Start, End and Actual Completion Dates of project activities and tasks</li> <li>• Specific resources assigned to project tasks</li> </ul>	

<ul style="list-style-type: none"> <li>Detailed Project schedule / Work Breakdown Structure (WBS) featuring phases, deliverables, and work packages</li> <li>Milestones and Deliverables</li> <li>Client Review Periods for Milestones and Deliverables</li> <li>Project Acceptance of Deliverables and Implementation Control</li> </ul>
Points
<b>Client Role:</b> <ul style="list-style-type: none"> <li>Provide information to assist in the development of an achievable plan, including blackout dates, key resource conflicts, etc.</li> <li>Review and authorize project plan</li> <li>Contribute information necessary to maintain project plan</li> <li>Review and Accept DED04</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>Conduct initial planning session to begin Project Plan development</li> <li>Create project plan</li> <li>Maintain project plan</li> <li>Post project schedule and task list to Project SharePoint site</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>The Project Plan contains all of the required components of the Agreement,</li> <li>The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>The deliverable meets the established project budget and timeline.</li> </ul>

### Stage 2: Assess & Define

Based on the approved plans from the previous Stage, the system deployment takes place, allowing the team access to all applications and functionality for use during upcoming analysis sessions. The appropriate City team members are trained on any activities that require their action and a complete review of the infrastructure is performed. This information is documented in the Installation Report ([DED-05](#)).

Understanding the 'Customer journey', or how end users experience using their tools to perform their daily tasks, requires mapping out key levels of the organization. We start by interviewing end user groups by functional area and asking basic questions to determine the needs of the users. This allows us to do three things: 1) define process flow at a high level; 2) catalog touchpoints; 3) begin Change Management efforts by giving End Users a voice.

Next, we move to the Power Users and repeat the process, delving more deeply into their processes and touchpoints. These users are typically core to the operation of each department and handle the majority of processing work in the system. Their needs will be significantly different than end users', but they will also need some of the same needs, as well.

Finally, we move to the Administrative level and finish the Customer Journey mapping process. Often at this level the needs are more focused on reporting, analytics, approvals, information access, and ensuring that citizens are being served at a high standard.

The entire process, when completed, allows us to guide business re-engineering around the information gathered and to design new processes with the simplest approach possible to achieve each user's work. This is the first step in making the Customer Experience part of the actual solution.

Tyler's Consultants fold what they've learned into a more detailed review of certain areas of Current State Analysis, performing an immersive business study of the Chart of Accounts structure, reporting requirements, and an evaluation of the City's Change Management skills, historical activities, and project buy-in. While spending too much time documenting Current State is a poor investment, from our perspective, spending an adequate amount of time to gain a thorough understanding of policies and procedures, pain points, operational deficiencies, and key rate calculations is critical. Using a combination of interviews and visual validation, Tyler gathers the information and builds the [Current State](#) component of the System Design Document ([DED-10](#)).

Next, to build familiarity with Tyler applications, concepts, data flow, and terminology, our Consultants conduct Fundamentals Process Introduction sessions. Initially a demonstration with a pre-populated database, during subsequent opportunities, we encourage City decision makers and subject matter experts to jump in and get some early hands-on transactional process experience. The exposure gained during these sessions are invaluable in preparing them to understand Future State options and to see new opportunities for process change.

In Future State Analysis sessions, Tyler leads discussions with City decision makers around Current State, the specified Functional Requirements, additional options available in Tyler applications, a deep 'in-application' explanation of data flow, data storage, process steps, and how the extremely flexible setup options allow Tyler customers to 'customize' through configuration. This process includes developing a customer experience model, making sure that the new system design supports ease of use and sensible means to meeting customer needs...external and internal. Throughout these steps new business processes are re-engineered at a draft level with Tyler making best practice recommendations as part of the consultation.

As an understanding of the inherent integration is learned, we also introduce sessions to define the Future State of the Chart of Accounts. Being exposed to Tyler applications and concepts at a deep level prior to the Chart of Accounts analysis is of key importance so that the new Chart design reflects the most updated future needs of the City. The Chart design is led by Tyler Consultants and the outcome put through significant testing prior to being finalized.

Next, Tyler and the City meet to review baseline Future State decisions. The output from these decisions are two-fold: (1) future state System Design Test Scripts to lead the build of a small Future State sandbox and the testing of new processes and workflows according to the baseline decisions; and (2) a Change Impact Report ([DED-09](#)), which evaluates and points out detailed procedural impact areas that will result from the future state decisions across the organization.



So that City decision makers can see their baseline decisions in action, Tyler will conduct the future state System Design Test and conduct 'real world' daily activities using what the City has selected as the preferred, new processes and workflows. Careful attention is paid to ensure that unique, complex scenarios are part of this test so that the City is confident in their decisions and the new System Design. Once final Future State process decisions are made, Tyler delivers a completed System Design Document ([DED-10](#)). Tyler finalizes the process by creating a Business Process Improvement Report ([DED-11](#)), which documents the improvements captured through the business re-engineering process. This provides information for reporting on investment benefits early in the project.

Analysis of all remaining components, such as forms, data conversions, interfaces, reports, dashboard design, and program modifications (if contracted) can also be completed, now that the System Design is largely in place, and a detailed Implementation Plan ([DED-12](#)) is delivered. The Assess & Define Stage reaches closure as exploration of all of the requirements, options, configurations, and other design elements are completed.

Invaluable tools are delivered, such as generic Process Manuals ([DED-13](#)) geared towards Power Users and End User Guides ([DED-14](#)), with basic and easy to follow steps for end user processes.

#### *Stage 2: Assess & Define Deliverables*

<b>Deliverable Name:</b> Installation Report	<b>DED-05</b>
<b>Objective:</b> Provide Client with listing of all products, installation paths and accounts installed for Client-hosted or Tyler-hosted agreements.	
<b>Scope:</b> All Tyler products and associated hardware and software	
<b>Format:</b> MS Word	
<b>Outline:</b> The Installation Report will contain the following key sections: <ul style="list-style-type: none"> <li>• Application and Database Server details</li> <li>• Network names and domain(s)</li> <li>• Installation paths, IPs and user accounts</li> <li>• Application and software user accounts details</li> <li>• Application and web service URLs</li> <li>• Tyler License Keys</li> <li>• Recommended on-going IT tasks</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Participate in a call with Tyler Technology team</li> <li>• Review details of hardware and software configuration, ongoing tasks</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• Review and accept DED-05</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Prepare Installation Report</li> <li>• Schedule and conduct call to review report and answer questions</li> </ul>	

**Acceptance Criteria:**

- The Installation Report accurately outlines all items identified in the Deliverable Outline
- The respective Tyler and Client project team members have resolved all material content and/or quality issues.
- The deliverable is free of formatting and spelling errors.

<b>Deliverable Name:</b> Organizational Change Assessment Study	<b>DED-06</b>
<b>Objective:</b> Identify the organization's capacity for change and outline key areas where change may be more difficult.	
<b>Scope:</b> Study includes all departments impacted by ERP Project.	
<b>Format:</b> MS Word	
<b>Outline:</b> The Organizational Change Assessment will contain the following key sections: <ul style="list-style-type: none"> <li>• Overview of Change Assessment Process</li> <li>• Results from assessment surveys and interviews</li> <li>• Analysis of results</li> <li>• Study Conclusion</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Make resources available for assessment input</li> <li>• Participate in formal review of Organizational Change Assessment Study</li> <li>• Review and accept DED-06</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Develop tools needed to conduct Organizational Change Assessment Study</li> <li>• Solicit information for content, current/future state delta</li> <li>• Write Evolution Plan using provided material and assessment</li> </ul>	
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Organizational Change Assessment encompasses comprehensive material gathered from the organization, from which detailed change management information can be extracted and utilized for further planning.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>	

<b>Deliverable Name:</b> Change Impact Report	<b>DED-09</b>
<b>Objective:</b> Provide guidance on significant procedural impact points throughout the organization based on the outcome of the System Design Test and the Client's process decisions.	

<b>Scope:</b> All Departments impacted by the use of Tyler Software
<b>Format:</b> MS Word
<b>Outline:</b> Tyler Change Impact Report will contain: <ul style="list-style-type: none"> <li>• Overview of changed business process</li> <li>• Identification of impacted groups</li> <li>• Change impact rating</li> <li>• Timing for Change Management action</li> </ul>
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Participate in informal review of Change Impact Report</li> <li>• Participate in formal review of Change Impact Report</li> <li>• Review and accept DED-09</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Review outcome of System Design test, Tyler Best Practice Recommendations, Future State sessions</li> <li>• Review change impact with Tyler Consultants</li> <li>• Write Change Impact Report</li> <li>• Lead formal review of Change Impact Report</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Change Impact Report address all major areas of significant change that will have impact on the Client's user group as they adopt their new processes and use Tyler software.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> System Design Document	<b>DED-10</b>
<b>Objective:</b> To fully document the information flow from current state through future state to decisions; track the associated system settings based on the process decisions; capture screen shots of set up tables; maintain change control.	
<b>Scope:</b> All modules covered under the Tyler Agreement	
<b>Format:</b> MS Excel	
<b>Outline:</b> System Design Document will contain: <ul style="list-style-type: none"> <li>• Current State</li> <li>• Future State</li> <li>• Settings</li> <li>• Screen Shots</li> <li>• Change Control</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Provide responses to questions and make process decisions</li> <li>• Validate that the document accurately reflects the Client's answers and decisions</li> </ul>	

<ul style="list-style-type: none"> <li>• Communicate changes to process decisions</li> <li>• Review and accept DED-10</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Build the System Design Document incrementally through the Current &amp; Future State process, add decisions following the System Design Test, complete the Settings Tab and validate correctness, capture screenshots</li> <li>• Review System Design Document with Client</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The System Design Document will accurately reflect the system design at the time of delivery.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> Business Process Improvement Report	<b>DED-11</b>
<b>Objective:</b> To document the business process improvements and major adjustments resulting from business process redesign.	
<b>Scope:</b> All modules covered under the Tyler Agreement	
<b>Format:</b> MS Word	
<b>Outline:</b> Business Process Improvement Report will contain: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Detail of Business Process Improvements &amp; Adjustments</li> <li>• Considerations             <ul style="list-style-type: none"> <li>• Policies &amp; Procedures</li> <li>• Strategic Operating Plan</li> <li>• Audits</li> <li>• Interfaces</li> <li>• Conversions</li> <li>• Reporting</li> <li>• Security                 <ul style="list-style-type: none"> <li>• Menu Security</li> <li>• Functional Role Permissions</li> <li>• Data Access Role Permissions</li> </ul> </li> <li>• Workflow Considerations</li> <li>• Internal Controls and Reconciliations</li> <li>• Decentralized Processing</li> <li>• Notes</li> </ul> </li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Validate that the document accurately reflects the Client's decisions</li> <li>• Review and accept DED-11</li> </ul>	

<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Write the Business Process Improvement Report using the results from the System Design Test, the System Design Document, and the Change Impact Report, and other analysis sessions as the basis for the information.</li> <li>• Review the Business Process Improvement Report with Client</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Business Process Improvement Report accurately captures the design and the areas of significant improvement at the time of delivery.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> Implementation Plan	<b>DED-12</b>
<b>Objective:</b> Detailed plan for implementation of Tyler products based on decisions made during Assess & Define Stage.	
<b>Scope:</b> All modules and associated services covered under the Tyler Agreement	
<b>Format:</b> MS Word	
<b>Outline:</b> Implementation Plan will contain: <ul style="list-style-type: none"> <li>• Conversion Plan</li> <li>• Integration Plan</li> <li>• Testing Plan</li> <li>• Interface Plan</li> <li>• Forms Plan</li> <li>• System Build Plan</li> <li>• Process Change Management Plan</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Attend sessions to review plans</li> <li>• Review and accept DED-12</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Write the plans to accurately reflect the approach to implement all modules and services, meeting requirements as determined by the accepted Design Document.</li> <li>• Lead the review sessions with Client</li> </ul>	
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Implementation Plan thoroughly covers the required details to implement the design and the areas of significant improvement at the time of delivery.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>	

<b>Deliverable Name:</b> Process Manuals	<b>DED-13</b>
<b>Objective:</b> Provide generic documents outlining standard process steps.	
<b>Scope:</b> All major processes in Tyler modules covered under the Agreement.	
<b>Format:</b> MS Word	
<b>Outline:</b> Process Manuals will follow the following structure: <ul style="list-style-type: none"> <li>• Objective</li> <li>• Overview</li> <li>• Prerequisites</li> <li>• Procedure</li> <li>• Results</li> <li>• Other Modules Impacted</li> <li>• What's Next?</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Update documents with specific process decisions</li> <li>• Notify Tyler of any corrections needed</li> <li>• Review and accept DED-13</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Deliver Process Documents.</li> <li>• Make needed corrections to manuals.</li> </ul>	
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Process Manuals accurately reflect the current version of the Tyler software.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>	

<b>Deliverable Name:</b> End User Guides	<b>DED-14</b>
<b>Objective:</b> Provide customized documents outlining simplified process steps for End User functions.	
<b>Scope:</b> All major End User processes in Tyler modules covered under the Agreement.	
<b>Format:</b> MS Word	
<b>Outline:</b> End User Guides will follow the following structure: <ul style="list-style-type: none"> <li>• Process Name</li> <li>• Process Steps</li> <li>• Process Screen Shots</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Test documents by completing processes in system</li> </ul>	



<ul style="list-style-type: none"> <li>• Notify Tyler of any corrections needed</li> <li>• Review and accept DED-14</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Write End User Guides to accurately reflect the specific requirements for the Client according to the accepted Design Document.</li> <li>• Make needed corrections to guides</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The End User Guides accurately reflect the Client's processes according to the accepted Design Document in a simple and easy to follow approach.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

### Stage 3: Build & Validate

With the system design approved and the City decision makers confident in the new processes, the investment in building the solution can truly begin in earnest. The application is configured to meet the System Design Document while data extractions for conversions are delivered to the Tyler Conversion Programmers for review, programming and initial testing. All converted data is first loaded in a test environment and reviewed by Tyler for data issues. The Tyler Conversion Programmers will work with Tyler Consultants and review the first pass for obvious balancing errors or other discrepancies, making corrections to the program and preparing the second pass. Once the second pass is ready and initially reviewed, the City Team is taught how to validate the converted data with Tyler Consultants assisting them. Conversion passes are repeated until accuracy is achieved and we know the conversion program produces correct results.

Once configuration is finalized, transactional process testing begins again, and as it progresses, the addition of converted data to the testing scope broadens and deepens the test arena. More layers of set up are built and tested, eventually adding Roles & Permissions and Workflow to the mix. These activities are all carefully managed in appropriate environments or databases to keep test activities isolated, according to the detailed Implementation Plan.

Forms, such as Utility Bills, Delinquent Notices, Accounts Payable or Payroll Checks, Direct Deposits, EFT/ACHs, Purchase Orders, Contracts, Permits, Licenses, and all other included form types are built and loaded for testing against City data. Review by Tyler, the City Team, and appropriate banking institutions occurs during this Stage.

Interfaces, temporary or permanent, are constructed during this phase and robust tracking of the system requirements, deliverables, and testing steps are part of our process in ensuring that this critical step is fulfilled early in the project.

Custom Reports, if required, are developed and delivered, making sure that the information presented meets the City's needs and is accessible to the appropriate users.

Roles & permissions, workflow, user dashboards for Power Users are built out in preparation for the next Stage.

A User Acceptance Test Plan ([DED-15](#)) is developed and reviewed with the City Team to provide guidance and control in developing UAT scripts if the City decides that this testing is necessary in addition to parallel testing (Utility Billing and Payroll/HCM) and Trial Run testing (Financials, Permits, Licensing).

The updated Requirements Traceability Matrix ([DED-16](#)) is delivered, containing all of the applicable requirements and their disposition.

The conclusion for this Stage is significant in that we expect the applications to be standing up, fully configured, processes and conversions largely proofed and ready for a larger audience to engage in training and testing.

### *Stage 3: Build & Validate Deliverables*

<b>Deliverable Name:</b> User Acceptance Test Plan	<b>DED-15</b>
<b>Objective:</b> Provide test plans to outline specific process areas that need to be included in UAT scripts to ensure the system configuration and data will function as required once in a live environment.	
<b>Scope:</b> All major processes in Tyler modules covered under the Agreement.	
<b>Format:</b> MS Word	
<b>Outline:</b> UAT Plans will follow the following structure: <ul style="list-style-type: none"> <li>• Plan Name</li> <li>• Application</li> <li>• List of recommended process testing</li> <li>• List of recommended report testing</li> <li>• List of recommended interface testing</li> <li>• List of recommended integration testing</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Review UAT Plan</li> <li>• Notify Tyler of any corrections needed</li> <li>• Review and accept DED-15</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Write UAT Plan to guide the UAT Test Script development process.</li> <li>• Make needed corrections to plan</li> </ul>	
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The UAT Plans accurately reflect the processes according to the accepted Design Document and provide sufficient detail to drive development of UAT Test Scripts.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> </ul>	

- The deliverable is free of formatting and spelling errors.

#### Stage 4: Training & Testing

With the majority of the system fully vetted, Tyler begins Power User training, which includes teaching Power Users how system configuration works, as well as end-to-end process training. This is a critical piece of training since Tyler and the City Project Team have configured the system, but Power Users will most likely be responsible for future adjustments to configuration, should process or policy changes demand them. When training this group of users, it's also important to create scenarios that require them to understand how to problem-solve. Once functioning in production, these are the users that will need to be able to quickly identify and resolve basic issues.

After Power User Training concludes, Tyler introduces the customized UAT Plan ([DED-15](#)) to the Power Users and the UAT process begins. Issues that are identified are reported, resolved, and go through regression testing. A preliminary Readiness Assessment ([DED-18](#)) is performed to see if the City's users are ready to move forward with Cutover Planning and End User Training. The Cutover Planning process is extremely detailed and requires the involvement of Functional Leads as well as the Project Team. Communications out to Department Heads and their staff is critical at this point, and ownership of tasks in the Production Cutover Plan ([DED-17](#)) is completed.

As part of the Change Management Plan ([DED-12](#)), a cross-functional demonstration is completed for end users. This single event can transform a mildly interested end user who complains about having to add more data into the new system into a user that understands their importance in the downstream information collection effort and its impact on City management decisions. Immediately following this demonstration, Executive dashboard and End User training is completed.

Full Change Management Cutover communications begin to prepare the City for the activities leading up to Production Cutover, including ceasing activities in the legacy system, how to handle held transactions, timing of interfaces between systems, banking notifications, and all of the critical components of cutover. Tyler and the City establish Open Labs for users to refresh themselves on processes or to have support during go live activities. A Readiness Assessment Report ([DED-18](#)) is completed to ensure that all members of the user community are fully prepared.

The end of this Stage is ultimately the authorization to move forward with Production Cutover and acceptance that all Training and Testing is complete.

#### Stage 4: Training & Testing Deliverables

<b>Deliverable Name:</b> Production Cutover Plan	<b>DED-17</b>
<b>Objective:</b> Detailed plan and task list outlining all activities leading up to production cutover. Provide cutover timelines to cease processing in legacy system, timeline for final data conversions, contingency processing plans, and instructions for decentralized departments.	

<b>Scope:</b> All functional and technical areas involved in the project.
<b>Format:</b> MS Excel
<b>Outline:</b> Production Cutover Plan will contain: <ul style="list-style-type: none"> <li>• Summary of Plan</li> <li>• Cutover Checklist <ul style="list-style-type: none"> <li>• Item ID</li> <li>• Activity</li> <li>• Owner</li> <li>• Date Verified</li> <li>• Client Approval</li> <li>• Notes Comments</li> </ul> </li> </ul>
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Participate in development of Cutover Plan</li> <li>• Review and accept DED-17</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Create and Maintain Cutover Plan</li> <li>• Review Cutover Plan with Client</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Cutover Plan outlines all activities necessary to successfully reach the cutover authorization milestone.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>

<b>Deliverable Name:</b> Readiness Assessment Report	<b>DED-18</b>
<b>Objective:</b> Provide information related to the organization's preparedness for transitioning to new procedures, Tyler software, and the new business vision.	
<b>Scope:</b> All functional and technical areas involved in the project.	
<b>Format:</b> MS Excel or MS Word	
<b>Outline:</b> Readiness Assessment Report will contain: <ul style="list-style-type: none"> <li>• Training Assessment</li> <li>• Procedural Assessment</li> <li>• Project Cutover Communication Assessment</li> <li>• Evolution Vision Assessment</li> <li>• Technical Assessment</li> <li>• Corrective Action Recommendations</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Participate in formal review of Readiness Assessment Report</li> <li>• Escalate areas that require additional attention to Steering Committee</li> <li>• Review and accept DED-18</li> </ul>	

**Tyler Role:**

- Conduct Readiness Assessment measurements
- Create Readiness Assessment Report
- Lead formal review of Readiness Assessment Report

**Acceptance Criteria:**

- The Readiness Assessment Report contains sufficient detail to allow the Client to evaluate the organization's preparedness for moving into Production Cutover.
- The respective Tyler and Client project team members have resolved all material content and/or quality issues.
- The deliverable is free of formatting and spelling errors.

**Stage 5: Production Cutover**

Production Cutover begins with the carefully planned and executed end of activities in the legacy system, as outlined in the Production Cutover Plan. Final conversion passes are run and delivered back to the City quickly for an expedited validation, then loaded in the Production database, once approved. Any held transactions from the cutoff point until when the final conversions are loaded may now be entered. Upon the City's authorization, Live Processing will begin.

Tyler's staff will be 'all hands-on deck' for this Production Cutover to support the process. On call Support & Technical Team staff will also be available and the Tyler Project Manager will have a direct line to access whatever help is needed.

Once the City is live on Tyler's products, the knowledge transfer from Tyler Implementation to Tyler Support begins. Even though our proposal includes an extended onsite post-live implementation support period it's critical for the City to have immediate access to Tyler's Support Team... and for that team to already know and understand the specific set-up of the City's system.

Tyler Consultants continue to provide onsite support, helping to resolve any issues, filling training gaps, and conducting post-live training, such as Month-End, Reporting, and Reconciliation. Tyler Consultants will also work to evaluate where the City may have partial process collapses or slowdowns resulting from workflow issues or find the need to make minor adjustments. A Post Live Efficiency Report ([DED-19](#)) will be produced with recommendations on steps that the City can take to further improve operational performance results.

Finally, an Evolution Assessment Report ([DED-20](#)) will be produced, measuring the baseline outcome of the Evolution against the stated goals. This is key in identifying and comparing anticipated vs. realized benefits resulting from the investment in Tyler software and services.

Transitioning to Tyler Support at the end of this Stage brings active implementation to a close for the applicable Phase.

*Stage 5: Production Cutover Deliverables*

<b>Deliverable Name:</b> Post Live Efficiency Evaluation Report	<b>DED-19</b>
<b>Objective:</b> Provide information related to the organization's adoption of new processes, identification of process flow congestion points, re-emergence of shadow systems, and the need for additional training, and adoption of Evolution vision.	
<b>Scope:</b> All functional and technical areas involved in the project.	
<b>Format:</b> MS Excel	
<b>Outline:</b> Post Live Efficiency Evaluation Report will contain: <ul style="list-style-type: none"> <li>• Project Goals vs Post Live State</li> <li>• Approved Processes vs. In Practice Processes</li> <li>• Tool Utilization vs Shadow Systems</li> <li>• Areas of Additional Process Improvement</li> <li>• Organizational Evolution Measurement</li> </ul>	
<b>Client Role:</b> <ul style="list-style-type: none"> <li>• Participate in collection of data for development of Post Live Efficiency Evaluation Report</li> <li>• Escalate areas that require additional attention to Steering Committee</li> <li>• Review and accept DED-19</li> </ul>	
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>• Conduct Post Live Efficiency Evaluation assessments</li> <li>• Develop Post Live Efficiency Evaluation Report</li> <li>• Lead formal review of Post Live Efficiency Evaluation Report</li> </ul>	
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>• The Post Live Efficiency Evaluation Report contains enough detail to provide the Client with specific means to measure performance and identify areas of improvement.</li> <li>• The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>• The deliverable is free of formatting and spelling errors.</li> </ul>	

<b>Deliverable Name:</b> Evolution Assessment Report	<b>DED-20</b>
<b>Objective:</b> Provide a detailed assessment evaluating the success of completing the Evolution Plan and meeting ROI expectations.	
<b>Scope:</b> All functional and technical areas involved in the project.	
<b>Format:</b> MS Word	
<b>Outline:</b> Evolution Report will contain:	
<ul style="list-style-type: none"> <li>• Anticipated Benefits vs. Benefits Realized</li> <li>• Benefits Realization Timeframe <ul style="list-style-type: none"> <li>• Baseline at current point in post live period</li> </ul> </li> </ul>	



<ul style="list-style-type: none"> <li>Expected duration of process</li> </ul>
<b>Client Role:</b> <ul style="list-style-type: none"> <li>Participate in collection of data for development of Evolution Assessment Report</li> </ul>
<ul style="list-style-type: none"> <li>Participate in a formal review of report.</li> <li>Review and accept DED-20</li> </ul>
<b>Tyler Role:</b> <ul style="list-style-type: none"> <li>Conduct Evolution Assessment Analysis</li> <li>Develop Evolution Assessment Report</li> <li>Lead formal review of Evolution Assessment Report</li> </ul>
<b>Acceptance Criteria:</b> <ul style="list-style-type: none"> <li>The Post Live Efficiency Evaluation Report contains enough detail to provide the Client with specific means to measure achieved benefits, revenue, and ROI.</li> <li>The respective Tyler and Client project team members have resolved all material content and/or quality issues.</li> <li>The deliverable is free of formatting and spelling errors.</li> </ul>

#### Stage 6: Phase/Project Closure

As the final stage in the Phase or Project, Tyler closes the project with an accountant's precision. We audit the project for compliance with the contract and ensure that we have met, or surpassed, the requirements. A thorough Project Reconciliation Report ([DED-21](#)) is prepared, outlining the project budget in detail and how funds have been expended. When all of these items are delivered, reviewed, and accepted, Tyler considers the Phase/Project closed.

#### Stage 6: Phase/Project Closure Deliverables

<b>Deliverable Name:</b> Project Reconciliation Report	<b>DED-21</b>
<b>Objective:</b> Provide a detailed project reconciliation report to ensure proper handling of the project budget, scope, and accounting.	
<b>Scope:</b> All software and services involved in the project.	
<b>Format:</b> MS Word or MS Excel	
<b>Outline:</b> Project Reconciliation Report will contain:	
<ul style="list-style-type: none"> <li>Accounting of all contract line items</li> </ul>	
<ul style="list-style-type: none"> <li>Change Orders and Amendments (if any)</li> <li>Disposition of unused services</li> <li>Final project budget</li> </ul>	
<b>Client Role:</b>	
<ul style="list-style-type: none"> <li>Participate in a formal review of report.</li> <li>Review and accept DED-21</li> </ul>	
<b>Tyler Role:</b>	

- Conduct detailed accounting analysis of Project budget
- Develop Project Reconciliation Report
- Lead formal review of Project Reconciliation Report

**Acceptance Criteria:**

- The Project Reconciliation Report contains the detail to provide the Client with specific means needed to validate compliance with contract terms.
- The information contained in the Project Reconciliation Report is accurate.
- The respective Tyler and Client project team members have resolved all material content and/or quality issues.
- The deliverable is free of formatting and spelling errors.

## 6.2 TIMING / ORDER OF PROPOSED ROLLOUT

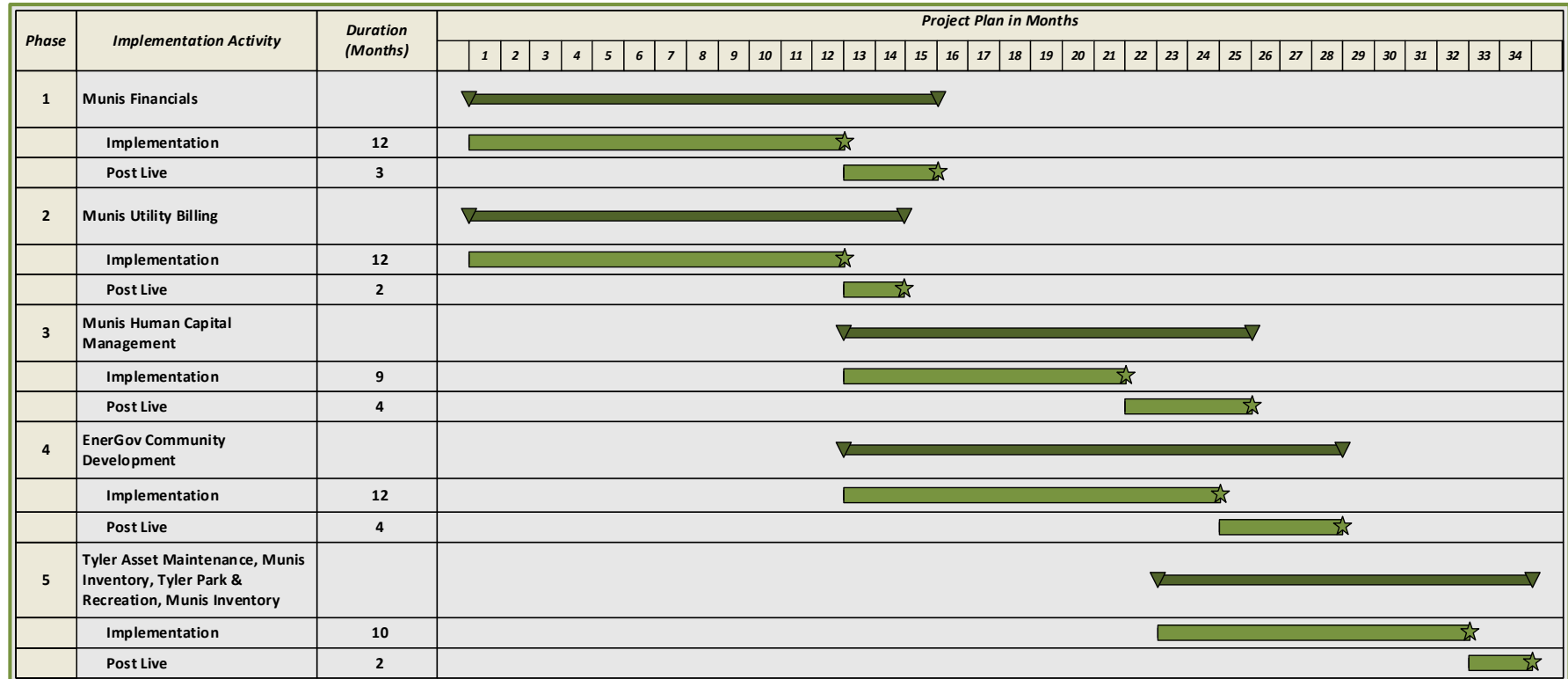
### 2. Timing / order of proposed rollout (by geography, application/module, etc.)

We recommend a phased implementation approach with staggered start and live dates for each phase of the project. Because the City is interested in bringing Utility Billing up as the first phase to go into production, Tyler recommends that the Financials phase be implemented in parallel with Utility Billing. Since the Chart of Accounts and General Ledger is the core to the entire system and so much of what transpires in financials departments can determine key procedures in other departments, having Financials established early will produce stability and immediate gains for the City. Our proposal includes five major phases. The project will initiate with both the Financials Phase (Phase 1) and Utility Billing Phase (Phase 2). Tyler recommends taking the General Ledger live first, several months prior to the rest of Core Financials and Utility Billing going live. HCM/Payroll/ExecuTime (Phase 3) follow immediately, along with EnerGov Permitting & Inspections and Professional Licensing (Phase 4). Once HCM/Payroll/ExecuTime activities are complete, Inventory, Asset Maintenance, and Asset Performance (Phase 5) can complete the implementation cycle. The staggered phasing also allows for the City to experience the exact same 6-Stage Implementation Methodology from one phase to the next. This predictability and consistency reduces risk and resistance and the organization has an opportunity to witness the successes from the previous phase.

## PROPOSED PROJECT PHASES

### *Proprietary and Confidential – Subject to Restrictions on Disclosure*

Tyler is prepared to adjust the project schedule, in particular Munis Utility Billing Go Live date, to meet the City's requested Utility Billing timeline upon finalized actual selection and contract dates.



## 6.3 PROJECT PLAN

### 3. Proposed project plan with milestones (please provide sample)

During the Planning Stage of the project, a project plan will be created by the project teams that will serve as a working document throughout the entire project. These teams will meet regularly throughout the project to foster communication and ensure that all tasks are on schedule. In addition, periodic reviews and project meetings will be scheduled where changes in scope, project length, or cost will be discussed. Any change to the overall plan, and specifically the project plan, will be agreed to by the two project teams. The original project plan, as well as any subsequent versions of the document will be posted on the Project SharePoint Site and available to all project participants. This open access to project documents helps to ensure good communication among all project stakeholders.

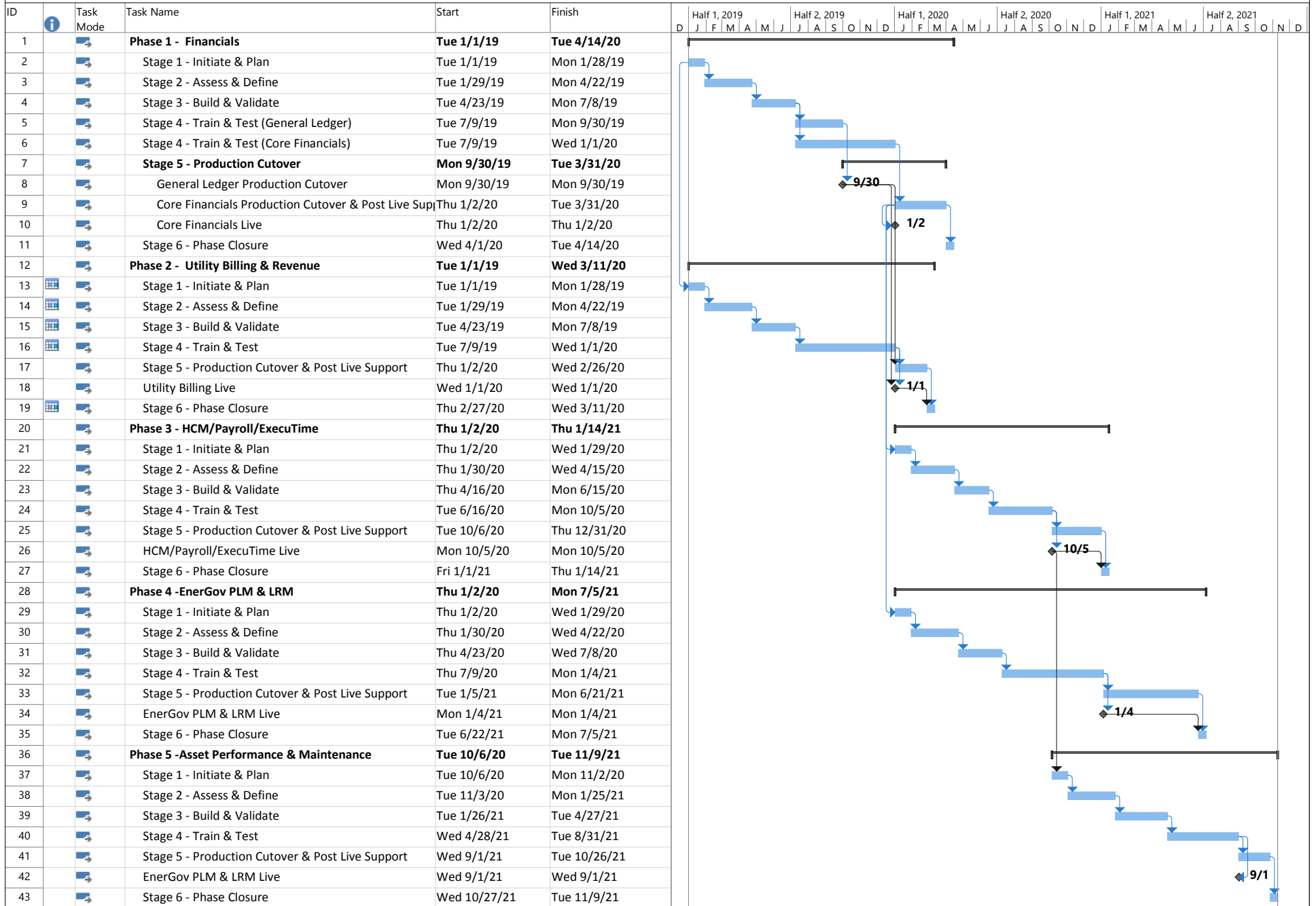
Please reference the attached sample Gantt Chart which outlines the tasks and milestones involved in implementation project. An important part of the custom project plan is the project timeline and schedule which is developed using MS Project and will be displayed through the Project SharePoint site in several different formats. A custom version will be created during the planning stage of the project by the project teams.

#### 6.3.1 GANTT CHART

Please reference the Gantt Chart on the following pages.



## City of Pembroke Pines, FL - Gantt Chart



## 6.4 RESOURCE COMMITMENT

### 4. City of Pembroke Pines resource commitment assumptions and percentage of time required by each resource

Tyler actively seeks the best talent to help us develop, implement and support our solutions for our clients. We recognize that our ability to hire the best candidates ultimately impacts our clients. We maintain a robust staff of exceptional people, some of whom may become candidates for the City's project team depending of their skillset, experience, location, and fit. Many of our employees have experience working for public sector agencies prior to joining Tyler. As a result, they bring value to Tyler's projects because they understand operations from unique cross-vantage points and move easily in the public-sector world. Others come to Tyler with equally unique and valuable skills, subsequently developing extensive public-sector industry experience through real world ERP implementation exposure before being assigned to large, complex projects like the City of Pembroke Pines.

At Tyler, we believe in providing superior, experienced and focused management resources to our clients and are committed to doing so. Tyler's ERP public sector-focused staff of more than 370 Implementation Consultants and Project Managers have on average tenure 3.5 years for Implementation Consultants and 9.5 years for Project Managers. For Lead positions, we select Implementation Consultants with a minimum of 5 + years of direct, germane experience to lead the discovery and design efforts.

The City's primary point of contact throughout the project is the PMP certified Tyler Project Manager. The Tyler Project Manager will guide the project from start to finish, following our PMI-based methodology and work breakdown structure. The Tyler Project Manager will be onsite, building relationships and consensus with key City project members, while directing project activities, including full oversight of the project, coordinating Tyler resources across departments, managing the budget and schedule, and maintaining effective risk and issue mitigation and management.

We have provided the requested information for the noted personnel in Exhibit B. In reviewing and understanding the City's goals and requirements, we must provide a team best suited to deliver services capable of helping the City achieve its vision. We believe this is one of the most critical steps in preparing for success in the ERP life cycle and appreciate your patience as we make arrangements for the specific resources to be selected for your project once the timeline has progressed to the point of selection. This is not a casual decision and, in our opinion, requires more in-depth discussion to ensure the correct fit and expertise for the numerous assignments is allocated at the appropriate time.

In the provided representative resumes, each member has listed recent projects and work experience. The implementation team is structured to include several layers of resources for a well-developed implementation staff with experience working on similar client implementation projects.



Our proposed project team includes a Full Time, Dedicated Project Manager, Subject Matter Leads (Financials, Procure to Pay, Payroll/HCM/Time & Attendance, Advance Scheduling, Utility Billing, Enterprise Asset Maintenance, Change Management), additional support from other Implementation Consultants for training, custom Reporting Writing resource, and numerous other part-time, offsite resources.

#### *Pembroke Pines Project Staffing Levels*

	% Full Time Employment				
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>Project Manager</b>	1.00	1.00	1.00	1.00	1.00
<b>System Administrator</b>	0.30	0.30	0.30	0.30	0.30
<b>Functional Leaders</b>	0.95	0.63	0.68	0.67	0.78
<b>Power Users</b>	1.08	0.72	0.77	0.76	0.88
<b>Conversion Specialist</b>	0.38	0.38	0.28	0.38	0.18
<b>Internal Trainers</b>	0.09	0.05	0.05	0.05	0.05
<b>Change Management Lead</b>	0.30	0.30	0.25	0.15	0.15

#### *Tyler Project Staffing Levels*

<b>Project Manager</b>	1.00	1.00	1.00	1.00	1.00
<b>Deployment Team / Tyler System Management</b>	0.10	0	0	0	0
<b>Implementation Lead(s)</b>	2.00	1.25	1.25	1.25	1.25
<b>Conversion Programmer</b>	0.20	0.20	0.15	0.20	0.10
<b>Forms Designer</b>	0.03	0.03	0.03	0.03	0.03
<b>Change Management Lead</b>	0.10	0.10	0.10	0.05	0.05

## 6.5 PROPOSED VENDOR IMPLEMENTATION TEAM

### 5. Composition (including names and titles) of proposed vendor implementation team

#### TYLER RESOURCES

Tyler actively seeks the best talent to help us develop, implement and support our solutions for our clients. Our staff consists of seasoned professionals with unique and proprietary skills, and years of industry experience, who are focused into dedicated departments. Our product expertise is strengthened by the fact that many of our employees have years of experience working at public sector agencies prior to joining Tyler. These professionals bring a unique perspective to Tyler's mission because they truly understand what our clients need to operate at their best.

Name | Annette H.

<b>Title</b>	Project Manager	
<b>Education</b>	<p>Doctorate in Business Administration (DBA) - Current Saint Leo University, Florida</p> <p>Master's Degree in Project Management - 2011 DeVry University, Keller Graduate School of Management, Illinois</p> <p>Master's Degree in Business Administration - 2010 DeVry University, Keller Graduate School of Management, Illinois</p> <p>Bachelor's Degree in Science – Accounting - 2007 High Point University – North Carolina</p>	
<b>Tenure</b>	11 Years	
<b>Previous Experience</b>	<p>Implementation Consultant – Tyler Technologies – 3 years</p> <p>Staff Accountant — Food Lion</p>	
<b>Reference Projects</b>	<p><i>Spartanburg County, SC – Overall Dedicated PM</i></p> <p><i>Pasco County, FL-- Overall Dedicated PM</i></p> <p><i>City of Charlotte, NC – Functional Lead</i></p> <p><i>City of Plant City, FL – Project Manager</i></p>	<p><i>Alexandria City Public Schools, VA– Project Manager</i></p> <p><i>Sussex County, DE– Project Manager</i></p> <p><i>Cobb County Public Health, GA– Project Manager</i></p>

<b>Name</b>	Rebecca U.	
<b>Title</b>	Project Manager	
<b>Education</b>	<p>MASTER OF BUSINESS ADMINISTRATION – DECEMBER 1997 Southeastern Louisiana University, Hammond, LA</p> <p>BACHELOR OF SCIENCE, ACCOUNTING – DECEMBER 1994 Southeastern Louisiana University, Hammond, LA</p>	
<b>Tenure</b>	13 Years	
<b>Previous Experience</b>	<p>Implementation Consultant – Tyler Technologies – 2 years</p> <p>Assistant Director of Human Resources &amp; Payroll – Tangipahoa Parish School System – 10 years</p>	
<b>Qualifications &amp; Technical Skills</b>	<p>PMP Certification</p> <p>PMI-RMP Certification</p>	

<b>Reference Projects</b>	CERTIFIED LOUISIANA SCHOOL BUSINESS OFFICIAL – APRIL 1997 Louisiana Association of School Business Officials, LA CERTIFIED PUBLIC ACCOUNTANT – JANUARY 1996 Louisiana State Board of Certified Accountants, New Orleans, LA	
	<i>Pasco County School District, FL --Dedicated Overall ERP Implementation Project Manager</i> <i>City of Baton Rouge &amp; Parish of East Baton Rouge, LA --Dedicated Overall ERP Implementation Project Manager</i> <i>Jefferson County, AL--Dedicated Overall ERP Implementation Project Manager</i>	<i>St. Bernard Parish School System, LA – Project Manager</i> <i>Lafourche Parish School System, LA– Project Manager</i> <i>St. Louis County, MO– Project Manager</i> <i>Burke County, NC– Project Manager</i> <i>City of Davenport, IA– Project Manager</i> <i>Government of the United States Virgin Islands– Project Manager</i> <i>City of Asheville, NC– Project Manager</i>

<b>Name</b>	Rob S.	
<b>Title</b>	Implementation Consultant	
<b>Education</b>	DePauw University, Greencastle, IN	
<b>Home Office</b>	Raleigh, NC	
<b>Tenure</b>	19 Years	
<b>Previous Experience</b>	Implementation Consultant– Creative Compute Solutions– 2 years Implementation Consultant– A. L. Roark & Associates– 2 years	
<b>Qualifications &amp; Technical Skills</b>	PMP Certification Proficient in MS Office, MS Project, MS SharePoint.	
<b>Reference Projects</b>	<i>City of Miami Beach, FL</i> <i>City of Sunrise, FL</i> <i>Jefferson County, AL</i>	<i>USVI</i> <i>Cobb County Schools, GA</i> <i>City of Pinellas Park, FL</i>

<b>Name</b>	John F.
<b>Title</b>	Implementation Consultant

<b>Education</b>	Auburn University, Auburn, AL	
<b>Home Office</b>	Opelika, AL	
<b>Tenure</b>	6 Years	
<b>Previous Experience</b>	Senior Software Consultant– SunGard Public Sector– 4 years Information Technology Director– City of Opelika, AL– 24 years	
<b>Qualifications &amp; Technical Skills</b>	Proficient in MS Office	
<b>Reference Projects</b>	<i>Eastern Band Cherokee Indians</i> <i>Manassas, VA</i> <i>Pinellas Park, FL</i>	<i>Columbia, MO</i> <i>Oklahoma County, OK</i> <i>Hallandale Beach, FL</i>

<b>Name</b>	Priscilla P.	
<b>Title</b>	Implementation Consultant	
<b>Education</b>	Southeastern Louisiana University	
<b>Home Office</b>	Raleigh, NC	
<b>Tenure</b>	5 Years	
<b>Previous Experience</b>	Technical and Training Coordinator - Child Nutrition Services– Tangipahoa Parish School System– 12 years	
<b>Qualifications &amp; Technical Skills</b>	Proficient in MS Office	
<b>Reference Projects</b>	<i>City of Baton Rouge/Parish of East Baton Rouge, LA</i> <i>Troup County Schools, GA</i>	<i>Cumberland County, NC</i> <i>Brooks County Schools, GA</i> <i>Lebanon, TN</i> <i>Kannapolis, NC</i>

<b>Name</b>	Jennifer G.	
<b>Title</b>	Implementation Consultant	
<b>Education</b>	University of Southern Maine	
<b>Home Office</b>	Yarmouth, ME	
<b>Tenure</b>	5 Years	
<b>Previous Experience</b>	Project Manager– WEX Inc– 5 years	
<b>Qualifications &amp; Technical Skills</b>	Proficient in MS Office	
<b>Reference Projects</b>	<i>Amarillo, TX-Implementation Consultant</i> <i>Ann Arundel, MD-Implementation Consultant</i> <i>League City, TX-Implementation Consultant</i> <i>Newark, NJ -Implementation Consultant</i> <i>Derry, NH-Implementation Consultant</i> <i>Buckeye, AZ-Implementation Consultant</i> <i>Deltona, FL -Implementation Consultant</i>	

<b>Name</b>	Nathan B.	
<b>Title</b>	Implementation Consultant	
<b>Education</b>	Husson University	
<b>Home Office</b>	Yarmouth, ME	
<b>Tenure</b>	5+ Years	
<b>Previous Experience</b>	Tier 3 Support Technician – Time Warner Cable – 3 years	
<b>Qualifications &amp; Technical Skills</b>	Implementer for more than 10 EnerGov Projects. Proficient in MS Office, MS Project, MS SharePoint, SQL, XML.	
<b>Reference Projects</b>	<i>Louisville, CO</i> <i>Buckeye, AZ</i> <i>Missouri City, TX</i> <i>Portland, ME</i> <i>Allen, TX</i> <i>La Crosse, WI</i> <i>Surprise, AZ</i> <i>Addison, TX</i>	

## 6.6 ADDITIONAL THIRD-PARTY SUPPORT

### 6. Additional third-party support or consulting required to implement your proposed solution

Tyler does not hire third party companies for the implementation of our solutions: Munis, EnerGov, ExecuTime, Parks and Recreation, Tyler Notify, Tyler Content Manager, and all other products proposed under the Tyler Software listing. Tyler staff implement Tyler products. Tyler is 100% public sector focused and our employees develop, implement and support more than 15,000 public sector clients.

## 6.7 INTERFACE STRATEGY

### 7. Interface strategy (compatible technology, available tool sets)

#### *Munis*

Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.

#### **Full Integrated ERP Solution**

When evaluating a new ERP system, it is very common clients are looking to replace several disparate systems with a single, integrated ERP solution. Since every Munis application is integrated with one another, sharing a single database, many existing interfaces are commonly eliminated when moving from several disparate systems. For example, with Munis an employee raise initiated by a Human Resources personnel action, automatically updates Payroll and the General Ledger.

#### **File-based integration**

Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.

Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.



## Microsoft Office Integration

Tyler applications are designed to easily integrate with the Microsoft Office suite.

Data can be exported to Microsoft Word directly from many Tyler applications. Some applications even leverage Word's mail merge functionality allowing users to easily create and maintain form templates for completely customized presentation of application data. Word Mail Merge exports are also automatically archived in Tyler Content Manager for quick retrieval at any time.

Applications include a variety of integrations with Microsoft Excel. Users can easily export application data directly to Microsoft Excel from most applications. Excel exports aren't just raw data dumps; exported data maintains the same formatting as the application including dates and currency data. Many exports include a link back to the corresponding record in application. Microsoft Excel is also one of many formats supported for bulk data exports and imports, which can also be scheduled for automated processing. Munis also includes an add-in to process Next Year Budget Entry directly in Excel using web services, saving from having to retrain users on basic application navigation each budget season.

Finally, many Tyler applications include integration with Microsoft Exchange calendars for appointments, meetings, and vacation requests. Email notifications and alerts can be sent using most email servers, including Microsoft Exchange.

## App Connectors

Munis includes a variety of App Connectors; pre-packaged web service integrations providing plug-and-play support with specific third-party applications. Tyler develops and maintains all App Connectors, requiring no development expertise from the client to configure.

## Munis API Suite

Tyler has extensive experience utilizing web services and APIs for application integrations. Historically, Munis APIs were provided to individual clients as part of their contract or statement of work. In 2018, Tyler's Munis Open API initiative was created to provide consistent, developer friendly, well documented, integration points through industry best practices. The Munis Open API Suite will include a library of exposable application programming interfaces (APIs), and API Recipes for integrating external applications with Munis. Comprehensive developer API documentation and resources will also be provided through Tyler's Developer Portal.

Munis APIs are a collection of API resources (or endpoints) packaged together per product module, e.g., General Ledger, Accounts Receivable. All Munis APIs conform to OpenAPI 3.0 specifications for Representational State Transfer (RESTful) based architecture and use OAuth2 protocol for user authorization. REST is the industry preferred standard for API development and scales very well since the client and server are loosely coupled. With REST, the server is free to change the exposed resources without breaking existing resources. Data can be exchanged in a flexible format using either JSON (default) or XML.

API recipes included with Munis APIs are designed to make integrations more accessible. Recipes provide an aide to developers creating their own integrations. While Munis APIs are specific to a

single module, an API Recipe includes a combination of API resources commonly used to accomplish a specific integration.

Tyler's web-based Developer Portal provides developers with documentation and testing resources for APIs and API Recipes through an industry standard experience built on Swagger UI and API framework. Documentation includes an explanation of all resources available within each module API, including associated operations and data elements. Developers can view examples of API calls and responses and test calls in an interactive manner.

### *EnerGov*

Tyler's EnerGov solution is integrated with Tyler Cashiering, Tyler's Munis solution, Tyler's Incode solution, Tyler Content Manager, Tyler Asset Maintenance, Tyler Incident Manager, Esri ArcGIS Server, Esri ArcGIS online, and Voxeo IVR.

Tyler's EnerGov solution is also integrated with the Microsoft Suite of products, allowing for export via Word, Excel, or CSV file. Additionally, EnerGov provides the ability to upload Microsoft files to records through the application, including permits, plans, inspections, properties, contacts, etc, and quickly open the files through the record. Tyler-EnerGov is also integrated with Microsoft Exchange allowing for seamless calendar integration.

EnerGov provides industry-pioneering and award-winning ESRI-based GIS integration that introduces a new dimension of visualization and analysis capabilities to end users, executive stakeholders and GIS professionals alike. EnerGov GIS adds a powerful facet to the EnerGov suite of products by enabling a GIS-centric approach to an agency's business process management. Below you will find additional detailed information regarding some inner workings of the tightly integrated GIS technology provided by EnerGov and ESRI. All EnerGov communication with ESRI ArcGIS and spatial data (aside from the history service) takes place via ArcGIS map services (i.e. EnerGov's integration with ArcGIS consumes feature sets / layers that the agency chooses to publish).

**EnerGov Live Link:** Integrated (real-time) Address, Parcel and Owner querying within EnerGov for validation requirements, buffering with label creation, map analysis, etc.

- **GeoRules:** Ability to initiate a spatial query, and return data from GIS to either, map a value to a field, add a fee to a record, or even adjust the workflow for a record (i.e. add an inspection to a permit workflow if the permit location is in a flood plain)
- **GIS History Writing:** Ability to capture spatial information about records created in EnerGov (permits, plans, inspections etc) and transmit this data to an "EnerGov" polygon layer in your SDE database, so maps demonstrating concentration and trends can be designed in ArcGIS
- **EnerGov Spatial Collections:** Ability for your users to create their own spatial features on the map (i.e. draw a polygon) in order to create an EnerGov record associated to this shape's geometry. For instance, if I issue an Encroachment permit to do some work on a sidewalk in the right of way, your users could draw a circle around this piece of sidewalk, and permit against that area, instead of the parcel or address.
- **Routing:** Ability to route inspections and cases utilizing a routing service or network analyst.

- **Parcel Split/Recombine Service:** The EnerGov Parcel Split / Recombine Service (.exe) was developed to detect changes in the geometric variations (shape) of parcels / polygons over time (i.e. splits, recombines). By using this service, EnerGov can compare the current shape of a parcel polygon with the historical shape as stored in the EnerGov Polygon History Feature Class. If changes are detected, EnerGov will flag any records associated with the historical parcel polygon and provide the user with a visual representation of those cases as well as the old and new parcel shape. The user then has the ability to associate the preexisting cases with the new parcels / polygons.

Tyler's EnerGov solution also offers a full suite of APIs designed to expose core EnerGov business objects which are utilized for interfacing with other external applications. The APIs are exposed as a RESTful JSON service layer installed as an IIS based application. Below is a visual representation of the architecture of our API.

## 6.8 DATA CONVERSION STRATEGY

### 8. Data conversion strategy (responsibilities, available tool sets)

The data conversion process can be the most time-critical element of your project plan. And as such, Tyler develops crucial steps in our implementation process to support a successful data conversion plan. Our resources complete hundreds of data conversions for our implementation projects every year using a process involving data mapping from our clients' legacy system and programs/scripts written by our conversion programmers. For all data coming from the City's system(s), Tyler has streamlined toolsets and processes for successful, reduced effort conversions.

Because we have proposed dedicated Leads for most of the significant functional areas, their knowledge and ability to interface with our conversion programmers will further facilitate the data conversion process. These resources will work with City resources to craft a detailed conversion plan, ensure that thorough analysis, mapping, and cross-walking is performed, and validate that the data extracts from the City's sources are readable and ready for programming. Working with other programmers, if necessary, custom programs are written to convert City data to fit the Munis database requirements. Once the programs are written and run against the data, error reports are generated to identify any sources of issues. If errors come from the data itself, corrections are made, and the data can be resubmitted for another conversion pass. When the data is ready to be loaded into Munis, it is done so in a TEST environment, isolated from other ongoing implementation activities.

Tyler Leads and/or Implementation Consultants review the data for balancing errors, total counts, and other types of issues that can be identified without familiarity with the City's materials. Corrections are made to the conversion program, the program is rerun against the data, and the data returned for a second validation.

At this point it is typically time to introduce the City's resources to the validation process. Tyler will train City staff how to validate the data and assist them in the process. This is repeated until we either reach 100% accuracy or there is an acceptable and explainable delta, such as a minor rounding issue, or an incorrect calculation in the legacy system, etc. In our experience, the conversion process

reaches conclusion in 3-4 passes in total, with a final pass occurring immediately prior to Production Cutover.

The steps for the Conversion Process all fall within other ongoing implementation activities. The following sections outline the activities in greater detail.

#### STAGE 2 - Assess and Define: Data Mapping and Design

At the beginning of the project, data from your legacy application is mapped to the Tyler system by Tyler Leads/Implementation Consultants and City experts. The City will be expected to ensure that the data extracted is well defined and conforms to the same format with each extract. The Assess and Define stage sets a path which, when followed precisely, leads to success with subsequent conversion activities in the remaining project stages. This critical step includes, but is not limited to:

- Comprehensive mapping and migration of legacy data
- Creation of a road map defining conversion approach, data extract strategy, conversion and reconciliation strategy
- Outline of migration mandates and best practices governing the layout of the destination storage environment

Such communication will include:

- Comprehensive review and evaluation of legacy system data with specific attention to general data quality, viability and identification of overt “scrubbing” necessities

#### STAGE 3 - Build and Validate: Conversions and validation

Tyler’s conversion programmer examines the City’s data files and layouts, and uses the supporting materials to interpret, crosswalk and generally re-arrange the data from the legacy system into the new database. Working with Tyler Leads/Implementation Consultants and City, when needed, conversion errors and discrepancies are identified and reported. This iterative data conversion and validation stage includes:

- Data loaded, tested, reviewed, and validated
- Stakeholder acceptance of data quality, viability and operability

Much attention is given to data integrity during the testing phase by the conversion developers. The conversion developer spends time testing to ensure the data conforms to the database definition and standards. The Tyler Lead/Implementation Consultants and City Project Team will work together on testing the balances and output of processes after the conversion to allow you to be confident that the provided data was captured accurately.

#### STAGE 5 - Production Cutover: Final Data Conversions

The final step in the process is the final data conversion into the production environment. Tyler extracts a final data packet, typically immediately before Production Cutover, thus transferring ownership and maintenance of the data to you for all data in the Tyler system. Because the conversion programs’ performance and the converted data have been vetted thoroughly during

earlier stages, the final data conversion is typically a greatly simplified event, allowing for final validation to take place in a matter of hours.

#### DATA PREPARATION

- Data Scrubbing and Reports

Tyler recommends that you conduct due diligence to ensure that your team delivers clean data, as this will make data validation efforts more seamless and result in a higher quality migration. We recommend creating control reports and screenshots for use in proofing the conversion later in the process. Your team and the Tyler Project Manager decide which reports are required. For verification purposes, it is imperative that reports for proofing be run at the same time that data is created for transfer to Tyler. There should be no intervening transactions posted between the data transfer and the reporting. We emphasize this point as it is difficult to match the data to the output on the report if these standards are not met.

## 6.9 TRAINING AND DEPLOYMENT

### 9. Training and deployment (approach to training)

A significant element of any implementation is training users at all levels. Fully trained users understand how to use new processes and to record and report information that helps them to do their jobs better and provide invaluable data for upstream decision-making and citizen transparency portals. This is critical to user acceptance of the system and crucial to achieving a positive customer experience.

Tyler offers several training formats to accommodate our diverse clients' needs. On-site training by Tyler staff provides hands-on learning in City labs. Tyler also provides flexible alternatives including remote collaborative training technology and may offer video and software tutorial media. Regardless of the scope or logistics, City resources receive consultative knowledge transfer sessions that are a combination of lecture and hands-on education, using City-specific data.

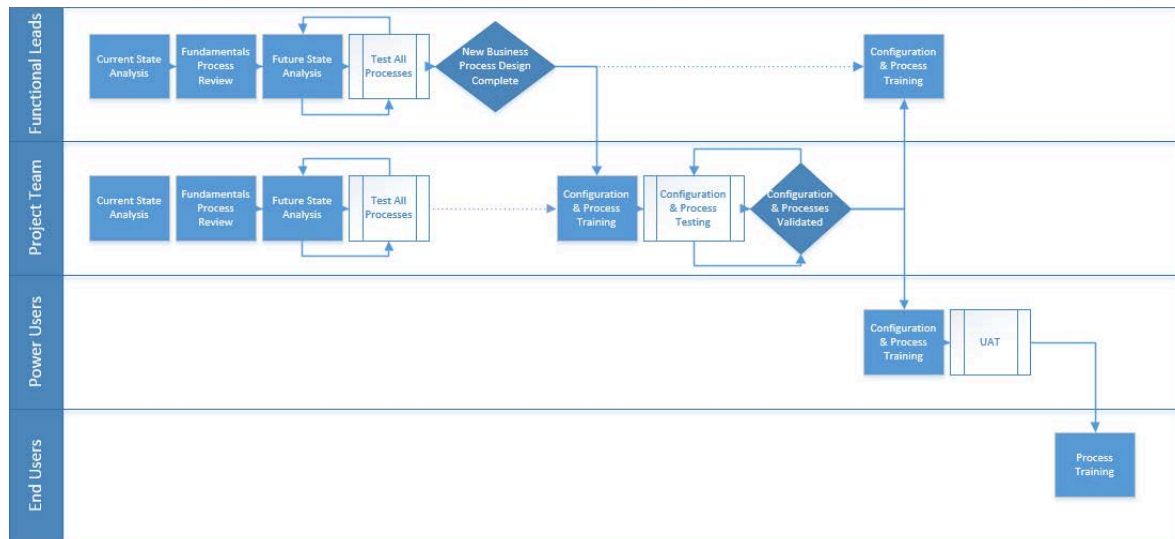
Tyler has developed a dynamic set of training and education resources and services that are tailored to your needs, the Tyler products you are implementing, and the scope of your project budget.

#### TRAINING METHODOLOGY

A mutually developed education plan lays out the process of transferring knowledge to the City Staff. We refer to our plan as an "education plan" as opposed to a "training plan" for several reasons.

First, the process of transferring knowledge is vital to the analysis phase of our project. During analysis we review the current environment, provide Tyler product introductions, review questionnaires, conduct interviews, develop process outlines, and ultimately arrive at a future state model. The future state model, once tested and approved, becomes the foundation for user training.

Second, training denotes a classroom setting with teacher and pupil. While training will occur, it is only a piece of the overall education needed to be a proficient Tyler software user.



### Fundamentals Review

In this step, decision-makers and subject matter experts become familiar with Tyler products and their capabilities, language and processes before the start of the future state analysis. A complete, scenario-based demonstration is performed in each applicable program, showing how data moves through the applications, the integration aspects, terminology that may be unique, concepts that are new, technology options, etc. This allows participants to better engage with Tyler Leads/Implementation Consultants during analysis sessions and empowers them with a more complete understanding of the system. It also provides a strong foundation for ongoing conversations regarding future state processing options.

### Configuration and Power User Training

This training enables Power Users to validate newly designed processes in the new Tyler software based on the design derived from the future state analysis sessions. Power User training includes learning how to validate data conversions, perform configuration validation testing, third-party data exchange validation, forms/reports validation and customization validation (if needed). During this training phase all processes will be trained thoroughly so unit testing can be accomplished and new processes validated end-to-end. A select group of these users will be trained on maintaining the system configuration tables so that future changes, should they be required, can easily be made without Tyler's involvement.

### Train the Trainer

Tyler will provide training to the City's training staff and prepare them to deliver decentralized end user training. The End User Guides that are part of our Training Materials will assist in preparing the City trainers and help end users absorb the material more quickly. One of the benefits of the Train the Trainer approach is that the City develops resources that can continue to help remote resources and provide help desk support.



### System Administration Training

System administration training is conducted after the servers and software are installed to show the City how to update users, permissions, menu security, workflow administration, etc. The City System Administrator attends these sessions and functional leaders should also attend to have a thorough understanding of the permissions and options available.

### Central Office End User Training

After the functional leaders and power users are trained, the system is configured, data is converted and validated, and processes are defined, tested, and approved, End Users attend applicable scheduled training. Tyler recommends conducting this training immediately prior to production cutover.

### Executive Training

Depending on the Education Plan developed at the onset of the project, the City may decide to have Tyler train City Executives on Tyler Hub access and how to get select information from the system that they require for reporting or decision-making purposes. Tyler will design specific curriculum to make sure there is a session prepared to make Tyler applications useful to them, whether it's the City Manager, City Commissioners, or other Executive members.

### Open Labs

Tyler recommends establishing open labs in the week or two prior to Production Cutover so that any user that needs additional guidance or refresher training can easily find assistance in an open lab. Many Tyler clients choose to staff an open lab during Production Cutover so that employees can actually come in and do their first tasks in Munis with someone there to guide them.

### Scheduling and Attendance

Tyler prefers a classroom and curriculum approach for on-site training to maximize the potential for knowledge transfer, comprehension, and retention. A successful user training session is more likely in a classroom environment with a computer for each user (minimum of one computer for every two users, but ideally one per user), a whiteboard, a printer in the room or nearby, and one computer connected to a projector. The size of the class depends on the classroom size and the available computers for training. Ideally, a class size should be limited to twelve (12) users in order to keep the session controlled and ensure that all users are receiving an appropriate level of personalized attention. The specific course topics are discussed and scheduled after analysis, depending on your organization's specific training needs. End User training sessions can be larger but may require City assistance to adequately monitor larger classroom activities.

Attendance to training is critical during implementation. By participating in training courses, City employees gain necessary hands-on experience in the system, and learn the new approach. Tyler's training staff will take attendance during classes, and relay that information back to the City Project

Manager for review. This ensures that users get the complete benefit of training and reduces support incidents after go-live.

#### TRAINING DELIVERABLES

Customized End User Guides outline quick, easy to follow steps for the end users' day-to-day use of Tyler's applications. These guides are specific and customized for the City, except for the general system navigation section, which is standard for all clients. Tyler's Implementation Consultants author and deliver the customized documents in MS Word for each ERP module purchased.

#### POST IMPLEMENTATION SUPPORT & TRAINING

Tyler has proposed extended implementation support for the major phases of this project, which includes post live training, reconciliation, reporting, and process streamlining during this time. Once fully transitioned from implementation, there are a variety of options available for continuing the education of City resources. Please see Section 6.10 for more information on the extensive educational resources available to our clients.

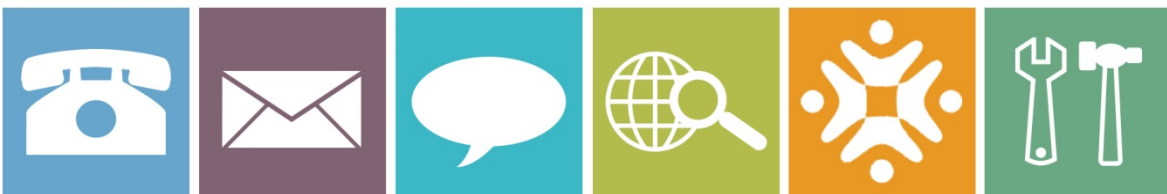
## 6.10 ONGOING SUPPORT AND MAINTENANCE

### 10. Ongoing support and maintenance

Tyler knows that satisfied clients—more than any other single factor—determine a company's ongoing success. We also recognize that superior technical and operational support is critical to our client's satisfaction. We provide a variety of resources and tools to support all aspects of the City's use of all Tyler modules. We want the City to receive the best return on investment possible and our approach to technical support is designed to ensure that the City has everything needed to maximize use of the Tyler solution.

Unlike some companies who outsource their application support to a third party, Tyler offers a complete solution of customer support services provided by our in-house experts. Our mission is to deliver superior service by providing a timely response, issue resolution and operational support, resulting in a high-level of client satisfaction.

We consider our customers our partners in this business, and as such, they have a direct impact on the evolution of the software itself, as well as the policies and procedures for implementing and supporting it. One of the resulting changes is that Support services have been expanded to incorporate a wide variety of options.



## SUPPORT CHANNELS

Tyler Technologies, Inc. provides the following channels of software support:

- Tyler Community – an on-line resource, Tyler Community provides a venue for all Tyler clients with current maintenance agreements to collaborate with one another, share best practices and resources, and access documentation.
- On-line submission (portal) – for less urgent and functionality-based questions, users may create unlimited support incidents through the customer relationship management portal available at the Tyler Technologies website.
- Email – for less urgent situations, users may submit unlimited emails directly to the software support group.
- Telephone – for urgent or complex questions, users receive toll-free, unlimited telephone software support.

## SUPPORT RESOURCES

A number of additional resources are available to provide a comprehensive and complete support experience:

- Tyler Website – [www.tylertech.com](http://www.tylertech.com) – for accessing client tools and other information including support contact information.
- Tyler Community – available through login, Tyler Community provides a venue for clients to support one another and share best practices and resources.
- Knowledgebase – A fully searchable depository of thousands of documents related to procedures, best practices, release information, and job aides.
- Program Updates – where development activity is made available for your consumption

## SUPPORT AVAILABILITY

Tyler Technologies support is available during the local business hours of 8 AM to 5 PM (Monday – Friday) across four US time zones (Pacific, Mountain, Central and Eastern). You may receive coverage across these time zones. Tyler’s holiday schedule is outlined below. There will be no support coverage on these days.

- New Year’s Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

## ISSUE HANDLING

### *Incident Tracking*

Every support incident is logged into Tyler's Customer Relationship Management System and given a unique incident number. This system tracks the history of each incident. The incident tracking number is used to track and reference open issues when clients contact support. You may track incidents, using the incident number, through the portal at Tyler's website or by calling software support directly.

### *Incident Priority*

Each incident is assigned a priority number, which corresponds to your needs and deadlines. Your team is responsible for reasonably setting the priority of the incident per the chart below. The goal of this structure is to help the client clearly understand and communicate the importance of the issue and to describe expected responses and resolutions.

