

City of Pembroke Pines Mobility Hub Master Plan

August 2020

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OVERVIEW

THE MOBILITY HUBS INITIATIVE

The Broward MPO's Mobility Hub program was first introduced in the 2035 Metropolitan Transportation Plan (formerly, the Long-Range Transportation Plan). Mobility Hubs aim to seamlessly integrate different modes of transportation (walking, bicycling, transit and automobiles) with investments in infrastructure that maximize first and last mile connectivity and help spur economic development by leveraging public funds to encourage private development investments. In addition to the Mobility Hub work that is being done in Pembroke Pines, the Broward MPO has ongoing Mobility Hub projects in Fort Lauderdale, Cypress Creek, Sunrise, Hollywood, Plantation and Coral Springs.

Guided by the goals established in *Commitment 2040*, an evaluation framework now measures a candidate location's **network**, **market** and **sponsor readiness**. Network readiness is measured by both existing and future transit ridership, and connecting opportunities evidenced by frequency of available transit service. Recent development trends show market interest and strength of future demand, to provide a measure of potential future trip generation related to market readiness. Sponsors (local municipal, public agency, or private sector) that are prepared to engage in coordinated Mobility Hub investment are also required to fully leverage Broward MPO investment.

The Pembroke Pines Mobility Hub location warrants a Master Plan to identify appropriate near-term MPO investments and longer-term implementation strategies, based on its future role in the transit network and recent redevelopment activity that will impact future mobility needs. The Broward MPO is undertaking the Hub Master Plan process in close coordination with the City of Pembroke Pines and other stakeholder agencies.

Funding for near term improvements is provided through Broward MPO assigned FTA funds. Preliminary design documentation is produced from the recommendations identified in the Planning Framework working with the municipality. Then an application for approval of FTA funding is submitted, once approved a design/build construction contract procurement is executed and the improvements are constructed.

MASTER PLAN PURPOSE

The Pembroke Pines Hub Master Plan reflects the following intentions of the Mobility Hubs initiative, which are both regional and local in scope.

REGIONAL / COUNTYWIDE

- Promote Travel Options that are Convenient
- Promote Visibility and Safety of Alternative Modes
- Focus on High Priority Hub Locations
 - Key role in regional **network**
 - Near term **market** potential
 - Engaged and committed **sponsors**

LOCAL / HUB VICINITY

- Invest in Near-Term Priorities
 - **Safe access** to the multimodal network
 - **Increase use and visibility** of the multimodal network
 - **Activate** the public realm
 - Align with **local priorities**
- Support Long-Term Strategies
 - **Coordinate** planning/design needs with 2045 LRTP
 - Support mobility-friendly **policies and standards**
 - Identify appropriate **phasing**
 - Formalize sponsor/partner **commitments**

MASTER PLAN PHASES

The Pembroke Pines Hub Master Plan consists of two phases, a Planning Framework followed by more detailed Planning Recommendations.

The **PLANNING FRAMEWORK** provides physical and policy planning guidance to pursue near-term investments in the Pembroke Pines Hub planning area and ongoing strategies in partnership with the City and other agencies. Four key inputs are considered by the HNTB team in development of the Planning Framework:

Planning Context – The Planning Context brings together key findings and recommendations from recent and ongoing planning efforts. It was developed to foster discussion among stakeholders and identify opportunities and considerations regarding the transportation network and physical features of the Pembroke Pines Hub planning area.

Market Analysis – The Market Analysis provides a baseline understanding of current market conditions, and what type and magnitude of development is likely in the near term. Input from the development community is considered to ensure Hub Master Plan design and policy recommendations are feasible, realistic and supportive of adjacent land uses.

Mobility Hub Evaluation – The types of activities to be supported at any given Mobility Hub location drive what mobility-supportive elements may be funded by the Broward MPO. Mobility Hub elements will be appropriate to support multimodal accessibility in coordination with anticipated market-driven development.

Outreach – Broward County Transit, Broward County Traffic Engineering, and Florida Department of Transportation District 4 provided early feedback to the Broward MPO and the City of Pembroke Pines, in addition to input from local stakeholders. Surveys were conducted directly with BCT and community shuttle riders to understand needs and concerns prior to development of recommendations.

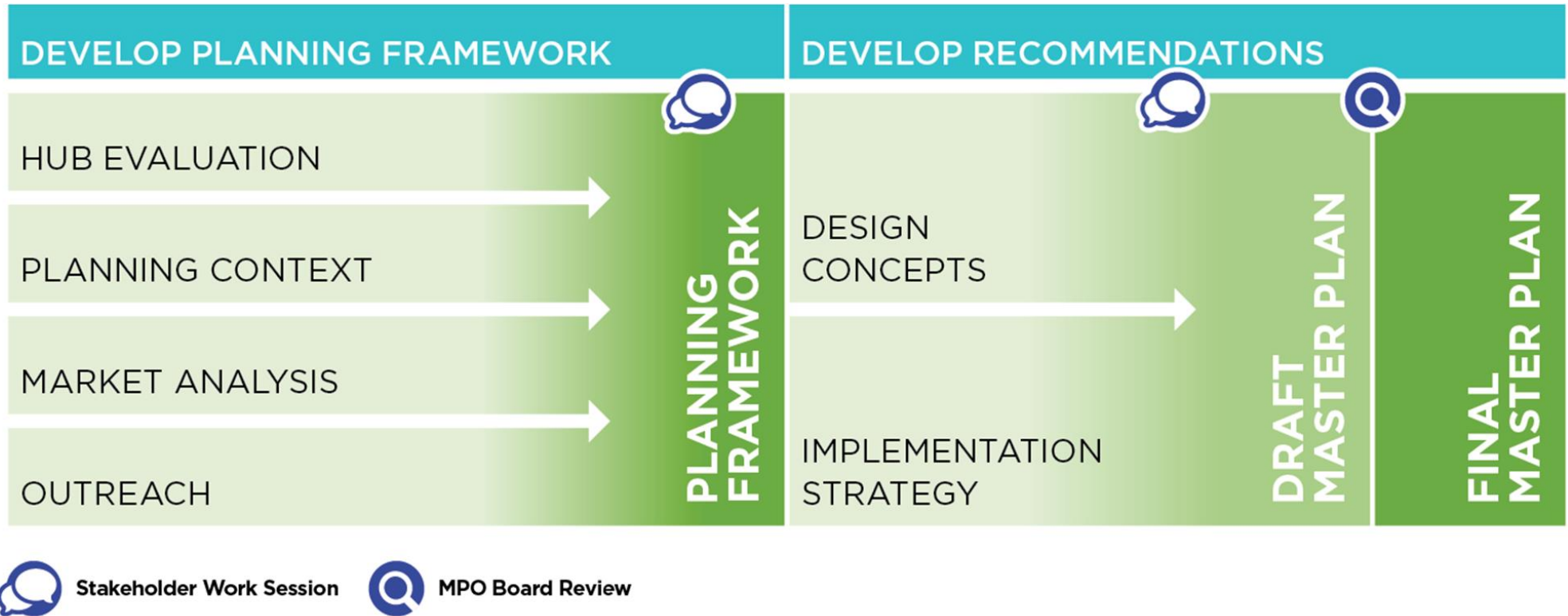
The **PLANNING RECOMMENDATIONS** are informed by the Framework and provide direction for both near-term projects and longer-term initiatives to be undertaken with local stakeholders and agency partners. The recommendations include:

Design Concepts – Conceptual design and cost estimates for project elements, including near-term physical infrastructure improvements to be funded by the Broward MPO, are documented (supported by Marlin Engineering).

Implementation Strategy – Both near-term and ongoing actions are outlined, including coordinated implementation of MPO-supported near-term investments and longer-term Mobility Hub initiatives in coordination with the City and other sponsors and partners.

*The Master Plan will provide a focused set of short-term **INFRASTRUCTURE INVESTMENTS** to be supported by the Broward MPO and identify longer-term initiatives to foster the **SPONSOR PARTNERSHIPS** needed to continue coordinated Mobility Hub development efforts in Pembroke Pines during the coming years.*

The two-phase planning process (as depicted generally in the figure below) included Development of the Planning Framework and Development of Planning Recommendations.



MARKET ANALYSIS

INTRODUCTION

Prepared based on the conditions as of March 2019, the market analysis associated with the Pembroke Pines Mobility Hub represents an initial, high-level market assessment intended to help guide the planning team with an understanding of market-driven development opportunities for the Pembroke Pines Mobility Hub area considering a mix of uses and primarily focusing on residential, retail, office and hotel. It is also intended to assist in identifying the opportunity for transit-oriented development within the Pembroke Pines Mobility Hub area. Based upon the potential development opportunities and findings derived from this assessment, and provided as the final component of the market analysis section, the team will be prepared support the conceptual planning by providing an understanding of any market and/or regulatory challenges associated with proposed concepts.

This document is formatted to provide a concise summary of Headline Conclusions, followed by individual sections providing a more comprehensive overview of the research, analysis, and findings undertaken for each of the proposed uses identified herein.

HEADLINE CONCLUSIONS

After many years of planning, Pembroke Pines' City Center area is now well underway with its phased, mixed-use development. The redevelopment represents a major investment within the City's core area that envelopes residential, commercial municipal and cultural facilities and should encourage investment within the surrounding area during the next several years. The

economic and market outlook observed as part of this analysis indicates considerable future demand for housing and commercial redevelopment during the next 10-year period. Notably, the primary Trade Area¹ from which the City Center area will potentially capture demand for residential and commercial development indicates:

- **Retail:** There is an estimated 325,000+ square feet of retail demand in the Trade Area. However, there is already 260,000± square feet of space planned in the Trade Area, and mostly situated within the City Center development. That would indicate net new demand for 65,000 square feet of retail. From one perspective, this net new demand is seemingly modest, which is largely the result of the relatively low population projection growth for the Trade Area which is a large driver of future retail demand. Nonetheless, and as it relates to mobility hub planning, the characteristic of most retail development in the area should not be focused on competing with the area's regional centers; rather, to be oriented primarily to smaller/mid-size retail accommodating a pedestrian friendly environment with a unique mix of business, including dining/entertainment venues;
- **Office:** Expanding office inventory City-wide should be a focus of planning on-going efforts, and equally as important to broaden the office mix in the City Center area. There is estimated demand for 225,000 to 300,000 square feet of office during the next 10-year period (City-wide), and from which the City Center area can potentially capture a measurable percentage;
- **Residential:** There is an estimated demand for 700+ multifamily units within the Trade Area over the next ten years, which should serve the City Center area well for steady resident growth;

¹ As discussed, and illustrated in the Geographic Overview section below, the Trade Area represents a geographic area within which a business enterprise or center of retail or wholesale distribution draws most of its business.

- **Hotel:** In addition to the currently proposed hotel development in the City Center area, there may be opportunities to plan for one smaller (100 to 150 room) additional select service hotel development during the next 10 years.

As City Center progresses toward build-out, the opportunity to leverage off of this momentum should continue to grow for surrounding properties; especially, along the north side of Pines Boulevard. Though City Center has generally maintained relatively modest density-levels, it is encouraged that future planning efforts for the area promote higher density within mixed-use commercial development and, specifically, around transit hubs.

MARKET HIGHLIGHTS FROM PREVIOUS STUDY

The first step of the analysis herein considers analysis from the City's most recent 2014-2019 Economic Development Strategic Plan (Strategic Plan) completed in 2014. Namely, it is intended to highlight key observations upon which to consider as part of the Mobility Hub planning process.

The Strategic Plan is a comprehensive document that incorporates extensive demographic data, industry sector analysis, and benchmark assessments to develop an action plan for the City's economic growth.

From an economic and market perspective, the data collection and analysis was quite thorough. The analysis did not provide forecasting for the key real estate uses supporting the strategic plan, however. Nonetheless, there were a few key observations that align with the market analysis and mobility hub planning undertaken herein, including:

- *Expanding the Professional Services Workforce:* As highlighted in the Strategic Plan, there is a community desire and need to diversify the City's economy with corporate headquarter/regional offices and technology. As set forth herein, Mobility Hub planning should support the promotion of office development.

- *Focusing on City Center:* At the time of the study, City Center was in its early development stages. The Strategic Plan identified economic tools to ensure City Center becomes a major component to the City's redevelopment efforts. Presently, City Center is evolving into a mixed use residential and retail/entertainment destination with plans to expand with one hotel. Leveraging City Center to continue redevelopment throughout the larger area is now critical.
- *Improving Transportation:* The Strategic Plan indicates that a threat to the City's economic development is transportation challenges. In that regard, Mobility Hub planning can take a major step toward envisioning improved transportation conditions and therefore enhanced redevelopment opportunities; especially, the ability to broaden the economic base.

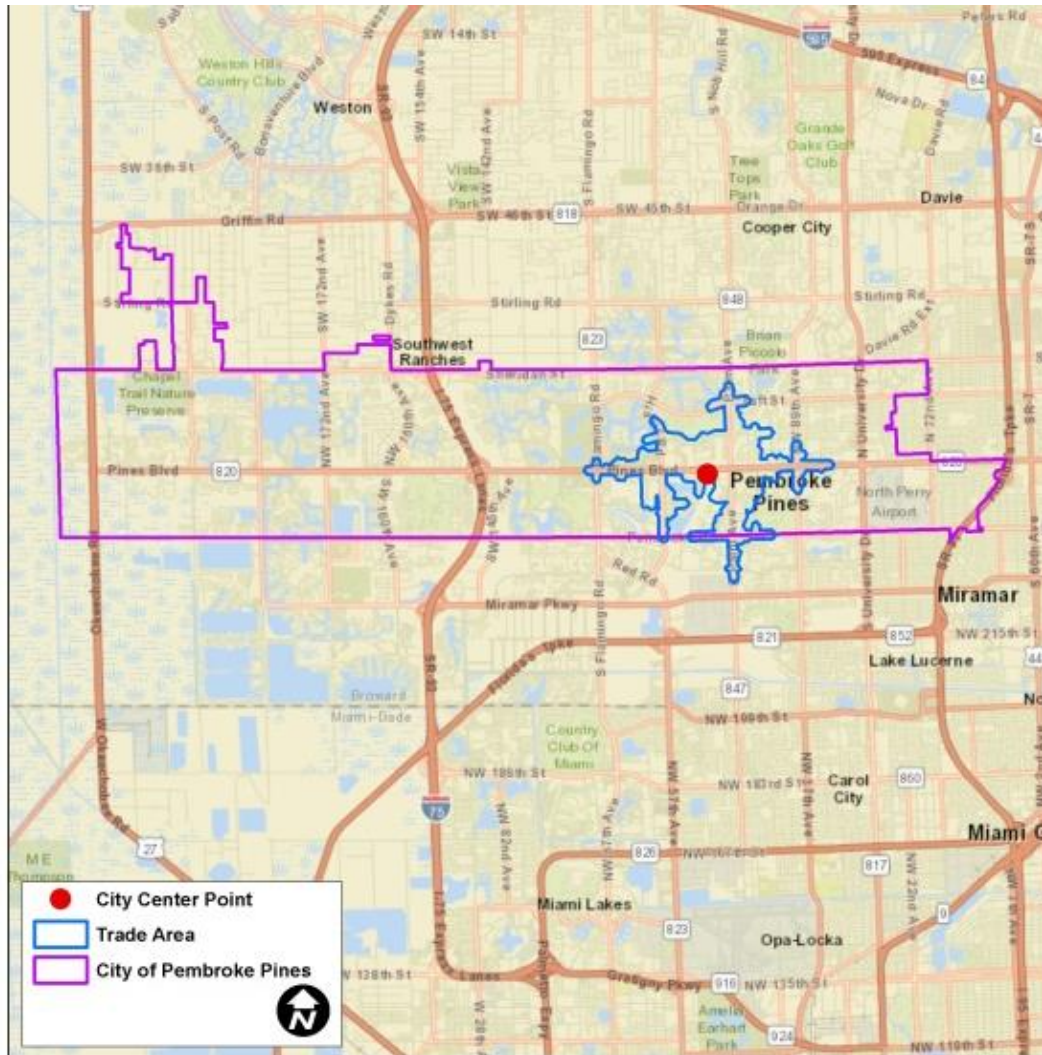
GEOGRAPHIC OVERVIEW

Pembroke Pines City Center a centrally located and emerging commercial core of the City, served by several major thoroughfares, including Pines Boulevard and Palm Avenue, and is situated less than 10 miles south of I-595 and between the Florida Turnpike and I-95.

The analysis considers the economic, demographic, and real estate market conditions and trends within Broward County and the City of Pembroke Pines, as well as one other key geography as illustrated in Figure 1 depicting the Pembroke Pines Mobility Hub Trade Area (Trade Area). This is an approximate 5±-minute drive-time radius,² and represents the geographic area from which the Mobility Hub may generate the majority of its activity for residential and commercial uses. Naturally, the market analysis herein considers the implications of competing supply and demand factors from surrounding corridors and activity nodes. However, the Trade Area has a strong competitive advantage given its proximity to the municipal complex/cultural venue for capturing future growth, and the intersection of Pines Boulevard and Palm Avenue serves as a key focal point for a potential Mobility Hub.

² The 5±-minute drive time is calculated by ESRI.com during non-peak periods; therefore, we recognize there is a level of variability that needs to be considered for peak and non-peak traffic periods.

FIGURE 1: PEMBROKE PINES CITY CENTER TRADE AREA



SUMMARY OF GENERAL REAL ESTATE AND MARKET CONDITIONS

The following is a summary of general economic and real estate market conditions that support the planning effort associated with this study for the Pembroke Pines Mobility Hub.

FIGURE 2: DEMOGRAPHIC HIGHLIGHTS

Source: US Census; ACS 2012-2016 (*Note: 2000 Census Tract Boundaries Different than 2016)

	Trade Area	City of Pembroke Pines	Broward County
Total Population ACS 2016	25,362	164,753	1,863,780
2010 Population	23,712	152,366	1,734,139
2000 Population*	25,945	137,427	1,623,018
Households ACS 2016	9,274	56,035	672,988
Avg. HH Size ACS 2016	2.74	2.89	2.75
Median Age ACS 2016	38.7	39.9	40.0
Median Household Income ACS 2016	\$53,622	\$62,702	\$52,954
Per Capita Income ACS 2016	\$25,893	\$28,845	\$28,987
% Above \$50K ACS 2016	57.3%	60.4%	52.9%
Owner Occupied Households % ACS 2016	60%	72.2%	62.8%
Renter Occupied Households % ACS 2016	40%	27.8%	37.2%
% Households with Vehicle ACS 2016	NA	93.8%	92.5%

Demographic Highlights

Figure 2 above, highlights key demographics that are mentioned throughout this report and are important factors in considering demand for retail, office, residential and hotel uses. A few notable highlights include:

- The population of the City is 8.8 percent of the County, and the Trade Area is 1.4 percent;
- Median household income in the City is notably higher than the Trade Area and County. Though the Trade Area is lower than the City's income levels, they are stronger than the County and supportive of future economic development in the City Center area; and,
- There is a considerably higher proportion of renter households in the Trade Area than the City and County, which has positive implications for continued development of multifamily rental housing;
- The Trade Area includes the new City Center, which is positioned to attract younger resident and visitor base; and,
- Nearly 94% of households in the City have at least one vehicle.

County and City Population Growth Trend/Projection

The table below illustrates population growth from 1990 to 2016 and projected population to 2045. A few notable highlights include:

- Between 2000 and 2010, Broward County's population increased at an average annual rate of 0.66 percent and at rate of 1.04 percent for the City.
- The Trade Area, however, actually shows a small loss in population growth during the period;
- Based upon American Community Survey (ACS) data, between 2010 and 2016, the County population shows a modest uptick in average annual growth rate at 1.2 percent, while the City is 1.3 percent and the Trade Area at 1.1 percent.

- However, it is important to note that there is variability between decennial census and the interim ACS surveys which are surveys based on five-year averages.
- According to BEBR,³ the County's population is projected to grow at an average annual rate of 0.62 percent from 2015 to 2045, while the City is projected to grow at 0.23 percent annually⁴. Although the information is not available at the TAZ level, it is assumed that the Trade Areas population forecast will align with the cities overall growth projection. This serves as the basis for population/housing demand discussed in following sections.

FIGURE 3: DEMOGRAPHIC HIGHLIGHTS

Source: US Census; BEBR, Broward County and Municipal Population Forecast and Allocation Model (PFAM) 2017

	Population				Projections		
	1990	2000	2010	2017	2015	2030	2045
Trade Area		25,945	23,712				
City	46,713	137,427	152,366	170,712	155,736	158,099	166,758
County	1,255,488	1,623,018	1,734,139	1,935,878	1,827,367	2,052,432	2,200,492
Population (Avg. Annual)					Projections (Avg. Annual)		
	1990	2000	2010	2017	2015	2030	2045
Trade Area			(223)				
City		9,071	1,494	2,621		158	367
County		36,753	11,112	28,820		15,004	12,438
Population (% Growth)					Projections (% Growth)		
	1990	2000	2010	2017	2015	2030	2045
Trade Area			-0.90%				
City		11.39%	1.04%	1.64%		0.10%	0.23%
County		2.60%	0.66%	1.58%		0.78%	0.62%

³ Broward County and Municipal Population Forecast and Allocation Model (PFAM) 2017

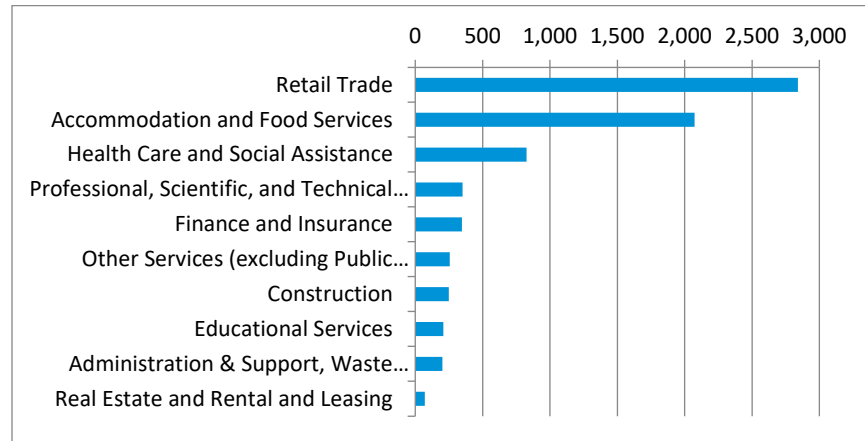
⁴ Data not available to do Trade Area analysis

Trade Area Employment Profile

According to Census On the Map, the strongest industries in the Trade Area with more than 1,000 jobs present in the area include: Retail Trade and Accommodation and Food Services. These two sectors are by far the most dominant in the area, with the heaviest employment activity along Pines Boulevard and North Palm Avenue.

FIGURE 4: TOP 10 EMPLOYMENT BY SECTOR IN TRADE AREA

Source: 2015 Census on the Map



These sectors generally have more modest wages than other sectors such as FIRE (Finance, Insurance, and Real Estate) and Professional Business. Therefore, the opportunity to broaden the area's employment base with these higher wage sectors should be a focus of on-going economic development efforts – and discussed further below.

Furthermore, enhancing the FIRE and Professional Business sector creates greater opportunity within the office segment, which increases the level of daytime expenditure within the area and supporting continued growth in the retail sector.

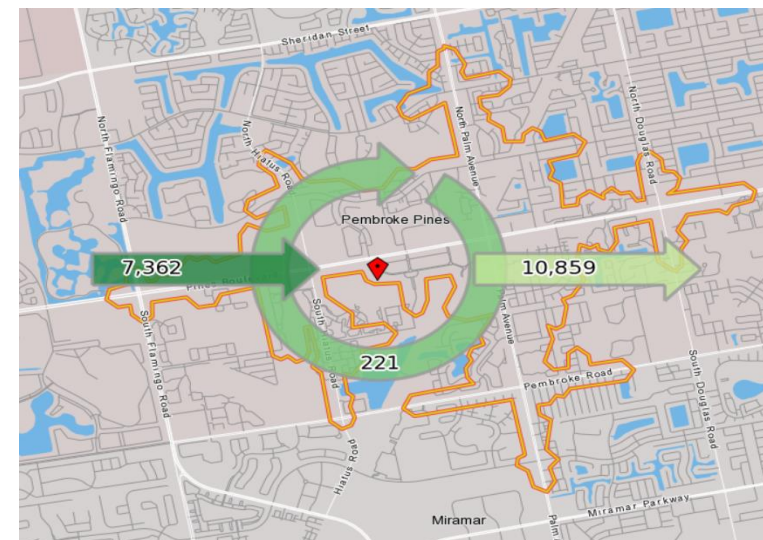
Trade Area Employment Migration

The Trade area benefits from a strong inflow of workers that do not live inside the trade area but sees a decrease in daytime population. As a majority of workers

are residents from other areas the majority of residents are employed outside of the trade area, only 3 percent of residents in the area actually work in the trade area. This metric is relatively low compared to numerous areas studied in the South Florida region, and signals potential opportunity for capturing “pent up” housing demand for those workers who would find housing opportunities closer to work appealing.

FIGURE 5: INFLOW / OUTFLOW OF EMPLOYMENT AT A 5 MIN DRIVING DISTANCE

Source: Census On The Map



Inflow/Outflow Job Counts 2015

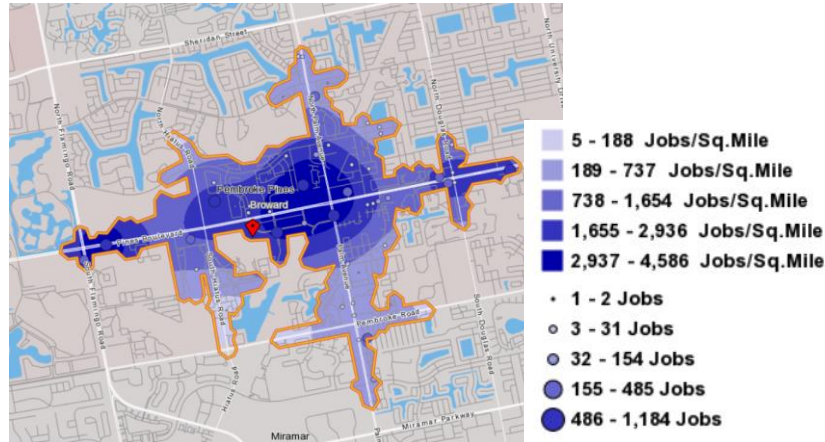
	Count	Share
Employed in the Selection Area	7,583	100%
Employed in the Selection Area but Living Outside	7,362	97.10%
Employed and Living in the Selection Area	221	2.90%
Living in the Selection Area	11,080	100%
Living in the Selection Area but Employed Outside	10,895	98%
Living and Employed in the Selection Area	221	2%

Trade Area Employment Density

Employment density is more concentrated in the center of the Trade area with 3,000 to 4,500 jobs per square mile.

FIGURE 6: EMPLOYMENT DENSITY IN TRADE AREA

Source: Census On The Map



Economic / Demographic Headlines

Based upon the data summarized above, there are a few key economic trends affecting the study area:

- Though local and regional population growth are anticipated to be modest compared to historical trends, the Trade Area benefits from a relatively strong influx of workers, which creates an opportunity to leverage retention for area worker housing since some of those workers may prefer to live closer to work.
- The Retail and Accommodation/Food Services sectors dominate the Trade Area, and any opportunity to broaden the employment mix with FIRE and Business Services should be beneficial to housing and office

redevelopment in the area, as well as for further strengthening the retail sector.

RETAIL MARKET HIGHLIGHTS

The retail market profile highlights historic, current and foreseeable growth trends within County, City, and/or Trade Area.

The following provides key market indicators within the City and Trade Area. As noted above the Trade Area represents an approximate 5 minute drive time radius from the Pembroke Pines City Center and represents the primary geographic area from which the mobility hub may generate the majority of its retail demand. Importantly the demand modeling undertaken here in also takes into account inflow and outflow resident expenditure factors for areas outside of the primary trade area. The data assembled for the retail supply analysis herein is based upon Costar⁵ and other published resources.

HIGHLIGHTS – CITY OF PEMBROKE PINES

- There are 342 Buildings ranging from <1,000 sf to 1 million sf
- There is a total 9.5 million square feet of space, with average size building at 28,000± square feet;
- 3.3 million square feet of retail has been built in the past 20 years, the largest of which include Boulevard Square, Lowes, and Home Depot.
- Pembroke Pines retail development in the past decade has slowed considerably compared to prior 2 decades
 - From 1990 to 2010, 300,000± sf avg. annually
 - 300,000 sf total being built since 2010.
- Significant amount of retail attributed to Mall and large (Big Box) centers
- Retail occupancy is above the County average.
- The City overall has average Lease Rates of \$28.47/sf, modestly higher than Broward County (County average of \$28.26/sf)

⁵ Costar is recognized as international leading commercial real estate research and data company.

- Net absorption of retail was 424,000 sf during the past five years, which is 13% of the County total and almost directly proportionate to the City's share of County's total retail inventory (14%).
- City Center and Pines Market Place represent 2 primary retail developments under construction/planning

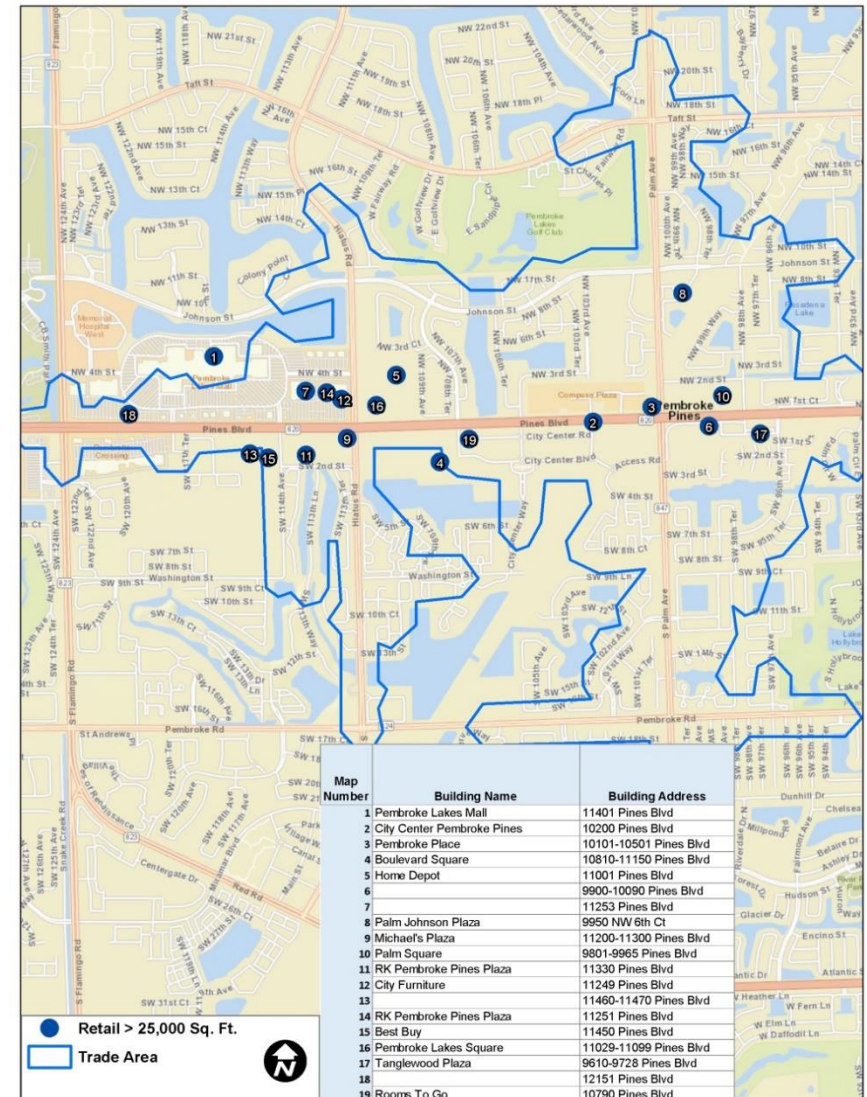
HIGHLIGHTS – TRADE AREA

- There is a total 3.3 million square feet of retail space, with an average size building or 46,000 square feet.
- 775,000 sf built in past 20 years the largest of which include Home Depot and Boulevard Square
- Occupancy is above the County average however, there was only a very modest 12,000 sf of net absorption of retail during the past 5 years which includes the City Center development space which has been built to date.
- Overall average retail lease rates of \$30.95/sf are notably higher than the City and County – both of which are in the \$28 per sf range.

Lastly, the broader Trade Area is well served by big box retailers, national chains and grocers. The Pembroke Lakes Mall, 1.5 miles west of the Hub area is the largest single retail destination in the Trade Area with 1.1 million square feet. Retail activity is dispersed along Pines Boulevard both east and west of the Hub Area, though primarily west.

FIGURE 7: MAP OF MAJOR RETAIL IN TRADE AREA

Source: Costar

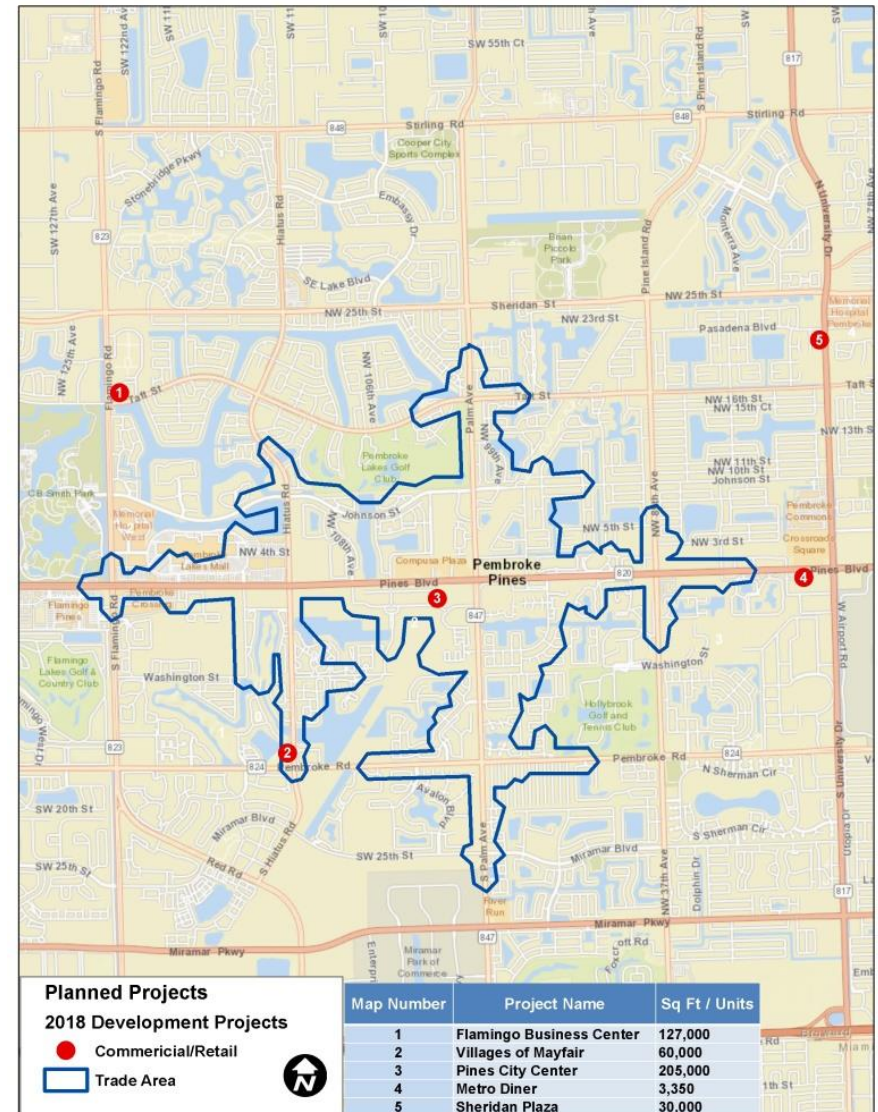


RETAIL PROJECTS IN PLANNING

Based upon information from the City of Pembroke Pines, there are several new retail projects in planning adding up to more than 425,000 square feet anticipated by 2020, there is 260,000 square feet planned in the Trade Area.

FIGURE 8: MAP OF RETAIL PROJECTS IN PLANNING

SOURCE: CITY OF PEMBROKE PINES



RETAIL DEMAND SUMMARY

To estimate retail demand for the Trade Area and Mobility Hub, the *Retail Trade Model was applied*, which utilizes a variety of data sources and a series of models that estimate expenditures within the Trade Area and translate them into demanded square feet of retail space by merchandise category.

The model takes into account expenditures by residents, workers and visitors within and outside of the Trade Area. It is important to note, however, that determining retail demand within a relatively small Trade Area is challenging without comprehensive research to measure inflow and outflow factors beyond the scope completed as part of this high-level assessment; particularly, when the Trade Area is home to some of the region's largest shopping destinations and commercial corridor.

Preliminary analysis herein indicates an estimated demand for approximately 325,000 square feet of retail in the Trade Area over the next 10-year period. However, as noted, there is already 260,000 square feet of space planned in the Trade Area, and situated within the City Center development. That would indicate net new demand for 65,000 square feet of retail beyond what is already in planning. From one perspective, this net new demand is seemingly modest, which is largely the result of the relatively low population projection growth for the Trade Area which is a large driver of future retail demand. Nonetheless, considering the significant regional draw to the Trade Area as a result of the Mall and Big Box centers attracting residents well beyond the Trade Area (and referred to as the secondary and tertiary markets) there should be a higher level of demand than what the models indicate. This requires a more comprehensive analysis of supply and demand that should be undertaken as part of subsequent planning efforts.

Regardless, as it relates to on-going redevelopment in the City Center area, and mobility hub specifically, the analysis does not envision new retail development as competitive to existing regional destinations (or other regional big box retailers). Instead, the focus is to leverage potential mixed-use opportunities that may be created by regulatory modifications, whereby retail is a supporting use with the potential to create a unique destination. These are generally pedestrian

friendly destinations such as Town Centers and Main Streets that provide an eclectic mix of retailers, including dining/entertainment venues.

OFFICE MARKET HIGHLIGHTS

The office market profile highlights historic, current and foreseeable growth trends within Pembroke Pines and the Trade Area, according to Costar data and input from local industry representatives.