Priority Level	Characteristics of Support Incident	Resolution Targets
<b>1 Critical</b>	Support incident that causes (a) complete application failure or application unavailability; (b) application failure or unavailability in one or more of the client's remote location; or (c) systemic loss of multiple essential system functions.	Tyler shall provide an initial response to Priority Level 1 incidents within one (1) business hour of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within one (1) business day. Tyler's responsibility for lost or corrupted data is limited to assisting the client in restoring its last available database.
<b>2 High</b>	Support incident that causes (a) repeated, consistent failure of essential functionality affecting more than one user or (b) loss or corruption of data.	Tyler shall provide an initial response to Priority Level 2 incidents within four (4) business hours of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within ten (10) business days. Tyler's responsibility for loss or corrupted data is limited to assisting the client in restoring its last available database.
<b>3 Medium</b>	Priority Level 1 incident with an existing circumvention procedure, or a Priority Level 2 incident that affects only one user or for which there is an existing circumvention procedure.	Tyler shall provide an initial response to Priority Level 3 incidents within one (1) business day of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents without the need for a circumvention procedure with the next published maintenance update or service pack. Tyler's responsibility for lost or corrupted data is limited to assisting the client in restoring its last available database.
<b>4 Non-critical</b>	Support incident that causes failure of non-essential functionality or a cosmetic or other issue that does not qualify as any other Priority Level.	Tyler shall provide an initial response to Priority Level 4 incidents within two (2) business days. Tyler shall use commercially reasonable efforts to resolve such support incidents, as well as cosmetic issues, with a future version release.

## *Incident Escalation*

Tyler Technology's software support consists of four levels of personnel:

**Level 1:** front-line representatives

**Level 2:** more senior in their support role, they assist front-line representatives and take on escalated issues

**Level 3:** assist in incident escalations and specialized client issues

**Level 4:** responsible for the management of support teams for either a single product or a product group

You may contact the appropriate Software Support Manager to ensure you are receiving the service needed if an issue arises. After receiving the incident tracking number, the manager will follow up on the open issue and determine the necessary action to meet your needs.

On occasion, the priority or immediacy of a software support incident may change after initiation. Tyler encourages clients to communicate the level of urgency or priority of software support issues so that we can respond appropriately. A software support incident can be escalated by any of the following methods:

**Telephone** – for immediate response, call toll-free to either escalate an incident's priority or to escalate an issue through management channels as described above.

**Email** – clients can send an email to software support in order to escalate the priority of an issue

**On-line Support Incident Portal** – clients can also escalate the priority of an issue by logging into the client incident portal and referencing the appropriate incident tracking number.

## REMOTE SUPPORT TOOL

Some support calls require further analysis of the client's database, process or setup to diagnose a problem or to assist with a question. Tyler will, at its discretion, use an industry-standard remote support tool. Support is able to quickly connect to the client's desktop and view the site's setup, diagnose problems, or assist with screen navigation. More information about the remote support tool Tyler uses is available upon request.

## ADDITIONAL SUPPORT AND IMPLEMENTATION OPTIONS

### *Tyler Systems Management*

Many public sector clients are looking for an additional layer of technical support to assist in managing their technical infrastructure, database, and maintenance needs. Tyler offers an optional level service through our Tyler Systems Management support team. Tyler Systems Management provides expert assistance for all your Munis database and system maintenance needs as well as



provide select hardware peripherals via Tyler's Hardware Loaner Maintenance program. The services offered through Tyler Systems Management include assistance with: installations, routine maintenance, system administrator software training, database tuning, server support, remote system monitoring, data recovery and upgrade services. In addition to specializing in Microsoft operating systems (server and workstation), SQL database engines and network configuration, our team holds industry specific certifications such as Microsoft Certified Solutions Expert (MCSE) and Microsoft Certified IT Professional (MCITP).

Tyler Systems Management is a contract service, much like the Tyler Maintenance Agreement, which is billed on an annual basis and renewed each year. Many of the services provided by Tyler Systems Management are available on a fee-per-incident basis to whom are not currently under an existing contract.

### *Tyler Community*

Tyler Community provides a secure, online setting where clients can go to find answers to common problems, connect with other Tyler users to share ideas, answer posted questions, and access information that is available 24/7. Based on a social networking platform, Tyler Community includes blogs, forums, files, and wikis where both clients and Tyler employees can contribute. Clients and employees use Tyler Community as a dynamic way to troubleshoot problems and share best practices with Tyler's vast community.



Additional benefits include:

- State user groups create an environment for you to easily communicate legislative changes and state-specific subject matter
- Easy access to current information on critical issues
- Helpful technical tips from subject matter experts
- Powerful search capabilities across forums, wikis, files and people

### *Tyler University\**

Tyler University is an e-learning solution to enhance support and training of your employees. Through this learning management system developed by Tyler Technologies, new and existing employees are provided an on-demand solution to acquire and refresh the skills needed to successfully implement and use your system day-to-day.



Tyler University's core modules include: financials, human resources, payroll and technology. Employees in the finance department can train on a wide range of topics from req-to-check, including

requisition entry, creating a change order for a purchase order and purchase order receiving. For the human resources and payroll staff, Tyler University offers courses on the complete payroll process, the power of employee building and applicant tracking. For system administrators, courses include topics on role-based security design, administering the dashboard and role synchronization into Tyler Content Manager. Courses are being added continuously into Tyler University, making it a vital resource for new employees and cross training your team.

\*Not available for all Tyler solutions and products.

### *KnowledgeBase*

The KnowledgeBase provides users with a single, easily accessible location to find all available documentation related to our software. This tool uses a user-friendly search screen which can be accessed through the Support website. Search criteria include the ability to filter by version, search for key words, include only certain types of documentation, or perform system wide searches. Provided through the KnowledgeBase are process documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises, e-learning classes and much more. More than 90% of the documents available are in MS Word format so that they can be easily customized for use in training materials, custom documentation or process checklists.

### *State User Groups*

Tyler clients benefit from networking and peer-to-peer collaboration through state user groups. The majority of user groups are run by clients, who set the meeting agenda, location and frequency, assign topics, and involve the Tyler resources they need. In large states, there may be several user groups or different sessions planned.

Tyler provides staff to demonstrate new functionality and assist with materials and collateral. During the sessions, Tyler representatives collect important feedback and report back to product managers. Many clients form lasting connections with other users within these groups and help to make each other better users of their software.

### *Annual User Conference*

Each year Tyler hosts an annual user conference, which brings together staff and clients from across all Tyler products. Tyler has appropriately named our conference Connect, and each year thousands of clients come to learn about Tyler, our products, and to connect with peers and staff. This premier event helps clients get the maximum use of their Tyler software. Clients can learn more about existing or proposed functionality through dozens of classes over several days. Development product managers attend the event to share their plans for the next upgrade and to solicit feedback from clients.

Our clients' input from past conferences continues to impact significantly the direction of software enhancements and changes. Client attendance each year ensures that appropriate needs are reflected in product development strategies. Connect is held in different locations every year to

accommodate our geographically diverse client base and to provide fresh and exciting activities for our clients outside of the classes and labs.

## SOFTWARE UPDATES & MAINTENANCE

Tyler has proven history of providing upgrades and enhancement releases on a continual basis, which are available to all clients. Our evergreen philosophy ensures that those upgrades and enhancements are provided at no cost to those current with their annual software maintenance contract.

Enhancement releases take place every year and are scheduled with the client to provide the best possible timeframe for both the client and Tyler. Upgrades, however, occur periodically and are initiated by the client at any time via the Internet through a process called Live Update, making the process as convenient as possible for our clients. Patches and fixes are provided to the client through Live Update as well.

Our professional team has successfully migrated many of our customers through three generations of software. Tyler views this software development and migration as a stewardship of your annual maintenance dollars. Those dollars are invested on behalf of our customers into new products and features, continually taking advantage of current technology.

Our evergreen development philosophy has been a strong differentiator that separates us from our competitors and provides a significant cost savings to our family of clients. Through evergreen, our clients receive the latest technology developments, releases and updates without paying additional license fees – for the life of their Tyler product. While this has provided our clients with a return on investment that is unrivaled in our industry, the frequency and complexity of software releases can sometimes create a consumption gap for our clients.

The gap exists when new features are released and, over time, users don't learn and apply these features to their work environments. In these instances, this consumption gap increases, causing the user to fall further and further behind on optimally using the product. Clients facing this situation are no longer benefiting from the full functionality of the product, or from the latest technology enhancements.



EverGuide® is a Tyler-wide continuous improvement initiative to address these issues. EverGuide is an extension of our evergreen philosophy and will offer services and consulting to help clients maximize, protect and get the most from their software investment.

- Through our EverGuide initiative, we will:



- Help clients better leverage product enhancements
- Provide a workflow “maturity model” for clients to follow
- Offer strategic planning services and training resources
- Offer a client executive program to help clients build and implement a continuous improvement plan
- Provide domain expertise, with defined integration points and common support methodology

As every Tyler product is different, EverGuide will be customized by product group and client type to ensure we are delivering the right level of services and support to meet the unique needs of our clients.

With EverGuide, our goal is to help our clients continue to grow and evolve their use of the functionality and enhancements of their Tyler product over a long period of time. It’s also our hope that this initiative is a catalyst for our clients’ organizations to embrace change, commit to training and developing their staff, and fully use the wide ranges of Tyler’s service and support offerings available to them.

## Section 7      COST

### Tab 7 – Cost:

Please highlight the estimated costs of your proposed solution in Attachment C - TCO.

Below is a list of the requested cost components to be included:

#### 1. Software licenses, by functional module

- Core software license cost
- Additional module license costs required to meet City of Pembroke Pines requirements
- Third-party software costs

Please see Attachment C – TCO for costs associated with ERP system software and implementation services.

#### 2. Describe the following with respect to software licensing:

- Describe your licensing scheme (enterprise, module versus system, concurrent versus named, external Internet user(s), query versus user, etc.) and how that works in a Disaster Recovery situation.

Tyler Technologies Munis ERP software (financial, human resource, payroll and utility billing) contracts are site licensed, by module and independent of concurrent users. Tyler's EnerGov Community Development and its related applications are sold on a per user count basis and can be increased at any time. Disaster Recovery solutions for all Tyler software offerings are available and can be optionally purchased as part of all contract negotiation and review.

- Describe how licensing is structured (alternatives, base software + per user licenses, license costs, license-packs, incentives, etc.). Identify how costs are determined for adding additional users after the initial purchase. Identify any licensing distinctions for City users and business partners to access the system remotely through the internet (e.g. employee self-service, Vendor checking on status).

Tyler Technologies Munis ERP software contracts are site licensed, by module and independent of concurrent users. Remote system access including vendor and employee self-service tools, as well as third-party business partner access is granted through normal contract negotiation and term acceptance. Roll out of these functions is governed by City of Pembroke Pines with guidance/best business practice knowledge transfer from Tyler Technologies implementation and project management. Additional user counts relating to Energov Community Development are sold on a per user basis and can be added as needed. Please refer to Attachment C – TCO for all per user count licensing costing.

- From time to time consultants, business partners or other non-employee type personnel need to access the licensed software. Under your licensing agreement, will these types of users have access?

Yes, provided the City of Pembroke Pines provides user access and login information using industry best business practices and security consideration.

- The City has a desire to establish a test and training (same server) and production environment (separate server). Are you able to structure an environment that will allow the City to run additional development, test, and training instances without the need for additional product licensing fees? Describe licensing options available for a development/test system.

All Tyler Technologies ERP clients are afforded, as part of standard maintenance contract terms, a Live, Test and Train DB environment at no additional fee above and beyond the presented cost proposal. Should additional DB environments above and beyond the aforementioned be required by the City additional fees may apply.

### 3. Training and support modules or materials

Requisite institutional knowledge transfer by Tyler staff to City employees through a variety of methods including on-site and web training and related fees is included in Attachment C – TCO. Access and use of all Tyler online classes, videos and courses through Tyler University and the Munis Knowledgebase is afforded to all clients with an active support and maintenance contract.

### 4. Third-party partner product costs required to support business requirements

Any known third-party partner products required to support RFQ business requirements are included in Attachment C – TCO.

### 5. Ongoing annual maintenance and support fees

Ongoing annual maintenance and support fees are waived for year one on contract signing. Please See Attachment C – TCO for annual maintenance amounts.

### 6. Professional services – by resource type, estimated hours, and rates for each resource type but not limited to:

- Costs for any required interfaces
- Costs for any required customization to meet the business requirements outlined in RFQ
- Costs for training and data conversion

Tyler Technologies Munis ERP is a commercial off the shelf application designed to offer native integration across the agency. Any required interfaces and/or customization identified through initial analysis and implementation will be billed as professional service delivery incurred. All affirmative



RFQ business requirements, application training and data conversion is included in Attachment C – TCO.

#### 7. Travel and expenses

See Attachment C – TCO for related Travel Expenses.

#### 8. Other professional services required to implement the product

See Attachment C – TCO for Professional Service fees

### 7.1 ATTACHMENT C / TOTAL COST OF OWNERSHIP / SELF HOSTED PRICING

Please reference Attachment C / Total Cost of Ownership / Self Hosted Pricing on the following pages.



## Total Cost of Ownership: Tyler Technologies

### Assumptions:

City of Pembroke Pines User Count:

Estimated Required Total Users: 1687

Please provide pricing for the following functional areas:

Department	Full-Time	Part-Time	Total
Accounting & Finance	24	0	24
Art Gallery	3	4	7
City Clerk	14	3	17
City Management (including Commission, Manager)	3	6	9
Communications & Media	4	0	4
Community Services (including Pines Place - Senior Residence)	24	0	24
Engineering	5	0	5
Environmental Services	8	0	8
Fire Department (including Fire Prevention & Rescue Billing)	221	0	221
Grounds Maintenance	12	0	12
Human Resources (including Risk)	5	0	5
Misc (including Gen Gov't - Buildings, Personnel, & Self Insurance)	23	0	23
Planning & Economic Development	9	1	10
Police	309	38	347
Purchasing	5	0	5
Recreation	29	74	103
Schools (including Early Learning, PreSchool, Substitute Teachers & Aides)	504	323	827
Technology Services Department	25	0	25
Utilities (including Sewer Collection, Water Distribution, & Admin Services)	11	0	11
		<b>Total</b>	<b>1687</b>

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Vendor Benefits, Costs and Value</b>						
<b>Year</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>ERP Software Costs (Core system, modules etc...)</b>						
( Please provide a breakdown of costs , i.e. software licenses, data base licenses, etc.						
Accounting/GL	\$267,750	\$0	\$0	\$0	\$0	\$0
Accounts Payable	\$73,600	\$0	\$0	\$0	\$0	\$0
Bid Management	\$31,500	\$0	\$0	\$0	\$0	\$0

BMI Asset Trak	\$5,800	\$0	\$0	\$0	\$0	\$0
BMI Collect	\$5,800	\$0	\$0	\$0	\$0	\$0
Budgeting	\$73,600	\$0	\$0	\$0	\$0	\$0
Capital Assets	\$67,200	\$0	\$0	\$0	\$0	\$0
Cash Management	\$48,500	\$0	\$0	\$0	\$0	\$0
Contract Management	\$29,950	\$0	\$0	\$0	\$0	\$0
Employee Expense Reimbursement	\$25,200	\$0	\$0	\$0	\$0	\$0
Inventory	\$67,200	\$0	\$0	\$0	\$0	\$0
Project & Grant Accounting	\$42,000	\$0	\$0	\$0	\$0	\$0
Purchasing	\$117,800	\$0	\$0	\$0	\$0	\$0
ET Advanced Scheduling - 2000	\$52,155	\$0	\$0	\$0	\$0	\$0
ET Advanced Scheduling CAD Interface	\$4,675	\$0	\$0	\$0	\$0	\$0
ET Advanced Scheduling Mobile	\$3,975	\$0	\$0	\$0	\$0	\$0
ET Time & Attendance Import	\$5,145	\$0	\$0	\$0	\$0	\$0
ET Time & Attendance Mobile Access	\$5,075	\$0	\$0	\$0	\$0	\$0
ET Time & Attendance 2500	\$67,575	\$0	\$0	\$0	\$0	\$0
Human Resource & Talent Management	\$30,880	\$0	\$0	\$0	\$0	\$0
Payroll w/ESS	\$52,030	\$0	\$0	\$0	\$0	\$0
Recruiting	\$9,150	\$0	\$0	\$0	\$0	\$0
Accounts Receivable	\$58,500	\$0	\$0	\$0	\$0	\$0
Animal Licenses	\$27,500	\$0	\$0	\$0	\$0	\$0
General Billing	\$27,500	\$0	\$0	\$0	\$0	\$0
Tyler Cashiering	\$77,000	\$0	\$0	\$0	\$0	\$0
UB CIS	\$126,500	\$0	\$0	\$0	\$0	\$0
UB Interface	\$27,500	\$0	\$0	\$0	\$0	\$0
Tyler Forms Processing	\$19,500	\$0	\$0	\$0	\$0	\$0
Tyler Content Manager	\$125,000	\$0	\$0	\$0	\$0	\$0
Munis Analytics & Reporting	\$222,900	\$0	\$0	\$0	\$0	\$0
IVR Gateway	\$24,000	\$0	\$0	\$0	\$0	\$0
eProcurement	\$46,200	\$0	\$0	\$0	\$0	\$0
Citizen Self Service	\$58,500	\$0	\$0	\$0	\$0	\$0
Asset Maintenance (50)	\$135,000	\$0	\$0	\$0	\$0	\$0
Asset Performance (25)	\$15,000	\$0	\$0	\$0	\$0	\$0
CAFR Statement Builder	\$35,000	\$0	\$0	\$0	\$0	\$0
EG Server Extension Bundle	\$14,400	\$0	\$0	\$0	\$0	\$0
EG Citizen Self Service - LRM	\$27,000	\$0	\$0	\$0	\$0	\$0
EG Citizen Self Service - PLM	\$27,000	\$0	\$0	\$0	\$0	\$0
EG e-Reviews	\$54,000	\$0	\$0	\$0	\$0	\$0
EG iG Workforce Apps (15)	\$13,500	\$0	\$0	\$0	\$0	\$0
EG IVR	\$32,400	\$0	\$0	\$0	\$0	\$0
EG Licensing & Regulatory Management (20)	\$54,000	\$0	\$0	\$0	\$0	\$0
EG Permitting & Land Management Suite (50)	\$135,000	\$0	\$0	\$0	\$0	\$0
EG Permitting & Land Management SDK	\$25,000	\$0	\$0	\$0	\$0	\$0
EG Report Toolkit	\$5,000	\$0	\$0	\$0	\$0	\$0
Parks & Recreation	\$89,760	\$0	\$0	\$0	\$0	\$0
Tyler GIS Site License	\$35,000	\$0	\$0	\$0	\$0	\$0
Tyler Incident Management	\$44,000	\$0	\$0	\$0	\$0	\$0
Annual Maintenance Costs ( if applies )	\$0	\$524,278	\$550,492	\$578,016	\$606,917	\$637,263

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Client Implementation Team Resources						
Contingency (20% of subtotal)						
Annual ERP Costs	\$4,463,221	\$1,334,966	\$1,627,510	\$578,016	\$606,917	\$637,263
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Estimated Cost by Fiscal Year	\$4,463,221	\$1,334,966	\$1,627,510	\$578,016	\$606,917	\$637,263
Total Estimated Cost Through FY2023	\$7,425,697					

## 7.2 INVESTMENT SUMMARY / SELF HOSTED

Please reference Investment Summary / Self Hosted on the following pages.





Quoted By: Phil Sharp and Garth Magness  
 Date: 7/10/2018  
 Quote Expiration: 7/4/2018  
 Quote Name: City of Pembroke Pines-ERP-Munis  
 Quote Number: 2018-42074-2  
 Quote Description: City of Pembroke Pines-ERP-Munis and EnerGov

### Sales Quotation For

City of Pembroke Pines  
 10100 Pines Blvd Fl 5  
 Pembroke Pines, FL 33026-6042  
 Phone +1 (954) 435-6500

### Tyler Software and Related Services

Description	License	Impl. Hours	Impl. Cost	Data Conversion	Module Total	Year One Maintenance
<b>Financials:</b>						
Accounting/GL	\$267,750.00	0	\$0.00	\$22,400.00	\$290,150.00	\$48,195.00
Accounts Payable	\$73,600.00	0	\$0.00	\$0.00	\$73,600.00	\$13,248.00
Bid Management	\$31,500.00	0	\$0.00	\$0.00	\$31,500.00	\$5,670.00
BMI Asset Track Interface	\$5,800.00	0	\$0.00	\$0.00	\$5,800.00	\$1,044.00
BMI CollectIT Interface	\$5,800.00	0	\$0.00	\$0.00	\$5,800.00	\$1,044.00
Budgeting	\$73,600.00	0	\$0.00	\$0.00	\$73,600.00	\$13,248.00
Capital Assets	\$67,200.00	0	\$0.00	\$5,000.00	\$72,200.00	\$12,096.00
Cash Management	\$48,500.00	0	\$0.00	\$0.00	\$48,500.00	\$8,730.00
Contract Management	\$29,950.00	0	\$0.00	\$6,500.00	\$36,450.00	\$5,391.00
Employee Expense Reimbursement	\$25,200.00	0	\$0.00	\$0.00	\$25,200.00	\$4,536.00
Inventory	\$67,200.00	0	\$0.00	\$8,000.00	\$75,200.00	\$12,096.00
Project & Grant Accounting	\$42,000.00	0	\$0.00	\$11,000.00	\$53,000.00	\$7,560.00
Purchasing	\$117,800.00	0	\$0.00	\$4,500.00	\$122,300.00	\$21,204.00

### Human Capital Management:

**Tyler Software and Related Services**

Description	License	Impl. Hours	Impl. Cost	Data Conversion	Module Total	Year One Maintenance
ExecuTime Advance Scheduling - Up to 2000 Employees	\$52,155.00	0	\$0.00	\$0.00	\$52,155.00	\$10,431.00
ExecuTime Advance Scheduling CAD Interface	\$4,675.00	0	\$0.00	\$0.00	\$4,675.00	\$935.00
ExecuTime Advance Scheduling Mobile Access	\$3,975.00	0	\$0.00	\$0.00	\$3,975.00	\$795.00
ExecuTime Time & Attendance Import	\$5,145.00	0	\$0.00	\$0.00	\$5,145.00	\$1,029.00
ExecuTime Time & Attendance Mobile Access	\$5,075.00	0	\$0.00	\$0.00	\$5,075.00	\$1,015.00
ExecuTime Time & Attendance - Up to 2500 Employees	\$67,575.00	0	\$0.00	\$0.00	\$67,575.00	\$13,515.00
Human Resources & Talent Management	\$30,880.00	0	\$0.00	\$0.00	\$30,880.00	\$5,558.00
Payroll w/ESS	\$52,030.00	0	\$0.00	\$27,800.00	\$79,830.00	\$9,365.00
Recruiting	\$9,150.00	0	\$0.00	\$0.00	\$9,150.00	\$1,647.00
<b>Revenue:</b>						
Accounts Receivable	\$58,500.00	0	\$0.00	\$0.00	\$58,500.00	\$10,530.00
Animal License	\$27,500.00	0	\$0.00	\$11,800.00	\$39,300.00	\$6,875.00
General Billing	\$27,500.00	0	\$0.00	\$13,800.00	\$41,300.00	\$4,950.00
Tyler Cashiering	\$77,000.00	0	\$0.00	\$0.00	\$77,000.00	\$13,860.00
UB Interface	\$27,500.00	0	\$0.00	\$0.00	\$27,500.00	\$4,950.00
Utility Billing CIS	\$126,500.00	0	\$0.00	\$35,500.00	\$162,000.00	\$22,770.00
<b>Productivity:</b>						
Tyler Forms Processing	\$19,500.00	0	\$0.00	\$0.00	\$19,500.00	\$3,900.00
Tyler Content Manager Enterprise	\$125,000.00	0	\$0.00	\$0.00	\$125,000.00	\$22,500.00
Munis Analytics & Reporting	\$222,900.00	0	\$0.00	\$0.00	\$222,900.00	\$40,122.00
IVR Gateway	\$24,000.00	0	\$0.00	\$0.00	\$24,000.00	\$4,320.00
eProcurement	\$46,200.00	0	\$0.00	\$0.00	\$46,200.00	\$8,316.00
Citizen Self Service	\$58,500.00	0	\$0.00	\$0.00	\$58,500.00	\$10,530.00
<b>Additional:</b>						
Asset Maintenance (50)	\$135,000.00	0	\$0.00	\$0.00	\$135,000.00	\$27,000.00
Asset Performance (25)	\$15,000.00	0	\$0.00	\$0.00	\$15,000.00	\$3,000.00

**Tyler Software and Related Services**

Description	License	Impl. Hours	Impl. Cost	Data Conversion	Module Total	Year One Maintenance
CAFR Statement Builder	\$35,000.00	0	\$0.00	\$0.00	\$35,000.00	\$6,300.00
EnerGovAdv Server Extensions Bundle	\$14,400.00	0	\$0.00	\$0.00	\$14,400.00	\$2,880.00
EnerGov Citizen Self Service - LRM	\$27,000.00	0	\$0.00	\$0.00	\$27,000.00	\$5,400.00
EnerGov Citizen Self Service - PLM	\$27,000.00	0	\$0.00	\$0.00	\$27,000.00	\$5,400.00
EnerGov e-Reviews	\$54,000.00	0	\$0.00	\$0.00	\$54,000.00	\$10,800.00
EnerGov iG Workforce Apps (15)	\$13,500.00	0	\$0.00	\$0.00	\$13,500.00	\$2,700.00
EnerGov IVR	\$32,400.00	0	\$0.00	\$0.00	\$32,400.00	\$8,100.00
EnerGov Licensing & Regulatory Management Suite (20)	\$54,000.00	0	\$0.00	\$15,275.00	\$69,275.00	\$10,800.00
EnerGov Permitting & Land Management SDK	\$25,000.00	0	\$0.00	\$0.00	\$25,000.00	\$5,000.00
EnerGov Permitting & Land Management Suite (50)	\$135,000.00	0	\$0.00	\$34,075.00	\$169,075.00	\$27,000.00
EnerGov Report Toolkit	\$5,000.00	0	\$0.00	\$0.00	\$5,000.00	\$1,000.00
Parks and Recreation	\$89,760.00	0	\$0.00	\$0.00	\$89,760.00	\$16,157.00
Tyler GIS - Site License	\$35,000.00	0	\$0.00	\$0.00	\$35,000.00	\$7,000.00
Tyler Incident Management	\$44,000.00	0	\$0.00	\$0.00	\$44,000.00	\$8,800.00
Sub-Total:	\$2,668,220.00		\$0.00	\$195,650.00	\$2,863,870.00	\$499,312.00
<i>Less Discount:</i>	<i>\$0.00</i>		<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$499,312.00</i>
<b>TOTAL:</b>	<b>\$2,668,220.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$195,650.00</b>	<b>\$2,863,870.00</b>	<b>\$0.00</b>

**Other Services**

Description	Quantity	Unit Price	Unit Discount	Extended Price
Animal License Consultant	7	\$1,400.00	\$0.00	\$9,800.00
Change Management Consulting	1	\$100,000.00	\$0.00	\$100,000.00
Custom Report Writing	120	\$250.00	\$0.00	\$30,000.00
Dedicated Full Time Project Manager (Monthly)	36	\$20,750.00	\$0.00	\$747,000.00
EnerGov Consultant	36	\$1,400.00	\$0.00	\$50,400.00
EnerGov Lead	208	\$1,400.00	\$0.00	\$291,200.00
EnerGov LRM Forms Library (6 Forms)	1	\$10,200.00	\$0.00	\$10,200.00

**Other Services**

Description	Quantity	Unit Price	Unit Discount	Extended Price
EnerGov PLM Forms Library (5 Forms)	1	\$10,200.00	\$0.00	\$10,200.00
EnerGov Project Manager Services	1	\$27,000.00	\$0.00	\$27,000.00
Enterprise Asset Maintenance Consultant	39	\$1,400.00	\$0.00	\$54,600.00
Enterprise Asset Maintenance Lead	153	\$1,400.00	\$0.00	\$214,200.00
ExecuTime Advanced Scheduling Lead	39	\$1,400.00	\$0.00	\$54,600.00
Financials Lead	192	\$1,400.00	\$0.00	\$268,800.00
Install Fee - New Server Install-WIN	1	\$12,000.00	\$0.00	\$12,000.00
Parks & Recreation Consultant	13	\$1,400.00	\$0.00	\$18,200.00
Payroll/HCM & Executime Lead	169	\$1,400.00	\$0.00	\$236,600.00
Procure to Pay Lead	135	\$1,400.00	\$0.00	\$189,000.00
Tyler Content Manager - Enterprise Edition Consultant	22	\$1,400.00	\$0.00	\$30,800.00
Tyler Forms Library - Business License	1	\$2,500.00	\$0.00	\$2,500.00
Tyler Forms Library - Financial	1	\$3,400.00	\$0.00	\$3,400.00
Tyler Forms Library - General Billing	1	\$2,500.00	\$0.00	\$2,500.00
Tyler Forms Library - Payroll	1	\$1,500.00	\$0.00	\$1,500.00
Tyler Forms Library - Personnel Action	1	\$1,400.00	\$0.00	\$1,400.00
Tyler Forms Processing Configuration	1	\$3,000.00	\$0.00	\$3,000.00
Tyler Forms Library - Utility Billing	1	\$6,000.00	\$0.00	\$6,000.00
Tyler Graphing Agent - Flat Fee	1	\$3,500.00	\$0.00	\$3,500.00
Utility Billing & Collections Consultant	39	\$1,400.00	\$0.00	\$54,600.00
Utility Billing Lead	169	\$1,400.00	\$0.00	\$236,600.00
<b>TOTAL:</b>				<b>\$2,669,600.00</b>

**3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
BMI-ASSETTRACK-ARS for Munis (Incl. Install Fee)	1	\$6,490.00	\$0.00	\$6,490.00	\$0.00	\$0.00	\$0.00
BMI CollectIT Inventory Bar Code Scanning System	1	\$6,490.00	\$0.00	\$6,490.00	\$0.00	\$0.00	\$0.00

**3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
Tyler Secure Signature System with 2 Keys	1	\$1,650.00	\$0.00	\$1,650.00	\$0.00	\$0.00	\$0.00
VSHELL Windows Encrypt	1	\$1,000.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$0.00
WINZIP	1	\$37.00	\$0.00	\$37.00	\$0.00	\$0.00	\$0.00
<i>3rd Party Hardware Sub-Total:</i>			<i>\$0.00</i>	<i>\$14,630.00</i>			<i>\$0.00</i>
<i>3rd Party Software Sub-Total:</i>			<i>\$0.00</i>	<i>\$1,037.00</i>		<i>\$0.00</i>	<i>\$0.00</i>
<b>TOTAL:</b>				<b>\$15,667.00</b>			<b>\$0.00</b>

**Summary****One Time Fees****Recurring Fees**

Total Tyler Software	\$2,668,220.00	\$0.00
Total Tyler Services	\$2,865,250.00	\$0.00
Total 3rd Party Hardware, Software and Services	\$15,667.00	\$0.00
<b>Summary Total</b>	<b>\$5,549,137.00</b>	<b>\$0.00</b>
<b>Contract Total</b>	<b>\$5,549,137.00</b>	
<b>(Excluding Estimated Travel Expenses)</b>		
<b>Estimated Travel Expenses</b>	<b>\$801,790.00</b>	

**Detailed Breakdown of Conversions (included in Contract Total)**

Description	Unit Price	Unit Discount	Extended Price
Accounting - Actuals up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Accounting - Budgets up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Accounting Standard COA	\$4,000.00	\$0.00	\$4,000.00
Accounts Payable - Checks up to 5 years	\$3,400.00	\$0.00	\$3,400.00
Accounts Payable - Invoice up to 5 years	\$5,000.00	\$0.00	\$5,000.00
Accounts Payable Standard Master	\$3,000.00	\$0.00	\$3,000.00
Animal License - Bills	\$6,300.00	\$0.00	\$6,300.00
Animal License Std Master	\$5,500.00	\$0.00	\$5,500.00
Capital Assets Std Master	\$5,000.00	\$0.00	\$5,000.00
Contracts	\$6,500.00	\$0.00	\$6,500.00
EnerGov Licensing & Regulatory Management	\$15,275.00	\$0.00	\$15,275.00
EnerGov Permitting & Land Management	\$34,075.00	\$0.00	\$34,075.00
General Billing - Bills up to 5 years	\$6,000.00	\$0.00	\$6,000.00
General Billing - Recurring Invoices	\$5,000.00	\$0.00	\$5,000.00
General Billing Std CID	\$2,800.00	\$0.00	\$2,800.00
Inventory - Commodity Codes	\$3,000.00	\$0.00	\$3,000.00
Inventory Std Master	\$5,000.00	\$0.00	\$5,000.00
Payroll - Accrual Balances	\$2,500.00	\$0.00	\$2,500.00
Payroll - Accumulators up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Certifications	\$2,000.00	\$0.00	\$2,000.00
Payroll - Check History up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Deductions	\$2,800.00	\$0.00	\$2,800.00
Payroll - Earning/Deduction Hist up to 5 years	\$3,500.00	\$0.00	\$3,500.00
Payroll - Education	\$2,000.00	\$0.00	\$2,000.00
Payroll - PM Action History up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Position Control	\$2,000.00	\$0.00	\$2,000.00
Payroll - Recruiting	\$2,000.00	\$0.00	\$2,000.00



**Detailed Breakdown of Conversions (included in Contract Total)**

Description	Unit Price	Unit Discount	Extended Price
Payroll - Standard	\$3,000.00	\$0.00	\$3,000.00
Payroll - State Retirement Tables	\$2,000.00	\$0.00	\$2,000.00
Project Grant Accounting - Actuals up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Project Grant Accounting - Budgets up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Project Grant Accounting Standard	\$4,000.00	\$0.00	\$4,000.00
Purchasing - Purchase Orders - Standard Open PO's only	\$4,500.00	\$0.00	\$4,500.00
Utility Billing - Assessments	\$3,000.00	\$0.00	\$3,000.00
Utility Billing - Backflow	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Balance Forward AR	\$8,000.00	\$0.00	\$8,000.00
Utility Billing - Consumption History up to 5 years	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Service Orders	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Services	\$4,500.00	\$0.00	\$4,500.00
Utility Billing - Standard	\$5,000.00	\$0.00	\$5,000.00
<b>TOTAL:</b>			<b>\$195,650.00</b>

**Optional SaaS**

			One Time Fees		
Description	# Years	Annual Fee	Impl. Hours	Impl. Cost	Data Conversion
<b>Productivity:</b>					
Transparency Portal	1	\$17,000.00	0	\$0.00	\$0.00
Tyler Notify	1	\$40,000.00	0	\$0.00	\$0.00

**Optional Tyler Software & Related Services**

Description	License	Impl. Hours	Impl. Cost	Data Conversion	Module Total	Year One Maintenance
<b>Financials:</b>						
Performance Based Budgeting	\$89,250.00	0	\$0.00	\$0.00	\$89,250.00	\$16,065.00
<b>Human Capital Management:</b>						
Risk Management	\$10,400.00	0	\$0.00	\$0.00	\$10,400.00	\$1,872.00
<b>Additional:</b>						
Tyler System Management Services Contract	\$0.00	0	\$0.00	\$0.00	\$0.00	\$107,483.00
<b>TOTAL:</b>	<b>\$99,650.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$99,650.00</b>	<b>\$125,420.00</b>

**Optional Other Services**

Description	Quantity	Unit Price	Discount	Extended Price
Install Fee - Transparency Portal	1	\$4,500.00	\$0.00	\$4,500.00
Tyler Notify - Implementation	16	\$175.00	\$0.00	\$2,800.00
<b>TOTAL:</b>				<b>\$7,300.00</b>

**Optional 3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
Cash Drawer	1	\$230.00	\$0.00	\$230.00	\$0.00	\$0.00	\$0.00
Hand Held Scanner - Model 1900GSR	1	\$385.00	\$0.00	\$385.00	\$0.00	\$0.00	\$0.00

Hand Held Scanner Stand	1	\$25.00	\$0.00	\$25.00	\$0.00	\$0.00	\$0.00
ID Tech MiniMag USB Reader	1	\$62.00	\$0.00	\$62.00	\$0.00	\$0.00	\$0.00
Printer (TM-S9000)	1	\$1,600.00	\$0.00	\$1,600.00	\$0.00	\$0.00	\$0.00
Tyler Notify IVR Plan (25,000 Minutes)	1	\$2,500.00	\$0.00	\$2,500.00	\$0.00	\$0.00	\$0.00
<i>3rd Party Hardware Sub-Total:</i>			\$0.00	\$2,302.00			\$0.00
<i>3rd Party Software Sub-Total:</i>			\$0.00	\$2,500.00		\$0.00	\$0.00
<b>TOTAL:</b>				<b>\$4,802.00</b>			<b>\$0.00</b>

Unless otherwise indicated in the contract or Amendment thereto, pricing for optional items will be held for Six (6) months from the Quote date or the Effective Date of the Contract, whichever is later.

Customer Approval:

Date:

Print Name:

P.O. #:

All primary values quoted in US Dollars

#### Tyler Discount Detail

Description	License	License Discount	License Net	Maintenance Basis	Year One Maint Discount	Year One Maint Net
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#### Financials:

Accounting/GL	\$267,750.00	\$0.00	\$267,750.00	\$48,195.00	\$48,195.00	\$0.00
Accounts Payable	\$73,600.00	\$0.00	\$73,600.00	\$13,248.00	\$13,248.00	\$0.00
Bid Management	\$31,500.00	\$0.00	\$31,500.00	\$5,670.00	\$5,670.00	\$0.00
BMI Asset Track Interface	\$5,800.00	\$0.00	\$5,800.00	\$1,044.00	\$1,044.00	\$0.00
BMI CollectIT Interface	\$5,800.00	\$0.00	\$5,800.00	\$1,044.00	\$1,044.00	\$0.00
Budgeting	\$73,600.00	\$0.00	\$73,600.00	\$13,248.00	\$13,248.00	\$0.00
Capital Assets	\$67,200.00	\$0.00	\$67,200.00	\$12,096.00	\$12,096.00	\$0.00
Cash Management	\$48,500.00	\$0.00	\$48,500.00	\$8,730.00	\$8,730.00	\$0.00
Contract Management	\$29,950.00	\$0.00	\$29,950.00	\$5,391.00	\$5,391.00	\$0.00
Employee Expense Reimbursement	\$25,200.00	\$0.00	\$25,200.00	\$4,536.00	\$4,536.00	\$0.00
Inventory	\$67,200.00	\$0.00	\$67,200.00	\$12,096.00	\$12,096.00	\$0.00
Project & Grant Accounting	\$42,000.00	\$0.00	\$42,000.00	\$7,560.00	\$7,560.00	\$0.00
Purchasing	\$117,800.00	\$0.00	\$117,800.00	\$21,204.00	\$21,204.00	\$0.00

**Tyler Discount Detail**

Description	License	License Discount	License Net	Maintenance Basis	Year One Maint Discount	Year One Maint Net
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**Payroll/HR:**

ExecuTime Advance Scheduling - Up to 2000 Employees	\$52,155.00	\$0.00	\$52,155.00	\$10,431.00	\$10,431.00	\$0.00
ExecuTime Advance Scheduling CAD Interface	\$4,675.00	\$0.00	\$4,675.00	\$935.00	\$935.00	\$0.00
ExecuTime Advance Scheduling Mobile Access	\$3,975.00	\$0.00	\$3,975.00	\$795.00	\$795.00	\$0.00
ExecuTime Time & Attendance Import	\$5,145.00	\$0.00	\$5,145.00	\$1,029.00	\$1,029.00	\$0.00
ExecuTime Time & Attendance Mobile Access	\$5,075.00	\$0.00	\$5,075.00	\$1,015.00	\$1,015.00	\$0.00
ExecuTime Time & Attendance - Up to 2500 Employees	\$67,575.00	\$0.00	\$67,575.00	\$13,515.00	\$13,515.00	\$0.00
Human Resources & Talent Management	\$30,880.00	\$0.00	\$30,880.00	\$5,558.00	\$5,558.00	\$0.00
Payroll w/ESS	\$52,030.00	\$0.00	\$52,030.00	\$9,365.00	\$9,365.00	\$0.00
Recruiting	\$9,150.00	\$0.00	\$9,150.00	\$1,647.00	\$1,647.00	\$0.00

**Revenue:**

Accounts Receivable	\$58,500.00	\$0.00	\$58,500.00	\$10,530.00	\$10,530.00	\$0.00
Animal License	\$27,500.00	\$0.00	\$27,500.00	\$6,875.00	\$6,875.00	\$0.00
General Billing	\$27,500.00	\$0.00	\$27,500.00	\$4,950.00	\$4,950.00	\$0.00
Tyler Cashiering	\$77,000.00	\$0.00	\$77,000.00	\$13,860.00	\$13,860.00	\$0.00
UB Interface	\$27,500.00	\$0.00	\$27,500.00	\$4,950.00	\$4,950.00	\$0.00
Utility Billing CIS	\$126,500.00	\$0.00	\$126,500.00	\$22,770.00	\$22,770.00	\$0.00

**Productivity:**

Citizen Self Service	\$58,500.00	\$0.00	\$58,500.00	\$10,530.00	\$10,530.00	\$0.00
eProcurement	\$46,200.00	\$0.00	\$46,200.00	\$8,316.00	\$8,316.00	\$0.00
IVR Gateway	\$24,000.00	\$0.00	\$24,000.00	\$4,320.00	\$4,320.00	\$0.00
Munis Analytics & Reporting	\$222,900.00	\$0.00	\$222,900.00	\$40,122.00	\$40,122.00	\$0.00
Tyler Content Manager Enterprise	\$125,000.00	\$0.00	\$125,000.00	\$22,500.00	\$22,500.00	\$0.00
Tyler Forms Processing	\$19,500.00	\$0.00	\$19,500.00	\$3,900.00	\$3,900.00	\$0.00

**Tyler Discount Detail**

Description	License	License Discount	License Net	Maintenance Basis	Year One Maint Discount	Year One Maint Net
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**Additional:**

Asset Maintenance (50)	\$135,000.00	\$0.00	\$135,000.00	\$27,000.00	\$27,000.00	\$0.00
Asset Performance (25)	\$15,000.00	\$0.00	\$15,000.00	\$3,000.00	\$3,000.00	\$0.00
CAFR Statement Builder	\$35,000.00	\$0.00	\$35,000.00	\$6,300.00	\$6,300.00	\$0.00
EnerGovAdv Server Extensions Bundle	\$14,400.00	\$0.00	\$14,400.00	\$2,880.00	\$2,880.00	\$0.00
EnerGov Citizen Self Service - LRM	\$27,000.00	\$0.00	\$27,000.00	\$5,400.00	\$5,400.00	\$0.00
EnerGov Citizen Self Service - PLM	\$27,000.00	\$0.00	\$27,000.00	\$5,400.00	\$5,400.00	\$0.00
EnerGov e-Reviews	\$54,000.00	\$0.00	\$54,000.00	\$10,800.00	\$10,800.00	\$0.00
EnerGov iG Workforce Apps (15)	\$13,500.00	\$0.00	\$13,500.00	\$2,700.00	\$2,700.00	\$0.00
EnerGov IVR	\$32,400.00	\$0.00	\$32,400.00	\$8,100.00	\$8,100.00	\$0.00
EnerGov Licensing & Regulatory Management Suite (20)	\$54,000.00	\$0.00	\$54,000.00	\$10,800.00	\$10,800.00	\$0.00
EnerGov Permitting & Land Management SDK	\$25,000.00	\$0.00	\$25,000.00	\$5,000.00	\$5,000.00	\$0.00
EnerGov Permitting & Land Management Suite (50)	\$135,000.00	\$0.00	\$135,000.00	\$27,000.00	\$27,000.00	\$0.00
EnerGov Report Toolkit	\$5,000.00	\$0.00	\$5,000.00	\$1,000.00	\$1,000.00	\$0.00
Parks and Recreation	\$89,760.00	\$0.00	\$89,760.00	\$16,157.00	\$16,157.00	\$0.00
Tyler GIS - Site License	\$35,000.00	\$0.00	\$35,000.00	\$7,000.00	\$7,000.00	\$0.00
Tyler Incident Management	\$44,000.00	\$0.00	\$44,000.00	\$8,800.00	\$8,800.00	\$0.00
<b>TOTAL:</b>	<b>\$2,668,220.00</b>	<b>\$0.00</b>	<b>\$2,668,220.00</b>	<b>\$499,312.00</b>	<b>\$499,312.00</b>	<b>\$0.00</b>

**Comments**

Tyler's OSDBA Service/Tyler System Management Services is calculated at 25% of the Munis annual maintenance. There is a \$2,500 minimum annual fee.

Tyler recommends the use of a 128-bit SSL Security Certificate for any Internet Web Applications, such as the Munis Web Client and the MUNIS Self Service applications if hosted by the Client. This certificate is required to encrypt the highly sensitive payroll and financial information as it travels across the public internet. There are various vendors who sell SSL Certificates, with all ranges of prices.

Conversion prices are based on a single occurrence of the database. If additional databases need to be converted, these will need to be quoted.

Tyler's quote contains estimates of the amount of services needed, based on our preliminary understanding of the size and scope of your project. The actual amount of services depends on such factors as your level of involvement in the project and the speed of knowledge transfer.

Unless otherwise noted, prices submitted in the quote do not include travel expenses incurred in accordance with Tyler's then-current Business Travel Policy.

Tyler's prices do not include applicable local, city or federal sales, use excise, personal property or other similar taxes or duties, which you are responsible for determining and remitting.

In the event Client cancels services less than two (2) weeks in advance, Client is liable to Tyler for (i) all non-refundable expenses incurred by Tyler on Client's behalf; and (ii) daily fees associated with the cancelled services if Tyler is unable to re-assign its personnel.

Implementation hours are scheduled and delivered in four (4) or eight (8) hour increments.

Tyler provides onsite training for a maximum of 12 people per class. In the event that more than 12 users wish to participate in a training class or more than one occurrence of a class is needed, Tyler will either provide additional days at then-current rates for training or Tyler will utilize a Train-the-Trainer approach whereby the client designated attendees of the initial training can thereafter train the remaining users.

Tyler's form library prices are based on the actual form quantities listed, and assume the forms will be provided according to the standard Munis form template. Any forms in addition to the quoted amounts and types, including custom forms or forms that otherwise require custom programming, are subject to an additional fee. Please also note that use of the Tyler Forms functionality requires the use of approved printers as well. You may contact Tyler's support team for the most current list of approved printers.

Financial library includes: 1 A/P check, 1 EFT/ACH, 1 Purchase order, 1 Contract, 1099M, 1099INT, 1099S, and 1099G.

General Billing library includes: 1 invoice, 1 statement, 1 general billing receipt and 1 miscellaneous receipt.

Utility billing library includes: 1 Utility bill, 1 assessment, 1 UB receipt, 1 Lien letter, 1 UB delinquent notice, 1 door hanger and 1 final utility bill.

Business license library includes: 1 business license and 1 renewal application.

Includes digitizing two signatures, additional charges will apply for additional signatures.

Tyler Forms Payroll Core library includes: 1 PR check, 1 direct deposit, 1 vendor from payroll check, 1 vendor from payroll direct deposit, W2, W2c, 1099 R, ACA 1095B and ACA 1095C.



**Comments**

Personnel Actions Forms Library includes: 1 Personnel Action form - New and 1 Personnel Action Form - Change.

Tyler's cost is based on all of the proposed products and services being obtained from Tyler. Should significant portions of the products or services be deleted, Tyler reserves the right to adjust prices accordingly.

The Tyler Software Product Tyler Forms Processing must be used in conjunction with a Hewlett Packard printer supported by Tyler for printing checks.

BMI CollectIT w/ data validation enabled - USB, 802.11b/g Wireless Data Com Utility for WM 6.1/6.5 devices w/ remote Install/training up to 4 hrs & (1) yr phone support, Subsequent support and upgrade plans are available directly through BMI Includes a Unitech PA 690 PDT Kit with WIN 6.5, 26 Key keypad, laser, 807 MHZ Processor, 2 batteries, Power Supply, Pistol Grip, Cradle, 802.11b/g radio & BMI Collect-IT PDT Users License Includes: 1 yr Phone support/upgrades for CollectIT and 1 yr depot parts and Labor warranty on the PA 690 Portable Data Terminal.

AssetTrak PPC Software, PA690 Portable Data terminal, Integrated Laser Scanner, USB Com/Charging cable w/ps, PDT Users Licenses for TrakSync and AssetTrak PPC Includes: 1 year phone support & software upgrades, Subsequent support and upgrade plans are available directly through BMI. Up to 4 hrs of remote Install/training via GoToMeeting.

e-Planning requires BlueBeam Revu or Adobe Acrobat Pro.

LRM Forms Library Includes: 1 Licensing - Business License, 1 Licensing - Business License Renewal, 1 Licensing - Business License Delinquent, 1 Licensing - Profession License, 1 Licensing - Profession License Renewal, 1 Licensing - Profession License Delinquent.

PLM Forms Library Includes: 1 Permits - Building, 1 Permits - Trade, 1 Planning - Certificate, 1 Permits - Occupancy/Completion, 1 Code - Violation Notice.

Tyler Notify SaaS services will renew automatically for additional one (1) year terms at our then-current fee unless terminated in writing by either part at least thirty (30) days prior to the end of the then-current term.

Transparency Portal SaaS services will renew automatically for additional one (1) year terms at our then-current fee unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.

### 7.3 ATTACHMENT C / TOTAL COST OF OWNERSHIP / SAAS PRICING

Please reference Attachment C / Total Cost of Ownership / SaaS Pricing on the following pages.



## Total Cost of Ownership: Tyler Technologies

### Assumptions:

City of Pembroke Pines User Count:

Estimated Required Total Users: 1687

Please provide pricing for the following functional areas:

Department	Full-Time	Part-Time	Total
Accounting & Finance	24	0	24
Art Gallery	3	4	7
City Clerk	14	3	17
City Management (including Commission, Manager)	3	6	9
Communications & Media	4	0	4
Community Services (including Pines Place - Senior Residence)	24	0	24
Engineering	5	0	5
Environmental Services	8	0	8
Fire Department (including Fire Prevention & Rescue Billing)	221	0	221
Grounds Maintenance	12	0	12
Human Resources (including Risk)	5	0	5
Misc (including Gen Gov't - Buildings, Personnel, & Self Insurance)	23	0	23
Planning & Economic Development	9	1	10
Police	309	38	347
Purchasing	5	0	5
Recreation	29	74	103
Schools (including Early Learning, PreSchool, Substitute Teachers & Aides)	504	323	827
Technology Services Department	25	0	25
Utilities (including Sewer Collection, Water Distribution, & Admin Services)	11	0	11
		<b>Total</b>	<b>1687</b>

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Vendor Benefits, Costs and Value</b>						
<b>Year</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>ERP Software Costs (Core system, modules etc...)</b>						
( Please provide a breakdown of costs , i.e. software licenses, data base licenses, etc.						
Accounting/GL	\$152,971	\$152,971	\$152,971	\$152,971	\$152,971	\$152,971
Accounts Payable	\$42,049	\$42,049	\$42,049	\$42,049	\$42,049	\$42,049
Bid Management	\$17,997	\$17,997	\$17,997	\$17,997	\$17,997	\$17,997
BMI Asset Trak	\$3,314	\$3,314	\$3,314	\$3,314	\$3,314	\$3,314
BMI Collect	\$3,314	\$3,314	\$3,314	\$3,314	\$3,314	\$3,314
Budgeting	\$42,049	\$42,049	\$42,049	\$42,049	\$42,049	\$42,049
Capital Assets	\$38,393	\$38,393	\$38,393	\$38,393	\$38,393	\$38,393
Cash Management	\$27,709	\$27,709	\$27,709	\$27,709	\$27,709	\$27,709
Contract Management	\$17,111	\$17,111	\$17,111	\$17,111	\$17,111	\$17,111
Employee Expense Reimbursement	\$14,397	\$14,397	\$14,397	\$14,397	\$14,397	\$14,397
Inventory	\$38,393	\$38,393	\$38,393	\$38,393	\$38,393	\$38,393
Project & Grant Accounting	\$23,995	\$23,995	\$23,995	\$23,995	\$23,995	\$23,995

Purchasing	\$67,301	\$67,301	\$67,301	\$67,301	\$67,301	\$67,301
ET Advanced Scheduling - 2000	\$30,865	\$30,865	\$30,865	\$30,865	\$30,865	\$30,865
ET Advanced Scheduling CAD Interface	\$2,767	\$2,767	\$2,767	\$2,767	\$2,767	\$2,767
ET Advanced Scheduling Mobile	\$2,352	\$2,352	\$2,352	\$2,352	\$2,352	\$2,352
ET Time & Attendance Import	\$3,045	\$3,045	\$3,045	\$3,045	\$3,045	\$3,045
ET Time & Attendance Mobile Access	\$3,003	\$3,003	\$3,003	\$3,003	\$3,003	\$3,003
ET Time & Attendance 2500	\$39,991	\$39,991	\$39,991	\$39,991	\$39,991	\$39,991
Human Resource & Talent Management	\$17,642	\$17,642	\$17,642	\$17,642	\$17,642	\$17,642
Payroll w/ESS	\$29,726	\$29,726	\$29,726	\$29,726	\$29,726	\$29,726
Recruiting	\$5,228	\$5,228	\$5,228	\$5,228	\$5,228	\$5,228
Accounts Receivable	\$33,422	\$33,422	\$33,422	\$33,422	\$33,422	\$33,422
Animal Licenses	\$17,683	\$17,683	\$17,683	\$17,683	\$17,683	\$17,683
General Billing	\$15,711	\$15,711	\$15,711	\$15,711	\$15,711	\$15,711
Tyler Cashiering	\$43,992	\$43,992	\$43,992	\$43,992	\$43,992	\$43,992
UB CIS	\$72,272	\$72,272	\$72,272	\$72,272	\$72,272	\$72,272
UB Interface	\$15,711	\$15,711	\$15,711	\$15,711	\$15,711	\$15,711
Tyler Forms Processing	\$11,540	\$11,540	\$11,540	\$11,540	\$11,540	\$11,540
Tyler Content Manager	\$71,415	\$71,415	\$71,415	\$71,415	\$71,415	\$71,415
Munis Analytics & Reporting	\$27,536	\$27,536	\$27,536	\$27,536	\$27,536	\$27,536
IVR Gateway	\$13,712	\$13,712	\$13,712	\$13,712	\$13,712	\$13,712
eProcurement	\$26,395	\$26,395	\$26,395	\$26,395	\$26,395	\$26,395
Citizen Self Service	\$33,422	\$33,422	\$33,422	\$33,422	\$33,422	\$33,422
Asset Maintenance (50)	\$79,900	\$79,900	\$79,900	\$79,900	\$79,900	\$79,900
Asset Performance (25)	\$8,875	\$8,875	\$8,875	\$8,875	\$8,875	\$8,875
CAFR Statement Builder	\$19,996	\$19,996	\$19,996	\$19,996	\$19,996	\$19,996
EG Server Extension Bundle	\$8,700	\$8,700	\$8,700	\$8,700	\$8,700	\$8,700
EG Citizen Self Service - LRM	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
EG Citizen Self Service - PLM	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
EG e-Reviews	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000
EG iG Workforce Apps (15)(Included)	\$0	\$0	\$0	\$0	\$0	\$0
EG IVR	\$19,000	\$19,000	\$19,000	\$19,000	\$19,000	\$19,000
EG Licensing & Regulatory Management (20)	\$43,440	\$43,440	\$43,440	\$43,440	\$43,440	\$43,440
EG Permitting & Land Management Suite (50)	\$112,800	\$112,800	\$112,800	\$112,800	\$112,800	\$112,800
EG Permitting & Land Management SDK (included)	\$0	\$0	\$0	\$0	\$0	\$0
EG Report Toolkit	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Parks & Recreation	\$51,282	\$51,282	\$51,282	\$51,282	\$51,282	\$51,282
Tyler GIS Site License	\$19,000	\$19,000	\$19,000	\$19,000	\$19,000	\$19,000
Tyler Incident Management	\$26,039	\$26,039	\$26,039	\$26,039	\$26,039	\$26,039
Annual Maintenance Costs ( if applies )	\$0	\$0	\$0	\$0	\$0	\$0

#### Professional Fees

Training Costs						
Project Management	\$249,000	\$249,000	\$249,000	\$0	\$0	\$0
Financial Implementation	\$485,800	\$0	\$0	\$0	\$0	\$0
HCM/Payroll Implementation	\$0	\$291,200	\$0	\$0	\$0	\$0
UB Implementation	\$291,200	\$0	\$0	\$0	\$0	\$0
Energov Implementation	\$0	\$0	\$368,600	\$0	\$0	\$0
Enterprise Asset Maintenance	\$0	\$0	\$268,800	\$0	\$0	\$0
Change Management	\$70,000	\$15,000	\$15,000	\$0	\$0	\$0
Content Manager Consulting	\$21,560	\$9,240	\$0	\$0	\$0	\$0
Conversions	\$118,500	\$27,800	\$49,350	\$0	\$0	\$0
Custom Report Writing	\$6,000	\$18,000	\$6,000	\$0	\$0	\$0
Tyler Forms & EG Libraries	\$44,200	\$0	\$0	\$0	\$0	\$0

On - Site Consulting (Included in Training Costs above)	\$0.00	\$0.00	\$0.00	\$0	\$0	\$0
Customizations	\$0	\$0	\$0	\$0	\$0	\$0
Travel (Travel Costs Breakdowns are Estimates Only)	\$481,074	\$200,448	\$120,268	\$0	\$0	\$0
Annual Maintenance						
Implementation by Location						
Location 1						
Location 2						
Location 3						
Location 4						
Location 5						
Manages Servcies						
Please provide a break down of costs (i.e. setup fees, reccurring hosting/services fees, any other reccurring fees, etc.)	\$0	\$0	\$0	\$0	\$0	\$0
VPN	\$4,000	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0
Tyler Software as a Service proposed under separate worksheet						
Hardware						
New Servers	\$0	\$0	\$0	\$0	\$0	\$0
Server/Client System Upgrades	\$0	\$0	\$0	\$0	\$0	\$0
Printers (Tyler Secure Signature System)	\$1,650	\$0	\$0	\$0	\$0	\$0
Scanners (BMI Asset & Collect IT)	\$12,980	\$0	\$0	\$0	\$0	\$0
Shipping	\$0	\$0	\$0	\$0	\$0	\$0
Hardware Contingency (15% of subtotal)						
Other Costs						
Client Implementation Team Resources						
Contingency (20% of subtotal)						
Annual ERP Costs	\$3,245,419	\$2,270,143	\$2,536,473	\$1,459,455	\$1,459,455	\$1,459,455
Estimated Cost by Fiscal Year	FY 2018 \$3,245,419	FY 2019 \$2,270,143	FY 2020 \$2,536,473	FY 2021 \$1,459,455	FY 2022 \$1,459,455	FY 2023 \$1,459,455
Total Estimated Cost Through FY2023	\$8,052,035					

## 7.4 INVESTMENT SUMMARY / SAAS

Please reference Investment Summary / SaaS on the following pages.





Quoted By: Phil Sharp  
 Date: 7/10/2018  
 Quote Expiration: 7/4/2018  
 Quote Name: City of Pembroke Pines-ERP-Munis  
 Quote Number: 2018-42074-6  
 Quote Description: Munis and EnerGov SaaS

### Sales Quotation For

City of Pembroke Pines  
 10100 Pines Blvd Fl 5  
 Pembroke Pines, FL 33026-6042  
 Phone +1 (954) 435-6500

### SaaS

			One Time Fees		
Description	# Years	Annual Fee	Impl. Hours	Impl. Cost	Data Conversion
<b>Financial:</b>					
Accounting/GL	3.0	\$152,971.00	0	\$0.00	\$22,400.00
Accounts Payable	3.0	\$42,049.00	0	\$0.00	\$0.00
Bid Management	3.0	\$17,997.00	0	\$0.00	\$0.00
BMI Asset Track Interface	3.0	\$3,314.00	0	\$0.00	\$0.00
BMI CollectIT Interface	3.0	\$3,314.00	0	\$0.00	\$0.00
Budgeting	3.0	\$42,049.00	0	\$0.00	\$0.00
Capital Assets	3.0	\$38,393.00	0	\$0.00	\$5,000.00
Cash Management	3.0	\$27,709.00	0	\$0.00	\$0.00
Contract Management	3.0	\$17,111.00	0	\$0.00	\$6,500.00
Employee Expense Reimbursement	3.0	\$14,397.00	0	\$0.00	\$0.00
Inventory	3.0	\$38,393.00	0	\$0.00	\$8,000.00
Project & Grant Accounting	3.0	\$23,995.00	0	\$0.00	\$11,000.00
Purchasing	3.0	\$67,301.00	0	\$0.00	\$4,500.00

### Human Capital Management:

**SaaS**

Description	# Years	Annual Fee	One Time Fees		
			Impl. Hours	Impl. Cost	Data Conversion
ExecuTime Advance Scheduling - Up to 2000 Employees	3.0	\$30,865.00	0	\$0.00	\$0.00
ExecuTime Advance Scheduling CAD Interface	3.0	\$2,767.00	0	\$0.00	\$0.00
ExecuTime Advance Scheduling Mobile Access	3.0	\$2,352.00	0	\$0.00	\$0.00
ExecuTime Time & Attendance Import	3.0	\$3,045.00	0	\$0.00	\$0.00
ExecuTime Time & Attendance Mobile Access	3.0	\$3,003.00	0	\$0.00	\$0.00
ExecuTime Time & Attendance - Up to 2500 Employees	3.0	\$39,991.00	0	\$0.00	\$0.00
Human Resources & Talent Management	3.0	\$17,642.00	0	\$0.00	\$0.00
Payroll w/ESS	3.0	\$29,726.00	0	\$0.00	\$27,800.00
Recruiting	3.0	\$5,228.00	0	\$0.00	\$0.00

**Revenue:**

Accounts Receivable	3.0	\$33,422.00	0	\$0.00	\$0.00
Animal License	3.0	\$17,683.00	0	\$0.00	\$11,800.00
General Billing	3.0	\$15,711.00	0	\$0.00	\$13,800.00
Tyler Cashiering	3.0	\$43,992.00	0	\$0.00	\$0.00
UB Interface	3.0	\$15,711.00	0	\$0.00	\$0.00
Utility Billing CIS	3.0	\$72,272.00	0	\$0.00	\$35,500.00

**Productivity:**

Citizen Self Service	3.0	\$33,422.00	0	\$0.00	\$0.00
eProcurement	3.0	\$26,395.00	0	\$0.00	\$0.00
IVR Gateway	3.0	\$13,712.00	0	\$0.00	\$0.00
Munis Analytics & Reporting (SaaS)	3.0	\$27,536.00	0	\$0.00	\$0.00
Tyler Content Manager Enterprise	3.0	\$71,415.00	0	\$0.00	\$0.00
Tyler Forms Processing	3.0	\$11,540.00	0	\$0.00	\$0.00

**Additional:**

Asset Maintenance (50)	3.0	\$79,900.00	0	\$0.00	\$0.00
Asset Performance (25)	3.0	\$8,875.00	0	\$0.00	\$0.00
CAFR Statement Builder	3.0	\$19,996.00	0	\$0.00	\$0.00
EnerGovAdv Server Extensions Bundle	3.0	\$8,700.00	0	\$0.00	\$0.00

**SaaS**

Description	# Years	Annual Fee	One Time Fees		
			Impl. Hours	Impl. Cost	Data Conversion
EnerGov Citizen Self Service - LRM	3.0	\$15,000.00	0	\$0.00	\$0.00
EnerGov Citizen Self Service - PLM	3.0	\$15,000.00	0	\$0.00	\$0.00
EnerGov e-Reviews	3.0	\$29,000.00	0	\$0.00	\$0.00
EnerGov iG Workforce Apps (15)	3.0	\$0.00	0	\$0.00	\$0.00
EnerGov IVR	3.0	\$19,000.00	0	\$0.00	\$0.00
EnerGov Licensing & Regulatory Management Suite (20)	3.0	\$43,440.00	0	\$0.00	\$15,275.00
EnerGov Permitting & Land Management SDK	3.0	\$0.00	0	\$0.00	\$0.00
EnerGov Permitting & Land Management Suite (50)	3.0	\$112,800.00	0	\$0.00	\$34,075.00
EnerGov Report Toolkit	3.0	\$5,000.00	0	\$0.00	\$0.00
Parks and Recreation	3.0	\$51,282.00	0	\$0.00	\$0.00
Tyler GIS - Site License	3.0	\$19,000.00	0	\$0.00	\$0.00
Tyler Incident Management	3.0	\$26,039.00	0	\$0.00	\$0.00
<b>TOTAL:</b>		<b>\$1,459,455.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$195,650.00</b>

**Other Services**

Description	Quantity	Unit Price	Unit Discount	Extended Price
Animal License Consultant	7	\$1,400.00	\$0.00	\$9,800.00
Change Management Consulting	1	\$100,000.00	\$0.00	\$100,000.00
Custom Report Writing	120	\$250.00	\$0.00	\$30,000.00
Dedicated Full Time Project Manager (Monthly)	36	\$20,750.00	\$0.00	\$747,000.00
EnerGov Consultant	36	\$1,400.00	\$0.00	\$50,400.00
EnerGov Lead	208	\$1,400.00	\$0.00	\$291,200.00
EnerGov LRM Forms Library (6 Forms)	1	\$10,200.00	\$0.00	\$10,200.00
EnerGov PLM Forms Library (5 Forms)	1	\$10,200.00	\$0.00	\$10,200.00
EnerGov Project Manager Services	1	\$27,000.00	\$0.00	\$27,000.00
Enterprise Asset Maintenance Consultant	39	\$1,400.00	\$0.00	\$54,600.00
Enterprise Asset Maintenance Lead	153	\$1,400.00	\$0.00	\$214,200.00

**Other Services**

Description	Quantity	Unit Price	Unit Discount	Extended Price
ExecuTime Advanced Scheduling Lead	39	\$1,400.00	\$0.00	\$54,600.00
Financials Lead	192	\$1,400.00	\$0.00	\$268,800.00
Parks & Recreation Consultant	13	\$1,400.00	\$0.00	\$18,200.00
Payroll/HCM & Executime Lead	169	\$1,400.00	\$0.00	\$236,600.00
Procure to Pay Lead	135	\$1,400.00	\$0.00	\$189,000.00
Tyler Content Manager - Enterprise Edition Consultant	22	\$1,400.00	\$0.00	\$30,800.00
Tyler Forms Library - Business License	1	\$2,500.00	\$0.00	\$2,500.00
Tyler Forms Library - Financial	1	\$3,400.00	\$0.00	\$3,400.00
Tyler Forms Library - General Billing	1	\$2,500.00	\$0.00	\$2,500.00
Tyler Forms Library - Payroll	1	\$1,500.00	\$0.00	\$1,500.00
Tyler Forms Library - Personnel Action	1	\$1,400.00	\$0.00	\$1,400.00
Tyler Forms Processing Configuration	1	\$3,000.00	\$0.00	\$3,000.00
Tyler Forms Library - Utility Billing	1	\$6,000.00	\$0.00	\$6,000.00
Tyler Graphing Agent - Flat Fee	1	\$3,500.00	\$0.00	\$3,500.00
Utility Billing & Collections Consultant	39	\$1,400.00	\$0.00	\$54,600.00
Utility Billing Lead	169	\$1,400.00	\$0.00	\$236,600.00
VPN Device	1	\$4,000.00	\$0.00	\$4,000.00
<b>TOTAL:</b>				<b>\$2,661,600.00</b>

**3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
BMI-ASSETTRACK-ARS for Munis (Incl. Install Fee)	1	\$6,490.00	\$0.00	\$6,490.00	\$0.00	\$0.00	\$0.00
BMI CollectIT Inventory Bar Code Scanning System	1	\$6,490.00	\$0.00	\$6,490.00	\$0.00	\$0.00	\$0.00
Tyler Secure Signature System with 2 Keys	1	\$1,650.00	\$0.00	\$1,650.00	\$0.00	\$0.00	\$0.00
VSHELL Windows Encrypt	1	\$1,000.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$0.00
WINZIP	1	\$37.00	\$0.00	\$37.00	\$0.00	\$0.00	\$0.00

**3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
<i>3rd Party Hardware Sub-Total:</i>			<i>\$0.00</i>	<i>\$14,630.00</i>			<i>\$0.00</i>
<i>3rd Party Software Sub-Total:</i>			<i>\$0.00</i>	<i>\$1,037.00</i>		<i>\$0.00</i>	<i>\$0.00</i>
<b>TOTAL:</b>				<b>\$15,667.00</b>			<b>\$0.00</b>

**Summary****One Time Fees****Recurring Fees**

Total SaaS	\$0.00	\$1,459,455.00
Total Tyler Software	\$0.00	\$0.00
Total Tyler Services	\$2,857,250.00	\$0.00
Total 3rd Party Hardware, Software and Services	\$15,667.00	\$0.00
<b>Summary Total</b>	<b>\$2,872,917.00</b>	<b>\$1,459,455.00</b>
<b>Contract Total</b>	<b>\$7,251,282.00</b>	
<b>(Excluding Estimated Travel Expenses)</b>		
<b>Estimated Travel Expenses</b>	<b>\$801,790.00</b>	

**Detailed Breakdown of Conversions (included in Contract Total)**

Description	Unit Price	Unit Discount	Extended Price
Accounting - Actuals up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Accounting - Budgets up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Accounting Standard COA	\$4,000.00	\$0.00	\$4,000.00
Accounts Payable - Checks up to 5 years	\$3,400.00	\$0.00	\$3,400.00
Accounts Payable - Invoice up to 5 years	\$5,000.00	\$0.00	\$5,000.00
Accounts Payable Standard Master	\$3,000.00	\$0.00	\$3,000.00
Animal License - Bills	\$6,300.00	\$0.00	\$6,300.00
Animal License Std Master	\$5,500.00	\$0.00	\$5,500.00
Capital Assets Std Master	\$5,000.00	\$0.00	\$5,000.00
Contracts	\$6,500.00	\$0.00	\$6,500.00
EnerGov Licensing & Regulatory Management	\$15,275.00	\$0.00	\$15,275.00
EnerGov Permitting & Land Management	\$34,075.00	\$0.00	\$34,075.00
General Billing - Bills up to 5 years	\$6,000.00	\$0.00	\$6,000.00
General Billing - Recurring Invoices	\$5,000.00	\$0.00	\$5,000.00
General Billing Std CID	\$2,800.00	\$0.00	\$2,800.00
Inventory - Commodity Codes	\$3,000.00	\$0.00	\$3,000.00
Inventory Std Master	\$5,000.00	\$0.00	\$5,000.00
Payroll - Accrual Balances	\$2,500.00	\$0.00	\$2,500.00
Payroll - Accumulators up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Certifications	\$2,000.00	\$0.00	\$2,000.00
Payroll - Check History up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Deductions	\$2,800.00	\$0.00	\$2,800.00
Payroll - Earning/Deduction Hist up to 5 years	\$3,500.00	\$0.00	\$3,500.00
Payroll - Education	\$2,000.00	\$0.00	\$2,000.00
Payroll - PM Action History up to 5 years	\$2,000.00	\$0.00	\$2,000.00
Payroll - Position Control	\$2,000.00	\$0.00	\$2,000.00
Payroll - Recruiting	\$2,000.00	\$0.00	\$2,000.00



**Detailed Breakdown of Conversions (included in Contract Total)**

Description	Unit Price	Unit Discount	Extended Price
Payroll - Standard	\$3,000.00	\$0.00	\$3,000.00
Payroll - State Retirement Tables	\$2,000.00	\$0.00	\$2,000.00
Project Grant Accounting - Actuals up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Project Grant Accounting - Budgets up to 3 years	\$3,500.00	\$0.00	\$3,500.00
Project Grant Accounting Standard	\$4,000.00	\$0.00	\$4,000.00
Purchasing - Purchase Orders - Standard Open PO's only	\$4,500.00	\$0.00	\$4,500.00
Utility Billing - Assessments	\$3,000.00	\$0.00	\$3,000.00
Utility Billing - Backflow	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Balance Forward AR	\$8,000.00	\$0.00	\$8,000.00
Utility Billing - Consumption History up to 5 years	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Service Orders	\$5,000.00	\$0.00	\$5,000.00
Utility Billing - Services	\$4,500.00	\$0.00	\$4,500.00
Utility Billing - Standard	\$5,000.00	\$0.00	\$5,000.00
<b>TOTAL:</b>			<b>\$195,650.00</b>

**Optional SaaS**

			One Time Fees		
Description	# Years	Annual Fee	Impl. Hours	Impl. Cost	Data Conversion
<b>Financial:</b>					
Performance Based Budgeting	3.0	\$50,990.00	0	\$0.00	\$0.00
<b>Human Capital Management:</b>					
Risk Management	3.0	\$5,942.00	0	\$0.00	\$0.00
<b>Productivity:</b>					
Transparency Portal	3.0	\$17,000.00	0	\$0.00	\$0.00
Tyler Notify	3.0	\$40,000.00	0	\$0.00	\$0.00
<b>TOTAL:</b>		<b>\$113,932.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Optional Other Services**

Description	Quantity	Unit Price	Discount	Extended Price
Install Fee - Transparency Portal	1	\$4,500.00	\$0.00	\$4,500.00
Tyler Notify - Implementation	16	\$175.00	\$0.00	\$2,800.00
<b>TOTAL:</b>				<b>\$7,300.00</b>

**Optional 3rd Party Hardware, Software and Services**

Description	Quantity	Unit Price	Unit Discount	Total Price	Unit Maintenance	Unit Maintenance Discount	Total Year One Maintenance
Cash Drawer	1	\$230.00	\$0.00	\$230.00	\$0.00	\$0.00	\$0.00
Hand Held Scanner - Model 1900GSR	1	\$385.00	\$0.00	\$385.00	\$0.00	\$0.00	\$0.00
Hand Held Scanner Stand	1	\$25.00	\$0.00	\$25.00	\$0.00	\$0.00	\$0.00
ID Tech MiniMag USB Reader	1	\$62.00	\$0.00	\$62.00	\$0.00	\$0.00	\$0.00
Printer (TM-S9000)	1	\$1,600.00	\$0.00	\$1,600.00	\$0.00	\$0.00	\$0.00
Tyler Notify IVR Plan (25,000 Minutes)	1	\$2,500.00	\$0.00	\$2,500.00	\$0.00	\$0.00	\$0.00

<i>3rd Party Hardware Sub-Total:</i>	<i>\$0.00</i>	<i>\$2,302.00</i>		<i>\$0.00</i>
<i>3rd Party Software Sub-Total:</i>	<i>\$0.00</i>	<i>\$2,500.00</i>	\$0.00	<i>\$0.00</i>
<b>TOTAL:</b>		<b>\$4,802.00</b>		<b>\$0.00</b>

Unless otherwise indicated in the contract or Amendment thereto, pricing for optional items will be held for Six (6) months from the Quote date or the Effective Date of the Contract, whichever is later.

Customer Approval: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ P.O. #: \_\_\_\_\_

All primary values quoted in US Dollars

**Comments**

Tyler recommends the use of a 128-bit SSL Security Certificate for any Internet Web Applications, such as the Munis Web Client and the MUNIS Self Service applications if hosted by the Client. This certificate is required to encrypt the highly sensitive payroll and financial information as it travels across the public internet. There are various vendors who sell SSL Certificates, with all ranges of prices.

Conversion prices are based on a single occurrence of the database. If additional databases need to be converted, these will need to be quoted.

Tyler's quote contains estimates of the amount of services needed, based on our preliminary understanding of the size and scope of your project. The actual amount of services depends on such factors as your level of involvement in the project and the speed of knowledge transfer.

Unless otherwise noted, prices submitted in the quote do not include travel expenses incurred in accordance with Tyler's then-current Business Travel Policy.

Tyler's prices do not include applicable local, city or federal sales, use excise, personal property or other similar taxes or duties, which you are responsible for determining and remitting.

In the event Client cancels services less than two (2) weeks in advance, Client is liable to Tyler for (i) all non-refundable expenses incurred by Tyler on Client's behalf; and (ii) daily fees associated with the cancelled services if Tyler is unable to re-assign its personnel.

Implementation hours are scheduled and delivered in four (4) or eight (8) hour increments.

Tyler provides onsite training for a maximum of 12 people per class. In the event that more than 12 users wish to participate in a training class or more than one occurrence of a class is needed, Tyler will either provide additional days at then-current rates for training or Tyler will utilize a Train-the-Trainer approach whereby the client designated attendees of the initial training can thereafter train the remaining users.

Tyler's form library prices are based on the actual form quantities listed, and assume the forms will be provided according to the standard Munis form template. Any forms in addition to the quoted amounts and types, including custom forms or forms that otherwise require custom programming, are subject to an additional fee. Please also note that use of the Tyler Forms functionality requires the use of approved printers as well. You may contact Tyler's support team for the most current list of approved printers.

Financial library includes: 1 A/P check, 1 EFT/ACH, 1 Purchase order, 1 Contract, 1099M, 1099INT, 1099S, and 1099G.

General Billing library includes: 1 invoice, 1 statement, 1 general billing receipt and 1 miscellaneous receipt.

Utility billing library includes: 1 Utility bill, 1 assessment, 1 UB receipt, 1 Lien letter, 1 UB delinquent notice, 1 door hanger and 1 final utility bill.

Business license library includes: 1 business license and 1 renewal application.

Includes digitizing two signatures, additional charges will apply for additional signatures.

Tyler Forms Payroll Core library includes: 1 PR check, 1 direct deposit, 1 vendor from payroll check, 1 vendor from payroll direct deposit, W2, W2c, 1099 R, ACA 1095B and ACA 1095C.

Personnel Actions Forms Library includes: 1 Personnel Action form - New and 1 Personnel Action Form - Change.

**Comments**

Tyler's cost is based on all of the proposed products and services being obtained from Tyler. Should significant portions of the products or services be deleted, Tyler reserves the right to adjust prices accordingly.

Tyler Content Manager Enterprise Edition includes up to 200GB of storage. Should additional storage be needed it may be purchased as needed at an annual fee of \$2,500 per TB.

The Munis SaaS fees are based on 100 concurrent users. Should the number of concurrent users be exceeded, Tyler reserves the right to re-negotiate the SaaS fees based upon any resulting changes in the pricing categories.

The Tyler Software Product Tyler Forms Processing must be used in conjunction with a Hewlett Packard printer supported by Tyler for printing checks.

BMI CollectIT w/ data validation enabled - USB, 802.11b/g Wireless Data Com Utility for WM 6.1/6.5 devices w/ remote Install/training up to 4 hrs & (1) yr phone support, Subsequent support and upgrade plans are available directly through BMI Includes a Unitech PA 690 PDT Kit with WIN 6.5, 26 Key keypad, laser, 807 MHZ Processor, 2 batteries, Power Supply, Pistol Grip, Cradle, 802.11b/g radio & BMI Collect-IT PDT Users License Includes: 1 yr Phone support/upgrades for CollectIT and 1 yr depot parts and Labor warranty on the PA 690 Portable Data Terminal.

AssetTrak PPC Software, PA690 Portable Data terminal, Integrated Laser Scanner, USB Com/Charging cable w/ps, PDT Users Licenses for TrakSync and AssetTrak PPC Includes: 1 year phone support & software upgrades, Subsequent support and upgrade plans are available directly through BMI. Up to 4 hrs of remote Install/training via GoToMeeting.

e-Planning requires BlueBeam Revu or Adobe Acrobat Pro.

LRM Forms Library Includes: 1 Licensing - Business License, 1 Licensing - Business License Renewal, 1 Licensing - Business License Delinquent, 1 Licensing - Profession License, 1 Licensing - Profession License Renewal, 1 Licensing - Profession License Delinquent.

PLM Forms Library Includes: 1 Permits - Building, 1 Permits - Trade, 1 Planning - Certificate, 1 Permits - Occupancy/Completion, 1 Code - Violation Notice.

Tyler Notify SaaS services will renew automatically for additional one (1) year terms at our then-current fee unless terminated in writing by either part at least thirty (30) days prior to the end of the then-current term.

Transparency Portal SaaS services will renew automatically for additional one (1) year terms at our then-current fee unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.

## Section 8      LEGAL

Please see Attachment D and provide the information requested.

### 8.1      ATTACHMENT D / LEGAL INFORMATION

Please reference Attachment D / Legal Information on the following pages.





## **APPENDIX D – LEGAL INFORMATION REQUESTED**

### **Tyler Technologies, Inc.**

- Please include a copy of your contracts and agreements, including but not limited to:
  - Software license agreements
  - Maintenance agreements
  - Standard Statement of Work (SOW)
  - Support agreements

**TYLER RESPONSE:** Tyler has provided these documents as a separate attachment.

- Please clearly identify any contract provisions that your organization considers “non-negotiable”.

**TYLER RESPONSE:** Tyler recognizes that there may be clauses of particular importance to the Client that may not be included in the Tyler contract. Tyler is amenable to accommodating the Client’s contract requests by incorporating mutually agreed clauses into the Tyler contract. While Tyler is reluctant to identify any provisions as categorically “non-negotiable”, some provisions such as intellectual property rights and limitation of liability have less flexibility than others.

- Please identify your organization’s contact in your Legal department in order to facilitate efficient and direct communications.

**TYLER RESPONSE:** Rob Kennedy-Jensen, Senior Corporate Attorney

- **Please provide answers to the following questions:**

#### **Licensing terms:**

1. How is the product licensed? Per operating system, active users, enterprise?

**TYLER RESPONSE:** Tyler’s licensing terms are set forth in Section B of its standard contracts. For a client-hosted solution, Tyler grants a perpetual, enterprise-wide license for your internal business purposes. SaaS licensing is not perpetual, and SaaS licensing and fees are based on the number of Defined Users using the Tyler software.



## 2. Any open source software? Identified?

**TYLER RESPONSE:** The only open source technologies used are Oracle Java development environment with Tyler Content Manager and ExecuTime, Apache Tomcat web server hosts Tyler Content Manager, and RedHat WildFly hosts ExecuTime. Nearly all other Tyler applications use industry standard platforms based on the Microsoft stack.

## 3. Any third-party software? How supported & updated?

**TYLER RESPONSE:** The only required third-party software are system requirements such as operating system, and RDBMS. Esri ArcGIS is also required for GIS integration. It is up to the client to support and update all client hosted third party software.

## 4. What features and functionality are covered in the documentation with the software?

### **TYLER RESPONSE:**

#### **Tyler Knowledgebase**

The KnowledgeBase provides users with a single, easily accessible location to find all available documentation related to our software. This tool uses a user-friendly search screen which can be accessed through the Support website. Search criteria include the ability to filter by version, search for key words, include only certain types of documentation, or perform system wide searches. Provided through the KnowledgeBase are process documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises, e-learning classes and much more. More than 90% of the documents available are in MS Word format so that they can be easily customized for use in training materials, custom documentation or process checklists.

#### **TylerU**

Tyler University is an e-learning solution to enhance support and training of your employees. Through this learning management system developed by Tyler Technologies, new and existing employees are provided an on-demand solution to acquire and refresh the skills needed to successfully implement and use your system day-to-day.

Tyler University's core modules include: financials, human resources, payroll and technology. Employees in the finance department can train on a wide range of topics from req-to-check, including requisition entry, creating a change order for a purchase order and purchase order receiving. For the human resources and payroll staff, Tyler University offers courses on the complete payroll process, the power of employee building and applicant tracking. For system administrators, courses include topics on role-based security design, administering the dashboard and role synchronization into Tyler Content Manager.



Courses are being added continuously into Tyler University, making it a vital resource for new employees and cross training your team.

\*Not available for all Tyler solutions and products.

**5. What if vendor bundles or unbundles underlying software with new product(s) having similar functionalities?**

**TYLER RESPONSE:** Tyler provides fully integrated solutions solely designed for the public sector. Master records are shared across multiple products throughout the system. This ensures a single data record is maintained across multiple applications, eliminating the need to “sync” or manually entering duplicate data in multiple areas. With integration information, users can “drill down” from summary to details, and “drill across” to related information in other applications. Finally, integrated applications have the same “look and feel” across most programs—so users learn just one set of conventions that apply everywhere.

**Professional Service Agreement (PSA) for configuration/migration/installation:**

**6. Is the PSA part of an integrated agreement with the software vendor? Or with approved contractors? Or both?**

**TYLER RESPONSE:** One of Tyler’s many strengths is that Tyler provides all implementation services with Tyler personnel, including installation, consulting, training, conversion, support and programming. Subcontractors are not necessary.

**7. If you require the use of approved contractors for services covered by a PSA, please provide a list.**

**TYLER RESPONSE:** Not applicable

**8. If a PSA is with an approved contractor only, how do you warranty the service work?**

**TYLER RESPONSE:** Not applicable

**9. Do you do background checks on contractor’s personnel?**

**TYLER RESPONSE:** Tyler’s hosting, implementation, maintenance, and support services are all performed within the continental United States.



10. Do you or contractors perform any service work offshore?

TYLER RESPONSE: Not applicable

11. What insurance requirements are there for approved contractors?

TYLER RESPONSE: Not applicable

**Acceptance:**

12. What is the time frame for acceptance testing?

TYLER RESPONSE: Client will have a maximum of a thirty (30) calendar day "Test Period" to test the System in a live production environment for, and to report, documented Defects.

13. Process for remediating non-conformance identified in testing?

TYLER RESPONSE: If Client reports a documented Defect during the Test Period, Client will notify Tyler in writing. Tyler will correct the Defect(s) or provide a mutually agreeable plan for future resolution of any Defect(s). A dispute with respect to the plan shall be addressed pursuant to the Dispute Resolution Process of this Agreement. Upon resolution of a Defect during the Test Period, Client may re-perform testing for a maximum of fifteen (15) calendar days. This procedure shall repeat until all Defects have either been resolved or the Client and Tyler, reasonably cooperating, have developed a mutually agreeable schedule for Defect resolution, at which point the Client shall issue Project Closure.

**Representations & Warranty:**

14. What is the term of the initial warranty period? When does it commence (upon acceptance or installation)?

TYLER RESPONSE: Tyler's Software and Services Warranties begin on the Effective Date of the Agreement and extend until Termination or Non-Renewal of the Agreement

15. Identify any contingencies or conditions specific to your willingness to warranty the functional performance requirements identified in Exhibit A.

TYLER RESPONSE: We warrant that the Tyler Software will be without Defect(s) as long as you have a Maintenance and Support Agreement in effect. If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect as set forth in the



Maintenance and Support Agreement. Modification of the software may void the warranty to the software and any obligation Tyler has to maintain or support the software.

**16. Please identify your warranty of:**

a) Ownership and right to license

**TYLER RESPONSE:** Tyler will defend, indemnify, and hold harmless the Client from third-party claims that the Tyler software and/or documentation infringes an intellectual property right in accordance with Section H(1) of Tyler's standard contract.

b) Performance

**TYLER RESPONSE:** We will perform the services in a professional, workmanlike manner, consistent with industry standards. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you

c) Documentation

**TYLER RESPONSE:** Tyler will defend, indemnify, and hold harmless the Client from third-party claims that the Tyler software and/or documentation infringes an intellectual property right in accordance with Section H(1) of Tyler's standard contract

d) Compatibility and Scalability

**TYLER RESPONSE:** Tyler reserves the right to discuss a warranty of compatibility. You may purchase additional products and services at the rates set forth in the Investment Summary for twelve (12) months from the Effective Date, and thereafter at our then-current list price, by executing a mutually agreed addendum. If no rate is provided in the Investment Summary, or those twelve (12) months have expired, you may purchase additional products and services at our then-current list price, also by executing a mutually agreed addendum. The terms of this Agreement will control any such additional purchase(s), unless otherwise specifically provided in the addendum.

e) Interface with existing systems identified in Exhibit A

**TYLER RESPONSE:** Tyler's interfaces are covered by Tyler's Software Warranty (please see Tyler's response to Question 15 above.)



f) Data integrity

**TYLER RESPONSE:** Tyler reserves the right to discuss a warranty for Data integrity.

**17. Are there any “pass through” warranties from third party software?**

**TYLER RESPONSE:** We are authorized by each Developer to grant or transfer the licenses to the third-party Software. The third-party Hardware will be new and unused, and upon payment in full, you will receive free and clear title to the third-party Hardware. You acknowledge that we are not the manufacturer of the third-party Products. We do not warrant or guarantee the performance of the third-party Products. However, we grant and pass through to you any warranty that we may receive from the Developer or supplier of the third-party Products.

**18. What are the remedies for a breach of warranty of performance during the initial warranty period?**

**TYLER RESPONSE:** If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect as set forth in the Maintenance and Support Agreement. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you. If Client believes any delivered software or service does not conform to the warranties in the Agreement, Client may invoke the Dispute Resolution clause of the Agreement.

**19. What are the remedies for a breach of the warranty of ownership and right to license (a/k/a IP remedy)?**

**TYLER RESPONSE:** If we receive information concerning an infringement or misappropriation claim related to the Tyler Software, we may, at our expense and without obligation to do so, either: (a) procure for you the right to continue its use; (b) modify it to make it non-infringing; or (c) replace it with a functional equivalent, in which case you will stop running the allegedly infringing Tyler Software immediately. Alternatively, we may decide to litigate the claim to judgment, in which case you may continue to use the Tyler Software consistent with the terms of this Agreement.

If an infringement or misappropriation claim is fully litigated and your use of the Tyler Software is enjoined by a court of competent jurisdiction, in addition to paying any adverse final judgment (or settlement to which we consent), we will, at our option, either: (a) procure the right to continue its use; (b) modify it to make it non-infringing; (c) replace it with a functional equivalent; or (d) terminate your license and refund the license fees paid for the infringing Tyler Software, as depreciated on a straight-line basis measured over seven (7) years from the Effective Date. We will pursue those options in the order



listed herein. This section provides your exclusive remedy for third party copyright, patent, or trademark infringement and trade secret misappropriation claims.

### **Maintenance and Service Level Agreement**

20. What is the minimum term that Maintenance will be available for the requested product?

**TYLER RESPONSE:** Provided the Client pays annual maintenance fees on the Tyler software, Tyler will provide maintenance services on the Tyler software for at least five years from contract signing. Tyler will offer support to Client so long as Tyler is making such support generally available to its client base

21. What is the minimum notice for an end of service date?

**TYLER RESPONSE:** We provide maintenance and support services on an annual basis. The initial term commences on the Effective Date, and remains in effect for one (1) year. The term will renew automatically for additional one (1) year terms unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.

22. Please define the Service Level Agreement applicable to availability of system.

23. What remedies for breach of SLA including extending term of maintenance?

**TYLER RESPONSE:** The availability of Tyler Software and any applicable remedy for downtime is set forth in Tyler's Service Level Agreement, which is included as an Exhibit to Tyler's template Agreement provided with its Proposal

24. What is the effect of termination of maintenance services? Are there reinstatement rights?

**TYLER RESPONSE:** The City may terminate maintenance services upon 30 days prior written notice, in which case Tyler's obligations to provide maintenance and support cease. We reserve the right to suspend maintenance and support services as set forth in Exhibit C of Tyler's standard Agreement if you fail to pay undisputed maintenance and support fees within thirty (30) days of our written notice. We will reinstate maintenance and support services only if you pay all past due maintenance and support fees, including all fees for the periods during which services were suspended.





## **Security and Data**

25. What data security program is offered? ISO or other certifications? Data breach notification? Indemnification?

**TYLER RESPONSE:** Tyler Technologies has a documented security incident response plan continually reviewed by our audits. Tyler's Hosting Operations follows security best practices and is subject to annual assurance audits including SOX-404 Financial and IT General Control conducted by an independent CPA firm, SOC 1 Type 2 and SOC 2 Type 2 conducted by an independent. Handling of security breaches, including notification to customers, conforms to applicable state and federal law.

26. If a network connection is established by vendor between any computing environments, how is the security of that connection managed?

**TYLER RESPONSE:** Cisco firewalls with Intrusion Protection System (IPS) module inspect all traffic to only allow connections from Tyler SaaS clients to the datacenter. Connection is established to internet-facing web applications securely over HTTPS. ERP clients are provided a VPN device as an added layer of security for accessing back-office applications through an encrypted tunnel between client site and Tyler data centers.

27. What is your disaster recovery plan?

**TYLER RESPONSE:**

**Tyler SaaS Business Continuity**

Our goal for building hosting infrastructure is no single point of failure. Tyler SaaS hosting server/storage infrastructure is built around enterprise compute systems running virtualized Windows Server and SQL Server. Three Tiers of storage are utilized providing varying levels of performance resiliency. Firewalls, VPN management, routers, and storage are all setup in a highly available configuration. Multiple ISPs are present with diverse paths to the Internet.

Full backups are performed daily of each client's application and database server after normal business hours (21:00-02:00). Tyler's retention policy is to keep daily ERP backups for 30 days, weekly backups for 1 year, and archive monthly backups for prior years. Clients can restore from any of these backups as needed.

Tyler maintains two primary datacenters for hosted customers. One is owned by Tyler, located in Yarmouth, ME, and the other is a colocation facility, DataBank, located in Dallas, TX in the old Federal Reserve Building, originally built to withstand a nuclear disaster. Data is replicated between each data center nightly using an enterprise backup solution through virtual infrastructure snapshots. In the



event of a catastrophic disaster that destroys a datacenter, guaranteed recovery point objective (RPO) and recovery time objective (RTO) are each 24 hours with standard services. Business continuity options with lower RTO and RPO are available for an additional fee.

## TYLER DISASTER RECOVERY FOR ON-PREMISES HOSTED CLIENTS

Tyler Disaster Recovery Services is an optional disaster recovery (DR) service provided by Tyler Technologies that ensures continued access to client hosted Tyler product data in the event of a natural or man-made disaster. Tyler Disaster Recovery Services takes nightly backups of your organization's Tyler product data and, in the event of a disaster declaration, works in conjunction with Tyler Hosting Services to create a temporary hosted environment that can be accessed remotely throughout the disaster event, minimizing lost operating time.

Disaster recovery, also called business continuity, is a form of security planning that protects your organization from (you guessed it) disasters. In the face of a significant negative event, DR shields you against the disruption of your daily workflow and critical processes, even if you lose your data and equipment. Having a viable recovery plan in place when disaster strikes makes all the difference as you work to get back on your feet. Tyler provides an array of disaster recovery services for your Tyler software applications, such as off-site backup, a recovery server, and remote access.

If you have Tyler Disaster Recovery Services in place when the unthinkable happens and a disaster is declared, Tyler staff will be there every step of the way to help you get back on your feet as quickly as possible to protect your financial standing and public image. Your data and Tyler software will be securely stored on our servers while your system is down, and our technical experts will help you through every step of your system's restoration process. Once fully functional, your data and Tyler applications will be transferred back to your organization's server and your citizens will continue to get the great customer service they are accustomed to receiving.

### *Disaster Declaration*

A disaster is defined as an unplanned, natural or man-made event that causes an interruption to vital technology infrastructure or systems, threatening your financial standing or public image. It does not include hardware or network failures that are covered by standard service agreements or repairs that can be made within 24 hours. The disaster can last for a few minutes or several days and can range in scope from a localized server event to a full-scale loss of operating facilities. Provided Tyler has your data, in the event of a disaster, we guarantee you'll be back in business within 24 hours.

When an event occurs that causes your Tyler product system to fail, you should initially contact your typical Tyler Support Team. Tyler Support will work with you to help resolve any issues that might be causing your initial outage. If it is determined while working with Tyler Support that the disaster event will not be quickly remedied, and your site wishes to declare a disaster, Tyler Support will escalate the issue to the Tyler Disaster Recovery Services team.



Disasters should be declared with Tyler Disaster Recovery Services if the disaster event will last longer than 24 hours and any further outage duration is deemed unacceptable to ongoing business operations. Disasters can only be declared Monday through Friday between the hours of 7 a.m. and 7 p.m. CST.

### *Coverage*

Tyler Disaster Recovery Services coverage includes:

- Tyler application data sent to the Tyler Disaster Recovery Services facility every 24 hours
- Data integrity check to ensure data is collected properly
- 24-hour Recovery Point Objective (RPO)
- 24-hour Recovery Time Objective (RTO)
- Emergency response within 2 business hours
- Application availability within 8 business hours
- Hosted services for concurrent users during service activations
- One annual DR test
- General backup/restoration assistance in non-disaster circumstances
- Monthly backup status reports

### **Recovery Point Objective (RPO) & Recovery Time Objective (RTO)**

According to Druva, “[RPO] is the interval of time that might pass during a disruption before the quantity of data lost during that period exceeds the... maximum allowable threshold or ‘tolerance.’ [RTO] is the duration of time and a service level within which a business process must be restored after a disaster...to avoid unacceptable consequences associated with a break in continuity.”

### **Disaster Recovery Test**

Tyler Disaster Recovery Services offers the ability for a site to perform a DR test, which is a scheduled mock test of a disaster event. You can request the test once per calendar year at no additional cost to your Tyler Disaster Recovery Services contract. A DR test will help ensure the protection of site-specific processes that may be impacted by a disaster.

### *How Tyler Disaster Recovery Services Works*

Tyler’s state-of-the-art data center transparently retrieves a copy of your data every night, ensuring your critical users can always process work via modem or by traveling to one of two Tyler locations (Plano, Texas, or Yarmouth, Maine).



The Tyler Disaster Recovery Services team helps you identify critical business processes and users, and define and document recovery procedures, printing solutions, etc. Tyler then provides disaster recovery services for your software applications including:

- Off-site backup: As a supplement to your local system backup, Tyler ensures your information is synched with our data center daily so critical users can always deliver services and access real-time data.
- Recovery server: In the event of any disaster, Tyler will host your data and Tyler applications for easy access while your system is being restored.
- Remote access: Regardless of whether you are at your desk or on the road, your data and Tyler applications are always accessible in real time for critical decision-making and daily customer service.

A database export is transferred every night to a server in Maine using a network efficient sync process that enables the transfer to be completed in minutes, even for extremely large databases. In the event of a disaster, your live database is loaded into an environment on the recovery server and your critical users are set up to access that server. You can access your Tyler disaster recovery environment using an SSL (Secure Socket Layer) VPN client from any remote location with an internet connection or come to one of the two offices and utilize our facilities.

### *Tyler Hosting Services*

Tyler Disaster Recovery Services is a Tyler-hosted cloud solution. Tyler owns and maintains all the necessary hardware at two different locations (Plano, Texas, and Yarmouth, Maine); employs more than 45 full-time staff members to monitor operations 24/7 and provide proactive support; provides multiple layers of security (anti-virus, intrusion protection, security monitoring, and firewalls); and utilizes third-party audits for security validations and to ensure accuracy at all levels.

### **Insurance**

**28. What are limits of your professional liability, CGL (including products/completed operations coverage), and network security and privacy liability coverage?**

**TYLER RESPONSE:** Please see Tyler's Certificate of Insurance included with Tyler's Proposal.



## **Termination**

### **29. Right to approve successor in the event of a change of control?**

**TYLER RESPONSE:** Neither party may assign the contract without the prior written consent of the other party, except that Tyler may, without the prior written consent of the Client, modify its ownership structure, transfer or assign the contract in its entirety to the surviving entity of any merger or consolidation or to any purchaser of substantially all of Tyler's assets.

### **30. Right to terminate for cause?**

**TYLER RESPONSE:** If you believe we have materially breached this Agreement, you will invoke the Dispute Resolution clause set forth in Section I(3). You may terminate this Agreement for cause in the event we do not cure, or create a mutually agreeable action plan to address, a material breach of this Agreement within the thirty (30) day window set forth in Section I(3). In the event of termination for cause, you will pay us for all undisputed fees and expenses related to the software, products, and/or services you have received, or we have incurred or delivered, prior to the effective date of termination.

### **31. Right to transition services and data?**

**TYLER RESPONSE** Upon termination, Tyler will provide a copy of the SQL database (for SaaS Agreements) and reasonably cooperate in providing other services and documentation generally available to other Tyler Clients upon termination. Upon termination, Tyler will provide such services as are mutually agreed to by the parties or as are determined through the dispute resolution process in the parties' contract.

## 8.2 EXCEPTIONS TO THE RFP

CITY OF PEMBROKE PINES, FL

RFP #TS-17-04-B, ERP SYSTEM SOFTWARE AND IMPLEMENTATION

Tyler Statement Regarding Exceptions to the Aforementioned Procurement Document(s)

Tyler's Proposal is based on the delivery of the requested software and services according to Tyler's standard implementation methodology and Tyler's standard contracts. That methodology, and those contracts, have been refined and enhanced over Tyler's many years of operation in the public-sector information technology market. Tyler's submission of its Proposal does not constitute a waiver of Tyler's right to negotiate any and all terms to the mutual satisfaction of the parties.

Tyler is providing "exceptions" to the procurement terms and conditions for your review. This representative list does not negate any of the expectations Tyler has stated above.

**Contract Considerations.** Tyler reserves the right to negotiate any and all terms to the mutual satisfaction of the parties. Tyler expects to use the standard Tyler contract as the basis for beginning contract negotiations, as it contains language specific to the software industry, such as license grant and intellectual property infringement. Tyler recognizes that there may be clauses of particular importance to the Client that may not be included in the Tyler contract. Tyler is amenable to accommodating the Client's contract requests by incorporating mutually agreed clauses into the Tyler contract. Tyler's standard contract(s) are included for your reference. To the extent you request to incorporate your bid documents and our proposal documents into the contract package, we will agree to do so as long as the order of priority is (a) the final, negotiated contract; (b) our proposal documentation; and (c) your bid documentation.

**Pricing.** Unless expressly indicated otherwise, our Proposal contains estimates of the amount of services and associated expenses needed, based on our understanding of the size and scope of your project. The actual amount of services and expenses depends on such factors as your level of involvement in the project and the speed of knowledge transfer. If required, we will provide a not-to-exceed quote once the scope of services has been finalized. Unless noted otherwise, our services rates do not include travel expenses, which are separately estimated. Unless expressly indicated otherwise, the fees we have quoted do not include any taxes.

**Payment Terms.** Tyler's standard payment terms are set forth in the Invoicing and Payment Policy (Exhibit B) to the standard Tyler contract. Payment shall be made within 45 days of receipt of invoice.

**Applicable Law.** Tyler agrees to comply with applicable laws and mutually agreed to Client policies/procedures. Tyler reserves the right to discuss in good faith which laws and policies/procedures the Client considers applicable, and to identify those in the contract. To the extent compliance requires a modification to the Tyler software, Tyler will provide that modification according to the provisions set forth in Exhibit C to the Tyler contract or as otherwise agreed to by the parties.

**Project Plan.** Tyler's Proposal includes a sample project plan. Tyler reserves the right to negotiate project timelines and will deliver the actual project plan upon obtaining further information from the Client.

**Personnel.** Tyler will provide information on representative Tyler personnel. We are unable to assign personnel to a project until Tyler is selected and a contract is signed, in an effort to most effectively use resources. Tyler reserves the sole right to assign and reassign project personnel but will use commercially reasonable efforts to maintain consistency of project personnel.

**Acceptance.** Tyler is willing to negotiate a mutually agreeable acceptance process of at least 30 days that is based on warranted functionality.

**Indemnification.** Tyler shall defend, indemnify and hold harmless the Client from and against any and all direct claims, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and costs) for personal injury or property damage arising from Tyler's negligence or willful misconduct; a breach of Tyler's confidentiality obligations arising from Tyler's negligence or willful misconduct; or Tyler's violation of a law applicable to Tyler's performance under the contract. The Client must notify Tyler promptly in writing of the claim and give Tyler sole control over its defense or settlement. The Client agrees to provide Tyler with reasonable assistance, cooperation, and information in defending the claim at Tyler's expense. Tyler will defend, indemnify, and hold harmless the Client from third-party claims that the Tyler software and/or documentation infringes an intellectual property right in accordance with Section H(1) of Tyler's standard contract

**Insurance.** We agree to secure our insurance from a carrier with a minimum AM Best rating of A-VII. Tyler's insurance program is established at a corporate level and is not subject to change on an individual customer basis. Tyler's insurer evidences Tyler's insurance coverage using a standard Acord form. The coverage limits set forth on our certificate of insurance do not apply separately. Copies of Tyler's insurance policies are only made available in the event a claim is disputed or denied. Tyler will disclose its deductibles upon written request, but those deductibles are not subject to customer approval. Tyler is well-positioned financially to satisfy its deductibles. At your request during contract negotiations, we will add language to the insurance provision that adds you as an additional insured to our commercial general liability and auto liability policy for claims arising out of or relating to the contract, which automatically affords you the same status under our excess/umbrella liability policy. A Certificate of Insurance reflecting that status may be provided at your request after the contract is executed. Our carrier has issued blanket endorsements regarding additional insured status; we do not issue separate endorsements specific to each customer. We agree that our insurance is primary for claims under our CGL or auto policies that arise out of or relate to the contract and are between us and you. If required, Tyler will agree to waive subrogation, but only on claims under our CGL or auto policies that arise out of or relate to the contract and are between us and you, except to the extent the damage or injury is caused by you. If you require it in the contract, we will agree to provide you with notice of cancellation, non-renewal or reduction in our insurance coverages below the minimum requirements set forth in the contract within thirty (30) days thereof. Renewal certificates of insurance will be provided as close as practicable to the date the applicable policy or policies is/are renewed.



**Termination.** The Client may terminate the contract for cause in the event Tyler fails to cure a material breach according to the terms of the dispute resolution process set forth in Tyler's standard contract. The Client will make payment to Tyler for all undisputed products, services and expenses delivered or incurred through the effective date of termination. Payment for disputed products, services and expenses, and the Client's remedies, will be determined through the mutually agreed dispute resolution process. The Client may terminate the contract for convenience on thirty days' prior written notice. Upon termination, the Client shall remit payment for all products and services delivered to the Client and all expenses incurred by Tyler prior through the effective date of termination. The Client will not be entitled to a refund or offset of previously paid license and other fees.

**Time is of the Essence.** Tyler does not agree to "time being made of the essence." Tyler will begin and perform services in accordance with the mutually agreed upon implementation plan schedule.

**Warranty.** Tyler does not provide implied warranties, including the implied warranties of merchantability and fitness for a particular purpose, as they are subjective. For as long as the Client has a current Maintenance Agreement in place, Tyler warrants that the Tyler software will substantially conform to the functional descriptions of the Tyler software contained in Tyler's Proposal, or their functional equivalent. Future functionality may be updated, modified, or otherwise enhanced through our maintenance and support services, and the governing functional descriptions for such future functionality will be set forth in our then-current documentation. Tyler warrants that it will perform services in a professional, workmanlike manner, consistent with industry standards. In the event Tyler provides services that do not conform to this warranty, Tyler will re-perform the services at no additional cost to the Client. This provides the exclusive remedy available to Client for such breach of warranty.

**Use and Public Disclosure.** The Client may use the Tyler Proposal for its internal reference in evaluating proposals. We reserve the right to protest the public disclosure of our confidential business information/trade secrets but will comply with applicable public records laws.

**Proposal Basis.** Tyler's proposal is based on the information provided in the RFP. Tyler has read and understands the RFP terms and conditions, and Tyler's Proposal is submitted in conformance with those terms and conditions, except as modified by, taken exception to, or as otherwise provided in Tyler's Proposal.

**Documentation.** Tyler will make available such documentation as it makes generally available to all clients using the proposed software and services, and reserves the right to provide some or all documentation electronically, including embedding in the Tyler Software. The Documentation is licensed to you and may be used and copied by your employees for internal, non-commercial reference purposes only.

## Section 9 ADDITIONAL INFORMATION

### Tab 9 – Additional Information:

Please provide any additional information that you deem necessary to complete your proposal in this section, if it has not been requested in another section.

### TYLER'S ORGANIZATIONAL INFORMATION

Tyler Technologies, headquartered in Plano, Texas, is a leading provider of end-to-end information management solutions and services for local governments. Tyler partners with clients to empower the public sector — cities, counties, schools and other government entities — to become more efficient, more accessible and more responsive to the needs of citizens. Tyler's client base includes more than 15,000 local government offices and school districts throughout the U.S. and its territories, Canada, the Caribbean, the United Kingdom and other international locations. These mission-critical applications provide the public sector with the ability to streamline and automate operations resulting in improved productivity and reduced costs.



### PUBLIC SECTOR FOCUS

Tyler's business units have provided software and services to customers for more than fifty years and have long-standing reputations in the local government market for quality products and customer service. Tyler is the largest company in the United States focused solely on providing software solutions to the public sector. While many of our competitors compete in multiple vertical markets, Tyler is singularly focused on the public sector. It's 100 percent of our business.

Tyler recognizes that the public sector is generally stable, risk averse, and craves community accessibility, security, and transparency. That is why local government and school entities seek reliable and efficient software and services from Tyler—a vendor who is professional, reputable, dedicated, and achieves results. Tyler has the experience to understand the unique requirements of

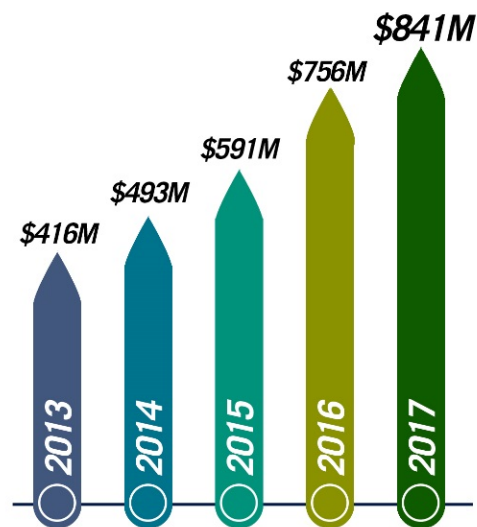
the public sector, the necessary resources to invest in its products, and the ability to deliver quality services.

### ABOUT TYLER TECHNOLOGIES

- Headquartered in Plano, Texas with 27 office locations across the U.S.
- Munis office located in Maine for nearly 40 years
- Publicly traded on the NYSE under the symbol “TYL”
- Founded in 1966
- Exclusively focused on local government since 1997
- Providing License Management software since 2001
- 15,000+ clients across every U.S. state, Canada, Puerto Rico and the United Kingdom
- 4,100+ employees
- Annual revenues of \$841 million (2017)
- Reinvestment of \$48M into Research & Development
- Scalable products with the smallest jurisdiction (Loving County, TX with a Population of 82) to the largest (Los Angeles County, CA with a population of 10.1M)

### FINANCIAL STABILITY

Tyler consistently maintains strong cash flow, low, or no debt, and quarter over quarter of revenue growth, and a total revenue for 2017 of \$841 million. While experiencing significant growth, an average of 13% year over year since 2002, Tyler has reinvested our revenue into an increase in staff, expanding territories, and reinvesting in the products with \$48 million into research and development for 2017. No other company has the size or experience to address the needs of local government across all major solutions areas. All of this leads to our having a footprint of market share that no other company can match. The size of our market wouldn't mean anything if we didn't have real partnerships with every client. Our client partnerships are the differentiator we are most proud of.



For additional revenue information please visit [www.tylertech.com](http://www.tylertech.com)

## INDUSTRY LEADERSHIP

Tyler strives to provide the best client services in the industry. Our products undergo testing by trained quality assurance and certified usability analysts, therefore our clients benefit from products that work logically based upon user experience and input. We also focus our implementation and support professionals on specific groups of applications so they can offer more specialized services.

Our commitment at Tyler is to ensure the highest level of client satisfaction through the efforts of Tyler's most valued resource: its people. We challenge our employees to pursue new initiatives aggressively and become industry leaders in their respective fields. Tyler employs more than 4,100 individuals, many of whom are seasoned professionals with unique and proprietary skills and years of industry experience. In fact, our employee turnover rate is very low—in recent years, about half of the industry average.

## COMPANY RECOGNITION

Tyler Technologies has earned the reputation as an industry leader based on our products and commitment to our clients. These factors, along with our financial strength and industry partnerships, have resulted in numerous accolades. "The recognition emphasizes Tyler's consistently strong growth, which is a direct result of our commitment to supporting our more than 15,000 clients and the development of best-in-class software and services to serve the needs of the public sector" said John S. Marr Jr., executive chairman of the board of Tyler Technologies.

## INNOVATIVE AND STRONG

- Dallas Business Journal ranked Tyler's Plano office #8 in its "North Texas Fastest-Growing Public Companies" list (2017)
- Forbes' "Most Innovative Growth Companies" list (2016, 2017)
- Forbes' "America's Best Small Companies" list (eight times)
- Barron's 400 Index ranking, a measure of the most promising companies in America (six times)
- Software Magazine's "Software 500" ranking of the world's largest software and service suppliers (seven times)
- Audit Integrity's "America's Most Trustworthy Companies" list (2007)

## EMPLOYER OF CHOICE

- "Best Places to Work in Maine" recognized Tyler's three Maine offices (nine times since 2007)
- Dallas Morning News' "Best in DFW: Top Workplaces" recognized Tyler's Plano, Texas, office (five times)
- Dayton Daily News' "Top Workplaces in the Dayton Metro Area" recognized Tyler's Moraine, Ohio, office

- Tyler's Lubbock, Texas, office named to the "Best of Lubbock" list by the Lubbock Avalanche-Journal (2016 and 2017)
- Detroit Free Press named Tyler's Troy, Michigan, office a top workplace (2017)
- Phoenix Business Journal named Tyler's Tempe, AZ, office on Best Places to Work list (2017)

## OUR EXPERIENCE

Tyler Technologies' Solutions offer the widest breadth of products in the industry, the latest technology available, and an integrated system that can operate in diverse offices throughout a jurisdiction. More importantly, Tyler's vision and skill in executing that vision is what ultimately leads to a successful implementation and long-term solution for our customers. Our experienced team consists of industry leaders that keep our team moving, and making sure we can give you the tools to succeed.

## 9.1 FUNCTIONAL REQUIREMENTS

### *Notes and Assumptions*

#### *Tyler Reporting Services*

Wherever Tyler Technologies, Inc. has responded affirmatively to certain functional checklist questions/requirements/specifications as requiring the use of Tyler Reporting Services, (SSRS), the City is solely responsible for development of the necessary/required report(s), unless specifically indicated otherwise.

#### *Interfaces / Customizations*

Interface requirements agreed to by Tyler within this response will depend on the customer maintaining an active support agreement with the identified third-party system as well as a current version actively supported by the manufacturer/developer of the product installed.

#### *Custom Modifications*

Custom modifications, if quoted with a specific dollar value, are priced based upon the total proposed software package and the requirements set forth in the RFP. To the extent system components and/or requirements change, pricing for custom modifications may also change. If a custom modification is identified without a price, that identification is provided as an alert that the functionality is not available "out of the box," and additional information is required from the customer before Tyler can price the modification. During the contract negotiation process, Tyler expects to work with the customer to identify the custom modifications that will be considered within the project scope, and to finalize the associated price and timeline. Those modifications will be delivered during the project on the schedule the parties mutually agree to during the contracting and/or project planning processes. Any custom modifications that the customer requests post-

contracting will be subject to an amendment or change order, which will address at least the pricing and schedule impacts of adding the subject modification to the original project scope and schedule.

### *Future Functionality*

Future Functionality, when and if provided, will be released on the same timeline as the functionality is made generally available to customers under a maintenance agreement with Tyler. If a customer requires that such functionality be committed to within the contract, the functionality will be treated as a custom modification, payable by the customer.

## 9.2 SAMPLE LICENSE AGREEMENT / SELF HOSTED

Please reference the Sample License Agreement on the following pages.



## LICENSE AND SERVICES AGREEMENT<sup>1</sup>

This License and Services Agreement is made between Tyler Technologies, Inc. and Client.

WHEREAS, Client selected Tyler to license the software products and perform the services set forth in the Investment Summary and Tyler desires to perform such actions under the terms of this Agreement;

NOW THEREFORE, in consideration of the foregoing and of the mutual covenants and promises set forth in this Agreement, Tyler and Client agree as follows:

### SECTION A – DEFINITIONS

- **“Agreement”** means this License and Services Agreement.
- **“Business Travel Policy”** means our business travel policy. A copy of our current Business Travel Policy is attached as Schedule 1 to Exhibit B.
- **“Client”** means [INSERT CLIENT NAME].
- **“Defect”** means a failure of the Tyler Software to substantially conform to the functional descriptions set forth in our written proposal to you, or their functional equivalent. Future functionality may be updated, modified, or otherwise enhanced through our maintenance and support services, and the governing functional descriptions for such future functionality will be set forth in our then-current Documentation.
- **“Developer”** means a third party who owns the intellectual property rights to Third Party Software.
- **“Documentation”** means any online or written documentation related to the use or functionality of the Tyler Software that we provide or otherwise make available to you, including instructions, user guides, manuals and other training or self-help documentation.
- **“Effective Date”** means the date on which your authorized representative signs the Agreement.
- **“Force Majeure”** means an event beyond the reasonable control of you or us, including, without limitation, governmental action, war, riot or civil commotion, fire, natural disaster, or any other cause that could not with reasonable diligence be foreseen or prevented by you or us.
- **“Investment Summary”** means the agreed upon cost proposal for the software, products, and services attached as Exhibit A.
- **“Invoicing and Payment Policy”** means the invoicing and payment policy. A copy of our current Invoicing and Payment Policy is attached as Exhibit B.
- **“Maintenance and Support Agreement”** means the terms and conditions governing the provision of maintenance and support services to all of our customers. A copy of our current Maintenance and Support Agreement is attached as Exhibit C.
- **“Statement of Work”** means the industry standard implementation plan describing how our professional services will be provided to implement the Tyler Software, and outlining your and our roles and responsibilities in connection with that implementation. The Statement of Work is attached as

<sup>1</sup> HIGHLIGHTED PROVISIONS INDICATE PROVISIONS THAT MAY OR MAY NOT APPLY TO THE PARTICULAR CLIENT/CONTRACT. DURING CONTRACT NEGOTIATIONS, THOSE PROVISIONS WILL BE ADJUSTED AS NECESSARY.



**Exhibit E.**

- **“Support Call Process”** means the support call process applicable to all of our customers who have licensed the Tyler Software. A copy of our current Support Call Process is attached as Schedule 1 to Exhibit C.
- **“Third Party Terms”** means, if any, the end user license agreement(s) or similar terms for the Third Party Software, as applicable and attached as Exhibit D.
- **“Third Party Hardware”** means the third party hardware, if any, identified in the Investment Summary.
- **“Third Party Products”** means the Third Party Software and Third Party Hardware.
- **“Third Party Software”** means the third party software, if any, identified in the Investment Summary.
- **“Tyler”** means Tyler Technologies, Inc., a Delaware corporation.
- **“Tyler Software”** means our proprietary software, including any integrations, custom modifications, and/or other related interfaces identified in the Investment Summary and licensed by us to you through this Agreement.
- **“we”, “us”, “our”** and similar terms mean Tyler.
- **“you”** and similar terms mean Client.

**SECTION B – SOFTWARE LICENSE****1. License Grant and Restrictions.**

- 1.1 We grant to you a license to use the Tyler Software for your internal business purposes only, in the scope of the internal business purposes disclosed to us as of the Effective Date. You may make copies of the Tyler Software for backup and testing purposes, so long as such copies are not used in production and the testing is for internal use only. Your rights to use the Tyler Software are perpetual but may be revoked if you do not comply with the terms of this Agreement.
- 1.2 Without limiting the terms of Section 1.1, you understand and agree that the Postal Xpress, Transparency Portal and Tyler Notify modules set forth in the Investment Summary are licensed to you on a subscription basis. If you do not pay the required annual fee in accordance with the Invoicing and Payment Policy, your license to use the associated module will be suspended unless and until payment in full has been made.
- 1.3 The Documentation is licensed to you and may be used and copied by your employees for internal, non-commercial reference purposes only.
- 1.4 You may not: (a) transfer or assign the Tyler Software to a third party; (b) reverse engineer, decompile, or disassemble the Tyler Software; (c) rent, lease, lend, or provide commercial hosting services with the Tyler Software; or (d) publish or otherwise disclose the Tyler Software or Documentation to third parties.
- 1.5 The license terms in this Agreement apply to updates and enhancements we may provide to you or make available to you through your Maintenance and Support Agreement.
- 1.6 The right to transfer the Tyler Software to a replacement hardware system is included in your license. You will give us advance written notice of any such transfer and will pay us for any required or requested technical assistance from us associated with such transfer.
- 1.7 We reserve all rights not expressly granted to you in this Agreement. The Tyler Software and Documentation are protected by copyright and other intellectual property laws and treaties. We own



the title, copyright, and other intellectual property rights in the Tyler Software and the Documentation.  
**The Tyler Software is licensed, not sold.**

2. License Fees. You agree to pay us the license fees in the amounts set forth in the Investment Summary. Those amounts are payable in accordance with our Invoicing and Payment Policy.
3. Escrow. We maintain an escrow agreement with a third party under which we place the source code for each major release of the Tyler Software. You may be added as a beneficiary to the escrow agreement by completing a standard beneficiary enrollment form and paying the annual beneficiary fee set forth in the Investment Summary. You will be responsible for maintaining your ongoing status as a beneficiary, including payment of the then-current annual beneficiary fees. Release of source code for the Tyler Software is strictly governed by the terms of the escrow agreement.
4. Limited Warranty. We warrant that the Tyler Software will be without Defect(s) as long as you have a Maintenance and Support Agreement in effect. If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect as set forth in the Maintenance and Support Agreement.

### SECTION C – PROFESSIONAL SERVICES

1. Services. We will provide you the various implementation-related services itemized in the Investment Summary and described in the Statement of Work/our industry standard implementation plan. We will finalize that documentation with you upon execution of this Agreement.
2. Professional Services Fees. You agree to pay us the professional services fees in the amounts set forth in the Investment Summary. Those amounts are payable in accordance with our Invoicing and Payment Policy. You acknowledge that the fees stated in the Investment Summary are good-faith estimates of the amount of time and materials required for your implementation. We will bill you the actual fees incurred based on the in-scope services provided to you. Any discrepancies in the total values set forth in the Investment Summary will be resolved by multiplying the applicable hourly rate by the quoted hours.
3. Additional Services. The Investment Summary contains, and the Statement of Work describes, the scope of services and related costs (including programming and/or interface estimates) required for the project based on our understanding of the specifications you supplied. If additional work is required, or if you use or request additional services, we will provide you with an addendum or change order, as applicable, outlining the costs for the additional work. The price quotes in the addendum or change order will be valid for thirty (30) days from the date of the quote.
4. Cancellation. We make all reasonable efforts to schedule our personnel for travel, including arranging travel reservations, at least two (2) weeks in advance of commitments. Therefore, if you cancel services less than two (2) weeks in advance (other than for Force Majeure or breach by us), you will be liable for all (a) non-refundable expenses incurred by us on your behalf, and (b) daily fees associated with cancelled professional services if we are unable to reassign our personnel. We will make all reasonable efforts to reassign personnel in the event you cancel within two (2) weeks of scheduled commitments.
5. Services Warranty. We will perform the services in a professional, workmanlike manner, consistent with industry standards. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you.
6. Site Access and Requirements. At no cost to us, you agree to provide us with full and free access to your



personnel, facilities, and equipment as may be reasonably necessary for us to provide implementation services, subject to any reasonable security protocols or other written policies provided to us as of the Effective Date, and thereafter as mutually agreed to by you and us. You further agree to provide a reasonably suitable environment, location, and space for the installation of the Tyler Software and any Third Party Products, including, without limitation, sufficient electrical circuits, cables, and other reasonably necessary items required for the installation and operation of the Tyler Software and any Third Party Products.

7. Client Assistance. You acknowledge that the implementation of the Tyler Software is a cooperative process requiring the time and resources of your personnel. You agree to use all reasonable efforts to cooperate with and assist us as may be reasonably required to meet the agreed upon project deadlines and other milestones for implementation. This cooperation includes at least working with us to schedule the implementation-related services outlined in this Agreement. We will not be liable for failure to meet any deadlines and milestones when such failure is due to Force Majeure or to the failure by your personnel to provide such cooperation and assistance (either through action or omission).

#### **SECTION D – MAINTENANCE AND SUPPORT**

This Agreement includes the period of free maintenance and support services identified in the Invoicing and Payment Policy. If you have purchased ongoing maintenance and support services, and continue to make timely payments for them according to our Invoicing and Payment Policy, we will provide you with maintenance and support services for the Tyler Software under the terms of our standard Maintenance and Support Agreement.

If you have opted not to purchase ongoing maintenance and support services for the Tyler Software, the Maintenance and Support Agreement does not apply to you. Instead, you will only receive ongoing maintenance and support on the Tyler Software on a time and materials basis. In addition, you will:

- (i) receive the lowest priority under our Support Call Process;
- (ii) be required to purchase new releases of the Tyler Software, including fixes, enhancements and patches;
- (iii) be charged our then-current rates for support services, or such other rates that we may consider necessary to account for your lack of ongoing training on the Tyler Software;
- (iv) be charged for a minimum of two (2) hours of support services for every support call; and
- (v) not be granted access to the support website for the Tyler Software or the Tyler Community Forum.

#### **SECTION E – THIRD PARTY PRODUCTS**

To the extent there are any Third Party Products set forth in the Investment Summary, the following terms and conditions will apply:

1. Third Party Hardware. We will sell, deliver, and install onsite the Third Party Hardware, if you have purchased any, for the price set forth in the Investment Summary. Those amounts are payable in accordance with our Invoicing and Payment Policy.
2. Third Party Software. Upon payment in full of the Third Party Software license fees, you will receive a non-transferable license to use the Third Party Software and related documentation for your internal business



purposes only. Your license rights to the Third Party Software will be governed by the Third Party Terms.

2.1 We will install onsite the Third Party Software. The installation cost is included in the installation fee in the Investment Summary.

2.2 If the Developer charges a fee for future updates, releases, or other enhancements to the Third Party Software, you will be required to pay such additional future fee.

2.3 The right to transfer the Third Party Software to a replacement hardware system is governed by the Developer. You will give us advance written notice of any such transfer and will pay us for any required or requested technical assistance from us associated with such transfer.

3. Third Party Products Warranties.

3.1 We are authorized by each Developer to grant or transfer the licenses to the Third Party Software.

3.2 The Third Party Hardware will be new and unused, and upon payment in full, you will receive free and clear title to the Third Party Hardware.

3.3 You acknowledge that we are not the manufacturer of the Third Party Products. We do not warrant or guarantee the performance of the Third Party Products. However, we grant and pass through to you any warranty that we may receive from the Developer or supplier of the Third Party Products.

4. Maintenance. If you have a Maintenance and Support Agreement in effect, you may report defects and other issues related to the Third Party Software directly to us, and we will (a) directly address the defect or issue, to the extent it relates to our interface with the Third Party Software; and/or (b) facilitate resolution with the Developer, unless that Developer requires that you have a separate, direct maintenance agreement in effect with that Developer. In all events, if you do not have a Maintenance and Support Agreement in effect with us, you will be responsible for resolving defects and other issues related to the Third Party Software directly with the Developer.

## **SECTION F – INVOICING AND PAYMENT; INVOICE DISPUTES**

1. Invoicing and Payment. We will invoice you for all fees set forth in the Investment Summary per our Invoicing and Payment Policy, subject to Section F(2).

2. Invoice Disputes. If you believe any delivered software or service does not conform to the warranties in this Agreement, you will provide us with written notice within thirty (30) days of your receipt of the applicable invoice. The written notice must contain reasonable detail of the issues you contend are in dispute so that we can confirm the issue and respond to your notice with either a justification of the invoice, an adjustment to the invoice, or a proposal addressing the issues presented in your notice. We will work with you as may be necessary to develop an action plan that outlines reasonable steps to be taken by each of us to resolve any issues presented in your notice. You may withhold payment of the amount(s) actually in dispute, and only those amounts, until we complete the action items outlined in the plan. If we are unable to complete the action items outlined in the action plan because of your failure to complete the items agreed to be done by you, then you will remit full payment of the invoice. We reserve the right to suspend delivery of all services, including maintenance and support services, if you fail to pay an invoice not disputed as described above within fifteen (15) days of notice of our intent to do so.

## **SECTION G – TERMINATION**



1. For Cause. If you believe we have materially breached this Agreement, you will invoke the Dispute Resolution clause set forth in Section I(3). You may terminate this Agreement for cause in the event we do not cure, or create a mutually agreeable action plan to address, a material breach of this Agreement within the thirty (30) day window set forth in Section I(3). In the event of termination for cause, you will pay us for all undisputed fees and expenses related to the software, products, and/or services you have received, or we have incurred or delivered, prior to the effective date of termination.
2. Lack of Appropriations. If you should not appropriate or otherwise receive funds sufficient to purchase, lease, operate, or maintain the software or services set forth in this Agreement, you may unilaterally terminate this Agreement effective on the final day of the fiscal year through which you have funding. You will make every effort to give us at least thirty (30) days written notice prior to a termination for lack of appropriations. In the event of termination due to a lack of appropriations, you will pay us for all undisputed fees and expenses related to the software and/or services you have received, or we have incurred or delivered, prior to the effective date of termination. Any disputed fees and expenses must have been submitted to the Invoice Dispute process set forth in Section F(2) at the time of termination in order to be withheld at termination. You will not be entitled to a refund or offset of previously paid license and other fees.
3. Force Majeure. Except for your payment obligations, either you or we may terminate this Agreement if a Force Majeure event suspends performance of scheduled tasks for a period of forty-five (45) days or more. In the event of termination due to Force Majeure, you will pay us for all undisputed fees and expenses related to the software and/or services you have received, or we have incurred or delivered, prior to the effective date of termination. Any disputed fees and expenses must have been submitted to the Invoice Dispute process set forth in Section F(2) at the time of termination in order to be withheld at termination. You will not be entitled to a refund or offset of previously paid license and other fees.

## **SECTION H – INDEMNIFICATION, LIMITATION OF LIABILITY AND INSURANCE**

1. Intellectual Property Infringement Indemnification.
  - 1.1 We will defend you against any third party claim(s) that the Tyler Software or Documentation infringes that third party's patent, copyright, or trademark, or misappropriates its trade secrets, and will pay the amount of any resulting adverse final judgment (or settlement to which we consent). You must notify us promptly in writing of the claim and give us sole control over its defense or settlement. You agree to provide us with reasonable assistance, cooperation, and information in defending the claim at our expense.
  - 1.2 Our obligations under this Section H(1) will not apply to the extent the claim or adverse final judgment is based on your: (a) use of a previous version of the Tyler Software and the claim would have been avoided had you installed and used the current version of the Tyler Software, and we provided notice of that requirement to you; (b) combining the Tyler Software with any product or device not provided, contemplated, or approved by us; (c) altering or modifying the Tyler Software, including any modification by third parties at your direction or otherwise permitted by you; (d) use of the Tyler Software in contradiction of this Agreement, including with non-licensed third parties; or (e) willful infringement, including use of the Tyler Software after we notify you to discontinue use due to such a claim.
  - 1.3 If we receive information concerning an infringement or misappropriation claim related to the Tyler



Software, we may, at our expense and without obligation to do so, either: (a) procure for you the right to continue its use; (b) modify it to make it non-infringing; or (c) replace it with a functional equivalent, in which case you will stop running the allegedly infringing Tyler Software immediately. Alternatively, we may decide to litigate the claim to judgment, in which case you may continue to use the Tyler Software consistent with the terms of this Agreement.

1.4 If an infringement or misappropriation claim is fully litigated and your use of the Tyler Software is enjoined by a court of competent jurisdiction, in addition to paying any adverse final judgment (or settlement to which we consent), we will, at our option, either: (a) procure the right to continue its use; (b) modify it to make it non-infringing; (c) replace it with a functional equivalent; or (d) terminate your license and refund the license fees paid for the infringing Tyler Software, as depreciated on a straight-line basis measured over seven (7) years from the Effective Date. We will pursue those options in the order listed herein. This section provides your exclusive remedy for third party copyright, patent, or trademark infringement and trade secret misappropriation claims.

## 2. General Indemnification.

2.1 We will indemnify and hold harmless you and your agents, officials, and employees from and against any and all third-party claims, losses, liabilities, damages, costs, and expenses (including reasonable attorney's fees and costs) for (a) personal injury or property damage to the extent caused by our negligence or willful misconduct; or (b) our violation of a law applicable to our performance under this Agreement. You must notify us promptly in writing of the claim and give us sole control over its defense or settlement. You agree to provide us with reasonable assistance, cooperation, and information in defending the claim at our expense.

2.2 To the extent permitted by applicable law, you will indemnify and hold harmless us and our agents, officials, and employees from and against any and all third-party claims, losses, liabilities, damages, costs, and expenses (including reasonable attorney's fees and costs) for personal injury or property damage to the extent caused by your negligence or willful misconduct; or (b) your violation of a law applicable to your performance under this Agreement. We will notify you promptly in writing of the claim and will give you sole control over its defense or settlement. We agree to provide you with reasonable assistance, cooperation, and information in defending the claim at your expense.

3. **DISCLAIMER. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS AGREEMENT AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, WE HEREBY DISCLAIM ALL OTHER WARRANTIES AND CONDITIONS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES, DUTIES, OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

4. **LIMITATION OF LIABILITY. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, OUR LIABILITY FOR DAMAGES ARISING OUT OF THIS AGREEMENT, WHETHER BASED ON A THEORY OF CONTRACT OR TORT, INCLUDING NEGLIGENCE AND STRICT LIABILITY, SHALL BE LIMITED TO YOUR ACTUAL DIRECT DAMAGES, NOT TO EXCEED (A) PRIOR TO FORMAL TRANSITION TO MAINTENANCE AND SUPPORT, THE TOTAL ONE-TIME FEES SET FORTH IN THE INVESTMENT SUMMARY; OR (B) AFTER FORMAL TRANSITION TO MAINTENANCE AND SUPPORT, THE THEN-CURRENT ANNUAL MAINTENANCE AND SUPPORT FEE. THE PRICES SET FORTH IN THIS AGREEMENT ARE SET IN RELIANCE UPON THIS LIMITATION OF LIABILITY. THE FOREGOING LIMITATION OF LIABILITY SHALL NOT APPLY TO CLAIMS THAT ARE SUBJECT TO SECTIONS H(1) AND H(2).**





5. **EXCLUSION OF CERTAIN DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.**
6. Insurance. During the course of performing services under this Agreement, we agree to maintain the following levels of insurance: (a) Commercial General Liability of at least \$1,000,000; (b) Automobile Liability of at least \$1,000,000; (c) Professional Liability of at least \$1,000,000; (d) Workers Compensation complying with applicable statutory requirements; and (e) Excess/Umbrella Liability of at least \$5,000,000. We will add you as an additional insured to our Commercial General Liability and Automobile Liability policies, which will automatically add you as an additional insured to our Excess/Umbrella Liability policy as well. We will provide you with copies of certificates of insurance upon your written request.

## SECTION I – GENERAL TERMS AND CONDITIONS

1. Additional Products and Services. You may purchase additional products and services at the rates set forth in the Investment Summary for twelve (12) months from the Effective Date, and thereafter at our then-current list price, by executing a mutually agreed addendum. If no rate is provided in the Investment Summary, or those twelve (12) months have expired, you may purchase additional products and services at our then-current list price, also by executing a mutually agreed addendum. The terms of this Agreement will control any such additional purchase(s), unless otherwise specifically provided in the addendum.
2. Optional Items. Pricing for any listed optional products and services in the Investment Summary will be valid for twelve (12) months from the Effective Date.
3. Dispute Resolution. You agree to provide us with written notice within thirty (30) days of becoming aware of a dispute. You agree to cooperate with us in trying to reasonably resolve all disputes, including, if requested by either party, appointing a senior representative to meet and engage in good faith negotiations with our appointed senior representative. Senior representatives will convene within thirty (30) days of the written dispute notice, unless otherwise agreed. All meetings and discussions between senior representatives will be deemed confidential settlement discussions not subject to disclosure under Federal Rule of Evidence 408 or any similar applicable state rule. If we fail to resolve the dispute, either of us may assert our respective rights and remedies in a court of competent jurisdiction. Nothing in this section shall prevent you or us from seeking necessary injunctive relief during the dispute resolution procedures.
4. Taxes. The fees in the Investment Summary do not include any taxes, including, without limitation, sales, use, or excise tax. If you are a tax-exempt entity, you agree to provide us with a tax-exempt certificate. Otherwise, we will pay all applicable taxes to the proper authorities and you will reimburse us for such taxes. If you have a valid direct-pay permit, you agree to provide us with a copy. For clarity, we are responsible for paying our income taxes, both federal and state, as applicable, arising from our performance of this Agreement.
5. Nondiscrimination. We will not discriminate against any person employed or applying for employment concerning the performance of our responsibilities under this Agreement. This discrimination prohibition will apply to all matters of initial employment, tenure, and terms of employment, or otherwise with respect to any matter directly or indirectly relating to employment concerning race, color, religion, national origin, age, sex, sexual orientation, ancestry, disability that is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, marital status, or political affiliation. We will post, where appropriate, all notices related to nondiscrimination as may be required by applicable law.



6. E-Verify. We have complied, and will comply, with the E-Verify procedures administered by the U.S. Citizenship and Immigration Services Verification Division for all of our employees assigned to your project.
7. Subcontractors. We will not subcontract any services under this Agreement without your prior written consent, not to be unreasonably withheld.
8. Binding Effect; No Assignment. This Agreement shall be binding on, and shall be for the benefit of, either your or our successor(s) or permitted assign(s). Neither party may assign this Agreement without the prior written consent of the other party; provided, however, your consent is not required for an assignment by us as a result of a corporate reorganization, merger, acquisition, or purchase of substantially all of our assets.
9. Force Majeure. Except for your payment obligations, neither party will be liable for delays in performing its obligations under this Agreement to the extent that the delay is caused by Force Majeure; provided, however, that within ten (10) business days of the Force Majeure event, the party whose performance is delayed provides the other party with written notice explaining the cause and extent thereof, as well as a request for a reasonable time extension equal to the estimated duration of the Force Majeure event.
10. No Intended Third Party Beneficiaries. This Agreement is entered into solely for the benefit of you and us. No third party will be deemed a beneficiary of this Agreement, and no third party will have the right to make any claim or assert any right under this Agreement. This provision does not affect the rights of third parties under any Third Party Terms.
11. Entire Agreement; Amendment. This Agreement represents the entire agreement between you and us with respect to the subject matter hereof, and supersedes any prior agreements, understandings, and representations, whether written, oral, expressed, implied, or statutory. Purchase orders submitted by you, if any, are for your internal administrative purposes only, and the terms and conditions contained in those purchase orders will have no force or effect. This Agreement may only be modified by a written amendment signed by an authorized representative of each party.
12. Severability. If any term or provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement will be considered valid and enforceable to the fullest extent permitted by law.
13. No Waiver. In the event that the terms and conditions of this Agreement are not strictly enforced by either party, such non-enforcement will not act as or be deemed to act as a waiver or modification of this Agreement, nor will such non-enforcement prevent such party from enforcing each and every term of this Agreement thereafter.
14. Independent Contractor. We are an independent contractor for all purposes under this Agreement.
15. Notices. All notices or communications required or permitted as a part of this Agreement, such as notice of an alleged material breach for a termination for cause or a dispute that must be submitted to dispute resolution, must be in writing and will be deemed delivered upon the earlier of the following: (a) actual receipt by the receiving party; (b) upon receipt by sender of a certified mail, return receipt signed by an employee or agent of the receiving party; (c) upon receipt by sender of proof of email delivery; or (d) if not actually received, five (5) days after deposit with the United States Postal Service authorized mail center with proper postage (certified mail, return receipt requested) affixed and addressed to the other party at the address set forth on the signature page hereto or such other address as the party may have designated by proper notice. The consequences for the failure to receive a notice due to improper notification by the intended receiving party of a change in address will be borne by the intended receiving party.