HIGHLIGHTS – CITY OF PEMBROKE PINES

- 95 buildings ranging from <1,000 sf to 925,000 sf
- Total 2.8M sf, with average building at 30,000± sf
 - Note, for a city of population size, the amount of office space is relatively low when compared to other similar sized municipalities like Hollywood, Miramar and Coral Springs – all of which have more than 20% more office than Pembroke Pines
- 1± million sf (40 properties) built in past 20 years
- City's office development since 2010 notably lower than previous decades
 - 320,000± sf total since 2010
- Occupancy is strong at 96%
- Lease rates at \$32.29/sf full service, which is notably higher than the County (\$28.80) and City (\$25.50) and partly attributed to more costly medical office space
- Over the last 5 years there has been 186,000 sf of net absorption, which is proportionate to its overall share of County office inventory (3%)

HIGHLIGHTS – TRADE AREA

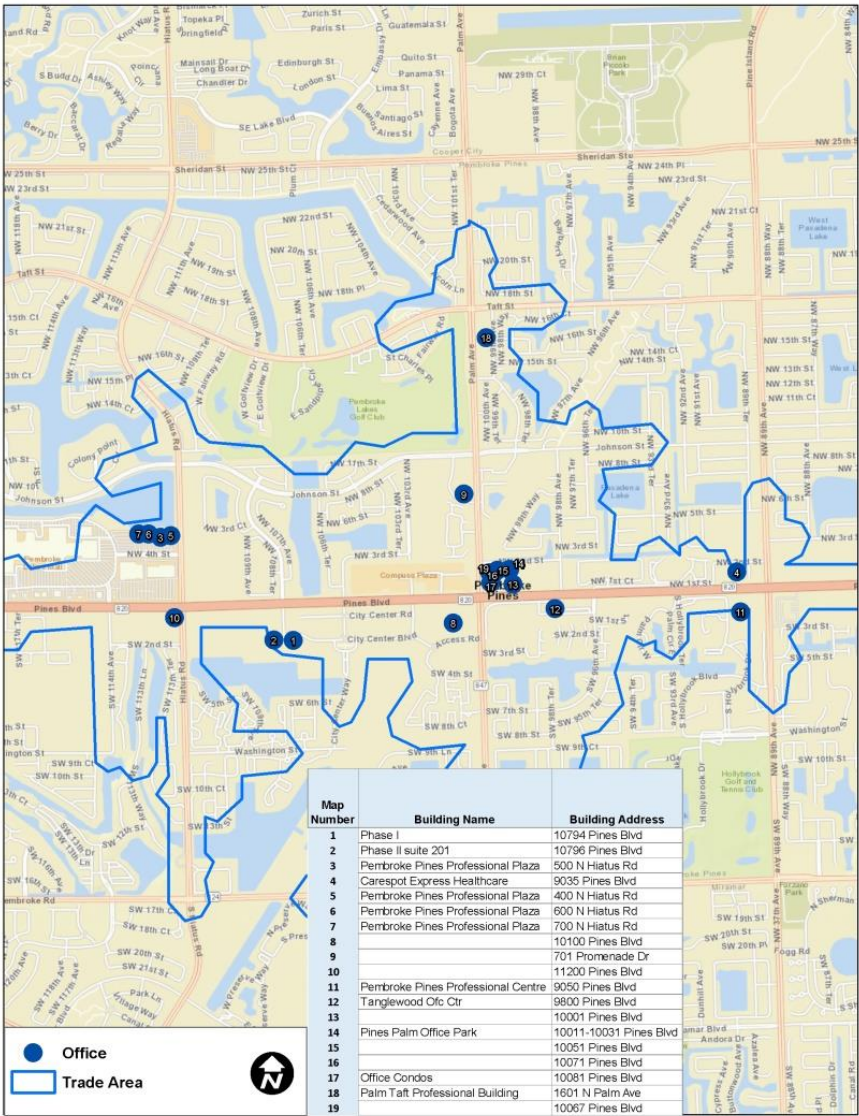
- 19 buildings ranging from <1,000 sf to 96,000 sf
- Total 495,000 sf, with average building at 26,000 ± sf
- 139,000 sf (7 properties) built in past 20 years
- Occupancy estimated to be 92%
- Average lease rates at \$25.14/sf (full service) and in-line with the City

- Over the last 5 years there has been 8,300 sf of net absorption, which is far lower than its 20% share of the City’s total office inventory

The City Center area contains a large share of the office buildings in the Trade Area, though it is a relatively modest 250,000± square feet in total.

FIGURE 9: MAP OF MAJOR OFFICE LOCATION IN TRADE AREA

Source: Costar

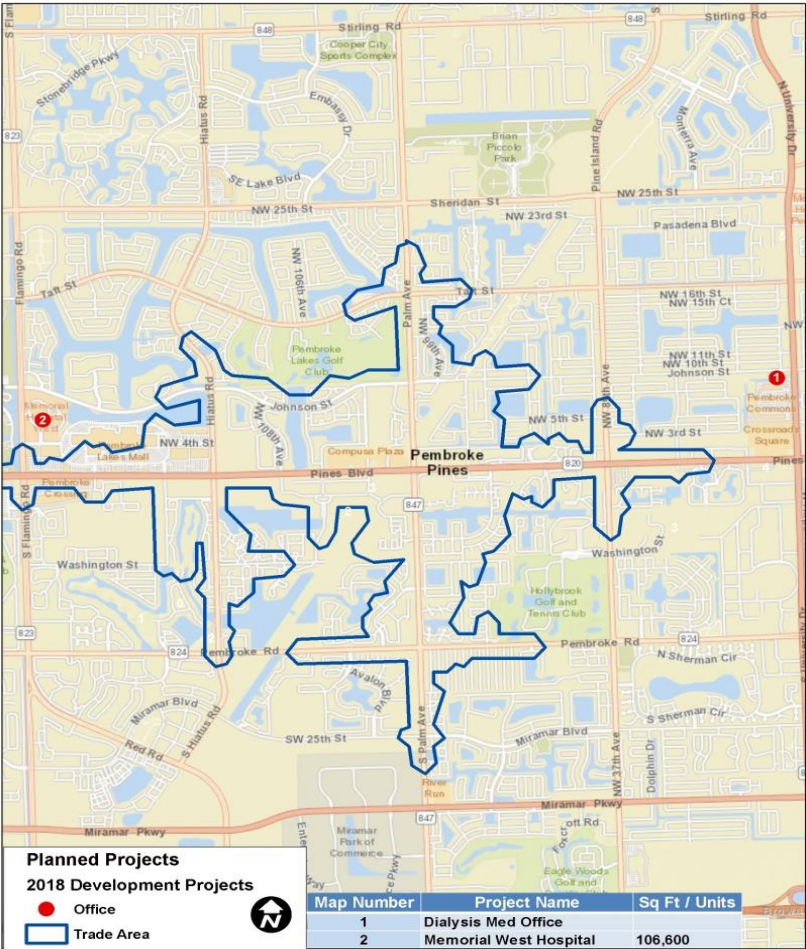


OFFICE PROJECTS IN PLANNING

Based upon information from the City of Pembroke Pines, there currently no office projects in planning within the Trade Area, however city wide there are two notable projects (200,000+ sf including The Edison and Century Medical.

FIGURE 10: MAP OF OFFICE PROJECTS IN PLANNING

Source: City of Pembroke Pines



OFFICE DEMAND SUMMARY

The basis for determining office demand within the Trade Area considers office sector employment projections, along with current and prospective office market conditions at the local and regional level.

FIGURE 11: OFFICE DEMAND PROJECTIONS

Source: Broward County, Pembroke Pine Office Demand Projections (2019-2029)

Code	Title		Empl. 2019	Empl. 2029	Change
51	Information	90%	18,490	19,646	1,157
52	Finance and Insurance	100%	38,001	39,386	1,385
53	Real Estate and Rental and Leasing	85%	19,179	20,340	1,162
54	Professional, Scientific, and Technical Services	100%	62,451	71,326	8,875
55	Management of Companies and Enterprises	100%	8,952	10,062	1,110
56	Administrative and Support and Waste Management	100%	89,134	102,071	12,937
62	Health Care and Social Assistance	50%	51,024	57,896	6,872
813	Membership Associations and Organizations	100%	13,597	14,666	1,069
Total Office Employment Sectors		75%	300,827	335,394	34,568

	Total	Avg. Annual
Total Change Office Demand Employment 2019-2029:	34,568	3,457
Total Demand @ 215 Sq. Ft./Employee:	7,432,027	743,203
Trade Area Capture of County - Modest (@ 3.0%)	222,961	22,296
Trade Area Capture of County - Upper (@ 5.0%)	297,281	29,728

Presently, the Trade Area comprises only 500,000 square feet of office space, or 20 percent of the City's total inventory. The analysis considered demand projections at the City level, and the demand from which the Mobility Hub will potentially capture. Considering City's recent 3.0 percent of the County's office demand, which is also the amount of net absorption during the past five years, the analysis assumes the City has potential office demand for 225,000 to 300,000 square feet of office demand during the next 10-year period. This is a relatively modest increase in total existing retail inventory (3.0 million square feet) City-wide.

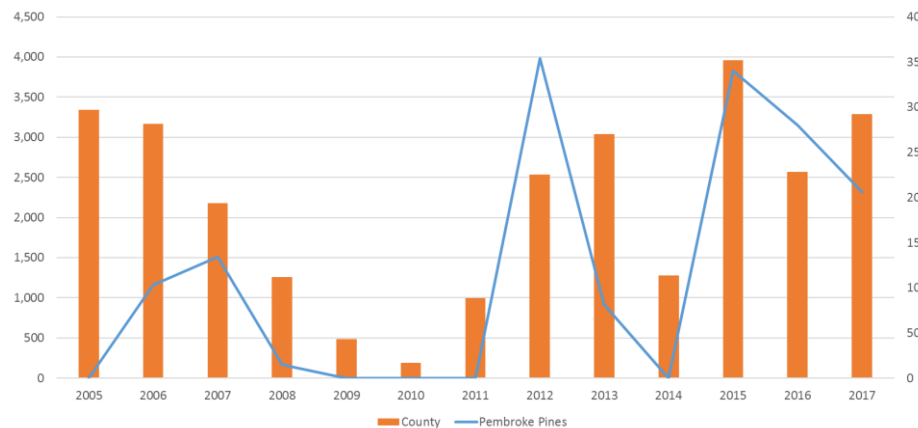
The Trade Area should be in a strong position to capture a decent amount of the City's office demand; particularly, as a strong supporting use in mixed-use development. However, office lease rate sensitivity, at least during the next few years, presents some challenges to the financial viability of supporting new office development. Nonetheless, the City should continue to focus on attracting and

supporting growth within the Finance, Insurance, and Real Estate (FIRE) and Business Service sectors – and discussed further in following sections.

MULTI FAMILY HOUSING MARKET HIGHLIGHTS

As highlighted in the Figure below, the County's multifamily permitting activity improved significantly following the Great Recession in 2007/8, with very solid activity occurring during the past three years.

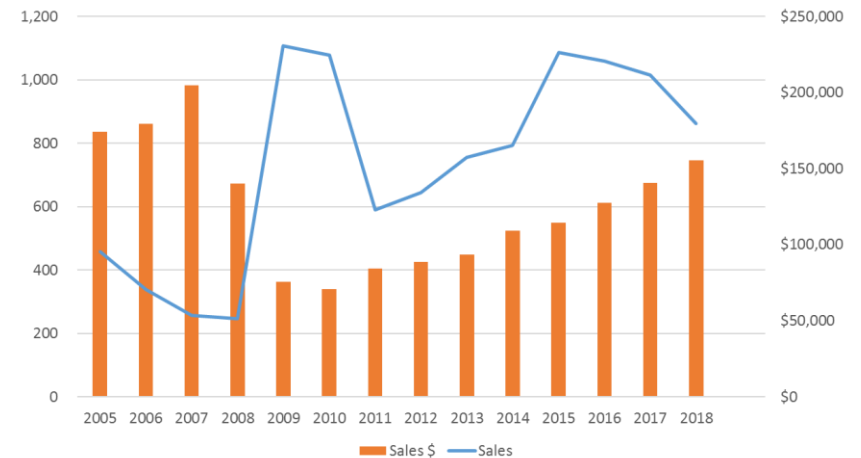
FIGURE 12: BROWARD COUNTY, PEMBROKE PINES MULTIFAMILY PERMIT ACTIVITY



The City's multifamily permit activity rebounded shortly after the Great Recession, and has remained relatively strong during much of the past six to seven years.

Relative to the condominium market, there has been one new development (150 units) in the past 12 years. However, activity within the existing market has experienced strong growth in terms of both sales volume and pricing during the past eight years. However, recent pricing and/or sales activity has yet to rebound to the levels of 2006/7.

FIGURE 13: CITY OF PEMBROKE PINES CONDOMINIUM SALES ACTIVITY



HIGHLIGHTS – CITY OF PEMBROKE PINES AND TRADE AREA

- As noted in preceding sections, the Trade Area has a higher renter proportion of households than City and County, which is a positive sign for on-going multifamily rental opportunity
- An analysis from Costar data indicates a survey of more than 8,400 multifamily rental units in 44 buildings ranging from duplex to more than 1,000 units in a complex
- The City had 3,600± units delivered since 2000, or roughly 200 units per average per year
 - Approximately 50% of this development occurred within the Trade Area

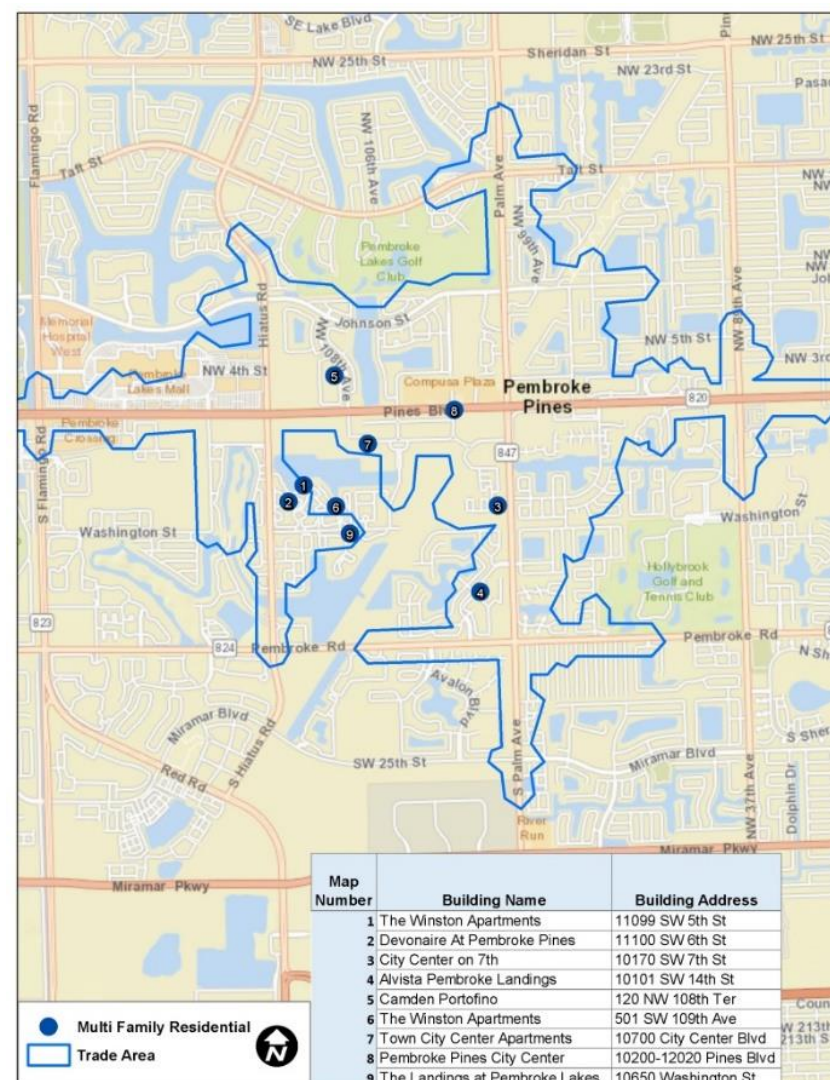
FIGURE 14: COUNTY, CITY & TRADE AREA RENTAL APARTMENT SNAPSHOT⁶

	Avg. Unit Size (SF)	Avg. Month Rent	Avg. Rent Per SF	Avg. Annl. Δ (past 5 yrs)	Vacancy
Broward County	963	\$1,473	\$1.53	4.75%	4.7%
Pembroke Pines	1,031	\$1,719	\$1.64	4.70%	6.7%
Trade Area	1,115	\$1,780	\$1.60	4.0%	3.5%

- Occupancy in both the city and Trade Area is approximately 95-96%, which is a very slight decline from peak occupancy of 97% in 2015/6
- The average size of rental units in the City is approximately 1,013 square feet, and marginally larger in the Trade Area at 1,115± sf
- Average monthly rental rates in both the City and Trade Area are considerably stronger than the County
 - Recent rental rate growth has been strong for the City and Trade Area, and generally in-line with the County
- According to Reinhold P. Wolff data, the Pembroke Pines rental submarket comprises: 28% one-bedrooms; 51% two-bedrooms; and, 21% three-bedroom units.

FIGURE 15: MAP OF MULTI FAMILY IN TRADE AREA

Source: Costar

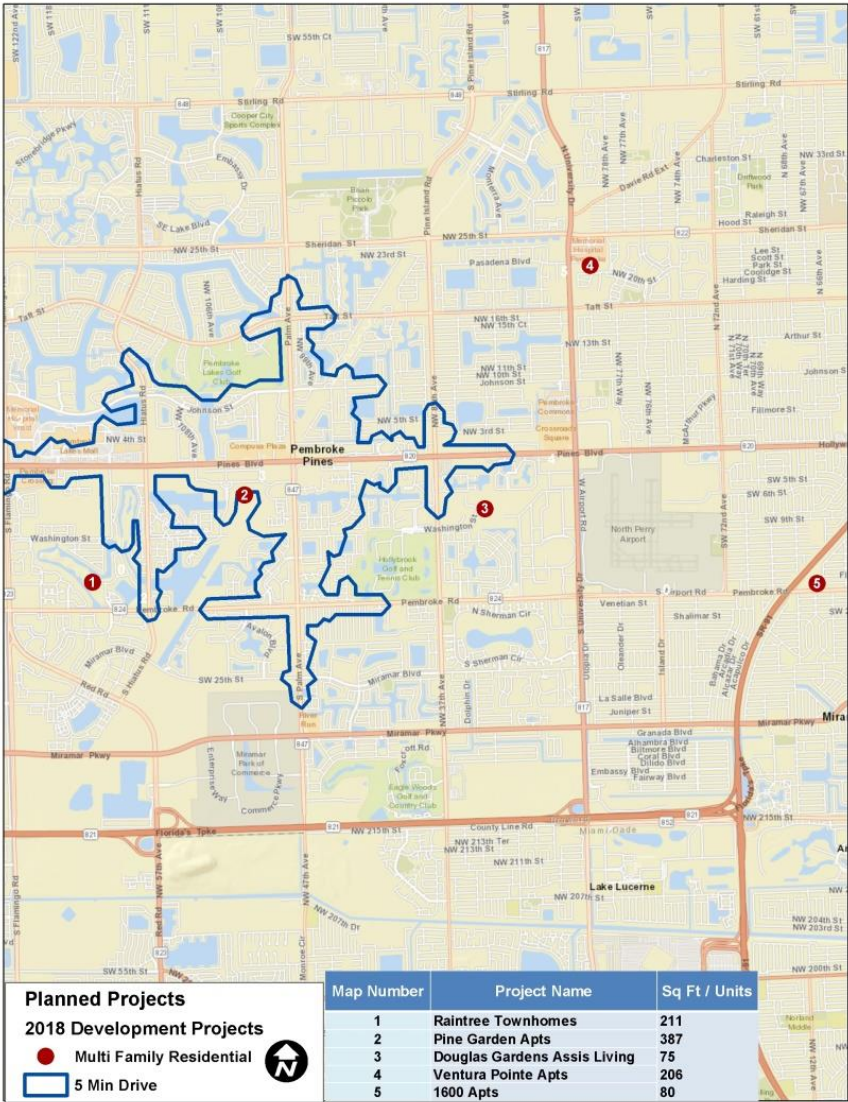

⁶ Costar

MULTI FAMILY PROJECTS IN PLANNING

Based upon information from the City of Pembroke Pines, there are 670 units of new multi-family in planning City-wide, with 387 units planned within the Trade Area.

FIGURE 16: MAP OF MULTI FAMILY PROJECTS IN PLANNING

Source: City of Pembroke Pines



MULTI FAMILY DEMAND SUMMARY

According to the most recent population projections set forth above, the City's population is forecast to increase an average 0.10 percent from 2015 to 2030 and 0.23 percent from 2030 to 2045, which the analysis largely assumes is the pattern for the Trade Area. For the Trade Area's estimated household base of 9,300 \pm , this yields on average less than 30 total multifamily housing units demand per year (or 300 \pm over a ten year period) which differs with current development under-construction or in planning.

While it is very difficult to assess how many of the units that are proposed and/or in planning will actually come to fruition, the fact is the level of planning that is currently in place will likely exceed BEBR forecasts. This trend is not unique to Pembroke Pines, this discrepancy has been observed in many South Florida markets which would lead to the assumption that BEBR is quite conservative in their forecast.

For this analysis, if the rate of BEBR's population growth is adjusted upward to roughly 0.5 percent average annual, multifamily housing demand in the Trade Area is estimated to be at least 300 \pm in addition to the 387 currently planned; or, upwards 700 residential units in total. This considers the potential to capture the "pent-up" up demand from Trade Area workers living outside of the area as discussed above. The Pembroke Pines City Center area should be in a strong position to capture a large share of this demand.

In regard to mobility hub housing plans, new residential development within a mixed-use environment that is proximate to transit, should continue to attract a wide range of tenants from young, single households to retiree. As such, it is recommended that the City promote a more balanced mix of units than what currently exists in Pembroke Pines overall, and namely to increase the level of one bedroom units. Therefore the proposed mix should represent: 40-45% one-bedroom units; 40-45% two-bedroom units; and, 10-15% three-bedroom units.

⁷ Greater Ft. Lauderdale Convention and Visitor Bureau

HOTEL MARKET HIGHLIGHTS

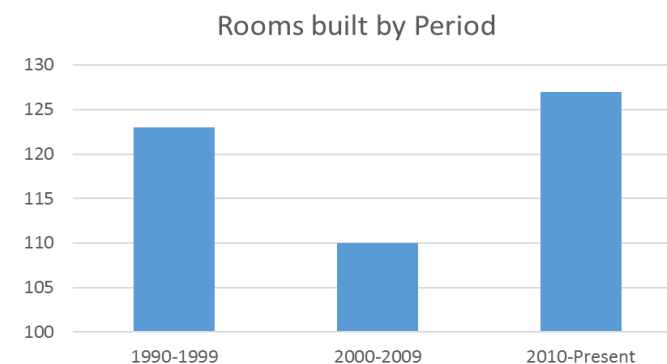
HIGHLIGHTS – CITY OF PEMBROKE PINES AND TRADE AREA

Broward County's tourism continues to be robust, with 12.8 million visitors in 2017 – an increase of 4.6 percent over the prior year.⁷ The County's hotel market continues to strengthen, reaching 77.5 percent annual occupancy and \$150 average daily rate (ADR) – up 7.8 percent from the prior year. According to the Greater Ft Lauderdale Convention and Visitors Bureau, the region's hotel demand growth next year (at 2.6 percent) is forecast to outpace supply (2.1 percent). Some of the strongest hotel demand has been in the Upper Midscale category (or properties such as Hampton Inn, Holiday Inn) and Upscale category (or properties such as Hyatt Place, Courtyard).

There are a total 490 hotel rooms (4 hotels) in the City, and two of which were built in the past 10 years (Fairfield Inn, Holiday Inn Express). There is no hotel inventory currently in the Trade Area.

FIGURE 17: ROOMS BUILT

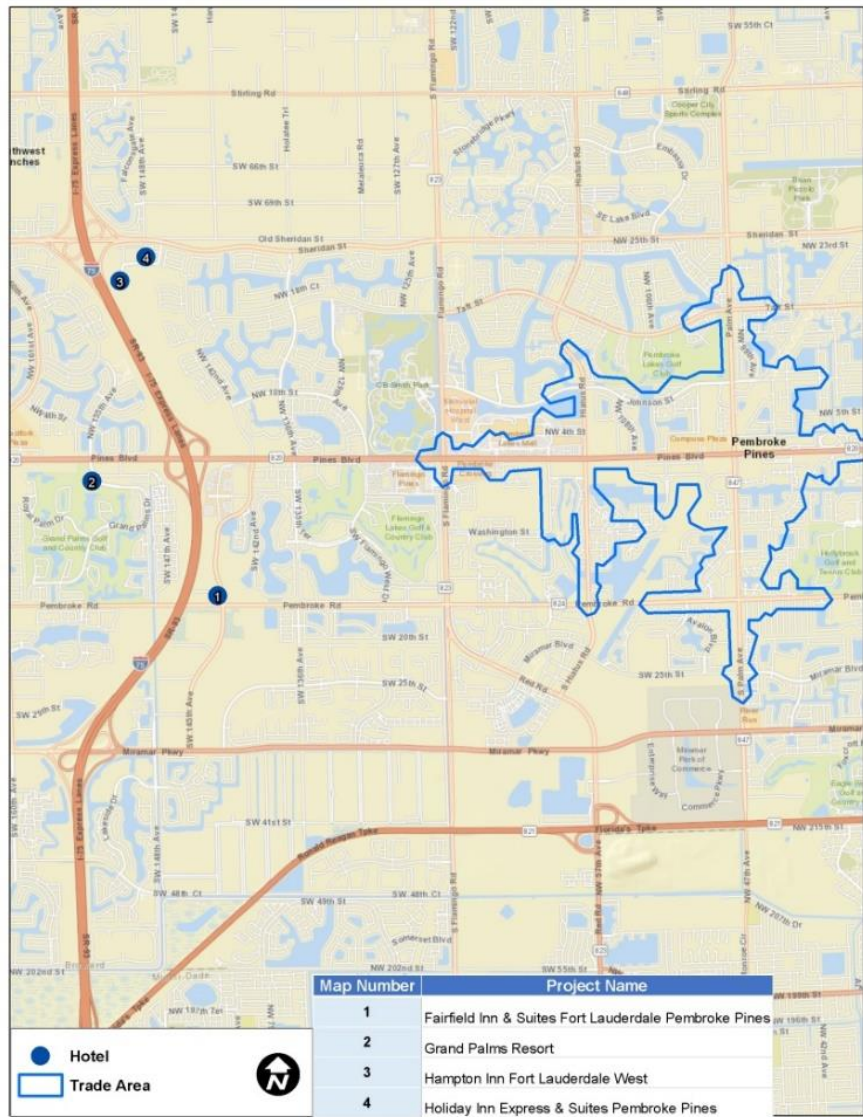
Source: STR⁸



⁸ A world leading resource for hotel demand and supply data

FIGURE 18: MAP OF HOTELS IN TRADE AREA

Source: STR



HOTEL MARKET DEMAND SUMMARY

Though preliminary at this point, there has been discussion of potential hotel development within the City Center area. It is presumed that the hotel will be a select service property between 100 and 150 rooms. This hotel would likely absorb Trade Area demand for hotel during the foreseeable ten-year timeframe; however, from a more aggressive standpoint, and presuming the market benefits from improved transit and potential Mobility Hub, there may be an opportunity to plan for one additional select service hotel development toward the latter end of the forecast period; particularly, if new office development is added during the foreseeable time frame.

STAKEHOLDER INTERVIEW INSIGHTS

As part of the research and analysis associated with the market analysis, stakeholders including developers, brokers and/or real estate industry representatives were interviewed. In this regard, the City has already undertaken considerable efforts to understand motivations, perceptions, and attitudes related to the City’s business climate. This was done as part of a Business Opinion Study in 2018 that surveyed more than 500 businesses within the City and comprising a diverse mix of industries. There were two key takeaways from the survey that may be helpful to the Mobility Hub planning process, including:

- More than two-thirds of all businesses employ less than 5 persons. As it relates to prospective office development, this challenges the ability to support office development of larger scale (or buildings greater than 100,000 square feet) from a financial perspective, since it requires a considerable amount of time to lease large blocks of space from smaller companies alone.
- One of the strengths noted by respondents was accessibility to major thoroughfares, while one of the noted challenges was lack of public transportation.

As a result of the stakeholder interviews completed as part of this analysis, there are a few general findings to highlight:

- The core area around City Center should provide for higher and more intensified development
- City Center continues to evolve and is becoming the “upper-end” residential and retail product in the area
- The market needs more office, and perhaps that may drive a need for increased transit

SUMMARY OF FINDINGS & RECOMMENDATIONS

Based upon the analysis of economic, demographic and real estate market conditions above, the following are summary conclusions, along with recommendations for Pembroke Pines Mobility Hub planning efforts:

- *Economic/Demographic:* Though the City and Trade Area population forecast indicates a measurable moderation from historical growth, current development under-construction, planned and/or proposed indicate that modeling forecasts warrant updates or modification. Though the Trade Area has more modest income than the City, the income is higher than the County and considered to be relatively stable and supportive of new housing development. Accordingly, with the Trade Area’s notably higher proportion of renter households than the City and County, it portends well for multifamily rental housing development as the population has more renters.

Employment within the Trade Area is dominated by Retail and Accommodation/Food Services, and there should be a concentrated effort to balance area employment with other sectors such as FIRE, Healthcare and Professional Business which enhances support for office development, as well as provide industries with higher wages to support housing and retail growth.

- *Retail:* In spite of changing conditions and trends in the broader retail sector, Pembroke Pines has one of the most robust retail markets in the County. There is enough projected retail demand to provide additional support to what is already planned in the Trade Area (and namely City Center area). However, as it relates to mobility hub planning, the

characteristic of retail development should not be focused on competing with the area’s regional centers; rather, to be oriented to more a pedestrian friendly environment with a unique mix of retailers, including dining/entertainment venues.

- *Office:* It is important for the City to continue enhancing and broadening its office sector. The County’s office market continues to be strong, and the FIRE and Business Services sectors are among the leading segments of future growth. Based upon regional employment projections and capture rates, the City has potential office demand for 225,000 to 300,000 square feet of office demand during the next 10-year period, and from which the City Center area can potentially capture a measurable percentage.
- *Residential:* The City and Trade Area are anticipating relatively strong multifamily development during next few years. For the Trade Area, this is estimated to be at least 700+ units during the next ten years, and upon which the City Center area is in a strong position to capture a large share of this demand.
- *Hotel:* In addition to the currently proposed hotel development in the City Center area, there may be opportunities to plan for one smaller (100 to 150 room) additional select service hotel development during the next 10 years should the area continue to evolve in a mixed use pattern.

As previously noted, the estimates of demand among all of the uses is relatively modest in relation to total existing inventory, and this incremental development will likely occur regardless of any proposed improvements to transit within the area. Although this level of incremental growth on its own has limited impact on the need for large-scale transit investment in the area, it does contribute notably to on-going economic development and infill redevelopment within the City Center area.

However, one critical piece to consider for the mobility hub planning initiative for the City Center area is the need to emphasize any opportunity to broaden the

City and Trade Area's economic base; namely, leveraging upon the County's growing FIRE and Business Services sectors. The mobility hub can be an instrumental tool to accomplishing this goal. The Florida Department of Economic Opportunity (FDEO) together with Enterprise Florida have made significant grant funding available for both capital improvements/infrastructure and job creation for higher wage qualified targeted industries (QTI). These specific industries can be identified in the Enterprise Florida website:
http://www.enterpriseflorida.com/wp-content/uploads/SI_Targeted_Industries.pdf

In light of these funding opportunities the consideration for integrating office development as part of mobility hub planning can present a compelling element of a grant funding submission and an approach that should be further explored as the mobility hub planning progresses.

PLANNING CONTEXT

The Pembroke Pines Mobility Hub Master Plan builds upon the existing physical context in and surrounding the Hub study area, and the policy context provided by prior and ongoing planning efforts. This Planning Context section summarizes relevant physical conditions and the relevant adopted policies and recommendations from recent planning efforts of the City and others. The resulting understanding of the transportation and development environment in the Pembroke Pines Hub study area, together with the accompanying Market Analysis, informs the Mobility Hub Planning Framework.

With the assistance of the Planning and Economic Development Department, the consulting team conducted site visits, stakeholder outreach and a review of

relevant documentation to gain an understanding of factors impacting the need for mobility improvements in the Hub study area. Current policies are supportive of multi-modal improvements. Now that the Pines City Center (as depicted in Figure C-1) is nearing completion, specific implementation strategies are timely.

The Hub study area is currently served by one Broward County Transit (BCT) route and a robust community shuttle system. Integration of these services, and planning for future BCT service upgrades, are both needed. Current market interest and development opportunities offer the potential for successful near-term and long-term multi-modal strategies.

This section documents relevant findings regarding:

FIGURE C-1: RENDERING OF PEMBROKE PINES CITY CENTER

Source: Terra



- the **REGIONAL CONTEXT** impacting the Pembroke Pines Hub study area, including surrounding areas that can be better connected to the City Center via multiple modes of travel;
- the **TRANSPORTATION CONTEXT**, including existing and planned transit services, the existing roadway network, and the existing pedestrian and biking environment; and
- the **DEVELOPMENT CONTEXT**, including existing land use, current zoning, and the prevailing development character in the area.

Feedback collected during **STAKEHOLDER OUTREACH** early in the planning process is also summarized. Outreach consisted of meetings with agencies, a joint meeting of all City of Pembroke Pines Advisory Boards, and both in-person and online surveys to gather input from current and potential future transit riders.

Adopted Policies Reviewed

Documentation reviewed for this report included the following:

- **City of Pembroke Pines Comprehensive Plan** (as amended October 2, 2013).¹
- **Commitment 2040 – The Long Range Transportation Plan (LRTP) for Broward County** (current through April 12, 2018).²
- **City of Pembroke Pines Future Land Use Map** (current through June 2018).³
- **City of Pembroke Pines 2014-2019 Economic Development Strategic Plan**, August 2014 (adopted September 17, 2014).⁴
- **City of Pembroke Pines Green Plan**, October 28, 2014.⁵
- **Hollywood/Pines Boulevard Congestion Management Process/Livability Planning Project**, December 2013.⁶
- **City of Pembroke Pines Streetscape Design Guidelines**, July 6, 2012.⁷
- **Hollywood/Pines Boulevard Multimodal Corridor Study**, September 2004.⁸
- **City of Pembroke Pines Zoning Map** (current through June 2018).⁹
- **City of Pembroke Pines Code of Ordinances** (current through March 21, 2018).¹⁰

REGIONAL CONTEXT

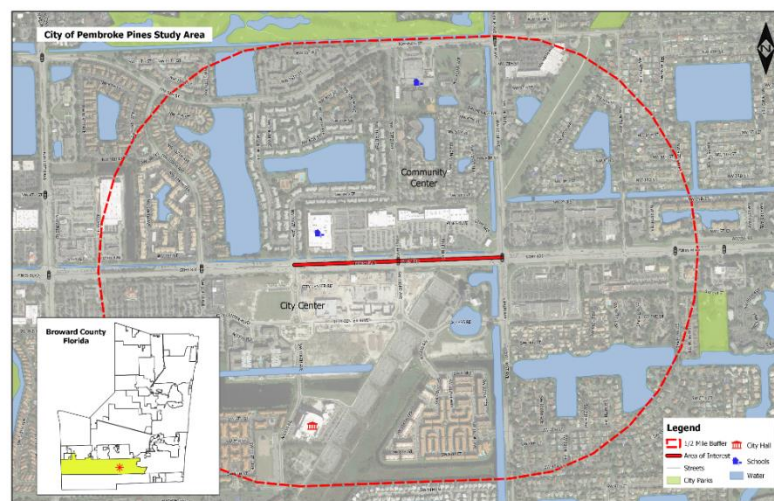
The study area for the Pembroke Pines Mobility Hub Master Plan encompasses the newly developed Pines City Center at the southwest corner of Pines Boulevard and Palm / 101st Avenue and its immediate surroundings. The Pines City Center is comprised of commercial uses, multi-family residential uses, and the new Charles F. Dodge City Hall complex, with a few site proposals still in

review. A long-established shopping center that also includes a charter school facility is located immediately to the north within the study area, with a variety of predominantly residential land uses extending north and south. Regional access to the Pines City Center area is provided by Flamingo Road about 1.5 miles west and an interchange with I-75 at Pines Boulevard approximately 3.5 miles west, and University Boulevard and an interchange with Florida's Turnpike approximately 2 and 4 miles east, respectively. Figure C-2 depicts the focused study area for the Mobility Hub that is documented and discussed in this report.

As depicted on Figure C-3, regional destinations extending west along Pines Boulevard include C B Smith Park west of Flamingo Road and Pembroke Lakes Mall between Flamingo and Hiatus Roads. To the east are several regional auto dealers, North Perry Airport and Broward College-South, past University Drive.