16. Client Lists. You agree that we may identify you by name in client lists, marketing presentations, and promotional materials.
17. Confidentiality. Both parties recognize that their respective employees and agents, in the course of performance of this Agreement, may be exposed to confidential information and that disclosure of such information could violate rights to private individuals and entities, including the parties. Confidential information is nonpublic information that a reasonable person would believe to be confidential and includes, without limitation, personal identifying information (e.g., social security numbers) and trade secrets, each as defined by applicable state law. Each party agrees that it will not disclose any confidential information of the other party and further agrees to take all reasonable and appropriate action to prevent such disclosure by its employees or agents. The confidentiality covenants contained herein will survive the termination or cancellation of this Agreement. This obligation of confidentiality will not apply to information that:
- (a) is in the public domain, either at the time of disclosure or afterwards, except by breach of this Agreement by a party or its employees or agents;
  - (b) a party can establish by reasonable proof was in that party's possession at the time of initial disclosure;
  - (c) a party receives from a third party who has a right to disclose it to the receiving party; or
  - (d) is the subject of a legitimate disclosure request under the open records laws or similar applicable public disclosure laws governing this Agreement; provided, however, that in the event you receive an open records or other similar applicable request, you will give us prompt notice and otherwise perform the functions required by applicable law.
18. Business License. In the event a local business license is required for us to perform services hereunder, you will promptly notify us and provide us with the necessary paperwork and/or contact information so that we may timely obtain such license.
19. Governing Law. This Agreement will be governed by and construed in accordance with the laws of your state of domicile, without regard to its rules on conflicts of law.
20. Multiple Originals and Authorized Signatures. This Agreement may be executed in multiple originals, any of which will be independently treated as an original document. Any electronic, faxed, scanned, photocopied, or similarly reproduced signature on this Agreement or any amendment hereto will be deemed an original signature and will be fully enforceable as if an original signature. Each party represents to the other that the signatory set forth below is duly authorized to bind that party to this Agreement.
21. Cooperative Procurement. To the maximum extent permitted by applicable law, we agree that this Agreement may be used as a cooperative procurement vehicle by eligible jurisdictions. We reserve the right to negotiate and customize the terms and conditions set forth herein, including but not limited to pricing, to the scope and circumstances of that cooperative procurement.
22. Performance Bond. Within ten (10) days of the Effective Date, we will secure a performance bond for the fee set forth in the Investment Summary, which is payable according to the Invoicing and Payment Policy. The bond will have an initial term of twenty-four (24) months. In the event you desire to extend or renew that term, you will provide timely notice of your request to us. You will be responsible for the cost of the extended or renewed bond, and any such extension or renewal is subject to surety approval.

23. Contract Documents. This Agreement includes the following exhibits:

Exhibit A	Investment Summary
Exhibit B	Invoicing and Payment Policy
	Schedule 1: Business Travel Policy
Exhibit C	Maintenance and Support Agreement
	Schedule 1: Support Call Process
Exhibit D	Third Party Terms
Exhibit E	Statement of Work

IN WITNESS WHEREOF, a duly authorized representative of each party has executed this Agreement as of the date(s) set forth below.

Tyler Technologies, Inc.

[INSERT CLIENT NAME]

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Address for Notices:

Tyler Technologies, Inc.  
One Tyler Drive  
Yarmouth, ME 04096  
Attention: Associate General Counsel

Address for Notices:

[INSERT CLIENT NAME]  
[INSERT CLIENT ADDRESS]  
[INSERT CLIENT ADDRESS]  
[INSERT CLIENT TITLE]





## **Exhibit A**

### **Investment Summary**

The following Investment Summary details the software, products, and services to be delivered by us to you under the Agreement. This Investment Summary is effective as of the Effective Date. Capitalized terms not otherwise defined will have the meaning assigned to such terms in the Agreement.

TO BE INSERTED





## Exhibit B

### Invoicing and Payment Policy

We will provide you with the software and services set forth in the Investment Summary. Capitalized terms not otherwise defined will have the meaning assigned to such terms in the Agreement.

**Invoicing:** We will invoice you for the applicable license and services fees in the Investment Summary as set forth below. Your rights to dispute any invoice are set forth in the Agreement.

#### 1. Tyler Software.

1.1 *License Fees:* License fees are invoiced as follows: (a) 25% on the Effective Date; (b) 60% on the date when we make the applicable Tyler Software available to you for downloading (the "Available Download Date"); and (c) 15% on the earlier of use of the Tyler Software in live production or 180 days after the Available Download Date.

1.2 *Subscription Fees:* Your initial subscription fees for Postal Xpress, Tyler Transparency and Tyler Notify are invoiced when we make the product available to you. Subsequent subscription fees are due annually in advance on the anniversary of that date at our then-current rates.

1.2 *Maintenance and Support Fees:* Year 1 maintenance and support fees are waived through the earlier of (a) availability of the Tyler Software for use in a live production environment; or (b) one (1) year from the Effective Date. Year 2 maintenance and support fees, at our then-current rates, are payable on that earlier-of date, and subsequent maintenance and support fees are invoiced annually in advance of each anniversary thereof. Your fees for each subsequent year will be set at our then-current rates.

#### 2. Professional Services.

2.1 *Implementation and Other Professional Services (including training):* Implementation and other professional services (including training) are billed and invoiced as delivered, at the rates set forth in the Investment Summary.

2.2 *Consulting Services:* If you have purchased any Business Process Consulting services, if they have been quoted as fixed-fee services, they will be invoiced 50% upon your acceptance of the Business System Design document, by module, and 50% upon your acceptance of custom desktop procedures, by module. If you have purchased any Business Process Consulting services and they are quoted as an estimate, then we will bill you the actual services delivered on a time and materials basis.

2.3 *Conversions:* Fixed-fee conversions are invoiced 50% upon initial delivery of the converted data, by conversion option, and 50% upon Client acceptance to load the converted data into Live/Production environment, by conversion option. Where conversions are quoted as estimated, we will bill you



the actual services delivered on a time and materials basis.

- 2.4 *Requested Modifications to the Tyler Software:* Requested modifications to the Tyler Software are invoiced 50% upon delivery of specifications and 50% upon delivery of the applicable modification. You must report any failure of the modification to conform to the specifications within thirty (30) days of delivery; otherwise, the modification will be deemed to be in compliance with the specifications after the 30-day window has passed. You may still report Defects to us as set forth in the Maintenance and Support Agreement.
- 2.5 *Other Fixed Price Services:* Except as otherwise provided, other fixed price services are invoiced upon complete delivery of the service. For the avoidance of doubt, where “Project Planning Services” are provided, payment will be due upon delivery of the Implementation Planning document. Dedicated Project Management services, if any, will be billed monthly in arrears, beginning on the first day of the month immediately following the project kick-off meeting.
- 2.6 *Change Management Services:* If you have purchased any change management services, those services will be invoiced in the following amounts and upon the following milestones:

Acceptance of Change Management Discovery Analysis	15%
Delivery of Change Management Plan and Strategy Presentation	10%
Acceptance of Executive Playbook	15%
Acceptance of Resistance Management Plan	15%
Acceptance of Procedural Change Communications Plan	10%
Change Management Coach Training	20%
Change Management After-Action Review	15%

### 3. Other Services and Fees. [Include as applicable]

- 3.1 *Systems Management:* Systems Management Services are invoiced on the Available Download Date. Systems Management Services will renew automatically for additional one (1) year terms at our then-current Systems Management Services fee, unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.
- 3.2 *Disaster Recovery Services:* Disaster Recovery Services are invoiced annually in advance upon our receipt of your data. Disaster Recovery services will renew automatically for additional one (1) year terms at our then-current Disaster Recovery fee, unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.
- 3.3 *Payroll Tax Table Update Fee:* The first year Payroll Tax Table Update Fee for the one-year period commencing on the Available Download Date is waived. Subsequent annual Payroll Tax Table Update fees will be due on the anniversary of the Available Download Date. Annual Payroll Tax Table Update services will renew automatically for additional one-year terms at our then-current Annual Payroll Tax Table Update service fee, unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term.
- 3.4 *Performance Bond:* We will invoice you the fees for the performance bond, set forth in the

Investment Summary, within ten (10) days of the Effective Date.

- 3.5 *Brazos Hosting Fees*: Hosting fees for the Brazos software are invoiced annually in advance, beginning on the Effective Date. Year 1 fees are at the rates set forth in the Investment Summary. Subsequent annual fees will be at our then-current rates.

4. Third Party Products.

- 4.1 *Third Party Software License Fees*: License fees for Third Party Software, if any, are invoiced when we make it available to you for downloading.

- 4.2 *Third Party Software Maintenance*: The first year maintenance fees for the Third Party Software, if any, is invoiced when we make that Third Party Software available to you for downloading.

- 4.3 *Third Party Hardware*: Third Party Hardware costs, if any, are invoiced upon delivery.

- 4.4 *Tyler Notify Minutes and Messages*: Tyler Notify Minutes and Messages are invoiced when we make Tyler Notify available to you. Subsequent fees for minutes and messages, at our then-current rates, will be due when you request additional minutes and messages and they are made available to you.

5. Expenses. The service rates in the Investment Summary do not include travel expenses. Expenses will be billed as incurred and only in accordance with our then-current Business Travel Policy, plus a 10% travel agency processing fee. Our current Business Travel Policy is attached to this Exhibit B at Schedule 1. Copies of receipts will be provided upon request; we reserve the right to charge you an administrative fee depending on the extent of your requests. Receipts for miscellaneous items less than twenty-five dollars and mileage logs are not available.

**Payment.** Payment for undisputed invoices is due within forty-five (45) days of the invoice date. We prefer to receive payments electronically. Our electronic payment information is:

Bank:	Wells Fargo Bank, N.A. 420 Montgomery San Francisco, CA 94104
ABA:	121000248
Account:	4124302472
Beneficiary:	Tyler Technologies, Inc. – Operating







**Exhibit B**  
**Schedule 1**  
**Business Travel Policy**

1. Air Travel

A. Reservations & Tickets

Tyler's Travel Management Company (TMC) will provide an employee with a direct flight within two hours before or after the requested departure time, assuming that flight does not add more than three hours to the employee's total trip duration and the fare is within \$100 (each way) of the lowest logical fare. If a net savings of \$200 or more (each way) is possible through a connecting flight that is within two hours before or after the requested departure time and that does not add more than three hours to the employee's total trip duration, the connecting flight should be accepted.

Employees are encouraged to make advanced reservations to take full advantage of discount opportunities. Employees should use all reasonable efforts to make travel arrangements at least two (2) weeks in advance of commitments. A seven day advance booking requirement is mandatory. When booking less than seven days in advance, management approval will be required.

Except in the case of international travel where a segment of continuous air travel is scheduled to exceed six hours, only economy or coach class seating is reimbursable.

B. Baggage Fees

Reimbursement of personal baggage charges are based on trip duration as follows:

- Up to five days = one checked bag
- Six or more days = two checked bags

Baggage fees for sports equipment are not reimbursable.

2. Ground Transportation

A. Private Automobile

Mileage Allowance – Business use of an employee's private automobile will be reimbursed at the current IRS allowable rate, plus out of pocket costs for tolls and parking. Mileage will be calculated by using the employee's office as the starting and ending point, in compliance with IRS regulations. Employees who have been designated a home office should calculate miles from their home.



## B. Rental Car

Employees are authorized to rent cars only in conjunction with air travel when cost, convenience, and the specific situation reasonably require their use. When renting a car for Tyler business, employees should select a “mid-size” or “intermediate” car. “Full” size cars may be rented when three or more employees are traveling together. Tyler carries leased vehicle coverage for business car rentals; additional insurance on the rental agreement should be declined.

## C. Public Transportation

Taxi or airport limousine services may be considered when traveling in and around cities or to and from airports when less expensive means of transportation are unavailable or impractical. The actual fare plus a reasonable tip (15-18%) are reimbursable. In the case of a free hotel shuttle to the airport, tips are included in the per diem rates and will not be reimbursed separately.

## D. Parking & Tolls

When parking at the airport, employees must use longer term parking areas that are measured in days as opposed to hours. Park and fly options located near some airports may also be used. For extended trips that would result in excessive parking charges, public transportation to/from the airport should be considered. Tolls will be reimbursed when receipts are presented.

# 3. Lodging

Tyler’s TMC will select hotel chains that are well established, reasonable in price, and conveniently located in relation to the traveler's work assignment. Typical hotel chains include Courtyard, Fairfield Inn, Hampton Inn, and Holiday Inn Express. If the employee has a discount rate with a local hotel, the hotel reservation should note that discount and the employee should confirm the lower rate with the hotel upon arrival. Employee memberships in travel clubs such as AAA should be noted in their travel profiles so that the employee can take advantage of any lower club rates.

“No shows” or cancellation fees are not reimbursable if the employee does not comply with the hotel’s cancellation policy.

Tips for maids and other hotel staff are included in the per diem rate and are not reimbursed separately.

# 4. Meals and Incidental Expenses

Employee meals and incidental expenses while on travel status are in accordance with the federal per diem rates published by the General Services Administration. Incidental expenses include tips to maids, hotel staff, and shuttle drivers and other minor travel expenses. Per diem rates are available at [www.gsa.gov/perdiem](http://www.gsa.gov/perdiem).

## A. Overnight Travel

For each full day of travel, all three meals are reimbursable. Per diems on the first and last day of a trip are



governed as set forth below.

Departure Day

Depart before 12:00 noon

Lunch and dinner

Depart after 12:00 noon

Dinner

Return Day

Return before 12:00 noon

Breakfast

Return between 12:00 noon & 7:00 p.m.

Breakfast and lunch

Return after 7:00 p.m.\*

Breakfast, lunch and dinner

\*7:00 p.m. is defined as direct travel time and does not include time taken to stop for dinner

The reimbursement rates for individual meals are calculated as a percentage of the full day per diem as follows:

- Breakfast      15%
- Lunch          25%
- Dinner        60%

B. Same Day Travel

Employees traveling at least 100 miles to a site and returning in the same day are eligible to claim lunch on an expense report. Employees on same day travel status are eligible to claim dinner in the event they return home after 7:00 p.m.\*

\*7:00 p.m. is defined as direct travel time and does not include time taken to stop for dinner

5. Internet Access – Hotels and Airports

Employees who travel may need to access their e-mail at night. Many hotels provide free high speed internet access and Tyler employees are encouraged to use such hotels whenever possible. If an employee's hotel charges for internet access it is reimbursable up to \$10.00 per day. Charges for internet access at airports are not reimbursable.



## Exhibit C Maintenance and Support Agreement

We will provide you with the following maintenance and support services for the Tyler Software. Capitalized terms not otherwise defined will have the meaning assigned to such terms in the Agreement.

1. Term. We provide maintenance and support services on an annual basis. The initial term commences on the Effective Date, and remains in effect for one (1) year. The term will renew automatically for additional one (1) year terms unless terminated in writing by either party at least thirty (30) days prior to the end of the then-current term. We will adjust the term to match your first use of the Tyler Software in live production if that event precedes the one (1) year anniversary of the Effective Date.
2. Maintenance and Support Fees. Your year 1 maintenance and support fees for the Tyler Software are listed in the Investment Summary, and your payment obligations are set forth in the Invoicing and Payment Policy. We reserve the right to suspend maintenance and support services if you fail to pay undisputed maintenance and support fees within thirty (30) days of our written notice. We will reinstate maintenance and support services only if you pay all past due maintenance and support fees, including all fees for the periods during which services were suspended.
3. Maintenance and Support Services. As long as you are not using the Help Desk as a substitute for our training services on the Tyler Software, and you timely pay your maintenance and support fees, we will, consistent with our then-current Support Call Process:
  - 3.1 perform our maintenance and support obligations in a professional, good, and workmanlike manner, consistent with industry standards, to resolve Defects in the Tyler Software (limited to the then-current version and the immediately prior version); provided, however, that if you modify the Tyler Software without our consent, our obligation to provide maintenance and support services on and warrant the Tyler Software will be void;
  - 3.2 provide telephone support during our established support hours;
  - 3.3 maintain personnel that are sufficiently trained to be familiar with the Tyler Software and Third Party Software, if any, in order to provide maintenance and support services;
  - 3.4 provide you with a copy of all major and minor releases to the Tyler Software (including updates and enhancements) that we make generally available without additional charge to customers who have a maintenance and support agreement in effect; and
  - 3.5 provide non-Defect resolution support of prior releases of the Tyler Software in accordance with our then-current release life cycle policy.
4. Client Responsibilities. We will use all reasonable efforts to perform any maintenance and support services



remotely. Currently, we use a third-party secure unattended connectivity tool called Bomgar, as well as GotoAssist by Citrix. Therefore, you agree to maintain a high-speed internet connection capable of connecting us to your PCs and server(s). You agree to provide us with a login account and local administrative privileges as we may reasonably require to perform remote services. We will, at our option, use the secure connection to assist with proper diagnosis and resolution, subject to any reasonably applicable security protocols. If we cannot resolve a support issue remotely, we may be required to provide onsite services. In such event, we will be responsible for our travel expenses, unless it is determined that the reason onsite support was required was a reason outside our control. Either way, you agree to provide us with full and free access to the Tyler Software, working space, adequate facilities within a reasonable distance from the equipment, and use of machines, attachments, features, or other equipment reasonably necessary for us to provide the maintenance and support services, all at no charge to us. We strongly recommend that you also maintain a VPN for backup connectivity purposes.

5. Hardware and Other Systems. If you are a self-hosted customer and, in the process of diagnosing a software support issue, it is discovered that one of your peripheral systems or other software is the cause of the issue, we will notify you so that you may contact the support agency for that peripheral system. We cannot support or maintain Third Party Products except as expressly set forth in the Agreement.

In order for us to provide the highest level of software support, you bear the following responsibility related to hardware and software:

- (a) All infrastructure executing Tyler Software shall be managed by you;
  - (b) You will maintain support contracts for all non-Tyler software associated with Tyler Software (including operating systems and database management systems, but excluding Third-Party Software, if any); and
  - (c) You will perform daily database backups and verify that those backups are successful.
6. Other Excluded Services. Maintenance and support fees do not include fees for the following services: (a) initial installation or implementation of the Tyler Software; (b) onsite maintenance and support (unless Tyler cannot remotely correct a Defect in the Tyler Software, as set forth above); (c) application design; (d) other consulting services; (e) maintenance and support of an operating system or hardware, unless you are a hosted customer; (f) support outside our normal business hours as listed in our then-current Support Call Process; or (g) installation, training services, or third party product costs related to a new release. Requested maintenance and support services such as those outlined in this section will be billed to you on a time and materials basis at our then current rates. You must request those services with at least one (1) weeks' advance notice.
7. Current Support Call Process. Our current Support Call Process for the Tyler Software is attached to this Exhibit C at Schedule 1.





## Exhibit C Schedule 1 Support Call Process

### Support Channels

Tyler Technologies, Inc. provides the following channels of software support:

- (1) Tyler Community – an on-line resource, Tyler Community provides a venue for all Tyler clients with current maintenance agreements to collaborate with one another, share best practices and resources, and access documentation.
- (2) On-line submission (portal) – for less urgent and functionality-based questions, users may create unlimited support incidents through the customer relationship management portal available at the Tyler Technologies website.
- (3) Email – for less urgent situations, users may submit unlimited emails directly to the software support group.
- (4) Telephone – for urgent or complex questions, users receive toll-free, unlimited telephone software support.

### Support Resources

A number of additional resources are available to provide a comprehensive and complete support experience:

- (1) Tyler Website – [www.tylertech.com](http://www.tylertech.com) – for accessing client tools and other information including support contact information.
- (2) Tyler Community – available through login, Tyler Community provides a venue for clients to support one another and share best practices and resources.
- (3) Knowledgebase – A fully searchable depository of thousands of documents related to procedures, best practices, release information, and job aides.
- (4) Program Updates – where development activity is made available for client consumption

### Support Availability

Tyler Technologies support is available during the local business hours of 8 AM to 5 PM (Monday – Friday) across four US time zones (Pacific, Mountain, Central and Eastern). Clients may receive coverage across these time zones. Tyler's holiday schedule is outlined below. There will be no support coverage on these days.

New Year's Day	Thanksgiving Day
Memorial Day	Day after Thanksgiving
Independence Day	Christmas Day
Labor Day	



## Issue Handling

### *Incident Tracking*

Every support incident is logged into Tyler's Customer Relationship Management System and given a unique incident number. This system tracks the history of each incident. The incident tracking number is used to track and reference open issues when clients contact support. Clients may track incidents, using the incident number, through the portal at Tyler's website or by calling software support directly.

### *Incident Priority*

Each incident is assigned a priority number, which corresponds to the client's needs and deadlines. The client is responsible for reasonably setting the priority of the incident per the chart below. This chart is not intended to address every type of support incident, and certain "characteristics" may or may not apply depending on whether the Tyler software has been deployed on customer infrastructure or the Tyler cloud. The goal is to help guide the client towards clearly understanding and communicating the importance of the issue and to describe generally expected responses and resolutions.

Priority Level	Characteristics of Support Incident	Resolution Targets
1 Critical	Support incident that causes (a) complete application failure or application unavailability; (b) application failure or unavailability in one or more of the client's remote location; or (c) systemic loss of multiple essential system functions.	Tyler shall provide an initial response to Priority Level 1 incidents within one (1) business hour of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within one (1) business day. For non-hosted customers, Tyler's responsibility for lost or corrupted data is limited to assisting the client in restoring its last available database.
2 High	Support incident that causes (a) repeated, consistent failure of essential functionality affecting more than one user or (b) loss or corruption of data.	Tyler shall provide an initial response to Priority Level 2 incidents within four (4) business hours of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within ten (10) business days. For non-hosted customers, Tyler's responsibility for loss or corrupted data is limited to assisting the client in restoring its last available database.
3 Medium	Priority Level 1 incident with an existing circumvention procedure, or a Priority Level 2 incident that affects only one user or for which there is an existing circumvention procedure.	Tyler shall provide an initial response to Priority Level 3 incidents within one (1) business day of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents without the need for a circumvention procedure with the next published maintenance update or service pack. For non-hosted customers, Tyler's responsibility for lost or corrupted data is limited to assisting the client in restoring its last available database.



Priority Level	Characteristics of Support Incident	Resolution Targets
4 Non-critical	Support incident that causes failure of non-essential functionality or a cosmetic or other issue that does not qualify as any other Priority Level.	Tyler shall provide an initial response to Priority Level 4 incidents within two (2) business days. Tyler shall use commercially reasonable efforts to resolve such support incidents, as well as cosmetic issues, with a future version release.

### *Incident Escalation*

Tyler Technology's software support consists of four levels of personnel:

- (1) Level 1: front-line representatives
- (2) Level 2: more senior in their support role, they assist front-line representatives and take on escalated issues
- (3) Level 3: assist in incident escalations and specialized client issues
- (4) Level 4: responsible for the management of support teams for either a single product or a product group

If a client feels they are not receiving the service needed, they may contact the appropriate Software Support Manager. After receiving the incident tracking number, the manager will follow up on the open issue and determine the necessary action to meet the client's needs.

On occasion, the priority or immediacy of a software support incident may change after initiation. Tyler encourages clients to communicate the level of urgency or priority of software support issues so that we can respond appropriately. A software support incident can be escalated by any of the following methods:

- (1) Telephone – for immediate response, call toll-free to either escalate an incident's priority or to escalate an issue through management channels as described above.
- (2) Email – clients can send an email to software support in order to escalate the priority of an issue
- (3) On-line Support Incident Portal – clients can also escalate the priority of an issue by logging into the client incident portal and referencing the appropriate incident tracking number.

### *Remote Support Tool*

Some support calls require further analysis of the client's database, process or setup to diagnose a problem or to assist with a question. Tyler will, at its discretion, use an industry-standard remote support tool. Support is able to quickly connect to the client's desktop and view the site's setup, diagnose problems, or assist with screen navigation. More information about the remote support tool Tyler uses is available upon request.



**Exhibit D**

**DocOrigin End User License Agreement**

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  - B. Per-Document.** This is defined as a fee per document based on the total number of documents generated annually by merging data with a template created by the Software. The combined data and template produce documents of one or more pages. A document may contain 1 or more pages. For instance a batch of invoices for 250 customers may contain 1,000 pages, this will be counted as 250 documents which should correspond to 250 invoices.
  - C. Per-Surface.** This is defined as a fee per surface based on the total number of surfaces generated annually by merging data with a template created by the Software. The combined data and template produce documents of one or more pages, the pages may be printed one side (one surface) or duplexed (2 surfaces). The documents may be rendered to a computer file (i.e. PDF), each page placed in the file is considered a surface. A document may contain 1 or more surfaces. For instance a batch of invoices for 250 customers may contain 500 pages duplexed, this will be counted as 1000 surfaces.
- 1.5 Disaster Recovery License.** You may request a Disaster Recovery license of the Software for each production license You have purchased as a failover in the event of loss of use of the production server(s). This license is for disaster recovery purposes only and under no circumstance may the disaster recovery license be used for production simultaneously with a production license with which it is paired.
- 1.6 Backup Copies.** After installation of the Software pursuant to this EULA, you may store a copy of the installation files for the Software solely for backup or archival purposes. Except as expressly provided in this EULA, you may not otherwise make copies of the Software or the printed materials accompanying the Software.
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- 6.3 THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY CONSTITUTE AN ESSENTIAL PART OF THIS AGREEMENT. YOU ACKNOWLEDGE THAT BUT FOR THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY, NEITHER OF SOFTWARE LTD. NOR ANY OF ITS LICENSORS OR SUPPLIERS WOULD GRANT THE RIGHTS GRANTED IN THIS AGREEMENT.

## 7. TERM AND TERMINATION

- 7.1 The term of this Agreement will begin on download of the Software and, in respect of an Evaluation License, shall continue for the Evaluation Period, and in respect of all other license types defined in Section 1, shall continue for as long as You use the Software, unless earlier terminated sooner under this section 7.
- 7.2 OF Software Ltd. may terminate this Agreement in the event of any breach by You if such breach has not been cured within five (5) days of notice to You. No termination of this Agreement will entitle You to a refund of any amounts paid by You to OF Software Ltd. or its applicable distributor or reseller or affect any obligations You may have to pay any outstanding amounts owing to OF Software Ltd. or its distributor.
- 7.3 Your rights to use the Software will immediately terminate upon termination or expiration of this Agreement. Within five (5) days of termination or expiration of this Agreement, You shall purge all Software and all copies thereof from all computer systems and storage devices on which it was stored, and certify such to OF Software Ltd.

## 8. GENERAL PROVISIONS

- 8.1 **No Waiver.** No delay or failure in exercising any right under this Agreement, or any partial or single exercise of any right, will constitute a waiver of that right or any other rights under this Agreement. No consent to a breach of any express or implied term set out in this Agreement constitutes consent to any subsequent breach, whether of the same or any other provision.
- 8.2 **Severability.** If any provision of this Agreement is, or becomes, unenforceable, it will be severed from this Agreement and the remainder of this Agreement will remain in full force and effect.
- 8.3 **Assignment.** You may not transfer or assign this Agreement (whether voluntarily, by operation of law, or otherwise) without OF Software Ltd.'s prior written consent. OF Software Ltd. may assign this Agreement at any time without notice. This Agreement is binding upon and will inure to the benefit of both parties, and their respective successors and permitted assigns.
- 8.4 **Governing Law and Venue.** This Agreement shall be governed by the laws of the Province of Ontario. No choice of laws rules of any jurisdiction shall apply to this Agreement. You consent and agree that the courts of the Province of Ontario shall have jurisdiction over any legal action or proceeding brought by You arising out of or relating to this Agreement, and You consent to the jurisdiction of such courts for any such action or proceeding.

- 8.5 **Entire Agreement.** This Agreement is the entire understanding and agreement between You and OF Software Ltd. with respect to the subject matter hereof, and it supersedes all prior negotiations, commitments and understandings, verbal or written, and purchase order issued by You. This Agreement may be amended or otherwise modified by OF Software Ltd. from time to time and the most recent version of the Agreement will be available on the OF Software website [www.docorigin.com](http://www.docorigin.com).

**Last Updated: [July 18 2013]**





## Exhibit D

### MyGovPay/VirtualPay and IVR

1. MyGovPay/VirtualPay Licensing. Access to MyGovPay and/or Virtual Pay is hereby granted if Customer elects to use MyGovPay or VirtualPay, products of Tyler Technologies (*Powered by Persolvent*), designed for Citizen Users to use for processing online payments.

(a) Special MyGovPay/VirtualPay Definitions.

**"Merchant Agreement"** means the agreement between Customer and Persolvent that provides for the Merchant Fees.

**"Merchant Fees"** means direct costs levied by Visa/Mastercard/Discover or other payment card companies for Interchange Fees, Dues, Assessments and Occurrence Fees, over which Tyler Technologies has no authority.

**"MyGovPay"** means the Product of Tyler Technologies that allows members of the public to pay for Customer's services with a credit or other payment card on the Customer's citizen-facing web portal.

**"Persolvent"** means Persolvent, formerly BankCard Services Worldwide, a Payment Card Industry (PCI) compliant processing agent through which the EnerGov Software passes credit card transactions.

**"Use Fees"** means the Technology Fees, Authorization Fees and Program/Convenience Fees as listed in Use Fees Table in Section 2, titled *MyGovPay/VirtualPay*.

**"VirtualPay"** means the Product of Tyler Technologies that allows the Customer to accept and process citizen user's credit or other payment card using the EnerGov Software.

(b) Conditions of Use. If customer elects to use MyGovPay and/or VirtualPay the following terms apply:

- (1) Customer must apply for and agree to a Merchant Agreement with Persolvent.
- (2) Customer agrees that Citizen Users will be subject to Use Fees as listed in Use Fees table in Section 2.
- (3) Customer agrees that Use Fees are separate from and independent of Merchant Fees.
- (4) Customer agrees that this Agreement does not represent any modification to Customer's Merchant Agreement with Persolvent.
- (5) Customer agrees that Use Fees are for use on the MyGovPay/VirtualPay online system and will not be deposited or owed to Customer in any way.
- (6) Customer agrees that MyGovPay's and VirtualPay's ability to assess Use Fees is dictated by the Card Associations whose rules may change at any time and for any reason. If MyGovPay and/or VirtualPay, for any reason, are unable to process payments using Use Fees, Customer agrees that MyGovPay/VirtualPay reserves the right to negotiate a new pricing model with Customer for the continued use of MyGovPay and/or VirtualPay.

2. MyGovPay/VirtualPay Fees. Customer agrees that the Use Fees set forth on the following page will apply if Customer elects to use MyGovPay/VirtualPay.

**USE FEES TABLE FOLLOWS ON NEXT PAGE**



## Use Fees

### EnerGov's MyGovPay (Online / card-not-present payments)\*\*

	MyGovPay (Online Payments)	MyGovPay (Online Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1: Government Entity Paid</b>	2.79%	\$0.20
<b>Option 2: Patron Paid</b>	3.29%	N/A

\*\*ACH processing is available for a fee of \$20 per month and \$0.30 per transaction.

### EnerGov's VirtualPay (retail card present)

	VirtualPay (Retail Payments)	Virtual Pay (Retail Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1: Government Entity Paid</b>	2.59%	\$0.15
<b>Option 2: Patron Paid</b>	2.99%	N/A

Patron Paid fees will be communicated as "Service Fees" to the cardholder, at the time of transaction. In the event that the average monthly transaction amount is below \$30, Contractor reserves the right to apply an additional \$0.20 service fee above the quoted rates above.

3. **Interactive Voice Response ("IVR").** If IVR is selected by Customer and included in the pricing, the following additional terms and conditions shall apply of this Agreement:

- (a) **Network Security.** Customer acknowledges that a third-party is used by Tyler Technologies to process IVR data. Customer's content will pass through and be stored on the third-party servers and will not be segregated or in a separate physical location from servers on which other customers' content is or will be transmitted or stored.
- (b) **Content.** Customer is responsible for the creation, editorial content, control, and all other aspects of content to be used solely in conjunction with the EnerGov Software.
- (c) **Lawful Purposes.** Customer shall not use the IVR system for any unlawful purpose.
- (d) **Critical Application.** Customer will not use the IVR system for any life-support application or other critical application where failure or potential failure of the IVR system can cause injury, harm, death, or other grave problems, including, without limitation, loss of aircraft control, hospital life-support system, and delays in getting medicate care or other emergency services.
- (e) **No Harmful Code.** Customer represents and warrants that no content designed to delete, disable, deactivate, interfere with or otherwise harm any aspect of the IVR system now or in the future, shall be knowingly transmitted by Customer or Users.
- (f) **IVR WARRANTY.** Except as expressly set forth in this Agreement, TYLER TECHNOLOGIES MAKES NO REPRESENTATION AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR IVR.



**Exhibit E**

**Statement of Work**

TO BE INSERTED



### 9.3 SAMPLE LICENSE AGREEMENT / SAAS

Please reference the Sample License Agreement on the following pages.



## SOFTWARE AS A SERVICE AGREEMENT<sup>1</sup>

This Software as a Service Agreement is made between Tyler Technologies, Inc. and Client.

WHEREAS, Client selected Tyler to provide certain products and services set forth in the Investment Summary, including providing Client with access to Tyler's proprietary software products, and Tyler desires to provide such products and services under the terms of this Agreement;

NOW THEREFORE, in consideration of the foregoing and of the mutual covenants and promises set forth in this Agreement, Tyler and Client agree as follows:

### SECTION A – DEFINITIONS

- **“Agreement”** means this Software as a Services Agreement.
- **“Business Travel Policy”** means our business travel policy. A copy of our current Business Travel Policy is attached as Schedule 1 to Exhibit B.
- **“Client”** means [INSERT CLIENT NAME].
- **“Data”** means your data necessary to utilize the Tyler Software.
- **“Data Storage Capacity”** means the contracted amount of storage capacity for your Data identified in the Investment Summary.
- **“Defect”** means a failure of the Tyler Software to substantially conform to the functional descriptions set forth in our written proposal to you, or their functional equivalent. Future functionality may be updated, modified, or otherwise enhanced through our maintenance and support services, and the governing functional descriptions for such future functionality will be set forth in our then-current Documentation.
- **“Defined Users”** means the number of users that are authorized to use the SaaS Services. The Defined Users for the Agreement are as identified in the Investment Summary.
- **“Developer”** means a third party who owns the intellectual property rights to Third Party Software.
- **“Documentation”** means any online or written documentation related to the use or functionality of the Tyler Software that we provide or otherwise make available to you, including instructions, user guides, manuals and other training or self-help documentation.
- **“Effective Date”** means the date on which your authorized representative signs the Agreement.
- **“Force Majeure”** means an event beyond the reasonable control of you or us, including, without limitation, governmental action, war, riot or civil commotion, fire, natural disaster, or any other cause that could not with reasonable diligence be foreseen or prevented by you or us.
- **“Investment Summary”** means the agreed upon cost proposal for the products and services attached as Exhibit A.

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<sup>1</sup> HIGHLIGHTED PROVISIONS INDICATE PROVISIONS THAT MAY OR MAY NOT APPLY TO THE PARTICULAR CLIENT/CONTRACT. DURING CONTRACT NEGOTIATIONS, THOSE PROVISIONS WILL BE ADJUSTED AS NECESSARY.

- **“Invoicing and Payment Policy”** means the invoicing and payment policy. A copy of our current Invoicing and Payment Policy is attached as Exhibit B.
- **“SaaS Fees”** means the fees for the SaaS Services identified in the Investment Summary.
- **“SaaS Services”** means software as a service consisting of system administration, system management, and system monitoring activities that Tyler performs for the Tyler Software, and includes the right to access and use the Tyler Software, receive maintenance and support on the Tyler Software, including Downtime resolution under the terms of the SLA, and Data storage and archiving. SaaS Services do not include support of an operating system or hardware, support outside of our normal business hours, or training, consulting or other professional services.
- **“SLA”** means the service level agreement. A copy of our current SLA is attached hereto as Exhibit C.
- **“Statement of Work”** means the industry standard implementation plan describing how our professional services will be provided to implement the Tyler Software, and outlining your and our roles and responsibilities in connection with that implementation. The Statement of Work is attached as Exhibit E.
- **“Support Call Process”** means the support call process applicable to all of our customers who have licensed the Tyler Software. A copy of our current Support Call Process is attached as Schedule 1 to Exhibit C.
- **“Third Party Terms”** means, if any, the end user license agreement(s) or similar terms for the Third Party Software, as applicable and attached as Exhibit D.
- **“Third Party Hardware”** means the third party hardware, if any, identified in the Investment Summary.
- **“Third Party Products”** means the Third Party Software and Third Party Hardware.
- **“Third Party Software”** means the third party software, if any, identified in the Investment Summary.
- **“Tyler”** means Tyler Technologies, Inc., a Delaware corporation.
- **“Tyler Software”** means our proprietary software, including any integrations, custom modifications, and/or other related interfaces identified in the Investment Summary and licensed by us to you through this Agreement.
- **“we”, “us”, “our”** and similar terms mean Tyler.
- **“you”** and similar terms mean Client.

## SECTION B – SAAS SERVICES

1. Rights Granted. We grant to you the non-exclusive, non-assignable limited right to use the SaaS Services solely for your internal business purposes for the number of Defined Users only. The Tyler Software will be made available to you according to the terms of the SLA. You acknowledge that we have no delivery obligations and we will not ship copies of the Tyler Software as part of the SaaS Services. You may use the SaaS Services to access updates and enhancements to the Tyler Software, as further described in Section C(8).
2. SaaS Fees. You agree to pay us the SaaS Fees. Those amounts are payable in accordance with our Invoicing and Payment Policy. The SaaS Fees are based on the number of Defined Users and amount of Data Storage Capacity. You may add additional users or additional data storage capacity on the terms set forth in Section H(1). In the event you regularly and/or meaningfully exceed the Defined Users or Data Storage Capacity, we reserve the right to charge you additional fees commensurate with the overage(s).

3. Ownership.

3.1 We retain all ownership and intellectual property rights to the SaaS Services, the Tyler Software, and anything developed by us under this Agreement. You do not acquire under this Agreement any license to use the Tyler Software in excess of the scope and/or duration of the SaaS Services.

3.2 The Documentation is licensed to you and may be used and copied by your employees for internal, non-commercial reference purposes only.

3.3 You retain all ownership and intellectual property rights to the Data. You expressly recognize that except to the extent necessary to carry out our obligations contained in this Agreement, we do not create or endorse any Data used in connection with the SaaS Services.

4. Restrictions. You may not: (a) make the Tyler Software or Documentation resulting from the SaaS Services available in any manner to any third party for use in the third party's business operations; (b) modify, make derivative works of, disassemble, reverse compile, or reverse engineer any part of the SaaS Services; (c) access or use the SaaS Services in order to build or support, and/or assist a third party in building or supporting, products or services competitive to us; or (d) license, sell, rent, lease, transfer, assign, distribute, display, host, outsource, disclose, permit timesharing or service bureau use, or otherwise commercially exploit or make the SaaS Services, Tyler Software, or Documentation available to any third party other than as expressly permitted by this Agreement.

5. Software Warranty. We warrant that the Tyler Software will perform without Defects during the term of this Agreement. If the Tyler Software does not perform as warranted, we will use all reasonable efforts, consistent with industry standards, to cure the Defect in accordance with the maintenance and support process set forth in Section C(8), below, the SLA and our then current Support Call Process.

6. SaaS Services.

6.1 Our SaaS Services are audited at least yearly in accordance with the AICPA's Statement on Standards for Attestation Engagements ("SSAE") No. 18. We have attained, and will maintain, SOC 1 and SOC 2 compliance, or its equivalent, for so long as you are timely paying for SaaS Services. Upon execution of a mutually agreeable Non-Disclosure Agreement ("NDA"), we will provide you with a summary of our compliance report(s) or its equivalent. Every year thereafter, for so long as the NDA is in effect and in which you make a written request, we will provide that same information.

6.2 You will be hosted on shared hardware in a Tyler data center, but in a database dedicated to you, which is inaccessible to our other customers.

6.3 We have fully-redundant telecommunications access, electrical power, and the required hardware to provide access to the Tyler Software in the event of a disaster or component failure. In the event any of your Data has been lost or damaged due to an act or omission of Tyler or its subcontractors or due to a defect in Tyler's software, we will use best commercial efforts to restore all the Data on servers in accordance with the architectural design's capabilities and with the goal of minimizing any Data loss as greatly as possible. In no case shall the recovery point objective ("RPO") exceed a maximum of twenty-four (24) hours from declaration of disaster. For purposes of this subsection, RPO represents the maximum tolerable



period during which your Data may be lost, measured in relation to a disaster we declare, said declaration will not be unreasonably withheld.

- 6.4 In the event we declare a disaster, our Recovery Time Objective (“RTO”) is twenty-four (24) hours. For purposes of this subsection, RTO represents the amount of time, after we declare a disaster, within which your access to the Tyler Software must be restored.
- 6.5 We conduct annual penetration testing of either the production network and/or web application to be performed. We will maintain industry standard intrusion detection and prevention systems to monitor malicious activity in the network and to log and block any such activity. We will provide you with a written or electronic record of the actions taken by us in the event that any unauthorized access to your database(s) is detected as a result of our security protocols. We will undertake an additional security audit, on terms and timing to be mutually agreed to by the parties, at your written request. You may not attempt to bypass or subvert security restrictions in the SaaS Services or environments related to the Tyler Software. Unauthorized attempts to access files, passwords or other confidential information, and unauthorized vulnerability and penetration test scanning of our network and systems (hosted or otherwise) is prohibited without the prior written approval of our IT Security Officer.
- 6.6 We test our disaster recovery plan on an annual basis. Our standard test is not client-specific. Should you request a client-specific disaster recovery test, we will work with you to schedule and execute such a test on a mutually agreeable schedule. At your written request, we will provide test results to you within a commercially reasonable timeframe after receipt of the request.
- 6.7 We will be responsible for importing back-up and verifying that you can log-in. You will be responsible for running reports and testing critical processes to verify the returned Data.
- 6.8 We provide secure Data transmission paths between each of your workstations and our servers.
- 6.9 For at least the past twelve (12) years, all of our employees have undergone criminal background checks prior to hire. All employees sign our confidentiality agreement and security policies. Our data centers are accessible only by authorized personnel with a unique key entry. All other visitors must be signed in and accompanied by authorized personnel. Entry attempts to the data center are regularly audited by internal staff and external auditors to ensure no unauthorized access.
- 6.10 Where applicable with respect to our applications that take or process card payment data, we are responsible for the security of cardholder data that we possess, including functions relating to storing, processing, and transmitting of the cardholder data and affirm that, as of the Effective Date, we comply with applicable requirements to be considered PCI DSS compliant and have performed the necessary steps to validate compliance with the PCI DSS. We agree to supply the current status of our PCI DSS compliance program in the form of an official Attestation of Compliance, which can be found at <https://www.tylertech.com/about-us/compliance>, and in the event of any change in our status, will comply with applicable notice requirements.

## **SECTION C – OTHER PROFESSIONAL SERVICES**

1. Other Professional Services. We will provide you the various implementation-related services itemized in the Investment Summary and described in the Statement of Work/our industry standard implementation plan. We will finalize that documentation with you upon execution of this Agreement.
2. Professional Services Fees. You agree to pay us the professional services fees in the amounts set forth in the Investment Summary. Those amounts are payable in accordance with our Invoicing and Payment Policy. You acknowledge that the fees stated in the Investment Summary are good-faith estimates of the amount of time and materials required for your implementation. We will bill you the actual fees incurred based on the in-scope services provided to you. Any discrepancies in the total values set forth in the Investment Summary will be resolved by multiplying the applicable hourly rate by the quoted hours.
3. Additional Services. The Investment Summary contains, and the Statement of Work describes, the scope of services and related costs (including programming and/or interface estimates) required for the project based on our understanding of the specifications you supplied. If additional work is required, or if you use or request additional services, we will provide you with an addendum or change order, as applicable, outlining the costs for the additional work. The price quotes in the addendum or change order will be valid for thirty (30) days from the date of the quote.
4. Cancellation. If travel is required, we will make all reasonable efforts to schedule travel for our personnel, including arranging travel reservations, at least two (2) weeks in advance of commitments. Therefore, if you cancel services less than two (2) weeks in advance (other than for Force Majeure or breach by us), you will be liable for all (a) non-refundable expenses incurred by us on your behalf, and (b) daily fees associated with cancelled professional services if we are unable to reassign our personnel. We will make all reasonable efforts to reassign personnel in the event you cancel within two (2) weeks of scheduled commitments.
5. Services Warranty. We will perform the services in a professional, workmanlike manner, consistent with industry standards. In the event we provide services that do not conform to this warranty, we will re-perform such services at no additional cost to you.
6. Site Access and Requirements. At no cost to us, you agree to provide us with full and free access to your personnel, facilities, and equipment as may be reasonably necessary for us to provide implementation services, subject to any reasonable security protocols or other written policies provided to us as of the Effective Date, and thereafter as mutually agreed to by you and us.
7. Client Assistance. You acknowledge that the implementation of the Tyler Software is a cooperative process requiring the time and resources of your personnel. You agree to use all reasonable efforts to cooperate with and assist us as may be reasonably required to meet the agreed upon project deadlines and other milestones for implementation. This cooperation includes at least working with us to schedule the implementation-related services outlined in this Agreement. We will not be liable for failure to meet any deadlines and milestones when such failure is due to Force Majeure or to the failure by your personnel to provide such cooperation and assistance (either through action or omission).
8. Maintenance and Support. For so long as you timely pay your SaaS Fees according to the Invoicing and Payment Policy, then in addition to the terms set forth in the SLA and the Support Call Process, we will:

- 8.1 perform our maintenance and support obligations in a professional, good, and workmanlike manner, consistent with industry standards, to resolve Defects in the Tyler Software (limited to the then-current version and the immediately prior version);
- 8.2 provide telephone support during our established support hours;
- 8.3 maintain personnel that are sufficiently trained to be familiar with the Tyler Software and Third Party Software, if any, in order to provide maintenance and support services;
- 8.4 make available to you all major and minor releases to the Tyler Software (including updates and enhancements) that we make generally available without additional charge to customers who have a maintenance and support agreement in effect; and
- 8.5 provide non-Defect resolution support of prior releases of the Tyler Software in accordance with our then-current release life cycle policy.

We will use all reasonable efforts to perform support services remotely. Currently, we use a third-party secure unattended connectivity tool called Bomgar, as well as GotoAssist by Citrix. Therefore, you agree to maintain a high-speed internet connection capable of connecting us to your PCs and server(s). You agree to provide us with a login account and local administrative privileges as we may reasonably require to perform remote services. We will, at our option, use the secure connection to assist with proper diagnosis and resolution, subject to any reasonably applicable security protocols. If we cannot resolve a support issue remotely, we may be required to provide onsite services. In such event, we will be responsible for our travel expenses, unless it is determined that the reason onsite support was required was a reason outside our control. Either way, you agree to provide us with full and free access to the Tyler Software, working space, adequate facilities within a reasonable distance from the equipment, and use of machines, attachments, features, or other equipment reasonably necessary for us to provide the maintenance and support services, all at no charge to us. We strongly recommend that you also maintain your VPN for backup connectivity purposes.

For the avoidance of doubt, SaaS Fees do not include the following services: (a) onsite support (unless Tyler cannot remotely correct a Defect in the Tyler Software, as set forth above); (b) application design; (c) other consulting services; or (d) support outside our normal business hours as listed in our then-current Support Call Process. Requested services such as those outlined in this section will be billed to you on a time and materials basis at our then current rates. You must request those services with at least one (1) weeks' advance notice.

#### **SECTION D – THIRD PARTY PRODUCTS**

- 1. Third Party Hardware. We will sell, deliver, and install onsite the Third Party Hardware, if you have purchased any, for the price set forth in the Investment Summary. Those amounts are payable in accordance with our Invoicing and Payment Policy.
- 2. Third Party Software. As part of the SaaS Services, you will receive access to the Third Party Software and related documentation for internal business purposes only. Your rights to the Third Party Software will be governed by the Third Party Terms.
- 3. Third Party Products Warranties.
  - 3.1 We are authorized by each Developer to grant access to the Third Party Software.

3.2 The Third Party Hardware will be new and unused, and upon payment in full, you will receive free and clear title to the Third Party Hardware.

3.3 You acknowledge that we are not the manufacturer of the Third Party Products. We do not warrant or guarantee the performance of the Third Party Products. However, we grant and pass through to you any warranty that we may receive from the Developer or supplier of the Third Party Products.

## **SECTION E - INVOICING AND PAYMENT; INVOICE DISPUTES**

1. Invoicing and Payment. We will invoice you the SaaS Fees and fees for other professional services in the Investment Summary per our Invoicing and Payment Policy, subject to Section E(2).
2. Invoice Disputes. If you believe any delivered software or service does not conform to the warranties in this Agreement, you will provide us with written notice within thirty (30) days of your receipt of the applicable invoice. The written notice must contain reasonable detail of the issues you contend are in dispute so that we can confirm the issue and respond to your notice with either a justification of the invoice, an adjustment to the invoice, or a proposal addressing the issues presented in your notice. We will work with you as may be necessary to develop an action plan that outlines reasonable steps to be taken by each of us to resolve any issues presented in your notice. You may withhold payment of the amount(s) actually in dispute, and only those amounts, until we complete the action items outlined in the plan. If we are unable to complete the action items outlined in the action plan because of your failure to complete the items agreed to be done by you, then you will remit full payment of the invoice. We reserve the right to suspend delivery of all SaaS Services, including maintenance and support services, if you fail to pay an invoice not disputed as described above within fifteen (15) days of notice of our intent to do so.

## **SECTION F – TERM AND TERMINATION**

1. Term. The initial term of this Agreement is **three (3)** years from the first day of the first month following the Effective Date, unless earlier terminated as set forth below. Upon expiration of the initial term, this Agreement will renew automatically for additional one (1) year renewal terms at our then-current SaaS Fees unless terminated in writing by either party at least sixty (60) days prior to the end of the then-current renewal term. Your right to access or use the Tyler Software and the SaaS Services will terminate at the end of this Agreement.
2. Termination. This Agreement may be terminated as set forth below. In the event of termination, you will pay us for all undisputed fees and expenses related to the software, products, and/or services you have received, or we have incurred or delivered, prior to the effective date of termination. Disputed fees and expenses in all terminations other than your termination for cause must have been submitted as invoice disputes in accordance with Section E(2).
  - 2.1 Failure to Pay SaaS Fees. You acknowledge that continued access to the SaaS Services is contingent upon your timely payment of SaaS Fees. If you fail to timely pay the SaaS Fees, we may discontinue the SaaS Services and deny your access to the Tyler Software. We may also terminate this Agreement if you don't cure such failure to pay within forty-five (45) days of receiving written notice of our intent to terminate.
  - 2.2 For Cause. If you believe we have materially breached this Agreement, you will invoke the

Dispute Resolution clause set forth in Section H(3). You may terminate this Agreement for cause in the event we do not cure, or create a mutually agreeable action plan to address, a material breach of this Agreement within the thirty (30) day window set forth in Section H(3).

2.3 Force Majeure. Either party has the right to terminate this Agreement if a Force Majeure event suspends performance of the SaaS Services for a period of forty-five (45) days or more.

2.4 Lack of Appropriations. If you should not appropriate or otherwise make available funds sufficient to utilize the SaaS Services, you may unilaterally terminate this Agreement upon thirty (30) days written notice to us. You will not be entitled to a refund or offset of previously paid, but unused SaaS Fees. You agree not to use termination for lack of appropriations as a substitute for termination for convenience.

2.5 Fees for Termination without Cause during Initial Term.<sup>2</sup> If you terminate this Agreement during the initial term for any reason other than cause, Force Majeure, or lack of appropriations, or if we terminate this Agreement during the initial term for your failure to pay SaaS Fees, you shall pay us the following early termination fees:

- a. if you terminate during the first year of the initial term, 100% of the SaaS Fees through the date of termination plus 75% of the SaaS Fees then due for the remainder of the initial term;
- b. if you terminate during the second year of the initial term, 100% of the SaaS Fees through the date of termination plus 50% of the SaaS Fees then due for the remainder of the initial term; and
- c. if you terminate after the second year of the initial term, 100% of the SaaS Fees through the date of termination plus 25% of the SaaS Fees then due for the remainder of the initial term.

## SECTION G – INDEMNIFICATION, LIMITATION OF LIABILITY AND INSURANCE

### 1. Intellectual Property Infringement Indemnification.

1.1 We will defend you against any third party claim(s) that the Tyler Software or Documentation infringes that third party's patent, copyright, or trademark, or misappropriates its trade secrets, and will pay the amount of any resulting adverse final judgment (or settlement to which we consent). You must notify us promptly in writing of the claim and give us sole control over its defense or settlement. You agree to provide us with reasonable assistance, cooperation, and information in defending the claim at our expense.

1.2 Our obligations under this Section G(1) will not apply to the extent the claim or adverse final judgment is based on your use of the Tyler Software in contradiction of this Agreement, including with non-licensed third parties, or your willful infringement.

1.3 If we receive information concerning an infringement or misappropriation claim related to the

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<sup>2</sup> IF SERVICES HAVE BEEN PRICED SEPARATELY FROM SAAS FEES, THEN THE APPLICABLE PERCENTAGES ARE 25%, 15% AND 10%.

Tyler Software, we may, at our expense and without obligation to do so, either: (a) procure for you the right to continue its use; (b) modify it to make it non-infringing; or (c) replace it with a functional equivalent, in which case you will stop running the allegedly infringing Tyler Software immediately. Alternatively, we may decide to litigate the claim to judgment, in which case you may continue to use the Tyler Software consistent with the terms of this Agreement.

- 1.4 If an infringement or misappropriation claim is fully litigated and your use of the Tyler Software is enjoined by a court of competent jurisdiction, in addition to paying any adverse final judgment (or settlement to which we consent), we will, at our option, either: (a) procure the right to continue its use; (b) modify it to make it non-infringing; or (c) replace it with a functional equivalent. This section provides your exclusive remedy for third party copyright, patent, or trademark infringement and trade secret misappropriation claims.

2. General Indemnification.

- 2.1 We will indemnify and hold harmless you and your agents, officials, and employees from and against any and all third-party claims, losses, liabilities, damages, costs, and expenses (including reasonable attorney's fees and costs) for (a) personal injury or property damage to the extent caused by our negligence or willful misconduct; or (b) our violation of PCI-DSS requirements or a law applicable to our performance under this Agreement. You must notify us promptly in writing of the claim and give us sole control over its defense or settlement. You agree to provide us with reasonable assistance, cooperation, and information in defending the claim at our expense.

- 2.2 To the extent permitted by applicable law, you will indemnify and hold harmless us and our agents, officials, and employees from and against any and all third-party claims, losses, liabilities, damages, costs, and expenses (including reasonable attorney's fees and costs) for personal injury or property damage to the extent caused by your negligence or willful misconduct; or (b) your violation of a law applicable to your performance under this Agreement. We will notify you promptly in writing of the claim and will give you sole control over its defense or settlement. We agree to provide you with reasonable assistance, cooperation, and information in defending the claim at your expense.

3. **DISCLAIMER. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS AGREEMENT AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, WE HEREBY DISCLAIM ALL OTHER WARRANTIES AND CONDITIONS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES, DUTIES, OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**
4. **LIMITATION OF LIABILITY. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, OUR LIABILITY FOR DAMAGES ARISING OUT OF THIS AGREEMENT, WHETHER BASED ON A THEORY OF CONTRACT OR TORT, INCLUDING NEGLIGENCE AND STRICT LIABILITY, SHALL BE LIMITED TO YOUR ACTUAL DIRECT DAMAGES, NOT TO EXCEED (A) DURING THE INITIAL TERM, AS SET FORTH IN SECTION F(2), TOTAL FEES PAID AS OF THE TIME OF THE CLAIM; OR (B) DURING ANY RENEWAL TERM, THE THEN-CURRENT ANNUAL SAAS FEES PAYABLE IN THAT RENEWAL TERM. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE PRICES SET FORTH IN THIS AGREEMENT ARE SET IN RELIANCE UPON THIS LIMITATION OF LIABILITY AND TO THE MAXIMUM EXTENT ALLOWED UNDER APPLICABLE LAW, THE EXCLUSION OF CERTAIN DAMAGES, AND EACH SHALL APPLY REGARDLESS OF THE FAILURE OF AN ESSENTIAL PURPOSE OF ANY REMEDY. THE FOREGOING LIMITATION OF LIABILITY SHALL NOT APPLY TO CLAIMS THAT ARE SUBJECT TO SECTIONS G(1) AND G(2).**

5. **EXCLUSION OF CERTAIN DAMAGES.** TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
6. Insurance. During the course of performing services under this Agreement, we agree to maintain the following levels of insurance: (a) Commercial General Liability of at least \$1,000,000; (b) Automobile Liability of at least \$1,000,000; (c) Professional Liability of at least \$1,000,000; (d) Workers Compensation complying with applicable statutory requirements; and (e) Excess/Umbrella Liability of at least \$5,000,000. We will add you as an additional insured to our Commercial General Liability and Automobile Liability policies, which will automatically add you as an additional insured to our Excess/Umbrella Liability policy as well. We will provide you with copies of certificates of insurance upon your written request.

## **SECTION H – GENERAL TERMS AND CONDITIONS**

1. Additional Products and Services. You may purchase additional products and services at the rates set forth in the Investment Summary for twelve (12) months from the Effective Date by executing a mutually agreed addendum. If no rate is provided in the Investment Summary, or those twelve (12) months have expired, you may purchase additional products and services at our then-current list price, also by executing a mutually agreed addendum. The terms of this Agreement will control any such additional purchase(s), unless otherwise specifically provided in the addendum.
2. Optional Items. Pricing for any listed optional products and services in the Investment Summary will be valid for twelve (12) months from the Effective Date.
3. Dispute Resolution. You agree to provide us with written notice within thirty (30) days of becoming aware of a dispute. You agree to cooperate with us in trying to reasonably resolve all disputes, including, if requested by either party, appointing a senior representative to meet and engage in good faith negotiations with our appointed senior representative. Senior representatives will convene within thirty (30) days of the written dispute notice, unless otherwise agreed. All meetings and discussions between senior representatives will be deemed confidential settlement discussions not subject to disclosure under Federal Rule of Evidence 408 or any similar applicable state rule. If we fail to resolve the dispute, either of us may assert our respective rights and remedies in a court of competent jurisdiction. Nothing in this section shall prevent you or us from seeking necessary injunctive relief during the dispute resolution procedures.
4. Taxes. The fees in the Investment Summary do not include any taxes, including, without limitation, sales, use, or excise tax. If you are a tax-exempt entity, you agree to provide us with a tax-exempt certificate. Otherwise, we will pay all applicable taxes to the proper authorities and you will reimburse us for such taxes. If you have a valid direct-pay permit, you agree to provide us with a copy. For clarity, we are responsible for paying our income taxes, both federal and state, as applicable, arising from our performance of this Agreement.
5. Nondiscrimination. We will not discriminate against any person employed or applying for employment concerning the performance of our responsibilities under this Agreement. This discrimination prohibition will apply to all matters of initial employment, tenure, and terms of employment, or otherwise with respect to any matter directly or indirectly relating to employment concerning race, color, religion, national origin, age, sex, sexual orientation, ancestry, disability that



is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, marital status, or political affiliation. We will post, where appropriate, all notices related to nondiscrimination as may be required by applicable law.

6. E-Verify. We have complied, and will comply, with the E-Verify procedures administered by the U.S. Citizenship and Immigration Services Verification Division for all of our employees assigned to your project.
7. Subcontractors. We will not subcontract any services under this Agreement without your prior written consent, not to be unreasonably withheld.
8. Binding Effect; No Assignment. This Agreement shall be binding on, and shall be for the benefit of, either your or our successor(s) or permitted assign(s). Neither party may assign this Agreement without the prior written consent of the other party; provided, however, your consent is not required for an assignment by us as a result of a corporate reorganization, merger, acquisition, or purchase of substantially all of our assets.
9. Force Majeure. Except for your payment obligations, neither party will be liable for delays in performing its obligations under this Agreement to the extent that the delay is caused by Force Majeure; provided, however, that within ten (10) business days of the Force Majeure event, the party whose performance is delayed provides the other party with written notice explaining the cause and extent thereof, as well as a request for a reasonable time extension equal to the estimated duration of the Force Majeure event.
10. No Intended Third Party Beneficiaries. This Agreement is entered into solely for the benefit of you and us. No third party will be deemed a beneficiary of this Agreement, and no third party will have the right to make any claim or assert any right under this Agreement. This provision does not affect the rights of third parties under any Third Party Terms.
11. Entire Agreement; Amendment. This Agreement represents the entire agreement between you and us with respect to the subject matter hereof, and supersedes any prior agreements, understandings, and representations, whether written, oral, expressed, implied, or statutory. Purchase orders submitted by you, if any, are for your internal administrative purposes only, and the terms and conditions contained in those purchase orders will have no force or effect. This Agreement may only be modified by a written amendment signed by an authorized representative of each party.
12. Severability. If any term or provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement will be considered valid and enforceable to the fullest extent permitted by law.
13. No Waiver. In the event that the terms and conditions of this Agreement are not strictly enforced by either party, such non-enforcement will not act as or be deemed to act as a waiver or modification of this Agreement, nor will such non-enforcement prevent such party from enforcing each and every term of this Agreement thereafter.
14. Independent Contractor. We are an independent contractor for all purposes under this Agreement.
15. Notices. All notices or communications required or permitted as a part of this Agreement, such as notice of an alleged material breach for a termination for cause or a dispute that must be submitted to dispute resolution, must be in writing and will be deemed delivered upon the earlier of the following: (a) actual receipt by the receiving party; (b) upon receipt by sender of a certified mail,

return receipt signed by an employee or agent of the receiving party; (c) upon receipt by sender of proof of email delivery; or (d) if not actually received, five (5) days after deposit with the United States Postal Service authorized mail center with proper postage (certified mail, return receipt requested) affixed and addressed to the other party at the address set forth on the signature page hereto or such other address as the party may have designated by proper notice. The consequences for the failure to receive a notice due to improper notification by the intended receiving party of a change in address will be borne by the intended receiving party.

16. Client Lists. You agree that we may identify you by name in client lists, marketing presentations, and promotional materials.
17. Confidentiality. Both parties recognize that their respective employees and agents, in the course of performance of this Agreement, may be exposed to confidential information and that disclosure of such information could violate rights to private individuals and entities, including the parties. Confidential information is nonpublic information that a reasonable person would believe to be confidential and includes, without limitation, personal identifying information (*e.g.*, social security numbers) and trade secrets, each as defined by applicable state law. Each party agrees that it will not disclose any confidential information of the other party and further agrees to take all reasonable and appropriate action to prevent such disclosure by its employees or agents. The confidentiality covenants contained herein will survive the termination or cancellation of this Agreement. This obligation of confidentiality will not apply to information that:
  - (a) is in the public domain, either at the time of disclosure or afterwards, except by breach of this Agreement by a party or its employees or agents;
  - (b) a party can establish by reasonable proof was in that party's possession at the time of initial disclosure;
  - (c) a party receives from a third party who has a right to disclose it to the receiving party; or
  - (d) is the subject of a legitimate disclosure request under the open records laws or similar applicable public disclosure laws governing this Agreement; provided, however, that in the event you receive an open records or other similar applicable request, you will give us prompt notice and otherwise perform the functions required by applicable law.
18. Business License. In the event a local business license is required for us to perform services hereunder, you will promptly notify us and provide us with the necessary paperwork and/or contact information so that we may timely obtain such license.
19. Governing Law. This Agreement will be governed by and construed in accordance with the laws of your state of domicile, without regard to its rules on conflicts of law.
20. Multiple Originals and Authorized Signatures. This Agreement may be executed in multiple originals, any of which will be independently treated as an original document. Any electronic, faxed, scanned, photocopied, or similarly reproduced signature on this Agreement or any amendment hereto will be deemed an original signature and will be fully enforceable as if an original signature. Each party represents to the other that the signatory set forth below is duly authorized to bind that party to this Agreement.
21. Cooperative Procurement. To the maximum extent permitted by applicable law, we agree that this Agreement may be used as a cooperative procurement vehicle by eligible jurisdictions. We reserve the right to negotiate and customize the terms and conditions set forth herein, including but not limited to pricing, to the scope and circumstances of that cooperative procurement.

22. Contract Documents. This Agreement includes the following exhibits:

Exhibit A	Investment Summary
Exhibit B	Invoicing and Payment Policy
	Schedule 1: Business Travel Policy
Exhibit C	Service Level Agreement
	Schedule 1: Support Call Process
Exhibit D	Third Party Terms
Exhibit E	Statement of Work

IN WITNESS WHEREOF, a duly authorized representative of each party has executed this Agreement as of the date(s) set forth below.

Tyler Technologies, Inc.

[INSERT CLIENT NAME]

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Address for Notices:

Tyler Technologies, Inc.  
One Tyler Drive  
Yarmouth, ME 04096  
Attention: Chief Legal Officer

Address for Notices:

INSERT CLIENT NAME  
INSERT  
INSERT  
Attn:



## **Exhibit A**

### **Investment Summary**

The following Investment Summary details the software and services to be delivered by us to you under the Agreement. This Investment Summary is effective as of the Effective Date. Capitalized terms not otherwise defined will have the meaning assigned to such terms in the Agreement.

*Tyler sales quotation to be inserted prior to Agreement execution.*

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## Exhibit B

### Invoicing and Payment Policy

We will provide you with the software and services set forth in the Investment Summary of the Agreement. Capitalized terms not otherwise defined will have the meaning assigned to such terms in the Agreement.

**Invoicing:** We will invoice you for the applicable software and services in the Investment Summary as set forth below. Your rights to dispute any invoice are set forth in the Agreement.

1. **SaaS Fees.** SaaS Fees are invoiced on an annual basis, beginning on the commencement of the initial term as set forth in Section F (1) of this Agreement. Your annual SaaS fees for the initial term are set forth in the Investment Summary. Upon expiration of the initial term, your annual SaaS fees will be at our then-current rates.
2. **Other Tyler Software and Services.**
  - 2.1 *Project Planning Services:* Project planning services are invoiced upon delivery of the implementation planning document.
  - 2.2 *VPN Device:* The fee for the VPN device will be invoiced upon installation of the VPN.
  - 2.3 *Implementation and Other Professional Services (including training):* Implementation and other professional services (including training) are billed and invoiced as delivered, at the rates set forth in the Investment Summary.<sup>3</sup>
  - 2.4 *Consulting Services:* If you have purchased any Business Process Consulting services, if they have been quoted as fixed-fee services, they will be invoiced 50% upon your acceptance of the Best Practice Recommendations, by module, and 50% upon your acceptance of custom desktop procedures, by module. If you have purchased any Business Process Consulting services and they are quoted as an estimate, then we will bill you the actual services delivered on a time and materials basis.
  - 2.5 *Conversions:* Fixed-fee conversions are invoiced 50% upon initial delivery of the converted Data, by conversion option, and 50% upon Client acceptance to load the converted Data into Live/Production environment, by conversion option. Where conversions are quoted as estimated, we will bill you the actual services delivered on a time and materials basis.<sup>4</sup>

<sup>3</sup> IF IMPLEMENTATION SERVICES, ETC. ARE QUOTED AS PART OF SAAS FEES, REPLACE THIS TEXT WITH: "IMPLEMENTATION AND CONVERSION SERVICES ARE QUOTED AS PART OF YOUR SAAS FEES, AND WILL BE INVOICED AS SET FORTH ABOVE."

<sup>4</sup> REMOVE IF IMPLEMENTATION AND CONVERSION SERVICES FEES ROLLED INTO SAAS FEES.

2.6 *Requested Modifications to the Tyler Software:* Requested modifications to the Tyler Software are invoiced 50% upon delivery of specifications and 50% upon delivery of the applicable modification. You must report any failure of the modification to conform to the specifications within thirty (30) days of delivery; otherwise, the modification will be deemed to be in compliance with the specifications after the 30-day window has passed. You may still report Defects to us as set forth in this Agreement.

2.7 *Other Fixed Price Services:* Other fixed price services are invoiced upon complete delivery of the service. For the avoidance of doubt, where “Project Planning Services” are provided, payment will be due upon delivery of the Implementation Planning document. Dedicated Project Management services, if any, will be billed monthly in arrears, beginning on the first day of the month immediately following the project kick-off meeting.

2.8 *Change Management Services:* If you have purchased any change management services, those services will be invoiced in the following amounts and upon the following milestones:

Acceptance of Change Management Discovery Analysis	15%
Delivery of Change Management Plan and Strategy Presentation	10%
Acceptance of Executive Playbook	15%
Acceptance of Resistance Management Plan	15%
Acceptance of Procedural Change Communications Plan	10%
Change Management Coach Training	20%
Change Management After-Action Review	15%

### 3. Third Party Products.

3.1 *Third Party Software License Fees:* License fees for Third Party Software, if any, are invoiced when we make it available to you for downloading.

3.2 *Third Party Software Maintenance:* The first year maintenance for the Third Party Software is invoiced when we make it available to you for downloading.

3.3 *Third Party Hardware:* Third Party Hardware costs, if any, are invoiced upon delivery.

4. Expenses. The service rates in the Investment Summary do not include travel expenses. Expenses will be billed as incurred and only in accordance with our then-current Business Travel Policy, plus a 10% travel agency processing fee. Our current Business Travel Policy is attached to this Exhibit B at Schedule 1. Copies of receipts will be provided upon request; we reserve the right to charge you an administrative fee depending on the extent of your requests. Receipts for miscellaneous items less than twenty-five dollars and mileage logs are not available.
5. Credit for Prepaid Maintenance and Support Fees for Tyler Software. Client will receive a credit for the maintenance and support fees prepaid for the Tyler Software for the time period commencing on the first day of the SaaS Term.<sup>5</sup>

**Payment.** Payment for undisputed invoices is due within forty-five (45) days of the invoice date. We

<sup>5</sup> **USE FOR FLIP CONTRACTS WHERE THE SAAS TERM BEGINS BEFORE THE END OF THE ANNUAL MAINTENANCE TERM.**

prefer to receive payments electronically. Our electronic payment information is:

Bank:	Wells Fargo Bank, N.A. 420 Montgomery San Francisco, CA 94104
ABA:	121000248
Account:	4124302472
Beneficiary:	Tyler Technologies, Inc. – Operating





**Exhibit B**  
**Schedule 1**  
**Business Travel Policy**

**1. Air Travel**

**A. Reservations & Tickets**

Tyler's Travel Management Company (TMC) will provide an employee with a direct flight within two hours before or after the requested departure time, assuming that flight does not add more than three hours to the employee's total trip duration and the fare is within \$100 (each way) of the lowest logical fare. If a net savings of \$200 or more (each way) is possible through a connecting flight that is within two hours before or after the requested departure time and that does not add more than three hours to the employee's total trip duration, the connecting flight should be accepted.

Employees are encouraged to make advanced reservations to take full advantage of discount opportunities. Employees should use all reasonable efforts to make travel arrangements at least two (2) weeks in advance of commitments. A seven (7) day advance booking requirement is mandatory. When booking less than seven (7) days in advance, management approval will be required.

Except in the case of international travel where a segment of continuous air travel is six (6) or more consecutive hours in length, only economy or coach class seating is reimbursable. Employees shall not be reimbursed for "Basic Economy Fares" because these fares are non-refundable and have many restrictions that outweigh the cost-savings.

**B. Baggage Fees**

Reimbursement of personal baggage charges are based on trip duration as follows:

- Up to five (5) days = one (1) checked bag
- Six (6) or more days = two (2) checked bags

Baggage fees for sports equipment are not reimbursable.

## 2. Ground Transportation

### A. Private Automobile

Mileage Allowance – Business use of an employee's private automobile will be reimbursed at the current IRS allowable rate, plus out of pocket costs for tolls and parking. Mileage will be calculated by using the employee's office as the starting and ending point, in compliance with IRS regulations. Employees who have been designated a home office should calculate miles from their home.

### B. Rental Car

Employees are authorized to rent cars only in conjunction with air travel when cost, convenience, and the specific situation reasonably require their use. When renting a car for Tyler business, employees should select a "mid-size" or "intermediate" car. "Full" size cars may be rented when three or more employees are traveling together. Tyler carries leased vehicle coverage for business car rentals; except for employees traveling to Alaska and internationally (excluding Canada), additional insurance on the rental agreement should be declined.

### C. Public Transportation

Taxi or airport limousine services may be considered when traveling in and around cities or to and from airports when less expensive means of transportation are unavailable or impractical. The actual fare plus a reasonable tip (15-18%) are reimbursable. In the case of a free hotel shuttle to the airport, tips are included in the per diem rates and will not be reimbursed separately.

### D. Parking & Tolls

When parking at the airport, employees must use longer term parking areas that are measured in days as opposed to hours. Park and fly options located near some airports may also be used. For extended trips that would result in excessive parking charges, public transportation to/from the airport should be considered. Tolls will be reimbursed when receipts are presented.

## 3. Lodging

Tyler's TMC will select hotel chains that are well established, reasonable in price, and conveniently located in relation to the traveler's work assignment. Typical hotel chains include Courtyard, Fairfield Inn, Hampton Inn, and Holiday Inn Express. If the employee has a discount rate with a local hotel, the hotel reservation should note that discount and the employee should confirm the lower rate with the hotel upon arrival. Employee memberships in travel clubs such as AAA should be noted in their travel profiles so that the employee can take advantage of any lower club rates.

"No shows" or cancellation fees are not reimbursable if the employee does not comply with the hotel's cancellation policy.

Tips for maids and other hotel staff are included in the per diem rate and are not reimbursed separately.

Employees are not authorized to reserve non-traditional short-term lodging, such as Airbnb, VRBO, and HomeAway. Employees who elect to make such reservations shall not be reimbursed.

#### 4. Meals and Incidental Expenses

Employee meals and incidental expenses while on travel status within the continental U.S. are in accordance with the federal per diem rates published by the General Services Administration. Incidental expenses include tips to maids, hotel staff, and shuttle drivers and other minor travel expenses. Per diem rates are available at [www.gsa.gov/perdiem](http://www.gsa.gov/perdiem).

Per diem for Alaska, Hawaii, U.S. protectorates and international destinations are provided separately by the Department of Defense and will be determined as required.

##### A. Overnight Travel

For each full day of travel, all three meals are reimbursable. Per diems on the first and last day of a trip are governed as set forth below.

##### Departure Day

Depart before 12:00 noon	Lunch and dinner
Depart after 12:00 noon	Dinner

##### Return Day

Return before 12:00 noon	Breakfast
Return between 12:00 noon & 7:00 p.m.	Breakfast and lunch
Return after 7:00 p.m.*	Breakfast, lunch and dinner

\*7:00 p.m. is defined as direct travel time and does not include time taken to stop for dinner.

The reimbursement rates for individual meals are calculated as a percentage of the full day per diem as follows:

Breakfast	15%
Lunch	25%
Dinner	60%

##### B. Same Day Travel

Employees traveling at least 100 miles to a site and returning in the same day are eligible to claim lunch on an expense report. Employees on same day travel status are eligible to claim dinner in the event they return home after 7:00 p.m.\*

\*7:00 p.m. is defined as direct travel time and does not include time taken to stop for dinner.

#### 5. Internet Access – Hotels and Airports

Employees who travel may need to access their e-mail at night. Many hotels provide free high speed internet access and Tyler employees are encouraged to use such hotels whenever possible. If an employee's hotel charges for internet access it is reimbursable up to \$10.00 per day. Charges for internet access at airports are not reimbursable.

#### 6. International Travel

All international flights with the exception of flights between the U.S. and Canada should be reserved through TMC using the "lowest practical coach fare" with the exception of flights that are six (6) or more consecutive hours in length. In such event, the next available seating class above coach shall be reimbursed.

When required to travel internationally for business, employees shall be reimbursed for photo fees, application fees, and execution fees when obtaining a new passport book, but fees related to passport renewals are not reimbursable. Visa application and legal fees, entry taxes and departure taxes are reimbursable.

The cost of vaccinations that are either required for travel to specific countries or suggested by the U.S. Department of Health & Human Services for travel to specific countries, is reimbursable.

Section 4, Meals & Incidental Expenses, and Section 2.b., Rental Car, shall apply to this section.



## Exhibit C

# SERVICE LEVEL AGREEMENT

### I. Agreement Overview

This SLA operates in conjunction with, and does not supersede or replace any part of, the Agreement. It outlines the information technology service levels that we will provide to you to ensure the availability of the application services that you have requested us to provide. All other support services are documented in the Support Call Process.

**II. Definitions.** Except as defined below, all defined terms have the meaning set forth in the Agreement.

*Attainment:* The percentage of time the Tyler Software is available during a calendar quarter, with percentages rounded to the nearest whole number.

*Client Error Incident:* Any service unavailability resulting from your applications, content or equipment, or the acts or omissions of any of your service users or third-party providers over whom we exercise no control.

*Downtime:* Those minutes during which the Tyler Software is not available for your use. Downtime does not include those instances in which only a Defect is present.

*Service Availability:* The total number of minutes in a calendar quarter that the Tyler Software is capable of receiving, processing, and responding to requests, excluding maintenance windows, Client Error Incidents and Force Majeure.

### III. Service Availability

The Service Availability of the Tyler Software is intended to be 24/7/365. We set Service Availability goals and measures whether we have met those goals by tracking Attainment.

#### a. Your Responsibilities

Whenever you experience Downtime, you must make a support call according to the procedures outlined in the Support Call Process. You will receive a support incident number.

You must document, in writing, all Downtime that you have experienced during a calendar quarter. You must deliver such documentation to us within 30 days of a quarter's end.

The documentation you provide must evidence the Downtime clearly and convincingly. It must include, for example, the support incident number(s) and the date, time and duration of the Downtime(s).

#### b. Our Responsibilities

When our support team receives a call from you that Downtime has occurred or is occurring, we will work with you to identify the cause of the Downtime (including whether it may be the result of a Client Error Incident or Force Majeure). We will also work with you to resume normal operations.

Upon timely receipt of your Downtime report, we will compare that report to our own outage logs and support tickets to confirm that Downtime for which we were responsible indeed occurred.

We will respond to your Downtime report within 30 day(s) of receipt. To the extent we have confirmed Downtime for which we are responsible, we will provide you with the relief set forth below.

c. Client Relief

When a Service Availability goal is not met due to confirmed Downtime, we will provide you with relief that corresponds to the percentage amount by which that goal was not achieved, as set forth in the Client Relief Schedule below.

Notwithstanding the above, the total amount of all relief that would be due under this SLA per quarter will not exceed 5% of one quarter of the then-current SaaS Fee. The total credits confirmed by us in one or more quarters of a billing cycle will be applied to the SaaS Fee for the next billing cycle. Issuing of such credit does not relieve us of our obligations under the Agreement to correct the problem which created the service interruption.

Every quarter, we will compare confirmed Downtime to Service Availability. In the event actual Attainment does not meet the targeted Attainment, the following Client relief will apply, on a quarterly basis:

Targeted Attainment	Actual Attainment	Client Relief
100%	98-99%	Remedial action will be taken.
100%	95-97%	4% credit of fee for affected calendar quarter will be posted to next billing cycle
100%	<95%	5% credit of fee for affected calendar quarter will be posted to next billing cycle

You may request a report from us that documents the preceding quarter's Service Availability, Downtime, any remedial actions that have been/will be taken, and any credits that may be issued.

#### IV. **Applicability**

The commitments set forth in this SLA do not apply during maintenance windows, Client Error Incidents, and Force Majeure.

We perform maintenance during limited windows that are historically known to be reliably low-traffic times. If and when maintenance is predicted to occur during periods of higher traffic, we will provide advance notice of those windows and will coordinate to the greatest extent possible with you.

#### V. **Force Majeure**

You will not hold us responsible for not meeting service levels outlined in this SLA to the extent any failure to do so is caused by Force Majeure. In the event of Force Majeure, we will file with you a signed request that said failure be excused. That writing will at least include the essential details and circumstances supporting our request for relief pursuant to this Section. You will not unreasonably withhold its acceptance of such a request.



## Exhibit C

### Schedule 1

### Support Call Process

#### Support Channels

Tyler Technologies, Inc. provides the following channels of software support:

- (1) Tyler Community – an on-line resource, Tyler Community provides a venue for all Tyler clients with current maintenance agreements to collaborate with one another, share best practices and resources, and access documentation.
- (2) On-line submission (portal) – for less urgent and functionality-based questions, users may create unlimited support incidents through the customer relationship management portal available at the Tyler Technologies website.
- (3) Email – for less urgent situations, users may submit unlimited emails directly to the software support group.
- (4) Telephone – for urgent or complex questions, users receive toll-free, unlimited telephone software support.

#### Support Resources

A number of additional resources are available to provide a comprehensive and complete support experience:

- (1) Tyler Website – [www.tylertech.com](http://www.tylertech.com) – for accessing client tools and other information including support contact information.
- (2) Tyler Community – available through login, Tyler Community provides a venue for clients to support one another and share best practices and resources.
- (3) Knowledgebase – A fully searchable depository of thousands of documents related to procedures, best practices, release information, and job aides.
- (4) Program Updates – where development activity is made available for client consumption

#### Support Availability

Tyler Technologies support is available during the local business hours of 8 AM to 5 PM (Monday – Friday) across four US time zones (Pacific, Mountain, Central and Eastern). Clients may receive coverage across these time zones. Tyler's holiday schedule is outlined below. There will be no support coverage on these days.

New Year's Day	Thanksgiving Day
Memorial Day	Day after Thanksgiving
Independence Day	Christmas Day
Labor Day	

#### Issue Handling

##### Incident Tracking

Every support incident is logged into Tyler's Customer Relationship Management System and given a unique incident number. This system tracks the history of each incident. The incident tracking number is used to track and reference open issues when clients contact support. Clients may track incidents, using the incident number, through the portal at Tyler's website or by calling software support directly.



### Incident Priority

Each incident is assigned a priority number, which corresponds to the client's needs and deadlines. The client is responsible for reasonably setting the priority of the incident per the chart below. This chart is not intended to address every type of support incident, and certain "characteristics" may or may not apply depending on whether the Tyler software has been deployed on customer infrastructure or the Tyler cloud. The goal is to help guide the client towards clearly understanding and communicating the importance of the issue and to describe generally expected responses and resolutions.

Priority Level	Characteristics of Support Incident	Resolution Targets
1 Critical	Support incident that causes (a) complete application failure or application unavailability; (b) application failure or unavailability in one or more of the client's remote location; or (c) systemic loss of multiple essential system functions.	Tyler shall provide an initial response to Priority Level 1 incidents within one (1) business hour of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within one (1) business day. For non-hosted customers, Tyler's responsibility for lost or corrupted Data is limited to assisting the client in restoring its last available database.
2 High	Support incident that causes (a) repeated, consistent failure of essential functionality affecting more than one user or (b) loss or corruption of Data.	Tyler shall provide an initial response to Priority Level 2 incidents within four (4) business hours of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents or provide a circumvention procedure within ten (10) business days. For non-hosted customers, Tyler's responsibility for loss or corrupted Data is limited to assisting the client in restoring its last available database.
3 Medium	Priority Level 1 incident with an existing circumvention procedure, or a Priority Level 2 incident that affects only one user or for which there is an existing circumvention procedure.	Tyler shall provide an initial response to Priority Level 3 incidents within one (1) business day of receipt of the support incident. Tyler shall use commercially reasonable efforts to resolve such support incidents without the need for a circumvention procedure with the next published maintenance update or service pack. For non-hosted customers, Tyler's responsibility for lost or corrupted Data is limited to assisting the client in restoring its last available database.
4 Non-critical	Support incident that causes failure of non-essential functionality or a cosmetic or other issue that does not qualify as any other Priority Level.	Tyler shall provide an initial response to Priority Level 4 incidents within two (2) business days. Tyler shall use commercially reasonable efforts to resolve such support incidents, as well as cosmetic issues, with a future version release.

### *Incident Escalation*

Tyler Technology's software support consists of four levels of personnel:

- (1) Level 1: front-line representatives
- (2) Level 2: more senior in their support role, they assist front-line representatives and take on escalated issues
- (3) Level 3: assist in incident escalations and specialized client issues
- (4) Level 4: responsible for the management of support teams for either a single product or a product group

If a client feels they are not receiving the service needed, they may contact the appropriate Software Support Manager. After receiving the incident tracking number, the manager will follow up on the open issue and determine the necessary action to meet the client's needs.

On occasion, the priority or immediacy of a software support incident may change after initiation. Tyler encourages clients to communicate the level of urgency or priority of software support issues so that we can respond appropriately. A software support incident can be escalated by any of the following methods:

- (1) Telephone – for immediate response, call toll-free to either escalate an incident's priority or to escalate an issue through management channels as described above.
- (2) Email – clients can send an email to software support in order to escalate the priority of an issue
- (3) On-line Support Incident Portal – clients can also escalate the priority of an issue by logging into the client incident portal and referencing the appropriate incident tracking number.

### *Remote Support Tool*

Some support calls require further analysis of the client's database, process or setup to diagnose a problem or to assist with a question. Tyler will, at its discretion, use an industry-standard remote support tool. Support is able to quickly connect to the client's desktop and view the site's setup, diagnose problems, or assist with screen navigation. More information about the remote support tool Tyler uses is available upon request.



**Exhibit D**  
**End User License Agreement<sup>6</sup>**

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<sup>6</sup> INCLUDE ONLY WHERE TYLERFORMS ARE PART OF LICENSED MODULES.

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**DocOrigin**

**SOFTWARE LICENSE**

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IF YOU ARE AN AGENT OR EMPLOYEE OF ANOTHER ENTITY YOU REPRESENT AND WARRANT THAT (I) THE INDIVIDUAL ACCEPTING THIS AGREEMENT IS DULY AUTHORIZED TO ACCEPT THIS AGREEMENT ON SUCH ENTITY'S BEHALF AND TO BIND SUCH ENTITY, AND (II) SUCH ENTITY HAS FULL POWER, CORPORATE OR OTHERWISE, TO ENTER INTO THIS AGREEMENT AND PERFORM ITS OBLIGATIONS HEREUNDER.

**1. LICENSE TERMS**

- 1.1** In this Agreement a "**License Key**" means any license key, activation code, or similar installation, access or usage control codes, including serial numbers digitally created and or provided by OF Software Ltd., designed to provide unlocked access to the Software and its functionality.
- 1.2** **Evaluation License.** Subject to all of the terms and conditions of this Agreement, OF Software Ltd. grants You a limited, royalty-free, non-exclusive, non-transferable license to download and install a copy of the Software from [www.docorigin.com](http://www.docorigin.com) on a single machine and use it on a royalty-free basis for no more than 120 days from the date of installation (the "**Evaluation Period**"). You may use the Software during the Evaluation Period solely for the purpose of testing and evaluating it to determine if You wish to obtain a commercial, production license for the Software. This evaluation license grant will automatically end on expiry of the Evaluation Period and you acknowledge and agree that OF Software Ltd. will be under no obligation to renew or extend the Evaluation Period. If you wish to continue using the Software You may, on payment of the applicable fees, upgrade to a full license (as further described in section 1.3 below) on the terms of this Agreement and will be issued with a License Key for the same. If you do not wish to continue to license the Software after expiry of the Evaluation Period, then You agree to comply with the termination obligations set out in section [7.3] of this Agreement. For greater certainty, any document generated by you under an evaluation license will have a 'spoiler' or watermark on the output document. Documents generated by DocOrigin software that has a valid license key file also installed will not have the 'spoiler' produced. You are not permitted to remove the watermark or 'spoiler' from documents generated using the software under an evaluation license.
- 1.3** **Development and Testing Licenses.** Development and testing licenses are available for purchase through authorized distributors and resellers of OF Software Ltd. only. Subject to all of the terms and conditions of this Agreement, OF Software Ltd. grants You, a perpetual (subject to termination by OF Software Ltd. due to your breach of the terms of this Agreement), non-exclusive, non-transferable, worldwide non-sublicenseable license to download and install a copy of the Software from [www.docorigin.com](http://www.docorigin.com) on a single machine and

use for development and testing to create collateral deployable to Your production system(s). You are not entitled to use a development and testing license for live production purposes.

- 1.4 Production Licenses.** Production licenses are available for purchase through authorized distributors and resellers of OF Software Ltd. only. Subject to all of the terms and conditions of this Agreement, OF Software Ltd. grants You, a perpetual (subject to termination by OF Software Ltd. due to your breach of the terms of this Agreement), non-exclusive, non-transferable, worldwide non-sublicenseable license to use the Software in accordance with the license type purchased by you as set out on your purchase order as further described below. For greater certainty, unless otherwise agreed in a purchase order concluded with an approved distributor of the Software, and approved by OF Software, the default license to the Software is a per-CPU license as described in A. below:

- A. Per-CPU.** The total number of CPUs on a computer used to operate the Software may not exceed the licensed quantity of CPUs. For purposes of this license metric: (a) CPUs may contain more than one processing core, each group of two (2) processing cores is consider one (1) CPU., and any remaining unpaired processing core, will be deemed a CPU. (b) all CPUs on a computer on which the Software is installed shall be deemed to operate the Software unless You configure that computer (using a reliable and verifiable means of hardware or software partitioning) such that the total number of CPUs that actually operate the Software is less than the total number on that computer.
- B. Per-Document.** This is defined as a fee per document based on the total number of documents generated annually by merging data with a template created by the Software. The combined data and template produce documents of one or more pages. A document may contain 1 or more pages. For instance a batch of invoices for 250 customers may contain 1,000 pages, this will be counted as 250 documents which should correspond to 250 invoices.
- C. Per-Surface.** This is defined as a fee per surface based on the total number of surfaces generated annually by merging data with a template created by the Software. The combined data and template produce documents of one or more pages, the pages may be printed one side (one surface) or duplexed (2 surfaces). The documents may be rendered to a computer file (i.e. PDF), each page placed in the file is considered a surface. A document may contain 1 or more surfaces. For instance a batch of invoices for 250 customers may contain 500 pages duplexed, this will be counted as 1000 surfaces.

- 1.5 Disaster Recovery License.** You may request a Disaster Recovery license of the Software for each production license You have purchased as a failover in the event of loss of use of the production server(s). This license is for disaster recovery purposes only and under no circumstance may the disaster recovery license be used for production simultaneously with a production license with which it is paired.
- 1.6 Backup Copies.** After installation of the Software pursuant to this EULA, you may store a copy of the installation files for the Software solely for backup or archival purposes. Except as expressly provided in this EULA, you may not otherwise make copies of the Software or the printed materials accompanying the Software.
- 1.7 Third-Party Software License Rights.** If a separate license agreement pertaining to an item of third-party software is: delivered to You with the Software, included in the Software download package, or referenced in any material that is provided with the Software, then such separate license agreement shall govern Your use of that item or version of Third-Party Software. Your rights in respect to any third-party software, third-party data, third-party software or other third-party content provided with the Software shall be limited to those rights necessary to operate the Software as permitted by this Agreement. No other rights in the Software or third-party software are granted to You.



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In certain jurisdictions some or all of the provisions in this Section may not be effective or the applicable law may mandate a more extensive warranty in which case the applicable law will prevail over this Agreement.

## 6. LIMITATIONS OF LIABILITY.

- 6.1 TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL OF SOFTWARE LTD. BE LIABLE TO YOU OR ANY OTHER PERSON FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING WITHOUT LIMITATION, LEGAL EXPENSES, LOSS OF BUSINESS, LOSS OF PROFITS, LOSS OF REVENUE, LOST OR DAMAGED DATA, LOSS OF COMPUTER TIME, COST OF SUBSTITUTE GOODS OR SERVICES, OR FAILURE TO REALIZE EXPECTED SAVINGS OR ANY OTHER COMMERCIAL OR ECONOMIC LOSSES ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, EVEN IF OF SOFTWARE LTD. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES, OR SUCH LOSSES OR DAMAGES ARE FORESEEABLE.
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- 6.3 THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY CONSTITUTE AN ESSENTIAL PART OF THIS AGREEMENT. YOU ACKNOWLEDGE THAT BUT FOR THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY, NEITHER OF SOFTWARE LTD. NOR ANY OF ITS LICENSORS OR SUPPLIERS WOULD GRANT THE RIGHTS GRANTED IN THIS AGREEMENT.

## 7. TERM AND TERMINATION

- 7.1 The term of this Agreement will begin on download of the Software and, in respect of an Evaluation License, shall continue for the Evaluation Period, and in respect of all other license types defined in Section 1, shall continue for as long as You use the Software, unless earlier terminated sooner under this section 7.
- 7.2 OF Software Ltd. may terminate this Agreement in the event of any breach by You if such breach has not been cured within five (5) days of notice to You. No termination of this Agreement will entitle You to a refund of any amounts paid by You to OF Software Ltd. or its applicable distributor or reseller or affect any obligations You may have to pay any outstanding amounts owing to OF Software Ltd. or its distributor.
- 7.3 Your rights to use the Software will immediately terminate upon termination or expiration of this Agreement. Within five (5) days of termination or expiration of this Agreement, You shall purge all Software and all copies thereof from all computer systems and storage devices on which it was stored, and certify such to OF Software Ltd.

## 8. GENERAL PROVISIONS

- 8.1 **No Waiver.** No delay or failure in exercising any right under this Agreement, or any partial or single exercise of any right, will constitute a waiver of that right or any other rights under this Agreement. No consent to a breach of any express or implied term set out in this Agreement constitutes consent to any subsequent breach, whether of the same or any other provision.
- 8.2 **Severability.** If any provision of this Agreement is, or becomes, unenforceable, it will be severed from this Agreement and the remainder of this Agreement will remain in full force and effect.
- 8.3 **Assignment.** You may not transfer or assign this Agreement (whether voluntarily, by operation of law, or otherwise) without OF Software Ltd.'s prior written consent. OF Software Ltd. may assign this Agreement at any time without notice. This Agreement is binding upon and will inure to the benefit of both parties, and their respective successors and permitted assigns.
- 8.4 **Governing Law and Venue.** This Agreement shall be governed by the laws of the Province of Ontario. No choice of laws rules of any jurisdiction shall apply to this Agreement. You consent and agree that the courts of the Province of Ontario shall have jurisdiction over any legal action or proceeding brought by You arising out of or relating to this Agreement, and You consent to the jurisdiction of such courts for any such action or proceeding.



- 8.5 **Entire Agreement.** This Agreement is the entire understanding and agreement between You and OF Software Ltd. with respect to the subject matter hereof, and it supersedes all prior negotiations, commitments and understandings, verbal or written, and purchase order issued by You. This Agreement may be amended or otherwise modified by OF Software Ltd. from time to time and the most recent version of the Agreement will be available on the OF Software website [www.docorigin.com](http://www.docorigin.com).

**Last Updated: [July 18 2013]**



## Exhibit D

### MyGovPay/VirtualPay and IVR

1. MyGovPay/VirtualPay Licensing. Access to MyGovPay and/or Virtual Pay is hereby granted if Customer elects to use MyGovPay or VirtualPay, products of Tyler Technologies (*Powered by Persolvent*), designed for Citizen Users to use for processing online payments.

(a) Special MyGovPay/VirtualPay Definitions.

**"Merchant Agreement"** means the agreement between Customer and Persolvent that provides for the Merchant Fees.

**"Merchant Fees"** means direct costs levied by Visa/Mastercard/Discover or other payment card companies for Interchange Fees, Dues, Assessments and Occurrence Fees, over which Tyler Technologies has no authority.

**"MyGovPay"** means the Product of Tyler Technologies that allows members of the public to pay for Customer's services with a credit or other payment card on the Customer's citizen-facing web portal.

**"Persolvent"** means Persolvent, formerly BankCard Services Worldwide, a Payment Card Industry (PCI) compliant processing agent through which the EnerGov Software passes credit card transactions.

**"Use Fees"** means the Technology Fees, Authorization Fees and Program/Convenience Fees as listed in Use Fees Table in Section 2, titled *MyGovPay/VirtualPay*.

**"VirtualPay"** means the Product of Tyler Technologies that allows the Customer to accept and process citizen user's credit or other payment card using the EnerGov Software.

(b) Conditions of Use. If customer elects to use MyGovPay and/or VirtualPay the following terms apply:

- (1) Customer must apply for and agree to a Merchant Agreement with Persolvent.
- (2) Customer agrees that Citizen Users will be subject to Use Fees as listed in Use Fees table in Section 2.
- (3) Customer agrees that Use Fees are separate from and independent of Merchant Fees.
- (4) Customer agrees that this Agreement does not represent any modification to Customer's Merchant Agreement with Persolvent.
- (5) Customer agrees that Use Fees are for use on the MyGovPay/VirtualPay online system and will not be deposited or owed to Customer in any way.
- (6) Customer agrees that MyGovPay's and VirtualPay's ability to assess Use Fees is dictated by the Card Associations whose rules may change at any time and for any reason. If MyGovPay and/or VirtualPay, for any reason, are unable to process payments using Use Fees, Customer agrees that MyGovPay/VirtualPay reserves the right to negotiate a new pricing model with Customer for the continued use of MyGovPay and/or VirtualPay.

2. MyGovPay/VirtualPay Fees. Customer agrees that the Use Fees set forth on the following page will apply if Customer elects to use MyGovPay/VirtualPay.

**USE FEES TABLE FOLLOWS ON NEXT PAGE**

## Use Fees

### EnerGov's MyGovPay (Online / card-not-present payments)\*\*

	MyGovPay (Online Payments)	MyGovPay (Online Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1: Government Entity Paid</b>	2.79%	\$0.20
<b>Option 2: Patron Paid</b>	3.29%	N/A

\*\*ACH processing is available for a fee of \$20 per month and \$0.30 per transaction.

### EnerGov's VirtualPay (retail card present)

	VirtualPay (Retail Payments)	Virtual Pay (Retail Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1: Government Entity Paid</b>	2.59%	\$0.15
<b>Option 2: Patron Paid</b>	2.99%	N/A

Patron Paid fees will be communicated as "Service Fees" to the cardholder, at the time of transaction. In the event that the average monthly transaction amount is below \$30, Contractor reserves the right to apply an additional \$0.20 service fee above the quoted rates above.

3. Interactive Voice Response ("IVR"). If IVR is selected by Customer and included in the pricing, the following additional terms and conditions shall apply of this Agreement:

- (a) Network Security. Customer acknowledges that a third-party is used by Tyler Technologies to process IVR Data. Customer's content will pass through and be stored on the third-party servers and will not be segregated or in a separate physical location from servers on which other customers' content is or will be transmitted or stored.
- (b) Content. Customer is responsible for the creation, editorial content, control, and all other aspects of content to be used solely in conjunction with the EnerGov Software.
- (c) Lawful Purposes. Customer shall not use the IVR system for any unlawful purpose.
- (d) Critical Application. Customer will not use the IVR system for any life-support application or other critical application where failure or potential failure of the IVR system can cause injury, harm, death, or other grave problems, including, without limitation, loss of aircraft control, hospital life-support system, and delays in getting medicate care or other emergency services.
- (e) No Harmful Code. Customer represents and warrants that no content designed to delete, disable, deactivate, interfere with or otherwise harm any aspect of the IVR system now or in the future, shall be knowingly transmitted by Customer or Users.
- (f) IVR WARRANTY. Except as expressly set forth in this Agreement, TYLER TECHNOLOGIES MAKES NO REPRESENTATION AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR IVR.



## **Exhibit E**

### **Statement of Work**

*Statement of Work, if applicable, to be inserted prior to Agreement execution.*



## SERVICE LEVEL AGREEMENT

### I. Agreement Overview

This SLA operates in conjunction with, and does not supersede or replace any part of, the Agreement. It outlines the information technology service levels that we will provide to you to ensure the availability of the application services that you have requested us to provide. All other support services are documented in the Support Call Process.

**II. Definitions.** Except as defined below, all defined terms have the meaning set forth in the Agreement.

*Attainment:* The percentage of time the Tyler Software is available during a calendar quarter, with percentages rounded to the nearest whole number.

*Client Error Incident:* Any service unavailability resulting from your applications, content or equipment, or the acts or omissions of any of your service users or third-party providers over whom we exercise no control.

*Downtime:* Those minutes during which the Tyler Software is not available for your use. Downtime does not include those instances in which only a Defect is present.

*Service Availability:* The total number of minutes in a calendar quarter that the Tyler Software is capable of receiving, processing, and responding to requests, excluding maintenance windows, Client Error Incidents and Force Majeure.

### III. Service Availability

The Service Availability of the Tyler Software is intended to be 24/7/365. We set Service Availability goals and measures whether we have met those goals by tracking Attainment.

#### a. Your Responsibilities

Whenever you experience Downtime, you must make a support call according to the procedures outlined in the Support Call Process. You will receive a support incident number.

You must document, in writing, all Downtime that you have experienced during a calendar quarter. You must deliver such documentation to us within 30 days of a quarter's end.

The documentation you provide must evidence the Downtime clearly and convincingly. It must include, for example, the support incident number(s) and the date, time and duration of the Downtime(s).

#### b. Our Responsibilities

When our support team receives a call from you that Downtime has occurred or is occurring, we will work with you to identify the cause of the Downtime (including whether it may be the result of a Client Error Incident or Force Majeure). We will also work with you to resume normal operations.

Upon timely receipt of your Downtime report, we will compare that report to our own outage logs and support tickets to confirm that Downtime for which we were responsible indeed occurred.

We will respond to your Downtime report within 30 day(s) of receipt. To the extent we have confirmed Downtime for which we are responsible, we will provide you with the relief set forth below.

**c. Client Relief**

When a Service Availability goal is not met due to confirmed Downtime, we will provide you with relief that corresponds to the percentage amount by which that goal was not achieved, as set forth in the Client Relief Schedule below.

Notwithstanding the above, the total amount of all relief that would be due under this SLA per quarter will not exceed 5% of one quarter of the then-current SaaS Fee. The total credits confirmed by us in one or more quarters of a billing cycle will be applied to the SaaS Fee for the next billing cycle. Issuing of such credit does not relieve us of our obligations under the Agreement to correct the problem which created the service interruption.

Every quarter, we will compare confirmed Downtime to Service Availability. In the event actual Attainment does not meet the targeted Attainment, the following Client relief will apply, on a quarterly basis:

Targeted Attainment	Actual Attainment	Client Relief
100%	98-99%	Remedial action will be taken.
100%	95-97%	4% credit of fee for affected calendar quarter will be posted to next billing cycle
100%	<95%	5% credit of fee for affected calendar quarter will be posted to next billing cycle

You may request a report from us that documents the preceding quarter's Service Availability, Downtime, any remedial actions that have been/will be taken, and any credits that may be issued.

**IV. Applicability**

The commitments set forth in this SLA do not apply during maintenance windows, Client Error Incidents, and Force Majeure.

We perform maintenance during limited windows that are historically known to be reliably low-traffic times. If and when maintenance is predicted to occur during periods of higher traffic, we will provide advance notice of those windows and will coordinate to the greatest extent possible with you.

**V. Force Majeure**

You will not hold us responsible for not meeting service levels outlined in this SLA to the extent any failure to do so is caused by Force Majeure. In the event of Force Majeure, we will file with you a signed request that said failure be excused. That writing will at least include the essential details and circumstances supporting our request for relief pursuant to this Section. You will not unreasonably withhold its acceptance of such a request.

## 9.4 MASTER ESCROW AGREEMENT

Please reference the Master Escrow Agreement on the following pages.



EFFECTIVE DATE: Sept. 29, 2008MASTER DEPOSIT ACCOUNT NUMBER: 34953

### **THREE-PARTY MASTER DEPOSITOR** **ESCROW SERVICE AGREEMENT**

#### **1. Introduction.**

This Three-Party Master Depositor Escrow Service Agreement (the "Agreement") is entered into by and between Tyler Technologies, Inc., ("Depositor"), and by any additional party enrolling as a "Beneficiary" upon execution of the Beneficiary Enrollment Form attached as Exhibit E to this Agreement and by Iron Mountain Intellectual Property Management, Inc. ("Iron Mountain"). Beneficiary, Depositor, and Iron Mountain may be referred to individually as a "Party" or collectively as the "Parties" throughout this Agreement.

(a) The use of the term "services" in this Agreement shall refer to Iron Mountain services that facilitate the creation, management, and enforcement of software or other technology escrow accounts as described in Exhibit A attached hereto ("Services"). A Party shall request Services under this Agreement by submitting a work request for certain Iron Mountain Services ("Work Request") via written instruction or the online portal maintained at the website located at [www.ironmountainconnect.com](http://www.ironmountainconnect.com) or other websites owned or controlled by Iron Mountain that are linked to that website (collectively the "Iron Mountain Website").

(b) The Beneficiary and Depositor have, or will have, entered into a license agreement or other agreement conveying intellectual property rights to the Beneficiary ("License Agreement"), and the Parties intend this Agreement to be considered as supplementary to the License Agreement, pursuant to Title 11 United States [Bankruptcy] Code, Section 365(n).

#### **2. Depositor Responsibilities and Representations.**

- (a) Depositor shall make an initial deposit that is complete and functional of all proprietary technology and other materials covered under this Agreement ("Deposit Material") to Iron Mountain within thirty (30) days of the Effective Date. Depositor may also update Deposit Material from time to time during the Term of this Agreement provided a minimum of one (1) complete and functional copy of Deposit Material is deposited with Iron Mountain at all times. At the time of each deposit or update, Depositor will provide an accurate and complete description of all Deposit Material sent to Iron Mountain via the Iron Mountain Website or using the form attached hereto as Exhibit B.
- (b) Depositor represents that it lawfully possesses all Deposit Material provided to Iron Mountain under this Agreement free of any liens or encumbrances as of the date of their deposit. Any Deposit Material liens or encumbrances made after their deposit will not prohibit, limit, or alter the rights and obligations of Iron Mountain under this Agreement. Depositor warrants that with respect to the Deposit Material, Iron Mountain's proper administration of this Agreement will not violate the rights of any third parties.
- (c) Depositor represents that all Deposit Material is readable and useable in its then current form; if any portion of such Deposit Material is encrypted the necessary decryption tools and keys to read such material are deposited contemporaneously.
- (d) Depositor agrees, upon request by Iron Mountain, in support of Beneficiary's request for verification Services, to promptly complete and return the Escrow Deposit Questionnaire attached hereto as Exhibit Q. Depositor consents to Iron Mountain's performance of any level(s) of verification Services described in Exhibit A attached hereto and Depositor further consents to Iron Mountain's use of a subcontractor to perform verification Services. Any such subcontractor shall be bound by the same confidentiality obligations as Iron Mountain and shall not be a direct competitor to either Depositor or Beneficiary. Iron Mountain shall be responsible for the delivery of Services of any such subcontractor as if Iron Mountain had performed the Services. Depositor represents that all Deposit Material is provided with all rights necessary for Iron Mountain to verify such proprietary technology and materials upon receipt of a Work Request for such Services or agrees to use commercially reasonable efforts to provide Iron Mountain with any necessary use rights or permissions to use materials necessary to perform verification of the Deposit Material. Depositor agrees to reasonably cooperate with Iron Mountain by providing reasonable access to its technical personnel for verification Services whenever reasonably necessary.

#### **3. Beneficiary Responsibilities and Representations.**

- (a) Beneficiary acknowledges that, as between Iron Mountain and Beneficiary, Beneficiary assumes all responsibility for the completeness and functionality of all Deposit Material.
- (b) Beneficiary may submit a verification Work Request to Iron Mountain for one or more of the Services defined in Exhibit A attached hereto and further consents to Iron Mountain's use of a subcontractor if needed to provide such

Services. Beneficiary warrants that Iron Mountain's use of any materials supplied by Beneficiary to perform the verification Services described in Exhibit A is lawful and does not violate the rights of any third parties.

**4. Iron Mountain Responsibilities and Representations.**

- (a) Iron Mountain agrees to use commercially reasonable efforts to provide the Services requested by Authorized Person(s) (as identified in the "Authorized Person(s)/Notices Table" below) representing the Depositor and Beneficiary in a Work Request. Iron Mountain may reject a Work Request (in whole or in part) that does not contain all required information at any time upon notification to the Party originating the Work Request.
- (b) Iron Mountain will conduct a visual inspection upon receipt of any Deposit Material and associated Exhibit B. If Iron Mountain determines that the Deposit Material does not match the description provided by Depositor represented in Exhibit B attached hereto, Iron Mountain will notify Depositor of such discrepancies and notate such discrepancy on the Exhibit B.
- (c) Iron Mountain will provide notice to the Beneficiary of all Deposit Material that is accepted and deposited into the escrow account under this Agreement.
- (d) Iron Mountain will work with a Party who submits any verification Work Request for Deposit Material covered under this Agreement to either fulfill any standard verification Services Work Request or develop a custom Statement of Work ("SOW"). Iron Mountain and the requesting Party will mutually agree in writing to a SOW on the following terms and conditions that include but are not limited to: description of Deposit Material to be tested; description of verification testing; requesting Party responsibilities; Iron Mountain responsibilities; Service Fees; invoice payment instructions; designation of the paying Party; designation of authorized SOW representatives for both the requesting Party and Iron Mountain with name and contact information; and description of any final deliverables, prior to the start of any fulfillment activity. After the start of fulfillment activity, each SOW may only be amended or modified in writing with the mutual agreement of both Parties, in accordance with the change control procedures set forth therein.
- (e) Iron Mountain will hold and protect all Deposit Material in physical or electronic vaults that are either owned or under the control of Iron Mountain, unless otherwise agreed to by the Parties.
- (f) Upon receipt of written instructions by Depositor, Iron Mountain will permit the replacement or removal of previously submitted Deposit Material.
- (g) Iron Mountain will return the Deposit Material to Depositor upon termination of this Agreement. If reasonable attempts to return the Deposit Material to Depositor are unsuccessful, Iron Mountain shall destroy the Deposit Material.

**5. Payment.**

The Party responsible for payment designated in Exhibit A ("Paying Party") shall pay to Iron Mountain all fees as set forth in the Work Request ("Service Fees"). Except as set forth below, all Service Fees are due to Iron Mountain within forty-five (45) calendar days from the date of invoice in U.S. currency and are non-refundable. Iron Mountain may update Service Fees with a ninety (90) calendar day written notice to the Paying Party during the Term of this Agreement. Iron Mountain shall not increase Service Fees by more than eight percent (8%) per year. The Paying Party is liable for any taxes related to Services purchased under this Agreement or shall present to Iron Mountain an exemption certificate reasonably acceptable to the taxing authorities. Applicable taxes shall be billed as a separate item on the invoice, to the extent possible. Any undisputed Service Fees not collected by Iron Mountain when due shall bear interest until paid at a rate of one percent (1%) per month (12% per annum) or the maximum rate permitted by law, whichever is less. Notwithstanding, the non-performance of any obligations of Depositor to deliver Deposit Material under the License Agreement or this Agreement, Iron Mountain is entitled to be paid all Service Fees that accrue during the Term of this Agreement.

**6. Term and Termination.**

- (a) The initial "Term" of this Agreement is for a period of one (1) year from the Effective Date ("Initial Term") and will automatically renew for additional one (1) year terms (each a "Renewal Term") and continue in full force and effect until one of the following events occur: (i) Depositor provides Iron Mountain with sixty (60) days' prior written notice of its intent to cancel this Agreement; (ii) Beneficiary provides Iron Mountain and Depositor with sixty (60) days' prior written notice of their intent to terminate this Agreement; (iii) the Agreement terminates under another provision of this Agreement; or (iv) any time after the Initial Term, Iron Mountain provides one hundred eighty (180) days prior written notice to the Depositor and Beneficiary of Iron Mountain's intent to terminate this Agreement. During this notice period, Iron Mountain's Service Fees shall be paid by the Paying Party. If the Effective Date is not specified above, then the last date noted on the signature blocks of this Agreement shall be the Effective Date.
- (b) Unless the express terms of this Agreement provide otherwise, upon termination of this Agreement, Iron Mountain shall return the Deposit Material to the Depositor. If reasonable attempts to return the Deposit Material to Depositor are unsuccessful, Iron Mountain shall destroy the Deposit Material.

- (c) In the event of the nonpayment of undisputed Service Fees owed to Iron Mountain, Iron Mountain shall provide all Parties to this Agreement with written notice of Iron Mountain's intent to terminate this Agreement. Any Party to this Agreement shall have the right to make the payment to Iron Mountain to cure the default. If the past due payment is not received in full by Iron Mountain within forty-five (45) calendar days of the date of such notice, then Iron Mountain shall have the right to terminate this Agreement at any time thereafter by sending written notice to all Parties. Iron Mountain shall have no obligation to take any action under this Agreement (except to those obligations that survive termination of this Agreement) so long as any undisputed Service Fees due Iron Mountain under this Agreement remain unpaid.

**7. General Indemnity.**

Subject to Section 10 and 11, each Party shall defend, indemnify and hold harmless the others, their corporate affiliates and their respective officers, directors, employees, and agents and their respective successors and assigns from and against any and all claims, losses, liabilities, damages, and expenses (including, without limitation, reasonable attorneys' fees), arising under this Agreement from the negligent or intentional acts or omissions of the indemnifying Party or its subcontractors, or the officers, directors, employees, agents, successors and assigns of any of them.

**8. Warranties.**

- (a) IRON MOUNTAIN WARRANTS ANY AND ALL SERVICES PROVIDED HEREUNDER SHALL BE PERFORMED IN A WORKMANLIKE MANNER. EXCEPT AS SPECIFIED IN THIS SECTION, ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, AGAINST INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. AN AGGRIEVED PARTY MUST NOTIFY IRON MOUNTAIN PROMPTLY OF ANY CLAIMED BREACH OF ANY WARRANTIES AND SUCH PARTY'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY SHALL BE RETURN OF THE PORTION OF THE FEES PAID TO IRON MOUNTAIN BY PAYING PARTY FOR SUCH NON-CONFORMING SERVICES. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY AND LIMITED REMEDY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE. THE WARRANTY PROVIDED IS SUBJECT TO THE LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT.
- (b) Depositor warrants that all Depositor Information provided hereunder is accurate and reliable and undertakes to promptly correct and update such Depositor Information during the Term of this Agreement.
- (c) Beneficiary warrants that all Beneficiary information provided hereunder is accurate and reliable and undertakes to promptly correct and update such Beneficiary Information during the Term of this Agreement.
- (d) Ownership Warranty. Depositor warrants that it is the owner or legal custodian of the Deposit Material and has full authority to store the Deposit Material and direct their disposition in accordance with the terms of this Agreement. Depositor shall reimburse Iron Mountain for any expenses reasonably incurred by Iron Mountain (including reasonable legal fees) by reason of Iron Mountain's compliance with the instructions of Depositor in the event of a dispute concerning the ownership, custody or disposition of Deposit Material stored by Depositor with Iron Mountain.

**9. Confidential Information.**

Iron Mountain shall have the obligation to reasonably protect the confidentiality of the Deposit Material. Except as provided in this Agreement Iron Mountain shall not use or disclose the Deposit Material. Iron Mountain shall not disclose the terms of this Agreement to any third party. If Iron Mountain receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Material, Iron Mountain will immediately notify the Parties to this Agreement unless prohibited by law. After notifying the Parties, Iron Mountain may comply in good faith with such order. It shall be the responsibility of Depositor or Beneficiary to challenge any such order; provided, however, that Iron Mountain does not waive its rights to present its position with respect to any such order. Iron Mountain will cooperate with the Depositor or Beneficiary, as applicable, to support efforts to quash or limit any subpoena, at such party's expense. Any Party requesting additional assistance shall pay Iron Mountain's standard charges or as quoted upon submission of a detailed request.

**10. Limitation of Liability.**

NOTWITHSTANDING ANYTHING ELSE IN THIS AGREEMENT, ALL LIABILITY, IF ANY, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, OF ANY PARTY TO THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT EQUAL TO ONE YEAR OF FEES PAID OR OWED TO IRON MOUNTAIN UNDER THIS AGREEMENT. IF CLAIM OR LOSS IS MADE IN RELATION TO A SPECIFIC DEPOSIT OR DEPOSITS, SUCH LIABILITY SHALL BE LIMITED TO THE FEES RELATED SPECIFICALLY TO SUCH DEPOSITS. THIS LIMIT SHALL NOT APPLY TO ANY PARTY FOR: (I) ANY CLAIMS OF

INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR TRADEMARK; (II) LIABILITY FOR DEATH OR BODILY INJURY; (III) PROVEN THEFT; OR (IV) PROVEN GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

#### 11. Consequential Damages Waiver.

IN NO EVENT SHALL ANY PARTY TO THIS AGREEMENT BE LIABLE TO ANOTHER PARTY FOR ANY INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST DATA OR INFORMATION, ANY COSTS OR EXPENSES FOR THE PROCUREMENT OF SUBSTITUTE SERVICES, OR ANY OTHER INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE EVEN IF THE POSSIBILITY THEREOF MAY BE KNOWN IN ADVANCE TO ONE OR MORE PARTIES.

#### 12. General.

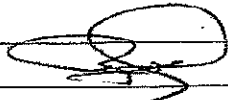
- (a) Incorporation of Work Requests. All valid Depositor and Beneficiary Work Requests are incorporated into this Agreement.
- (b) Purchase Orders. In the event that the Paying Party issues a purchase order or other instrument used to pay Service Fees to Iron Mountain, any terms and conditions set forth in the purchase order which constitute terms and conditions which are in addition to those set forth in this Agreement or which establish conflicting terms and conditions to those set forth in this Agreement are expressly rejected by Iron Mountain.
- (c) Right to Make Copies. Iron Mountain shall have the right to make copies of all Deposit Material as reasonably necessary to perform the Services. Iron Mountain shall copy all copyright, nondisclosure, and other proprietary notices and titles contained on Deposit Material onto any copies made by Iron Mountain. Any copying expenses incurred by Iron Mountain as a result of a Work Request to copy will be borne by the Party requesting the copies. Iron Mountain may request Depositor's reasonable cooperation in promptly copying Deposit Material in order for Iron Mountain to perform Services.
- (d) Choice of Law. The validity, interpretation, and performance of this Agreement shall be controlled by and construed under the laws of the State of Texas, United States of America, as if performed wholly within the state and without giving effect to the principles of conflicts of laws.
- (e) Authorized Person(s). Depositor and Beneficiary must each authorize and designate one person whose actions will legally bind such party ("Authorized Person(s)" who shall be identified in the Authorized Person(s) Notices Table of this Agreement) and who may manage the Iron Mountain escrow account through the Iron Mountain Website or written instruction. The Authorized Person(s) for each the Depositor and Beneficiary will maintain the accuracy of their name and contact information provided to Iron Mountain during the term of this Agreement.
- (f) Right to Rely on Instructions. Iron Mountain may act in reliance upon any instruction, instrument, or signature reasonably believed by Iron Mountain to be genuine and from an Authorized Person(s), officer, or other employee of a Party. Iron Mountain may assume that such representative of a Party to this Agreement who gives any written notice, request, or instruction has the authority to do so. Iron Mountain will not be required to inquire into the truth or evaluate the merit of any statement or representation contained in any notice or document reasonably believed to be from such representative. With respect to Release and Destruction of Deposit Materials, Iron Mountain shall rely on an Authorized Person(s).
- (g) Force Majeure. No Party shall be liable for any delay or failure in performance due to events outside the defaulting Party's reasonable control, including without limitation acts of God, earthquake, labor disputes, shortages of supplies, riots, war, acts of terrorism, fire, epidemics, or delays of common carriers or other circumstances beyond its reasonable control. The obligations and rights of the excused Party shall be extended on a day-to-day basis for the time period equal to the period of the excusable delay.
- (h) Notices. All notices regarding Exhibit C (release) shall be sent by commercial express mail or other commercially appropriate means that provide prompt delivery and require proof of delivery. All other correspondence, including invoices, payments, and other documents and communications, may be sent electronically or via regular mail. The Parties shall have the right to rely on the last known address of the other Parties. Any correctly addressed notice to last known address of the other Parties that is relied on herein that is refused, unclaimed, or undeliverable because of an act or omission of the Party to be notified as provided herein shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by electronic mail, the postal authorities by mail, through messenger or commercial express delivery services.
- (i) No Waiver. No waiver of rights under this Agreement by any Party shall constitute a subsequent waiver of this or any other right under this Agreement.
- (j) Assignment. No assignment of this Agreement by Depositor or Beneficiary or any rights or obligations of Depositor or Beneficiary under this Agreement is permitted without the written consent of Iron Mountain, which shall not be

unreasonably withheld or delayed, provided, however, Depositor may, without the prior written consent of Iron Mountain, assign this Agreement in its entirety to the surviving entity of any merger or consolidation or to any purchaser of substantially all of the Depositor's assets. Iron Mountain shall have no obligation in performing this Agreement to recognize any successor or assign of Depositor or Beneficiary unless Iron Mountain receives clear, authoritative and conclusive written evidence of the change of parties. No assignment of this Agreement by Iron Mountain or any rights or obligation of Iron Mountain under this Agreement is permitted without the written consent of Depositor, which shall not be unreasonably withheld or delayed, provided, however, that Depositor's consent shall not be required for any assignment of this Agreement to an Iron Mountain subsidiary or other Iron Mountain entity.

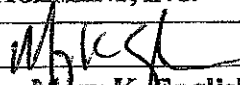
- (k) Severability. In the event any of the terms of this Agreement become or are declared to be illegal or otherwise unenforceable by any court of competent jurisdiction, such term(s) shall be null and void and shall be deemed deleted from this Agreement. All remaining terms of this Agreement shall remain in full force and effect. If this paragraph becomes applicable and, as a result, the value of this Agreement is materially impaired for any Party, as determined by such Party in its sole discretion, then the affected Party may terminate this Agreement by written notice to the others.
- (l) Independent Contractor Relationship. Depositor and Beneficiary understand, acknowledge, and agree that Iron Mountain's relationship with Depositor and Beneficiary will be that of an independent contractor and that nothing in this Agreement is intended to or should be construed to create a partnership, joint venture, or employment relationship.
- (m) Attorneys' Fees. In any suit or proceeding between the Parties relating to this Agreement, the prevailing Party will have the right to recover from the other(s) its costs and reasonable fees and expenses of attorneys, accountants, and other professionals incurred in connection with the suit or proceeding, including costs, fees and expenses upon appeal, separately from and in addition to any other amount included in such judgment. This provision is intended to be severable from the other provisions of this Agreement, and shall survive and not be merged into any such judgment.
- (n) No Agency. No Party has the right or authority to, and shall not, assume or create any obligation of any nature whatsoever on behalf of the other Parties or bind the other Parties in any respect whatsoever.
- (o) Disputes. Any dispute, difference or question relating to or arising among any of the Parties concerning the construction, meaning, effect or implementation of this Agreement or the rights or obligations of any Party hereof will be submitted to, and settled by arbitration by a single arbitrator chosen by the corresponding Regional Office of the American Arbitration Association in accordance with the Commercial Rules of the American Arbitration Association. The Parties in dispute shall submit briefs of no more than ten (10) pages and the arbitration hearing shall be limited to two (2) days maximum. The arbitrator shall apply Texas law. Unless otherwise agreed by the Parties, with agreement by Iron Mountain not to be unreasonably withheld, arbitration will take place in Dallas, Texas, U.S.A. Any court having jurisdiction over the matter may enter judgment on the award of the arbitrator. Service of a petition to confirm the arbitration award may be made by regular mail or by commercial express mail, to the attorney for the Party or, if unrepresented, to the Party at the last known business address. If however, Depositor and/or Beneficiary refuse to submit to arbitration, the matter shall not be submitted to arbitration and Iron Mountain may submit the matter to any court of competent jurisdiction for an interpleader or similar action. Unless adjudged otherwise, any costs of arbitration incurred by Iron Mountain, including reasonable attorney's fees and costs, shall be divided equally and paid by Depositor and Beneficiary.
- (p) Regulations. All Parties are responsible for and warrant, to the extent of their individual actions or omissions, compliance with all applicable laws, rules and regulations, including but not limited to: customs laws; import; export and re-export laws; and government regulations of any country from or to which the Deposit Material may be delivered in accordance with the provisions of this Agreement.
- (q) No Third Party Rights. This Agreement is made solely for the benefits of the Parties to this Agreement and their respective permitted successors and assigns, and no other person or entity shall have or acquire any right by virtue of this Agreement unless otherwise agreed to by all the parties hereto.
- (r) Entire Agreement. The Parties agree that this Agreement, which includes all the Exhibits attached hereto and all valid Work Requests submitted by the Parties, is the complete agreement between the Parties hereto concerning the subject matter of this Agreement and replaces any prior or contemporaneous oral or written communications between the Parties. There are no conditions, understandings, agreements, representations, or warranties, expressed or implied, which are not specified herein. Each of the parties herein represents and warrants that the execution, delivery, and performance of this Agreement has been duly authorized and signed by a person who meets statutory or other binding approval to sign on behalf of its business organization as named in this Agreement. This Agreement may only be modified by mutual written agreement of the Parties.
- (s) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

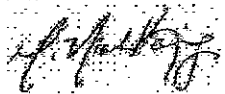
- (t) Survival. Sections 6 (Term and Termination), 7 (General Indemnity), 8 (Warranties), 9 (Confidential Information), 10 (Limitation of Liability), 11 (Consequential Damages Waiver), and 12 (General) of this Agreement shall survive termination of this Agreement or any Exhibit attached hereto.

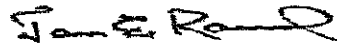
**DEPOSITOR: TYLER TECHNOLOGIES, INC.**

SIGNATURE:	
PRINT NAME:	Richard E. Peterson, Jr.
TITLE:	President - FMS Division
DATE:	September 25, 2008
EMAIL ADDRESS:	

**IRON MOUNTAIN INTELLECTUAL  
PROPERTY MANAGEMENT, INC.**

SIGNATURE:	
PRINT NAME:	Mary K. English
TITLE:	Director of Operations
DATE:	9/29/08
EMAIL ADDRESS:	<a href="mailto:ipmclientservices@ironmountain.com">ipmclientservices@ironmountain.com</a>

<p>Approved as to Operational Content: Iron Mountain Operations</p>  <p>I. Nicole King, Contracts Specialist Date: September 19, 2008</p>
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<p>Approved as to Form and Content: Iron Mountain Legal Department</p>  <p>James E. Raymond, Contracts Specialist Date: Sept. 8, 2008</p>
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**NOTE: AUTHORIZED PERSONS/NOTICES TABLE, BILLING CONTACT INFORMATION TABLE AND EXHIBITS FOLLOW**

**DEPOSITOR AUTHORIZED PERSON(S)/NOTICES TABLE**

Please provide the name(s) and contact information of the Authorized Person(s) under this Agreement. All notices will be sent electronically and/or through regular mail to the appropriate address set forth below.

PRINT NAME:	Stacey M. Gerard
TITLE:	Contracts Manager
EMAIL ADDRESS	stacey.gerard@tylertech.com
STREET ADDRESS	370 US Route 1
PROVINCE/CITY/STATE	Falmouth, ME
POSTAL/ZIP CODE	04105
PHONE NUMBER	800-772-2260
FAX NUMBER	207-781-2459

**BILLING CONTACT INFORMATION TABLE**

Please provide the name and contact information of the Billing Contact under this Agreement. All invoices will be sent electronically and/or through regular mail to the appropriate address set forth below.

PRINT NAME:	Lisa Carpenter
TITLE:	Senior A/P Specialist
EMAIL ADDRESS	lisa.carpenter@tylertech.com
STREET ADDRESS	370 US Route 1
PROVINCE/CITY/STATE	Falmouth, ME
POSTAL/ZIP CODE	04105
PHONE NUMBER	800-772-2260
FAX NUMBER	207-781-2459

**IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.**

All notices should be sent to [ipmclientservices@ironmountain.com](mailto:ipmclientservices@ironmountain.com) OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA.



## MUST BE COMPLETED

## EXHIBIT A - Escrow Service Work Request - Deposit Account Number:

34953

SERVICE Check box(es) to order service	SERVICE DESCRIPTION-MASTER THREE PARTY ESCROW AGREEMENT - DEPOSITOR All services are listed below. Services in shaded tables are required for every new escrow account set up. Some services may not be available under the Agreement.	ONE- TIME FEES	ANNUAL FEES	PAYING PARTY Check to identify Paying Party
<input checked="" type="checkbox"/> Setup Fee	Iron Mountain will setup a new escrow deposit account using a standard escrow agreement. Custom contracts are subject to the Custom Contract Fee noted below. Iron Mountain will set up one deposit account to manage and administrate access to Deposit Material that will be secured in a controlled storage environment. Furthermore, Iron Mountain will provide account services that include unlimited deposits, electronic vaulting, access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status. A Client Manager will be assigned to each deposit account and provide training upon request to facilitate secure Internet access to the account and ensure fulfillment of Work Requests. An oversize fee may apply. Iron Mountain will fulfill a Work Request to add a Beneficiary to any number of escrow deposit accounts under this Agreement and manage access rights associated with the account(s), where possible. Beneficiary will have access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status. A Client Manager will be assigned to each deposit account and provide training upon request to facilitate secure Internet access to the account and ensure fulfillment of Work Requests.	\$1,912.50	\$1,000	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input checked="" type="checkbox"/> Deposit Account Fee, including Escrow Management Center Access			\$1,000	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input checked="" type="checkbox"/> Beneficiary Fee including Escrow Management Center Access			\$700	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Additional Deposit Account	Iron Mountain will set up one additional deposit account to manage and administrate access to new Deposit Material that will be securely stored in controlled media vaults in accordance with the service description above and the Agreement that governs the Initial Deposit Account.		\$1,000	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Additional Beneficiary	Iron Mountain will fulfill a Work Request to add a new Beneficiary to an escrow deposit account in accordance with the service description above and the Agreement.		\$700	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Deposit Tracking Notification	At least semi-annually, Iron Mountain will send an update reminder to Depositor. Thereafter, Beneficiary will be notified of last deposit.	N/A	\$375	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add File List Report	Iron Mountain will fulfill a Work Request to provide a File List Test, which includes a deposit media readability analysis, a file listing, a file classification table, virus scan outputs, and assurance of completed deposit questionnaire. A final report will be sent to the Paying Party regarding the Deposit Material to ensure consistency between Depositor's representations (i.e., Exhibit B and Deposit Questionnaire) and stored Deposit Material. Deposit must be provided on CD, DVD-R, or deposited by SFTP.	\$2,500	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Level 1 - Inventory and Analysis Test	Iron Mountain will perform an Inventory Test on the initial deposit, which includes Analyzing deposit media readability, virus scanning, developing file classification tables, identifying the presence/absence of build instructions, and identifying materials required to recreate the Depositor's software development environment. Output includes a report which will include build instructions, file classification tables and listings. In addition, the report will list required software development materials, including, without limitation, required source code languages and compilers, third-party software, libraries, operating systems, and hardware, as well as Iron Mountain's analysis of the deposit.	\$5,000 or based on SOW if custom work required	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Level 2 - Deposit Compile Test	Iron Mountain will fulfill a Work Request to perform a Deposit Compile Test, which includes the outputs of the File Listing Report and the Level 1 - Inventory Test as described above plus recreating the Depositor's software development environment, compiling source files and modules, linking libraries and recreating executable code, pass/fail determination, creation of comprehensive build instructions with a final report sent to the Paying Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Based on SOW	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Level 3 - Binary Comparison	Iron Mountain will fulfill a Work Request to perform one Deposit Usability Test - Binary Comparison which includes a comparison of the files built from the Deposit Compile Test to the actual licensed technology on the Beneficiary's site to ensure a full match in file size, with a final report sent to the Requesting Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Based on SOW	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Level 4 - Full Usability	Iron Mountain will fulfill a Work Request to perform one Deposit Usability Test - Full Usability which includes a confirmation that the built applications work properly when installed, based on pre-determined test scripts provided by the Parties. A final report will be sent to the Paying Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Based on SOW	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Dual/Remote Vaulting	Iron Mountain will fulfill a Work Request to store and manage the deposit materials in a remote location, designated by the client, outside of Iron Mountain's primary escrow vaulting location or to store and manage a redundant copy of the deposit materials in one (1) additional location. All Deposit Materials (original and copy) must be provided by the Depositor.	N/A	\$500	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Release Deposit Material	Iron Mountain will process a Work Request to release Deposit Material by following the specific procedures defined in Exhibit C "Release of Deposit Materials" the Escrow Service Agreement.	\$500	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Custom Services	Iron Mountain will provide its Escrow Expert consulting based on a custom SOW mutually agreed to by all Parties.	\$175/hour	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Custom Contract Fee	Custom contracts are subject to the Custom Contract Fee, which covers the review and processing of custom or modified contracts.	\$500	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary

Note: Parties may submit Work Requests via written instruction or electronically through the online portal.

\*15% Setup Fee discount applies to the first year only.

## EXHIBIT B

### DEPOSIT MATERIAL DESCRIPTION

COMPANY NAME: \_\_\_\_\_ DEPOSIT ACCOUNT NUMBER: 34953

DEPOSIT NAME \_\_\_\_\_ AND DEPOSIT VERSION \_\_\_\_\_

(Deposit Name will appear in account history reports)

DEPOSIT MEDIA (PLEASE LABEL ALL MEDIA WITH THE DEPOSIT NAME PROVIDED ABOVE)

MEDIA TYPE	QUANTITY	MEDIA TYPE	QUANTITY
<input type="checkbox"/> CD-ROM / DVD		<input type="checkbox"/> 3.5" Floppy Disk	
<input type="checkbox"/> DLT Tape		<input type="checkbox"/> Documentation	
<input type="checkbox"/> DAT Tape		<input type="checkbox"/> Hard Drive / CPU	
		<input type="checkbox"/> Circuit Board	

	TOTAL SIZE OF TRANSMISSION (SPECIFY IN BYTES)	# OF FILES	# OF FOLDERS
<input type="checkbox"/> Internet File Transfer			
<input type="checkbox"/> Other (please describe below):			

DEPOSIT ENCRYPTION (Please check either "Yes" or "No" below and complete as appropriate)

Is the media or are any of the files encrypted? ☐ Yes or ☐ No

If yes, please include any passwords and decryption tools description below. Please also deposit all necessary encryption software with this deposit.

Encryption tool name \_\_\_\_\_ Version \_\_\_\_\_

Hardware required \_\_\_\_\_

Software required \_\_\_\_\_

Other required information \_\_\_\_\_

DEPOSIT CERTIFICATION (Please check the box below to Certify and Provide your Contact Information)

<input type="checkbox"/> I certify for Depositor that the above described Deposit Material has been transmitted electronically or sent via commercial express mail carrier to Iron Mountain at the address below.	<input type="checkbox"/> Iron Mountain has inspected and accepted the above described Deposit Material either electronically or physically. Iron Mountain will notify Depositor of any discrepancies.
NAME:	NAME:
DATE:	DATE:
EMAIL ADDRESS:	
TELEPHONE NUMBER:	
FAX NUMBER:	

**Note: If Depositor is physically sending Deposit Material to Iron Mountain, please label all media and mail all Deposit Material with the appropriate Exhibit B via commercial express carrier to the following address:**

Iron Mountain Intellectual Property Management, Inc.

Attn: Vault Administration

2100 Norcross Parkway, Suite 150

Norcross, GA 30071

Telephone: 800-875-5669

Facsimile: 770-239-9201

<b>FOR IRON MOUNTAIN USE ONLY (NOTED DISCREPANCIES ONLY VISUAL INSPECTION)</b>	

## EXHIBIT C

### RELEASE OF DEPOSIT MATERIAL

Deposit Account Number: 34953

Iron Mountain will use the following procedures to process any Beneficiary Work Request to release Deposit Material. All notices under this Exhibit C shall be sent pursuant to the terms of Section 12(h) Notices.

1. **Release Conditions.** Depositor and Beneficiary agree that a Work Request for the release of the Deposit Material shall be based solely on one or more of the following conditions (defined as "Release Conditions"):
  - (i) Depositor's failure to cure a material breach of the License Agreement or other agreement between the Depositor and Beneficiary regulating the use of the Deposit Material covered under this Agreement; or
  - (ii) Joint written instructions from Depositor and Beneficiary; or
  - (iii) Depositor is subject to voluntary or involuntary bankruptcy.
2. **Release Work Request.** A Beneficiary may submit a Work Request to Iron Mountain to release the Deposit Material covered under this Agreement. Iron Mountain will send a written notice of this Beneficiary Work Request within five (5) business days to the Depositor's Authorized Person.
3. **Contrary Instructions.** From the date Iron Mountain mails written notice of the Beneficiary Work Request to release Deposit Material covered under this Agreement, Depositor representative(s) shall have ten (10) business days to deliver to Iron Mountain contrary instructions. Contrary Instructions shall mean the written representation by Depositor that a Release Condition has not occurred or has been cured ("Contrary Instructions"). Contrary Instructions shall be on company letterhead and signed by an authorized Depositor representative. Upon receipt of Contrary Instructions, Iron Mountain shall promptly send a copy to Beneficiary's Authorized Person(s). Additionally, Iron Mountain shall notify both Depositor and Beneficiary Authorized Person(s) that there is a dispute to be resolved pursuant to the disputes provisions of this Agreement. Iron Mountain will continue to store Deposit Material without release pending (i) joint instructions from Depositor and Beneficiary with instructions to release the Deposit Material; or (ii) dispute resolution pursuant to the disputes provisions of this Agreement; or (iii) receipt of an order from a court of competent jurisdiction.
4. **Release of Deposit Material.** If Iron Mountain does not receive Contrary Instructions from an authorized Depositor representative, Iron Mountain is authorized to release Deposit Material to the Beneficiary or, if more than one Beneficiary is registered to the deposit, to release a copy of Deposit Material to that particular Beneficiary only. Iron Mountain is entitled to receive any undisputed, unpaid Service Fees due Iron Mountain from the Parties before fulfilling the Work Request to release Deposit Material covered under this Agreement. Any Party may cure a default of payment of Service Fees.
5. **Termination of Agreement.** This Agreement will terminate upon the release of Deposit Material held by Iron Mountain with regards to that particular Beneficiary only.
6. **Right to Use Following Release.** Beneficiary has the right under this Agreement to use the Deposit Material for the sole purpose of continuing the benefits afforded to Beneficiary by the License Agreement. Notwithstanding, the Beneficiary shall not have access to the Deposit Material unless there is a release of the Deposit Material in accordance with this Agreement. Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Material.

**EXHIBIT D****AUXILIARY DEPOSIT ACCOUNT TO ESCROW AGREEMENT**Deposit Account Number: 34953

Auxiliary Account Number \_\_\_\_\_

\_\_\_\_\_, ("Depositor"), and Iron Mountain Intellectual Property Management, Inc. ("Iron Mountain") have entered into the above referenced Escrow Agreement ("Agreement"). Pursuant to that Agreement Depositor may create additional deposit accounts ("Auxiliary Deposit Account") for the purpose of holding additional Deposit Material in a separate account which Iron Mountain will maintain separately from other deposit accounts under this Agreement. The new account will be referenced by the following name: \_\_\_\_\_ ("Deposit Account Name").

Pursuant to the Agreement, Depositor may submit material to be held in this Auxiliary Deposit Account by submitting a properly filled out Exhibit B with the Deposit Material to Iron Mountain. For avoidance of doubt, Beneficiary's rights and obligations relative to the Deposit Material held in any deposit account under this Agreement are governed by the express terms of the Agreement; this form does not provide any additional rights in the Deposit Material.

The undersigned hereby agrees that all terms and conditions of the above referenced Escrow Agreement will govern this Auxiliary Deposit Account. The termination or expiration of any other deposit account will not affect this account.