FIGURE C-2: STUDY AREA FOR MOBILITY HUB DATA COLLECTION

(not to scale)



¹ <https://www.ppines.com/374/Comprehensive-Plan>

² <http://www.browardmpo.org/index.php/core-products/long-range-transportation-plan-lrtp>

³ <https://www.ppines.com/DocumentCenter/View/689/FLUM?bidId=>

⁴ <https://www.ppines.com/DocumentCenter/View/3883/Pembroke-Pines-EDSP-2014-2019?bidId>

⁵ <https://www.ppines.com/DocumentCenter/View/2656/greenplan?bidId>

⁶ <http://www.browardmpo.org/index.php/major-functions/congestion-management-process-livability-planning>

⁷ <https://www.ppines.com/DocumentCenter/View/737/Streetscape-Design-Guidelines?bidId=>

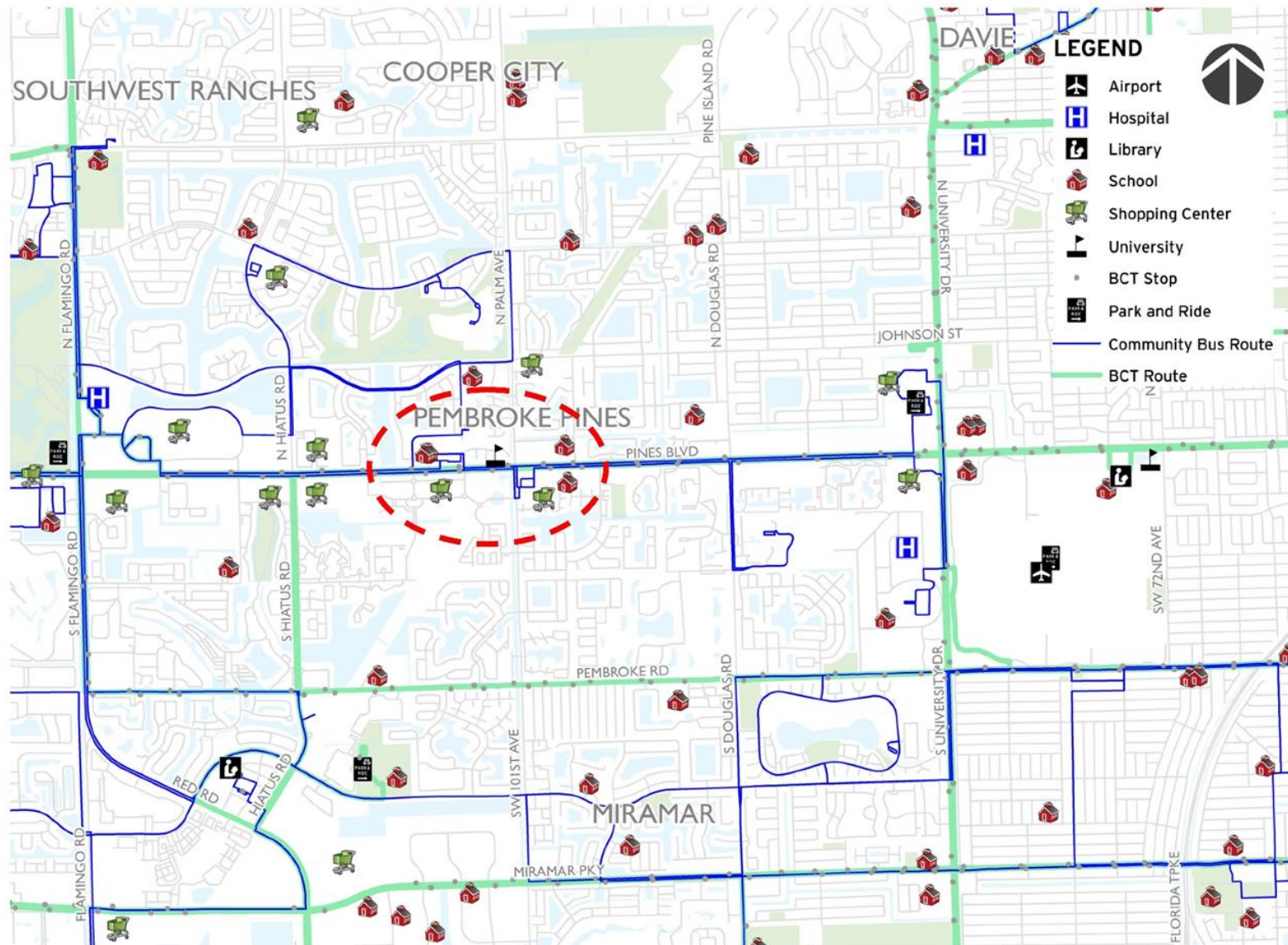
⁸ http://www.browardmpo.org/images/WhatWeDo/HollywoodPines_Final.pdf

⁹ <https://www.ppines.com/DocumentCenter/View/731/Zoning?bidId>

¹⁰ http://www.amlegal.com/codes/client/pembroke-pines_fl/

FIGURE C-3: REGIONAL CONTEXT OF THE PEMBROKE PINES MOBILITY HUB STUDY AREA

(not to scale)



TRANSPORTATION CONTEXT

Information regarding current and planned transit service in the Pembroke Pines Hub study area is summarized in this section, including a summary of community shuttle service. Documentation of the existing pedestrian and bicycle network and the roadway network is also included. Relevant planning recommendations from prior planning studies are also summarized. The information provides a consistent “baseline” understanding of the existing mobility network upon which recommendations for Hub-related multimodal investments and longer-term mobility initiatives can be developed.

TRANSIT SERVICE

Existing Service

There is one BCT Route within the Hub study area, Route 7 which is a major east-west line providing service along Pines Boulevard from U.S. 1/Federal Highway to U.S. 27. The Hub study area is also served by three community shuttle routes operated by the City:

Route 7

- A major east-west line provides service along Pines Boulevard from U.S. 1/Federal Highway to U.S. 27
- Services 716,380 passengers annually (July 2017 to July 2018)

Pembroke Pines Blue East (Route 726)

- A Community Shuttle servicing the eastern portion of Pembroke Pines from University Drive to the Southwest Focal Point Community Center, primarily along Pines Boulevard
- Route was recently updated in 2017
- Services 6,536 passengers annually (July 2017 to July 2018)
- A free service Tuesday, Wednesday, Friday from 9 AM to 3:25 PM

Pembroke Pines Blue West (Route 727)

- A Community Shuttle servicing the central portion of Pembroke Pines from Century Village off SW 136 Avenue to the Southwest Focal Point Community Center, via Palm and Pines
- Route was recently updated in 2017
- Services 6,638 passengers annually (July 2017 to July 2018)
- A Free service Tuesday, Wednesday, Friday from 8 AM to 3:15 PM

Pembroke Pines Gold East (Route 725)

- A Community Shuttle servicing the central portion of Pembroke Pines from the Southwest Pines Focal Point Community Center to Century Village off SW 136 Avenue, via Johnson and Hiatus
- Route was recently updated in 2017
- Services 69,105 passengers annually (July 2017 to July 2018)
- A free service Monday through Saturday from 7 AM to 7:21 PM

Figure C-4 shows the transit network in the Hub study area. Figure C-5 shows the citywide transit network that feeds into the Hub study area, along with existing nearby park-and-ride facilities.

Other Pembroke Pines Routes

Route 2

- A major north-south line provides service along University Drive from Westview Drive in Coral Springs to NW 207th Street in Miami- Dade County
- Services 1,227,607 passengers annually (July 2017 – July 2018)

Route 5

- An east-west feeder line provides service along Pembroke Road from Hallandale Beach City Hall to the Pembroke Lakes Mall, just west of the Hub study area
- Services 264,211 passengers annually (July 2017 to July 2018)

FIGURE C-4: STUDY AREA TRANSIT NETWORK

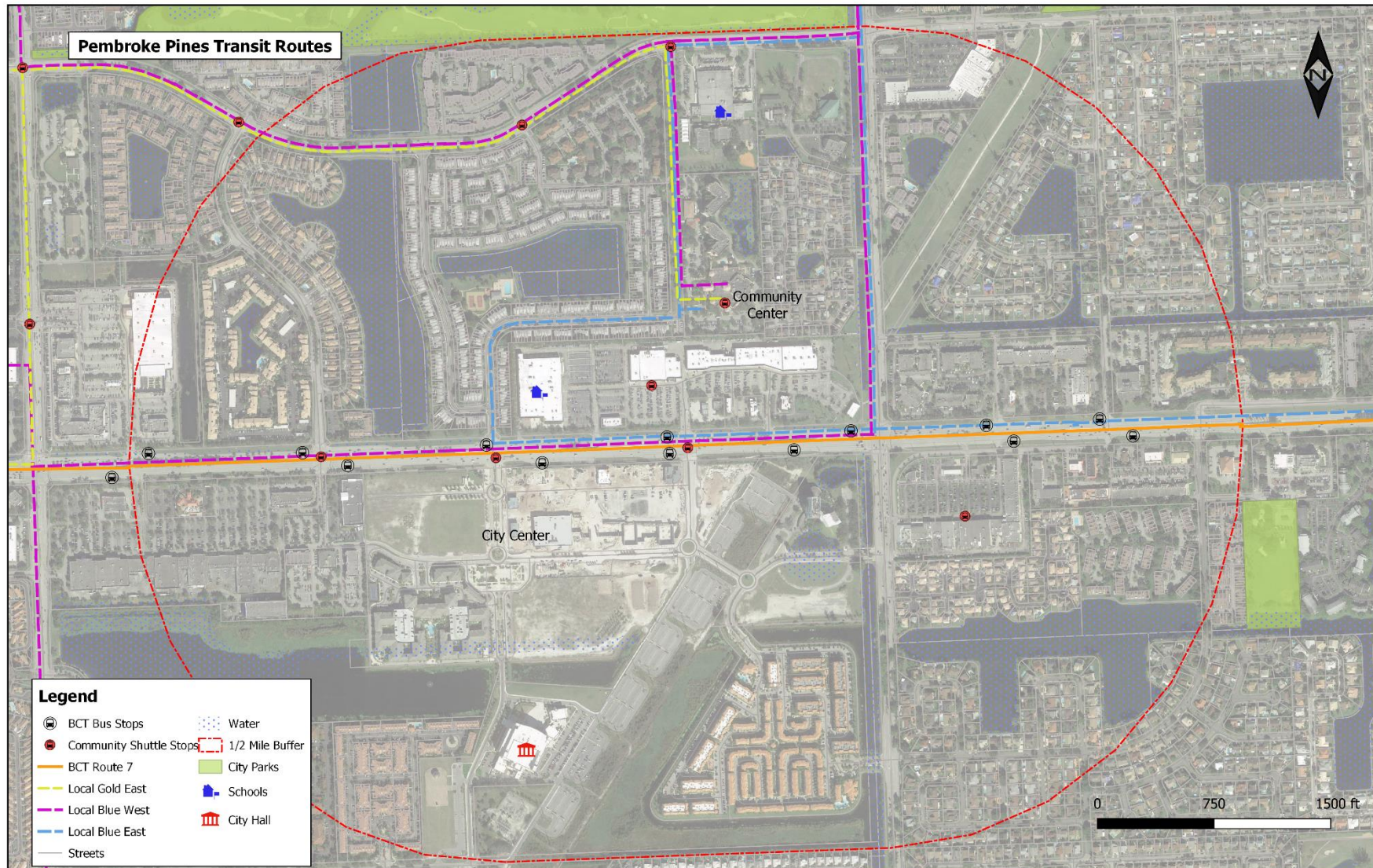
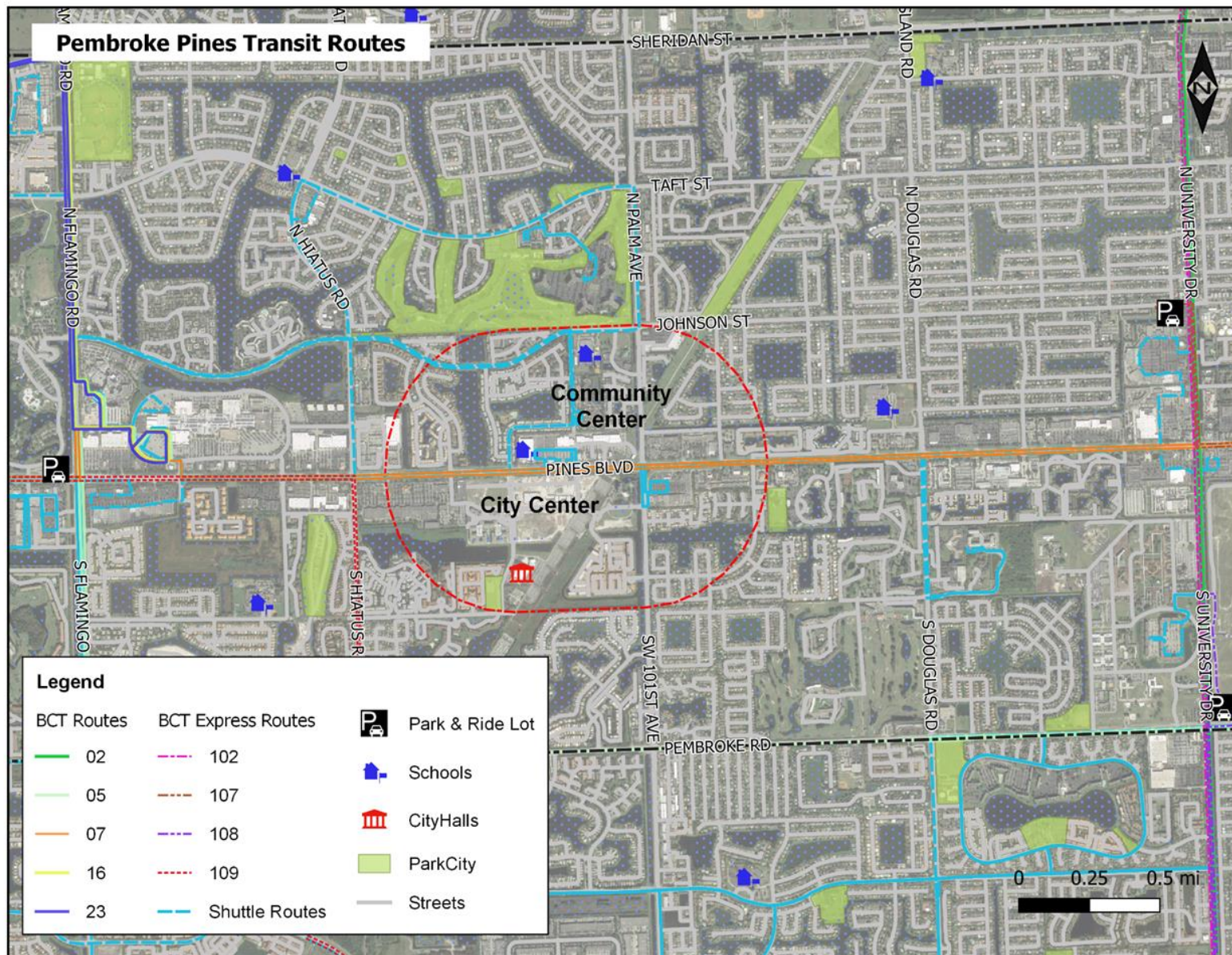


FIGURE C-5: CITYWIDE TRANSIT NETWORK



Other Pembroke Pines Routes - Continued

Route 16

- An east-west feeder line providing service primarily along Stirling Road from Dania Beach to the Pembroke Lakes Mall, just west of the Hub study area
- Services 161,399 passengers annually (July 2017 to July 2018)

Route 23

- A north-south feeder line providing service primarily along Weston Road from the Sawgrass Mills Mall to the Pembroke Lakes Mall, just west of the Hub study area
- Services 57,504 passengers annually (July 2017 to July 2018)

Route 102

- A major north-south line provides limited service stops along University Drive from Westview Drive in Coral Springs, to the Golden Glades Park and Ride in Miami-Dade
- Services 155,778 passengers annually (July 2017 – July 2018)

95 Express (Route 107)

- An express bus service from University Drive/Pines Boulevard to the Miami Civic Center and Downtown Miami
- Services 32,342 passengers annually (July 2017 to July 2018)

95 Express (Route 108)

- An express bus service from North Perry Airport on SW 72nd Avenue/Pembroke Road to the Culmer Metrorail Station and University Miami Hospital
- Services 82,879 passengers annually (July 2017 to July 2018)

95 Express (Route 109)

- An express bus service from CB Smith park on Flamingo Road/Pines Boulevard to Downtown Miami/Brickell
- Services 116,994 passengers annually (July 2017 to July 2018)

Pembroke Pines Gold West (Route 725)

- A Community Shuttle servicing the central western portion of Pembroke Pines from Century Village off SW 136th Avenue to Walmart off Pines Boulevard and SW 184th Avenue
- Services 33,705 passengers annually (July 2017 to July 2018)
- A Free service Monday through Saturday from 7 AM to 7:21 PM

Pembroke Pines Green (Route 724)

- A Community Shuttle servicing the western most portion of Pembroke Pines from Westfork Plaza off Pines Boulevard and Dykes Road to Holly Lake mobile home park off U.S. 27
- Services 41,678 passengers annually (July 2017 to July 2018)
- A Free service Monday through Saturday 7:45 AM to 7:55 PM

Transportation Options (TOPS) is a county paratransit service

- Provides service within Hub study area – no specific data for City
- Cost is \$3.50 per one-way trip
- Services 719,850 passengers annually (July 2017-July 2018)

Headways and Spans of Service

Route 7 provides weekday, Saturday, and Sunday service. Table C-1 provides a summary of the weekday service. The route provides service exceeding 15 hours per day with approximately 25-minute headways.

TABLE C-1: WEEKDAY TRANSIT HEADWAYS AND SPAN OF SERVICE

Pines Blvd & University Dr Bus Stop								
Route	Span of Service		Ave Span of Service Weekday [Hours]:[Min]	Peak Hour Headway Weekday [minutes]				Peak Hour Headway Weekday Ave [minutes]
	WB	EB		WB AM	EB AM	WB PM	EB PM	
Route 7	17:44	17:31	17:37	0:27	0:23	0:23	0:24	0:24

Bus Stop Types and Activity

There are three different types of bus stops ranging from a bus stop sign with street furniture to a BCT bus shelter provided on Pines Boulevard serving Pines City Center and the surrounding commercial centers.

Figure C-6 provides a map of bus stop locations by type, and Figures C-7 and C-8 depict boardings and alightings. Note the most current boarding and alighting data available from BCT is for the year 2014, when much of Pines City Center was still vacant.

Figures C-7 and C-8 indicate that there is moderate transit activity with the most activity occurring at the bus stop east of Palm Avenue on Pines Boulevard experiencing 78 boardings and 70 alightings, followed by a grouping of stops in proximity to Pines City Center with fewer boardings and alightings.

Note that the City of Pembroke Pines has a community shuttle service also, for which stop-level data is not available. The Green Route was established in 1994, the Gold route in 2003, and the Blue route in 2010. The service was modified in 2017 to accommodate the expansive growth the City has undergone in the last 20 years. The shuttles operate 12 hours each day Monday through Saturday except for the Blue Routes, which operate approximately 6 hours per day, three days per week. Changes implemented in 2017 included splitting the Gold and Blue routes into an east and west shuttle, covering the span of the entire City with several transfer points in between shuttles, and improving connections to the various BCT routes throughout the City. The community shuttle routes carry an average of over 185,000 passengers annually, with the Gold Route servicing the most passengers, averaging over 110,000 passengers annually. The Blue Route services almost 9,000 passengers annually.



Above are four examples of existing bus stops found along Pines Boulevard in the Hub study area. Top left: Bus stop type 1 at Pines and 103rd. Top right: Bus stop type 2 at Pines and 108th. Middle left: Bus stop type 3 on Pines east of Palm. Middle right: bus stop type 1 at Pines west of Palm. The bottom image represents a typical existing community shuttle stop (not in the Hub study area).

FIGURE C-6: BUS STOP TYPES

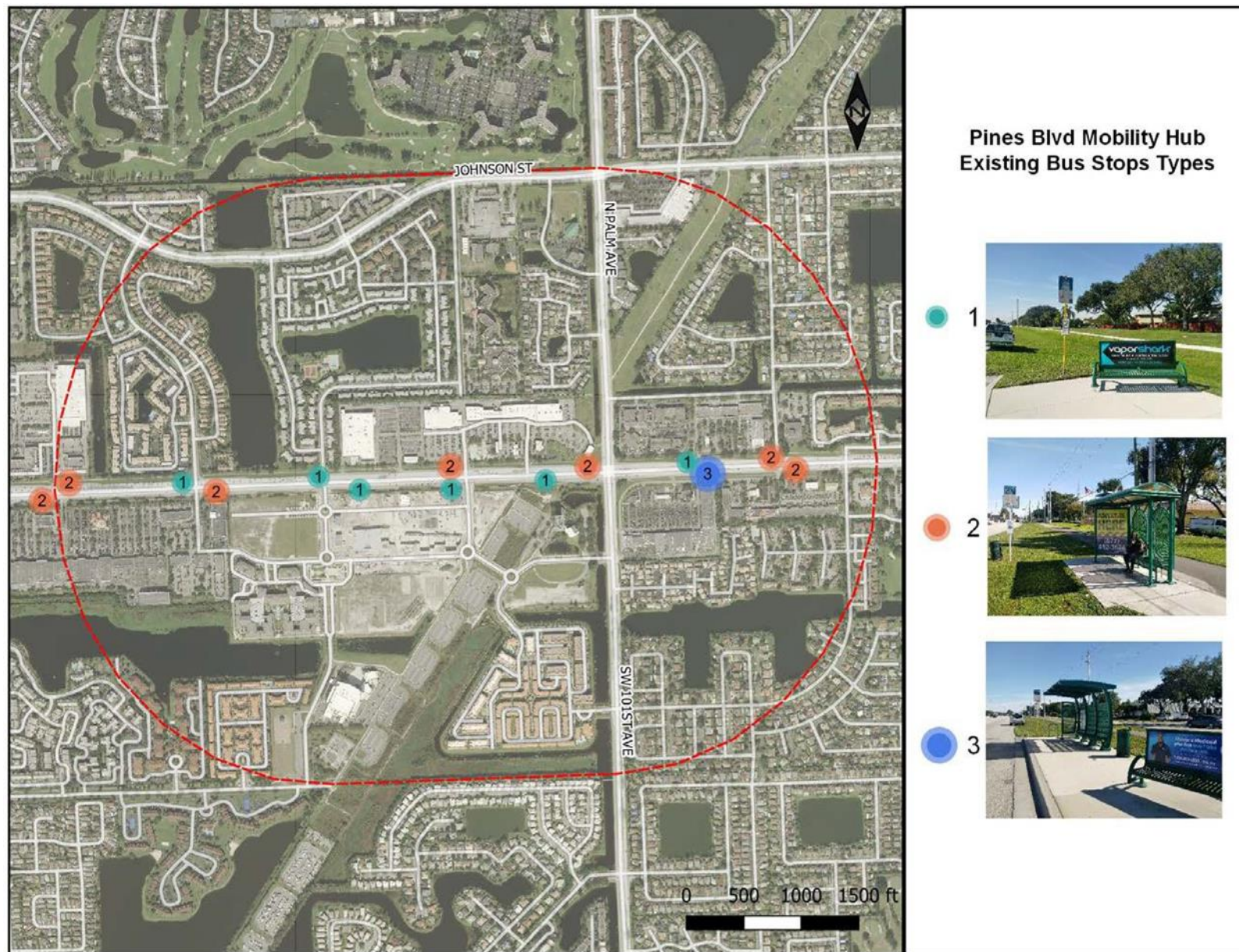
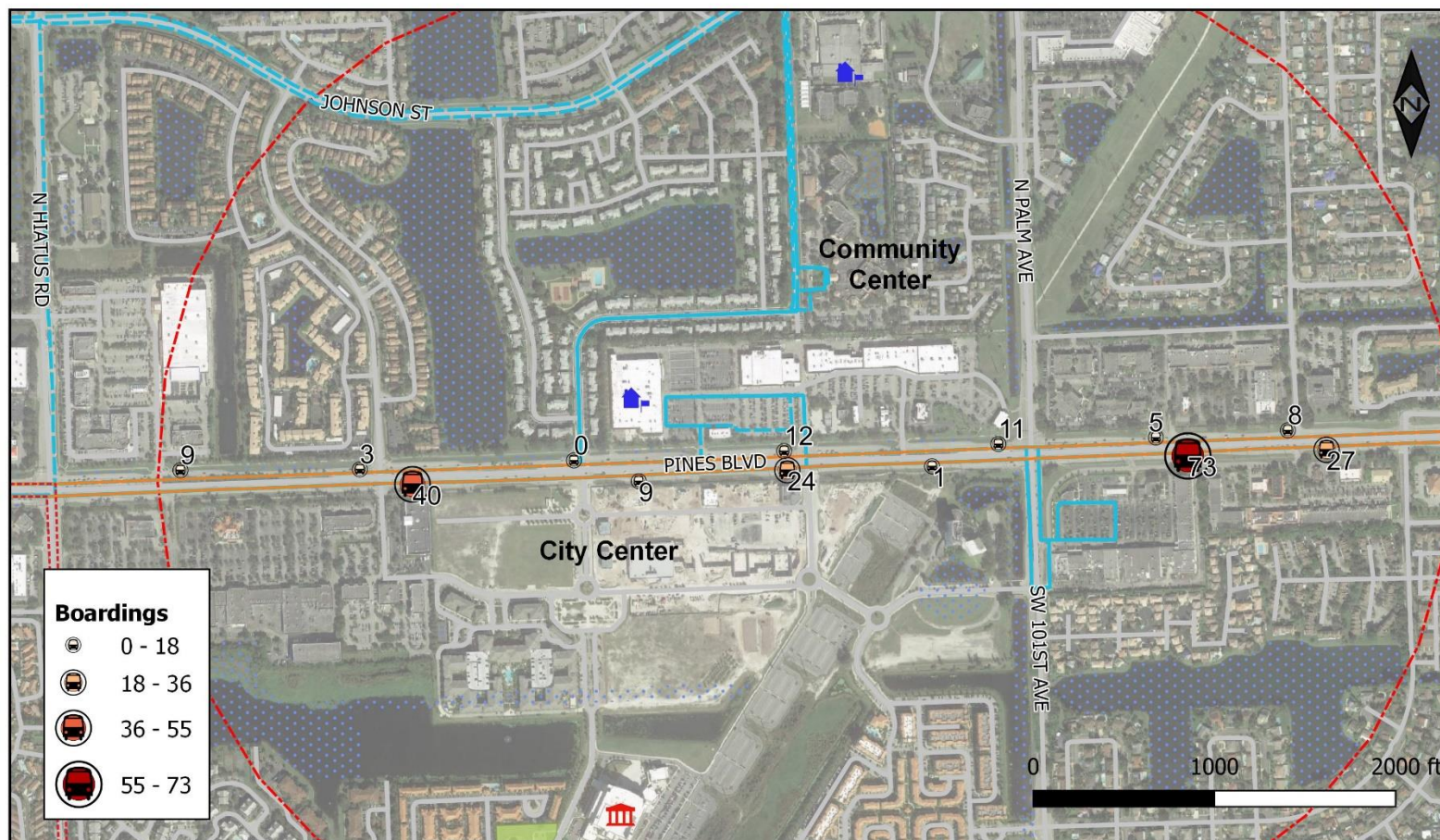


FIGURE C-7: TRANSIT BOARDING ACTIVITY (BCT ROUTE 7)



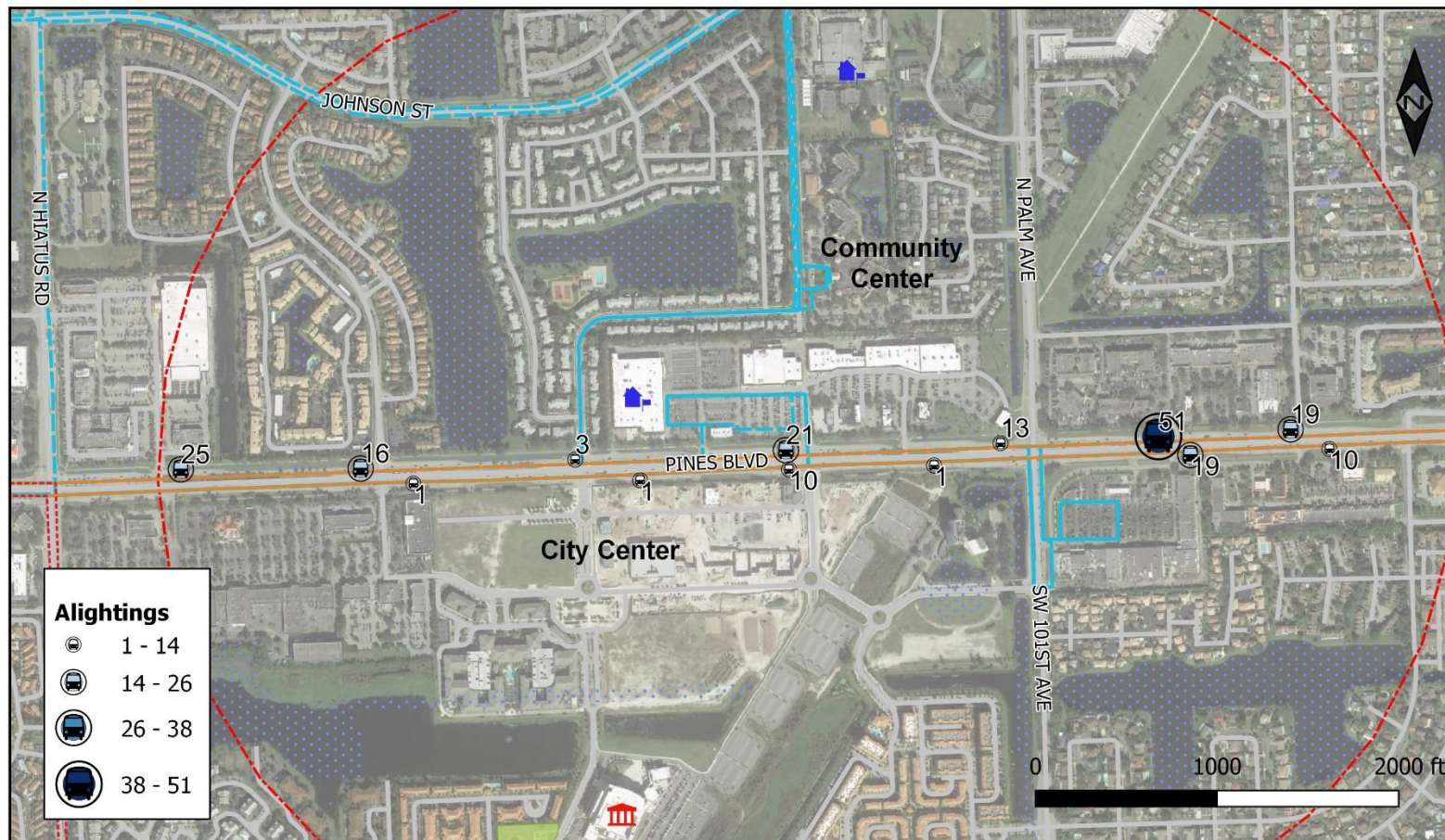
CITY OF PEMBROKE PINES BUS RIDERSHIP DATA BOARDINGS & ALIGHTINGS Weekdays - Daily Average



Disclaimer: This data is based on available weekday samples from Automatic Passenger Counters (APC) between Jan. 19, 2014 - Mar 2, 2014. Please note that BCT has known technical issues with APC sensors that have caused sampling and counting errors. It is recommended that all APC ridership statics are validated with on-board surveys.

3/22/2019

FIGURE C-8: TRANSIT ALIGHTING ACTIVITY (BCT ROUTE 7)



CITY OF PEMBROKE PINES BUS RIDERSHIP DATA BOARDINGS & ALIGHTINGS Weekdays - Daily Average



Disclaimer: This data is based on available weekday samples from Automatic Passenger Counters (APC) between Jan. 19, 2014 - Mar 2, 2014. Please note that BCT has known technical issues with APC sensors that have caused sampling and counting errors. It is recommended that all APC ridership statics are validated with on-board surveys.

3/22/2019

Field Observations of Transit Use

Field observation undertaken at the West Regional Terminal is fully documented under separate cover in a report entitled “City of Pembroke Pines Data Collection and Transit Count Summary.” The results of the observation are summarized below.

MIOVision Cameras were deployed on December 5, 2018 and placed at seven (7) locations within the study area. Five (5) cameras were placed along Pines Boulevard to document pedestrian, bicycle and transit use along Pines Boulevard over a 24-hour period. Videos were viewed by engineering technicians to document peak period activity from 7 AM to 9 AM and 4 PM to 6 PM.

The Route 7 schedule provided by Broward County Transit does not list every stop along the route. The study area falls in between two primary stops published within the schedule, the Pines Boulevard/University Drive stop and the Pembroke Lakes Mall stop. Using the times that the bus travels in between these two stops, a total of four buses travel eastbound and four buses travel westbound through the study area during the AM weekday and Saturday AM peak times, while a total of five buses travel eastbound and another five travel westbound during the PM weekday peak times. During Saturday PM peak times, four buses travel eastbound and four buses travel westbound. Bus operators only stop within the study area if they observe people waiting at the stops or a rider indicates they must alight at the stop.

The data collection results for the study area indicate that there was a total of 46 transit riders accessing Route 7 bus stops along Pines Boulevard between 7 AM to 9 AM and 4 PM to 6 PM on Thursday, December 6, 2018 and Saturday, December 8, 2018. Morning peak period use was 19 transit riders and evening peak period resulted in 27 transit riders, with 18% more transit users during evening peak periods. Thirty transit riders were observed during the weekday peak period with 16 transit riders during the weekend peak period. During weekend peak periods, there were three times the number of users that alighted Route 7 than boarded. Approximately twice as many transit users access Route 7 during the weekday versus the weekend.

All but two transit users accessing the bus stops along Pines Boulevard within the study area walked to or from their designated bus stop, traveling in all directions along Pines Boulevard. Three (3) of the 46 transit riders were traveling with a bicycle, and two (2) transit users alighting were observed getting picked up by a vehicle at the bus stop. Some pedestrians were observed utilizing crosswalks at SW 103rd and SW 106th Avenues, in addition to utilizing the existing sidewalks to access the bus stop or walk to their destination from alighting the bus. Transit users at the SW 103rd Avenue bus stops were also observed crossing Pines Boulevard without utilizing the existing crosswalks, many times crossing where the bus stops are located. Due to the placement of the cameras, it was difficult to discern the origins or destinations of the transit users.

Weekend bus ridership was only half of weekday ridership, and weekend bus alightings were three times more than weekend boardings. Weekday bus boardings and alightings were similar, with total evening peak hour alightings more than morning peak hour alightings. More transit riders rode eastbound during the weekday evening peak period than the morning peak period.

The camera located at Pines Boulevard and SW 103rd Avenue captured the bus stops located on the north and south side of Pines Boulevard. This camera also captured the most transit use, with 15 total transit riders using the westbound bus stop and 14 total transit riders using the eastbound bus stop. This camera also captured the most buses stopping within the study area: three (3) westbound buses stopped during the morning peak period and four (4) westbound buses stopped during the evening peak period. All other cameras captured less than four (4) buses stopping within the study area. Only one transit rider in total, with a bicycle, was observed utilizing the bus stop located near Pines Boulevard and Palm Avenue, moving eastbound, during the weekend.

Key findings from the field observation of transit use include:

- Highest ridership was observed at the bus stops at the Pines and 103rd intersection.
- A total of 46 transit riders on Route 7 in the study area were observed for the weekend and weekday peak period, with higher weekday ridership.

BIKE AND PEDESTRIAN NETWORK

Existing Network

The Hub study area overall has a lack of roadway, pedestrian, and bicycle network connectivity. The area has been planned and developed for compartmentalized development where parcels are separated by canals and other physical barriers. Movement between and through developments often occurs through parking lots from site to site and most of the lots have been designed without pedestrian facilities except along the storefronts.

Figure C-9 provides an inventory of pedestrian and bicycle facilities for the primary and secondary roadway network. There is only one bicycle facility on the primary roadway, Pines Boulevard. The map shows that for the most part sidewalks exist on both sides of the road for all major arterial and collector roads except for sections of:

- Palm Avenue where a sidewalk does not exist on the west side of the road, next to the canal, due to limited right-of-way.
- Shopping centers on the northwest, northeast, and southeast corners of Pines Boulevard and Palm Avenue have been designed for vehicle access with limited pedestrian facilities.
- Pines City Center has been developed with an emphasis on pedestrian facilities, creating a walkable environment throughout the complex.

Pedestrian Bicycle Crashes

Florida Department of Transportation (FDOT) crash data for 2013 to 2017 pedestrian and bicycle related crashes, prior to Pines City Center completion, is shown on Figure C-10. Crash incidents are focused on the Pines Boulevard corridor, with 15 total crashes occurring as follows:

- 8 Pedestrian Crashes with Injuries, several in midblock locations
- 3 Bicycle Crashes with Injuries
- 2 Pedestrian Crashes without Injuries
- 2 Bicycle Crashes without Injuries
- 0 Fatalities

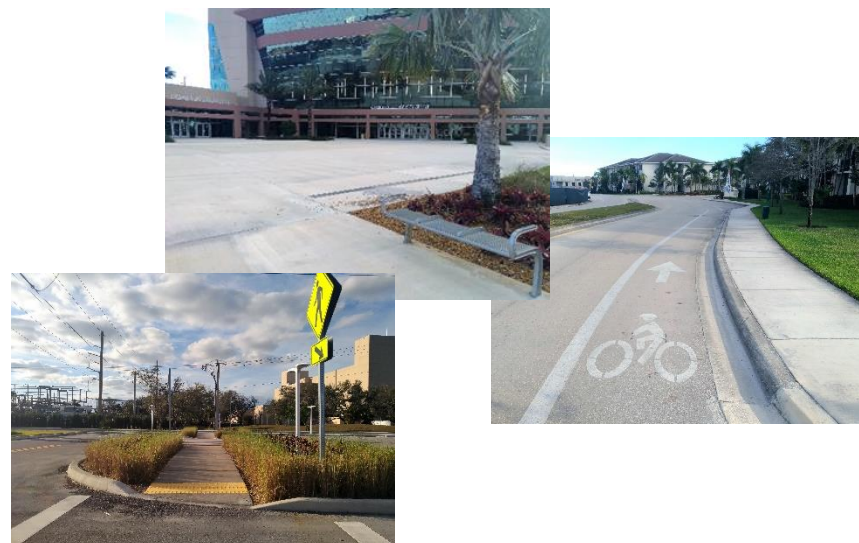
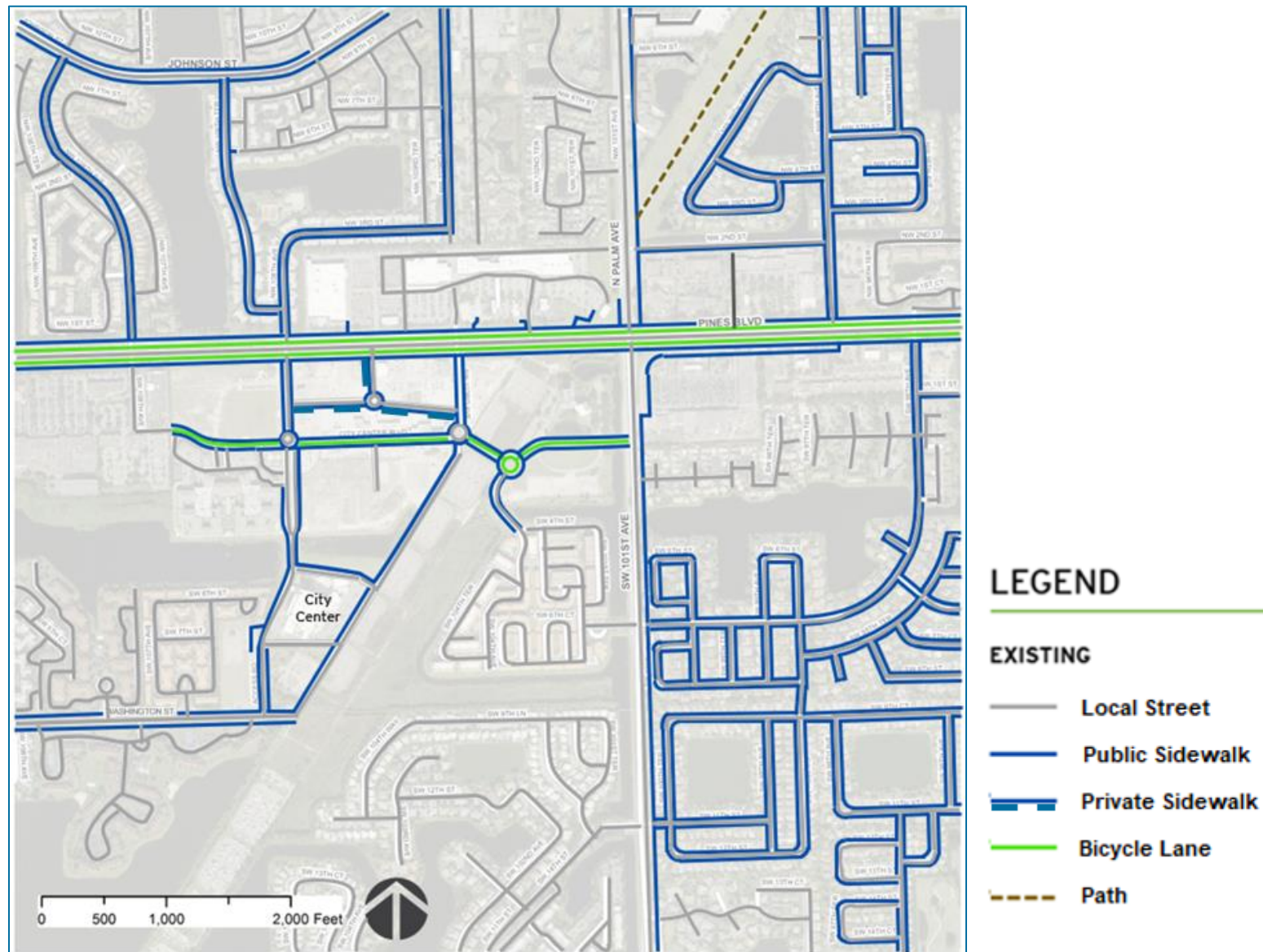


Photo group above: Recent City Center multi-modal features – plaza, parking lot walkways, and bike lanes. Photo group below: Current pedestrian connection between shopping center and neighborhood to north, typical sidewalk and crossing at Pines, intersection of Pines and Palm.