**DEPOSITOR**

<b>SIGNATURE:</b>	
<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>DATE:</b>	
<b>EMAIL ADDRESS</b>	

**IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.**

<b>SIGNATURE:</b>	
<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>DATE:</b>	
<b>EMAIL ADDRESS:</b>	<a href="mailto:ipmclientservices@ironmountain.com">ipmclientservices@ironmountain.com</a>

**IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.**

All notices should be sent to [ipmclientservices@ironmountain.com](mailto:ipmclientservices@ironmountain.com) OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA.

**PAYING PARTY COMPANY NAME:** \_\_\_\_\_

**BILLING CONTACT INFORMATION TABLE**

Please provide the name and contact information of the Billing Contact under this Agreement. All Invoices will be sent to this individual at the address set forth below.

<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>EMAIL ADDRESS</b>	
<b>STREET ADDRESS</b>	
<b>PROVINCE/CITY/STATE</b>	
<b>POSTAL/ZIP CODE</b>	
<b>PHONE NUMBER</b>	
<b>FAX NUMBER</b>	
<b>PURCHASE ORDER #</b>	

**DEPOSITOR**

<b>SIGNATURE:</b>	
<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>DATE:</b>	
<b>EMAIL ADDRESS</b>	

**BENEFICIARY**

<b>SIGNATURE:</b>	
<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>DATE:</b>	
<b>EMAIL ADDRESS:</b>	

**IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.**

<b>SIGNATURE:</b>	
<b>PRINT NAME:</b>	
<b>TITLE:</b>	
<b>DATE:</b>	
<b>EMAIL ADDRESS:</b>	<a href="mailto:ipmclientservices@ironmountain.com">ipmclientservices@ironmountain.com</a>

All notices to Iron Mountain Intellectual Property Management, Inc. should be sent to [ipmclientservices@ironmountain.com](mailto:ipmclientservices@ironmountain.com) OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA.

## EXHIBIT Q

### ESCROW DEPOSIT QUESTIONNAIRE

#### *Introduction*

From time to time, Beneficiaries may exercise their right to perform verification Services. This is a Service that Iron Mountain provides for the purpose of validating relevance, completeness, currency, accuracy and functionality of Deposit Materials.

#### *Purpose of Questionnaire*

In order for Iron Mountain to determine the Deposit Material requirements and to quote Fees associated with verification Services, a completed deposit questionnaire is requested. It is the responsibility of the Depositor to complete the questionnaire.

#### *Instructions*

Please complete the questionnaire in its entirety by answering every question with accurate data. Upon completion, please return the completed questionnaire to the Beneficiary asking for its completion, or e-mail it to Iron Mountain to the attention of [verification@ironmountain.com](mailto:verification@ironmountain.com)

#### *Escrow Deposit Questionnaire*

##### **General Description**

1. What is the general function of the software to be placed into escrow?
2. On what media will the source code be delivered?
3. What is the size of the deposit in megabytes?

##### **Requirements for the Execution of the Software Protected by the Deposit**

1. What are the system hardware requirements to successfully execute the software? (memory, disk space, etc.)
2. How many machines are required to completely set up the software?
3. What are the software and system software requirements, to execute the software and verify correct operation?

##### **Requirements for the Assembly of the Deposit**

1. Describe the nature of the source code in the deposit. (Does the deposit include interpreted code, compiled source, or a mixture? How do the different parts of the deposit relate to each other?)
2. How many build processes are there?
3. How many unique build environments are required to assemble the material in the escrow deposit into the deliverables?
4. What hardware is required for each build environment to compile the software? (including memory, disk space, etc.)
5. What operating systems (including versions) are used during compilation? Is the software executed on any other operating systems/version?
6. How many separate deliverable components (executables, share libraries, etc.) are built?
7. What compilers/linkers/other tools (brand and version) are necessary to build the application?
8. What, if any, third-party libraries are used to build the software?
9. How long does a complete build of the software take? How much of that time requires some form of human interaction and how much is automated?
10. Do you have a formal build document describing the necessary steps for system configuration and compilation?
11. Do you have an internal QA process? If so, please give a brief description of the testing process.
12. Please list the appropriate technical person(s) Iron Mountain may contact regarding this set of escrow deposit materials.

*Please provide your technical verification contact information below:*

COMPANY:	
SIGNATURE:	
PRINT NAME:	
ADDRESS 1:	
ADDRESS 2:	
CITY, STATE, ZIP	
TELEPHONE:	
EMAIL ADDRESS:	

For additional information about Iron Mountain Technical Verification Services, please contact Manager of Verification Services at 978-667-3601 ext. 100 or by e-mail at <mailto:verification@ironmountain.com>

## PREFERRED BENEFICIARY ACCEPTANCE FORM

Depositor, Preferred Beneficiary and Iron Mountain Intellectual Property Management, Inc. ("IMIPM"), hereby acknowledge that \_\_\_\_\_ is the Preferred Beneficiary referred to in the Master Preferred Escrow Agreement effective \_\_\_\_\_, 20\_\_\_\_ with IMIPM as the escrow agent and \_\_\_\_\_ as the Depositor. Preferred Beneficiary hereby agrees to be bound by all provisions of such Agreement.

SERVICE Check box(es) to order service	SERVICE DESCRIPTION-MASTER THREE PARTY ESCROW AGREEMENT - DEPOSITOR All services are listed below. Services in shaded tables are required for every new escrow account set up. Some services may not be available under the Agreement.	ONE- TIME FEES	ANNUAL FEES	PAYING PARTY  Check box to identify the Paying Party
<input checked="" type="checkbox"/> Add Additional Beneficiary	<b>Iron Mountain will fulfill a Work Request to add a new Beneficiary to an escrow deposit account in accordance with the service description above and the Agreement</b>		\$1500	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Additional Deposit Account	Iron Mountain will set up one additional deposit account to manage and administrate access to new Deposit Material that will be securely stored in controlled media vaults in accordance with the service description above and the Agreement that governs the Initial Deposit Account.		\$1,000	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> File List Test	Iron Mountain will fulfill a Work Request to perform a File List Test, which includes analyzing deposit media readability, file listing, creation of file classification table, virus scan, and assurance of completed deposit questionnaire. A final report will be sent to the Paying Party regarding the Deposit Material to ensure consistency between Depositor's representations (i.e., Exhibit B and Supplementary Questionnaire) and stored Deposit Material. Deposit must be provided on CD, DVD-R, or deposited by FTP.	\$2,500	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Level 1 - Inventory and Analysis Test	Iron Mountain will perform an Inventory Test on the initial deposit, which includes Analyzing deposit media readability, virus scanning, developing file classification tables, identifying the presence/absence of build instructions, and identifying materials required to recreate the Depositor's software development environment. Output includes a report which will include build instructions, file classification tables and listings. In addition, the report will list required software development materials, including, without limitation, required source code languages and compilers, third- party software, libraries, operating systems, and hardware, as well as Iron Mountain's analysis of the deposit.	\$5,000 or based on SOW if custom work required	N/A	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Add Deposit Tracking Notification	At least semi-annually, Iron Mountain will send an update reminder to Depositor. Thereafter, Beneficiary will be notified of last deposit.	N/A	\$375	<input type="checkbox"/> Depositor - OR - <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Custom Contract Fee	Custom contracts are subject to the Custom Contract Fee, which covers the review and processing of custom or modified contracts.	\$750	N/A	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary

Depositor hereby enrolls Preferred Beneficiary to the following account(s):

Account Name

Deposit Account Number

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notices and communications to Preferred  
Beneficiary should be addressed to:

Invoices should be addressed to:

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Designated Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

Contact: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



Facsimile: \_\_\_\_\_

P.O.#, if required: \_\_\_\_\_

E-mail: \_\_\_\_\_

\_\_\_\_\_  
Preferred Beneficiary\_\_\_\_\_  
Depositor

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

IMIPM

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## 9.5 CERTIFICATE OF INSURANCE

Please reference the Certificate of Insurance on the following pages.



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/28/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Hays Companies 133 Federal Street, 4th Floor  Boston MA 02110		<b>CONTACT NAME:</b> Moira Crosby <b>PHONE (A/C, No. Ext):</b> <b>E-MAIL ADDRESS:</b> mcrosby@hayscompanies.com <b>FAX (A/C, No):</b>	
<b>INSURED</b> Tyler Technologies, Inc. 5101 Tennyson Parkway  Plano TX 75024		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Hartford Fire Insurance Company <b>INSURER B:</b> Hartford Casualty Insurance Company <b>INSURER C:</b> Lloyds of London Syndicates <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	
		<b>NAIC #</b> 19682 29424 048337 & 048945	

## COVERAGES

CERTIFICATE NUMBER: 18-19 GL, Auto

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			08UENAY8572	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
							MED EXP (Any one person)	\$ 10,000
							PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000
	OTHER:							\$
A	<b>AUTOMOBILE LIABILITY</b>			08UENAY8572	4/1/2018	4/1/2019	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident)	\$
	<input checked="" type="checkbox"/> HIRED AUTOS	<input checked="" type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)	\$
								\$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB			08RHUAY8122	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 25,000,000
	<input type="checkbox"/> EXCESS LIAB	<input checked="" type="checkbox"/> OCCUR					AGGREGATE	\$ 25,000,000
	DED		RETENTION \$					\$
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>			08WHEEL5271	4/1/2018	4/1/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y / N					E.L. EACH ACCIDENT	\$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below		N / A				E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
C	Cyber/Privacy Prof Liab			B0621PTYLE000217	12/17/2017	12/17/2018	Occurrence Limit	\$20,000,000
C	Cyber/Privacy Prof Liab			B0621PTYLE000317	12/17/2017	12/17/2018	Aggregate Limit	\$20,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

## CANCELLATION

Evidence of Insurance

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

James Hays/MCROSB

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## 9.6 CORPORATE RESOLUTION

Please reference the Corporate Resolution on the following pages.

**CERTIFICATE OF SECRETARY OF  
TYLER TECHNOLOGIES, INC.**

The undersigned, being the duly elected and qualified Secretary of Tyler Technologies, Inc., a Delaware corporation ("Tyler"), hereby certifies on behalf of Tyler that:

1. Attached hereto is a true, correct and complete copy of resolutions duly adopted by the Executive Committee of the Board of Directors of Tyler.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Secretary on behalf of Tyler as of July 11, 2016.

TYLER TECHNOLOGIES, INC.  
a Delaware corporation

By: 

Name: H. Lynn Moore, Jr.

Title: Secretary

**RESOLUTIONS OF THE EXECUTIVE COMMITTEE OF THE BOARD OF DIRECTORS OF  
TYLER TECHNOLOGIES, INC.**

WHEREAS, the Executive Committee of the Board of Directors of Tyler Technologies, Inc., a Delaware corporation ("Tyler"), deems it to be in the best interests of the Enterprise Group (the "Tyler Division") to authorize certain individuals to enter into contracts and other legally binding obligations or representations on behalf of the Tyler Division and Tyler;

RESOLVED, that, in addition to Tyler's corporate officers, the following persons are hereby authorized to enter into contract(s) and make other legally binding obligations or representations on behalf of the Tyler Division and of Tyler (including, without limitation, contract(s) for the license, lease, sale and provision of Tyler goods and services) without regard to the dollar value of such contract(s), and limited only by the product line listed below, if any such limitation is given:

Andy Teed

Chris Hepburn

Dane Womble

Rob Kennedy-Jensen

Janet Joiner

Roger Routh - New World ERP

Rusty Smith – EnerGov

Ted Thien – Versatrans

John Lavazzo – Versatrans

Nick Botonis – Tyler SIS

David Grossman – Tyler SIS

Kurt Miyatake - Schoolmaster

RESOLVED, that the foregoing authorization will automatically terminate with respect to each named person on such date is no longer employed by Tyler;

RESOLVED, that each officer of Tyler is hereby authorized and directed, in the name and on behalf of Tyler, to do or cause to be done any and all things, and to execute, deliver and file all such other agreements, amendments, instruments, certificates, waivers, documents, and papers that any of them deem necessary or advisable to carry into effect the purposes and intent of the foregoing resolutions and to consummate the transactions contemplated thereby.

## 9.7 MUNIS OVERVIEW

Munis is an Enterprise Resource Planning (ERP) solution designed specifically for governments and schools. Simply put, Munis enables and empowers users to become more efficient, productive and responsive to the needs of their constituents.

Munis clients get industry leading technology that is continually enhanced through a perpetual upgrade process we refer to as *evergreen*. It is a steady stream of significant yet manageable changes deployed with minimal disruption to our clients' operations — with no re-licensing fees. We add the newest technologies while maintaining the integrity of our core business logic. This incremental introduction of new technologies results in a product that always has functional innovation with the practical application of technology that is in line with client needs.

Munis may be installed through a traditional site purchase or as a cloud-based solution operating through Tyler's data centers.

### SOFTWARE THAT DELIVERS CLIENT SUCCESS

Our commitment to the total client experience means that we invest heavily in a user-centric design process. We continually maximize end-user productivity by listening to our clients and assessing what is important to their business. We involve them in usability testing conducted by analysts certified by Human Factors International to ensure that Munis works the way they do.

### COMMAND CENTERS AND CENTRAL PROGRAMS

Throughout Munis you will find Command Centers and Central Screens that are tailored to specific functional areas such as purchasing or budgeting. These tools are designed to provide one-click access to relevant data from multiple applications and screens. They provide efficient access to information — everything you need is easily available from a single screen. Central Screens are for the user who needs inquiry and operational access, while Command Centers provide additional access to the user responsible for administrative actions such as code and table set up.



HR Command Center  
Welcome, Jean28 Jones

Employees Workforce Central

Profile Change Actions Leave Terminate Employee Qualifications Employment History Paycheck Simulator Pay Office Tools Return To Search

**JONES, TIMOTHY M**  
ASSISTANT FINANCE DIRECTOR, FINANCE DEPARTMENT

Personal Information View/Maintain

Employment Contact Demographics

Check Location Status ACTIVE

Group/BU NON UNION ID 100

Account SALARIES FULL TIME Supervisor MILLER, JOY

Personnel Status FULL TIME Position ASST FINANCE DIRECTO

Hire Date 01/01/2004 Grade/Step ACCOUNTANT 3 / 3

Compensation View/Maintain

Job Class	Position	Salary
ASSISTANT FINA	ASST FINANCE DIRECTO	59,627.15

Withholdings View/Maintain

Description	Amnt/Pct	YTD Amnt
CHILD SUPPORT	120.0000	3,120.00
CREDITOR GARNISHMENT	75.0000	1,950.00
DEPENDENT FLEXIBLE SPENDING	50.0000	1,300.00
DIRECT DEPOSIT NET	100.0000	35,880.51
EARNED INCOME CREDIT	0.0000	0.00
FEDERAL INCOME TAX	0.0000	7,615.66
FICA	6.2000	3,451.93
MEDICARE	1.4500	838.50
PRUDENTIAL FAMILY PLAN	150.0000	0.00
PRUDENTIAL LIFE INSURANCE-SAL	0.1500	0.00

Seniority View/Maintain

Class	Start
ADMINISTRATION	01/01/2004

Accruals View/Maintain

Type	Available	Limit
PERSONAL	24.00	24.00
SICK	328.00	1,600.00
VACATION	310.00	150.00

Certifications View/Maintain

Type	Area	EFF Date
EMPLOYEE	NEW EMPLOYEE ORIEI	01/15/2004
INFORMATION TECHNOLOGY	MICROSOFT EXCEL	11/01/2003
ACCOUNTING	CERTIFIED PUBLIC AC	11/01/1982

K < 1 2 3 > > Return to search

Example of a Munis HR Command Center

GL Account Central  
Welcome, Jean28 Jones

Accounts Account Inquiry Master Journals Excel Email Notes Return To Search View/Maintain Office Tools Return

**SALARIES FULL TIME**

Fund 1000 Org 11135000 Obj 5110 Proj

Account Account Inquiry Segments Account Inquiry

Percent used 65

Actual (Memo) 248,388.02

Revised Budget 757,304.00

Encumbered/Reqs 247,491.70

Available Budget 261,424.28

Status Active

Multi year fund No

	2014	2013	2012
Revised Budget	0.00	757,304.00	761,613.00
Actual (Memo)	0.00	248,388.02	493,623.25
Encumbered/Reqs	0.00	247,491.70	0.00
Available Budget	0.00	261,424.28	267,989.75
Percent Used	0%	65%	65%

Transactions

Ref 1

Search Filter

Year	Peri	Journal	Amount	Comment	Original	Ref 2	Vendor	Eff Date	Posted	Ref 1	Ref 4	Check #	Warrant	Voucher
2014	01	20	18,819.54	WARRANT-2013	Details	1201315		07/18/2013	Yes	201315	201315	0		
2014	01	21	-15,695.00	201315		201315		07/18/2013	Yes	201315	PR ENCUM	0		
2014	01	18	18,819.54	WARRANT-2013	Details	1201314		07/04/2013	Yes	201314	201314	0		
2014	01	19	392,377.00	201314		201314		07/04/2013	Yes	201314	PR ENCUM	0		

K < 25 26 27 28 ... > > Return to search

Example of a Munis General Ledger Account Central Program

## WIZARDS

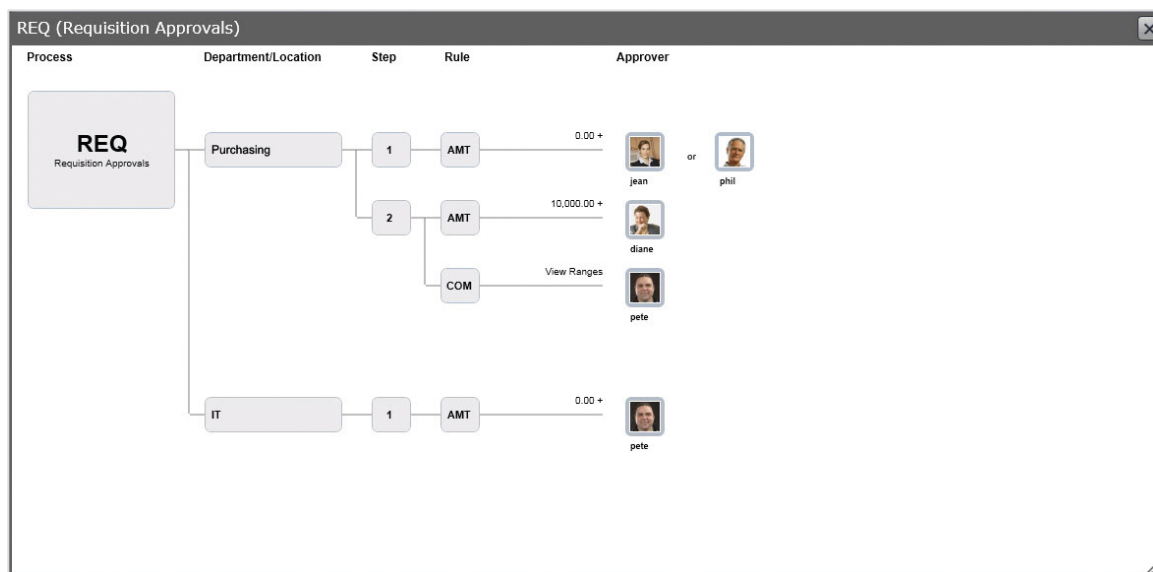
Built-in wizards—including those for employee on-boarding, budget projections, and W-2 creation—make infrequently performed tasks a breeze. Easy-to follow directions walk users through each step, from verifying information to final submission, and a progress bar at the top of the screen shows where you are in the process. What's more, integrated, context-sensitive online Help for everything from local screen assistance to important definitions and government links is available on every screen.

The screenshot shows the 'Employee Changes Wizard' window. At the top, it says 'Employee Changes Wizard' and 'Welcome, Eastman, Chris'. Below this, there's a progress bar with steps: Search, Edit, Confirm, and Finished. The 'Edit' step is currently active. The main area displays the employee's information for '4 - TIM ANTHONY JONES'. On the left, there's a list of fields: Name, Address, Email Address, Telephone, Emergency Contact, Service Dates, and Demographic. The 'Name' field is expanded, showing sub-fields: First Name (TIM), Middle Name (ANTHONY), Last Name (JONES), and Suffix. On the right, there's a dropdown menu for 'Action Code' with a list of options: NAME CHANGE, ADDRESS CHANGE, PHONE NUMBER CHANGE (which is selected), EMERGENCY CONTACT CHANGE, CITIZENSHIP CHANGE, VISA CHANGE, and EDUCATION. The 'Action Effective Date' is set to 12/16/2013. At the bottom right, there's a 'Restart Wizard' button.

*Example of a Munis Employee Change Wizard*

## WORKFLOW

Munis Workflow helps you automate the flow of approvals, notifications and tasks throughout your organization, ensuring the right tasks are carried out by the right people at the right time. You may tailor business rule templates to work the way your organization does, and set up dynamic alerts to notify appropriate staff when a deadline is approaching or a process has run.



*Example of a Requisition Approval chain in Munis Workflow*

## INTEGRATION WITH MICROSOFT

You use Microsoft products every day--from Word to Excel to Outlook®--so we designed Munis to easily integrate with these familiar programs. In fact, Munis was one of the first ERP applications to provide “single-click” integration with Microsoft Office.

Calendars in Munis don’t just work like Microsoft Outlook—they are Microsoft Outlook. Full integration with Microsoft Exchange means calendar appointments and meetings, vacation requests, and workflow are fully synced with users’ daily schedules. Users can email records and reports using their Outlook email right from the Munis ribbon.

Munis integrates fully with Microsoft Skype to enable easy communication with other application users. Need to know if an employee is available? Skype’s advanced “presence” functionality indicates an employee status, such as *available*, *busy* or *out of office*. Users can initiate an email, IM, or phone or video chat directly from the Munis screen, saving time.

## CONTENT MANAGEMENT

Tyler Content Manager includes all the critical components of an enterprise content management suite — back file scanning, indexing and redaction, optical character recognition, web interface, micrographics conversion, disaster recovery, and highly secure off-site document storage. It also works with third-party applications, using Batch Print Capture to print multiple documents directly into Tyler Content Manager.

Additionally, the Application Connector provides seamless integration between applications and Tyler Content Manager. You’ll improve accuracy and have quick access to related documents without leaving an application — saving valuable time navigating throughout multiple applications to find vital, related files.

More than “document management”, Tyler Content Manager supports multiple file types ranging across multiple departments in distributed locations. Electronic files include scanned images (TIFF, PDF, etc.), photos (JPEG), office documents (Microsoft® Word, Excel®, PowerPoint®, etc.), drawings (DWF, DWG, etc.), or any other file you want to store and manage.

## MUNIS ANALYTICS AND REPORTING

Public sector entities need multiple ways to get information out of their ERP software. That’s why Munis provides more than just traditional paper-based reports for accessing and using critical information. It is designed to provide you with the information you need in the format you want— instantly.

Based on Microsoft SharePoint, the Tyler Role-Tailored Dashboard provides an easy-to-use, simplified way of finding, accessing and sharing information by aggregating the data you deem important into one or more customizable views. Web parts display information from different parts of Munis and other Web-based tools. Each user can personalize his or her dashboard views, tailoring it to the information that’s critical for their role.

Munis also offers full bi-directional integration between your Munis database and Microsoft Excel, providing a user-friendly, multi-dimensional view of your data across many platforms allowing you to analyze and report on trends, track key performance indicators, create charts and graphs, generate reports and more. Embedded hyperlinks point to the originating record stored in Munis for fast access to detailed information.

For paper reports, users may choose from our library of report templates or use Tyler Reporting Services for more customized reporting using powerful wizards and built-in tools such as Microsoft Business Intelligence Development Studio and Visual Studio.

## BUSINESS INTELLIGENCE

The right business intelligence solution is crucial for effective data analysis and strategic decision-making. That's why we created the Munis Business Intelligence Toolkit specifically for our clients' needs, leveraging the decades of experience we have serving only the public sector. With Microsoft SharePoint, SQL Server Analysis Services and OLAP cubes provided with the Munis system, this advanced toolkit provides administrators with tools for "what if" scenario analysis, monitoring of key performance indicators based on business rules, and reporting, charting and publishing.

## MUNIS TYLERFORMS

TylerForms provides flexible form delivery across your organization with output options such as print, e-mail and archive. Utilize its template form designs to print purchase orders, invoices, checks, work orders, tax documents and much more. The advanced processor eliminates the need for preprinted forms, and incorporates bar codes, OCR and postal fonts, logos and other date driven elements using standard blank paper. Eliminate form printing costs and deliver documents that meet your organization's branding, service and regulatory requirements. TylerForms also:

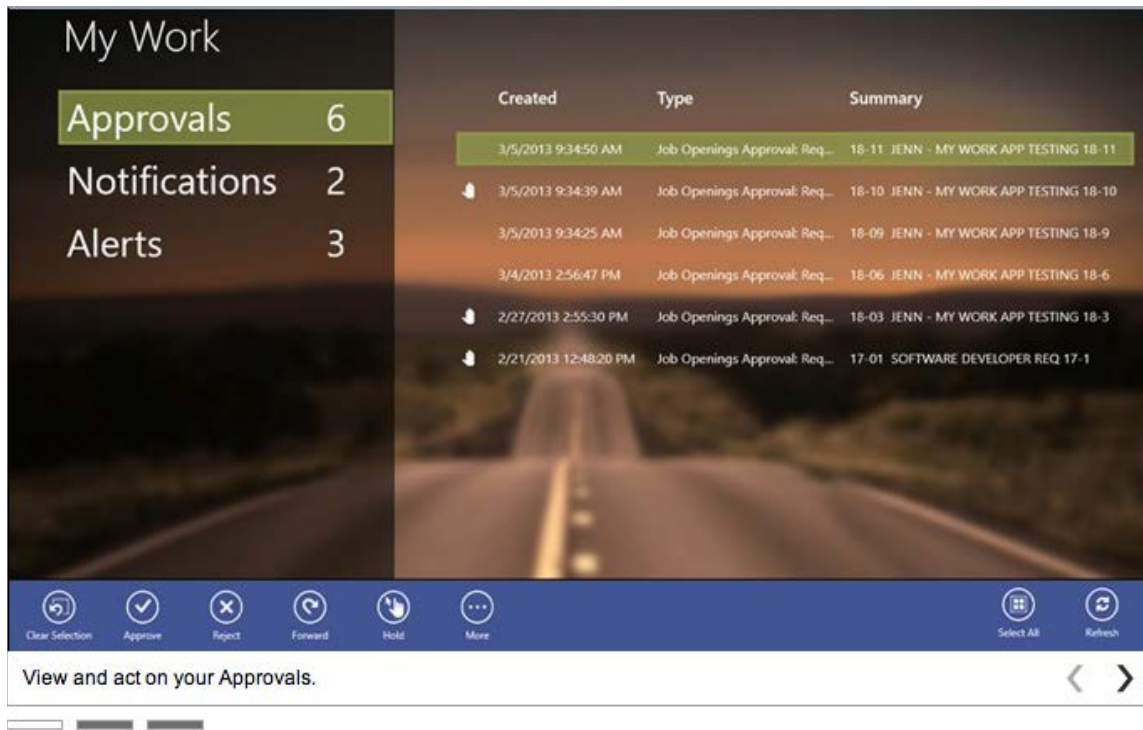
- Supports electronic delivery of payroll, invoices and purchase orders
- Provides seamless integration with Tyler Content Manager for an end-to-end paperless solution
- Reduces print material inventory, saving money and supporting green practices
- Streamlines document creation, control and storage

## MOBILE APPLICATIONS

Tablets and smart phones are quickly replacing desktops and laptops as the devices of choice to access information and conduct business. Munis runs on tablets and smartphones – actually recognizing the device and displaying a user interface designed for touch.

Apps designed for tablets and smartphones include functions that require use of the device's camera, GPS or voice recognition functionality. They may also be designed for employees who require limited access to functions or for parent and student use. Our current apps include **Munis My Work** for workflow, **Munis Field Inspector** for permitting and licensing, **Tyler eTimekeeper** for remote time and attendance entry, and **Munis Citizen Self Service** and **Munis Employee Self Service** for 24/7 access to

information and password protected data. Tyler continues to develop new apps to meet evolving needs.



*Example of Munis My Work Mobile App for Windows 8®*

## GIS MAP INTEGRATION

**Tyler GIS** seamlessly integrates your transactional and spatial data by integrating Munis with the Esri® ArcGIS® Server. Users can view assets and properties on a map, spatially analyze data, perform spatial functions such as buffer searches and even assist with worker or inspector routing by placing locations on a map.

## 9.8 PRODUCT DESCRIPTIONS

### 9.8.1 MUNIS FINANCIAL OVERVIEW

Munis Fund Accounting and Budgeting applications are the core of our Munis ERP solution, designed to streamline the management of critical financial processes organization-wide. A Web-based multi-fund accounting system, Munis provides the tools to easily comply with regulatory requirements and highly structured accounting and budgeting processes, while integrating fully with the human capital management, procurement, revenue, and citizen services processes and software. Finance employees have access to detailed fund and budget information in a seamless, real-time and intuitive manner, and state and local governments increase transparency.

#### BENEFITS OF Munis FUND ACCOUNTING AND BUDGETING

### State & Local Government & Schools

- Reduces overall financial costs through a strategic management of resources
- Increases organization flexibility to address business & legislative changes
- Ensures accountability, transparency, & compliance with local, state, & federal requirements
- Enables collaboration across organization boundaries

### Finance Administrators

- Increases organization-wide visibility into budget compliance & financial status
- Provides real-time insight into business processes for strategic decision making
- Reduces planning and budgeting cycle times
- Optimizes cash flow through performance measurement, analysis & forecasting

### Finance Employees

- Reduces redundant data entry & creates a “single version of the truth”
- Improves productivity, efficiency & responsiveness to citizens
- Decreases process time & enhances workflow for day-to-day tasks

### Citizens

- Improves understanding of state & local government mission and goals
- Increases satisfaction in state & local government programs & services
- Provides transparency into state & local government operations & processes

## MUNIS GENERAL LEDGER

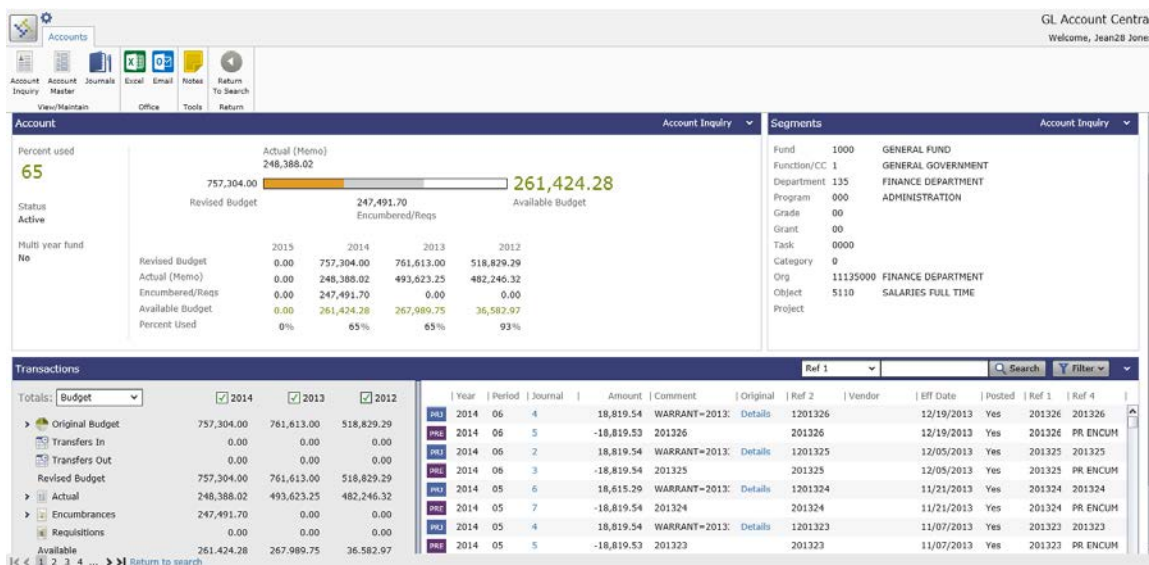
Munis General Ledger is a true multi-fund budgeting and accounting module designed to meet all GAAFR and GAAP standards. Munis General Ledger maintains account balances for both Balance Sheet and Subsidiary Ledgers, and offers a flexible chart of account structure (45 alpha numeric code with 10 segments available) to fit your specific reporting needs. Role-based permissions and workflow can be configured by chart of account segments and accounts allowing processes to be decentralized to improve productivity without sacrificing security. It offers a comprehensive journal processing system that automates journal reversal, retrieves unlimited years of journal history, and adds as much descriptive text to each journal entry as needed.

The true beauty of the module is its tight integration with all other modules Munis has to offer. It provides quick, online access to account information, including the ability to “drill down and around” to transaction detail such as purchase orders, invoices, payroll data, and cash receipts. Quick data access and efficient reporting improves responsiveness and decision making. If corrections are necessary, accountants can easily go to the source (i.e. Payroll check, AP invoice, Purchase order) to enter what the account or amount should have been and the system will correct the journal entry for them without additional manual journal entries. If third party systems are used the system is very flexible and allows user to build their own formats for import or export of journals.



Reporting is a critical piece in the area of General Ledger. Munis GL includes these reporting features and tools:

- Dozens of ready-to-use reports which allow the user to sort and summarize by their chart of account segments with hyperlinks which allow the user to drill down to the data
- Customizable report templates with user definable columns and saved find and sort options
- A built-in Scheduler tool which automates the processing and distribution of standard reports. Users can schedule reports to be generated as they wish on a daily, weekly, or monthly basis
- Flexible reporting for multi-year funds and grants, as well as staggered fiscal years
- Excel data cubes allow the average user (with not a lot of IT experience) to start in Excel and create ad-hoc reports to retrieve and analyze any segment level across multiple years
- Optional customizable report generation through Tyler Reporting Services where IT or a Munis TRS representative builds the report to the exact specifications required by the end user



*Example of GL Account Central*

## TYLER CAFR STATEMENT BUILDER

The CAFR Statement Builder simplifies development of the financial statements presented in the Comprehensive Annual Financial Report (CAFR). This easy-to-use tool allows you to upload your financial data, prepare adjusting entries, equity classifications, and generate statements and schedules. The Governmental Accounting Standards Board (GASB) defines the reporting model which is embedded in the CAFR Statement Builder. When GASB requirements change, the CAFR Statement Builder is updated, so you can rest assured that your statements will be in compliance. The CAFR Statement Builder increases efficiency, minimizes errors, and simplifies reporting. Highlights include:

- Intuitive user-interface to get you quickly into building your statements



- Customized account coding, templates and reconciliation notes carry forward year after year
- Statement drill downs provide a complete audit trail
- Microsoft Excel reporting engine increases flexibility
- Optional cloud-based data hosting service available to reduce hardware investments and IT maintenance burden

## MUNIS CAPITAL ASSETS

Munis Capital Assets manages record-keeping of all capital assets such as land, buildings, machinery and equipment, construction in progress, and infrastructure. Asset information can automatically flow from purchasing. Simplify record maintenance and reporting by tying an unlimited number of individual assets to master assets, and track items transferred, missing, not in use, or due for maintenance or replacement. Munis Capital Assets also calculates depreciation by selective methods such as straight line, composite rate, 6-month convention and reports on the depreciation schedule. For a complete 360-degree process, Munis Capital Assets provides a complete set of financial statements that fully reflects your organization's investments. Integration with other Munis programs provides additional benefits:

- Direct posting of Capital Assets to the General Ledger facilitates data export to the Tyler CAFR Statement Builder to create GASB reports
- With Payroll integration, Munis Capital Assets not only records true capitalized assets but also property signed out to individual employees
- With Purchasing, data flows seamlessly from Purchase Orders into Capital Assets
- Direct integration to and from the Work Order system allows you to see maintenance history on a fixed asset
- Records true capitalized assets and who has what fixed asset via integration with Munis Payroll

## MUNIS BUDGETING

The Munis Budgeting module manages existing budgets and offers users an efficient tool to develop and forecast budgets for future year(s). Managing existing budget with real-time lookup is made easy in Munis. If a user enters a requisition, purchase order, or AP invoice the system displays the available budget for that account, group of accounts or department total based on user setup. Workflow rules can be configured to handle over-budget requests. Budget transfer and amendment requests can be easily decentralized due to the fact that instead of selecting "debit" or "credit" the user is choosing "decrease" or "increase".

For Budget Development, budget directors can generate, compare and analyze an unlimited number of projections or "what if" scenarios. For ease of use, budget amount requests and changes can be entered using a familiar tool, Excel. Simply click an icon on the Excel ribbon to download the accounts to be budgeted, crunch the numbers, and then with a single click upload the new numbers

into Munis Budgeting. Salary and Benefit planning can be done through direct integration with the Munis Payroll/HR module reducing the need for complex Excel spreadsheets to be created outside of the system. The integration provides accurate forecasting for all employee-related costs including step raises, vacancies, and benefits. Direct integration into the Munis Capital Assets can auto-create records for assets due to be replaced.

Budgeting for projects can be done in Project Accounting module and pushed to the GL budget via another direct integration. Specifics benefits include:

- Budget amounts can be entered at the account or detail level which roll up to the account level and details can be moved forward from year to year
- Workflow allows projections to be shared between departments, reviewed and then merged into a single final budget
- Ability to project budgets up to 10 years in the future using user-defined inflation rates
- Unlimited text per line or detail can be entered for justification and printed on reports
- Budget process has five levels so original department “wish list” amounts can be compared to final approved numbers
- Biannual budgets can be implemented

LineAccount	Org	Obj	Proj	Type	Fund	Function/CC	Department	Grant	Acct Descr	Original	Revised	Actual	Encumbered	Projected	DEPARTMENT Level
1000-1-195-000-00-0000-0-5111-	11135000	5111		E	1000	1	195	00	SALARIES PART TIME	54925	54925	21159.02	20962.5	54925	
1000-1-195-000-00-0000-0-5120-	11135000	5120		E	1000	1	195	00	OVERTIME	1000	1000	264.52	0	1000	
1000-1-195-000-00-0000-0-5121-	11135000	5121		E	1000	1	195	00	OVERTIME TEMPORARY EMPLOYEES	500	500	0	0	500	
1000-1-195-000-00-0000-0-5130-	11135000	5130		E	1000	1	195	00	LONGEVITY	3400	3400	0	0	3400	
1000-1-195-000-00-0000-0-5141-	11135000	5141		E	1000	1	195	00	COURT PAY	500	500	0	0	500	
1000-1-195-000-00-0000-0-5170-	11135000	5170		E	1000	1	195	00	HOLIDAY PAY	500	500	0	0	500	
1000-1-195-000-00-0000-0-5180-	11135000	5180		E	1000	1	195	00	VACATION PAY	3000	3000	384.52	0	3000	
1000-1-195-000-00-0000-0-5190-	11135000	5190		E	1000	1	195	00	SICK PAY	2000	2000	100.06	0	2000	
1000-1-195-000-00-0000-0-5209-	11135000	5209		E	1000	1	195	00	TRAVEL	12663	15163	0	0	12663	
1000-1-195-000-00-0000-0-5211-	11135000	5211		E	1000	1	195	00	ELECTRIC	7914.38	7914.38	0	0	7914.38	
1000-1-195-000-00-0000-0-5215-	11135000	5215		E	1000	1	195	00	TELEPHONE	10552.5	10552.5	3348	0	10552.5	
1000-1-195-000-00-0000-0-5218-	11135000	5218		E	1000	1	195	00	PROFESSIONAL DEVELOPMENT	36301.25	36301.25	0	0	36301.25	
1000-1-195-000-00-0000-0-5227-	11135000	5227		E	1000	1	195	00	CONTRACTUAL SERVICES	369337.5	369337.5	300	25000	369337.5	
1000-1-195-000-00-0000-0-5270-	11135000	5270		E	1000	1	195	00	SOFTWARE SERVICES	268812.5	268812.5	0	0	268812.5	
1000-1-195-000-00-0000-0-5290-	11135000	5290		E	1000	1	195	00	MISCELLANEOUS EXPENSES	52762.5	52762.5	0	0	52762.5	
1000-1-195-000-00-0000-0-5400-	11135000	5400		E	1000	1	195	00	OFFICE SUPPLIES	52762.5	50292.5	1019.65	1320	52792.5	
1000-1-195-000-00-0000-0-5415-	11135000	5415		E	1000	1	195	00	CLOTHING	5276.25	5276.25	0	0	5276.25	
1000-1-195-000-00-0000-0-5704-	11135000	5704		E	1000	1	195	00	INSURANCES	76135	76135	36793.26	0	76135	
1000-1-195-000-00-0000-0-5780-	11135000	5780		E	1000	1	195	00	RETIREMENT	6755	6755	3357.08	0	6755	
1000-1-195-000-00-0000-0-5800-	11135000	5800		E	1000	1	195	00	CAPITAL OUTLAY	369337.5	369337.5	0	0	369337.5	
1000-1-195-000-00-0000-0-5830-	11135000	5830		E	1000	1	195	00	MACHINERY AND EQUIPMENT	580387.5	580387.5	0	0	580387.5	
1000-1-195-000-00-0000-0-5950-	11135000	5950		E	1000	1	195	00	MOTOR VEHICLE	791437.5	825937.5	0	34500	825937.5	
1000-1-195-000-00-0000-0-5403-	11135000	5403		E	1000	1	195	00	POSTAGE AND COURIER	5276.25	5276.25	0	200	5276.25	
1000-1-195-000-00-0000-0-5405-	11135000	5405		E	1000	1	195	00	PERIODICALS	21105	21105	0	0	21105	
1000-1-195-000-00-0000-0-5111-	11135000	5111		E	1000	1	195	00	SALARIES PART TIME	2500	2500	0	0	2500	
1000-1-195-000-00-0000-0-5120-	11135000	5120		E	1000	1	195	00	OVERTIME	2500	2500	0	0	2500	
1000-1-195-000-00-0000-0-5121-	11135000	5121		E	1000	1	195	00	OVERTIME TEMPORARY EMPLOYEES	2500	2500	0	0	2500	
1000-1-195-000-00-0000-0-5130-	11135000	5130		E	1000	1	195	00	LONGEVITY	1900	1900	0	0	1900	
1000-1-195-000-00-0000-0-5141-	11135000	5141		E	1000	1	195	00	COURT PAY	2500	2500	0	0	2500	
1000-1-195-000-00-0000-0-5170-	11135000	5170		E	1000	1	195	00	HOLIDAY PAY	2500	2500	0	0	2500	
1000-1-195-000-00-0000-0-5180-	11135000	5180		E	1000	1	195	00	VACATION PAY	2500	2500	1261.52	0	2500	

*Munis: Budget Preparation using Excel*

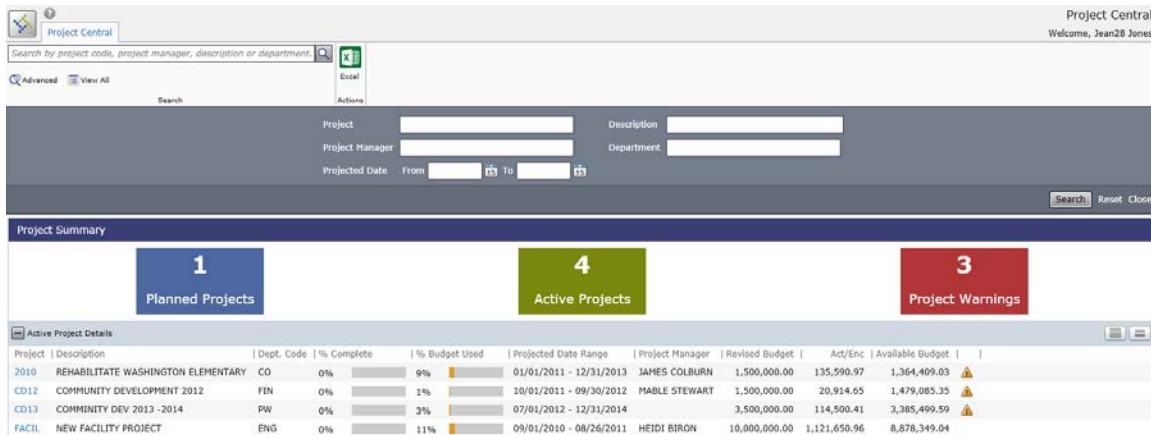
## MUNIS PROJECT AND GRANT ACCOUNTING

Munis Project and Grant Accounting tracks multi-year budgets, expenditures and revenues for user-defined projects such as capital improvements and special programs. It provides the option to manage projects as part of the General Ledger or in a separate project ledger with additional segments to track the project phase, tasks and subtasks. Grants can be tracked from application

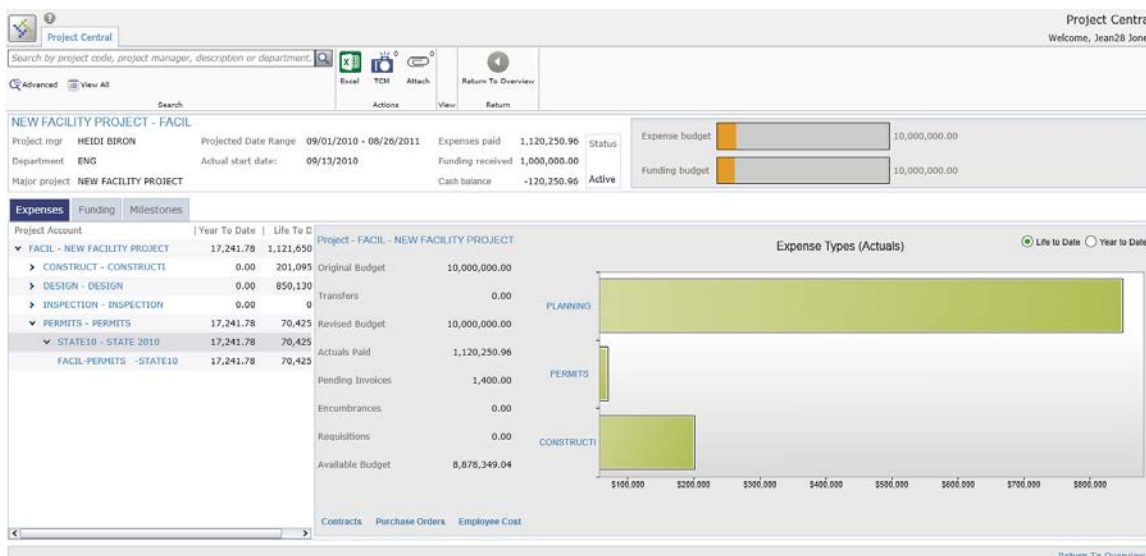
91

through conversion to a project. With full integration any detailed Purchasing, Payables, Payroll or Cash Receipts transactions can be posted to projects as well as to General Ledger accounts. Project and Grant Accounting also provides:

- Control of revenue allocation by defining the rules and priorities of sources that will fund each project
- Real-time tracking of funding received for grants
- Project cubes for a multi-dimensional look at data sets
- Milestone tracking with familiar Gantt Charts
- Automatic creation of a project from a grant
- Workflow to streamline approvals and notifications, monitor efficiency and provide audit history
- Grant Manager tool to show available budget, funding received, yearly, quarterly, and monthly expenditures, along with drill down capabilities to individual transactions



*Project Central: Dashboard divides projects according to phase.*



*Project Central: Key data is summarized on the project dashboard.*

## MUNIS CASH MANAGEMENT

Munis Cash Management automates all treasurer office functions from bank reconciliation to interest allocation and cash flow utilization. Other benefits include:

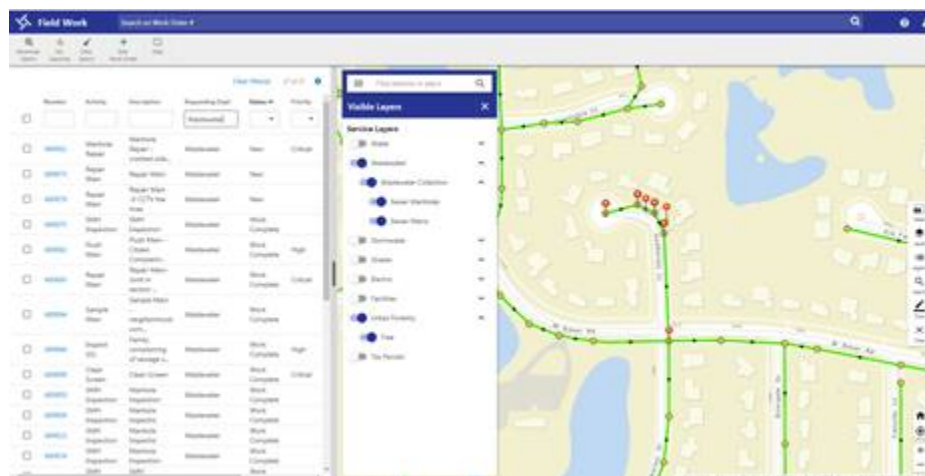
- Automatic processing of AP and PR checks via a file from the bank as they clear simplifies reconciliation of cash accounts (book balance) with corresponding bank accounts (bank balance)
- Allocates interest to cash accounts based on average daily balance by month or quarter
- Provides easy access to cash flow and project cash flow fluctuations
- Projected cash flow records can be used for actual vs. budget analysis
- Use forecast feature to anticipate cash flow for any date range
- Standard reports include: Cash Fund Position, Daily Treasurer's Total, Cash Flow (Summary and Detail), Investment, and Debt Service

## ASSET MAINTENANCE

Asset Maintenance enables organizations to track and maintain assets effectively, increasing reliability of physical assets, enhancing predictive maintenance, and providing configurability to address the most important asset management challenges. Asset Maintenance delivers robust software allowing you to track, rate and manage your assets throughout their life cycle with detailed inventory, preventative maintenance, inspections, on-demand work orders, condition assessments, and more. It also allows you to make informed decisions on whether to repair or replace an asset, and provides tools to streamline the maintenance process from design through construction.

Asset Maintenance fully leverages the advantages of Esri® with an embedded mapping environment that allows for a seamless, GIS-centric solution to work management. Whether selecting data on the map or through Asset Maintenance, users will be able to interact dynamically with their data.

Asset Maintenance maximizes your field-focused workforce using web-enabled programs as well as mobile apps, allowing workers in the field to easily see their work, complete work orders on assets, manage inventory, and allocate resources from anywhere at any time.



*Filed Work displays a list of open work orders and their location on a map*

## MUNIS PURCHASING

Munis Purchasing includes Requisitions and Purchase Orders to automate and decentralize the procurement processes across your organization. Departments can enter their own requests, and site-specific business rules route the request for approval. Real-time General Ledger budget checks ensure availability of funds. Munis Procurement enables a direct conversion of an approved requisition to a purchase order. Through the use of Tyler Content Manager, the purchase order can be automatically imaged and archived, allowing for optional e-mail delivery. And the PO image can be accessed by the vendor at any time through the e-Procurement module. The Purchasing process ensures employee compliance with business rules and eliminates purchasing fraud and abuse. Other benefits include:

- Customizable Requisition Screens provide only essential information, enabling other non-finance staff to enter requisitions with ease
- Requisitions can be created directly from a vendor's online shopping cart using the e-Procurement solution
- Workflow rules -- based on dollar amount, commodity code and/or chart of account segments -- route requisitions for approval and then to a buyer to be sourced
- Preset procurement rules are referenced to determine whether phone quotes or formal bids required—the latter can be auto-created from the requisition

- Supports blanket purchase orders
- Once awarded, the requisition is updated with the chosen vendor information, converted to a purchase order, printed and sent to a vendor via mail, fax or email; an image of the purchase order is auto-archived to Tyler Content Manager
- Changes can be submitted via a PO change order, and then routed through Workflow for approvals
- Updates to general ledger are automatically performed with no interaction from end users
- Interface with e-Procurement, P-Cards and Tyler Content Management offers significant savings by streamlining approval process, reducing paperwork, storage and costs
- Purchasing is integrated with Munis Inventory, Work Orders, Payroll, Capital Assets, General Ledger, e-Procurements, Contract Management and Budgeting

## MUNIS INVENTORY

Munis Inventory tracks inventory such as office supplies and public works equipment across an organization and in multiple locations, eliminating unnecessary purchases and wasteful spending. When used with Munis Purchasing one can choose the item cost method, select by average (over all lots received), or FIFO (first in, first out) or buy items in bulk and issue them to departmental users as needed. Munis Inventory automates all inventory accounting including on-hand balances, month-to-date (MTD) and year-to-date (YTD) values. Other benefits include:

- Auto notifications indicate when inventory levels are low in multiple locations, and prompts reordering
- Schedules pick tickets and routes to maximize delivery efficiency
- Integrates with hand-held devices (BMI) to conveniently scan products and track inventory movement (Hand-held devices, purchased separately)
- Integrates with Work Orders, Purchasing and Human Resources (to track asset assignment by employee)
- Users can request inventory items through decentralized requisition process



Inventory Central  
Welcome, Jean28 Jones

Items History

Item Excel Email Return To Search

View/Maintain Office Return

1551 - CAT 6 NETWORKING CABLE, 3FT. BLACK  
9.00 on hand at IT CLOSET

Item			Cost			Warehouse Specific Quantities	
View/Maintain			View/Maintain			View/Maintain	
Serial No.	Qty committed	Primary vendor	Average cost	Markup	Markup secondary	Standard purchase qty	Lead time
	2.00	ABC SUPPLY COMPANY	\$20.07	\$0.00	\$0.00	5.00	3
UPC	Issuing UOH	Vendor Item	Unit price	Markup flat		Maximum purchase qty	Variance percent
	EACH	5688974	\$20.07	\$0.00		10.00	0.00
Qty on order	Status	Alternate vendor					
10.00	Active						
Average cost	Commodity	Alt. Vendor item					
\$20.07	NETWORKING SERVICES						
Last pur. cost	Ratio	Manufacturer					
\$21.00	1.00						

No cost data records found.

Accounts		Pick Tickets	
View/Maintain		View/Maintain	
Type	Description	Pick Ticket	Status
Inv-resale	INVENTORY ASSETS	24	Issued
Revenue	INVENTORY REVENUE	31	Issued
Expense	MISCELLANEOUS EXPENSES	33	New

Entry Date Department Back Ordered Req. No.

06/07/2019 FINANCE DEPARTMENT 20100074

03/09/2012 FINANCE DEPARTMENT 20120048

04/18/2013 FINANCE DEPARTMENT 20130089

All Pick Tickets

Return to search

## MUNIS CONTRACT MANAGEMENT

Munis Contract Management supports the entire lifecycle of a contract from inception to expiration. Create and approve contracts, including multi-year contracts, for purchases—and encumber the appropriate funds in advance. Allocate contracts by account or account segment and define milestones and key dates that trigger optional Munis Dashboard alerts to notify appropriate staff. Track and withhold contract sliding scale retainage based off percentage complete. Also provides ability to track other activity such as pending payments, open purchase orders and requisitions and contract change orders. Contract Management is fully integrated with General Ledger, Purchasing and Accounts Payable. Other benefits include:

- Defining contractors by size, performance, minority or women ownership, or other criteria
- Documenting vendor performance including past due deliveries, fill percentage and returns
- Maintain insurance information and policies
- Sliding scale retainage tracking
- Tracking multiple subcontractors for a given contract
- Routing contract change orders for approval through Workflow
- Maintaining history of contract changes with complete audit trail
- Interface with optional Tyler Content Manager for document management and attachments

## MUNIS BID MANAGEMENT

Munis Bid Management provides structure and framework to effectively manage the bid process and to analyze and compare vendor responses to bids. Create an unlimited number of bids for items routinely purchased and route to specific departments or individuals for review. Track an unlimited number of vendor responses and response deadlines. Vendors can mail their bids to the requested site or enter their bid information using Munis e-Procurement which facilitates sealed bid processing.

96



From the responses, Munis determines the best vendor based on each site's unique criteria. Once a bid is awarded it is converted to a purchase order or can be turned into a vendor contract. Munis Bid Management also allows you to:

- Track an unlimited number of addenda to bids
- Fully supports NIGP and custom commodity code formats
- Decentralize requests, allowing departments to enter requested quantities
- Supports addenda tracking and vendor notifications
- Post questions to vendors and score the responses to assess a weighted vendor ranking
- Easily generate reports by departments, vendor response and ranking, budget versus award amounts, and more

## MUNIS ACCOUNTS PAYABLE

Munis Accounts Payable manages and maintains all aspects of vendor invoices, payments, delivery performance and history. It provides a comprehensive view of all activity related to a vendor through Munis Vendor Central. Additionally, Munis Accounts Payable offers the ability to extend select vendor information for on-line vendor access using e-Procurement, including vendor check images, invoices, and bid information.

Accounts Payable also incorporates a Web-based card management program that imports transaction details incurred on purchasing cards (P-Cards). It can split individual transactions to multiple accounting codes and create accounts payable invoices. Purchase card administrators can monitor card transactions in real time, and create and analyze custom reports to improve spend tracking and anticipate problems with a transaction before they occur. Other benefits include:

- Flexibility to liquidate purchase orders in full or in part, and view detailed information online

- Decentralized workflow saves central AP employee time by allowing individual departments to enter invoices
- Automated 3-way PO matching function expedites processing in distributed arrangements
- Flexible scheduling of invoices for payment helps maximizes cash flow
- P-Card reconciliation processing such as coding and attachment of receipts, tracks against actual vendor for complete year-end transactional reporting
- Integrated workflow allows users to route and approve invoices online without logging into Munis
- Configurable checking printing
- Provides positive pay processing security
- Utilize Tyler Content Manager to upload, organize and easily retrieve document images for improved efficiency
- Assets to the General Ledger facilitates data export to CAFR to create GASB reports

## MUNIS EPROCUREMENT

Munis eProcurement provides a secure location for vendors to search for, or submit a bid, check a current or past PO status; access an invoice, check or bid details; or create and update their vendor profile. Munis eProcurement provides vendors access to the key information and business records they need. Information is reflected in real-time because it is extracted directly from the Munis database.

Additionally, eProcurement provides Punch-Out capabilities to vendor hosted websites. It allows users to initiate a requisition in Munis, then Punch-Out to vendor-hosted websites for online shopping. Once shopping is complete the virtual shopping cart of items is instantly transferred to Munis and automatically populates a Munis requisition which then flows through the existing Workflow process. Munis eProcurement can reduce off-contract spending, gain advantageous pricing, and condense requisition to PO cycles while electronically managing the entire life-cycle of a purchase.

For vendors that cannot support Punch-Out catalogs, you use hosted catalogs in Munis. In this way, you can view, import and purchase a vendor's items via the Munis Items program.

The eProcurement process translates to both soft and hard-cost savings for your organization:

- Web-based process — save staff time to prepare and distribute bid information
- Meets green initiatives — save paper and shipping materials
- Vendor response — reduce staff time responding to questions and requests for information
- Vendor 24/7 access — view and submit bid information online
- Vendor Punch-Out catalogues — establish an unlimited number

## MUNIS PAYROLL

Munis Payroll allows you to implement paperless payroll processes, streamline timesheet entry and ensure all local, state and federal requirements are met. With Tyler Content Manager integration, Munis Payroll provides an image-based history of all payroll documentation, allowing staff and employees to access old paystubs, W-2 forms, benefit elections and more. Standard payroll functions include, but are not limited to, reconciliation of employee insurance reports to monthly premium statements; manual or automatic check reconciliation; support of electronic timesheet entry; and verification and tracking of employee performance data, earning and withholding information, training and more. Munis Payroll also integrates fully with Munis Employee Self Service, providing W-2, tax, benefit and accrual information to employees when they sign in to your Employee Self Service Website. Changes made by the employee, such as accrual requests and benefit selections, are transmitted directly to the payroll system for approval and will then reflect in employee pay. Other benefits include:

- Generates retro pay for scenarios such as extended contract negotiations or delayed promotion or salary increase decisions
- Enables direct deposits and positive pay validation
- Supports mass pay changes, “pay bands”, step increases, and retro-pay calculations
- Supports a wide range of calculation and accrual types
- Supports daily time and attendance entry, including entry from Employee Self Service, once approved the information is automatically moved into Payroll without re-keying information
- Integrates with Munis General Ledger for increased efficiency and time savings
- Integrates with Munis Budgeting for salary and benefits projections
- Integrates with General Billing for extra duty pay and COBRA/insurance billing
- Integrates with Munis Accounts Payable for vendor payments
- Integrates with any third-party time-tracking systems for streamlined payroll processing
- Integrates with Employee Expense reimbursement
- Integrates with GoDocs, Tyler Forms and Tyler Content Manager for seamless document management, output options (i.e., emailing direct deposit advices) and data storage

Workforce Central HR Command Center  
Welcome, Jean28 Jones

**JONES, TIMOTHY M**  
ASSISTANT FINANCE DIRECTOR, FINANCE DEPARTMENT

Personal Information		Compensation		Withholdings		
Check Location	Status ACTIVE	Job Class	Position	Description	Amt/Pct	YTD Amt
Group/BU NON UNION	ID 100	ASSISTANT FINA	ASST FINANCE DIRECTO	CHILD SUPPORT	120.0000	3,120.00
Account SALARIES FULL TIME	Supervisor MILLER, JOY			CREDITOR GARNISHMENT	75.0000	1,950.00
Personnel Status FULL TIME	Position ASST FINANCE DIRECTO			DEPENDENT FLEXIBLE SPENDING	50.0000	1,300.00
Hire Date 01/01/2004	Grade/Step ACCOUNTANT 3 / 3			DIRECT DEPOSIT NET	100.0000	35,880.51
				EARNED INCOME CREDIT	0.0000	0.00
				FEDERAL INCOME TAX	0.0000	7,615.66
				FICA	6.2000	3,451.93
				MEDICARE	1.4500	838.50
				PRUDENTIAL FAMILY PLAN	150.0000	0.00
				PRUDENTIAL LIFE INSURANCE-SAL	0.1500	0.00

Seniority		Accruals			Certifications		
Class	Start	Type	Available	Limit	Type	Area	Eff Date
ADMINISTRATION	01/01/2004	PERSONAL	24.00	24.00	EMPLOYEE	NEW EMPLOYEE ORIE	01/15/2004
		SICK	328.00	1,600.00	INFORMATION TECHNOLOGY	MICROSOFT EXCEL	11/01/2003
		VACATION	310.00	150.00	ACCOUNTING	CERTIFIED PUBLIC AC	11/01/1992

**W-2 Information**

Employee: JONES - SMITH, TIMOTHY J Year: 2005 - 0

TIMOTHY JONES

YEAR: 2005 SEQ: 0

1055 BEECH POND RD WHITE PLAINS, NY 10293

RETIREMENT ☒

DEF COMP ☐

3RD PARTY SICK ☒

STATUTORY EMPLOYEE ☐

DECEASED ☐

**Wages and Tax**

	GROSS	TAX
FIT	\$64,829.12	\$10,850.56
FICA	\$67,584.56	\$4,190.32
MEDICARE	\$67,584.56	\$979.96
SIT - MA	\$64,829.12	\$3,102.00
DEP CARE		\$0.00
SOCIAL SECURITY TIPS		\$0.00
ALLOCATED TIPS		\$0.00
EIC		\$0.00
NONQUAL		\$0.00
Box 14		
14Y RETIREMENT		\$2,755.44

Home

Employee Self Service

Benefits

Certifications

Expense Reports

**Pay/Tax Information**

YTD Information

W-2

1099-R

W-4

Paycheck Simulator

Salary Notification

Total Compensation

Direct Deposit

Performance Evaluations

Personal Information

Position Transfer

Substitute Teaching

Time Off

## MUNIS RECRUITING

Munis Recruiting streamlines the entire application review and hiring process. Users can create custom job application forms to post online with unlimited customized conditions for each position. Candidates and recruiters can easily manage attachments such as resumes, references, certifications, writing samples and which are immediately and securely accessible by the HR department. Reports can be generated for the top scoring candidates to compare skills and qualifications. Interview results, certifications, skills, training, education and work history references can all be tracked to identify the best candidate. Our Hiring Central and Applicant Central programs make management and analysis of applicants easy from a single screen. Once a candidate is chosen to be hired onboarding tasks can be managed and applicant data automatically populates the Human Resources Management and Payroll module so no rekeying of information is required. Simply use the Employee Add Wizard and draw from all the data stored in Recruiting. Other benefits include:

100

- Applicants are able to self-schedule interviews, pre-employment tests, pre-employment orientation, and training through ESS
- Easily score applicants using an intuitive interface and tie scoring results to automatic applicant status changes
- Ability to post job openings on website, sort by job type or location, and limit access to internal applicants only, if so desired.
- Allows candidates to create one online profile for streamlining the application process for multiple positions
- Workflow helps manage all requests for new job openings as they travel through the approval process
- Employee Tasks program allows for customized employee onboarding tasks to be established and managed

## MUNIS HUMAN RESOURCES AND TALENT MANAGEMENT

Munis Human Resources and Talent Management centralizes all employment data for an organization -- from an organized hierarchy of jobs with position controls, pay and benefits scales to a confidential repository for employee information such as education, wages, promotions, benefit elections and performance evaluations. It provides all the tools needed by an HR department. Munis Human Resources and Talent Management solutions integrate enterprise employee data, from hire to retire. This means your compensation, retention, training and development plans work together to promote your goals.

Munis HR helps streamline workflow and processes. Confidential employee information is centralized and accessible only to those with designated access. Munis Workflow allows you to set up business rules for personnel actions including inquiries, leave, termination, civil service, attendance, reinstatement, and so forth. Full integration with Munis Recruiting, Payroll and Budget eliminates duplicate data entry. Integration with ESS provides an employees' enterprise wide the ability to easily access info, initiate requests, collect benefit information and more.

Our Talent Management solutions provide staff and management with tools that enhance succession planning and career development processes. Supervisors can better track staff certifications and skills and evaluate employee performance to align employee goals with strategic organization goals. They can analyze their talent to decide who best to target for leadership positions. Employees can utilize career planning tools to help structure their career track and robust training program can be development to enrich and strengthen personnel.

Other advantages include:

- Advanced position and budget control:
  - Forecast future salary and benefit costs, including step and contract increases, and simulate changes to positions during a specified time period
  - Identify valid and authorized positions, both filled and vacant

- Restrict the addition of new employees to a valid and authorized position
- Provide a history of employees who have held a certain position, for turnover and analysis
- Identify and allow updates to budget and FTE allocations
- Provide current year budget/actual/projected figures, by position
- Automatically create job postings in Applicant Tracking module from position control information
- Integration with Employee Self Service allows employees to use their password protected account to access updated sick and vacation accruals
- Track an employee's full employment history including certifications, training, promotions and raises
- Integrates Tyler Content Manager for document management of all HR related documents (i.e. resume, grievance letters, certifications)
- Supports a paperless online benefits enrollment process using Employee Self Service
- Supports a paperless onboarding process using the On-Boarding Codes program and Personnel Actions. You can create different On-Boarding Code Steps, Subject Text, and Body Header. Emails can be sent to employees, to a group of new employees or they can be sent based on the On-Boarding Code chosen when hiring a new employee in the Personnel Actions program.