FIGURE C-9: PEDESTRIAN AND BICYCLE NETWORK



**City of Pembroke Pines
Pedestrian & Bicycle Crashes
2013-2017 Crash Data**

Legend

- Bicycle Injury
- Bicycle Property Damage Only
- Pedestrian Injury
- Pedestrian Property Damage Only
- 1/2 Mile Buffer

Scale: 0 to 1000 feet

ROADWAY NETWORK

Figure C-11 depicts the jurisdictions of roadways and location of signalized intersections in the Hub study area for ease of reference. The network is clearly hierarchical, with primary access from Pines Boulevard and Palm Avenue to local public streets at limited points, and then to neighborhoods comprised primarily of private streets. This pattern is reinforced by the barriers created by detention facilities throughout the study area.

Field observation undertaken at two intersections in the Hub study area is fully documented under separate cover in a report entitled “City of Pembroke Pines Data Collection and Transit Count Summary.” The results of the observation are summarized below.

Two (2) MIOVision Cameras were placed at the intersections of Pines Boulevard and the unsignalized Access Road Entrance at Palm Avenue to collect multi-modal turning movement counts on December 6, 2018 and December 8, 2018. Traffic counters were also deployed on Pines Boulevard and Palm Avenue to collect 72-hour traffic counts from Thursday, December 6 through Saturday, December 8, 2018.

The analysis was conducted using Synchro simulation software and the results indicates that the signalized intersection of Pines and Palm operates poorly at level of service (LOS) at weekday and weekend peak periods, except for the WB approach operating at LOS D during the AM peak period. The unsignalized intersection at Palm Avenue and Access Road Entrance operates well at LOS A during peak hours for the NB and SB approaches as they are free flowing. WB operates poorly at LOS of F during the weekday and weekend peak periods. Synchro could not determine the delay and LOS for the EB approach at the unsignalized intersection due to the high through movement of NB and SB traffic during the weekday peak hours. Weekend peak period operation for EB operates poorly at LOS E and F. Vehicles turning left from either the EB or WB approach at the unsignalized intersection of Palm Avenue and the Access Road Entrance must make a two-stage maneuver; this two-stage maneuver is difficult to perform due to the high through-traffic movement during peak periods.

A total of 62 pedestrians and 10 bicyclists were observed at the two intersections during the weekday peak periods. A total of 39 pedestrians and 21 bicyclists were counted at the two intersections for weekend peak periods. Most of the pedestrian activity occurred on the east side of Palm Avenue during both weekend and weekday peak periods, with a total of 61 pedestrians observed at the Palm Avenue and the Access Road Entrance intersection during the weekend and weekday peak periods.

Key findings from observation of intersections include:

- The Pines Boulevard and Palm Avenue intersection operates at a LOS F during the weekend and weekday peak periods.
- Evening peak periods had more traffic than morning peak periods.
- Left turns at the unsignalized intersection at Palm Avenue and Access Road Entrance requires a two-stage maneuver; and are difficult during peak traffic periods due to the amount of through traffic.
- Most traffic coming from the Access Road Entrance turns right onto Palm Avenue during both weekend and weekday peak periods.
- Most pedestrian activity occurred along the east side of Palm Avenue.
- Most bicycle activity occurred on Pines Boulevard during the weekend.



Images at left: Recent City Center development, with sidewalk connections, and ample pedestrian areas at new commercial. Top image: Current lack of pedestrian facilities along Palm Avenue.

SELECTED PREVIOUS RECOMMENDATIONS

Various transportation related planning recommendations exist within the documents and ordinances listed in the Planning Context introduction. These recommendations vary from regionwide to district specific. The most relevant recommendations from these plans/ordinances are summarized below.

City of Pembroke Pines Comprehensive Plan (2013)

The Transportation Element of the Comprehensive Plan is the City's long-term plan for a multimodal transportation system that places an emphasis on public transit. Pines Boulevard is identified with approximately 200 feet of right-of-way dedication varying from east to west. Pines Boulevard is classified as a State Principal Arterial. Palm Avenue south of Pines Boulevard is classified as a County Minor Arterial, and north of Pines Boulevard Palm Avenue is classified as a City Minor Arterial.

The City's transit vehicle inventory consists of 22 shuttle vehicles that are wheelchair accessible and have a seating capacity of 20 passengers. BCT updates and maintains the City's Bus Stop Inventory, according to the BCT inventory, the City has 225 bus stops, 25 shelters, 187 benches, and 33 bays/right turn lanes, with two buses operating on the Green Route and three buses operating on the Gold Route. Since adoption of this plan, the City also operates two additional buses on a Blue Route.

The document identifies pedestrian ways throughout the City, including a comprehensive list of missing sidewalk segments for all major roads within the City. The west side of Palm Avenue has been identified within the study along a canal right-of-way, construction within the canal right-of-way requires coordination and permitting through the appropriate drainage district and the South Florida Water Management Districts. A policy has been added providing for the City's Environmental Services Division to research the feasibility of constructing sidewalks within canal rights-of-way, in addition to prepare a feasibility study by 2011 which provides for the elimination of all missing sidewalk links. The Palm Avenue sidewalk has been identified as a cost feasible project through 2030. Currently, the City allocates \$100,000 annually to repair and replace missing sidewalk links with most of the budget going to repairs and a cost

estimate of \$250,000 to replace missing sidewalk links. Pedestrian and bikeway services are provided by the City's Environmental Services Division.

Pines Boulevard between NW 64th Avenue and NW 196th Avenue, which falls within the Hub study area, has been identified as an area where pedestrian crossovers with extended sidewalks have been constructed because of expanded roadway sections. Pedestrian crossovers improve access to residential and commercial areas. Both Pines Boulevard and Palm Avenue have been identified as bikeways within the Hub study area, bicycle racks are required at all government and community facilities.

An intermodal facility is a facility designed to relate two or more modes of transportation using single or closely related transportation facility and service. There are currently no intermodal facilities within the Hub study area. TE Policy 2.5.2 (3) provides for the City to continue coordination with BCT, FDOT, the MPO and other entities to investigate the need for additional intermodal facilities in the City. The City has adopted several policies to support pedestrian and bicycle facilities.

Both Pines Boulevard and Palm Avenue within the Hub study area is projected to approach overcapacity by 2030, with Pines Boulevard east of Palm Avenue already identified as overcapacity. As of 2005, LOS along Pines Boulevard for the Hub study area is D/F, with the area west of Palm at a "D," and the area east of Palm at an "F." Palm Avenue's LOS is B/C, with the area south of Pines Boulevard at a "B," and the area north of Pines Boulevard at a "C."

Commitment 2040 – The Long Range Transportation Plan for Broward County (2018)

Broward County's LRTP, amended in April 2018, is a multi-modal transportation plan which expands over 20 years, looking at the region and future needs. The plan emphasizes moving people, creating jobs and strengthening communities. The Metropolitan Planning Organization (MPO) is the agency responsible for creating local transportation policy and identifying the best use of federal and state tax dollars on transportation projects.

The Plan builds on existing transportation assets, identifies deficiencies in these facilities, and recommends actions that maintain or improve quality of life. The Plan seeks to update the Mobility Hub concept to maximize a Mobility Hub's economic and transit potential. In addition, the Plan seeks to provide a list of 50 regional significant projects (10 transit and 40 roadway), to construct, operate, and maintain by and through 2040.

This study is a direct result of the Long-Range Transportation Plan along with several other bicycle and pedestrian improvements within and surrounding the Hub study area.

City of Pembroke Pines 2014-2019 Economic Development Strategic Plan (2014)

Completed in August 2014, the Economic Development Strategic Plan is the City's five-year economic blueprint.

Within the Hub study area, the Plan discusses development efforts since 2014. Within the Hub study area is the City's "Downtown," or City Center, which features 2,215 dwelling units consisting of mid-rise, townhomes, multi-family, and affordable housing units. City Center also consists of 80,000 square feet of industrial, 358,000 square feet of commercial, and 120,000 square feet of office uses. Additionally, a 175,000 square feet, multi-purpose Civic Center houses City Hall above a 35,000 square feet flexible concert, meeting, and event space and a separate 11,000 square feet two-story art gallery.

Opportunities within the Hub study area include traffic, mass transit, public transportation, and completion of City Center. Some of the weaknesses identified include traffic and need for transit, aging population, and planning and zoning issues. Strengths identified include quality of life, location, education, diversity, and pro-business environment. Threats include traffic related issues, decreasing housing values, and aging housing stock.

The following strategies have been identified within the Plan that are in alignment with the current study:

- Strategy 1.1.3: Emphasis strategic regional location
- Strategy 1.1.4: Promote Quality of Life

- Strategy 1.1.6: Promote City Center as the new Downtown
- Strategy 1.2.1: Continue to actively promote responsible growth
- Strategy 1.2.3: Adopt Vision of Balanced Growth
- Strategy 1.2.4: Continue to support and fund infrastructure needs for economic growth. *This objective aims to improve transportation infrastructure to encourage business growth. The need for an integrated countywide transit system is listed as a key strategy.*
- Strategy 4.2.1: Continue to support development of City Center
- Strategy 4.2.5: Develop underutilized parcel next to City Center for regional uses
- Strategy 4.2.8: Improve aesthetic quality of common areas, medians, and swales through improved landscaping and maintenance
- Strategy 5.1.1: Conduct an inventory of roadway deficiencies at key development sites
- Strategy 5.1.2: Develop a Funding Plan to improve roadway deficiencies
- Strategy 5.3.1: Collaborate with regional stakeholders to establish a comprehensive regional transit plan
- Strategy 6.1.2: Promote Civic Center as a regional business venue and cultural asset
- Strategy 6.2.2: Encourage housing density within the Central and Eastern sections of the City

City of Pembroke Pines Green Plan (2014)

The Pembroke Pines Green Plan was completed in 2014 by City staff as the City's framework to create a more livable community. Chapter 3 of the document focuses on the Built Environment and Transportation; the following Goals and Objectives are in alignment with our study focus:

Goal 3.2: The City promotes and encourages smart growth principles when and where feasible. Smart growth principles include creating walkable neighborhoods and transportation choices. Future Objectives under this goal include adopting complete streets principles and encouraging new development to abide by Complete Streets and Smart Growth Principles.

Goal 3.3: The City encourages the principles of Transit-Oriented Development (TOD) within the older, more populated areas of the City, with the following initiatives being undertaken:

- Support for transit hubs throughout the City
- Park and ride location at Pines Boulevard and Flamingo Road
- Collaboration with County and MPO in their efforts to establish transit-oriented corridors
- Encourage the use of public transit
- Future Objective 3.3.1 supports and encourages transit communities via continued work with the MPO, exploring the purchasing of parcels located along the Pines Boulevard corridor for development, improving walkability by providing shade and canopy where feasible throughout the City, identifying and creating safe bicycle paths to travel throughout the City, and encouraging the installation of bicycle racks within commercial and business centers.

Goal 3.4: The City is dedicated to mobility and access to transit for all users. The City operates a community shuttle with three routes throughout the City connecting to the regional bus system.

- Future Objective 3.4.1 encourages shelter and shade at all bus stops, continued monitoring and assessment of the City's bus network to ensure coverage and identify gaps to modify routes as appropriate, work with the County to identify the need for an express bus west of I-75, the creation of car share or car pool program for residents, work with communities to ensure pedestrian access to commercial centers, and continued promotion and exploration of alternative transportation options for residents, visitors, and workers in the City.

Goal 6.1: The City has been a leader when it comes to policies, procedures, and becoming more aware of the growing threat of unsustainable practices.

- Future Objective 6.1.1 highlights exploring the creation of a carshare/rideshare program for City employees to reduce vehicle miles traveled.

- Future Objective 6.2.1 highlights exploring the feasibility and cost savings associated with an interdepartmental car share program where City staff or departments could check out a vehicle when in need.

Hollywood/Pines Boulevard Congestion Management Process/Livability Planning Project (2013)

Completed in December 2013, the project combines the Broward MPO's Congestion Management Process and Livability Planning study approaches. The Congestion Management Process identifies, develops, prioritizes, and implements short-term multimodal congestion management and mobility enhancement strategies, while Livability Planning studies are intended as the first step in implementing the Mobility Hub concept of Broward MPO's 2035 LRTP.

Within the Hub study area, a Community Hub was identified at the Pines Boulevard and Palm Avenue intersection. The study identifies a Community Hub as a hub served by premium rapid bus service and more likely to attract local trips than regional trips and is the least intense of the hubs. The study identifies several improvements within the Hub study area and groups these improvements within three groups, in addition to providing multiple recommendations along the corridor.

Of the many recommendations provided, the following recommendations apply to the Hub study area:

- Provide sidewalk along the west side of Palm Avenue
- Enhance and modify the location of bus stops at various locations
- Evaluate the potential for right-turn queue jump lanes pending completion of the FDOT Pilot Project at Palm Avenue
- Improve pedestrian design features and/or enhance crosswalk lighting to improve safety/mobility at the Pines/Palm intersection

Furthermore, the study provides a series of scenario planning examples using quantitative and qualitative analysis. These examples use urban design and planning principles as a guide for transforming the Hollywood/Pines Corridor over the long term into a more transit-supportive, multimodal environment. These

principles include connectivity, public realm, site orientation, ground floor design/use, and transition to neighborhoods for multi-modal development.

City of Pembroke Pines Streetscape Design Guidelines (2012)

The Streetscape Design Guidelines was prepared by consultant Miller Legg in 2012. The Hub study area is located within the Central District of the design guidelines and has been identified as an Urban Arterial. The guidelines introduce a number of recommendations including a plant palette for each district, sectionals, and intersection and median improvements. In addition to the landscape guidelines, hardscape guidelines are provided and recommended via street furniture, lighting, and branding. Mobility improvements include bus stop minimum requirements:

- All new commercial developments, multifamily development, or single-family subdivision shall be located within one quarter mile of an adequate bus stop. If no adequate bus stop is located within this distance, the development shall provide it.
- All bus stops shall be paved.
- All bus stops shall have a minimum lighting level of one-foot candle. The lighting for the bus shelters shall utilize solar power alternatives and LED lighting to enhance sustainability.
- All bus stops shall be landscaped with canopy trees or large palms to provide additional shade.
- All bus stops shall be connected to the existing pedestrian system by a paved accessible walkway.
- Bus stops located within Intersection Influence Zones, Urban Arterial or Gateway locations shall be paved with specialty pavement.

Furthermore, the guidelines identify streetscape improvements within each district. The Hub study area recommendations include pedestrian interconnections/path along Washington Street, the Florida Power and Light (FPL) easement and NW 103rd Avenue, improved canal crossing along Palm Avenue and Washington Street, the addition of a sidewalk on the west side of Palm Avenue, and aesthetic improvements at Pines Boulevard and Palm Avenue intersection.

Since the completion of the Streetscape Design Guidelines, many of the recommendations have been implemented, within the Hub study area the City has created pedestrian interconnections at Pines City Center, Washington Street and the FPL easement, wayfinding signage in the area, along with median and landscape improvements through the site plan process.

Hollywood/Pines Boulevard Multimodal Corridor Study (2004)

The Multimodal Corridor Study was completed in 2004 by consultant Kimley-Horn and Associates, Inc. for the Broward MPO to develop a congestion management system to improve travel along the corridor. Strategies in the Hub study area are listed by mode in Table C-2.

Since the completion of the study several of the improvements have been completed along the corridor. Within the Hub study area bicycle lanes now exist along Pines Boulevard, bus shelters have been installed at the location recommended above, and missing sidewalk links to many bus stops along the corridor have been completed. Bicycle racks can be found at many shopping centers along Pines Boulevard, including the newly constructed Pines City Center.

City of Pembroke Pines Code of Ordinances (2018)

One of the City's ordinances regarding mixed-use development states that this type of use should promote a pedestrian friendly environment and reduce traffic generation. Pedestrian movement and safety shall be given priority. Internal roadways shall be "pedestrian friendly" including the use of pavers, wide sidewalks, narrow vehicular lanes, and parallel parking. Major parking areas shall be located to encourage walking and discourage internal vehicle trips among the various buildings and uses.

TABLE C-2: CORRIDOR STRATEGIES BY MODE

Mode	Strategy	Description
Pedestrian	Sidewalk Connection	Construct new sidewalk - west side of Palm Avenue
Bicycle	Proposed Bicycle Lanes	From NW 155 th Ave to NW 83 rd Ave
	Bicycle Parking	Provide covered bicycle parking at multimodal locations and bike parking where appropriate
Transit	Bus Shelters	EB, 500 ft east of Palm Ave, ID - 2910
	Far Side Bus Bay	Palm Ave (westbound)
	Headway Reductions	Route 7 (30 to 20 minutes)
	Express Bus Service	Route 7 limited stop from Pembroke Lakes Mall to Downtown Hollywood NTC
Multimodal	“Enhanced” Benches and Shelters	Multimodal hubs
	TDM Strategies	Work with SFCS
	ITS Strategies	ATIS improvements and passenger kiosks
		Trailblazer signage for guidance and awareness of facility
Roadway	Intersection Improvements	Pines Blvd and Palm Ave – Construct SB through lane

PROGRAMMED AND PLANNED PROJECTS

Planning and programming documents were reviewed including the Broward MPO Year 2019 to 2023 Transportation Improvement Program (TIP), the MPO 2040 LRTP, and projects identified to be funded with the recently approved Broward County 2018 Penny Surtax.

BCT’s new Transit Development Plan (TDP), adopted in December 2018, identifies improvements to transit service levels in the 10-Year Vision Plan Network (by 2028), and new Rapid Bus service on Pines Boulevard in the 30-Year Vision Plan (by 2048). The recent passage of the countywide surtax initiative now offers a new predictable and reliable funding source to increase transit routes and service levels over the long-term.

Tables C-3 and C-4 provide the planned and programmed improvements.

TABLE C-3: BROWARD COUNTY 2040 LRTP PROJECTS

LRTP ID	Project	Description	Location	Cost	Time Period
8	SR 820/ Hollywood/ Pines Blvd.	Upgrades to support enhanced bus service	US 27 to SR A1A	\$86.3 M	2015-2025

TABLE C-4: BROWARD COUNTY 2018 PENNY SURTAX INITIATIVE PROJECTS

No.	Description	Year	Capital Cost
1	Video detection predictive maintenance	2020	\$1,680,000
2	Future technology adaptation	2020	\$47,500,000
3	New bus routes: Johnson St.	2025	NA
4	Intersection improvement: Pines Blvd.	2027	\$1,400,000
5	New sidewalks: Palm Ave.	2027	\$569,000
6	New bus routes: Palm Ave.	2028	NA
7	Rapid bus routes: Hollywood / Pines Blvd.	2030	NA
8	Mast arm intersection upgrades: Palm Ave.	2037	\$600,000

Note: 2019-2028 TDP projects are included in the 2018 penny surtax initiative. No projects for TIP.

DEVELOPMENT CONTEXT

Due to proactive efforts to implement the recommendations of the 2014 Pembroke Pines Economic Development Strategic Plan, the Pines City Center has emerged as a new residential and retail/entertainment destination, in addition to the civic amenities provided by the adjacent Charles F. Dodge City Center.

Pines City Center planning has focused on facilitating redevelopment efforts and improving the physical character of the area in a way that provides connectivity between new commercial areas and adjacent existing shopping centers, supporting pedestrian mobility and providing several access routes to help relieve traffic congestion. Significant private investment in commercial and residential development has occurred, and most recently the focus has shifted to finalizing development approvals for the remaining sites located between 103rd Avenue and 101st Avenue at the east end of the redevelopment.

The sections that follow document the “baseline” development pattern and character features in the area, summarize relevant zoning and development standards, and present the elements of the “vision” for future development in the Pines City Center that are particularly relevant for mobility planning. Mobility Hub recommendations will expand upon this broader vision to support the improved integration, function, and visibility of multimodal options as the Pines City Center continues to evolve.

DEVELOPMENT PATTERN

Recently, the Pines City Center has become an active concentration of commercial and residential uses, including some development sites still in construction or in final approval with the City. Figure C-12 depicts the current arrangement of land uses in the Pines City Center area, generalized to show the overall pattern rather than parcel-level detail. A more generalized pattern of land uses, and an understanding of the orientation of and access to these uses, are most relevant to the development of multimodal strategies.

COMMERCIAL uses (shown in red on Figure C-12) include the new development south of Pines Boulevard between 106th and 103rd Avenues,

flanked by an established shopping center to the west and pending commercial development parcels east of 103rd Street on either side of a FPL easement. Commercial uses are also located farther east along Pines Boulevard, and directly across Pines Boulevard to the north. These shopping centers are laid out in a traditional auto-oriented pattern that positions storefronts toward dedicated off-street parking, with stand-alone out lot structures.

OFFICE uses (shown in blue on Figure C-12) include several single-story buildings that are occupied primarily by medical offices in the northeast quadrant of the intersection of Pines Boulevard and Palm/101st Avenue, and two two-story buildings interspersed with commercial uses at the south termination of 108th Avenue, south of Pines Boulevard.

RESIDENTIAL uses in the Pines City Center study area (shown in shades of yellow on Figure C-12) include a single-family neighborhood, a small two-story apartment complex northeast of Pines and Palm, a single-family neighborhood to the north and just west of Palm, senior housing along 103rd Avenue north of the shopping center, townhouses along 106th Avenue and 3rd Street flanking the shopping center perimeter north of Pines, and newer mid-rise apartment buildings directly south of City Center Boulevard. Current residential typology in the Pines City Center is characterized by relatively isolated pockets of low-density housing in master planned environments, with the exception of the new moderate-density rental apartment communities located within the Pines City Center itself that are accessible by foot or bicycle from the shopping area without crossing a major arterial.

ACTIVITY GENERATORS (shown in purple on Figure C-12) encompass a variety of specialized and/or larger scale uses that warrant specific attention during the development of multimodal strategies. These include:

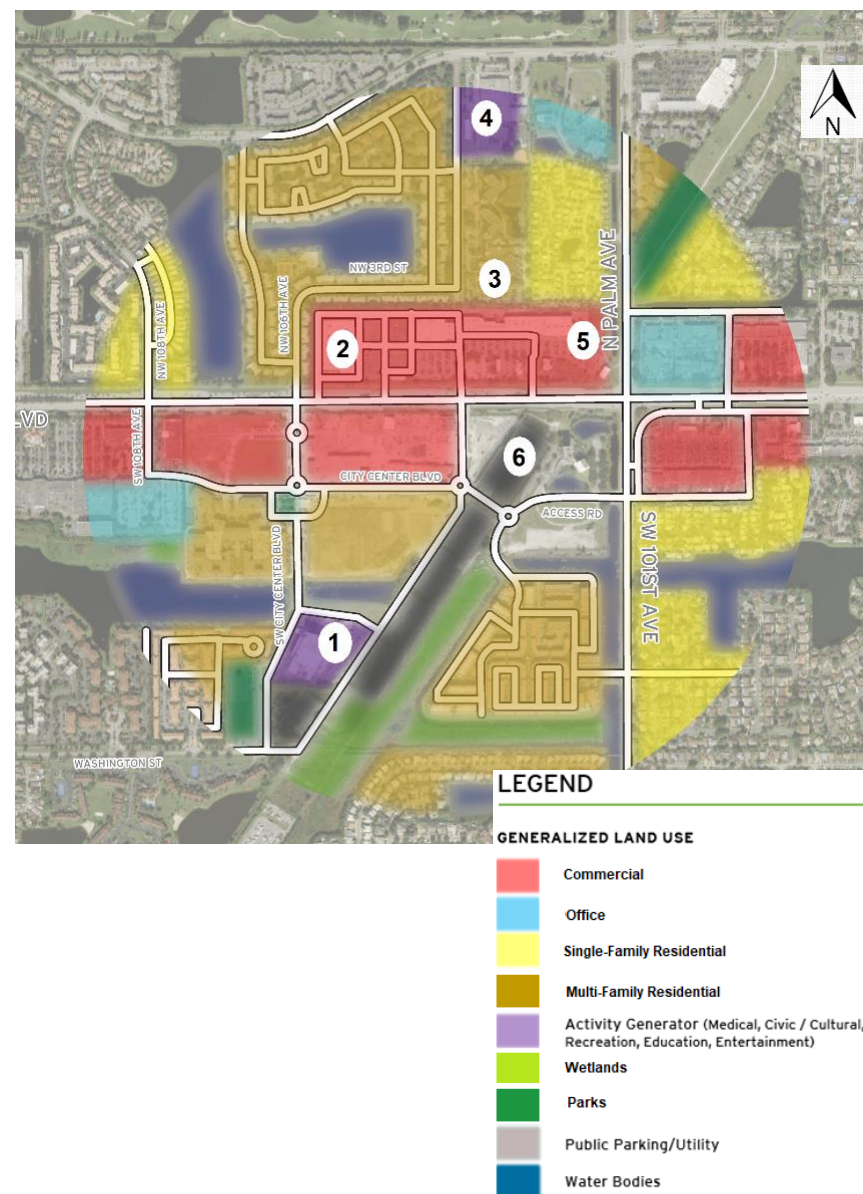
- The **Charles F. Dodge City Center (1)**, south of the Pines City Center commercial and residential areas at the south end of 106th Avenue. The City Center facilities can also be accessed via a new roadway running adjacent to the west edge of the FPL easement.
- The **Renaissance Charter School at Pines (2)** occupies a former big box retail structure in the shopping center north of the Pines Boulevard shopping center.
- The **Southwest Focal Point Senior Center (3)** is senior housing facility with a community center that provides various services, activities, classes, and adult daycare used by both residents and non-residents. The facility serves as a hub for community shuttles, as well.
- **Pine Lakes Elementary School (4)** is located north of the senior housing complexes, at 103rd Avenue and Johnson Street.
- Additionally, **Vargas University (5)** occupies a storefront in the main commercial structure facing Pines Blvd east of the 103rd Avenue intersection.

Significant public parking has been developed within the **FPL easement (6)** between Pines Boulevard and Washington Street (indicated in gray on Figure C-12). The easement extends northeast and southwest from the study area, with a recreational trail extending northeast from Palm Avenue. The FPL Hollybrooke Sub Station is located immediately south of the Dodge City Center.

OPEN SPACES (indicated in shades of green on Figure C-12) in the area include a new public park under construction immediately southwest of the Dodge City Center, the recreational trail in the FPL easement extending northeast, and a small scale open space in the core of the Pines City Center area. Additional open space exists as conservation areas in conjunction with drainage facilities, including adjacent to the FPL easement south of Pines Boulevard.

FIGURE C-12: GENERALIZED EXISTING LAND USE PATTERN

(not to scale)



DEVELOPMENT CHARACTER

The frontage on Pines Boulevard is predominantly low-scale commercial in character, with some two-story office and two- to three-story residential uses behind. Pines Boulevard includes a planted median in some areas, but presents a more rural cross-section overall with limited curbs, wide grassy drainage swales, and sidewalks set back from the roadway itself. Pines Boulevard includes a striped bike lane next to the grassy swale in both directions. The primary east-west roadway internal to the Pines City Center area, running between the commercial and residential uses, also includes an on-street bike lane. The FPL easement running southwest to northeast through the study area, and several retention ponds contribute to the open, low density character of the area.



Photo group at lower left: Existing uses north of Pines Blvd – Focal Point Senior Center, existing shopping center, charter school in renovated big box store. Photo group at lower right: Pedestrian and biking conditions along Pines Blvd, with new City Center identity and streetscape features at entrance. Photo group at top right: New City Center developments – multi-family residential, commercial, Dodge City Center facility, and typical landscaped commercial parking lot.



ZONING AND DEVELOPMENT STANDARDS

The current Future Land Use Plan for the City, which serves as the legal basis for the enforcement of zoning, defines the entire Pines City Center redevelopment area as a Regional Activity Center (RAC), flanked by commercial and residential designations that reflect the existing land use pattern. The residential designations vary in density from an “irregular” nine dwelling units per acre to the southwest, three to five dwelling units per acre in the single-family areas to the south and east, and five to ten dwelling units per acre in the multi-family areas to the east and north.

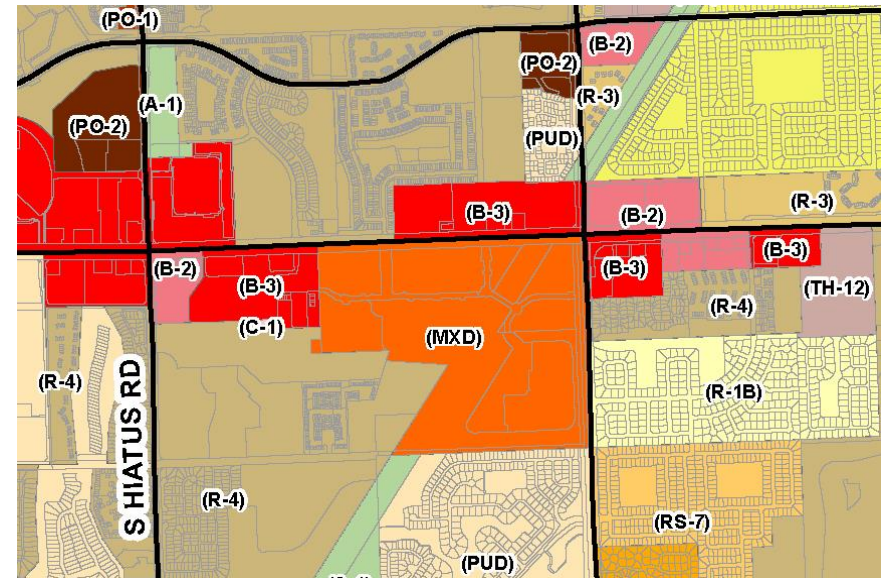
The City’s Economic Development Strategic Plan includes objectives for the Pines City Center area as mixed-use intended to “encourage housing density, promote a wide range of housing products, and meet demand for Transit-Oriented Development.” According to the Plan, the Pines City Center development will feature 1,365 residential units, up to 350 hotel rooms, and mixture of commercial and office uses upon build-out.

Current zoning in the study area, as depicted in Figure C-13, permits the City’s largest swath of mixed-use development (MXD – i.e. the City Center), along with primarily multi-family residential (R-3, R-4), and commercial uses (B-2, B-3). Single family residential is more prevalent east of Palm (R-1B, RS-7). Multi-family densities vary from 5 to 10 dwelling units per acre to the north, west and south of the City Center. Single family developments to the east allow for relatively compact detached residential uses, at 3 to 5 dwelling units per acre.

The MXD area is subject to mixed-use development regulations that are intended to provide flexible design regulations and uses for each project to “encourage innovative development and redevelopment without imposing arbitrary requirements” so development approvals are negotiated on a case-by-case basis.

FIGURE C-13: EXISTING STUDY AREA ZONING

Source: City of Pembroke Pines (current as of October 2018)



STAKEHOLDER OUTREACH

The Broward MPO and consulting team met with the Pembroke Pines Advisory Boards on November 8, 2018 to discuss the project and solicit input regarding local needs, concerns, and priorities towards multimodal mobility. An earlier meeting with City personnel on August 30, 2018 included Planning and Engineering representatives. Meetings were also held with Broward County Planning and Engineering representatives on October 17, 2018, FDOT District 4 Planning and Operations representatives on October 17, 2018, and Broward County Transit representatives on October 18, 2018.

In addition, the City of Pembroke Pines solicited responses to an online survey regarding multimodal mobility experiences and needs. Quest Communications also deployed personnel in the Pines City Center area and at nearby park-and-ride lots to conduct intercept surveys with current public transit users.

The insights shared regarding both near-term investment opportunities and long-term planning needs in the Pembroke Pines Hub study area collected from these outreach efforts are summarized below.

CITY AND AGENCY MEETINGS

PUBLIC TRANSPORTATION

- Pembroke Pines has a strong fixed-route community shuttle system, with a very active bus stop at Pembroke Lakes Mall. Several private shuttles operate in the area already, in addition to the fixed community routes.
- The City of Pembroke Pines is working to establish the viability of a park-and-ride location in the area to serve a “95-Express” type service along I-75 to Miami, and/or other linkages such as to the University Breeze. The City created an abundance of parking in the FPL right-of-way south of Pines Boulevard, where vehicles could be parked while using a potential future transit hub. While existing park-and-ride locations are used by some Pembroke Pines residents now, the City’s desire is to establish a location that offers synergy with the Pines City Center, in addition to the established locations.

- Designated “kiss and ride” locations and drop-off locations for transportation network company (TNC) vehicles such as Lyft and Uber could be identified in the Pines City Center area.

ROADWAY, BICYCLE AND PEDESTRIAN NETWORK

- Secondary streets could benefit from Complete Streets improvements; for example, there is currently a “cowpath” connection used by students walking west from the Washington Avenue and Hiatus Road intersection.
- Per FDOT, pedestrians using a pedestrian-activated crossing signal can delay signal timing and vehicular flow; this could be a concern especially on Pines Boulevard. Suggested alternatives include high-visibility crossings, improved lighting, and/or a pedestrian bridge, pending a PD&E study.
- City staff have observed that traffic patterns along Pines Boulevard differ on weekdays and weekends.
- FDOT has received complaints about the 106th Street and Pines Boulevard intersection, as traffic levels have increased due to Pines City Center development directly to the south. The City is coordinating with FDOT to conduct a safety study.
- Traffic levels are also increasing at the Palm Avenue intersection with City Center Boulevard, with inaccessible conditions for pedestrians due in part to the lack of designated crossings or a sidewalk extending south.
- Pedestrian crossing activity also appears to be increasing at the Pines Boulevard and 103rd Street intersection, including school-aged children.
- The City is currently studying options for a bikeshare program, likely to be focused on the Pines City Center area; bicycle parking will therefore be needed not only in locations adjacent to transit stops.

DEVELOPMENT PATTERN

- The Pembroke Place Shopping Center on the north side of Pines Boulevard is well-occupied but likely in need of a “refresh” to compete with new commercial options in the immediate area. City staff indicated that the property owners may be amenable to a through road connecting residents from the north to Pines Boulevard and across to the new commercial district on the south side of Pines Boulevard.

SURVEYS

To assess mobility improvement needs as part of the planning phase, surveys were conducted in-person and online. The data collected identifies usage and user perception about transportation services and their facilities, and how mobility in Pembroke Pines' City Center area could be improved. Results are summarized below, with complete documentation available in a report entitled "Pembroke Pines Mobility Hub Planning Phase Survey Results" available under separate cover.

Methodology

In-person surveys targeted qualified respondents, in this case, those observed using Broward County transit and community shuttle services, walking, and/or cycling in the study area. The online surveys were available to anyone regardless of whether they currently use transit. The online surveys were distributed by the Broward MPO and available for sharing. Both methodologies were used to provide a broader collection of opinions.

Opinions collected were focused on the following:

- Modes of mobility (transit, TNCs, and walking/cycling) used in the area
- Purpose and frequency of mobility in the area
- Pros and cons of the current mobility services and facilities
- Mobility safety concerns

The in-person surveys were completed on wireless tablets with data collected through an online portal. The link to the online survey was shared electronically to the City of Plantation and through the Broward MPO's communication channels. The survey also included links to the Hub study area map and overall program information. All completed information submitted on the tablets and online was reviewed and analyzed. The tabulation of data resulted in tables and charts (available under separate cover) to quantify transportation and mobility opinions of the City of Pembroke Pines' City Center area.

Overall Summary

There were 277 completed surveys. Wait times and schedule were improvements that were suggested that could improve transit. For most respondents, installing a crossing at Pines Boulevard and 106th Avenue was identified as both an improvement and one that could address the safety concerns. Further improvements to address safety concerns include sidewalks, bike lanes and lighting.

In-Person Surveys

The in-person survey was conducted in Pembroke Pines City Center on Tuesday, December 18, 2018, during the early morning, mid-day, and late afternoon/evening. A total of 80 questionnaires were completed at the following locations:

- Pines Boulevard at Palm Avenue, 103rd and 106th Avenues (north and south sides)
- Southwest Focal Pointe Senior Center, 103rd Avenue and NW Third Street

Of the total 80 respondents,

- 58% live in City Center, and of those,
 - 40% use transit,
 - 37% use TNCs, and
 - 82% walk/cycle in the area.
- 36% work in City Center, and of those,
 - 60% use transit,
 - 42% use TNCs, and
 - 57% walk/cycle in the area.
- 17% both live and work in City Center, and of those,
 - 38% use transit,
 - 53% use TNCs, and
 - 77% walk/cycle in the area.

- 18% neither live nor work in City Center, and of those,
 - 64% use transit,
 - 28% use TNCs, and
 - 57% walk/cycle in the area.

Overall, of all respondents, 58% use transit frequently to get to work. Transit users identified real time information, wait times, frequency, and timely schedule as improvements that can be made. Amenities that rated poorly are crosswalks, signalization, sidewalks, and bike racks. TNCs were used by 36% of respondents mostly to get to work when the bus is inconvenient. The 67% that walk/cycle in the City Center area do so to shop, work, or connect to bus.

Additional crosswalks (especially noted at Pines Boulevard/106th Avenue) and traffic signalization were the improvements that respondents identified as enhancements that could be made for better mobility and safety. Protected bike lanes were identified more so by those who work in City Center. Lighting was identified more so by those who live in City Center. Those who did not live or work in the City Center were more likely to identify traffic as a safety concern in the area.

Online Surveys

The online survey was available from December 17, 2018 through January 22, 2019. The highest response volume was on January 7 and 14, 2019. A total of 79 surveys were completed.

Of the total 79 respondents,

- 13% live in City Center, and of those,
 - 11% use transit,
 - 30% use TNCs, and
 - 60% walk/cycle in the area.
- 67% work in City Center, and of those,
 - 6% use transit,
 - 30% use TNCs, and
 - 23% walk/cycle in the area.
- 8% both live and work in City Center, and of those,
 - 16% use transit,

- 50% use TNCs, and
- 50% walk/cycle in the area.
- 12% neither live nor work in City Center, and of those,
 - 11% use transit,
 - 33% use TNCs, and
 - 44% walk/cycle in the area.

Overall, of all respondents, only 5% use transit mostly for appointments, 25% use TNCs mostly to go to work, and 28% walk or cycle in the City Center area mostly to exercise or for recreation. Crosswalks, sidewalks, and bike lanes were identified improvements that could address safety concerns. Additional safety concerns are traffic and lack of traffic enforcement.

PARK AND RIDE SURVEYS

To assess the viability of a new I-95 Miami Express Park and Ride facility in City Center, BCT passengers were surveyed to collect data on user perceptions about service and its facilities at two I-95 Express Park and Ride locations in Pembroke Pines: CB Smith Park, approximately two miles west of City Center, and North Perry Airport, approximately five miles east/southeast of City Center. Results are summarized below, with complete documentation available in a report entitled “Pembroke Pines Mobility Hub Park-and-Ride Survey Results” available under separate cover.

Methodology

The survey focused on the following questions to determine the viability of a Park and Ride service at City Center:

- Method of transportation and distance used to arrive to the Park and Ride location.
- Purpose and frequency of use of the express service.
- Pros and cons of the current services and facilities.

Surveys were collected in-person by Quest team members on wireless tablets with data collected through an online portal. Survey data was collected at the CB Smith Park and Ride from 5:45 AM to 8:45 AM on Thursday, December 19,

2018. Survey data was collected at the North Perry Airport Park and Ride from 5:15 AM to 8 AM on Thursday, January 3, 2019. All data collected was reviewed and analyzed. The tabulation of data resulted in tables and charts (available under separate cover) to quantify transportation and mobility opinions at the I-95 Express lots in the City of Pembroke Pines.

Overall Summary

Commuters using the I-95 Miami Express Park and Ride services use them because they are convenient, located both near their home and place of employment. Most of the respondents live within five miles from the facility and work near the designated Miami stops. Covered shelter was the top suggested improvements at both locations.

Overall, the 30% that were favorable of a Park and Ride at City Center live in or near the City Center area. The two surveyed facilities have different schedules and Miami destinations. To consider a new facility at City Center, schedules and Miami destinations would need to be studied further.

CB Smith Park Survey

CB Smith Park and Ride lot is located at 12430 Pines Boulevard in Pembroke Pines, approximately 1.7 miles from I-75, 9.3 miles from I-95, and 3.6 miles from Florida's Turnpike Extension.

The target audience of the survey included commuters using the BCT I-95 Express shuttle service (Route 109) between CB Smith Park/Ansin Sports Center and Miami/Brickell. The service includes connections to Miami-Dade County's Metrorail and Metromover services.

The in-person team met with I-95 Express BCT transit commuters waiting for and getting off buses, Miami-Dade residents arriving to work in western Broward County, and Broward County residents returning home after working an overnight shift in Miami-Dade. Passengers were surveyed at their cars, under the park shelter, and at the I-95 Express bus stop. The team surveyed 48 commuters. The nine-question survey took about five minutes to complete.

Overall, 15% of respondents were in favor of a I-95 Express Park and Ride facility at City Center because it was closer to their home and 85% were not in favor of a Park and Ride facility at City Center because it would be too inconvenient as many of these respondents live near or west of the Flamingo/I-75 corridor. Most of the respondents were satisfied with the service and its distance from their home. Larger covered shelter and security were suggested improvements to the facility.

A unique finding at this location was reverse commuting – commuters traveling from Miami homes to Broward County jobs.

North Perry Airport Survey

The North Perry Airport Park and Ride lot is located at the northeast corner of Pembroke Road and University Drive, 4.4 miles from I-95, approximately seven miles east of I-75, and 1.7 miles to Florida's Turnpike Extension.

The target audience of the survey included commuters using the BCT I-95 Express shuttle service (Route 108) between North Perry Airport and Miami's Civic Center/Health District. The service connects to the Miami-Dade County's Metrorail service.

The in-person team met with I-95 Express BCT transit commuters waiting for and getting off buses, pedestrians, drop-off passengers. Users were stopped at their cars, as they exited cars at the drop-off location and at the Park and Ride bus bench. The team surveyed 104 I-95 Express commuters. The nine-question survey took about five minutes to complete.

Overall, 37% of the respondents were in favor of a I-95 Express Park and Ride facility at City Center because it would be closer to their home and 63% were not in favor of a Park and Ride facility at City Center because it would be too inconvenient as many of these respondents live close to or east of the airport location. Lighting and covered shelter were facility improvements that were suggested.

Several respondents commented that colleagues that work the overnight shift in the Civic Center / Health District are unable to use the I-95 Express service because of the bus route's schedule.

PLANNING FRAMEWORK

The Planning Framework presented in this section provides an organizing strategy for undertaking infrastructure improvements in the Pembroke Pines Hub area with a particular emphasis on near-term priorities for investment. The Framework enables consideration of both the near-term and the long-term so that investments in early phases do not preclude more ‘visionary’ future objectives for the area, but instead establish a strong foundation for subsequent phases of coordinated investment in the coming years.

The Hub area encompasses the newly developed Pines City Center at the southwest corner of Pines Boulevard and Palm / 101st Avenue and its immediate surroundings. Framework development included reviewing area activities and circulation patterns between travel modes within the City Center and the immediate vicinity for multimodal connectivity. The functionality of bike/pedestrian connections considering in-progress construction and anticipated future private development was also reviewed. The Framework is consistent with the City’s current redevelopment efforts and long-term aspirations, and with the pending bikeshare program and refinement of community shuttle routes.

The Planning Framework builds on past planning efforts and an understanding of existing planning area conditions, as described in the preceding **Planning Context**. It is also informed by early stakeholder input and is consistent with the findings of the preceding **Market Analysis**. It guides the application of specific Hub Elements in defined Focus Areas, as described later in this section. The Framework serves therefore as a “pivot point” between a general discussion of City and agency aspirations and the identification of specific investments that support these aspirations, documented in the **Near-Term Priority Projects** and **Implementation Strategy** sections to follow.

This section presents the following:

- **Framework Themes and Considerations** that guided development of the physical Framework.
- **Hub Elements**, consistent with the broader Mobility Hub initiative, that were considered for inclusion in the physical Framework.
- **Framework Layers** that describe the anticipated development pattern in the Hub area, and potential investments to the public realm and multimodal opportunities that could support a vibrant and transit supportive Hub.
- **Project Priorities** that break the planning area into discrete segments for purposes of project development and phasing. Design concepts and cost estimates for near-term implementation priorities, and finalized locations, will be developed in the next phase of the planning process.

FIGURE F-1 (LEFT): UPGRADED CITY CENTER STREETSCAPE AT 103RD AVE SOUTH OF PINES BLVD

FIGURE F-2 (RIGHT): PEDESTRIAN ENVIRONMENT IN NEED OF IMPROVEMENT NORTH OF PINES BLVD, NEAR NW 103RD AVE AND NW 3RD STREET



FRAMEWORK THEMES AND CONSIDERATIONS

Based upon the review of current physical conditions, recent planning efforts, and stakeholder feedback regarding the Pembroke Pines Mobility Hub planning area, the following considerations guided development of a Planning Framework. The Planning Framework will facilitate the development of more detailed planning and design efforts for targeted Mobility Hub elements and locations. Building from the Planning Framework, the Broward Metropolitan Planning Organization (MPO) will pursue both *feasible and actionable short-term investments*, and *partnerships to support longer-term initiatives*.

Considerations moving forward are organized around three “guiding themes”:

TRANSPORTATION: Establish a City Center Transit Hub

DEVELOPMENT: Expand City Center with Complementary Office Uses

IMPLEMENTATION: Support Phased Transit Upgrades

TRANSPORTATION

Transit, bicycle and pedestrian mobility infrastructure in the Pembroke Pines Mobility Hub planning area should be expanded and enhanced in a manner that results in improved accessibility to, from, and within the City Center. While there will be other locations in the City where residents and employees can access express, regional or local transit, the City Center offers a unique opportunity to foster a multimodal lifestyle, for City Center residents in particular. Planning considerations include the following:

CENTRALLY LOCATED TRANSFERS

- *Focus visible Mobility Hub improvements along the central spine of Pines Boulevard.* In addition to raising the visibility of transit as a travel option, this will support transfer activity between Broward County Transit (BCT) and other providers/modes to make “last mile” connections to the broader City

Center area. These options now include walking, biking, community bus routes, cabs or rideshare services, and in the future will include bikeshare.

- In addition to higher profile BCT stops along Pines Boulevard, *establish a centralized off-street location within the City Center* where transfers between modes can be more efficiently served, bus bays and amenities can potentially be accommodated, and where convenient nearby parking can be provided.
- *Enhance secondary Pines Boulevard crossings at NW 103rd and NW 106th Avenues*, to facilitate convenient pedestrian and bicycle movement between development areas to the north and south without diverting non-motorized crossing to the primary intersection at Pines Boulevard and NW 101st/Palm Avenue.
- *Adjust community shuttle routes to travel through the City Center development* once all roadway connections are complete, so that more destinations are directly accessible from the route than would be if it remained on perimeter arterials. Carefully consider routing to make transit use convenient for City Center residents in particular, to include convergence with and potential overlap with local bus routes.

LEVERAGE EXISTING ASSETS

- Utilize the generous right-of-way width of Pines Boulevard to *create high profile transit stop locations* that are tied aesthetically to the design of the City Center.
- As property improvements are undertaken north of Pines Boulevard, *create a direct north-south connection* via NW 103rd Street extended through the site to better connect residential areas to the north with the City Center and allow for improved traffic flow and transit routing.
- Use a City Center inspired design theme to *create a consistent “vocabulary” of multimodal features* throughout the area. Transit amenities should focus on user convenience and comfort, and build on the newly “walkable” character of the redevelopment.
- Transit service upgrades will not alter the predominantly auto-oriented focus of the area in the near term. Transit will continue to function in this environment as a key component of mobility, and its *visual presence and the*

ability of transit users to orient themselves to the area upon arrival should be elevated.

- Transit, multimodal, and wayfinding features should *balance between elements scaled to: 1) drivers* along Pines Boulevard and Palm Avenue/ NW 101st Avenue to identify the City Center and denote key entry points, and 2) *pedestrians and transit users* on lower speed streets within the City Center.
- In conjunction with broader initiatives to expand the greenway network throughout the City, *improve pedestrian and bicycle connections into the City Center from surrounding neighborhoods*, such as the Washington Street right-of-way and connection west via Raintree Park, NW 103rd Avenue north to Johnson Street, and northeast via the FPL easement pathway.
- Explore the available public parking in the Florida Power & Light (FPL) easement as *a park-and-ride facility for express bus service* in the long term, in coordination with BCT and/or Florida Department of Transportation (FDOT). This location could eventually also provide park-and-ride capacity for expanded high capacity transit services as well given its proximity to the primary intersection.

DEVELOPMENT

Development in the Pembroke Pines Mobility Hub planning area should continue with the attention to quality and walkability established with the recent City Center development, with the over-arching goal of fostering a more vibrant mixed-use environment. Considerations related to mobility planning include the following:

EXPAND CITY CENTER ENVIRONMENT

- Extend the City Center concept *to the north across Pines Boulevard*. Travelers on Pines Boulevard should feel that they are moving through the heart of the City Center, not just along an edge. A consistent pattern of development and urban design pursued both north and south of Pines Boulevard can support this.
- As development efforts proceed, the City should continue to require cross access easements between private development parcels to *facilitate safe*

and direct routes between City Center destinations, for pedestrians and bicyclists in particular. Transit services should also be routed through private properties as needed to provide efficient and convenient connections near the entrances to destinations whenever feasible.

- Orient desired outdoor spaces (dining areas, plazas, etc.) to side streets or private “streets” rather than toward high traffic or high-speed roadways.

BROADEN THE LAND USE MIX

- Further City Center development or expansion should seek to *broaden the overall mix of land uses by incorporating additional office uses* (see the accompanying Market Analysis). This will increase the daytime population and further bolster additional retail activity.
- Consideration should be given to *other potential uses that would draw community attention and traffic to the area*, or that could complement a commuter transit orientation. Such uses could include: daycare facilities, cultural/recreational/entertainment venues, and service/convenience uses oriented to transit users, commuters and City Center residents.

IMPLEMENTATION

Implementation in the Pembroke Pines Hub planning area will require a coordinated balance of near-term initiatives and longer-term strategies, with considerable coordination among agencies to address competing needs and priorities. Decisions and investments made early should keep in mind the potential for higher capacity transit on arterial roadways in the future, not precluding the ability to effectively accommodate it later. Planning considerations include the following:

NEAR-TERM TRANSIT SUPPORT

- The near-term opportunity for *implementation of “high visual impact” transit-focused amenities which can elevate the role of transit in the area*, along with pedestrian crossing and wayfinding elements that are responsive to varying needs can be undertaken. The branding of community transit

services will be important, including consistent wayfinding features that support transfers between shuttle and BCT services.

- Transit planning should be carefully coordinated with the City's ongoing effort to *develop a local bikeshare program*, so the two (2) initiatives are mutually supportive and beneficial.
- As transit routing and transfer location adjustments are being considered, explore whether a "tactical urbanism" approach of *implementing temporary facility and/or service changes for purposes of evaluation* is warranted, before significant investments are undertaken.
- Agreements regarding *ongoing maintenance responsibility* for any new Hub amenities will be needed prior to any installation. This could involve agreement among the City, County, and/or adjacent private property owners.

LONGER-TERM COLLABORATION

- The City, BCT and FDOT should *discuss mutually beneficial strategies to provide a park-and-ride facility at the City Center*. Additional capacity and operational flexibility- including the ability to accommodate ridesharing and other emerging technologies, shared parking, and electric transit vehicle recharging- could also be accommodated depending upon the facility layout.
- A City strategy for further City Center development should potentially *include strategic acquisition of key parcels for redevelopment and/or future rights-of-way as opportunities arise*, so that a complete and coherent multimodal network can be created over time.
- Leverage *funding mechanisms* so that all are used most effectively. Available Mobility Hub support should be supplemented with other available sources.
 - Pembroke Pines could consider pursuing grant support from the State of Florida related to Enterprise Florida's grant for infrastructure and capital improvements that link transit to job growth (as discussed in the accompanying Market Analysis).
 - With the recent passage of the "Penny for Transportation" surtax county-wide, iterative improvements to transportation infrastructure and services will be forthcoming through coordination with Broward County. These plans should be carefully coordinated with Mobility Hub efforts to ensure the mutual benefit is maximized.

MOBILITY HUB ELEMENTS

Potential elements to include in the Hub area were presented and discussed with local stakeholders at a work session to establish local priorities for the Planning Framework. These elements, consistent with the county-wide Hub initiative, address the three key aspects of Hub development – Mobility, Safety and Placemaking.

MOBILITY

Figure F-3 provides examples of potential improvements to enhance multimodal mobility in Hub areas, and in particular amenities for transit users and support for transfer and first-mile / last-mile connections. They are typically eligible for Hub funding, and are intended to:

- Encourage and promote multimodal travel
- Facilitate easier use of the transit system

SAFETY

Figure F-4 provides examples of potential improvements to enhance safety for pedestrians and bicyclists in Hub areas, through separation of modes and highlighting areas set aside for non-motorized movement. These elements may be eligible for Hub funding, and are intended to:

- Increase safety of all users
- Separate and clarify modes of travel

PLACEMAKING

Figure F-5 provides examples of potential improvements related to urban design, which can enhance both the pedestrian and driver experience and establish a strong and positive community identity. These elements will likely require alternative sources of funding, but are intended to:

- Activate the public realm
- Serve as a visually consistent expansion of the City Center character
- Support (re)development efforts

FIGURE F-3: MOBILITY ELEMENT EXAMPLES



Bus Boarding Platform



Bicycle Parking



On-Street Bus Bay Pull-Out



Bus Shelter without bench



Bus Shelter with bench



Car Share Parking



Electric Vehicle Parking & Charge Stations



Transit Info Signage



Real Time Transit Information



Shuttle Trolley Drop-Off



Transit Signal Prioritization



Kiss & Ride/Transportation Network Companies/Taxi Drop-Off



Bikeshare Station

FIGURE F-4: SAFETY ELEMENT EXAMPLES



Protected Bike Lanes



Raised Pedestrian Crosswalk



Pedestrian Activated Signals



Pavement Upgrade



Pedestrian-Scale Lighting



Pedestrian Refuge Median



In-Ground Lights



Lighted Crosswalk

FIGURE F-5: PLACEMAKING ELEMENT EXAMPLES



Community Entry Marker



Wayfinding Signage



Canopies / General Shading



Community Plaza with Public Art



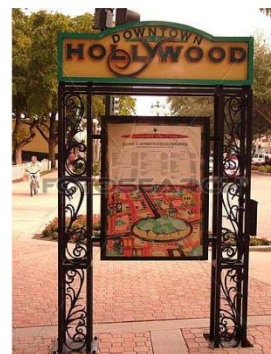
Community Event Space



Community Identity Feature



Public Restroom



Community Identity Feature /
Wayfinding Map (Monument)



Hallandale Beach Mural Building

FRAMEWORK LAYERS

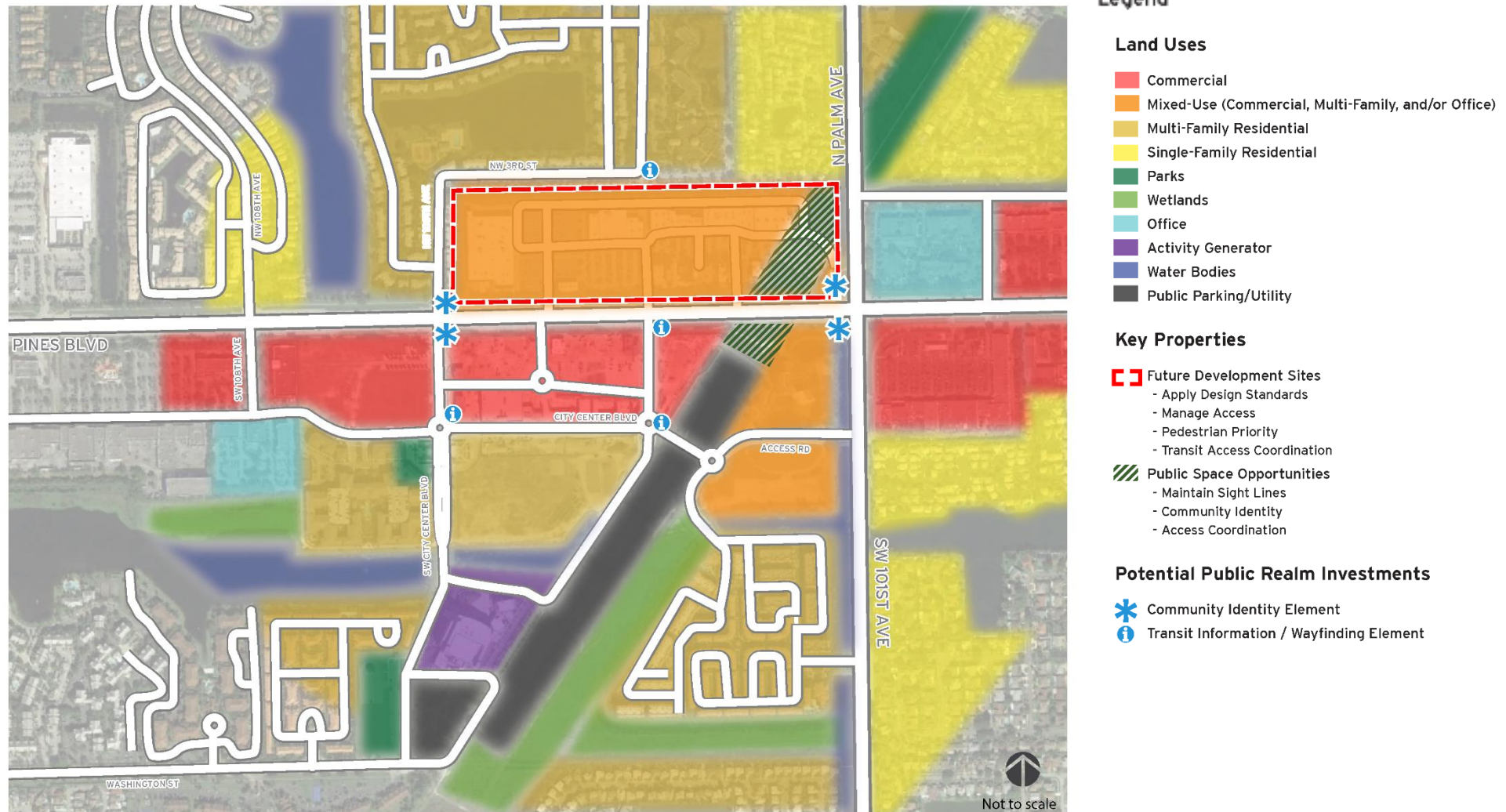
The two (2) Framework layers depicted in Figures F-6 and F-8 on the following pages reinforce the interconnected nature of the underlying development pattern, the public right-of-way, the various types and modes of movement, and the elements that support these modes. These Development and Multimodal Frameworks provides a *conceptual* depiction of potential improvements to guide more detailed design efforts, applying specific high-priority Hub elements.

DEVELOPMENT PATTERN AND PUBLIC REALM

Figure F-6, the Development Framework, is long-term in focus. Despite the challenges of an established development pattern that is compartmentalized and reliant upon a hierarchical street network, the Framework suggests a proactive and intentional strategy to support a broader and more integrated mix of uses in the Hub area. Figure F-6 depicts the following:

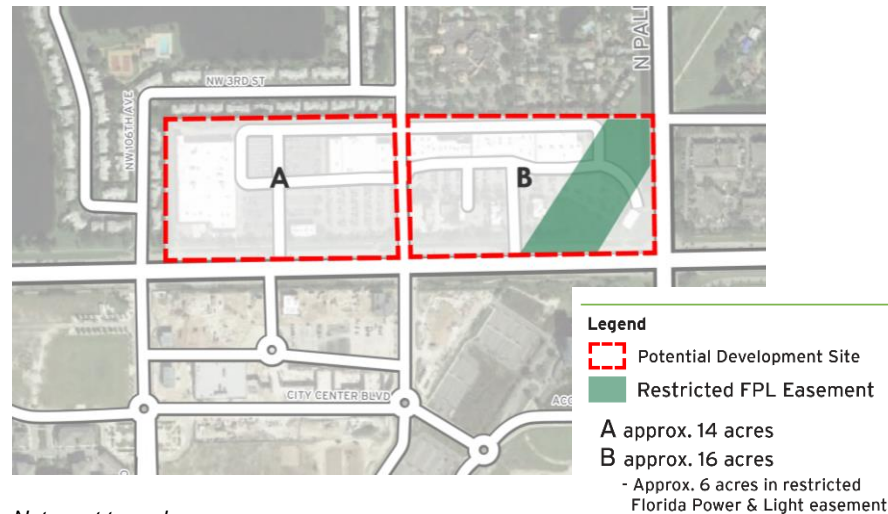
- **Land Uses** depicted remain unchanged in the surrounding established area, while expanding the new City Center development concept to the north and east to create an expanded mixed-use area that incorporates office uses. This would increase daytime population which would further support more retail activity. A longer-term opportunity to use public parking in the easement for park-and-ride should remain under consideration.
- A **Key Development Site** is delineated as a high priority for future change, potentially in phases. A future concept should allow for more intensity, apply City Center design standards and prioritize pedestrian and transit access. See Figure F-7 for additional site characteristics, including an open space in the existing easement, and a high profile “gateway” element at the corner.
- **Key Open Space Opportunities** in the Hub area, to supplement those already existing, include making use of the existing significant overhead utility easement as an amenity and focal point both north and south of Pines Boulevard, in particular in conjunction with redevelopment of the corner of the shopping center north of Pines Boulevard.

FIGURE F-6: DEVELOPMENT PATTERN AND PUBLIC REALM



- **Potential Public Realm Investments**, including *conceptual* locations for community identity elements, transit information signage and local wayfinding features. These locations would establish clear extents of the “walkable” City Center environment, clarify the expansion of the environment across Pines Boulevard, and align wayfinding and information locations with multimodal improvements (see Figure F-8).

FIGURE F-7: HIGH PRIORITY HUB REDEVELOPMENT SITES



Note: not to scale

MULTIMODAL OPPORTUNITIES

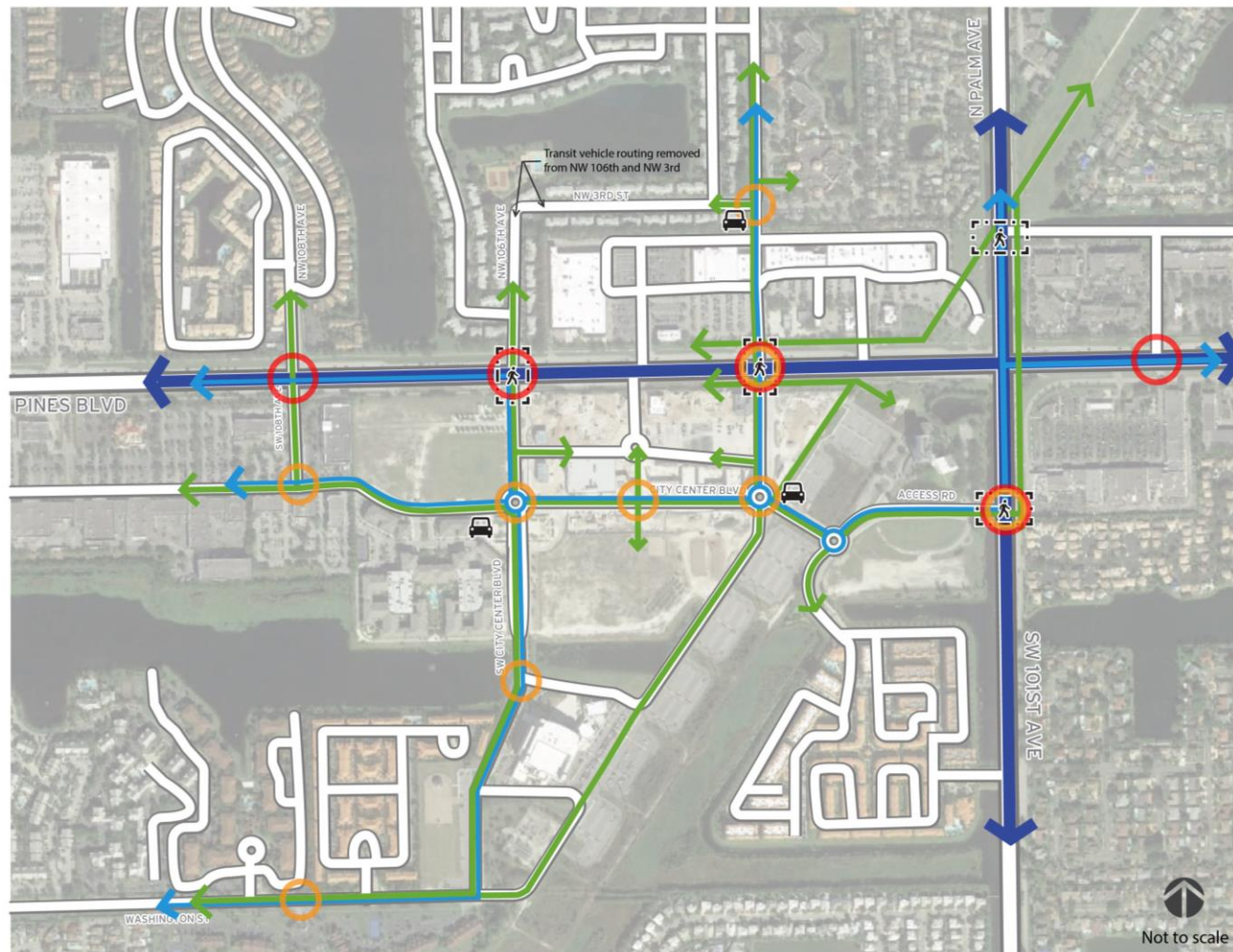
Figure F-8 depicts the following:

- **Key Movements** at three (3) scales, including:
 - Regional auto and transit movements along the primary arterial network (including BCT along Pines Boulevard);
 - Local auto and community shuttles movements providing access into and through the City Center from all directions, *including a vital new connection to extend NW 103rd Avenue through the priority redevelopment site* (also depicted on

Figure F-7) and connections from Washington Street to the south.

- Local pedestrian and bike movements, reflecting the smallest scale mobility network of local daily activity and transit use, including better connections to and along an expanded trail network in the FPL easement in the future, and west along Washington Street to Raintree Park.
 - Potential removal of transit vehicle traffic from NW 3rd Street and NW 106th Street north of Pines Boulevard, after a direct route can be established through the City Center.
- **Multimodal Opportunities** at various intersections, including:
 - Enhanced pedestrian crossings along Pines Boulevard and Palm Avenue, to increase the visibility of the pedestrian network and encourage crossing at clearly delineated locations. Crossing improvements at Pines Boulevard and NW 103rd Avenue are the highest priority for improvement, with upgrades to NW 106th Avenue and Access Road to be pursued as signalization is installed.
 - Primary transit stops that include existing BCT on Pines Boulevard, and future express and limited stops along and south of Pines Boulevard.
 - Secondary transit stops to delineate and upgrade community shuttle service and facilitate mode transfer between shuttles, BCT and the local bikeshare program. *These opportunities will be evaluated further in the next step of the planning process.*
 - Transportation Network Companies (TNCs, such as Uber & Lyft) and private vehicle drop-offs in designated locations convenient to transit boarding (Kiss-n-Ride).
 - Access coordination over the long-term, anticipating future opportunities to support multimodal transfers between community shuttles, BCT, TNCs, and bicycles as redevelopment efforts continue. In particular, upgrades near the new open space at City Center Boulevard and at the City-owned parking area near the entrance to Focal Point Senior Center should be explored.

FIGURE F-8: MULTIMODAL OPPORTUNITIES



Legend

Key Movements

- ➡ Regional Connectivity
- ➡ Community Connectivity
- ➡ Pedestrian / Bike Connections

Multimodal Opportunities

- 🚶 Enhanced Pedestrian Crossing
- 🔴 Primary Transit Access
 - Local BCT, Express/Limited Stop BCT (future)
- 🟠 Secondary Transit Access
 - Community Shuttle/Mode Transfer
- 🚗 TNC/Kiss-n-Ride Dropoff
 - Off-street zone convenient to transit

PROJECT PRIORITIES

In addition to discussions with City staff and BCT, work sessions with the City's Advisory Boards were convened on April 29, 2019 and again on October 10, 2019. At the initial work session, a preliminary Planning Framework was presented. At the subsequent work session, a refined Planning Framework that incorporated community shuttle recommendations was presented and discussed. Based on the feedback received, project priorities have been established to guide more detailed design efforts in the next phase of the Master Plan.

COMMUNITY SHUTTLE EVALUATION

Figure F-9 depicts a general strategy for evaluation of refinements to the existing community shuttle system upon completion of the City Center redevelopment. It notes the following:

- Existing Shuttle Routes and Existing Shuttle Stops, which still reflect the system operating prior to the development of Pines City Center.
- Potential Shuttle Route alignments and approximate locations for Potential Shuttle Stops, which will require more detailed evaluation. Decisions regarding the refined shuttle system will need to consider ease of accessibility into and out of the City center area, visibility, adjacency to safe crossing locations, route timing, potential for route transfers, and phasing considerations as redevelopment efforts continue.
- A Potentially Eliminated Shuttle Route, along NW 3rd Street and NW 103rd Avenue north of Pines Boulevard. As redevelopment occurs north of Pines, there is an opportunity to streamline and improve shuttle routing to better serve commercial and office uses, while reducing traffic on a predominantly residential street with multiple curb cuts.

IMPLEMENTATION FOCUS AREAS

The planning area has been organized into discrete segments for purposes of further project development and phasing, as shown in Figure F-10. Longer-term investment and redevelopment priorities are also identified.

- **Intersection Upgrades:** Intersection upgrades are recommended in the near-term for the crossing of Pines Boulevard at NW 103rd Avenue. Opportunities to improve the visibility and accessibility of the BCT stops at this intersection will be explored, along with heightened visibility of pedestrian crosswalks. Intersection upgrades are also recommended for the crossing of Pines Boulevard at NW 106th Avenue, to be planned and installed in conjunction with signalization in the future. Ideally these intersection improvements will be similar in quality and design to the improvements at NW 103rd Avenue.
- **BCT Stop Upgrades:** BCT stops along Pines Boulevard should be relocated, expanded and made more accessible at both NW 103th Avenue in the near term and at NW 106th Avenue in the longer term. Upgraded shelters that reflect the design theme of Pines City Center are recommended, and options for either near-side or far-side station locations will be evaluated.
- **Community Shuttle Stops:** High priority stop locations will serve the Pines City Center and new municipal facility, while improving access for residential areas immediately to the southwest. Scalable stop designs that reflect the Pines City Center aesthetic, are fully accessible, facilitate transfers to the bikeshare system and TNCs, improve the visibility and legibility of the shuttle system are recommended, along with extension of the stop system to additional locations in a second phase as redevelopment efforts continue and signals are installed.
- **Pedestrian Connection:** An improved connection should be provided through the shopping center to the north of Pines Boulevard in coordination with the property owner, with a longer-term goal of eventually accommodating an extended public right-of-way through the site as indicated previously in Figure F-7.

Design concepts, finalized locations for new physical infrastructure, and cost estimates will be developed in the next phase of the planning process for near-term investments. Locations may be modified during the next phase based upon a more in-depth review of site conditions and Americans with Disabilities Act (ADA) accessibility strategies.

FIGURE F-9: COMMUNITY SHUTTLE EVALUATION

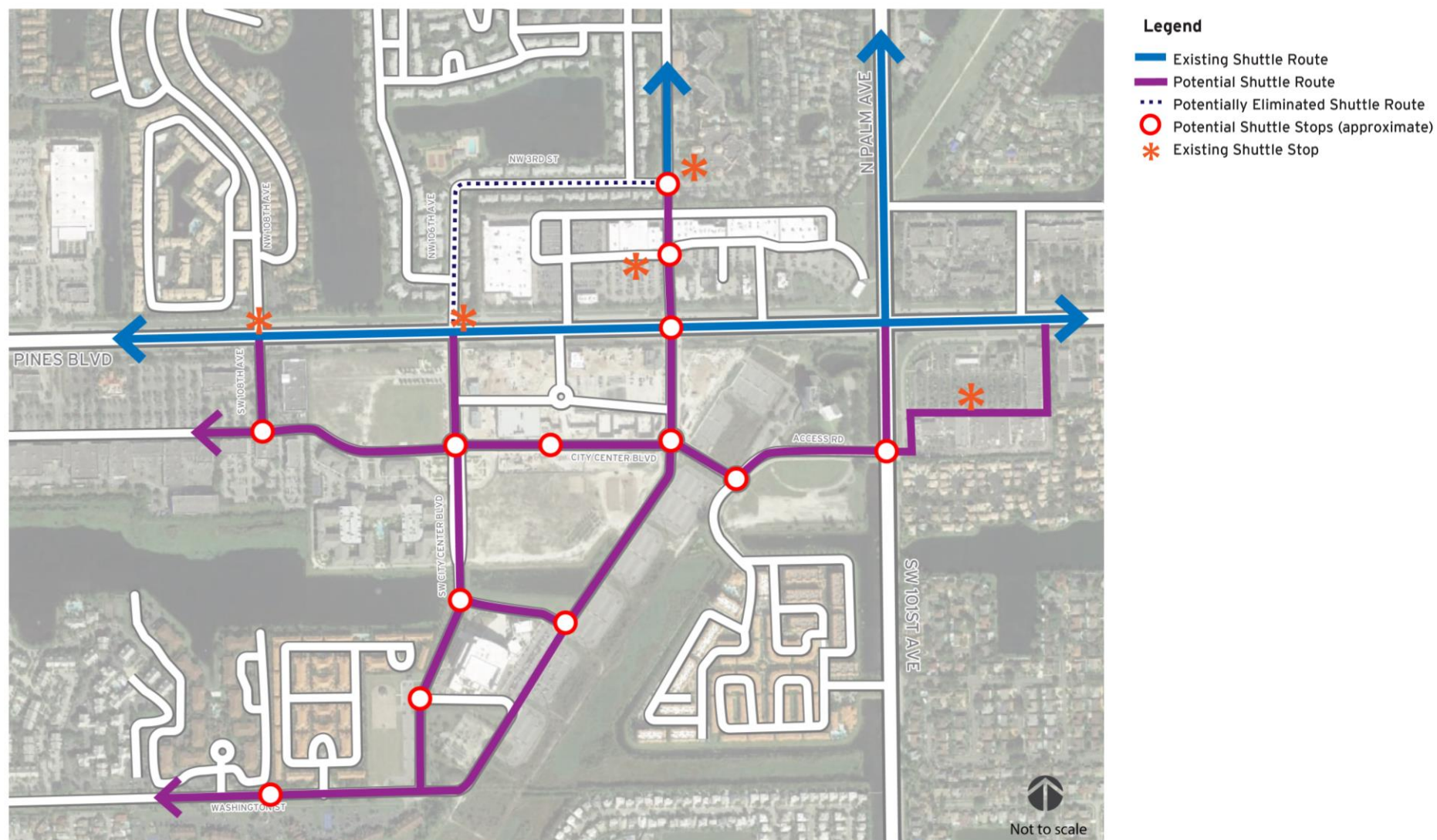









FIGURE F-10: PROJECT IMPLEMENTATION FOCUS AREAS



Legend

-  Intersection Upgrade Phase 1
-  Intersection Upgrade Phase 2
-  BCT Stop Upgrade Phase 1
-  BCT Stop Upgrade Phase 2
-  Shuttle Stop Phase 1
-  Shuttle Stop Phase 2
-  Pedestrian Connection Phase 2 (coord with property owner)

PROJECT ELEMENTS

Project elements in the Pembroke Pines Mobility Hub planning area are prioritized for conceptual design, permitting and implementation based on the Planning Framework. Preliminary cost estimates were developed for all Mobility Hub elements potentially fundable by the Broward MPO, including Mobility and Safety project elements, irrespective of the horizon year for ultimate implementation. The MPO expects to fund the shelters with FTA funds. Placemaking project elements are assumed to be City-funded projects, with cost estimates to be developed by the City for those elements not directly related to the multimodal transportation and transit network.

The near-term priority projects are comprised of a combination of Mobility, Safety, and Placemaking elements focused along Pines Boulevard west of Palm/NW 101st Avenue, and at community shuttle stop locations within the City Center and along Washington Avenue. Custom shelters are planned for BCT stops at the intersections of Pines Boulevard and NW 103rd and NW 106th Avenues, and some initially prioritized community shuttle stops. These shelters will be coordinated with other related investments, including intersection improvements for pedestrian and bicycle safety, sidewalk connectivity and ADA accessibility. At NW 106th Avenue, improvements will need to be coordinated with signalization and funded separately.