Employee Central  
Welcome, Jean28 Jones

Employees

Profile Change | Leave | Terminate | Employee | Qualifications | Employment | History | Eval | Email | Notes | Return To Search | Return

**JONES, JEAN K**  
ACCOUNTANT III, FINANCE DEPARTMENT

Personal Information		Accruals		Withholdings		
View/Maintain		View/Maintain		View/Maintain		
<b>Employment</b>   Contact   Demographics   Check Location: Status ACTIVE Group/BU: NON UNION ID 101 Account: SALARIES FULL TIME Supervisor JONES, TIMOTHY Personnel Status: FULL TIME Position HEAD ACCOUNTANT Hire Date: 02/10/1992 Grade/Step ACT3/2		Type   Available   Limit VACATION 380.00 180.00 SICK 776.00 1,600.00 PERSONAL 40.00 40.00		Description   Amt/Pct   YTD Amt FICA 6.2000 3,197.38 MEDICARE 1.4500 776.62 HEALTH REIMBURSEMENT 70.0000 1,820.00 PRUDENTIAL INDIVIDUAL PLAN 0.0000 0.00 PRUDENTIAL DEFERRED COMP 2.0000 1,105.00 FEDERAL INCOME TAX 0.0000 892.06 STATE TAX 0.0000 1,951.51 PERS 4.0000 2,210.26 PRUDENTIAL LIFE INSURANCE-HOUR 5.0000 130.00 DIRECT DEPOSIT DOLLAR AMOUNT 150.0000 3,900.00		
Compensation		Evaluations		Training		
View/Maintain		View/Maintain		View/Maintain		
Job Class   Position   Salary ACCOUNTANT III HEAD ACCOUNTANT \$5,655.00		Type   Begin   End ANNUAL EVALUATION 01/01/2007 12/31/2007 ANNUAL EVALUATION 01/01/2008 12/31/2008 ANNUAL EVALUATION 01/01/2010 12/31/2010 ANNUAL EVALUATION 07/01/2011 06/30/2012		Type   Area   Start ACCOUNTING ADMINISTRATION 02/28/2012 EMPLOYEE SEXUAL HARASSMENT		

K < 1 2 3 > X Return to search

## MUNIS EMPLOYEE EXPENSE REIMBURSEMENT

Munis Employee Expense Reimbursement is an easy-to-use application that fully integrates with Munis General Ledger, Payroll and Accounts Payable for complete electronic expense report filing—thereby increasing office efficiency, saving employees’ time, and reducing paper trails. Once expense types are defined, Munis Employee Expense Reimbursement offers many time saving system defaults such as: quick expense report creation, system-generated travel requests, invoice reimbursement numbers and general ledger account codes. For ease of use, your office can create an unlimited number of expense claim form templates; determine whether employees submit reports before or after expenses are incurred; and decide whether to reimburse through payroll or by cutting an AP check. When submitting expense reports, employees simply log into the application—anytime and from anywhere over the Internet—and enter his or her employee number. The system automatically populates the expense report fields with data pulled from Munis Payroll, and the employee simply fills out the remaining required fields and submits. The claim is automatically entered into the workflow process, where it can be preset to direct expense reports to different approvers based on user-defined account codes, amount and department codes. Other benefits include:

- Minimizes time-consuming documentation process
- Eliminates messy paper receipt storage
- Reduces service issues by letting employees file reports and check on pending or past requests using Employee Self Service
- Allows management to quickly review expenses by type, employee, time frame or other category using a range of reporting options

### 9.8.2 MUNIS RISK MANAGEMENT

Munis Risk Management allows an organization to manage risks such as job-related injuries and property damage with the tools necessary to effectively track, manage and pay property and causality claims. Risk Management enables you to handle these claims quickly and easily, from initial claim to related expenditures. Other benefits include:

- Easily maintain data, track claim activity and record expenses with recoveries and estimated costs via integration with Munis Procurement and Accounts Payables
- Links claims to employee records via integration with Munis Human Resources Management
- Evaluate injury-related compensation via integration with Munis Payroll
- Powerful analysis via interface with Microsoft Excel

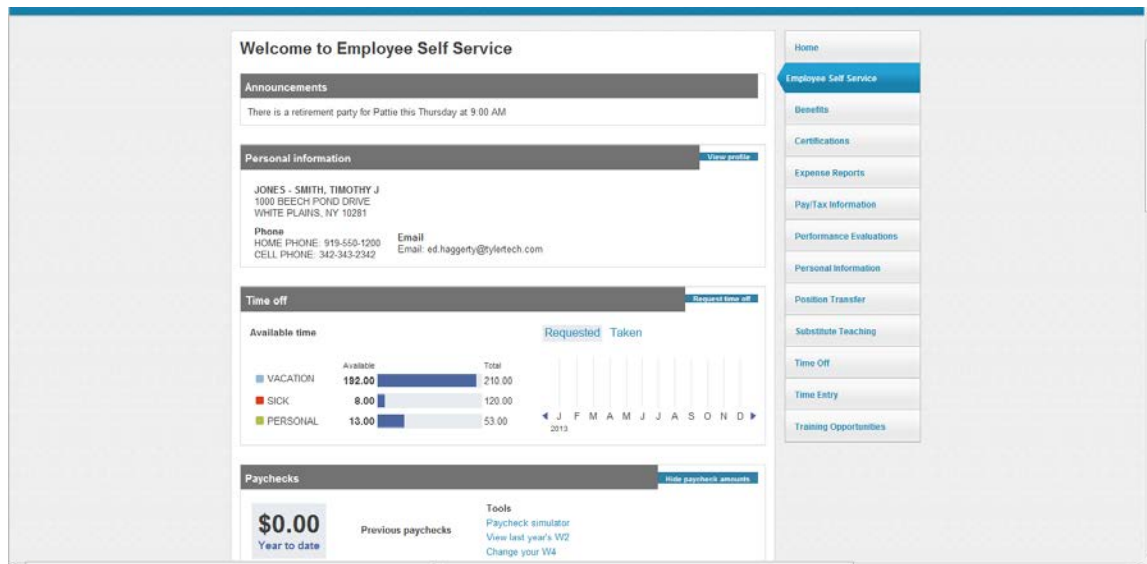
## MUNIS EMPLOYEE SELF SERVICE

Munis Employee Self Service improves employee access to key information and services, and reduces staff time spent responding to routine requests. Employees are able to update personal information,



request leave, or check compensation quickly, confidentially, and securely over the Web from any computer, and at any time that's convenient for them. Employees log in using a unique username to view and update information. Accurate is assured because Employee Self Service extracts information from the Munis database and is reflected in real-time. Employee Self Service reduces Human Resources workload by allowing employees to:

- Use the calendar interface to request vacation time, enter sick time and view up-to-date accruals
- Log work hours against projects and activities
- Use the Net Pay Simulator to see how deductions, withholdings and pay rates would affect paychecks
- Receive HR messages and benefits updates
- Register for training classes (Separate log in available for non-employee registration, as well)
- Review their performance evaluations
- See overview of compensation and benefits, W-2, W-4, direct deposit changes
- Sign up for benefits during open enrollment
- Access paperless images of W-2 forms, payroll stubs and other employment documentation stored by Tyler Content Manager



## TYLER INCIDENT MANAGEMENT

Tyler Incident Management is Web-based application to handle non-emergency inquiries, complaints and service requests from the public, and free up local 911 lines for real emergencies. Tyler Incident Management allows citizens to report a range of issues such as: loss of water service, stray animals, roadway potholes, and questionable activity in their neighborhood. Once an issue is logged, assigned a priority level, service category, and department responsibility, the information automatically flows

into the appropriate Munis program such as Munis Work Orders and Munis Permits - Complaints/Violations. Any subsequent change relayed to Munis regarding the incident's status is automatically reflected in Tyler Incident Management. What's more, this module is compatible and seamlessly integrated with Tyler's Citizen Self Service for online incident reporting. Other benefits include:

- Provides single point of contact for all citizen requests
- Manages unlimited photos, contacts and notes, and links them by incident, location, or person(s)
- Seamlessly integrated with Munis Utility Billing, Work Orders & Complaints/violations
- Provides customizable call scripts for improved and consistent service handling. One or more call scripts can be in place for a given call type; call scripts can be marked as effective thru a certain period of time.
- Is accessible via a mobile device for improved responsiveness
- Supports and reports on Service Level Agreements
- Provide a knowledge-base of documents and references particular to the specific call type.
- Automatically retrieves and presents related calls (by type, person, or location)
- Provides complex task creation for multiple steps and assignments to be tracked relative to an incident
- SSRS reporting provides quick access to incidents sorted by category, type, department, frequency, status, and much more
- Configurable dashboard gadgets for focused listings, charting and tracking of groups of incidents.
- Integrates with Tyler Versatrans to document issues on school buses such as bullying or accidents
- Interfaces with School Information Systems to link incidents to the student records

*Incident Management documents and routes all complaints for prompt handling.*

## MUNIS ACCOUNTS RECEIVABLE

Munis Accounts Receivable provides two major functions: collections of miscellaneous cash and the collection of billed receivables. Processing over-the-counter or mailed payments for non-billed items such as licenses, permits, and registrations is easy using Munis AR, and you have the option to print a receipt if necessary. You can set charge codes to facilitate data entry and provide detailed or summary analysis (daily, weekly, monthly) by type, and pre-set General Ledger revenue accounts to these codes so data entry personnel do not need to enter account numbers—creating efficiencies, and saving your organization critical time and resources. Notable highlights include:

- Single Customer Identification Number (CID) provides a complete view of all outstanding balances across revenues which improves collections
- Cross department utilization improves efficiency and reduces training burden
- Supports validation, check endorsement, OCR scanning and receipt printing
- Utilize workflow approval processes to better regulate payment, reversal and refund processes
- Supports various hardware devices; see Tyler’s recommended hardware listing

### 9.8.3 MUNIS CITIZEN SELF SERVICE

Munis Citizen Self Service provides secure online access to account information anytime and from anywhere. Citizens can inquire and pay outstanding balances for Munis generated bills, including animal licenses, business licenses, general/miscellaneous bills, permits and code fees, taxes and utility bills. Citizen Self Service also allows the users to submit information, such as business license applications or renewals and requests for service. Accuracy is assured because information is

accessed from the Munis database in real-time. When used in conjunction with Tyler Content Manager, citizens are able to view actual images of past invoices and statements. Other benefits include:

- A secure log in for access to real-time account information for a full range of bills and services
- Ability to pay invoices online as individual bills or combined using the shopping cart feature
- Opportunity to request services such as filling potholes, and Utility Billing Service Requests
- Efficient 24/7 self-service without leaving home or the office
- Reduction of customer service workload

**tyler technologies** TIM JONES - My Cart (1) -

### Welcome to Citizen Self Service

**Announcements**

**Pay and/or View Bills Online.** The Town of Tyler is excited to offer residents an easy and convenient method to view and pay their real estate, motor vehicle excise, personal property tax, and water/sewer use bills online.

**Fast and Easy.** "Express Pay", the fastest way to pay online. Quick, simple, and easier than writing and mailing checks, plus you'll get an email confirming that your payment has been accepted.

**Safe and Secure.** Rest assured that your information is kept confidential and is 100% secure, backed by the highest standards in security today.

**Eco-Friendly.** Paying online reduces paper use and is an easy way to help the environment. You'll save natural resources like trees, and gas, and reduce your carbon footprint.

HAVE A QUESTION? You may reach us at (555) 660-7210. You may email your questions to [hbirn@tylertown.gov](mailto:hbirn@tylertown.gov)

**Profile Information** [View profile](#)

JONES, TIM  
1032 SANDY POND RD  
BEVERLY HILLS, CA 90210 USA

Phone 310-234-4353 Email [jean@mail.demonet.tylertech.com](mailto:jean@mail.demonet.tylertech.com)

**Business License Accounts**

- ☐ FRANK'S ACCOUNTING (20050001)
- ☐ KINKOS (20100004)

**Personal Property Accounts**

- ☐ RIZZO, FRANK (1001)

**Utility Billing Accounts**

- ☐ 100100 (71)

**Home**

**Citizen Self Service**

- [Animal License](#)
- [Business License](#)
- [Email Announcements](#)
- [General Billing](#)
- [Motor Vehicle](#)
- [Non-Emergency Requests](#)
- [Other Services](#)
- [Parking Tickets](#)
- [Permits and Inspections](#)
- [Personal Property](#)
- [Real Estate](#)
- [Utility Billing](#)

*Citizen Central provides 24/7 citizen access to all account information*

#### 9.8.4 MUNIS GENERAL BILLING

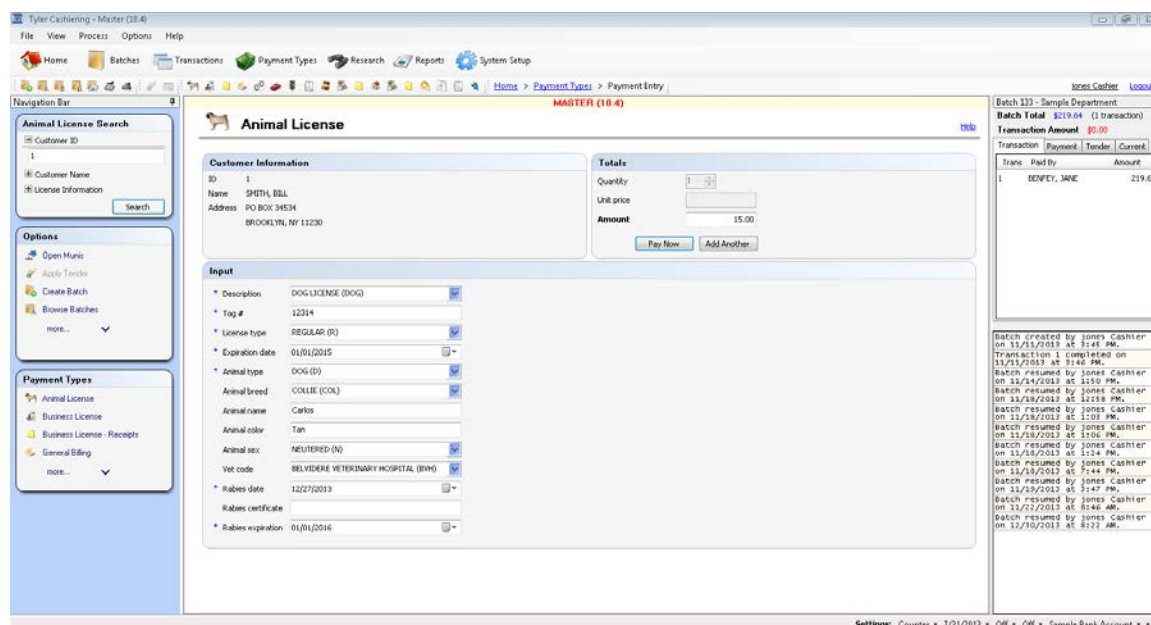
Munis General Billing creates invoices and bills for miscellaneous charges, such as facility rentals, hangar fees, tuition, vandalism and false alarm billing. It eliminates handwritten bills and manual calculations, totals invoice lines and provides accurate payment information. General Billing works with Munis Payment Entry (Accounts Receivable), Work Orders, General Ledger, and provides accurate and up-to-the-minute accountability. Other benefits include:

- Can aggregate services provided such as multiple days billed monthly
- Supports automatic interdepartmental billing
- Manages escalating fees associated with multiple incidents
- Provides loan tracking and amortization for HUD housing
- Integrates with Grant Management for reimbursement requests
- Integrates with Payroll for extra duty pay and COBRA billing
- Integrates with Work Orders for billing repairs and other services

#### 9.8.5 MUNIS ANIMAL LICENSES

Munis Animal Licenses allows you to issue dog tags and maintain licenses, track veterinarian data such as rabies records, process payments, and perform historical incident reporting for domestic animals. The Animal Licenses module is fully integrated with other Munis applications, including General Ledger and Payment Entry (Accounts Receivable). Other benefits include:

- Flexible configuration for tracking of variable licenses
- Ability to enter incidents such as bites
- Auto-renewal process for increased efficiency
- Integration with Citizen Self Service allows pet owners to register online, upload attachments like vaccination certifications and other required documentation, and process payments



## 9.8.6 MUNIS IVR GATEWAY

Munis IVR Gateway module facilitates the integration and ongoing support for IVR (interactive voice response) systems. IVR technology allows for automated interaction with a caller via keypad or voice for off-hour availability, thereby reducing the need for direct staff involvement. Munis supports this integration through a Web service-based approach, providing the Web service API to the approved Tyler IVR vendor (Tyler supports Selectron, Teleworks, Presidio). The IVR Gateway provides the ability to inquire into the Munis system to obtain real-time information such as balances, customer information, current status, and more. Integration with Utility Billing provides convenient access to consumption details, billing and payment history, and online payment option. Other benefits include:

- Integration with Utility Billing provides citizens with 24/7 access to account information and payment history. Utility specific features include submitting and obtaining meter readings and consumption history. Payments via IVR are supported.
- Integration with Permits and Licensing allows citizens to easily schedule, cancel or review inspection results
- Integration with Taxes and General Invoices provides citizens with 24/7 access to all business and personal taxes and to process payments

## 9.8.7 TYLER CASHIERING

Tyler Cashiering streamlines cash management by creating a single point of entry for data from multiple applications. Cashiering features a versatile, easy-to-navigate interface developed in the Microsoft® .NET platform. This scalable application has a familiar Microsoft Windows® look and feel, and was designed with user experience in mind. Tyler Cashiering allows for a wide range of customization based on payment type—and it integrates with local resources such as OCR and

handheld bar code scanners, printers, validators and MICR devices, making it an essential addition to any agency's collection process. Other benefits include:

- On-screen running batch and transaction totals displays
- Unlimited, user-defined tender types.
- Various user permission and controls over POS actions – such as voids, cash drawer opening, and more.
- Robust reporting on batch totals, user activity, and overall collection totals/trends
- Compliant with PCI/PA-DSS security standards
- Full Check-21 compliance which allows for creation of an electronic cash letter containing images of checks to be submitted to a bank in lieu of a traditional deposit with paper checks
- Standard interface to other Tyler products and may be configured to connect to third party modules as well
- Support for EMV chip credit card processing

### 9.8.8 MUNIS UTILITY BILLING CIS

Munis Utility Billing Customer Information System (CIS) streamlines the complex procedures associated with billing, scheduling and reporting utilities, and puts the focus on the customers. Munis provides the tools to easily maintain customer accounts, track service orders, generate utility bills, and collect fees. Billing clerks, service managers and utility directors have access to detailed information in a seamless, real-time and intuitive manner. And local governments increase transparency and improve customer service.

#### BENEFITS OF Munis UTILITY BILLING CIS

##### Local Governments

- Enables a paperless organization
- Simplifies the utility billing process
- Accelerates revenue collection
- Puts the focus on the citizen to improve customer service

##### Employees

- Improves productivity, efficiency & responsiveness to citizens
- Reduces redundant data entry and creates a "single version of the truth"
- Automates repetitive tasks & enhances workflow
- Enables fast, informed decision-making

##### Citizens

- Improves access to utility, account & payment information
- Enables easy bill payment
- Increases confidence & support in utility services

### MUNIS UTILITY BILLING CIS

Utility Billing CIS processes all billing functions easily, quickly and accurately. With it your staff can perform expected tasks such as billing water, sewer, electric and gas; and maintain multiple billing



cycles active at the same time. Robust functionality enables users to manage all aspects of utility billing with features including easy account setup to view past, current and pending customers, easy access to all service deposits, assessments, and installments; as well as unlimited user defined fields for account location master, account customer, and services in a variety of areas. With centralized accounts Utility Billing CIS simplifies property management. Integration with other Munis programs provides additional benefits:

- Access usage and billing details, enter service requests, and pay online via Citizen Self Service
- View billing history with images of past invoices through Tyler Content Manager (TCM)
- Online payments flow directly into general ledger through integration with Tyler Cashiering and Accounts Receivable
- Track site access and repairs through built in Service Order tool
- Verify address through Tyler GIS integration
- Set rules for bill adjustments and service requests using Workflow
- Option to deliver bills via e-billing
- Manage cut off selections, lien collections, and all notifications out of the account management screen
- Interface with Tyler Notify provides reliable customer notification regarding late notices, service interruptions and other account notifications
- Schedule service visits and inspection through Scheduler Central

## 9.9 EXECUTIME PRODUCT

### EXECUTIME TIME & ATTENDANCE

ExecuTime Time & Attendance provides small and large organizations with incredible cost savings and increased efficiency. In most local government entities, payroll processing, time tracking and benefits accrual tracking places an unnecessary strain on staff efficiency and limited budgets. ExecuTime™ fixes those issues and keeps them fixed while providing the highest ROI on the market. How do we do that?

- Effortlessly handle complex time tracking rules and pay codes
- Seamless, automated integration and synchronization with your IT environment and payroll software
- Powerful and user-friendly web-based interface for supervisors and staff
- Solid integration with numerous time collecting interfaces (web browsers, time clocks, phone, text messaging, IVR, proximity readers, biometrics and more)
- Dedicated technical and training support

### ***Simplify Complex Time, Attendance and Benefit Tracking***

By incorporating complex time tracking procedures that usually exist within public safety, public works and education, ExecuTime makes it easy for managers and staff of every department to enter and track time types, manage time-off requests and apply job costing all while handling multiple pay periods and FLSA guidelines.

### ***Reduce Costly Errors***

ExecuTime Time & Attendance drastically reduces errors and oversights by eliminating several of the manual tasks associated with collecting time and entering data into the payroll system.

Electronic capture of employee time offers a more accurate account of actual time worked and automates the process of collecting, calculating and entering employee hours each pay period. You generate precise timesheets for both hourly and salaried personnel and have access to historical data through audit trails and reports to ensure secure and effective management.

### ***Time Efficiency and Cost Effectiveness***

ExecuTime Time & Attendance automates the most labor-intensive tasks associated with timekeeping and gives that time back to your staff. Payroll clerks that spend days sorting through timecards will now complete the same duties in a fraction of the time. Many public-sector organizations have already discovered that ExecuTime offers the most rapid ROI along with the most critical product features.

*"Streamlining our payroll department, providing much better data access and reporting information and improving accuracy. It's been great. I'd do it all over again."*

*- Debbie Mammone  
Lincoln City, Oregon*

### ***Supported Solutions***

ExecuTime offers budget friendly systems that fit seamlessly into your current infrastructure and will grow with you for years to come. Our project management team will guide you through an implementation plan catered toward your personnel environment, conduct training and support your internal rollout. And you will have added assurance knowing an experienced and responsive technical team is only a phone call or email away.

## **EXECUTIME ADVANCED SCHEDULING**

ExecuTime Advanced Scheduling™ automates, simplifies and streamlines your staff scheduling process while minimizing labor costs and overtime expenses. The Advanced Scheduling solution makes sure you have the right people working the right job at the right time through a fully-integrated, easy-to-use solution that easily scales to suit the needs of small, medium and large organizations.

### ***Reduce Labor Costs***

Labor costs are a big part of your organization's budget. And those costs escalate through human error, manual processes and requests, and scheduling conflicts. ExecuTime scheduling allows you to cut labor costs while drastically reducing human error and manual processes. Even better, ExecuTime

can be configured to easily handle the complex scheduling in public safety, public works and parks and recreation. With ExecuTime, you'll effectively manage complex costs while incorporating union agreements, overtime and premium pay into your workforce management strategy.

### *Increase Workforce Productivity*

You're being told to do more with fewer resources. In these challenging economic times, decreasing budgets and increasing expectations go hand-in-hand. ExecuTime Advanced Scheduling allows your staff and supervisors to securely access customized and insightful data to eliminate unnecessary confusion and scheduling errors while enhancing employee accountability. Self-service tools allow your staff to request schedule changes and shift swaps, leave requests, bid for days off and vacation requests, and more. It's centralized, 24x7x365, real-time scheduling and management across departments, teams and locations.

### *Seamless Integrations*

The ExecuTime Advanced Scheduling solution integrates seamlessly with third-party applications (HR, payroll, CAD and more) and eliminates manually running scripts, passing files back and forth, and the wasteful production of paperwork. Of course, you can also integrate the scheduling solution with the ExecuTime Time & Attendance solution to create a powerful, automated and fully-integrated workforce management solution.

### *Easy to Use and Implement*

If you can use a web browser, then you can learn to use ExecuTime Advanced Scheduling in a snap. This solution is entirely web-based and requires no software to install or maintain on workstations. The user interface is extremely intuitive and user-friendly to make adoption easy even for users with little or no experience with computers.

### *Key Features*

- • Unlimited schedules/shifts
- • View and print daily roster reports
- • Schedule grid and calendar view
- • Post open positions for sign-up or bidding
- • Time exchange feature for shift swaps and shift trades
- • Automated time-off request and approval process
- • Overtime eligibility management
- • Track certifications and work limits
- • Cloud-based and on-premises options
- • Holiday and events calendar
- • Reporting and auditing

- Employee self-service
- 

## 9.10 TYLER PARKS AND REC

### *Centralize Your Program Administration with Tyler Technologies' Recreation Management Application*

Tyler Parks & Rec serves a full spectrum of agencies in need of a management solution for the daily operations and finances of parks and recreation programs. Streamline registration, fee processing and facility scheduling while expanding citizen access and service.

### *Improve Efficiency with Central Management*

With a single point of entry, Parks & Rec provides a 360 degree view of all business activities and events and allows you to:

- Focus on what's important — The administrative portal is easy to use, minimizes repetitive administrative work and allows you to focus on programming for your citizens.
- Build a community network — Develop lists of members, registrants, instructors and volunteers. Import outside contact lists, track participant history and define relationships between contacts.
- Monitor your programs — View real-time program registrations to anticipate resources and equipment needs. The online calendar allows citizens and administrators to view classes, activities and events at a glance.
- Visualize your market — The GIS "Heat Map" shows where your participants live and correlates the data with the number of registered participants. See which neighborhoods have the strongest enrollment in your programs and which areas need additional outreach.
- Streamline processes — Integration with Tyler ERP software centralizes financials and eliminates redundant data entry. Maintain multi-tiered rates based on membership status, residency and other criteria.
- Reduce IT burden — Optional cloud based service minimizes up-front investment in hardware and software, as well as on-site IT support staff.

### *Recreation Management*

Tyler Parks & Rec allows personnel to easily manage their routine activities and rentals with less effort:

- Customize your portal with logos, photography and special events to reflect your community.

- Automatically reserve your facility for single or multiple sessions using the class creation interface.
- Define class enrollment by residency, membership status, prerequisites, class size limits or other user-defined criteria.
- Compile a listing of popular classes and programs to use year after year. Select the class from the administrative portal, copy it, update with new details and publish on the citizen portal.
- Track class registrations, memberships and team rosters, and manage wait lists in real time.
- Maintain multiple fee structures based on criteria such as membership, residency, age and more.
- Use the Web portal to post permission forms, equipment lists and waiver forms for easy download.
- Create custom fields to collect data specific to your programming requirements and community needs.
- Generate SSRS reports of classes, memberships, team rosters, instructor reports, location details and more.

### *Facilities Management*

Tyler Parks & Rec simplifies the management of your facilities:

- Its online facilities calendar provides at-a-glance access to facility usage and bookings.
- The auto-registration feature automatically reserves a facility upon creation of a class or program.
- User-defined fields can be set for special notes such as cleaning, set-up or other specifications such as lining fields or equipment needs.

### *Finance Management*

Tyler Parks & Rec streamlines your business functions:

- Maintain a multi-tiered fee structure for membership types, residents and non-residents, age groups and other criteria.
- Generate automatic fee calculations for full range of programs, courses, facilities and equipment.
- Centralize expenses and reimbursements.
- Utilize role-based security to restrict access to certain features.
- Process payments securely online or using our point-of-sale option, Tyler Cashiering, featuring a PCI Compliant Merchant Account Service interface.

### *Improved Citizen Service*

Tyler Parks & Rec offers many conveniences for your citizens:

- Easy access to information — Citizen portal features an events calendar, a GIS map with facility locations, activity promotions, special announcements such as field closings and weather cancellations.
- Online registration — The secure log-in portal allows citizens to create an account, register for classes, download waivers and permission forms and submit payment online.
- Remote access — The HTML5 user interface is browser-agnostic and can be accessed with many different devices such as smartphones and tablets.
- Networking — Customize your Tyler Parks & Rec portal with links to Facebook, Twitter and other social networking sites that help build support for your programming.

### *Integration*

Tyler Parks & Rec is designed to work with Munis ERP to improve efficiency through data integration. In summary:

- Tyler Parks & Rec centralizes expenses and reimbursements, generates automatic class fees and maintains multi-tiered rates for residents and non-residents. Payment transactions can be searched, viewed and exported to Munis General Ledger via the Munis standard journal/GL import format, which creates a journal entry in the Munis GL JE/Proof program via web services, a .csv file, or a txt export file for organizations requiring this.
- Tyler Parks & Rec can export invoices to Munis Accounts Receivable via an .xls file of the invoice data. This creates an export file in the Munis GL Invoice Import File Layout format.
- Tyler Parks & Rec reimbursements can be searched, viewed and exported via Munis AP import, web services, or a txt format for organizations requiring this. Users can export the Reimbursements list in Tyler Parks & Rec Transactions, thereby exporting instructor payments to Munis AP.

## 9.11 ENERGOV PRODUCT OVERVIEW

Tyler Technologies is dedicated to developing, implementing, and supporting software solutions that are tailored specifically for the public sector. Our specialized expertise and experience in this area gives us the ability to provide solutions that address the varied yet unique needs of this type of organization, positioning Tyler as a leading provider of software for the public sector. Tyler's EnerGov solution assists our Clients in managing a more efficient and effective operation while empowering government to better engage their customers through enhanced access to information, processes, and services.

## ENERGOV PRODUCT ECOSYSTEM

EnerGov is the public sector's leading browser-based enterprise application that assist clients in managing a more efficient, streamlined and citizen friendly enterprise operation.



The EnerGov product suites are specifically designed to automate and centrally connect the critical processes of land use planning and project review, permitting, code enforcement, inspections, licensing and regulatory management, asset and work order management, infrastructure management, citizen requests and more.

## BUILT FOR GOVERNMENT

EnerGov is specifically designed to automate and centrally connect the critical business processes government agencies require related to regulatory management and the administration of infrastructure assets.

## COMPLETE MANAGEMENT SOLUTION

Complete solution and full lifecycle management for automating tasks associated with critical functions such as land use planning and project review, permitting, code enforcement, inspections, licensing and regulatory management, asset and work order management, citizen requests and more.



## ENERGOV HIGHLIGHTS

### ADVANCED AUTOMATED WORKFLOW

EnerGov is an enterprise management application that encompasses all aspects of the application, review, issuance and enforcement lifecycle. Central to the management process is the concept of enterprise workflow and process regulation, both of which are achieved through native workflow design tools.

### INDUSTRY LEADING GIS INTEGRATION

EnerGov has partnered with Esri technology and actively maintains support for the latest versions of the ArcGIS platform. EnerGov provides industry-pioneering and award winning Esri-based GIS integration that introduces a new dimension of visualization, analysis and business management capabilities to Agencies like yours. EnerGov GIS adds a powerful facet to the EnerGov suite of products by enabling a GIS-centric approach to an Client's business process management.

### PERSONALIZED INTERFACE

The EnerGov Workspace is the user interface that runs in the program shell. Within the workspace, an unlimited number of customized, role-based screens can be created. The workspace includes data processing screens, widgets, search results, external web pages, and more.

#### *Widgets*

EnerGov workspaces are customized by including role-specific widgets that track and display role-relevant data. Widgets can include application shortcuts or favorites menus, commonly searched terms, system notifications, pinned or scheduled reports, or sets of data within the application.

#### *Key Performance Indicators (KPI)*

One of the strengths of role-based work stations is the ability to add KPIs relevant to the user's work processes. Whether that's a list of work orders to process, information about the status, or number of current tasks, KPIs are an instrumental part of developing a more efficient work process.

### REPORTING

EnerGov provides multiple reporting options as well as graphical grid construction tools which enable system users to construct customized, on-demand views and filters of performance and process data which can be used to readily identify trends, associations, performances, and relationships.



## TASKS AND NOTIFICATIONS

EnerGov enables users to stay connected and informed whether in the office or in the field through a centralized task and notification engine. Automated reminders and notifications of pending tasks / actions are routed to appropriate personnel according to the Client's prevailing workflow.

## CENTRAL CONTACT MANAGEMENT

EnerGov utilizes an enterprise contact management console to catalogue and centrally track citizens and the individuals conducting business with the City. This allows the City a number of advantages including enterprise access to contact records, correspondence, fees, applications, documentation, and more.

## CENTRAL CASH MANAGEMENT

All payments and transactions, regardless of origin, are processed through a centralized cashing console. EnerGov provides an unprecedented level of configurability with regard to fee calculation and fee assignment. Even the most daunting fee schedules are easily configured and promoted through an intuitive graphical user interface.

## SOCIAL MEDIA

Get and stay connected to your community. Using social media channels like Facebook and Twitter and automated communication as the conduit, you can achieve your desired level of transparency with citizens when it comes to community development initiatives, status updates and much more.

## ENERGOV ODATA & REST APIs

EnerGov's open data service, EnerGov OData, allows your government organization more connectivity, flexibility and transparent communication with constituents than ever before. Using OData, your IT staff can create specialized applications for the Web, mobile devices, the GIS environment and other external or community-based uses which display a personalized combination of open source data most pertinent to those you serve.



Additionally, Tyler's packaged REST-based APIs provide the requisite tools for developing intelligent interfaces between the EnerGov application and any number of 3rd party / existing line of business solutions currently in use by each agency.

## FLEXIBLE DEPLOYMENT – ON PREMISE OR CLOUD

As a web and cloud-capable platform, EnerGov offers flexible deployment with the option of hosting and maintaining their IT infrastructure on premise, within an Client's private cloud, or within the Tyler Cloud (Tyler hosting and application availability services).

## UNLIMITED SCALABILITY AND SUPERIOR CONFIGURABILITY

EnerGov is a platform technology that can be sized and scaled according to the needs and demands of each Client. Native system administration consoles provide superior configuration capabilities and the tools to automate even the most demanding process workflow.

EnerGov features dynamic built-in tools native to each software suite/module that embraces extensibility and provide our clients with the ability to define, capture and manage site-specific processes, workflows, custom forms, business rules, etc. These tools are powerful, intuitive, and accessible to authorized users and foster growth as new Client mandates and procedures are adopted and implemented.

## THE FUTURE OF ENERGOV

Government agencies look to Tyler Technologies for industry leading solutions in the form of scalable, integrated software that make it easier for government agencies to manage their day-to-day, complex functions. We are committed to designing, developing and deploying spatially enabled software solutions that provides efficiencies for and connects all departments, mobile users and citizens alike. The foundation of this commitment is an aggressive investment in product development to extend existing functions, add innovative new features and integrate among Tyler products.

Our EnerGov product development teams understand that your business is more than approving plans, issuing permits, enforcing ordinances and maintaining public infrastructure. EnerGov products are designed to help you meet your ultimate goals of guiding orderly growth, promoting safety and livability, fostering economic vitality and encouraging community collaboration. The future direction for Tyler's EnerGov software leverages the latest web technologies, spatial capabilities and industry standards while remaining focused on your goals to help you attain the success you require.

Input to our product roadmap comes from several sources. Current customers provide suggestions through a collaborative enhancement request forum within our Tyler Community. Another source of influence comes from prospective or new customers who identify new scenarios with specific pain points that can be solved by leveraging or enhancing functionality within EnerGov. Lastly, Tyler employees continually monitor industry and technology trends and proactively respond to the changing needs of the market resulting in the innovation, functionality and flexibility you come to expect from EnerGov software.

### 9.11.1 BMI

BMI Systems group has been a leader in barcode based Asset Tracking and Inventory systems since 1986. AssetTrak PPC software interfaces with the Munis Fixed Asset module to allow for barcode scanning, reconciliation and automated asset posting.

For over 25 years, BMI has been providing "front end" Automated Data Collection Systems (ADCS) that interface with many popular Public Sector Fixed Asset Modules. We also offer complete

Automated Data Management Systems (ADMS) for asset tracking if you want to manage assets/equipment that are not currently in your FMS's fixed asset module.

BMI has recently expanded our Automated Data Collection Systems (ADCS) product offering to include our CollectIT barcode printing and scanning system for automating receiving, issuing and counting items in a warehouse environment. Our system is designed to interface with popular Public Sector Inventory/Warehouse Modules.

There's a good reason for our success. We not only help you scan and track your items, but we also allow you to leverage your existing investment in whatever system or database you currently have in place. This sets us apart from the other scanning solutions in the market.

Please reference BMI product information on the following pages.



# ASSETTRAK ARS



## ADD SCANNING TECHNOLOGY TO YOUR FIXED ASSET MODULE

### AssetTrak ARS – Asset Reconciliation System

BMI's AssetTrak ARS fixed asset scanning and reconciliation system is designed to interface with popular Public Sector Fixed Asset Modules and "State of the Art" Mobile Scanning Devices. Inventory reconciliation functions are automated and extremely efficient with the use of barcode and RFID scanning technologies. The AssetTrak ARS system includes an application on a mobile scanning device & on a Tablet, Laptop or Desktop Computer. AssetTrak ARS compares or reconciles a file from your fixed asset records against a physical scanned inventory file from the Barcode/RFID scanner.

The AssetTrak ARS program on the mobile scanning device allows you inventory, re-tag and clean up current asset records "On the Fly". Collected data can be reviewed and edited prior to reconciling, exporting, uploading and posting into your Fixed Asset Module utilizing the interface program supplied by your Fixed Asset Module vendor.

BMI has been in business for over 28 years and we have installed over 800 systems nationwide. The majority of our installations interface with leading Public Sector Financial Management Systems.

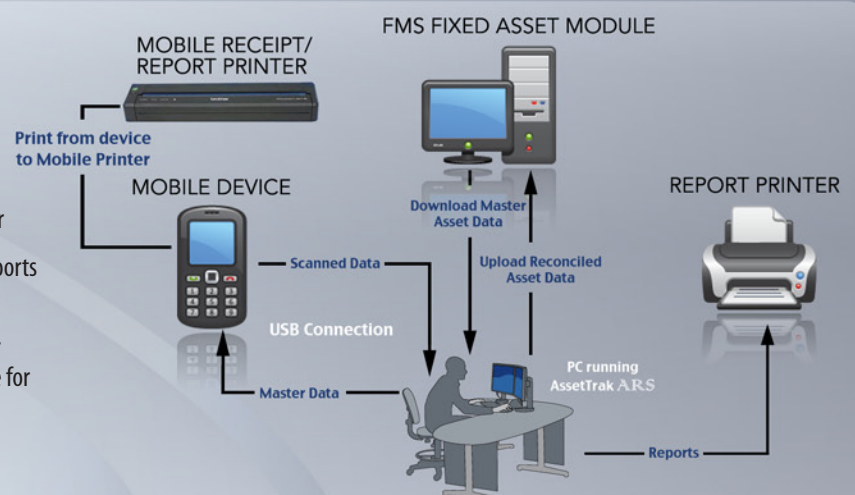
### Programs on Mobile Scanning Device

- **Scan** - Inventory count, enter location and scan barcode or RFID tag
- **Add / Edit** - Scan asset tag, view current data for asset and update/edit information if required. Add assets "On the Fly"
- **Convert** - Change/convert Asset Tag to a Barcode/RFID Tag #  
Very easy to re-tag assets with Bar-coded or RFID Tags
- **Print** - Asset reconciliation reports from the Mobile Scanning Device (MSD)



### AssetTrak ARS:

- Imports asset data exported from **your** Fixed Asset Module
- Syncs data to and from (MSD) to inventory and "clean up" existing records with Barcode/RFID scanner
- Produces a variety of exception reports from PC or Scanner
- Reconciles scanned data with your current FA data and produces a file for upload and posting to your FAM





# COLLECT-IT

## ADD SCANNING TECHNOLOGY TO YOUR INVENTORY MODULE

### Collect-IT

BMI's Collect-IT barcode based automated data collection system (ADCS) is designed to interface with popular Public Sector Warehouse Inventory modules, barcode printers, and portable barcode scanners (PDT's). Receiving, Issuing/ Picking, and Inventory count functions are automated and extremely efficient with the use of barcode scanning technology. Collect-IT can interface directly with your inventory tables via flat files or an ODBC connection. Up to ten fields of data such as the purchase order numbers, Item numbers, order id's and warehouse id can be synced to the Collect-IT application on the mobile terminal via a USB connection, a wireless LAN 802.11 b/g connection, or a wireless WAN GSM/GPRS/EDGE mobile broadband connection. Using a mobile device with data validation eliminates most human errors and greatly increases productivity in the warehouse.

BMI has been in business for over 25 years and we have installed over 700 systems nationwide. The majority of our installations interface with Public Sector Financial Management Systems.

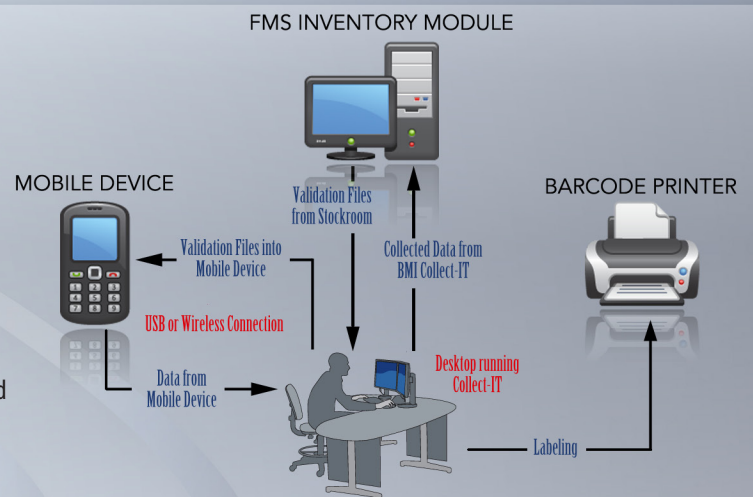
### Scanning Programs on Mobile Device

- **Inventory count** - Item inventory or cycle counts
- **Receive** - Label items, scan items, and put away items as they are received into the warehouse
- **Issue / Pick** - Scan items as they are picked to fulfill orders or when items are issued to employees



### Collect-IT:

- Interfaces with data tables in your INV module
- Syncs validation files to a portable Data Terminal (PDT)
- Produces barcoded item labels from Inventory Module
- Scanner functions include: receiving, issuing, and counting items
- Data is verified & validated during the scanning process
- Transaction files are produced and exported
- Transaction files from Collect-IT are then imported and posted to your INV module



## 9.12 TYLER SYSTEM SPECIFICATIONS

Tyler Technologies applications are designed to operate on systems that meet specific requirements. Systems that do not meet the required specifications may not provide reliable or adequate performance, and Tyler cannot guarantee acceptable results.

Tyler SaaS clients should disregard any references of “on-premises” specific requirements.

### ON-PREMISES SERVER REQUIREMENTS

#### *Overview*

Tyler supports several server environment deployment types including bare-metal and virtualized environments, high availability configurations, and dedicated testing environments. Production and non-production application environments (e.g. train, test) are deployed to the same servers unless otherwise noted or desired by the client.

Operating system, database, and application software is included for reference only. It is the client’s responsibility to properly license all third-party software, including OS and RDBMS, and procure required infrastructure.

The following server specifications are provided as general guidance only. Clients should contact their sales representative or Tyler’s Deployment Department for approval of desired configuration prior to procurement or configuration of production infrastructure.

#### *General Server Requirements*

COMPONENT	REQUIREMENT
<b>General Requirements</b>	Servers / VM’s dedicated to Tyler products Microsoft Windows Certified Server (nationally recognized brand) External backup solution Gigabit Ethernet RAID storage Dedicated partitions for OS, Tyler applications, and databases
<b>Operating System</b>	Microsoft Windows Server 2012 R2 or 2016 Standard
<b>Database Software</b>	Microsoft SQL Server 2012, 2014, 2016, 2017 Standard or Enterprise [1]
<b>Additional System Software</b>	Microsoft components including Microsoft VCSASP, Visual C++ Runtime Libraries Java Runtime Environment (JRE), Java Development Kit (JDK) [2]
<b>Network Environment</b>	Microsoft Active Directory Domain and DNS services
<b>GIS Environment [3]</b>	Esri ArcGIS for Server 10+

[1] All Tyler applications except iasWorld. SQL Server Enterprise Edition is only required for clients who wish to use advanced RDBMS functionality including SQL AlwaysOn Availability Groups for high-availability, and SQL Server TDE for at-rest data encryption.

[2] JRE required on TCM and ExecuTime application servers only. JDK required on TCM application servers only.



[3] Dedicated GIS environment is only required for use with Munis MapLink, Tyler EAM, or EnerGov. ArcGIS Online is also supported with EnerGov. Installation and maintenance of GIS environment is the responsibility of the client.

### Hardware Requirements

#### Munis – Up to 15 Users, EnerGov – Up to 25 users

The following outlines server infrastructure required for a Tyler implementation sized up to 15 concurrent Munis users and 25 EnerGov users.

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database, Munis Application, & Tyler Infrastructure Server	1	4	32	750
EnerGov Application Server	1	6	16	200
EnerGov Search Services Server	1	6	16	200
Content Management Server	1	4	24	200
External Web Server	1	1	12	150
<b>TOTAL RESOURCES</b>	<b>5</b>	<b>21</b>	<b>100</b>	<b>1500</b>

[1] EnerGov eReview requires an additional 500GB-1TB of storage.

#### Munis – Up to 100 Users, EnerGov – Up to 25 Users

The following outlines server infrastructure required for a Tyler implementation sized up to 100 concurrent Munis users and 25 EnerGov users.

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database, Munis Application Server	1	6	48	1250
EnerGov Application Server	1	6	16	200
EnerGov Search Services Server	1	6	16	200
Tyler Infrastructure Server	1	4	24	200
Content Management Server	1	4	32	200
External Web Server	1	1	12	150
<b>TOTAL RESOURCES</b>	<b>6</b>	<b>27</b>	<b>148</b>	<b>2200</b>

[1] EnerGov eReview requires an additional 500GB-1TB of storage.

#### Munis – Up to 250 Users, EnerGov – Up to 50 Users

The following outlines server infrastructure required for a Munis and EnerGov software implementation sized up to 250 concurrent Munis users and 50 EnerGov users.

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database, Munis Application Server	1	8	64	2000
EnerGov Application Server	1	6	16	200

EnerGov Search Services Server	1	6	16	200
Tyler Infrastructure Server	1	4	24	200
Content Management Server	1	4	32	200
External Web Server	1	1	12	150
<b>TOTAL RESOURCES</b>	<b>6</b>	<b>29</b>	<b>164</b>	<b>2950</b>

[1] EnerGov eReview requires an additional 500GB-1TB of storage.

### Munis – Up to 350 Users, EnerGov – Up to 100 Users

The following outlines server infrastructure required for a Munis and EnerGov software implementation sized up to 350 concurrent Munis users and 100 EnerGov users.

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database Server	1	4	48	1000
Munis Application Server	1	4	48	300
EnerGov Application Server	1	8	32	200
EnerGov Search Services Server	1	6	24	200
Tyler Infrastructure Server	1	4	32	200
Content Management Server	1	4	32	200
External Web Server	1	2	18	150
<b>TOTAL RESOURCES</b>	<b>7</b>	<b>32</b>	<b>234</b>	<b>2250</b>

[1] EnerGov eReview requires an additional 500GB-1TB of storage.

### Munis – Up to 500 Users, EnerGov – Up to 100 Users

The following outlines server infrastructure required for a Tyler software implementation sized up to 500 concurrent Munis users and 100 EnerGov users. At this size, Tyler recommends separate infrastructure for non-production environments (e.g. Train, Test).

Due to the added configuration complexity at this size and larger, clients should contact their Tyler Sales Representative or Tyler's Deployment Department for further consultation.

#### *Production Environment*

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database Server	1	6	64	2000
Munis Application Server [2]	2	6	64	300
EnerGov Application Server	1	8	32	200
EnerGov Search Services Server	1	6	24	200
Tyler Infrastructure Server	1	6	48	200
Content Management Server	1	4	32	400

External Web Server	1	2	18	150
<b>TOTAL RESOURCES</b>	<b>8</b>	<b>44</b>	<b>346</b>	<b>3750</b>

[1] EnerGov eReview requires an additional 500GB-1TB of storage.

[2] Multiple application servers for the production environment require a Network Load Balancer. Requirements for each server.

### *Non-Production Environment*

	# of Servers	CPU Cores	Memory (GB)	Storage (GB) [1]
Database Server	1	4	48	2000
Munis Application Server [2]	1	4	48	300
EnerGov Application Server	1	4	8	200
EnerGov Search Services Server	1	6	16	200
Tyler Infrastructure Server	1	4	24	200
Content Management Server	1	4	24	200
External Web Server	1	2	12	150
<b>TOTAL RESOURCES</b>	<b>7</b>	<b>28</b>	<b>180</b>	<b>3250</b>

## Server Definitions

### *Database Server (DB)*

Hosts Microsoft SQL Server for all Tyler application databases. SQL Server Reporting Services, SQL Server Analysis Services, and SQL Server Integration Services may also be installed for use with select Tyler applications.

### *Munis Application Server (MAS)*

Hosts Munis application server and IIS; accessed via HTTPS. The Munis application framework should be installed on the same server as the SQL Server instance used with Munis, except when multiple Munis application servers are used.

### *EnerGov Application Server (EAS)*

Hosts EnerGov application server and IIS; accessed via HTTPS.

### *EnerGov Service Server (EGSS)*

Hosts services used for connectivity between EnerGov application and database. This includes the EnerGov Windows Service (required) and the Tyler Search Service (for Citizen Self-Service). It is responsible for managing background processes and search services. Because of its need for resources, it is required to have this service reside on its own server so that it doesn't impact the use of EnerGov applications and web products.

### *Tyler Infrastructure Server (TIS)*

Hosts Tyler Infrastructure server components such as Tyler Identity and Tyler Hub, and IIS. Additional Tyler applications such as Tyler Parks and Rec, and Tyler Incident Management may also be hosted on this server. All applications are accessed via HTTPS.

#### *Content Management Server (CMS)*

Hosts web and application framework for Tyler Content Manager, and TylerForms. Additional Tyler applications such as ExecuTime may also be hosted on this server. All applications are accessed via HTTPS.

#### *External Web Server (EWS)*

Hosts Tyler self-service applications, mobile services, and IIS; accessed via HTTPS. IIS ARR may also be configured on this server to provide external access to some internal hosted applications (e.g. ExecuTime mobile). If EnerGov IVR is purchased, a direct connection to SQL and to the outside is required. It should be placed on a web server that can allow direct access to SQL.

### **ExecuTime**

The following infrastructure is required for an ExecuTime server environment based on the total number of employees maintained in ExecuTime.

Clients who do not have other Tyler ERP applications (e.g. Munis, Tyler Content Manager) installed at the time of ExecuTime deployment should refer to the **Dedicated Server Environment** section. Clients with existing Tyler ERP applications should refer to the **Shared Tyler Server Environment** section.

If internet access of ExecuTime is desired (e.g. for mobile use), additional network configuration may also be required; refer to **External / Internet Application Access** in the Network Requirements section for more details.

#### *ExecuTime Dedicated Server Environment*

Requirements assume the ExecuTime application framework and database are hosted on the same server, however Tyler also supports distributed environments with the application and database on separate servers.

# of Employees	CPU Cores	Memory (GB)	Storage (GB)
Up to 1000	4	8	100
Up to 2000	4	16	100
Up to 3000	6	32	100

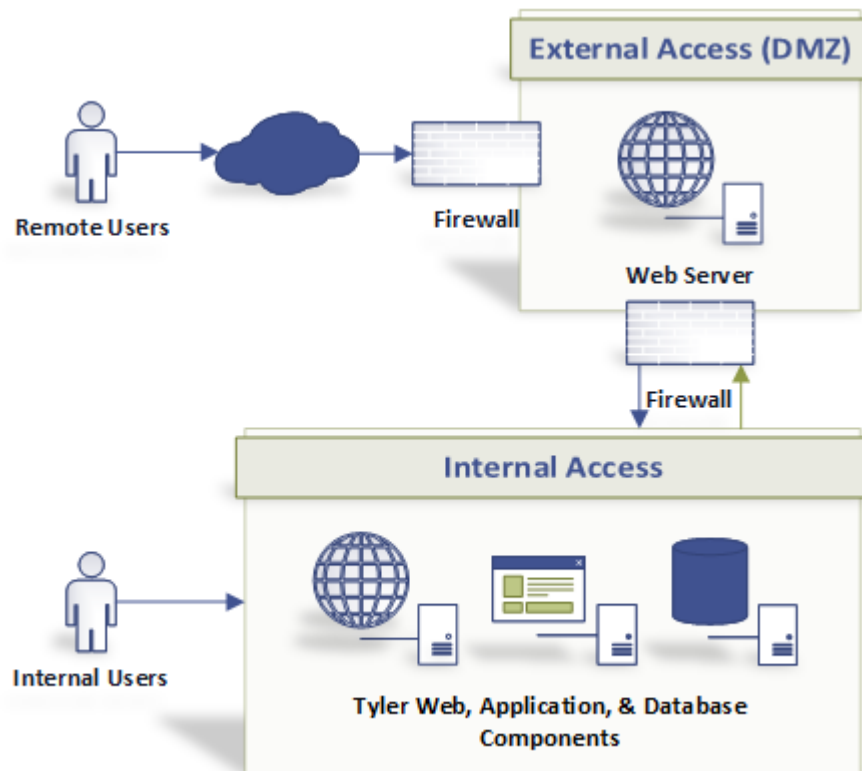
#### *ExecuTime Shared Tyler Server Environment*

Tyler recommends installing ExecuTime on existing Tyler servers if possible. The ExecuTime web framework is typically installed on the **TCM Application Server** and database on the **Tyler Database server**.

To accommodate ExecuTime on existing servers, server resources must be increased by the amounts specified below based on the total number of employees maintained in ExecuTime.

# of Employees	App Server – CPU Cores	App Server – Memory	DB Server – Storage
Up to 1000	0	+4GB	0
Up to 2000	0	+4GB	+5GB
Up to 3000	+2	+10GB	+10GB

### Configuration Diagram



### Storage

Enterprise-level, redundant storage arrays using high-bandwidth iSCSI or fiber channel backend connection/s should be used for all Tyler servers. Disk input/output (I/O) performance is also important for successful deployment of Tyler applications. Tyler recommends Microsoft's SQLIO Disk Subsystem Benchmark Tool to measure disk performance and provide minimum IO to run Tyler applications.

## Recommended I/O

The following average I/O measurements from a large sampling of ERP clients with good storage performance and should be used as a guideline when configuring storage subsystems.

	Random Writing	Random Reading
8K - IOPS	18000	27000
8K - MBs/sec	140	210
8K - Avg. Latency (ms)	1.3	1
128K – IOPS	6000	8000
128K - MBs/sec	450	800
128K - Avg. Latency (ms)	7	6.5

## High Availability

Tyler supports a variety of high availability (HA) server configurations. Tyler's recommended configuration is a virtualized environment used in conjunction with replication products such as VMware Site Recovery Manager or Veeam Backup and Replication. For environments requiring multiple SQL Server servers, SQL Server AlwaysOn Availability Groups is recommended (note, AlwaysOn requires SQL Server Enterprise Edition). A hardware-based network load balance appliance is required when using multiple application servers. Clients should contact Tyler Installation Services when considering these advanced configurations.

Tyler will work with every client to help determine the best configuration to meet their infrastructure needs, however it is typically the responsibility of the client (or their hardware vendor) to configure advanced HA environments.

## Virtualization Support

VMware vSphere and Microsoft Hyper-V are supported for virtualizing servers. It is a requirement that virtualized guests are given dedicated memory and host virtual CPUs are not over committed. VM provisioning is the responsibility of the client; Tyler Technologies does not offer any training or installation services for VMware or Microsoft Hyper-V.

## NETWORK AND SECURITY REQUIREMENTS

Tyler applications communicate over TCP/IP. On-premises clients must obtain a 1024-bit (minimum) SSL certificate from a trusted Certificate Authority for all servers to encrypt application communication over HTTPS.

## External / Internet Application Access

Tyler applications such as mobile apps and self-service web portals are commonly accessed from outside a client's network. Tyler supports most industry standard methods of providing external access to on-premises applications. These options include but are not limited to; hosting web/application framework in a client's DMZ, or behind a client's firewall using NAT port mapping,

Application Request Routing (ARR) with IIS, and VPN. Deployment and network configuration of on-premises Tyler applications is dependent on the client's preferred method of providing this access.

### ***Bandwidth Requirements***

Bandwidth usage can vary depending on application user type and their daily functions. Based on benchmarks through Tyler's SaaS data center and Test Lab, Tyler recommends the following bandwidth requirements:

Client to Server:

- Minimum: Mobile broadband connection
- Recommended: 10/100 Mbps network connection
- 30 Kbps per concurrent user session

Server to Server (on-premises only):

- 1GBps network connection

Tyler highly recommends sites with many anticipated remote users request a bandwidth utilization report for at least 1 month of recent usage from their ISP to ensure they have sufficient bandwidth available to meet these requirements, especially those considering Tyler SaaS Hosting.

### ***Microsoft Active Directory***

Microsoft Active Directory is required for authentication with select on-premises hosted Tyler ERP applications. Tyler SaaS hosted clients can use Active Directory authentication with select Tyler applications, though an existing Azure AD or ADFS [1] environment is required. SaaS hosted applications not supported with clients Active Directory use unique, Tyler provided credentials. The setup and maintenance of client Active Directory, Azure AD, and/or ADFS environment is the responsibility of the client.

*[1] Microsoft ADFS for OpenID with Windows Server 2016 forest functional level recommended when using ADFS; ADFS WS-Federation with Windows Server 2012 forest functional level also supported.*

### ***Email Server Integration***

An SMTP / IMAP email server is required for sending application notifications.

Microsoft Exchange is only required for the following advanced Outlook calendar integration. Sites without Exchange can perform these tasks using an integrated application calendar.

- Munis Scheduler Central used with Munis Permitting, Munis Work Orders and Munis Utility Service Orders.
- Munis Work Order Facilities room reservations.
- Appointment creation on records directly from select Munis applications.
- EnerGov inspection, meeting, hearing, and task scheduling.



## END-USER REQUIREMENTS

### *Microsoft Windows Workstation Requirements*

COMPONENT	REQUIREMENT [1]
<b>Workstation</b>	Microsoft Windows Certified PC (Nationally recognized brand)
<b>Processor</b>	Intel Core i3 1.8 GHz minimum; Intel Core i3 2.5 GHz+ recommended
<b>Operating System</b>	Windows 7 and later
<b>Memory</b>	4GB RAM
<b>Disk Space</b>	500 MB
<b>Network</b>	Back office workstations: Member of same domain as Tyler application servers
<b>Screen Resolution</b>	General: 1280 x 800 minimum, 1920 x 1080 recommended EnerGov: 1680 x 1050 minimum, 1920 x 1080 recommended; ePlans Review: 2560 x 1600
<b>Required Software</b>	Microsoft .NET Framework 4.5 [2] Microsoft Silverlight 5.1 [3] Java Runtime Environment 8 [4]
<b>Productivity Software</b>	Microsoft Office 2010, 2013, 2016 Microsoft Office 365 (requires desktop client) Microsoft Office 2007 is supported for Excel and Word exports only; Munis add-ins are not supported

[1] Meeting the minimum PC requirements will ensure the Tyler applications will operate but will not guarantee performance. All performance and benchmark testing are done with PC's that meet (or exceed) the recommended hardware configuration.

[2] Microsoft .NET required for Tyler Cashiering and select SIS functionality only.

[3] Microsoft Silverlight required for CAFR Statement Builder, Tyler Incident Management, Tyler Meeting Manager, and select EnerGov applications only.

[4] Java is required for advanced Tyler Content Manager functionality only.

### Browser Compatibility

BROWSER	APPLICATION SUPPORT
<b>Google Chrome (latest version)</b>	Recommended with Munis, ExecuTime, select EnerGov applications, SIS (excluding Click-Once apps), and self-service applications.
<b>Microsoft Edge (latest version)</b>	Supported with Munis, ExecuTime, select EnerGov applications, SIS, and self-service applications.
<b>Microsoft Internet Explorer 11</b>	Supported with all Tyler applications.
<b>Mozilla Firefox (latest version)</b>	Supported with EnerGov, SIS, and all self-service applications.

### *Apple macOS Workstation Requirements*

For optimal user experience, Tyler recommends all Mac workstations used for back office application access (those excluding self-service applications) leverage macOS Keychain Access to store

credentials or an authentication solution such as Microsoft Web Application Proxy. Refer to *macOS Limitations* for additional information regarding using Tyler applications with macOS.

COMPONENT	REQUIREMENT [1]
<b>Operating System</b>	macOS 10.10 or later
<b>Processor</b>	Intel Core i3 1.8 GHz minimum; Intel Core i3 2.5 GHz+ recommended
<b>Memory</b>	4GB RAM
<b>Disk Space</b>	500 MB
<b>Screen Resolution</b>	General: 1280 x 800 minimum, 1920 x 1080 recommended EnerGov: 1680 x 1050 minimum, 1920 x 1080 recommended, 2560 x 1600 for ePlans Review
<b>Required Software</b>	Microsoft Silverlight 5.1 [2]
<b>Productivity Software</b>	Microsoft Office for Mac 2011, 2016 Microsoft Office 365 (requires desktop client)

[1] Meeting the minimum PC requirements will ensure the Tyler applications will operate but will not guarantee performance. All performance and benchmark testing are done with PC's that meet (or exceed) the recommended hardware configuration.

[2] Microsoft Silverlight required for CAFR Statement Builder, Tyler Incident Management, Tyler Meeting Manager, and select EnerGov applications only.

### Browser Compatibility

BROWSER	APPLICATION SUPPORT
<b>Apple Safari 10</b>	Supported with Munis, select EnerGov applications, SIS (excluding Click-Once apps), and self-service applications.
<b>Mozilla Firefox (latest version)</b>	Supported with EnerGov and all self-service applications.

### Limitations with macOS

Some Tyler applications or select application functionality are not supported on macOS. This functionality can be obtained using alternative solutions such as RDS to a Windows environment or "Windows on Mac" virtualization solutions such as Parallels Desktop for Mac and VMware Fusion.

#### *EnerGov*

EnerGov is fully supported on macOS except for eReviews.

#### *ExecuTime*

ExecuTime is not supported on macOS.

#### *Munis*

Munis is fully supported on macOS with the following exceptions:

- Microsoft Office for Mac does not support connections to SQL OLAP cubes. Due to this Microsoft limitation, Mac users cannot access Munis Cubes.

- Munis Next Year Budget Entry (NYBE) for Excel is a Microsoft Excel add-on providing one of several ways users can input and maintain next year budget data. This add-on is only available for Microsoft Excel on Windows platforms.
- Microsoft SQL Server Reporting Services reports cannot be created or modified.

### *Tyler Content Manager*

Advanced Tyler Content Manager functionality such as batch document scanning is not supported on macOS.

### *Mobile Device Support*

Tyler offers many mobile options to access select Tyler applications and functions from a mobile and/or touch-enabled device.

APPLICATION	ANY MOBILE DEVICE	ANDROID	iOS	WINDOWS
EnerGov Inspections	--	--	App	App
EnerGov Enforcement Management	--	--	App	--
ExecuTime Timekeeping	Mobile Web	Mobile Web	Mobile Web	Mobile Web
Munis Application Suite	Web App	Web App	Web App	Web App
Munis Citizen & Vendor Self Service	Mobile Web	Mobile Web	Mobile Web	Mobile Web
Munis Employee Self Service	Mobile Web	App	App	Mobile Web
Munis Field Inspector	--	--	App	App
Munis Workflow	Email	App	App	App
Munis Work Orders	--	App	App	App
Tyler Incident Management Click2Report	--	App	App	--

*App: Native mobile app available for download from respective app store.*

*Mobile Web: Mobile optimized web site. Not all devices validated.*

*Web App: HTML applications only. Not all devices validated. Not all web applications optimized for mobile devices / smaller screens. Some applications may require remote access configuration by client.*

*Email: Munis Workflow can send emails with actionable links to process workflow from any device.*

## PERIPHERALS

### Printers

Most application output can be printed to any printer accessible from an end-user's device. Tyler recommends laser printers for universal compatibility for all applications. Workgroup class laser printers are required for select print jobs.

PRINTER TYPE	Reports	Forms	Additional Criteria/Notes
HP or HP Compatible Laser Printer	Yes	Yes	PCL 5 or above

### TylerForms Output Management Printer Requirements

TylerForms merges your application data with electronic form design templates. The results can be printed to your existing network printers, regardless where the hardware is physically located in addition to automatically emailing, faxing and archiving this output to Tyler Content Manager. TylerForms offers several libraries of form templates that are tailored to work specifically with your Tyler applications.

The following technical specifications must be met for all printers used with TylerForms Output Management.

- HP PCL 5e personality or language installed
- Automatic duplexing included and enabled
- Minimum memory - 64MB
- Minimum of 80 internal TrueType scalable fonts (80 HP font set)
- Minimum of 2 full input trays (manual feed tray not usable)
- Accommodates letter and legal-size paper stock
- Printers must have the latest firmware updates installed

### Check Printers

The following technical specifications must also be met for check printing with TylerForms Output Management.

- HP brand black/white laser jet networked printer with static IP address
- High speed USB 2.0 port

Note: Tyler does not support HP printers that have been modified with TROY brand or any other 3rd party MICR security features for check printing.

### *Recommended TylerForms Check Printers*

Please note that some of the following printers may not be available from HP directly as they change printer models often. They are generally available from HP resellers and other retailers even if HP no longer offers them directly.

HPLJ M506dn*	HPLJ M608dn* <sup>1</sup>	HPLJ M712xh
HPLJ M506x	HPLJ M608x <sup>1</sup>	HPLJ M806dn
HPLJ M605dn*	HPLJ M609dn* <sup>1</sup>	
HPLJ M606dn*	HPLJ M609x <sup>1</sup>	
HPLJ M607dn* <sup>1</sup>	HPLJ M712dn	

[\*] An additional input tray is required to meet the requirement of two full input trays.

[1] Cannot use pressure seal stock.

### Other (Non-Check) TylerForms Printers

Some non-check form designs required duplexing capabilities.

Munis is designed for and guaranteed to work with approved HP black and white laser jet printers meeting the minimum requirements. For non-check forms Tyler will make every effort to print to other networked printers if they meet the technical requirements. While Tyler routinely and successfully prints other forms to many brands of laser printers, if we are unable to print to a printer on your site, clients may be required to provide an alternate printer. Tyler does not program tray calls or support tray calls. Printing from specific trays can and should be managed and controlled by clients at the printer level.

### Scanners

Tyler Content Manager (TCM) supports two methods of batch scanning documents. Documents can be scanned to a file system (e.g. network share), then batch imported into TCM. Documents can also be scanned directly into TCM using a scanner attached to a workstation.

The first method only requires a scanner capable of scanning to a file system. The second method requires a TWAIN compliant scanner, though Tyler highly recommends using an approved scanner referenced in the Scanner Compatibility Chart below for full functionality. Tyler also recommends verifying driver compatibility with your operating system for any scanner considered.

SCANNER BRAND	SCANNER MODEL	
Canon	CR-190i	DR-7550C
	DR-2510C	DR-7580
	DR-3010C	DR-9050C
	DR-4010C	DR-9080C
	DR-5010C	DR-M160
	DR-6050C	DR-X10C
	DR-M140	DRC-125
	DR-M160	DR-C125
	DR-6030C	
Fujitsu	Fi-5750C	Fi-6240Z
	Fi-5900C	Fi-6670
	Fi-5990C	Fi-6770
	Fi-6040Z	Fi-7160
	Fi-6110	Fi-7260
	Fi-7180	Fi-7280
	Fi-6110	
Graphex	CS500 Pro*	
Hewlett Packard (HP)	ScanJet 8250*	ScanJet 8390*
	ScanJet 8350*	
Panasonic	KV-S7075C	KV-S1057C
	KV-S5046H	KV-S1027C
	KV-S2087	KV-S1015C
Xerox	Documate 152*	

\* Not fully supported. These scanners have not been tested in our lab. They are in use by one or more customers and may have issues that have not been reported.

### *Barcode Label Printer for Invoice Batch Scanning*

Batch Invoicing using TCM requires a desktop bar code label printer for each workstation that enters invoices. At the time of invoice entry, a placeholder document is created in TCM and the printer prints a barcode label that's affixed to each invoice. When batch scanning / importing to TCM, the barcode is used to automatically link the invoice to the respective application record.

While any label printer capable of printing PDF images will work, Tyler recommends one of the following certified models.

MODEL	RECOMMENDED LABELS
Zebra GX420d	Zebra Z-Select 4000D 3" x 1" labels. Mfg. Part: 10010043
	Mfg. Part: GX42-202411-000
Brother QL-700	Brother DK-1201 standard address labels

### *ExecuTime Time Collection Devices (Clocks)*

Collecting Time entries is a key component to the system, and incorporating the ability to manage time around specific criteria and policies for departments that are in operation seasonally, Monday through Friday or 24x7/365 is the key for a client-wide enterprise system.

ExecuTime offers two levels of on-line devices. The difference in the levels is the functionality at the device. Both can be configured to identify the employee by reading Proximity, Magnetic Stripe, Barcode and/or Biometric (fingerprints). They both are equipped with a key pad so simple entry of a badge number is also an option for identification. They require an electrical outlet (POE is also an option) and Ethernet connection (to be provided by the customer). *Basic Functionality* devices allow employees to clock in/out, view hours, view benefit accruals and approve timesheet. *Advance Functionality* devices allow employees to clock in/out, view hours, view benefit accruals, approve timesheet, request time off and some job costing.

ExecuTime also supports an off-line clock that can be used in remote locations where internet and/or network connectivity is not an option. These devices will capture employee in/out times and store the entries until it is connected to the network so all entries can be passed to ExecuTime Software and populate the appropriate employee timesheet.

For clients currently utilizing proximity, magnetic stripe or barcode badge(s), we recommend a sample badge be supplied to Tyler for testing to confirm compatibility. If clients are interested in purchasing new badges to use with the time collection devices, we recommend one of the following badge types:

- Proximity – HID 26 bit
- Magnetic Stripe – Track 1 or 2
- Barcode – 3of 9, code 39

Clients may purchase badges directly from a vendor of their choice. For pricing and product information, we recommend the following source: IDWholesaler: [www.idwholesaler.com](http://www.idwholesaler.com)

Fingerprint readers or keypad code entry devices are also supported and can eliminate the need for a badge. Fingerprint readers add an additional layer of accountability and can be an ideal way to insure employee time entry and eliminate buddy punching.



## Appendix A – Vendor Questionnaire Functional Questions

Upon review of the RFQ responses to the requirements we are asking the vendors to provide additional information and clarification to the following questions.

In the solution proposed please answer the following:

1. Clearly define all 3<sup>rd</sup> party/bolt on products in your response by name/software/company and explain the relationship.
  - a) Have you used this 3rd party before?
  - b) Describe the integration process.
  - c) Who is responsible for customization and customer service of the 3rd party bolt on?

**TYLER RESPONSE:** Tyler Technologies is excited to reply to the City of Pembroke Pines Bid#TS-04-B ERP System Software and Implementation as a natively integrated ERP System. All software offerings submitted as part of this bid opportunity are Tyler products.

Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.

### *File-based integration*

Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.

Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.

## App Connectors

Munis includes a variety of App Connectors; pre-packaged web service integrations providing plug-and-play support with specific third-party applications. Tyler develops and maintains all App Connectors, requiring no development expertise from the client to configure.

## Munis API Suite

Tyler has extensive experience utilizing web services and APIs for application integrations. Historically, Munis APIs were provided to individual clients as part of their contract or statement of work. In 2018, Tyler's Munis Open API initiative was created to provide consistent, developer friendly, well documented, integration points through industry best practices. The Munis Open API Suite will include a library of exposable application programming interfaces (APIs), and API Recipes for integrating external applications with Munis. Comprehensive developer API documentation and resources will also be provided through Tyler's Developer Portal.

Munis APIs are a collection of API resources (or endpoints) packaged together per product module, e.g., General Ledger, Accounts Receivable. All Munis APIs conform to OpenAPI 3.0 specifications for Representational State Transfer (RESTful) based architecture and use OAuth2 protocol for user authorization. REST is the industry preferred standard for API development and scales very well since the client and server are loosely coupled. With REST, the server is free to change the exposed resources without breaking existing resources. Data can be exchanged in a flexible format using either JSON (default) or XML.

API recipes included with Munis APIs are designed to make integrations more accessible. Recipes provide an aide to developers creating their own integrations. While Munis APIs are specific to a single module, an API Recipe includes a combination of API resources commonly used to accomplish a specific integration.