The plan view renderings in this section indicate both near- and long-term improvements as follows:

- Improvements to the intersection of Pines Boulevard and NW 103rd Avenue, within the Pines Boulevard public right-of-way (Figure P-1)
- Improvements to the intersection of Pines Boulevard and NW 106th Avenue, within the Pines Boulevard public right-of-way (Figure P-2)
- Pedestrian safety and ADA-compliance improvements at the privately-owned shopping center north of Pines Boulevard (Figure P-3)
- A series of custom transit stop shelters of varying scales, within public rights-of-way or on City-owned property (Figures P-4 through P-10)

The shelter design renderings in this section can be considered “prototypes” of custom bus stop treatments, supporting both near-term and potential long-term implementation at specific Hub locations subject to further evaluation.

MOBILITY AND SAFETY ELEMENTS

Specific near-term elements depicted in the renderings include:

CUSTOM BUS SHELTERS- The custom shelter structures planned are prefabricated steel components that are assembled at the site and bolted into place. The design provides a form that is related to the architectural design elements used at the adjacent City Center. It is intended to be easy to install and maintain and will also facilitate shelter expansion in some locations pending growing ridership activity over time.

- **Shelter Type 1** (Figure P-4) consists of a vertical element that denotes the stop location, including a City logo at the top and information panels at eye-level that will accommodate the Broward County Transit (BCT) and community shuttle logo, and route and system information. *This shelter type will be installed at the existing porte-cochere on the west side of the Charles F. Dodge City Center.*
- **Shelter Type 2** (Figure P-5) expands upon Type 1 by providing a shaded waiting area including two (2) benches and a second panel that can accommodate additional transit information or public art. A trash receptacle and two (2) bike racks are also included. *This shelter type will be installed to serve Memorial Park along Washington Avenue.*
- **Shelter Type 3** (Figure P-6) expands further to provide additional waiting and information panel capacity. *This shelter type will be installed adjacent to the City Center park, at a location to be finalized based upon City evaluation of shuttle routes.*
- **Shelter Type 4** (Figures P-7 through P-10) is the largest shelter prototype, providing the most shaded waiting area and seating capacity for passengers. *This shelter type will be used at the BCT bus stops at four (4) locations on*

Pines Boulevard at both NW 103rd and NW 106th Avenue intersections. The westbound bus stop at NW 103rd Avenue is being moved closer to the road along with a safer sidewalk connection; the eastbound bus stop at NW 103rd Avenue is being moved to a safer far-side location out of the right turn lane into City Center; neither bus stop at NW 106th Avenue currently has a shelter.

UPGRADED PEDESTRIAN CROSSWALKS- At the intersections of NW 103rd and NW 106th Avenues with Pines Boulevard, and adjacent to the Washington Avenue shuttle stops, stamped and color-enhanced crosswalk treatments will be installed to aid in pedestrian mobility and safety.

SIDEWALK AND ADA ACCESSIBILITY IMPROVEMENTS- At the intersections of NW 103rd and NW 106th Avenues with Pines Boulevard, ADA-accessible sidewalk connectivity will be provided at all four corners and to provide direct connections to the eastbound and westbound BCT stops associated with each intersection. Improvements will be provided adjacent to the Washington Avenue shuttle stop as required, also, to ensure connections to the existing sidewalk network.

MULTI-USE PATH - From Hiatus Road to SW City Center Boulevard on Washington Avenue, an off-street multi-use path will be provided on the north side of the street, within the existing right-of-way to improve bicycle connectivity to and from transit stops in the City Center area, supporting a connection further west via Raintree Park. The existing sidewalk will remain.

PAINTED BIKE LANES- From NW 108th Avenue to Palm Avenue on Pines Boulevard, painted bike lane markings will be provided per FDOT standards in the vicinity of the intersections where the bike lane will be impacted by vehicle turning movements or BCT bus movements. The bike lanes will improve bicycle connectivity to and from transit stops in the City Center area.

All improvements associated with the intersection of Pines Boulevard and NW 106th Avenue will need to be coordinated carefully with signalization and funded separately.

PLACEMAKING ELEMENTS

These related elements, both near- and long-term, would be funded and installed by the City in conjunction with the MPO-funded elements described above. Features under consideration are as follows:

LANDSCAPING AT TRANSIT STOPS- The City has adopted standards for transit stops that include landscape features; however, these enhancements are not FTA-eligible expenses. Provisions for future landscaping to be installed separately should be considered and coordinated during the design process.

COMMUNITY IDENTITY FEATURES- The City will consider incorporating a community logo at BCT and shuttle stop locations, as part of the vertical element and potentially in pavement features, to ensure consistency with City-wide branding and wayfinding initiatives. If there are additional costs associated with including these custom features, they may not be FTA-eligible expenses.

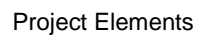
The preliminary cost estimate and schedule for the near-term Mobility and Safety element improvements, along with a discussion of implementation roles, responsibilities, and coordination needs is included in the **Implementation Strategy** section.

FIGURE P-1: INTERSECTION IMPROVEMENTS AT PINES BOULEVARD AND NW 103RD AVENUE

Not to Scale. Source: Marlin Engineering



Not to Scale. Source: Marlin Engineering



Not to Scale. Source: Marlin Engineering

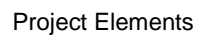


FIGURE P-4: TRANSIT STOP TYPE 1 – VERTICAL ELEMENT ONLY

Not to Scale. Source: HNTB



FIGURE P-5: TRANSIT STOP TYPE 2 – SMALL-SCALE SHELTER

Not to Scale. Source: HNTB



FIGURE P-6: TRANSIT STOP TYPE 3 – MEDIUM-SCALE SHELTER

Not to Scale. Source: HNTB



FIGURE P-7: TRANSIT STOP TYPE 4 – LARGE-SCALE SHELTER

Not to Scale. Source: HNTB



FIGURE P-8: TRANSIT STOP TYPE 4 – LARGE-SCALE SHELTER (FRONT VIEW)

Not to Scale. Source: HNTB



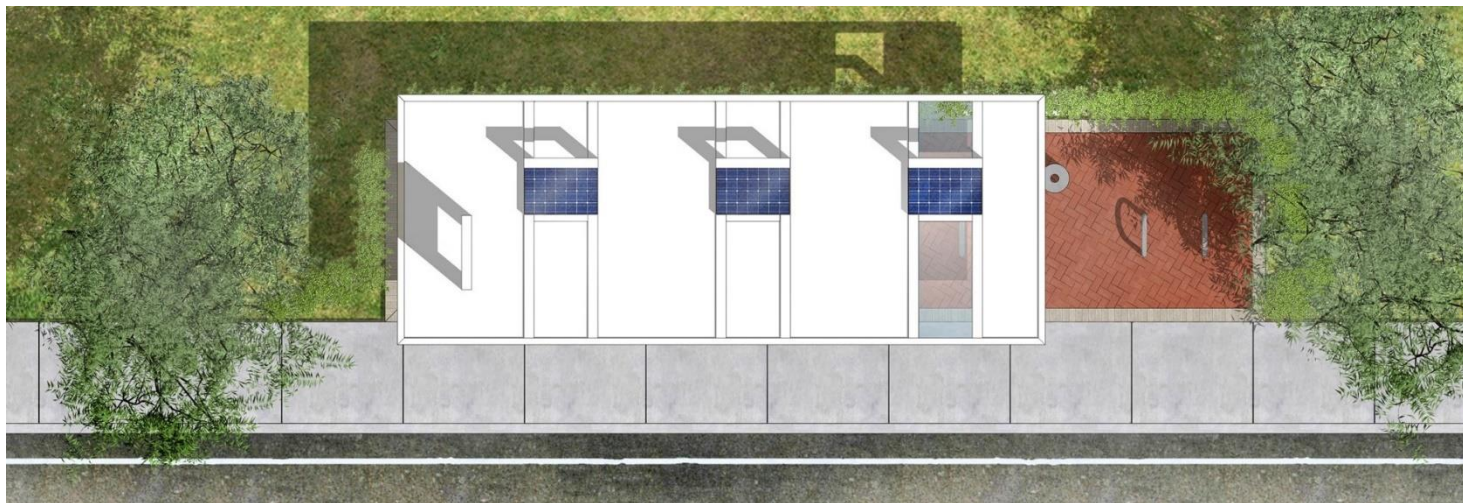
FIGURE P-9: TRANSIT STOP TYPE 4 – LARGE-SCALE SHELTER (PLAN VIEW)

Not to Scale. Source: HNTB



FIGURE P-10: TRANSIT STOP TYPE 4 – LARGE-SCALE SHELTER (ROOF PLAN VIEW)

Not to Scale. Source: HNTB



IMPLEMENTATION STRATEGY

The package of Mobility and Safety project elements prioritized for near-term Mobility Hub implementation includes custom shelters, pedestrian connectivity and other shelter area improvements, high-emphasis crosswalks and bike lane markings at and near the intersections of NW 103rd and NW 106th Avenues with Pines Boulevard, and bicycle and pedestrian connectivity improvements along Washington Street.

As noted at the outset of the master planning process, the Broward MPO assigned FTA funds to expend on Mobility Hub near-term projects to improve mobility and safety for pedestrians, bicyclists, and transit users. In determining the type and location of investments, the project team also considered how public investments might encourage redevelopment. The most visible near-term investments will be made along Pines Boulevard and SW City Center Boulevard to leverage other planned investments, signaling a commitment to multimodal access for the area, with future opportunities for the City to install similar improvements elsewhere in conjunction with development projects as opportunities arise.

While near-term project implementation is underway, it will be important for all stakeholders to continue to consider the broader strategies outlined in the Planning Framework, and to seek opportunities to collaborate on additional projects that will build on the near-term investments. Upgrades to additional bus and shuttle stops, and incorporation of wayfinding and community identity elements in additional locations will signal to the development community that the Mobility Hub is a vibrant and high priority investment location for the City.

If high capacity regional transit and/or park-and-ride facilities are considered to serve the area in the longer term, the implications for the Mobility Hub location to provide additional transfer and parking functions would also impact planning decisions. While these functions are not warranted or anticipated now, the long-term potential should remain in consideration as City planners discuss redevelopment opportunities within the Mobility Hub.

The City of Pembroke Pines must continue to engage, as appropriate, in discussions or negotiations with private property owners and developers regarding private investments in the Mobility Hub area. The City will seek opportunities to secure easements or use agreements to advance longer-term City goals for additional mobility, safety, and placemaking improvements. The City of Pembroke Pines must also coordinate Mobility Hub improvement efforts for the planned signalization of the Pines Boulevard / NW 106th Avenue intersection. This must precede Mobility Hub improvements, with ongoing City Center redevelopment and potential future redevelopment north of Pines Boulevard.

PROCESS OVERVIEW

The Broward MPO will assist with development of some preliminary design documents and permitting coordination. The City of Pembroke Pines will issue procurement documents, oversee final design, construction, and be responsible for maintenance of all elements, which are to be located within the public right-of-way (ROW).

The Design Phase of the project will be conducted for most project elements over the next year, with construction anticipated to be completed two years after design. Elements associated with the Pines Boulevard / NW 106th Avenue intersection will require additional coordination and may take longer to implement to align with the schedule for signalization.

The Broward MPO will lead the following tasks in 2020 and 2021 in close coordination with the City of Pembroke Pines, Broward County Transit (BCT), Broward County, Florida Department of Transportation (FDOT) and FTA:

Coordination and Permitting

Identify local, state and federal permitting requirements for near-term MPO-funded project elements. Address NEPA compliance, and Federal Highway Administration

(FHWA) and/or FDOT procedural reviews of crash data and traffic studies to warrant application of special treatments for bike/pedestrian safety. Collect updated traffic counts and crash data and analyze as needed to support warrant of design exceptions review.

Right-of-Way Research

Determine jurisdictional responsibilities for permitting authorities for near-term projects and confirm and document public ownership for placement of project elements and useful life maintenance responsibilities.

Environmental Reviews and NEPA Documentation

Review class of action and potential environmental impacts of the near-term projects, including impacts during construction, to determine the type of categorical exclusion. A categorical exclusion is a class of action that a Federal agency has determined, after review, does not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required.¹

30% Conceptual Design and Coordination

Develop conceptual design drawings for near-term MPO-funded projects and update conceptual cost estimates based on FDOT approved unit costs and recent similar projects. Coordinate between the City, FDOT and BCT, as needed for transit stops, sidewalks, ADA improvements, bike lane markings, and high-emphasis crosswalks.

Engineering Plans Review, Documentation and Construction

Develop a Final Design Report and associated civil engineering and architectural plans for permitting and construction documents for award of contract. This includes documentation for design variations in accordance with City of Pembroke Pines and FDOT criteria for solicitation of construction bids, updated estimates for costs and quantities, and standard technical specification packages for unique features.

The Broward MPO has launched a new construction division called Metro Transportation Engineering & Construction Cooperative (M-TECC). Member municipalities who wish to join can benefit from a variety of services such as a streamlined procurement of construction projects. M-TECC takes over all aspects of the project management in accordance with Federal and State laws, which include assistance in Procurement, Design, and Construction. This eliminates the need for additional city staff to administer FTA funded transportation projects and can offer a time/cost savings with increased project efficiencies to member municipalities. M-TECC staff, MPO administrative costs, Engineering Consultant and Contractors are all eligible expenses. Municipalities are free to choose to administer the procurement and construction of FTA eligible projects if utilizing M-TECC is not a viable option for them.

Stakeholder Coordination

Coordination efforts between the Broward MPO project team, the City of Pembroke Pines, BCT, FDOT and other stakeholders will include the following:

- The Broward MPO and City will coordinate with FDOT for the permitting of elements within the ROW, including bus shelters, lighting, decorative sidewalks, stamped asphalt crosswalks, benches, trash cans, and wayfinding.
- The City will coordinate with BCT on the installation of new custom shelters along Pines Boulevard. BCT has reviewed bus stop locations and confirmed the shelter locations are acceptable. Ridership changes will be monitored after construction is complete.
- The Broward MPO and City will provide opportunities for public review and comment on the near-term projects, including direct coordination with potentially impacted and/or adjacent property owners. It is not anticipated that near-term projects, which will all occur in the public right-of-way or on City property, will impact access or visibility for any private property owners.
- In the long term, as documented in the Planning Framework report, the City may choose to negotiate easements or use agreements with Hub-area property owners to accommodate desired features such as shuttle

¹ <https://ceq.doe.gov/nepa-practice/categorical-exclusions.html>

stops, bus transfer facilities and park-and-ride facilities. For example, establishing an improved pedestrian connection and potential shuttle route north-south through the shopping center north of Pines Boulevard, as depicted in the Project Elements report, will require an agreement with the property owner. A mutually beneficial agreement will ensure that safe and effective movement patterns can be accommodated.

PRELIMINARY SCHEDULE

The Broward MPO will provide implementation support to the City of Pembroke Pines. The tasks outlined above will proceed on the timeline outlined below:

- **Preliminary Design Documentation:** July 2020 – March 2021
- **FTA Funding Application Approval:** December 2020 – March 2021
- **Design/Build Construction Contract Procurement:** March 2021 – July 2021
- **Mobility Hub Construction:** July 2021 – June 2023
- **Construction Completion and Project Closeout:** July 2023

²<https://www.fdot.gov/programmanagement/estimates/basisofestimates/boemanual/boeonline.shtm>

³<https://www.fdot.gov/programmanagement/estimates/historicalcostinformation/historicalcost.shtm>

⁴<https://www.fdot.gov/programmanagement/estimates/lre/costpermilemodels/cpmsummary.shtm>

PRELIMINARY COST ESTIMATE

The Opinion of Probable Cost (on the following page) represents a preliminary and general cost estimate as the basis for design elements. Cost estimates will be modified and refined, as appropriate, during subsequent implementation support tasks. Adjustments to locations or quantities of elements may be made in the design phase.

The Broward MPO will continue to work with the City of Pembroke Pines to monitor opportunities to leverage available funds with City of Pembroke Pines as it plans for potential Placemaking improvements adjacent to BCT and shuttle transit stops.

Features and quantities included in the cost estimate table below are depicted and described in the preceding Project Elements section of this report.

Costs were developed based upon recent similar project experience in the south Florida market by both Marlin Engineering and HNTB. Relevant industry standards and cost estimate sources referenced in developing the cost estimate include:

- FDOT Basis of Estimate (for intersection design elements)²
- FDOT Pay Item Cost History (for intersection design elements)³
- FDOT Cost Per Mile Models for Long Range Estimating⁴, including
 - Sidewalk cost model (5' wide, 4" deep)⁵
 - Shared Use Path cost model (12' wide, asphalt)⁶
 - Additional Lane cost model (asphalt)⁷
- RSMeans 2020 Square Foot Costs Book (for bus shelter concepts)

⁵ https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/lre/costpermilemodels/o03.pdf?sfvrsn=734a20a3_8

⁶ https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/lre/costpermilemodels/o01.pdf?sfvrsn=dfe7cd6_10

⁷ https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/lre/costpermilemodels/u10.pdf?sfvrsn=96fd4359_4

NEAR-TERM PROJECT ELEMENTS - OPINION OF PROBABLE COST (MAY 2020)

Sources for unit costs: Marlin Engineering, HNTB

Project Element	Unit	Qty	Cost/Unit	Cost	Description
Custom Bus Shelters - Estimates below include shelter structure and associated site and pavement work, user amenities as depicted in the Project Elements section. Cost/unit includes design, survey, Construction Engineering and Inspection (CEI), and 20% contingency.					
Type 1	Each	1	\$17,730	\$17,730	At City Hall west porte-cochere
Type 2	Each	2	\$42,745	\$85,490	Verify two one-way stops or one paired stop on Washington Street
Type 3	Each	2	\$61,430	\$122,860	Verify two one-way stops or one paired stop at City Center park
Type 4	Each	4	\$80,935	\$323,740	Two paired stop locations (Pines/NW 103 rd Avenue, Pines/NW 106 th Avenue)
Total				\$549,820	
Pines Boulevard Intersection Safety Improvements - Estimates below include ADA accessible sidewalk, crosswalk, curb work and painted bike lane improvements as depicted in the Project Elements section. Shelter-related costs for four (4) Pines Boulevard stop locations are included above. Signalization costs are not included at NW 106 th Avenue intersection. Cost/unit includes design, survey, CEI, and 20% contingency.					
NW 103rd Avenue/ Pines Intersection	Each	1	\$336,464	\$336,464	
NW 106th Avenue / Pines Intersection	Each	1	\$436,178	\$436,178	Excludes signalization
Bus Pullout / Curb Modification	Each	4	\$70,405	\$281,620	Estimate of cost to accommodate pullout at each stop (not depicted in the Project Elements section)
Total				\$1,054,262	
Washington Street Ped/Bike Connection - Hiatus Road to SW City Center Boulevard; supports a connection further west via Raintree Park. Cost/unit includes design, survey, CEI, and 20% contingency.					
Multi-Use Path	Linear Feet	2,685	\$86	\$231,910	North side only; off-street; asphalt, 12' wide; assumes existing sidewalk remains

5' Bicycle Lanes	Linear Feet	2,685	\$133	\$356,690	Roadway widening to accommodate east- and west-bound on-street lanes; no off-street multi-use path included
7' Bicycle Lanes	Linear Feet	2,685	\$185	\$497,310	Roadway widening to accommodate east- and west-bound on-street lanes; no off-street multi-use path included
TOTAL Cost with Multi-Use Path				\$1,835,992	No bike lanes
TOTAL Cost with 5' Bicycle Lanes				\$1,960,772	No multiuse path
TOTAL Cost with 7' Bicycle Lanes				\$2,101,392	No multiuse path

APPENDIX A:

PLANNING PHASE SURVEY RESULTS



PEMBROKE PINES MOBILITY HUB

Planning Phase Survey Results

March 2019

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EXECUTIVE SUMMARY

Purpose

The Broward Metropolitan Planning Organization (BMPO) contracted with HNTB and Quest Corporation of America (Quest) to gather data regarding the community's mobility experience in the identified area of Pembroke Pines' City Center to create a planning framework for a mobility hub project.

To assess mobility improvements as part of the planning phase, surveys (English, Spanish and Creole) were conducted in-person and online. The data collected identifies usage and user perception about transportation services and their facilities and how mobility in Pembroke Pines' City Center area could be improved.

The data collected will identify usage and user perception about transportation services and their facilities and how mobility in Pembroke Pines' City Center area could be improved.

Methodology

Quest Project Manager Nannette Rodriguez drafted survey questions, which were approved by HNTB Project Manager Diane Gormley-Barnes, AICP, LEED, and BMPO Project Manager Andrew Riddle, AICP.

As directed and approved, surveys were conducted in-person and online. The in-person surveys targeted qualified respondents, in this case, those observed using Broward County transit and community bus services, walking and/or cycling in the study area. The online surveys were available to anyone regardless of whether they currently use transit. The online surveys were distributed by the Broward Metropolitan Transportation Organization (MPO) and available for sharing. Both methodologies were used to provide a broader collection of opinions.

Opinions collected were focused on the following:

- Modes of mobility (transit, Transportation Network Companies (TNC) and walking/cycling) used in the area.
- Purpose and frequency of mobility in the area.
- Pros and cons of the current mobility services and facilities.
- Mobility safety concerns.

The in-person survey was available in English, Spanish and Creole. Surveys were collected in-person by Quest team members in English and Spanish. The surveys were completed on wireless tablets with data collected through an online portal.

The online survey was also available in English, Spanish and Creole. The link to the survey was shared electronically to the City of Pembroke Pines and through the BMPO's communication channels. The survey also included links to the studied area map and overall program.

All completed information submitted on the tablets and online was reviewed and analyzed. The tabulation of data resulted in preparing tables and charts (within this report) to quantify transportation and mobility opinions of the City of Pembroke Pines' City Center area.

Results

In-Person

The in-person survey was conducted in Pembroke Pines City Center on Tuesday, December 18, 2018, during the early morning, mid-day, and late afternoon/evening. A total of 80 questionnaires were completed at the following locations:

- Pines Boulevard at Palm Avenue, 103 and 106 avenues (north and south sides).
- Southwest Focal Pointe Senior Center, 103 Avenue and NW Third Street

Of the total 80 respondents,

- 58% live in City Center, and of those,
 - 40% use transit,
 - 37% use TNCs, and
 - 82% walk/cycle in the area.
- 36% work in City Center, and of those,
 - 60% use transit,
 - 42% use TNCs, and
 - 57% walk/cycle in the area.
- 17% both live and work in City Center, and of those,
 - 38% use transit,
 - 53% use TNCs, and
 - 77% walk/cycle in the area.
- 18% neither live nor work in City Center, and of those,
 - 64% use transit,
 - 28% use TNCs, and
 - 57% walk/cycle in the area.

Overall, of all respondents, 58% use transit and use it frequently to get to work. Transit users identified real time information, wait times, frequency and timely schedule as improvements that can be made. Amenities that rated poorly are crosswalks, signalization, sidewalks and bike racks. TNCs were used by 36% of respondents mostly to get to work when the bus is

inconvenient. The 67% that walk/cycle in the City Center area do so to shop, work or catch the bus.

Additional crosswalks (especially noted at Pines Boulevard/106 Avenue) and traffic signalization were the improvements that respondents identified as enhancements that could be made for better mobility and safety. Protected bike lanes were identified more so by those who work in City Center. And, lighting was identified more so by those who live in City Center. Those who did not live or work in the City Center were more likely to identify traffic as a safety concern in the area.

Online

The online survey was available from December 17, 2018 through January 22, 2019. The highest response volume was on January 7 and 14, 2019. A total of 79 surveys were completed.

Of the total 79 respondents,

- 13% live in City Center, and of those,
 - 11% use transit,
 - 30% use TNCs, and
 - 60% walk/cycle in the area.
- 67% work in City Center, and of those,
 - 6% use transit,
 - 30% use TNCs, and
 - 23% walk/cycle in the area.
- 8% both live and work in City Center, and of those,
 - 16% use transit,
 - 50% use TNCs, and
 - 50% walk/cycle in the area.
- 12% neither live nor work in City Center, and of those,
 - 11% use transit,
 - 33% use TNCs, and
 - 44% walk/cycle in the area.

Overall, of all respondents, only 5% use transit mostly for appointments, 25% use TNCs mostly to go to work, and 28% walk or cycle in the City Center area mostly to exercise or for recreation. Crosswalks, sidewalks and bike lanes were identified improvements that could address safety concerns. Additional safety concerns are traffic and lack of traffic enforcement.

Overall Summary of Results

There were 277 completed surveys. Wait times and schedule were improvements that were suggested that could improve transit. For the majority of the respondents, installing a crossing at Pines Boulevard and 106 Avenue was identified as both an improvement and one that could address the safety concerns. Further improvements to address safety concerns include sidewalks, bike lanes and lighting.

Detailed Findings

PEMBROKE PINES CITY CENTER IN-PERSON SURVEY

Tuesday, December 18, 2018 | 6 a.m. to 6 p.m.

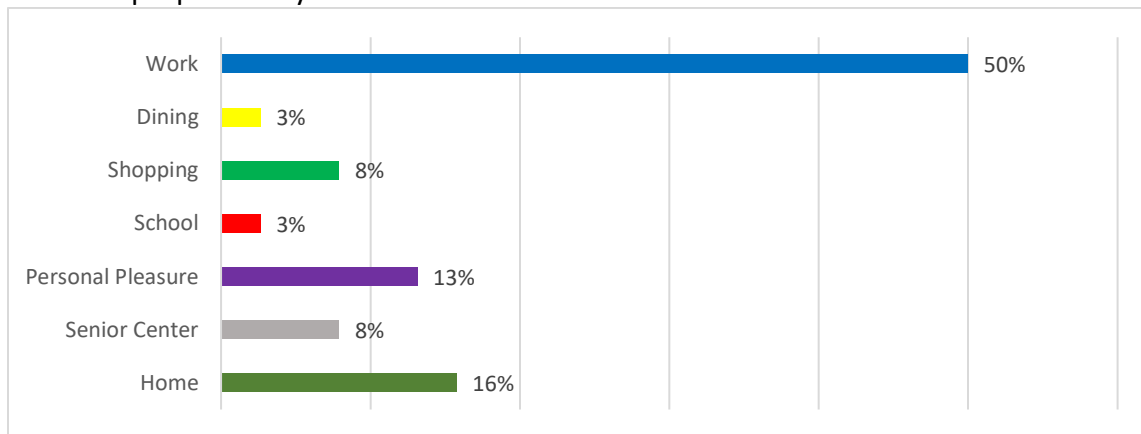
80 Respondents

- Pines Boulevard at Palm Avenue, 103 and 106 avenues (north and south sides).
- Southwest Focal Pointe Senior Center, 103 Avenue and NW Third Street

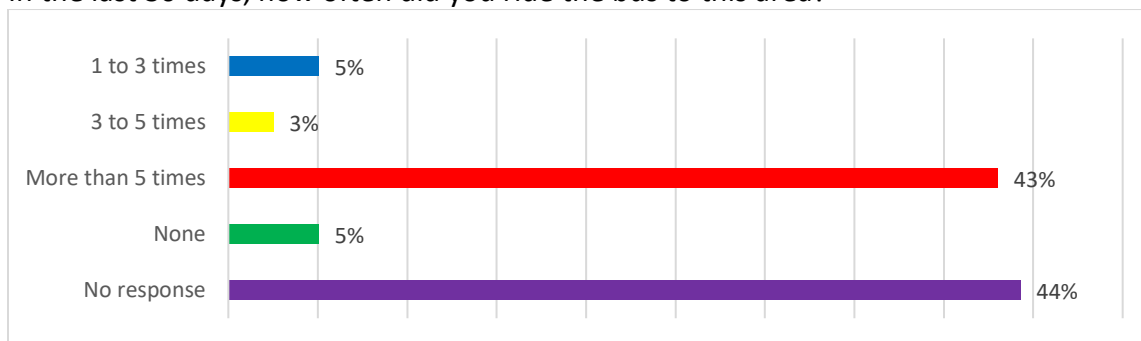
TRANSIT USERS

(Transit/Community Bus Respondents = 58%)

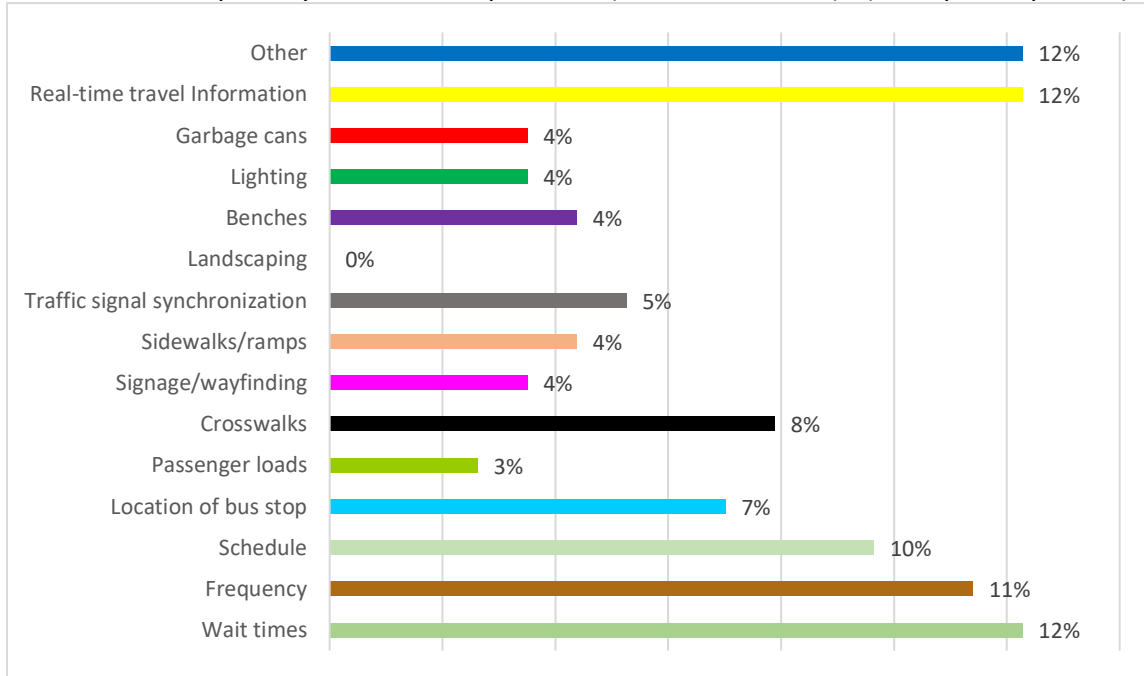
1. For what purpose did you ride the bus to this location?



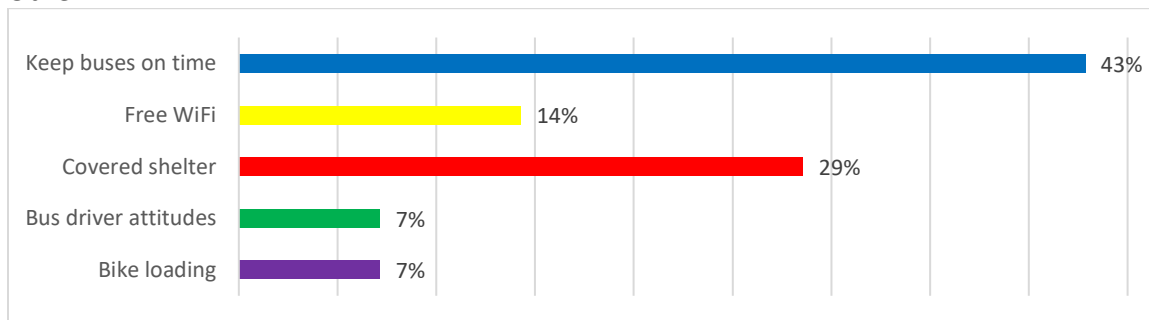
2. In the last 30 days, how often did you ride the bus to this area?



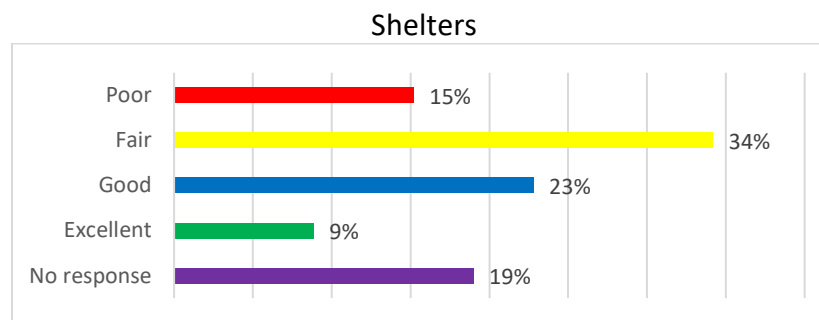
3. What could improve your transit experience (or that of others)? (Multiple responses)



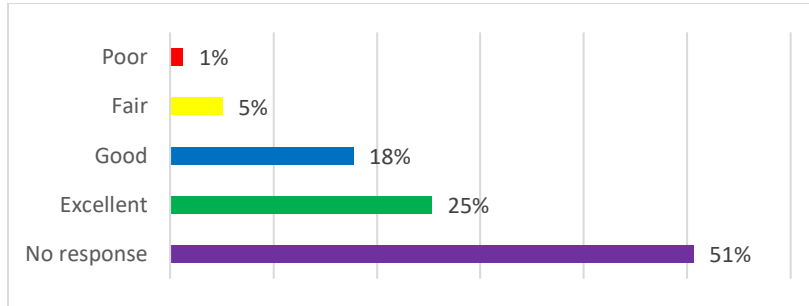
3a. Other



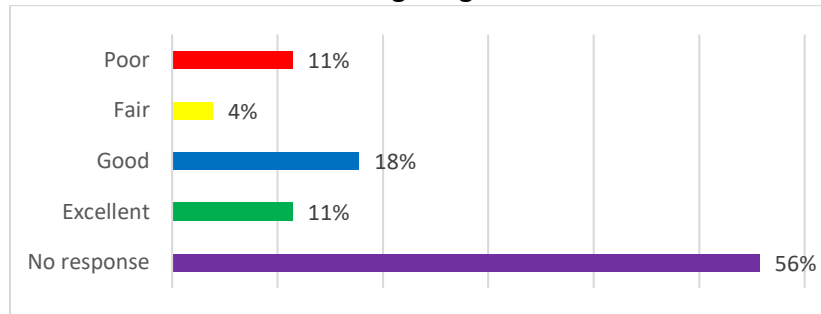
4. In your opinion, what are the conditions of the following bus stop amenities?