Tyler's web-based Developer Portal provides developers with documentation and testing resources for APIs and API Recipes through an industry standard experience built on Swagger UI and API framework. Documentation includes an explanation of all resources available within each module API, including associated operations and data elements. Developers can view examples of API calls and responses and test calls in an interactive manner.

2. . Does the ERP system allow for different rules/calculations/etc. based on what collective bargaining agreement an employee is under (as well as different rules based on date of hire for members of the same union)?
  - a. How does the ERP system allow for retirees to be included in the data base?

**TYLER RESPONSE:** Yes, this can be accomplished. Employees would be classified with a different Group/BU in which different rules can be applied.

There are various ways to classify retired employees. Retirees will exist within Employee Master and can be identified using Employee Groups, Personnel Status, etc. A separate employee status is available for retirees who are classified as benefits only. Benefits only employees can be processed separately from the standard payroll.

3. We understand that each vendor had a few items that were “Not Supported” in their proposal. We would like more detail on those items from the vendor. Why is the requirement not supported? We want to make sure they understand the requirement, (what we are asking for) and what they mean by not supported.

**TYLER RESPONSE:** Please see the attached updated version of Attachment M - Functional Requirements. The comments highlighted in yellow denote those that differ from the initial RFQ submission with the exception of ID’s 941-1135.

The Public Safety requirements ranging from 941 through 1135 now include responses based strictly on available functionality within the ERP system. As noted in the comments, some of the requirements would be covered with Tyler’s Public Safety software, but this is not included with our core ERP solution.

Please note that upon further review and in cadence with our Munis ERP standard version upgrades, improved functionality. The requirements for ID’s 98, 339, 347, 348, and 415 have been updated to “Out of the box.”

Lastly, as noted in the comments, ID’s 645, and 884-940 are not supported as Tyler does not offer a Student Information Systems solution for the State of Florida, but we are happy to review possible integration with other parties in the market.

4. We would like the SIS companies to explain their position and how they expect to incorporate with another ERP software since they do not offer any of the other requirements.

**TYLER RESPONSE:** Tyler Technologies is not bidding a SIS system as part of this RFP Reply.

5. We would like the vendors to tell us how much time they typically need to provide the evaluation committee an appropriate overview of their product.

**TYLER RESPONSE:** Tyler Technologies typically responds to more than 100 formal ERP RFP’s each year. A significant number of these projects and related evaluations are facilitated with public sector

consulting agencies. In our wide industry experience, we would suggest at least a three-day demonstration/product overview for the City. These presentations are traditionally 8:30am to 5:00PM affairs with additional follow up as needed. We are happy to work with both Panorama and the City to create an agenda that works for you based on requested RFP functionality.

6. If you're utilizing a 3rd party bolt on for SIS solution, which vendor would you propose?
  - a. Explain your experience and relationship with vendor.

**TYLER RESPONSE:** Tyler Technologies does not offer a SIS Solution for the Florida marketplace. Our core ERP application set, Munis, can and will offer core financial, human capital management and payroll solutions for both the Finance and Payroll offices of the Pembroke Pines Charter Schools. We are open and willing to communicate and discuss any necessary or applicable integrations with a selected SIS offeror.



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Network Infrastructure		
1 Network Protocols and Remote Access; Interoperability		
Please provide an overview of the product capacity in terms of network protocols. Information here includes overview of LAN, WAN, Data Center and Network Services.	Notes ==>	All traffic between end user and server is over TCP/IP / HTTPS.
2 Authentication		
Please describe how authentication is managed by the product. Authentication is how authorized users are allowed in and unauthorized users are kept out of the system. Industry standards include: SSL, LDAP, Active Directory, Single Sign-on.	Notes ==>	Microsoft Active Directory is used and required for authentication with select on-premises hosted Tyler ERP applications. Tyler SaaS hosted clients can use Active Directory authentication with select Tyler applications, though an existing Azure AD or ADFS [1] environment is required. SaaS hosted applications not supported with clients Active Directory use unique, Tyler provided credentials. The setup and maintenance of client Active Directory, Azure AD, and/or ADFS environment is the responsibility of the client.  [1] Microsoft ADFS for OpenID with Windows Server 2016 forest functional level recommended when using ADFS; ADFS WS-Federation with Windows Server 2012 forest functional level also supported.
3 Server Hardware and OS		
Please describe server hardware and operating system options. Server types include IBM iSeries (AS/400), Intel, AMD, HP x86, HP RISC, Dell x86, other. Server deployments include physical servers and virtual servers. Virtual server technologies include VMWare and Microsoft Hyper-V. Server Operating Systems (OS) include Windows and Linux	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
4 Storage Sizing and Requirements		
Please provide an overview of typical storage needs for the product based on a given baseline. Configurations include server-attached storage and SAN's (Storage Area Networks). Storage requirements are often a function of transaction volumes and archiving policies as well as numbers of instances and users, but please provide some bench marks as a starting point.	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
5 System Administration and Availability		



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
<p>Please provide a brief overview of the administration needs and options for the product. Relevant issues include: backups; backup methods, disaster recovery, upgrades, service packs, fixes; code layers; physical servers, virtual servers; Support for 8x5, 24x7 or other scheduled timeframe for system availability.</p>	Notes ==>	<p>Common application administration of Tyler applications includes user and security administration, printer, workflow, and release update administration. On-premises clients must also perform general server operating system maintenance and basic database administration tasks.</p> <p>Much of Tyler application administration has been designed in such a way that clients can opt for a single department centrally administer tasks such as workflow and security or choose to decentralize administration to other departments. For example, sites can choose to have security administration of all users in the Payroll Department managed by a Payroll administrator or all Workflow specific to the Finance Department managed by someone in that department rather than a single department, such as the IT Department, managing all user security and workflow administration.</p> <p>In addition, Tyler offers a Systems Management support service for on-premises clients. This provides operating system and database administration services, such as installations, upgrades, routine maintenance, and database tuning by a specialized department of Tyler support technicians.</p> <p>Server environment deployment and configuration also plays a role in how much time is required maintaining the system. For example, clients who choose a virtualized, high-availability configuration with off-site replication requires additional resources than clients who opt for a standard dedicated solution. Clients hosted with Tyler SaaS, will see even more limited need for onsite technical resources as nearly all aspects of administration including maintenance of operating system, databases, release updates and backup maintenance are the responsibility of dedicated Tyler SaaS Support Engineers.</p>
6 System Performance		
<p>Please describe an overview of performance considerations that may be applicable to the product including topics such as response times for data searches, data queries; transaction commits, reports should all be good. Bottlenecks may include processor power, memory; communication channels; network speeds; gateway and router bottlenecks; remote connectivity issues; security issues; application logic; page file or virtual memory settings. Performance can be influenced by issues throughout the full technology stack which includes: Applications, Middleware, Database, Operating System, Virtual Machine, Servers, Storage</p>	Notes ==>	<p>Tyler provides fully scalable solutions to meet the requirements of all organizations, regardless of size, and can grow to meet increasing demands. Tyler’s applications perform well on modest networks with a handful of users—or on large, distributed networks with hundreds of users. Tyler applications have features to ensure large organizations run effectively. And smaller clients don’t outgrow Tyler solutions—they easily expand to meet clients changing needs.</p> <p>Tyler applications are based on an n-tier architecture and can scale both vertically or horizontally eliminating limitations for user growth. Based on client feedback and experience, internal testing and running our own SaaS hosting service, we have learned to tailor Tyler applications specific to a client based on their size and needs.</p>
7 Cloud Hosting and Services		
<p>Please describe the options available in terms of hosting strategies. Topics to cover may include remote servers, managed services, single-tenant or multi-tenant SAAS; cloud services integrated with traditional, on premise systems.</p> <p>Additionally, please describe how the product may function in a situation where field office locations have poor connectivity or periods of connectivity blackout.</p>	Notes ==>	<p>Tyler is proposing on-premises and Tyler SaaS hosting options. All applications are real-time web applications and require a network connection between end-user and application server (regardless of where it's hosted). Tyler applications also include several mobile apps that do have "store and forward" capabilities, allowing users to continue work without internet access.</p>



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Solution Architecture		
8 Software Architecture		
Please provide an overview of the product architecture. Topics to consider include technology stack layers, # of tiers, runtime stack, SDK, development tools, middleware, development frameworks, procedural languages, server OS, databases, server types, scalability strategies.	Notes ==>	Tyler applications are multi-tiered, typically consisting of a 3-tier architecture; web, application, and database tiers. Tyler applications are deployed exclusively on industry leading Microsoft stack of technologies, utilizing Windows Server, SQL Server, Active Directory, Internet Information Services, Office, SQL Server Reporting Services, and SQL Server Analysis Services. Most industry standard server deployments are supported including bare-metal and virtualized environments, high availability configurations, and dedicated testing environments. All Tyler applications can also be hosted in the cloud by leveraging Tyler’s SaaS hosting service.
9 Supported Databases		
Please describe databases supported. Supported database types may include: SQL Server (2005, 2008); Oracle, MySQL, DB2, Postgres, Other; Important database attributes may include Integration Services, Reporting Services, Analysis Services	Notes ==>	Microsoft SQL Server 2012, 2014, 2016, 2017.
10 Development, Configuration and Customization Environments		





Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
Relevant terminology includes: Personalization, Customization, Configuration, Code Layers, UDFs, UDTs, User Exits, SDK, Protection from upgrades, Upgrade Maintenance, Form Customization, Reports Customization, Search Customization, Data Validation, Alerts, Gap Analysis, Data Dictionary	Notes ==>	<p>Release Updates - Tyler deploys industry leading technology and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy. Application upgrades for on-premises clients are installed by Tyler Systems Management support services. Tyler SaaS hosted clients request and schedule a time convenient for them to have application upgrades installed by SaaS support engineers during off hours.</p> <p>End-users must be out of the entire application during the upgrade process. The time it takes to apply these upgrades can vary significantly depending on number variables such as modules owned, and database size and can range anywhere between 1 hour to an entire business day. All releases are cumulative allowing clients to can upgrade to the latest application version directly.</p> <p>Some Tyler applications also include incremental software updates that can clients can install themselves. These tools can be used to manually install individual updates or scheduled to install all available updated automatically. The typical install time for this update type can vary depending on the number updates applied, but typically ranges from a couple minutes to an hour.</p> <p>Tyler provides a dedicated Test application environment with most deployments to install new updates. Tyler highly recommends clients use this environment to familiarize themselves with new features and enhancements prior to installing to the Production environment.</p> <p>Customization - Tyler applications are developed as commercial off-the-shelf (COTS) solutions and include various levels of configuration and customization. All configuration and customization tools are application-based allowing end-users and administrators alike to tailor the system to their specific business needs. In addition, by using application-based tools, all customizations are retained upon system upgrade eliminating timely re-tooling, conversions or re-programming typically required from other systems.</p> <p>Data Dictionary Data dictionaries are provided for Munis and EnerGov database views. These are made available to all clients with a valid maintenance agreement or those who sign a non-disclosure agreement (NDA).</p>
11 Client Types including Web Interfaces and Portals		
Please describe client types applicable to the product. Relevant attributes include: Thick, Thin, Browser Based, Citrix, Terminal Services, Authentication; Netbooks, iPads, Smartphones (iPhone, Android, Blackberry, Windows Mobile), Macintosh, Browser Add-On's, if any. Data Collections devices may include: MES (Manufacturing Execution Systems); Bar Code Readers, Scales, RFID, Intermec, Symbol, WinWedge, Touch Screens, RF Handhelds.	Notes ==>	Refer to Tyler System Specifications attachment.
12 Workflow and Business Process Modeling Platform		



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Please provide an overview of the product capabilities in terms of configuration of workflows. Workflow and Business Process Modeling Platform include methods for collaboration and communication.	Notes ==>	<p>Tyler applications feature integrated, real-time workflow to help clients automate common tasks such as approval requests, notifications, and alerts. Workflow can be setup for nearly any process available in Tyler applications and include a number customization options to meet each client’s unique business requirements.</p> <p>Workflow rules can include one or hundreds of users and / or roles for a single process. Hierarchies can also be easily configured so specific users are only involved after other specified users have already approved or been notified first. Some Tyler applications also include the ability to define contingencies so that users are only included in workflow if specific data conditions are met for a particular process. For example, if a requisition created in the financial system is over a certain dollar amount only require approval from the Finance Director, or time off requests from a specific department only notify the respective department supervisor.</p> <p>To prevent gridlock paper-based workflow practices sometimes experience, alternate approvers can also be defined. If a workflow approver is out of the office for example, another user can be set as a “proxy” to handle all approval requests until the original user has returned. In select applications, an alternate approver can also be included in the workflow process so that after a specified time of no activity (hours, days, months, etc.), the workflow process is automatically forwarded to another user.</p> <p>Workflow users can receive, and with select applications, take action on, notifications, approval requests, and alerts a number of ways including in the application, automated emails, and, with some Tyler applications, Workflow mobile apps.</p> <p>Finally, integrated auditing ensures both workflow processes and the actual changes to workflow rules are tracked to be reviewed at any time.</p>
13 Data Migration and Conversion		
Please provide a brief overview of tools and methods accompanying the product with regard to data migration. Data migration provisions include: Table Schemas, Migration Templates, Migration Programs, Test Scripts, Static, Transactional, History. Considerations include data object calls; API's, Web Services; Data Validation; Bridge file formats; Data conversion will vary for master setup data vs. transactional data.	Notes ==>	<p>Tyler has a complete data conversion service and department that can write custom data conversion programs to convert history records from a legacy system. This service is a standard component of all Tyler implementations.</p>
14 Interfaces / System Integration		



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Please provide an overview of the product capabilities in terms of interfaces and integration with other applications. Interface devices may include: .CSV,.XLS, XML, EDI, Connectors, APIs, Messaging; Web Services; Integration Hubs	Notes ==>	<p>Munis</p> <p>Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler’s Munis Open API initiative will also eventually provide a suite of module API’s for custom interface development.</p> <p>Full Integrated ERP Solution</p> <p>When evaluating a new ERP system, it is very common clients are looking to replace several disparate systems with a single, integrated ERP solution. Since every Munis application is integrated with one another, sharing a single database, many existing interfaces are commonly eliminated when moving from several disparate systems. For example with Munis, an employee raise initiated by a Human Resources personnel action, automatically updates Payroll and the General Ledger.</p> <p>File-based integration</p> <p>Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.</p> <p>Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.</p> <p>Microsoft Office Integration</p> <p>Tyler applications are designed to easily integrate with the Microsoft Office suite.</p> <p>Data can be exported to Microsoft Word directly from many Tyler applications. Some applications even leverage Word's mail merge functionality allowing users to easily create and maintain form templates for completely customized presentation of application data. Word Mail Merge exports are also automatically archived in Tyler Content Manager for quick retrieval at any time.</p> <p>Applications include a variety of integrations with Microsoft Excel. Users can easily export application data directly to Microsoft Excel from most applications. Excel exports aren’t just raw data dumps; exported data maintains the same formatting as the application including dates and currency data. Many exports include a link back to the corresponding record in application. Microsoft Excel is also one of many formats supported for bulk data exports and imports, which can also be scheduled for automated processing. Munis also includes an add-in to process Next Year Budget Entry directly in Excel using web services, saving from having to retrain users on basic application navigation each budget season. Finally, many Tyler applications include integration with Microsoft Exchange calendars for appointments, meetings, and vacation requests. Email notifications and alerts can be sent using most email servers, including Microsoft Exchange.</p>
15 Security	Notes ==>	<p>Please describe the features present with the product in terms of security. Features may include: User Accounts, Roles, Groups, Functions, Tasks, Screen/Field/Data Levels, Copy, Password Expiration, User-defined fields, user-defined tables; user, field level security, record level security; user authentication; process security</p> <p>Tyler applications employ a comprehensive Role Based Access Control (RBAC) security model to facilitate the management of application access through groups of permissions - roles - and assigning those roles to any number of users. This allows administrators to maintain access for multiple users who may share common responsibilities simultaneously rather than on an individual, user basis.</p> <p>Roles can be created and customized to offer an extremely flexible level of access control within each application suite. This includes product, module and menu item access (i.e. what programs can users open), functional access (i.e. what processes can users perform) and finally, record-based and, where available, field level access (i.e. what data can users see). Role permissions can also span multiple modules within each application providing easy administration for those individuals who may “wear multiple hats”. If overlapping or conflicting permissions are applied to a user, the highest priority / least restrictive access is granted to that user.</p> <p>Once application roles are created, user accounts are added to the system, either manually or imported from Active Directory and roles are then assigned to a user, providing access to the system. All of this is done using easy-to-use, integrated applications, requiring very little technical expertise.</p> <p>Traditionally, application security is centrally administered by a sites IT department. While this is still possible within Tyler applications, a unique and useful feature commonly</p>
16 Forms and Report Generation		



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Notes ==>	Description of Capacity
Please describe the reporting capabilities present with the product and the general breakdown of reporting options. Please note that this item overlaps with functional requirements. Report types include scheduled and on-demand, graphical and tabular. Output methods include dashboard, preview, print, export (.pdf, .xls., .csv, more). Financial reports need to provide for rollups, consolidations, and drill-downs. Related terms include: SSRS, Data Warehousing, BI, Analytics, OLAP, KPI's.		<p>Munis</p> <p>Public sector entities need multiple ways to get information out of their ERP software. That’s why Munis provides more than just traditional paper-based reports for accessing and using critical information. It is designed to provide you with the information you need in the format you want—instantly.</p> <p>Nearly every application screen throughout Munis includes the ability to create a report of the current dataset using a variety of output options (print, PDF, Word, Excel). An integrated “query wizard” can be used to guide users through the selection process to create complex queries. These queries can be saved for future and even shared with fellow users to quickly and easily access pre-defined searches at moment’s notice. Leveraging the integrated Munis Scheduler, reports can also be scheduled to automate delivery and printing.</p> <p>Munis Analytics and Reporting includes several tools to help clients improve data management, analysis, information sharing, and delivery. Dashboards and Central applications provide immediate, out-of-the-box views of key information that can be configured by user based on role and preference. Robust Microsoft Office integration provides seamless data exports to familiar Office formats for further analysis.</p> <p>Support for industry-leading business intelligence and ad hoc reporting tools offer even further flexibility and customization while still using existing application permissions. Munis database cubes, built on Microsoft SQL Server Analysis Services, allow you to make better business decisions by easily viewing comparisons, patterns, and trends with Microsoft Excel PivotTable and PivotChart reports. Create, manage, and setup subscriptions to complex, interactive reports with SQL Server Reporting Services and deliver them in a variety of formats.</p> <p>Tyler CAFR Statement Builder simplifies the development of your Comprehensive Annual Financial Report (CAFR), create audit-ready CAFR statements and schedules, streamlining the process from year to year. Additionally, Tyler employs a dedicated Munis State Reporting team responsible for ensuring you maintain compliance with state and federal reporting mandates.</p> <p>EnerGov</p> <p>Strategic business performance management tools empower decision-makers by giving managers and executives the ability to analyze and report against various benchmarks in order to readily identify trends, inefficiencies, redundancies, etc. while monitoring important operational drivers of agency performance. Tyler recognizes the value in on-demand performance indicators &amp; reporting mechanisms and, as such, provides several native BI resource tools that facilitate process automation, data analysis and disaggregation within the EnerGov Enterprise framework including:</p>
17	Software Upgrades	



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
Please describe the current and known future state directions of software updates. Attributes include: Frequency (Major Releases, Service Packs), Notification, Customization Impact, Push/Pull, Back Release Support, Availability of next Major Release; Fat client upgrades; Length of support; Schema updates	Notes ==>	<p>Munis</p> <p>Tyler deploys industry leading technology and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy. This includes a continuous stream of significant yet manageable updates deployed over the life of the application with minimal disruption to our clients. Application updates are provided in the following formats:</p> <p>Technology Releases (e.g. XXXX.X.X V12, XXXX.X.X V13) are typically released every 3-4 years and represent the baseline for product release, integrating technological advances, and system-wide user-interface improvements. These releases go through full process/system testing and the Early Adopter program, are only available to a limited number of clients, and only receive a single Year End Update.</p> <p>Feature Releases (e.g. 2017.1.X VXX, 2018.1.X VXX) are released annually after the initial Technology Release. These releases contain a wide variety of features including strategic enhancements, contractual modifications, client funded enhancements, and legislative changes. Feature Releases typically receive 3 Year End Updates.</p> <p>Final Releases represent the last Feature Release in a Technology Release family and typically receive 4 Year End Updates.</p> <p>Service Packs (e.g. XXXX.X.1, XXXX.X.2) are a bundle of software corrections for a given release. Service Packs are deployed through Tyler’s Managed Internet Update (MIU) and installed by the client. The MIU allows clients to download and install Service Packs and individual critical software corrections. Updates can be applied on-demand or scheduled be installed automatically.</p> <p>Year End Updates are a special Service Pack that includes specific updates required for year-end W2 and 1099 processing. These updates are deployed through Tyler’s Managed Internet Update (MIU) and installed by the client.</p> <p>All other applications</p> <p>Tyler application updates are released every quarter, in January, April, July and October. Occasionally, high priority issues arise between releases which results in a mid-release service pack which can be applied on top of the most recently released version.</p>
18 Error Handling		
Please provide an overview of error notification functionality in the product. Relevant terms include: Alerts, Alarms, Delivery, Logs, Debugging, On-Line, Audit Trails, Rollback, Tracing, Event Viewer	Notes ==>	<p>Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who looked at what and when.</p>
19 Open Source Components		
Please describe the product capability in terms of open source components. Relevant issues include: Open Source tools in technology stack, user groups, community forums, community wikis; community-contributed source code and enhancements; user conferences - what's available	Notes ==>	<p>The only open source technologies used are Oracle Java development environment with Tyler Content Manager and ExecuTime, Apache Tomcat web server hosts Tyler Content Manager, and RedHat WildFly hosts ExecuTime. Nearly all other Tyler applications use industry standard platforms based on the Microsoft stack.</p>
20 3rd Party Modules		



Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
Please describe any current third party components that may be present based on the information about the client needs provided in the RFI. Common Third Party modules include: Credit Card Authorization, Freight Carrier Integration, EDI, Financial Reporting, Warehouse Management, International Shipping Docs, Sale and Use Tax Engine, PLM, CAD - What's needed and proposed?	Notes ==>	Refer to Tyler System Specifications attachment for third-party requirements
Skills		
21 Training		
Please provide a basic overview of training methods that accompany implementaitonof the product. Implementations typically have two main training seasons: 1) Applications Training for the Core Team and Developers (done near the beginning of the Project); 2) End User Training (done near the end of the project); Training options include: Classroom Off-site, On-site, On-line, Technical, End User, Train The Trainer.	Notes ==>	Tyler provides 3 types of training: (1) high-level process and application training designed to prepare Functional Leads (new process decision-makers) with the intent being to give Functional Leads enough information and understanding to make initial re-engineered process decisions for testing and training in subsequent steps; (2) Core User training, which is a variety of training types including formal classroom training on application processes, side-by-side issue resolution training, conversion validation training, testing training and execution, report writing, cubes, and configuration training; (3) End User Training (done near the end of the phase) - which includes formal classroom training onsite and open labs for central office end users and the City's trainers who will conduct training for decentralized end users.
22 Skill Set Requirements		
Please provide an overview of the types of skillsets (in-house to the client) that are ideal for implementation and on-going operations of the product. Project and IT Roles for Implementation may include: Project Manager, Screen Developers; Report Developers; Database DBA; EDI Specialist; System Admin; Help Desk. Roles that are more technical often have require skills that are specific to the technology stack and the application software.	Notes ==>	-Project Manager - lead City resources, contract administration, partners with Tyler PM, issue resolution -Steering Committee - representation from City Leadership, escalation points, work with Project Manager and Project Sponsor to resolve issues -Project Sponsor - authorize project, provide resources and leadership throughout, support change management -Functional Leads - participate in process re-engineering, make new process decisions, reinforce new processes, determine workflow approval process, handle workflow actions -Core Users - provide process expertise, attend training, learn new processes & applications, learn configuration options, test processes, validate data conversions, learn ad hoc reporting, provide support to other City users once issue vetted by Help Desk and Tyler Support not required -End Users - attend training, practice new processes, learn information access and extraction methods -Change Management Lead - work with Tyler Change Management Lead, work with Tyler, City Sponsor, and other City resources to roll-out Change Management Plan, and ensure adoption of new processes and procedures -IT - provide crosswalk assistance and extract legacy data, maintain security and permissions options, basic database administration -EDI Specialist - minimal technical skill requirement based on Tyler's flexible interface options -Help Desk - route calls, first determining if it requires Tyler Support assistance or if it is a procedural issue that can be answered by a City resource, monitor Tyler's Support portal
Other		
23 Help and System Documentation		





Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
Please describe options typically provide in terms of training and help documentation. Help System methods and attributes include: Contextual, On-line, Wiki-based Manuals, Forums, wiki-based	Notes ==>	<p>Munis applications include a context sensitive online help function that provides field level and procedural information to assist your resources in completing program tasks. When you are in a program and select the help function, the program displays a field level description of all data elements on the screen, as well as processing options for that program. It is formatted to provide you with a general overview of the program or the selected program screen, descriptions of the fields on the screen, and procedures for completing the tasks within the program. The online help function also includes a table of contents, from which you can select help for other programs within a product. This tool is linked to the Munis Knowledgebase, allowing for immediate access to additional information and resources directly from the Help screen. There are also links to Munis Technical Support for ease in requesting assistance from a Munis expert. Our online help functionality is not customizable to clients currently.</p> <p>The Online Help Menu also ties directly into Tyler University which allows you to either take a structured course right in a Munis program or will walk you through the completion of the task you've sought help on. Tyler has developed its own inline Learning Management System (LMS), under the brand Tyler University. Tyler U is provided at no additional charge and will continue to grow and be updated with each new release of Munis. One of the options in Tyler U is to use the functionality to have its teaching capability instruct users 'on-the-fly', or mid-process. Tyler U can also teach processes from the beginning and contains an entire library of pre-requisites, coursework that Tyler Consultants will assign to users prior to attending analysis or training sessions.</p> <p>What makes Tyler U so invaluable in the learning process is that it overlays the City's Production, Train, and Test databases. This means that the coursework is using the City's actual data that is specific to the user's work. In addition, it does not require user management, usernames, or passwords since the classes are taken directly from the Munis programs and the associated user permissions. Tyler U also submits a weekly report on classes taken and provides the information directly so an assessment can be performed as to the level of study and difficulty that is ongoing.</p> <p>Finally, Tyler also maintains a complete set of documentation that is available to all users through the Munis KnowledgeBase. The Munis KnowledgeBase provides users with a single, easily accessible location to find all existing documentation on the Munis product and other widely used technology products that integrate with Munis. Included are procedure documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises and much more. Clients also have the ability to upload and submit their own customized documentation, creating a single online repository for all ERP related documents.</p>
24	Audit and Compliance	





Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area		Description of Capacity
Please include audit standards and capabilities that are native to the product. Audit and Compliance standards and attributes to consider include: FDA, SOX, ISO, Audit Logs (From/To/When/Who), IP Address, ERES, userid, date/time stamps, legal numbering; transaction types, transaction ID; System should help to prevent audit problems and provide a foundation for rapid response to ad hoc audit needs	Notes ==>	<p>Auditing</p> <p>Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who looked at what and when.</p> <p>Tyler SaaS Data Center Security</p> <p>Using key card and cameras, access to Tyler SaaS data centers is restricted to authorized personnel only. Entry attempts into the data center are audited on a regular basis by internal staff and external auditors.</p> <p>Cisco firewalls with Intrusion Protection System (IPS) module inspect all traffic to only allow connections from Tyler SaaS clients to the datacenter. Connection is established to internet-facing web applications securely over HTTPS. ERP clients are provided a VPN device as an added layer of security for accessing back-office applications through an encrypted tunnel between client site and Tyler data centers.</p> <p>ERP application access through the VPN device Traffic is encrypted using AES-256 bit, SHA-1 and Diffie Hellman group 2 for keying of the pre-shared secret. The keys are re-generated every 8 hours and we use perfect forward secrecy in the key process. Once they data comes out of the VPN, all traffic is thrown back into the firewall and checked against an ACL for source, destination and allowed services. The VPN device is included with the Tyler SaaS service and is installed and configured at the client site. In addition to the added layer of security, this device also provides Tyler application access to client intranet resources such as printers, third-party systems, and network filesystems.</p> <p>Application access must be explicitly granted by administrators. Application authentication is handled using Tyler SaaS Active Directory maintained by Client administrators. Direct database access is only granted upon request via read-only ODBC connection for ad-hoc reporting. Although hardware is shared with multiple SaaS clients, application environments are segregated per client, eliminating any possibility of accessing another client’s data.</p> <p>Tyler’s Hosting Operations follows security best practices and is subject to annual assurance audits. These include SOX-404 Financial and IT General Control conducted by an independent CPA firm, SOC 1 Type 2 and SOC 2 Type 2 conducted by an independent AICPA firm, and PCI Security Council PA-DSS and PCI-DSS validation for Tyler’s payment and payment gateway applications.</p>
25 Technical Support		
Please include a brief description of the support strategy and offerings that are typical of product implementation. Support attributes and cost variable may include: Annual Maintenance, % of Net/Gross License, Hours/Time Zones of Coverage, Escalation Process, On-line service ticket entry and monitoring, Phone Support, 24x7, 8x5, etc.; first level response, escalations.	Notes ==>	Please reference Question 6.10 in the response document for our Technical Support Overview.

## Supplier: Tyler Technologies

### Appendix A – Vendor Questionnaire Functional Questions

#### Tyler Technologies, Inc.

Upon review of the RFQ responses to the requirements we are asking the vendors to provide additional information and clarification to the following questions.

In the solution proposed please answer the following:

1. Clearly define all 3<sup>rd</sup> party/bolt on products in your response by name/software/company and explain the relationship.

- a. Have you used this 3<sup>rd</sup> party before?
- b. Describe the integration process.

- c. Who is responsible for customization and customer service of the 3<sup>rd</sup> party bolt on?

**Tyler Technologies is excited to reply to the City of Pembroke Pines Bid#TS-04-B ERP System Software and Implementation as a natively integrated ERP System. All software offerings submitted as part of this bid opportunity are Tyler products.**

**Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.**

#### **File-based integration**

**Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.**

**Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.**

#### **App Connectors**

**Munis includes a variety of App Connectors; pre-packaged web service integrations providing plug-and-play support with specific third-party applications. Tyler develops and maintains all App Connectors, requiring no development expertise from the client to configure.**

#### **Munis API Suite**

**Tyler has extensive experience utilizing web services and APIs for application integrations. Historically, Munis APIs were provided to individual clients as part of their contract or statement of work. In 2018, Tyler's Munis Open API initiative was created to provide**

consistent, developer friendly, well documented, integration points through industry best practices. The Munis Open API Suite will include a library of exposable application programming interfaces (APIs), and API Recipes for integrating external applications with Munis. Comprehensive developer API documentation and resources will also be provided through Tyler's Developer Portal.

Munis APIs are a collection of API resources (or endpoints) packaged together per product module, e.g., General Ledger, Accounts Receivable. All Munis APIs conform to OpenAPI 3.0 specifications for Representational State Transfer (RESTful) based architecture and use OAuth2 protocol for user authorization. REST is the industry preferred standard for API development and scales very well since the client and server are loosely coupled. With REST, the server is free to change the exposed resources without breaking existing resources. Data can be exchanged in a flexible format using either JSON (default) or XML.

API recipes included with Munis APIs are designed to make integrations more accessible. Recipes provide an aide to developers creating their own integrations. While Munis APIs are specific to a single module, an API Recipe includes a combination of API resources commonly used to accomplish a specific integration.

Tyler's web-based Developer Portal provides developers with documentation and testing resources for APIs and API Recipes through an industry standard experience built on Swagger UI and API framework. Documentation includes an explanation of all resources available within each module API, including associated operations and data elements. Developers can view examples of API calls and responses and test calls in an interactive manner.

2. Does the ERP system allow for different rules/calculations/etc. based on what collective bargaining agreement an employee is under (as well as different rules based on date of hire for members of the same union)?

- a. How does the ERP system allow for retirees to be included in the data base?

**Yes, this can be accomplished. Employees would be classified with a different Group/BU in which different rules can be applied.**

**There are various ways to classify retired employees. Retirees will exist within Employee Master and can be identified using Employee Groups, Personnel Status, etc. A separate employee status is available for retirees who are classified as benefits only. Benefits only employees can be processed separately from the standard payroll.**

3. We understand that each vendor had a few items that were "Not Supported" in their proposal. We would like more detail on those items from the vendor. Why is the requirement not supported? We want to make sure they understand the requirement, (what we are asking for) and what they mean by not supported.

**Please see the attached updated version of Attachment M - Functional Requirements. The comments highlighted in yellow denote those that differ from the initial RFQ submission with the exception of ID's 941-1135.**

**The Public Safety requirements ranging from 941 through 1135 now include responses based strictly on available functionality within the ERP system. As noted in the comments, some of the requirements would be covered with Tyler's Public Safety software, but this is not included with our core ERP solution.**

**Please note that upon further review and in cadence with our Munis ERP standard version upgrades, improved functionality. The requirements for ID's 98, 339, 347, 348, and 415 have been updated to "Out of the box."**

**Lastly, as noted in the comments, ID's 645, and 884-940 are not supported as Tyler does not offer a Student Information Systems solution for the State of Florida, but we are happy to review possible integration with other parties in the market.**

4. We would like the SIS companies to explain their position and how they expect to incorporate with another ERP software since they do not offer any of the other requirements.

**Tyler Technologies is not bidding a SIS system as part of this RFP Reply.**

5. We would like the vendors to tell us how much time they typically need to provide the evaluation committee an appropriate overview of their product.

**Tyler Technologies typically responds to more than 100 formal ERP RFP's each year. A significant number of these projects and related evaluations are facilitated with public sector consulting agencies. In our wide industry experience, we would suggest at least a three-day demonstration/product overview for the City. These presentations are traditionally 8:30am to 5:00PM affairs with additional follow up as needed. We are happy to work with both Panorama and the City to create an agenda that works for you based on requested RFP functionality.**

6. If you're utilizing a 3<sup>rd</sup> party bolt on for SIS solution, which vendor would you propose?

- a. Explain your experience and relationship with vendor.

**Tyler Technologies does not offer a SIS Solution for the Florida marketplace. Our core ERP application set, Munis, can and will offer core financial, human capital management and payroll solutions for both the Finance and Payroll offices of the Pembroke Pines Charter Schools. We are open and willing to communicate and discuss any necessary or applicable integrations with a selected SIS offeror.**

Supplier: **Tyler Technologies**P A N O R A M A  
CONSULTING SOLUTIONS

Vendor Technical Fit Assessment: <VENDOR NAME>		Date:
Technical Area	Description of Capacity	
<b>Network Infrastructure</b>		
<b>1 Network Protocols and Remote Access; Interoperability</b>		
Please provide an overview of the product capacity in terms of network protocols. Information here includes overview of LAN, WAN, Data Center and Network Services.	Notes ==>	All traffic between end user and server is over TCP/IP / HTTPS.
<b>2 Authentication</b>		
Please describe how authentication is managed by the product. Authentication is how authorized users are allowed in and unauthorized users are kept out of the system. Industry standards include: SSL, LDAP, Active Directory, Single Sign-on.	Notes ==>	"Microsoft Active Directory is used and required for authentication with select on-premises hosted Tyler ERP applications. Tyler SaaS hosted clients can use Active Directory authentication with select Tyler applications, though an existing Azure AD or ADFS [1] environment is required. SaaS hosted applications not supported with clients Active Directory use unique, Tyler provided credentials. The setup and maintenance of client Active Directory, Azure AD, and/or ADFS environment is the responsibility of the client.  [1] Microsoft ADFS for OpenID with Windows Server 2016 forest functional level recommended when using ADFS; ADFS WS-Federation with Windows Server 2012 forest functional level also supported."
<b>3 Server Hardware and OS</b>		
Please describe server hardware and operating system options. Server types include IBM iSeries (AS/400), Intel, AMD, HP x86, HP RISC, Dell x86, other. Server deployments include physical servers and virtual servers. Virtual server technologies include VMWare and Microsoft Hyper V. Server Operating Systems (OS) include Windows and Linux	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
<b>4 Storage Sizing and Requirements</b>		
Please provide an overview of typical storage needs for the product based on a given baseline. Configurations include server-attached storage and SAN's (Storage Area Networks). Storage requirements are often a function of transaction volumes and archiving policies as well as numbers of instances and users, but please provide some bench marks as a starting point.	Notes ==>	Refer to Tyler System Specifications in the Proposal Response document provided as a separate attachment.
<b>5 System Administration and Availability</b>		
Please provide a brief overview of the administration needs and options for the product. Relevant issues include: backups; backup methods, disaster recovery, upgrades, service packs, fixes; code layers; physical servers, virtual servers; Support for 8x5, 24x7 or other scheduled timeframe for system availability.	Notes ==>	"Common application administration of Tyler applications includes user and security administration, printer, workflow, and release update administration. On-premises clients must also perform general server operating

		<p>system maintenance and basic database administration tasks.</p> <p>Much of Tyler application administration has been designed in such a way that clients can opt for a single department centrally administer tasks such as workflow and security or choose to decentralize administration to other departments. For example, sites can choose to have security administration of all users in the Payroll Department managed by a Payroll administrator or all Workflow specific to the Finance Department managed by someone in that department rather than a single department, such as the IT Department, managing all user security and workflow administration.</p> <p>In addition, Tyler offers a Systems Management support service for on-premises clients. This provides operating system and database administration services, such as installations, upgrades, routine maintenance, and database tuning by a specialized department of Tyler support technicians.</p> <p>Server environment deployment and configuration also plays a role in how much time is required maintaining the system. For example, clients who choose a virtualized, high-availability configuration with off-site replication requires additional resources than clients who opt for a standard dedicated solution. Clients hosted with Tyler SaaS, will see even more limited need for onsite technical resources as nearly all aspects of administration including maintenance of operating system, databases, release updates and backup maintenance are the responsibility of dedicated Tyler SaaS Support Engineers."</p>
<p><b>6 System Performance</b></p> <p>Please describe an overview of performance considerations that may be applicable to the product including topics such as response times for data searches, data queries; transaction commits, reports should all be good. Bottlenecks may include processor power, memory; communication channels; network speeds; gateway and router bottlenecks; remote connectivity issues; security issues; application logic; page file or virtual memory settings. Performance can be influenced by issues throughout the full technology stack which includes: Applications, Middleware, Database, Operating System, Virtual Machine, Servers, Storage</p>	<p><b>Notes ==&gt;</b></p>	<p>"Tyler provides fully scalable solutions to meet the requirements of all organizations, regardless of size, and can grow to meet increasing demands. Tyler's applications perform well on modest networks with a handful of users—or on large, distributed networks with hundreds of users.</p>

		<p>Tyler applications have features to ensure large organizations run effectively. And smaller clients don't outgrow Tyler solutions — they easily expand to meet clients changing needs.</p> <p>Tyler applications are based on an n- tier architecture and can scale both vertically or horizontally eliminating limitations for user growth. Based on client feedback and experience, internal testing and running our own SaaS hosting service, we have learned to tailor Tyler applications specific to a client based on their size and needs."</p>
<p><b>7 Cloud Hosting and Services</b></p> <p>Please describe the options available in terms of hosting strategies. Topics to cover may include remote servers, managed services, single-tenant or multi-tenant SAAS; cloud services integrated with traditional, on premise systems.</p> <p>Additionally, please describe how the product may function in a situation where field office locations have poor connectivity or periods of connectivity blackout.</p>	<p><b>Notes ==&gt;</b></p>	<p>Tyler is proposing on-premises and Tyler SaaS hosting options. All applications are real-time web applications and require a network connection between end-user and application server (regardless of where it's hosted). Tyler applications also include several mobile apps that do have "store and forward" capabilities, allowing users to continue work without internet access.</p>
<p><b>Solution Architecture</b></p>		
<p><b>8 Software Architecture</b></p> <p>Please provide an overview of the product architecture. Topics to consider include technology stack layers, # of tiers, runtime stack, SDK, development tools, middleware, development frameworks, procedural languages, server OS, databases, server types, scalability strategies.</p>	<p><b>Notes ==&gt;</b></p>	<p>Tyler applications are multi-tiered, typically consisting of a 3- tier architecture; web, application, and database tiers. Tyler applications are deployed exclusively on industry leading Microsoft stack of technologies, utilizing Windows Server, SQL Server, Active Directory, Internet Information Services, Office, SQL Server Reporting Services, and SQL Server Analysis Services. Most industry standard server deployments are supported including bare-metal and virtualized environments, high availability configurations, and dedicated testing environments. All Tyler applications can also be hosted in the cloud by leveraging Tyler's SaaS hosting service.</p>
<p><b>9 Supported Databases</b></p> <p>Please describe databases supported. Supported database types may include: SQL Server (2005, 2008); Oracle, MySQL, DB2, Postgres, Other; Important database attributes may include Integration Services, Reporting Services, Analysis Services</p>	<p><b>Notes ==&gt;</b></p>	<p>Microsoft SQL Server 2012, 2014, 2016, 2017.</p>
<p><b>10 Development, Configuration and Customization Environments</b></p> <p>Relevant terminology includes: Personalization, Customization, Configuration, Code Layers, UDFs, UDTs, User Exits, SDK, Protection from upgrades, Upgrade Maintenance, Form Customization, Reports Customization, Search Customization, Data Validation, Alerts, Gap Analysis, Data Dictionary</p>	<p><b>Notes ==&gt;</b></p>	<p>"Release Updates - Tyler deploys industry leading technology</p>



and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy.

Application upgrades for on-premises clients are installed by Tyler Systems Management support services. Tyler SaaS hosted clients request and schedule a time convenient for them to have application upgrades installed by SaaS support engineers during off hours.

End-users must be out of the entire application during the upgrade process. The time it takes to apply these upgrades can vary significantly depending on number variables such as modules owned, and database size and can range anywhere between 1 hour to an entire business day. All releases are cumulative allowing clients to can upgrade to the latest application version directly.

Some Tyler applications also include incremental software updates that can clients can install themselves. These tools can be used to manually install individual updates or scheduled to install all available updated automatically. The typical install time for this update type can vary depending on the number updates applied, but typically ranges from a couple minutes to an hour.

Tyler provides a dedicated Test application environment with most deployments to install new updates. Tyler highly recommends clients use this environment to familiarize themselves with new features and enhancements prior to installing to the Production environment.

Customization - Tyler applications are developed as commercial off-the-shelf (COTS) solutions and include various levels of configuration and customization. All configuration and customization tools are application-based allowing end-users and administrators alike to tailor the system to their specific business needs. In addition, by using application-based tools, all customizations are retained upon system upgrade eliminating

		<p>timely re-tooling, conversions or re-programming typically required from other systems.</p> <p>Data Dictionary Data dictionaries are provided for Munis and EnerGov database views. These are made available to all clients with a valid maintenance agreement or those who sign a non-disclosure agreement (NDA)."</p>
<p><b>11 Client Types including Web Interfaces and Portals</b></p> <p>Please describe client types applicable to the product. Relevant attributes include: Thick, Thin, Browser Based, Citrix, Terminal Services, Authentication; Netbooks, iPads, Smartphones (iPhone, Android, Blackberry, Windows Mobile), Macintosh, Browser Add-On's, if any. Data Collections devices may include: MES (Manufacturing Execution Systems); Bar Code Readers, Scales, RFID, Intermec, Symbol, WinWedge, Touch Screens, RF Handhelds.</p>	<p>Notes ==&gt;</p>	<p>Refer to Tyler System Specifications attachment.</p>
<p><b>12 Workflow and Business Process Modeling Platform</b></p> <p>Please provide an overview of the product capabilities in terms of configuration of workflows. Workflow and Business Process Modeling Platform include methods for collaboration and communication.</p>	<p>Notes ==&gt;</p>	<p>"Tyler applications feature integrated, real-time workflow to help clients automate common tasks such as approval requests, notifications, and alerts. Workflow can be setup for nearly any process available in Tyler applications and include a number customization options to meet each client's unique business requirements.</p> <p>Workflow rules can include one or hundreds of users and / or roles for a single process. Hierarchies can also be easily configured so specific users are only involved after other specified users have already approved or been notified first. Some Tyler applications also include the ability to define contingencies so that users are only included in workflow if specific data conditions are met for a particular process. For example, if a requisition created in the financial system is over a certain dollar amount only require approval from the Finance Director, or time off requests from a specific department only notify the respective department supervisor.</p> <p>To prevent gridlock paper-based workflow practices sometimes experience, alternate approvers can also be defined. If a workflow approver is out of the office for example, another user can be set as a "proxy" to handle all approval requests until the original user has returned. In select applications, an alternate approver can also be included in the workflow process so that after a specified time of no activity (hours, days, months,</p>

		<p>etc.), the workflow process is automatically forwarded to another user.</p> <p>Workflow users can receive, and with select applications, take action on, notifications, approval requests, and alerts a number of ways including in the application, automated emails, and, with some Tyler applications, Workflow mobile apps.</p> <p>Finally, integrated auditing ensures both workflow processes and the actual changes to workflow rules are tracked to be reviewed at any time."</p>
<p><b>13 Data Migration and Conversion</b></p> <p>Please provide a brief overview of tools and methods accompanying the product with regard to data migration. Data migration provisions include: Table Schemas, Migration Templates, Migration Programs, Test Scripts, Static, Transactional, History. Considerations include data object calls; API's, Web Services; Data Validation; Bridge file formats; Data conversion will vary for master setup data vs. transactional data.</p>	<p>Notes ==&gt;</p>	<p>Tyler has a complete data conversion service and department that can write custom data conversion programs to convert history records from a legacy system. This service is a standard component of all Tyler implementations.</p>
<p><b>14 Interfaces / System Integration</b></p> <p>Please provide an overview of the product capabilities in terms of interfaces and integration with other applications. Interface devices may include: .CSV, .XLS, XML, EDI, Connectors, APIs, Messaging; Web Services; Integration Hubs</p>	<p>Notes ==&gt;</p>	<p>"Munis</p> <p>Munis offers a variety of methods of interfacing with external third-party systems, including file-based import and exports and real-time web service integration through plug-and-play App Connectors. Tyler's Munis Open API initiative will also eventually provide a suite of module API's for custom interface development.</p> <p>Full Integrated ERP Solution</p> <p>When evaluating a new ERP system, it is very common clients are looking to replace several disparate systems with a single, integrated ERP solution. Since every Munis application is integrated with one another, sharing a single database, many existing interfaces are commonly eliminated when moving from several disparate systems. For example with Munis, an employee raise initiated by a Human Resources personnel action, automatically updates Payroll and the General Ledger.</p> <p>File-based integration</p> <p>Munis includes several file-based interfaces provided through integrated Munis applications and designed for end users. Unlike many legacy systems that require a database administrator to import or export data with their system, users can easily import</p>

or export data with Munis through point-and-click user interface. User-defined templates specify the data layout for a specific system, so users can quickly choose the appropriate template at the time of import/export. Munis also includes interface templates for commonly used third-party systems out of the box. File-based interfaces can also be scheduled for one-time or recurring, automated processing.

Munis imports can be configured with Munis Workflow to send automated notifications or approval requests before the data updates production records. Workflow business rules can be set on a variety of data conditions specific to the imported data. This includes if data causes an account to go over budget, is over a certain dollar amount, or effects a specific segment of your general ledger. After all workflow rules are been approved, imported data is moved to production records. Depending on the process, imports can also be rejected at the item or file level; rejected imports can be resubmitted at any time.

**Microsoft Office Integration**  
Tyler applications are designed to easily integrate with the Microsoft Office suite.

Data can be exported to Microsoft Word directly from many Tyler applications. Some applications even leverage Word's mail merge functionality allowing users to easily create and maintain form templates for completely customized presentation of application data. Word Mail Merge exports are also automatically archived in Tyler Content Manager for quick retrieval at any time.

Applications include a variety of integrations with Microsoft Excel. Users can easily export application data directly to Microsoft Excel from most applications. Excel exports aren't just raw data dumps; exported data maintains the same formatting as the application including dates and currency data. Many exports include a link back to the corresponding record in application.

Microsoft Excel is also one of many formats supported for bulk data exports and imports, which can also be scheduled for automated processing. Munis also includes an add-in to process Next Year Budget Entry directly in Excel using web services, saving from having to retrain users on basic application navigation each budget season. Finally, many Tyler applications include integration with Microsoft Exchange calendars for appointments, meetings, and vacation requests. Email notifications and alerts can be sent using most email servers, including Microsoft Exchange. App Connectors

Munis includes a variety of App Connectors; pre-packaged web service integrations providing plug-and-play support with specific third-party applications. Tyler develops and maintains all App Connectors, requiring no development expertise from the client to configure. Munis API Suite

Tyler has extensive experience utilizing web services and APIs for application integrations. Historically, Munis APIs were provided to individual clients as part of their contract or statement of work. In 2018, Tyler's Munis Open API initiative was created to provide consistent, developer friendly, well documented, integration points through industry best practices. The Munis Open API Suite will include a library of exposable application programming interfaces (APIs), and API Recipes for integrating external applications with Munis. Comprehensive developer API documentation and resources will also be provided through Tyler's Developer Portal.

Munis APIs are a collection of API resources (or endpoints) packaged together per product module, e.g., General Ledger, Accounts Receivable. All Munis APIs conform to OpenAPI 3.0 specifications for Representational State Transfer (RESTful) based architecture and use OAuth2 protocol for user authorization. REST is the industry preferred standard for API development and scales very well since

the client and server are loosely coupled. With REST, the server is free to change the exposed resources without breaking existing resources. Data can be exchanged in a flexible format using either JSON (default) or XML. API recipes included with Munis APIs are designed to make integrations more accessible. Recipes provide an aide to developers creating their own integrations. While Munis APIs are specific to a single module, an API Recipe includes a combination of API resources commonly used to accomplish a specific integration. Tyler's web-based Developer Portal provides developers with documentation and testing resources for APIs and API Recipes through an industry standard experience built on Swagger UI and API framework. Documentation includes an explanation of all resources available within each module API, including associated operations and data elements. Developers can view examples of API calls and responses and test calls in an interactive manner.

EnerGov  
Tyler's EnerGov solution is integrated with Tyler Cashiering, Tyler's Munis solution, Tyler's Incode solution, Tyler Content Manager, Tyler Asset Maintenance, Tyler Incident Manager, Esri ArcGIS Server, Esri ArcGIS online, and Voxeo IVR.

Tyler's EnerGov solution is also integrated with the Microsoft Suite of products, allowing for export via Word, Excel, or CSV file. Additionally, EnerGov provides the ability to upload Microsoft files to records through the application, including permits, plans, inspections, properties, contacts, etc, and quickly open the files through the record. Tyler- EnerGov is also integrated with Microsoft Exchange allowing for seamless calendar integration.

EnerGov provides industry-pioneering and award-winning ESRI-based GIS integration that introduces a new dimension of visualization and analysis capabilities to end users, executive

stakeholders and GIS professionals alike. EnerGov GIS adds a powerful facet to the EnerGov suite of products by enabling a GIS-centric approach to an agency's business process management. Below you will find additional detailed information regarding some inner workings of the tightly integrated GIS technology provided by EnerGov and ESRI. All EnerGov communication with ESRI ArcGIS and spatial data (aside from the history service) takes place via ArcGIS map services (i.e. EnerGov's integration with ArcGIS consumes feature sets / layers that the agency chooses to publish).

EnerGov Live Link: Integrated (real-time) Address, Parcel and Owner querying within EnerGov for validation requirements, buffering with label creation, map analysis, etc.

GeoRules: Ability to initiate a spatial query, and return data from GIS to either, map a value to a field, add a fee to a record, or even adjust the workflow for a record (i.e. add an inspection to a permit workflow if the permit location is in a flood plain)

GIS History Writing: Ability to capture spatial information about records created in EnerGov (permits, plans, inspections etc) and transmit this data to an "EnerGov" polygon layer in your SDE database, so maps demonstrating concentration and trends can be designed in ArcGIS

EnerGov Spatial Collections: Ability for your users to create their own spatial features on the map (i.e. draw a polygon) in order to create an EnerGov record associated to this shape's geometry. For instance, if I issue an Encroachment permit to do some work on a sidewalk in the right of way, your users could draw a circle around this piece of sidewalk, and permit against that area, instead of the parcel or address.

Routing: Ability to route inspections and cases utilizing a routing service or network analyst.

Parcel Split/Recombine Service: The EnerGov Parcel Split / Recombine Service (.exe) was developed to detect changes in the geometric



		<p>variations (shape) of parcels / polygons over time (i.e. splits, recombines). By using this service, EnerGov can compare the current shape of a parcel polygon with the historical shape as stored in the EnerGov Polygon History Feature Class. If changes are detected, EnerGov will flag any records associated with the historical parcel polygon and provide the user with a visual representation of those cases as well as the old and new parcel shape. The user then has the ability to associate the preexisting cases with the new parcels / polygons.</p> <p>Tyler's EnerGov solution also offers a full suite of APIs designed to expose core EnerGov business objects which are utilized for interfacing with other external applications. The APIs are exposed as a RESTful JSON service layer installed as an IIS based application. Below is a visual representation of the architecture of our API."</p>
<p><b>15 Security</b></p> <p>Please describe the features present with the product in terms of security. Features may include: User Accounts, Roles, Groups, Functions, Tasks, Screen/Field/Data Levels, Copy, Password Expiration, User-defined fields, user-defined tables; user, field level security, record level security; user authentication; process security</p>	<p><b>Notes ==&gt;</b></p>	<p>"Tyler applications employ a comprehensive Role Based Access Control (RBAC) security model to facilitate the management of application access through groups of permissions - roles - and assigning those roles to any number of users. This allows administrators to maintain access for multiple users who may share common responsibilities simultaneously rather than on an individual, user basis.</p> <p>Roles can be created and customized to offer an extremely flexible level of access control within each application suite. This includes product, module and menu item access (i.e. what programs can users open), functional access (i.e. what processes can users perform) and finally, record-based and, where available, field level access (i.e. what data can users see). Role permissions can also span multiple modules within each application providing easy administration for those individuals who may "wear multiple hats". If overlapping or conflicting permissions are applied to a user, the highest priority / least restrictive access is granted to that user.</p>

		<p>Once application roles are created, user accounts are added to the system, either manually or imported from Active Directory and roles are then assigned to a user, providing access to the system. All of this is done using easy-to-use, integrated applications, requiring very little technical expertise.</p> <p>Traditionally, application security is centrally administered by a sites IT department. While this is still possible within Tyler applications, a unique and useful feature commonly employed by clients, is the ability to decentralize security administration by application module to specific users or groups of users. For example, a Finance Director can be configured with permissions to maintain access specific to Munis General Ledger and Budgeting program, process and data in any role and then assign those roles to end-users requiring such access. This ensures those most familiar with the fields, parameters and processes are responsible for maintaining appropriate security rather than those in IT who may be less familiar with specific user tasks."</p>
<p><b>16 Forms and Report Generation</b></p> <p>Please describe the reporting capabilities present with the product and the general breakdown of reporting options. Please note that this item overlaps with functional requirements. Report types include scheduled and on-demand, graphical and tabular. Output methods include dashboard, preview, print, export (.pdf, .xls, .csv, more). Financial reports need to provide for rollups, consolidations, and drill-downs. Related terms include: SSRS, Data Warehousing, BI, Analytics, OLAP, KPI's.</p>	<p><b>Notes ==&gt;</b></p>	<p>"Munis Public sector entities need multiple ways to get information out of their ERP software. That's why Munis provides more than just traditional paper-based reports for accessing and using critical information. It is designed to provide you with the information you need in the format you want—instantly.</p> <p>Nearly every application screen throughout Munis includes the ability to create a report of the current dataset using a variety of output options (print, PDF, Word, Excel). An integrated "query wizard" can be used to guide users through the selection process to create complex queries. These queries can be saved for future and even shared with fellow users to quickly and easily access pre-defined searches at moment's notice. Leveraging the integrated Munis Scheduler, reports can</p>

also be scheduled to automate delivery and printing.

Munis Analytics and Reporting includes several tools to help clients improve data management, analysis, information sharing, and delivery. Dashboards and Central applications provide immediate, out-of-the-box views of key information that can be configured by user based on role and preference. Robust Microsoft Office integration provides seamless data exports to familiar Office formats for further analysis.

Support for industry-leading business intelligence and ad hoc reporting tools offer even further flexibility and customization while still using existing application permissions. Munis database cubes, built on Microsoft SQL Server Analysis Services, allow you to make better business decisions by easily viewing comparisons, patterns, and trends with Microsoft Excel PivotTable and PivotChart reports. Create, manage, and setup subscriptions to complex, interactive reports with SQL Server Reporting Services and deliver them in a variety of formats.

Tyler CAFR Statement Builder simplifies the development of your Comprehensive Annual Financial Report (CAFR), create audit-ready CAFR statements and schedules, streamlining the process from year to year. Additionally, Tyler employs a dedicated Munis State Reporting team responsible for ensuring you maintain compliance with state and federal reporting mandates.

EnerGov Strategic business performance management tools empower decision-makers by giving managers and executives the ability to analyze and report against various benchmarks in order to readily identify trends, inefficiencies, redundancies, etc. while monitoring important operational drivers of agency performance. Tyler recognizes the value in on-demand performance indicators & reporting mechanisms and, as such, provides several

	<p>native BI resource tools that facilitate process automation, data analysis and disaggregation within the EnerGov Enterprise framework including:</p> <p>EnerGov utilizes SAP Crystal Reports as its primary reporting engine providing the ability to report against any field (both inherent and agency defined) in the database; all reports within EnerGov can be exported to a variety of formats (i.e. .pdf, .xls, .rtf, .doc, .rpt) and distributed via email to designated parties.</p> <p>Built in exporting to PDF, Word, Excel, Rich Text Format Color Charts and Maps Advanced Report Navigation Automated Report Generation &amp; Distribution Global &amp; Modular Reporting Digital Dashboards</p> <p>EnerGov provides system users with a unique view of process information through the use of Digital Dashboards. These graphical tools allow managers et.al to monitor the contribution of the various departments throughout the enterprise as well as the ability to gauge exactly how well a specific department is performing in the aggregate; in effect, digital dashboards allow agencies to capture and report specific data points from various departments (and users) within the organization thereby providing a graphical "snapshot" of performance while gaining total visibility of all systems instantly.</p> <p>Visual presentation of performance measures Identify and correct negative trends Measure efficiencies/inefficiencies</p> <p>Communicate Strategy</p> <p>Increase Insight &amp; Coordination Dynamic Grids / Data Disaggregation Tools</p> <p>EnerGov includes graphical grid construction tools which enable system users to construct customized, on-demand views and filters of performance and process data in the aggregate which can be used to readily identify trends, associations, &amp; relationships, etc; more importantly,</p>
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		once the desired model is created, users have the ability to create reports & print, email, and/or export this data to a variety of industry standard formats including: .pdf, .txt, .csv, .MHT, .xls, image etc."
17 Software Upgrades		
<p>Please describe the current and known future state directions of software updates. Attributes include: Frequency (Major Releases, Service Packs), Notification, Customization Impact, Push/Pull, Back Release Support, Availability of next Major Release; Fat client upgrades; Length of support; Schema updates</p>	Notes ==>	<p>"Munis Tyler deploys industry leading technology and features that are continually enhanced through a process of perpetual upgrades as part of our Evergreen Philosophy. This includes a continuous stream of significant yet manageable updates deployed over the life of the application with minimal disruption to our clients. Application updates are provided in the following formats:</p> <p>Technology Releases (e.g. XXXX.X.X V12, XXXX.X.X V13) are typically released every 3-4 years and represent the baseline for product release, integrating technological advances, and system-wide user-interface improvements. These releases go through full process/system testing and the Early Adopter program, are only available to a limited number of clients, and only receive a single Year End Update.</p> <p>Feature Releases (e.g. 2017.1.X VXX, 2018.1.X VXX) are released annually after the initial Technology Release. These releases contain a wide variety of features including strategic enhancements, contractual modifications, client funded enhancements, and legislative changes. Feature Releases typically receive 3 Year End Updates. Final Releases represent the last Feature Release in a Technology Release family and typically receive 4 Year End Updates.</p> <p>Service Packs (e.g. XXXX.X.1, XXXX.X.2) are a bundle of software corrections for a given release. Service Packs are deployed through Tyler's Managed Internet Update (MIU) and installed by the client. The MIU allows clients to download and install Service Packs and individual critical software corrections. Updates can be applied on-demand or scheduled be installed automatically. Year End Updates are</p>

		<p>a special Service Pack that includes specific updates required for year-end W2 and 1099 processing. These updates are deployed through Tyler's Managed Internet Update (MIU) and installed by the client.</p> <p>All other applications Tyler application updates are released every quarter, in January, April, July and October. Occasionally, high priority issues arise between releases which results in a mid-release service pack which can be applied on top of the most recently released version."</p>
<b>18 Error Handling</b>		
<p>Please provide an overview of error notification functionality in the product. Relevant terms include: Alerts, Alarms, Delivery, Logs, Debugging, On-Line, Audit Trails, Rollback, Tracing, Event Viewer</p>	<p>Notes ==&gt;</p>	<p>Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who looked at what and when.</p>
<b>19 Open Source Components</b>		
<p>Please describe the product capability in terms of open source components. Relevant issues include: Open Source tools in technology stack, user groups, community forums, community wikis; community-contributed source code and enhancements; user conferences - what's available</p>	<p>Notes ==&gt;</p>	<p>The only open source technologies used are Oracle Java development environment with Tyler Content Manager and ExecuTime, Apache Tomcat web server hosts Tyler Content Manager, and RedHat WildFly hosts ExecuTime. Nearly all other Tyler applications use industry standard platforms based on the Microsoft stack.</p>
<b>20 3rd Party Modules</b>		
<p>Please describe any current third party components that may be present based on the information about the client needs provided in the RFI. Common Third Party modules include: Credit Card Authorization, Freight Carrier Integration, EDI, Financial Reporting, Warehouse Management, International Shipping Docs, Sale and Use Tax Engine, PLM, CAD - What's needed and proposed?</p>	<p>Notes ==&gt;</p>	<p>Refer to Tyler System Specifications attachment for third-party requirements</p>
<b>Skills</b>		
<b>21 Training</b>		
<p>Please provide a basic overview of training methods that accompany implementation of the product. Implementations typically have two main training seasons: 1) Applications Training for the Core Team and Developers (done near the beginning of the Project); 2) End User Training (done near the end of the project); Training options include: Classroom Off-site, On-site, On-line, Technical, End User, Train The Trainer.</p>	<p>Notes ==&gt;</p>	<p>Tyler provides 3 types of training: (1) high-level process and application training designed to prepare Functional Leads (new process decision-makers) with the intent being to give Functional Leads enough information and understanding to make initial re-</p>

		<p>engineered process decisions for testing and training in subsequent steps; (2) Core User training, which is a variety of training types including formal classroom training on application processes, side-by-side issue resolution training, conversion validation training, testing training and execution, report writing, cubes, and configuration training; (3) End User Training (done near the end of the phase) - which includes formal classroom training onsite and open labs for central office end users and the City's trainers who will conduct training for decentralized end users.</p>
<p><b>22 Skill Set Requirements</b></p>		
<p>Please provide an overview of the types of skillsets (in-house to the client) that are ideal for implementation and on-going operations of the product. Project and IT Roles for Implementation may include: Project Manager, Screen Developers; Report Developers; Database DBA; EDI Specialist; System Admin; Help Desk. Roles that are more technical often have require skills that are specific to the technology stack and the application software.</p>	<p>Notes ==&gt;</p>	<p>" - Project Manager - lead City resources, contract administration, partners with Tyler PM, issue resolution -Steering Committee - representation from City Leadership, escalation points, work with Project Manager and Project Sponsor to resolve issues          -Project Sponsor - authorize project, provide resources and leadership throughout, support change management          -Functional Leads - participate in process re-engineering, make new process decisions, reinforce new processes, determine workflow approval process, handle workflow actions          -Core Users - provide process expertise, attend training, learn new processes &amp; applications, learn configuration options, test processes, validate data conversions, learn ad hoc reporting, provide support to other City users once issue vetted by Help Desk and Tyler Support not required          -End Users - attend training, practice new processes, learn information access and extraction methods          -Change Management Lead - work with Tyler Change Management Lead, work with Tyler, City Sponsor, and other City resources to roll-out Change Management Plan, and ensure adoption of new processes and procedures          -IT - provide crosswalk assistance and extract legacy data, maintain security and permissions options, basic database administration          -EDI Specialist -</p>



		minimal technical skill requirement based on Tyler's flexible interface options -Help Desk - route calls, first determining if it requires Tyler Support assistance or if it is a procedural issue that can be answered by a City resource, monitor Tyler's Support portal"
Other		
<p><b>23 Help and System Documentation</b></p> <p>Please describe options typically provide in terms of training and help documentation. Help System methods and attributes include: Contextual, On-line, Wiki-based Manuals, Forums, wiki-based</p>	Notes ==>	<p>"Munis applications include a context sensitive online help function that provides field level and procedural information to assist your resources in completing program tasks. When you are in a program and select the help function, the program displays a field level description of all data elements on the screen, as well as processing options for that program. It is formatted to provide you with a general overview of the program or the selected program screen, descriptions of the fields on the screen, and procedures for completing the tasks within the program. The online help function also includes a table of contents, from which you can select help for other programs within a product. This tool is linked to the Munis Knowledgebase, allowing for immediate access to additional information and resources directly from the Help screen. There are also links to Munis Technical Support for ease in requesting assistance from a Munis expert. Our online help functionality is not customizable to clients currently.</p> <p>The Online Help Menu also ties directly into Tyler University which allows you to either take a structured course right in a Munis program or will walk you through the completion of the task you've sought help on. Tyler has developed its own inline Learning Management System (LMS), under the brand Tyler University. Tyler U is provided at no additional charge and will continue to grow and be updated with each new release of Munis. One of the options in Tyler U is to use the functionality to have its teaching capability instruct users 'on-the-fly', or mid-process. Tyler U can also teach contains a reference library of pre-requisites, coursework</p>

		<p>that Tyler Consultants will assign to users prior to attending analysis or training sessions.</p> <p>What makes Tyler U so invaluable in the learning process is that it overlays the City's Production, Train, and Test databases. This means that the coursework is using the City's actual data that is specific to the user's work. In addition, it does not require user management, usernames, or passwords since the classes are taken directly from the Munis programs and the associated user permissions. Tyler U also submits a weekly report on classes taken and provides the information directly so an assessment can be performed as to the level of study and difficulty that is ongoing.</p> <p>Finally, Tyler also maintains a complete set of documentation that is available to all users through the Munis KnowledgeBase. The Munis KnowledgeBase provides users with a single, easily accessible location to find all existing documentation on the Munis product and other widely used technology products that integrate with Munis. Included are procedure documents, file layouts, user guides, installation manuals, setup documents, system administrator documents, data schemas, training exercises and much more. Clients also have the ability to upload and submit their own customized documentation, creating a single online repository for all ERP related documents."</p>
<p><b>24 Audit and Compliance</b></p> <p>Please include audit standards and capabilities that are native to the product. Audit and Compliance standards and attributes to consider include: FDA, SOX, ISO, Audit Logs (From/To/When/Who), IP Address, ERES, userid, date/time stamps, legal numbering; transaction types, transaction ID; System should help to prevent audit problems and provide a foundation for rapid response to ad hoc audit needs</p>	<p><b>Notes ==&gt;</b></p>	<p>"Auditing Tyler applications include comprehensive auditing integrated directly within the application. This assists clients in supporting internal control requirements and includes system and program level auditing. Process auditing allows an administrator to see who ran what, when, where, and for how long. Change audits allow the viewing of who changed what, where, when, and both the old and new values. Select applications also include query audits that can be optionally enabled to log who</p>

	<p>looked at what and when.</p> <p>Tyler SaaS Data Center Security Using key card and cameras, access to Tyler SaaS data centers is restricted to authorized personnel only. Entry attempts into the data center are audited on a regular basis by internal staff and external auditors.</p> <p>Cisco firewalls with Intrusion Protection System (IPS) module inspect all traffic to only allow connections from Tyler SaaS clients to the datacenter. Connection is established to internet-facing web applications securely over HTTPS. ERP clients are provided a VPN device as an added layer of security for accessing back-office applications through an encrypted tunnel between client site and Tyler data centers.</p> <p>ERP application access through the VPN device Traffic is encrypted using AES-256 bit, SHA-1 and Diffie Hellman group 2 for keying of the pre-shared secret. The keys are re-generated every 8 hours and we use perfect forward secrecy in the key process. Once they data comes out of the VPN, all traffic is thrown back into the firewall and checked against an ACL for source, destination and allowed services. The VPN device is included with the Tyler SaaS service and is installed and configured at the client site. In addition to the added layer of security, this device also provides Tyler application access to client intranet resources such as printers, third-party systems, and network filesystems.</p> <p>Application access must be explicitly granted by administrators. Application authentication is handled using Tyler SaaS Active Directory maintained by Client administrators. Direct database access is only granted upon request via read-only ODBC connection for ad-hoc reporting. Although hardware is shared with multiple SaaS clients, application environments are segregated per client, eliminating any possibility of accessing another client's data.</p> <p>Tyler's Hosting</p>
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		Operations follows security best practices and is subject to annual assurance audits. These include SOX-404 Financial and IT General Control conducted by an independent CPA firm, SOC 1 Type 2 and SOC 2 Type 2 conducted by an independent AICPA firm, and PCI Security Council PA-DSS and PCI-DSS validation for Tyler's payment and payment gateway applications."
25 <b>Technical Support</b>		
Please include a brief description of the support strategy and offerings that are typical of product implementation. Support attributes and cost variable may include: Annual Maintenance, % of Net/Gross License, Hours/Time Zones of Coverage, Escalation Process, On-line service ticket entry and monitoring, Phone Support, 24x7, 8x5, etc.; first level response, escalations.	Notes ==>	Please reference Question 6.10 in the response document for our Technical Support Overview.