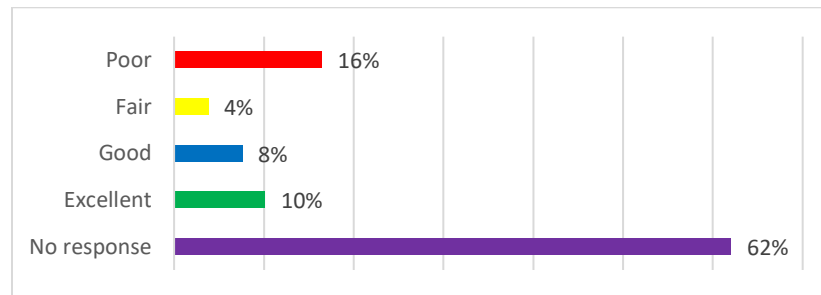
Benches



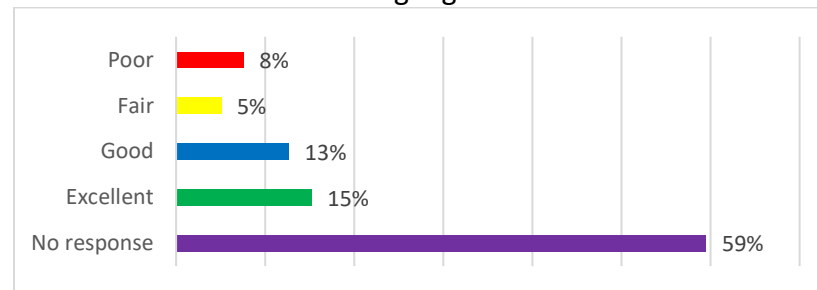
Lighting



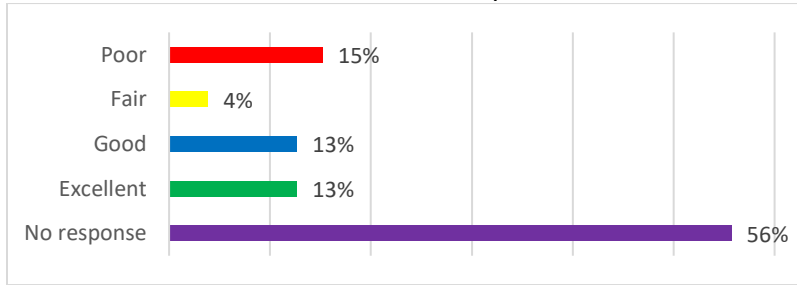
Bike Racks



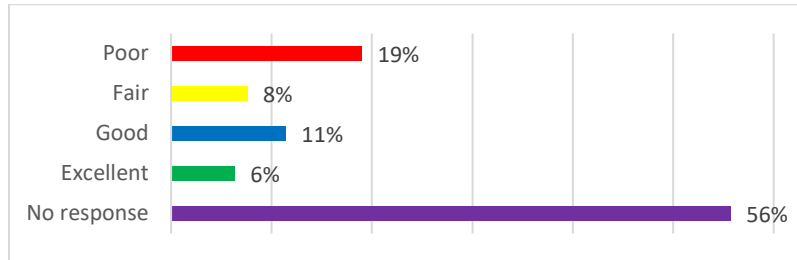
Signage



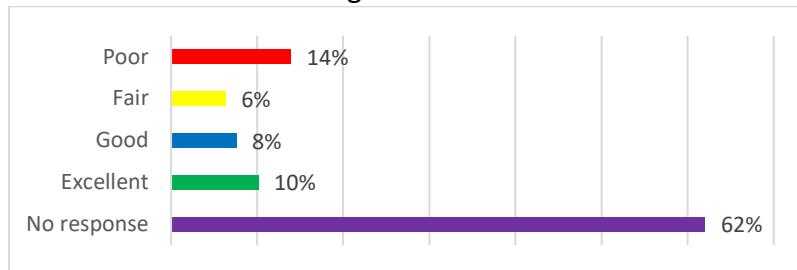
Sidewalks/Ramps



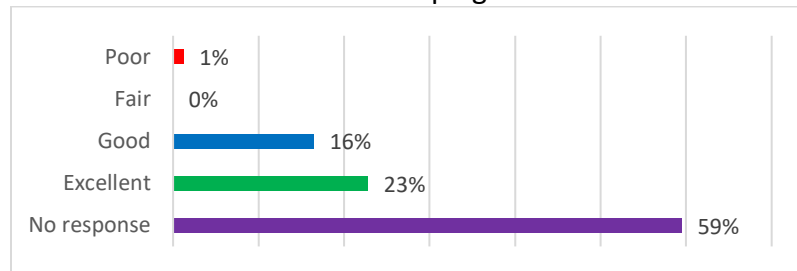
Crosswalks



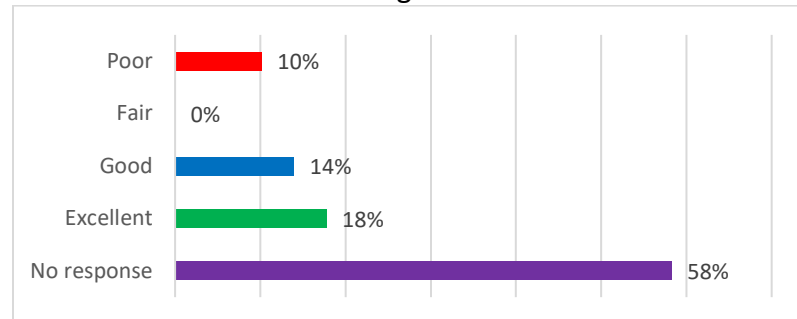
Signalization



Landscaping

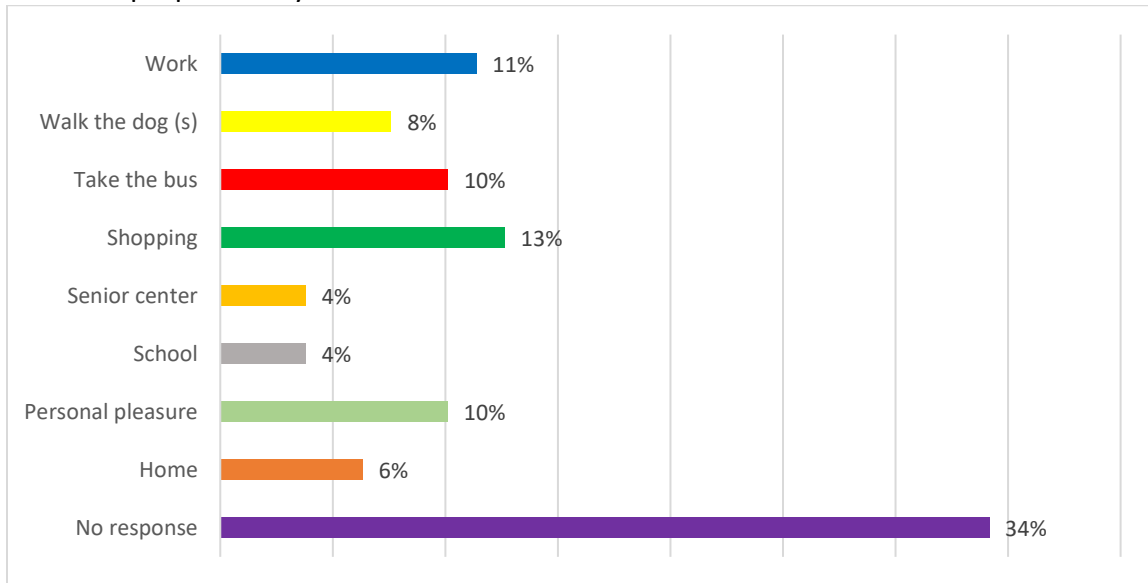


Garbage Cans

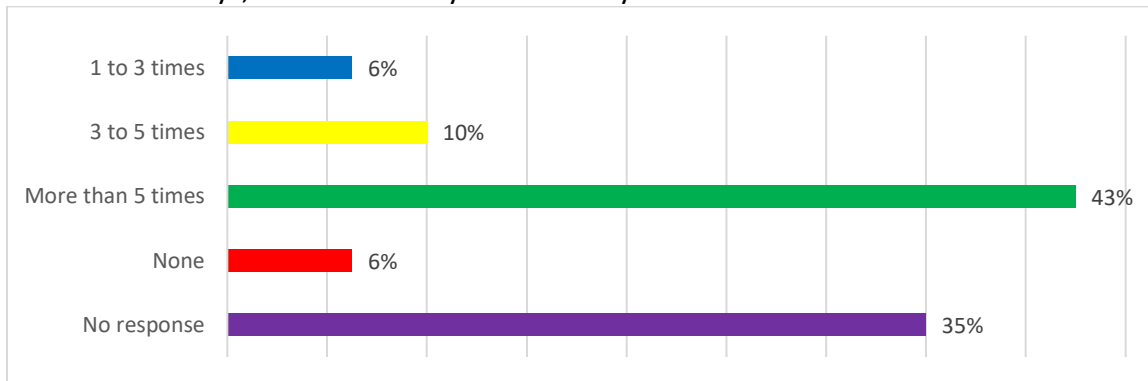


PEDESTRIANS/CYCLISTS
(Pedestrian/Cyclists Respondents = 67%)

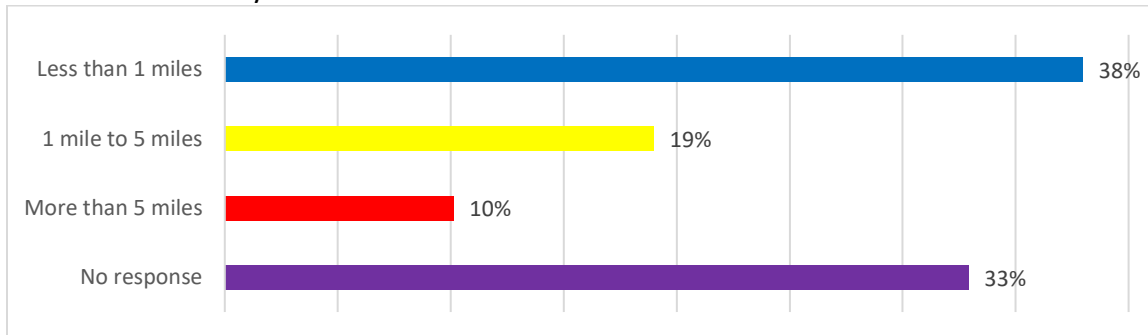
5. For what purpose did you walk or ride to this area?



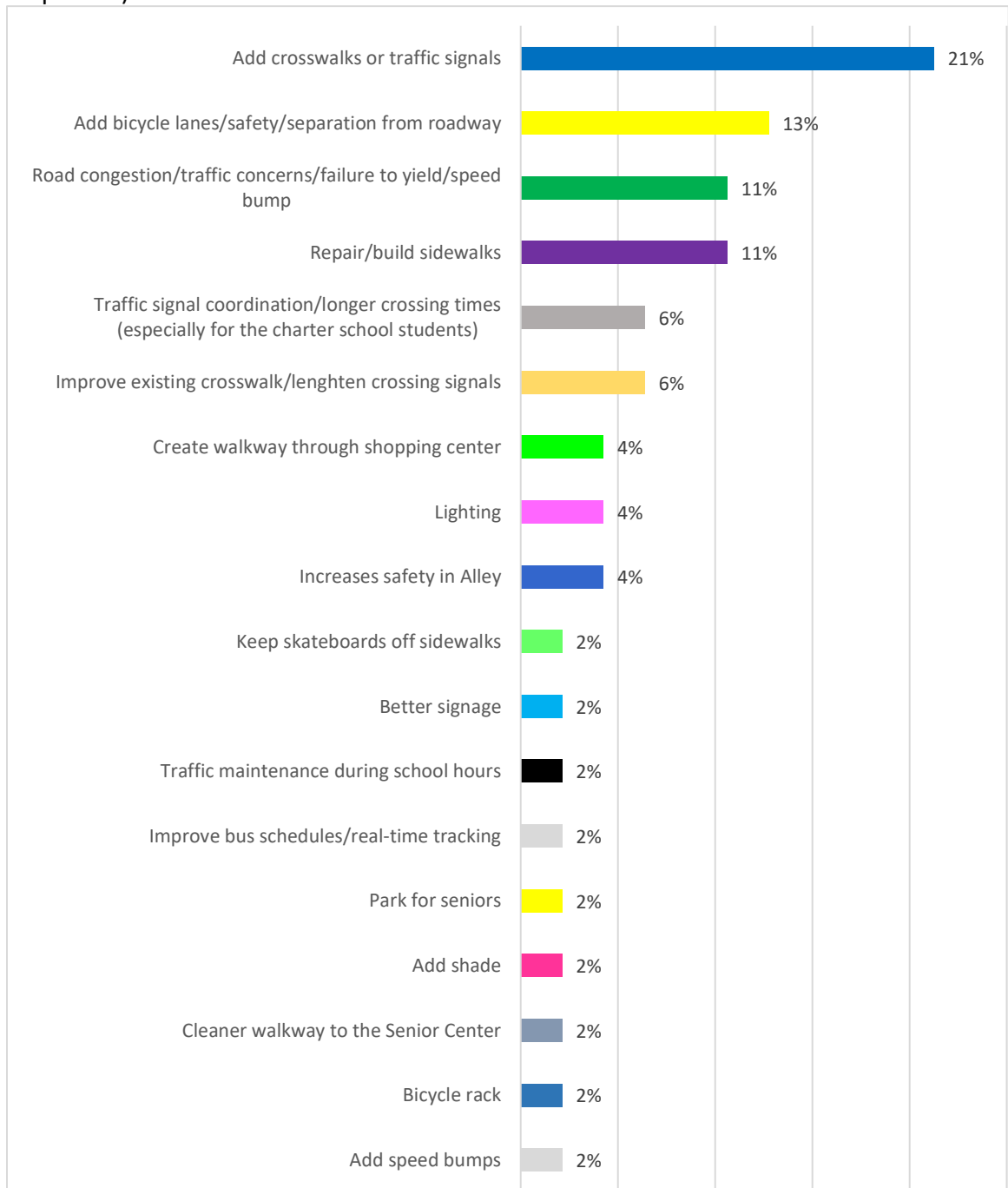
6. In the last 30 days, how often did you walk or cycle to this area?



7. What distance did you travel to reach this destination?

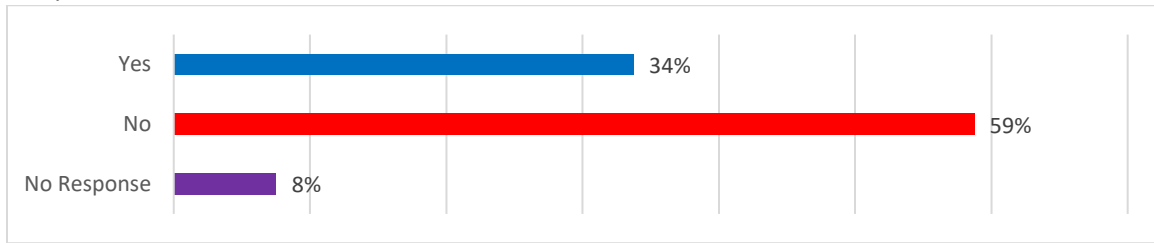


8. What could improve your walking and cycling experience (or that of others)? (Multiple responses)

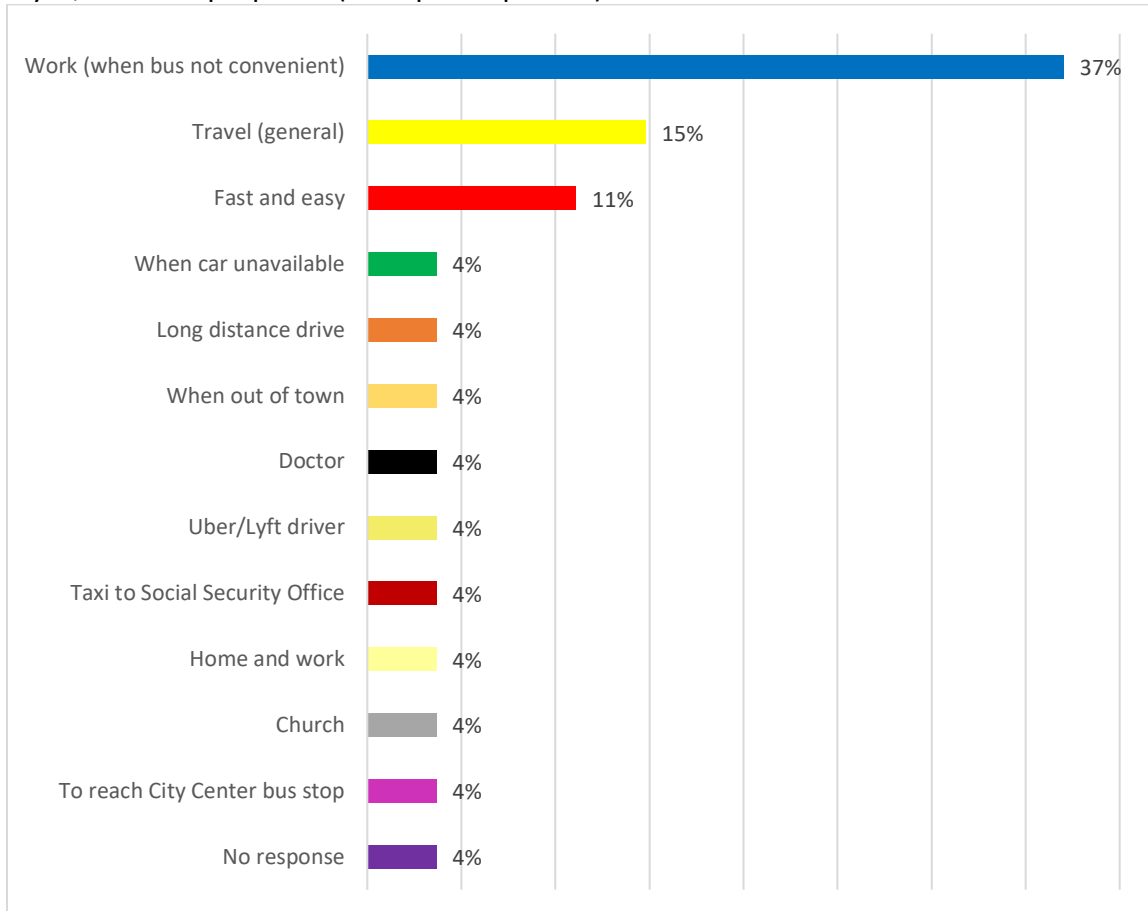


EVERYONE

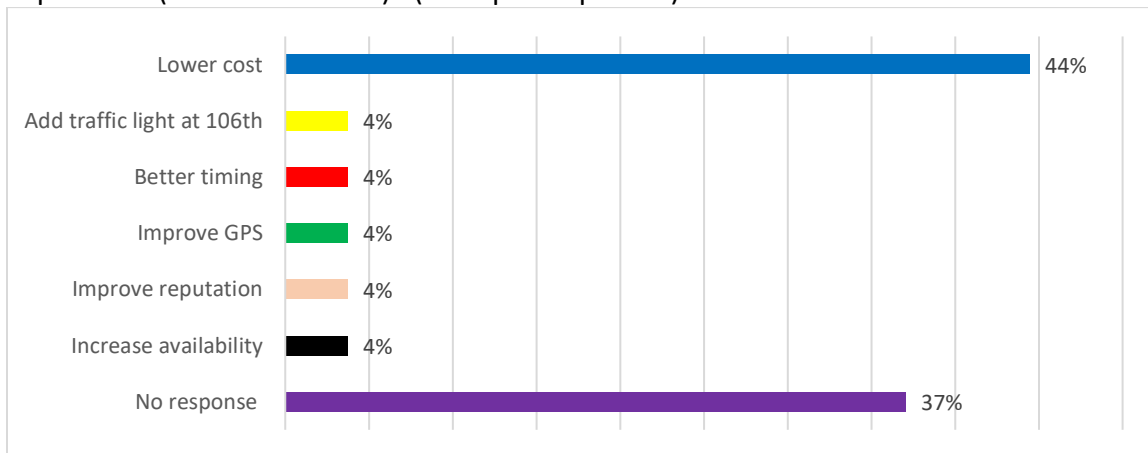
9. Do you use Transportation Network Companies (i.e. Uber/Lyft/Other) for and/or in the area?



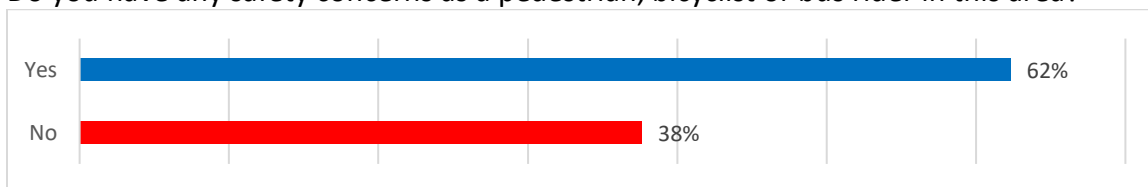
9a. If yes, for what purpose? (Multiple responses)



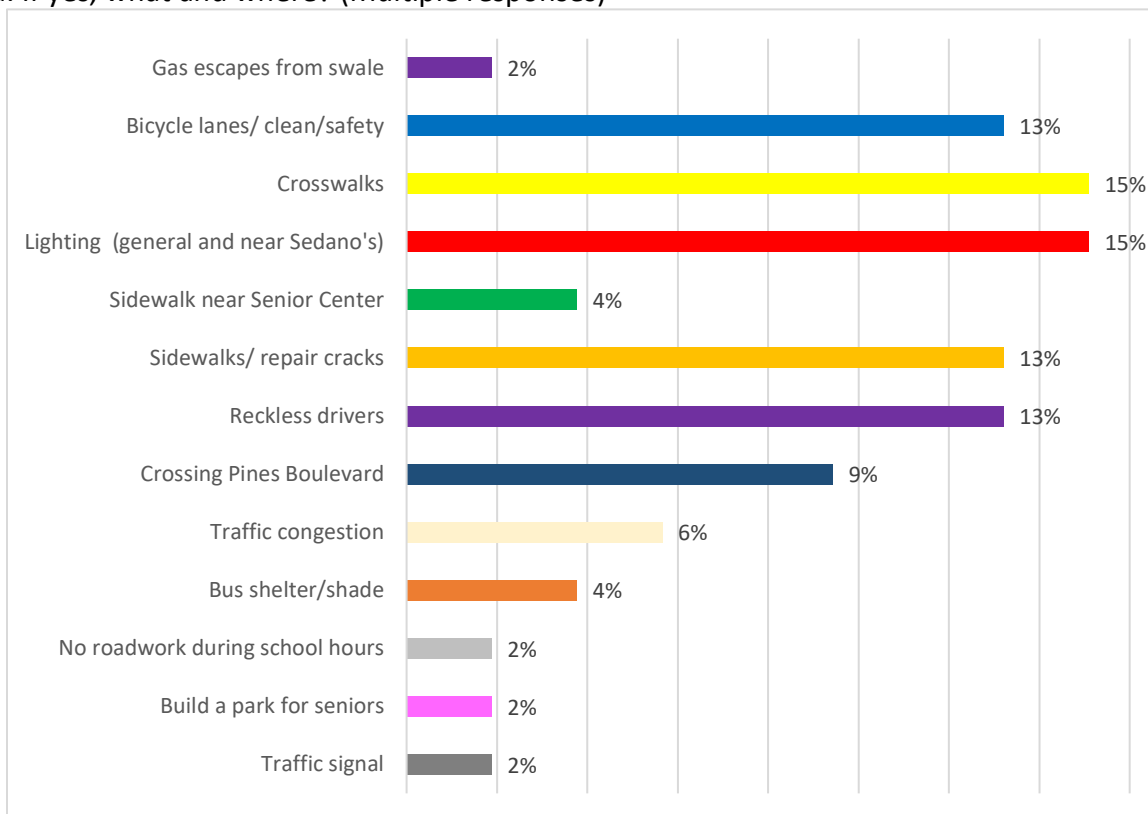
9b. What could improve your transportation network company (i.e. Uber/Lyft/Other) experience (or that of others)? (Multiple responses)



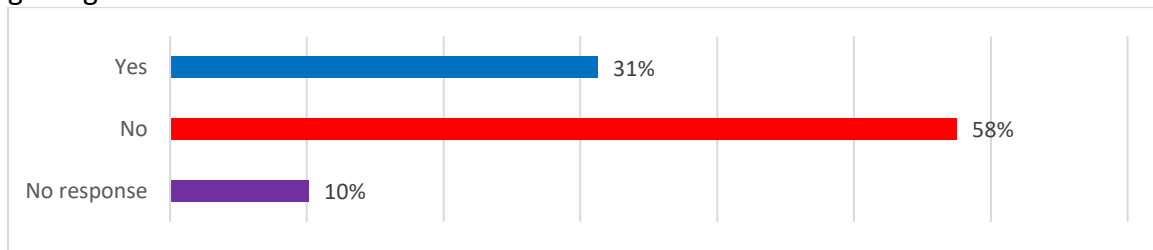
10. Do you have any safety concerns as a pedestrian, bicyclist or bus rider in this area?



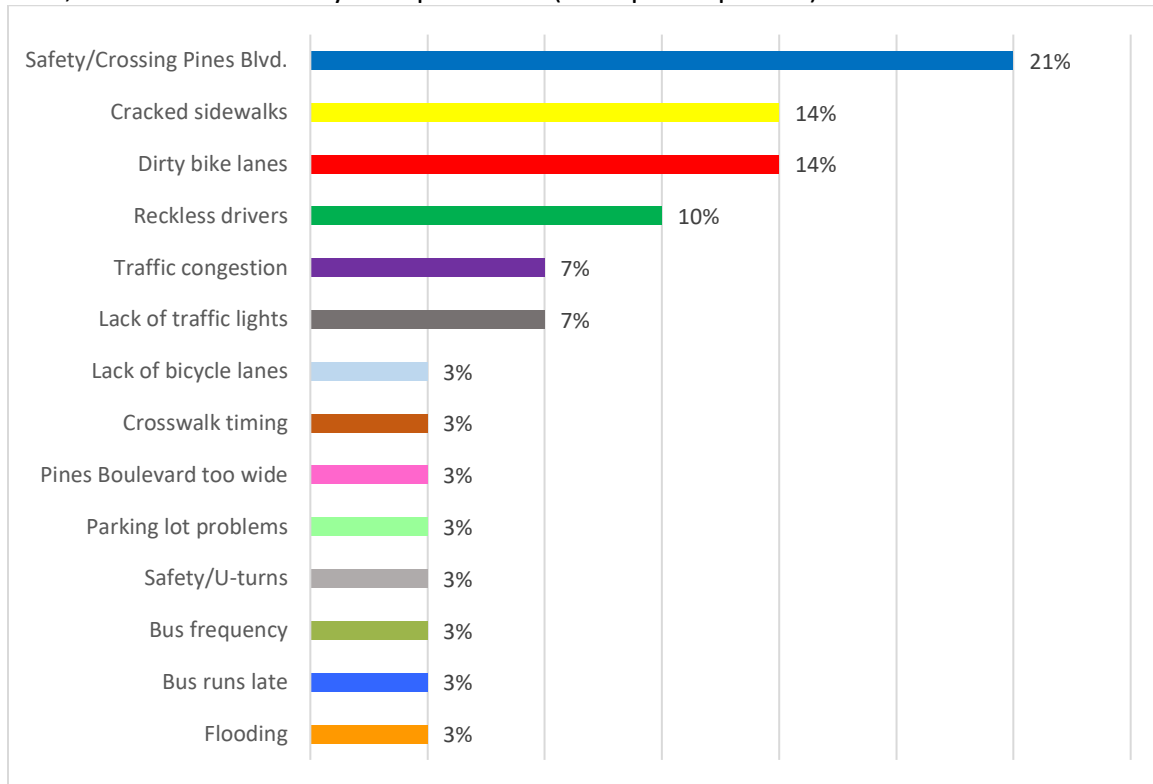
10a. If yes, what and where? (Multiple responses)



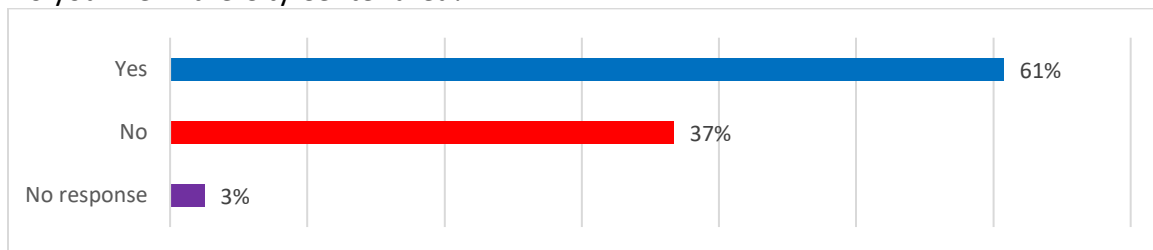
11. Do you experience or have you experienced any obstacles getting to where you need to go or get around in the area?



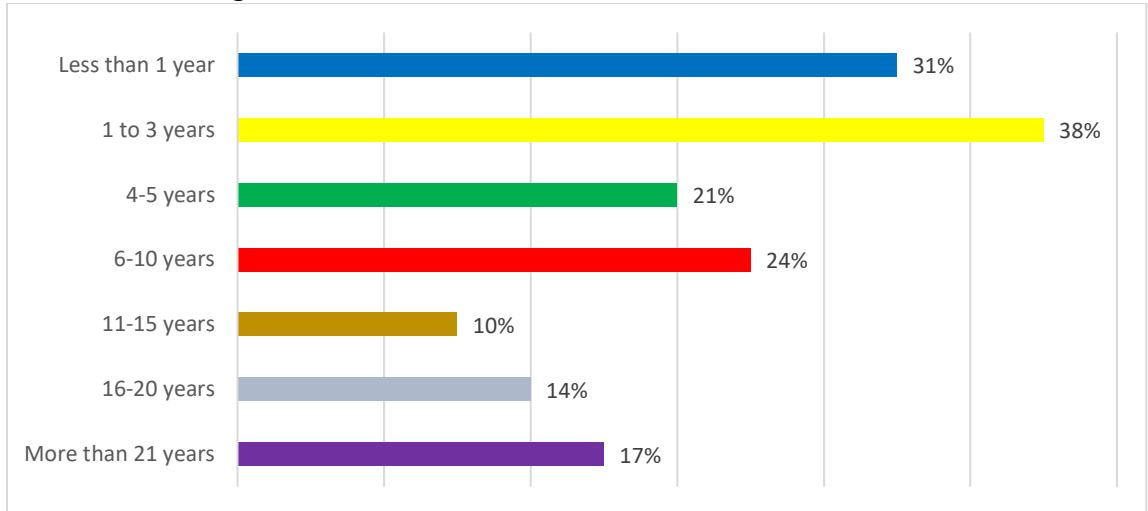
11a. If so, what obstacles did you experience? (Multiple responses)



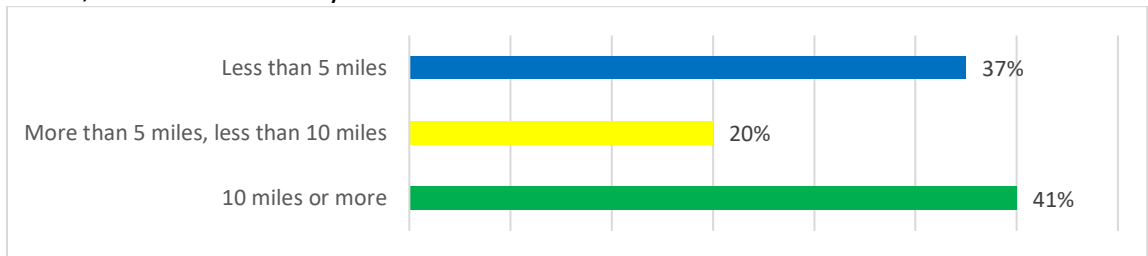
12. Do you live in the City Center area?



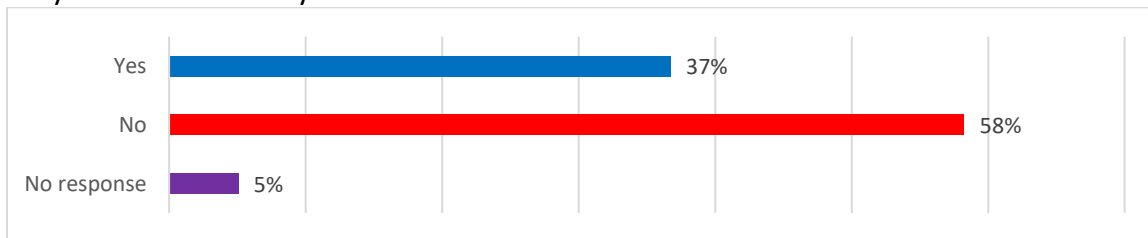
12a. Yes, for how long?



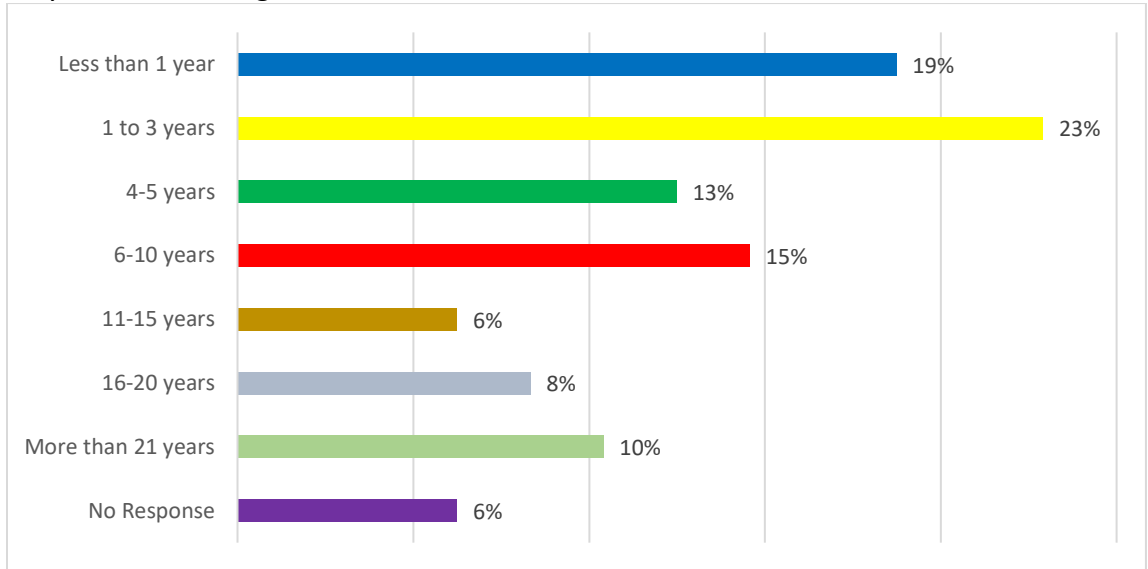
12b. If no, what distance do you live from here?



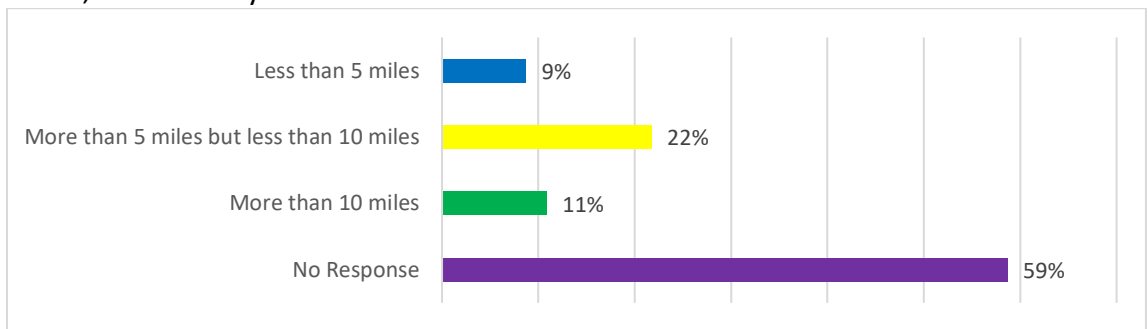
13. Do you work in the City Center area?



13a. If yes, for how long?



13b. If no, how far do you work from here?



-- End of Pembroke Pines City Center In-Person Survey Results --

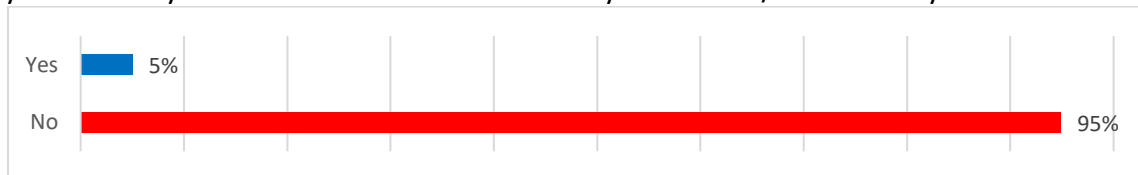
Detailed Findings

PEMBROKE PINES CITY CENTER ONLINE

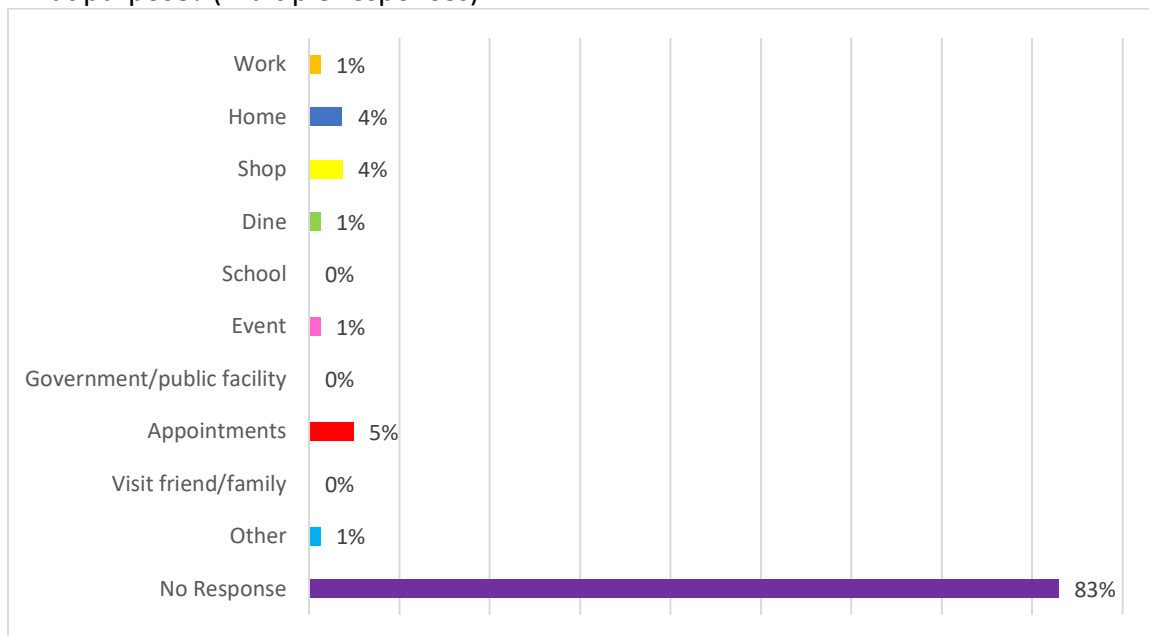
December 17, 2018 through January 22, 2019

79 Respondents

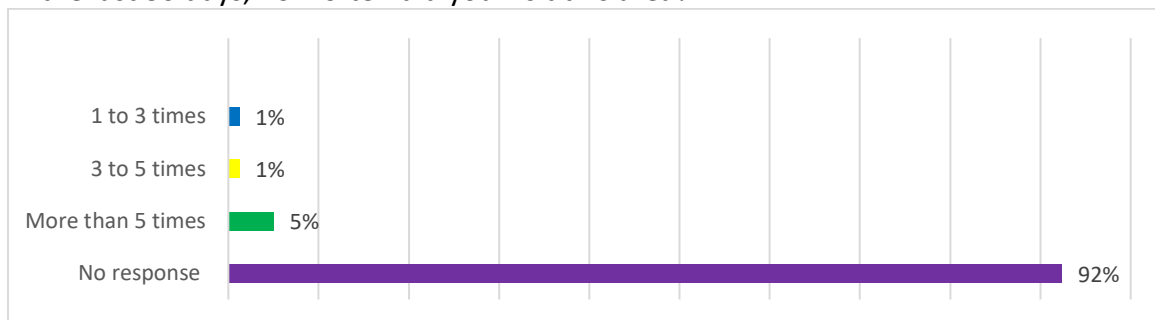
1. Do you or have you used transit bus or community bus to and/or in the City Center area?



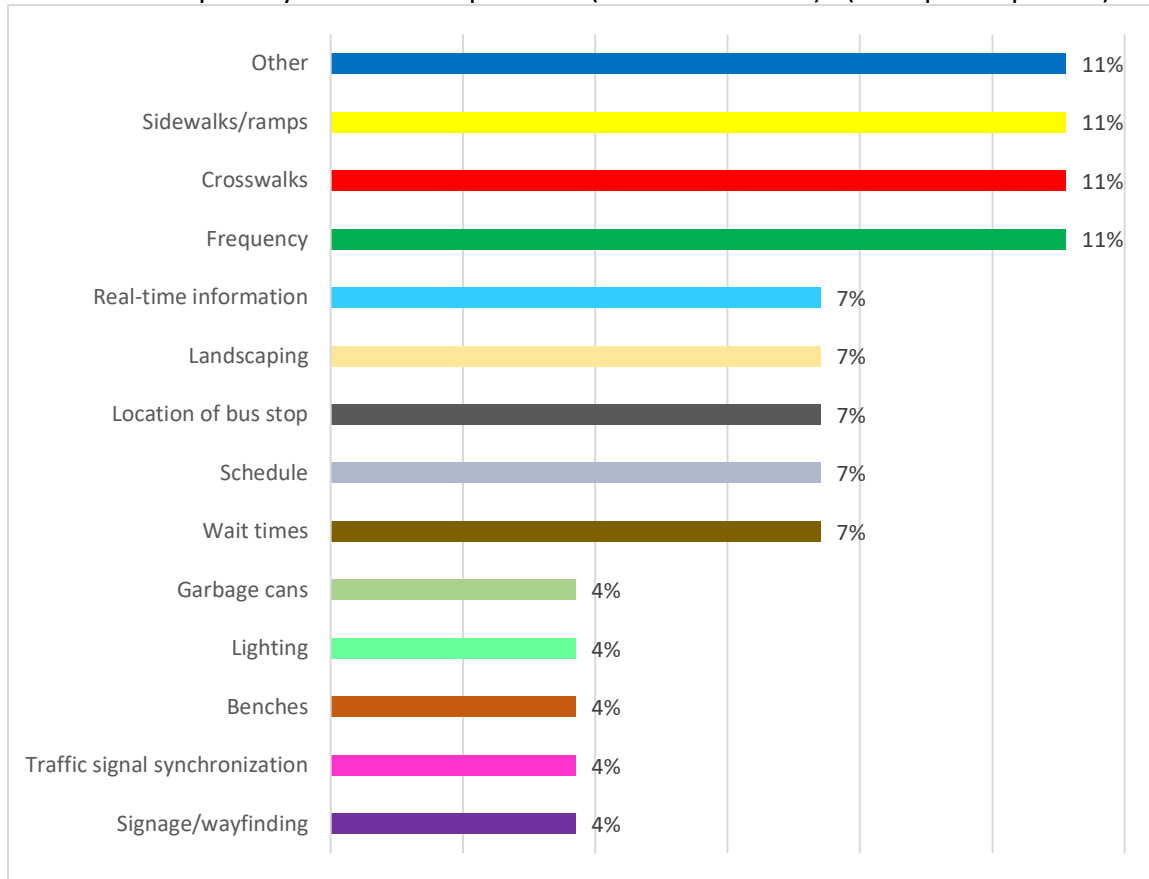
2. For what purpose? (Multiple responses)



3. In the last 30 days, how often did you visit this area?



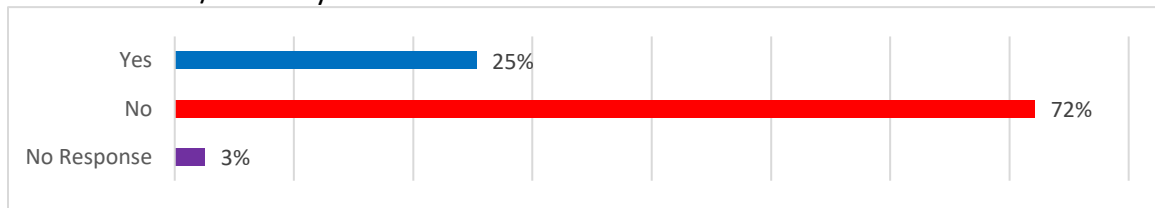
4. What could improve your transit experience (or that of others)? (Multiple responses)



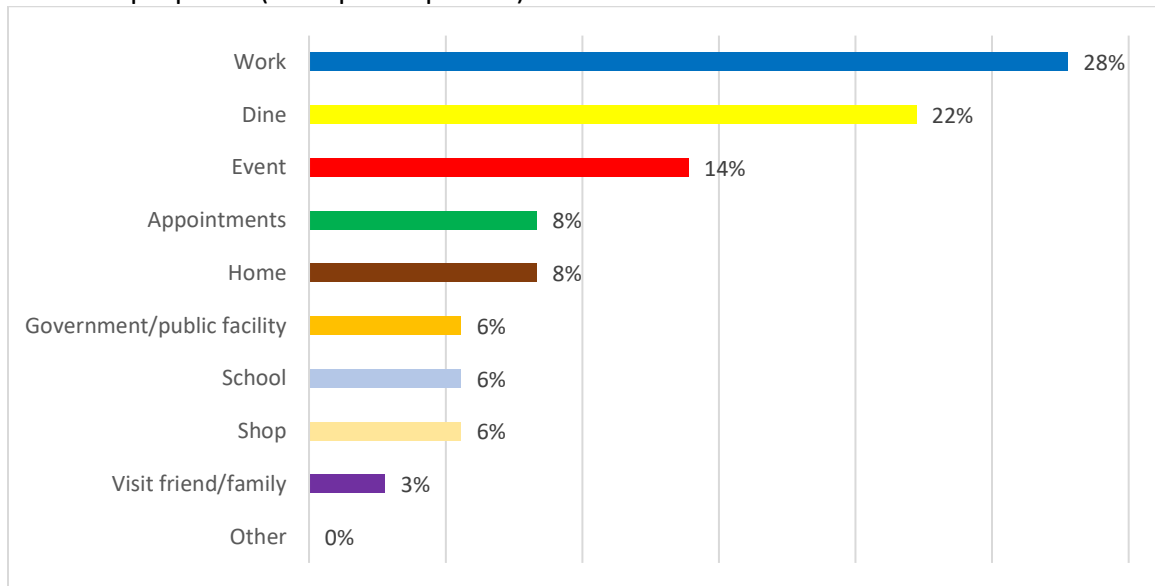
Other Comments:

- *Major roads like Pines Boulevard are important roads, but they have been designed like highways so they are EXTREMELY dangerous. Eight lanes of traffic to cross the road is stressful and dangerous. These roads are stressful to drivers too because they are so big. It's hard to see the road signs because the intersections are so large and high travel speeds. Do road diets. Take a lane of travel and make a greenway. Elevate the bus stops so that cars stop killing transit riders waiting at the stops.*
- *Pembroke Pines is not bike-friendly at all. I would be much more inclined to ride my bike if there were protected bike lanes. I would be more inclined to use the public transit if the schedules were more easily available and easy to understand, and if buses would be more accurate in arrival and departure times.*
- *Add more crosswalks closer to 106 Avenue.*

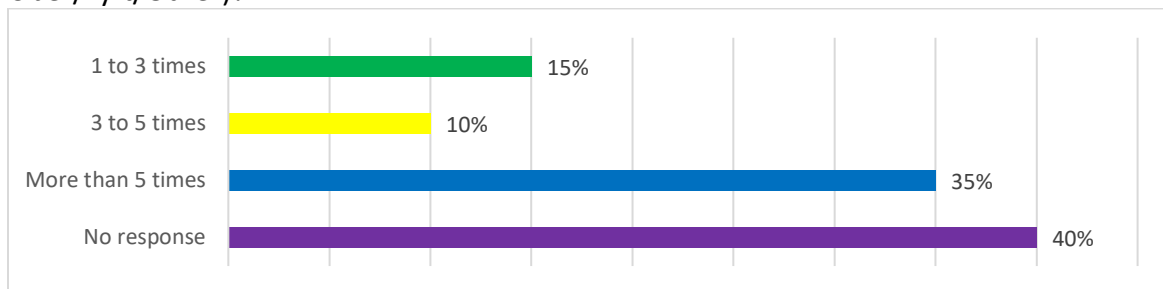
5. Do you use, or have you used Transportation Network companies (i.e. Uber/Lyft/Other) service for and/or in City Center?



5a. For what purpose? (Multiple responses)



5b. In the last 30 days, how often have you used a Transportation Network Company (i.e. Uber/Lyft/Other)?

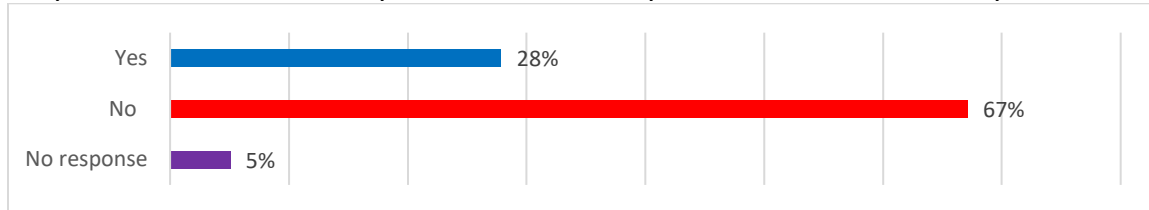


5c. What could improve your Transportation Network Company (i.e. Uber/Lyft/Other) experience (or that of others) in the City Center area? (Open-ended)

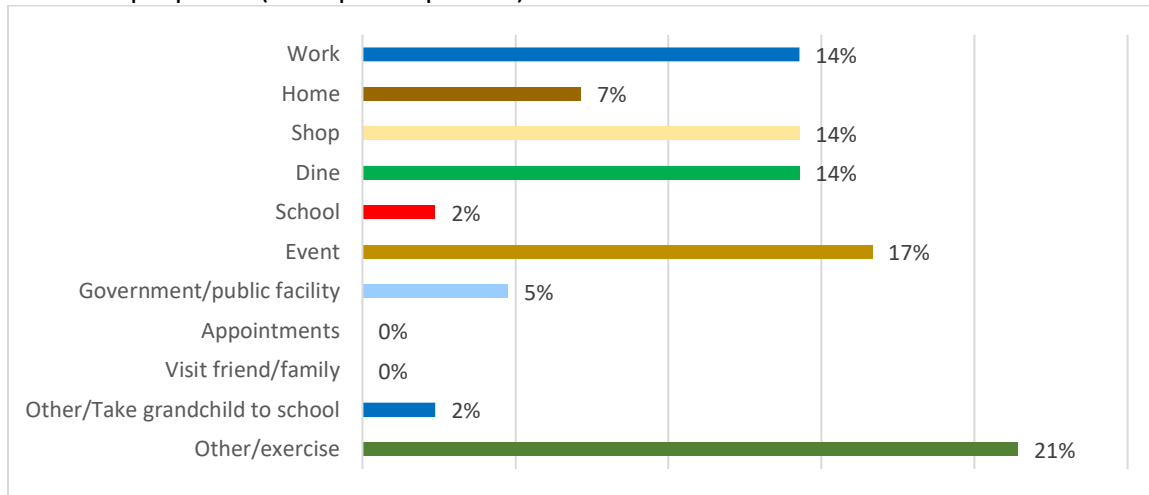
- *A designated pick-up and drop-off point. The Uber/Lyft maps do not clearly show City Center;*
- *Add a street light on 106 Avenue;*
- *Add crosswalk at 106 Avenue;*
- *Better signage;*

- *Even though the TNC is much more convenient due to they come directly to you, the public transit is much cheaper;*
- *Roads need to be opened fully and roads registered correctly on GPS. Uber drivers have trouble meeting me at City Center because of road blockages;*
- *Would prefer to use public transportation. It feels safer; and*
- *N/A (Not applicable)*

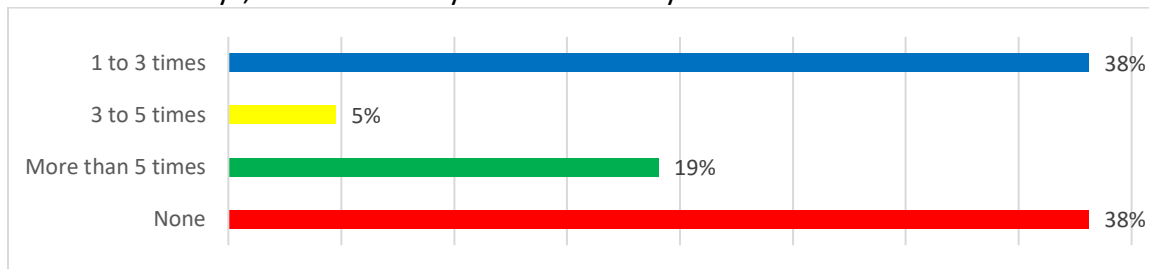
6. Do you walk or bike or have you ever walked or cycled to and/or in the study area?



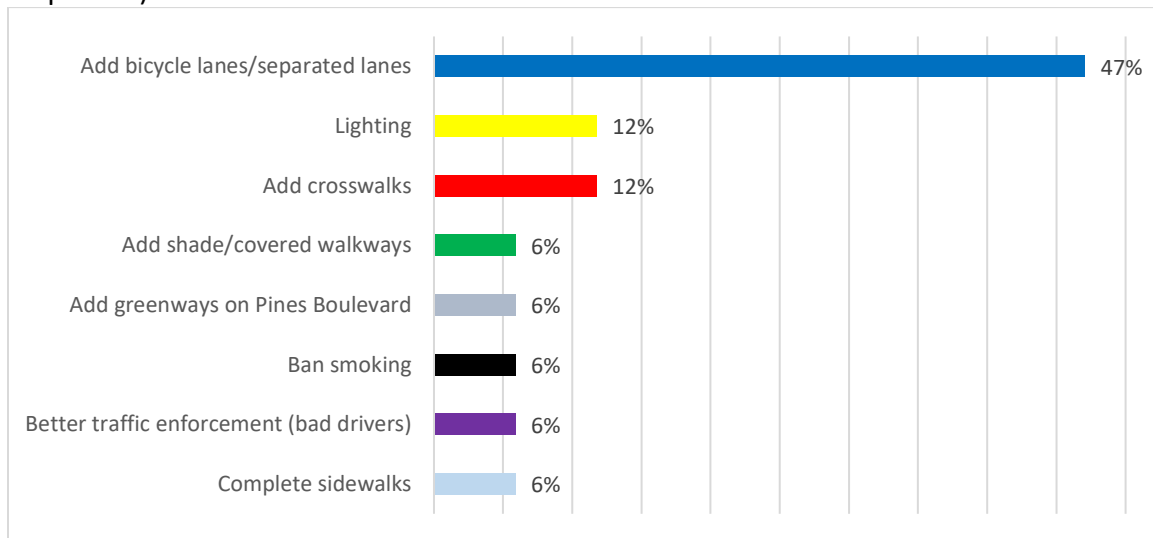
6a. For what purpose? (Multiple responses)



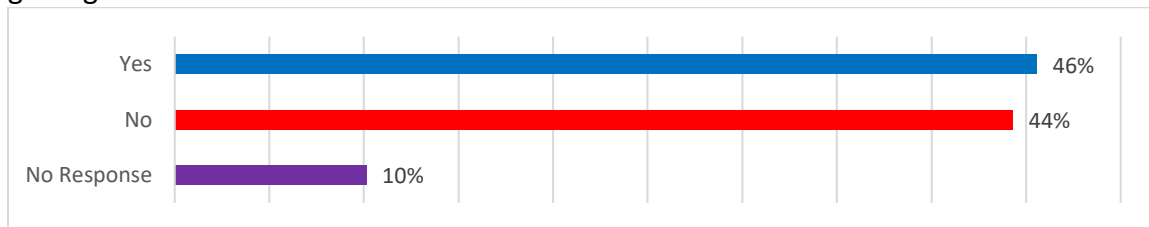
7. In the last 30 days, how often did you walk or ride your bike to this area?



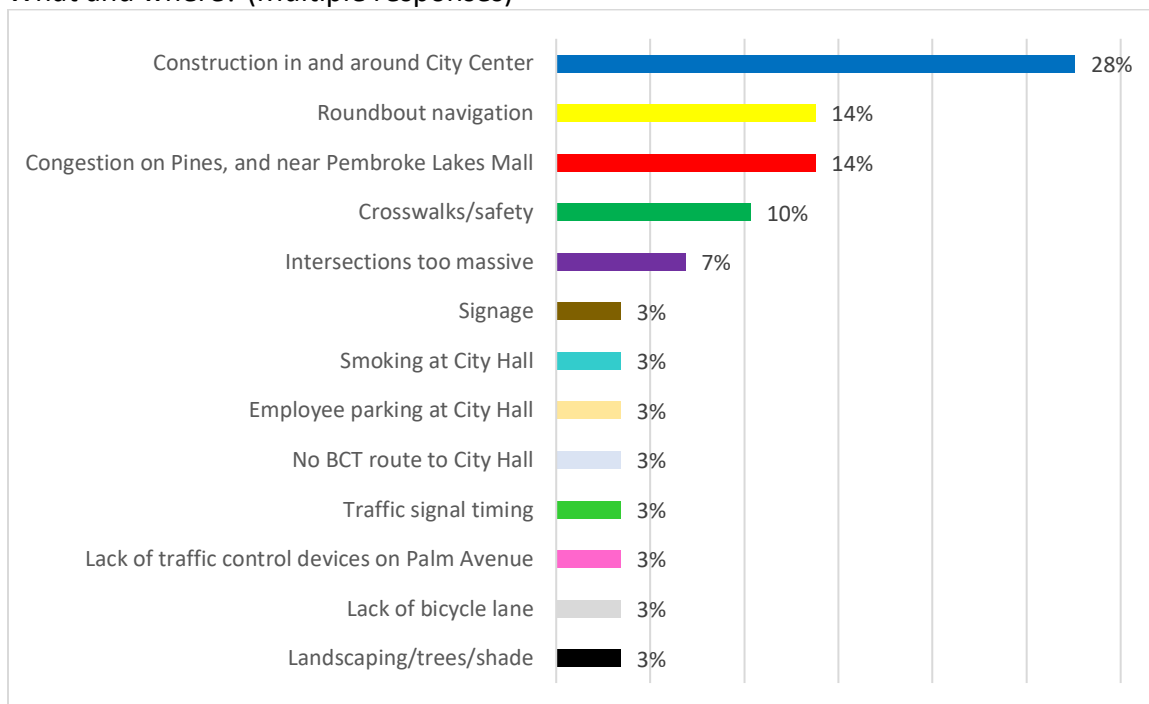
7a. What could improve your walking and cycling experience (or that of others)? (Multiple responses)



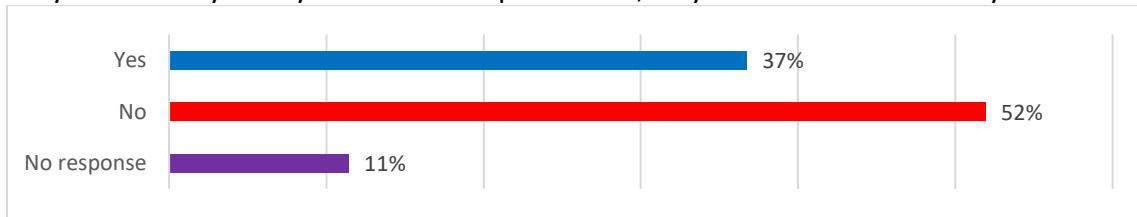
8. Do you experience or have you experienced any obstacles getting to where you need to go or get around in the area?



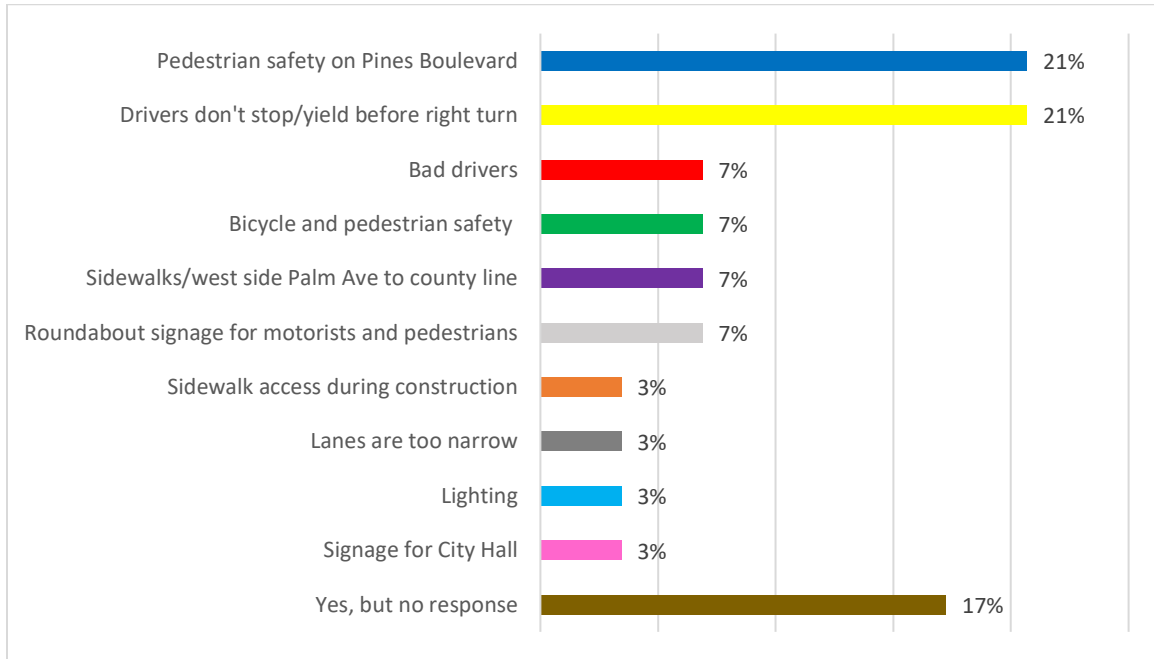
8a. What and where? (Multiple responses)



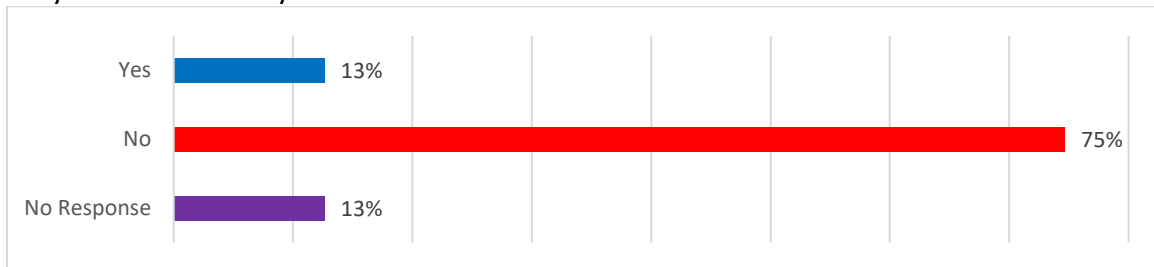
9. Do you have any safety concerns as a pedestrian, bicyclist or bus rider in City Center?



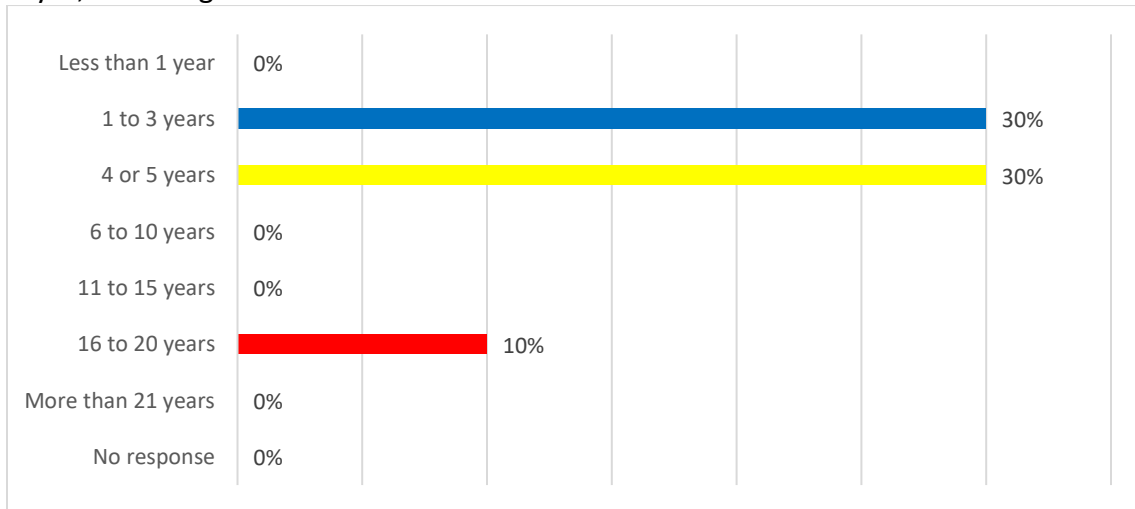
9a. What and where?



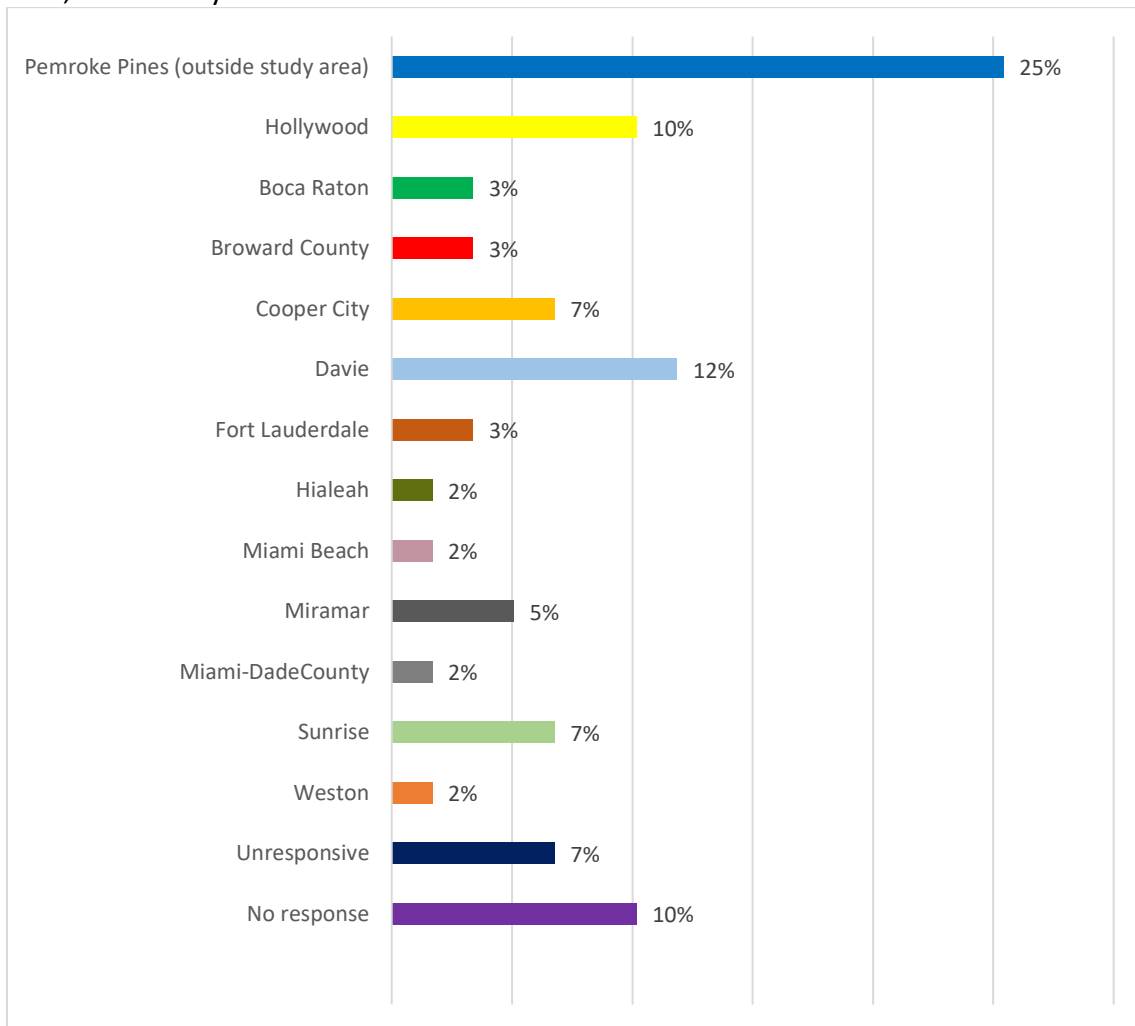
10. Do you live in the City Center area?



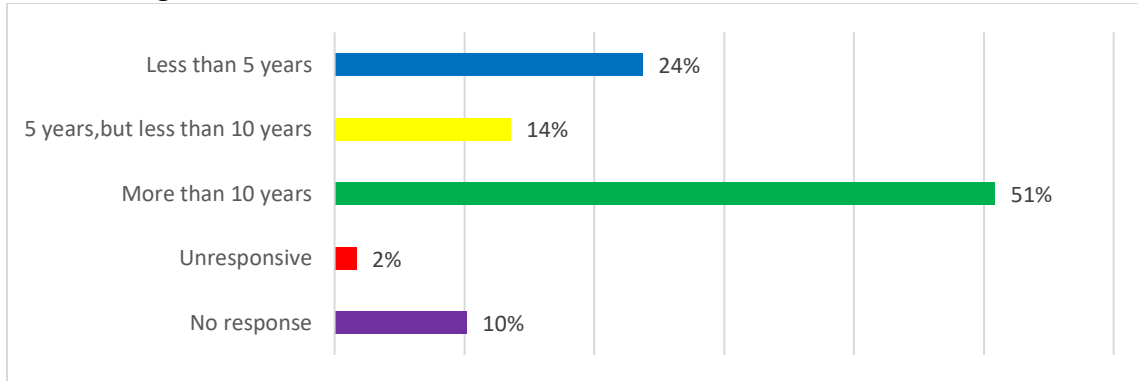
10a. If yes, how long?



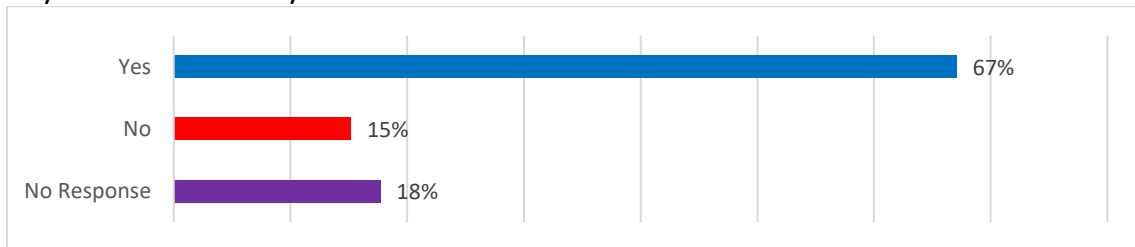
10b. If no, where do you live?



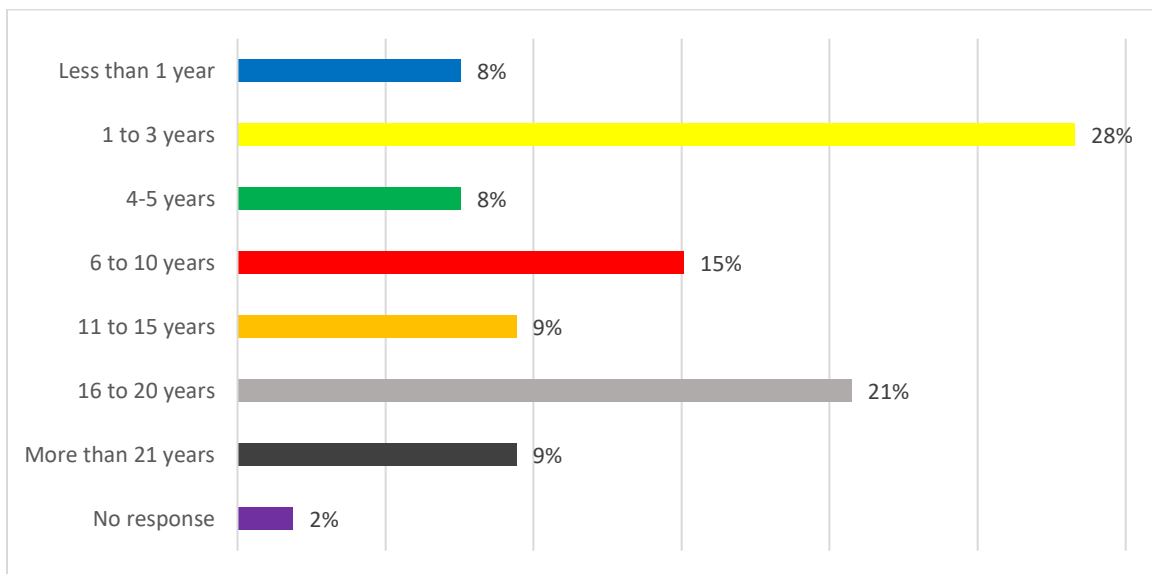
10c. For how long?



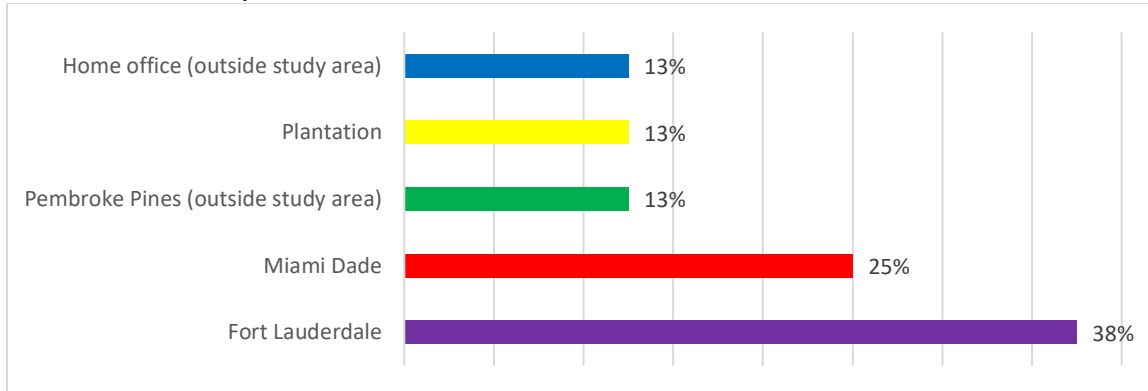
11. Do you work in the City Center area?



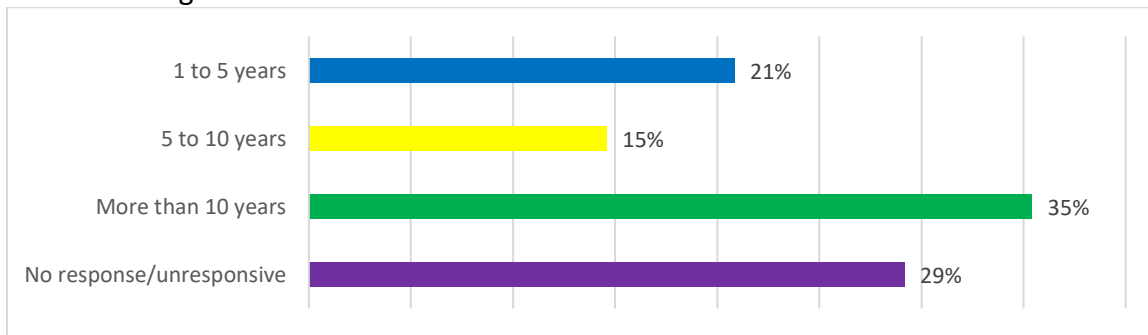
11a. If yes, for how long?



11b. If not, where do you work?



11b. For how long?



-- End of Pembroke Pines City Center Online Survey Results --

In-person Questionnaire (City Center)

(Note: Location / Time)

Transit / Community Bus Riders

For what purpose did you ride the bus to this location? _____

Note Route: _____

In the last 30 days, how often did you ride the bus to this area?

None 1 to 3 times 3 to 5 times More than 5 times

What could improve your transit experience (or that of others)? (Check all that apply)

- Wait times
- Frequency
- Schedule
- Location of bus stop
- Passenger loads
- Crosswalks
- Signage/wayfinding
- Sidewalks/ramps
- Traffic signal synchronization
- Landscaping
- Benches
- Lighting
- Garbage cans
- Real-time travel information
- Other _____

In your opinion, what are the conditions of the following bus stop amenities?

- | | | | | |
|--------------------|-------------|--------|--------|--------|
| • Shelters: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Benches: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Lighting: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Bike racks: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Signage: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Sidewalks/ramps: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Crosswalks: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Signalization: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Landscaping: | Excellent__ | Good__ | Fair__ | Poor__ |
| • Garbage cans: | Excellent__ | Good__ | Fair__ | Poor__ |

Pedestrian / Cyclist

For what purpose did you walk or ride to this area?

In the last 30 days, how often did you walk or cycle to this area?

None 1 to 3 times 3 to 5 times More than 5 times

What distance did you travel to reach this destination?

Less than 1 mile 1 mile to 5 miles More than 5 miles

What could improve your walking and cycling experience (or that of others)? _____

Everyone

Do you use Transportation Network Companies (i.e. Uber/Lyft/Other) for and/or in the area?

Yes No

If so, for what purpose? _____

What could improve your transportation network company (i.e. Uber/Lyft/Other) experience (or that of others)?

Do you have any safety concerns as a pedestrian, bicyclist or bus rider in this area?

Yes No

If so, what and where?

Do you experience or have you experienced any obstacles getting to where you need to go or get around in the area?

Yes No

If yes, what and where?

Do you live in the City Center area?

Yes No

If yes, for how long? _____

If no, what distance do you live from here?

Less than 5 miles ____ More than 5 miles but less than 10 miles ____ 10 miles or more ____

Do you work in the City Center area?

Yes

No

If yes, for how long? _____

If no, how far do you work from here?

Less than 5 miles ____ More than 5 miles but less than 10 miles ____ 10 miles or more ____

Online Questionnaire

(Note: Include link to map (pdf) of each study area City Center for reference.)

The following questions refer to how you get to and from and around Pembroke Pines' City Center. A link to a map of the designated area is included for your reference. City Center Map >

1. Have do you or have you used transit bus or community bus to and/or in the City Center area?

- Yes
- b. No (skip to Q3)

If yes, for what purpose? Select all that apply. (dropdown menu)

- Work
- Home
- Shop
- Dine
- School
- Event
- Government/Public facility
- Appointments (medical, personal service)
- Visit friend/family
- Other _____

If yes, in the last 30 days, how often did you visit this area?

None 1 to 3 times 3 to 5 times More than 5 times

2. What could improve your transit experience (or that of others)? (Select all that apply)

- Wait times
- Frequency
- Schedule
- Location of bus stop
- Passenger loads
- Crosswalks
- Signage/wayfinding
- Sidewalks/ramps
- Traffic signal synchronization
- Landscaping
- Benches
- Lighting
- Garbage cans
- Real-time travel information
- Other _____

3. Do you use or have you used Transportation Network Companies (i.e. Uber/Lyft/Other) service for and/or in City Center?
- Yes b. No (skip to Q5)

If yes, for what purpose? Select all that apply. (*dropdown menu*)

- Work
- Home
- Shop
- Dine
- School
- Event
- Government/Public Facility
- Appointments (medical, personal service)
- Visit friend/family
- Other _____

If yes, in the last 30 days, how often have you use a Transportation Network Company service (i.e. Uber/Lyft/Other)?

None 1 to 3 times 3 to 5 times More than 5 times

4. What could improve your Transportation Network Company (ie. Uber/Lyft/Other) experience (or that of others) in the City Center area?

5. Do you walk or bike or have you ever walked or cycled to and/or in the study area?
- Yes b. No (skip to Q7)

If yes, for what purpose? Select all that apply. (*dropdown menu*)

- Work
- Home
- Shop
- Dine
- School
- Event
- Government/Public Facility
- Appointments (medical, personal service)
- Visit friend/family
- Other _____

If yes, in the last 30 days, how often did you walk or ride your bike to this area?

None 1 to 3 times 3 to 5 times More than 5 times

6. What could improve your walking and cycling experience (or that of others)?

7. Do you experience or have you experienced any obstacles getting to where you need to go or get around in the area?
- Yes b. No (skip to Q8)

If yes, what and where?

8. Do you have any safety concerns as a pedestrian, bicyclist or bus rider in City Center?
- Yes b. No (skip to Q9)

If yes, what and where?

9. Do you live in the City Center area?

- Yes b. No

If yes, for how long? _____

If no, where do you live? _____ How long? _____

10. Do you work in the City Center?

- Yes b. No

If yes, for how long? _____

If no, where do you work? _____ How long? _____

###

APPENDIX B:

PARK AND RIDE SURVEY RESULTS



PEMBROKE PINES

Mobility Hub Park and Ride Survey Results

March 2019

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C.B. Smith Park Survey Results	7
North Perry Airport Survey Results	11
In-person Questionnaire	15

EXECUTIVE SUMMARY

Purpose

The Broward Metropolitan Planning Organization (BMPO) contracted with HNTB and Quest Corporation of America (Quest) to gather data regarding the community's mobility experience in the identified area of Pembroke Pines' City Center to create a planning framework for a mobility hub project.

To assess the viability of a new I-95 Miami Express Park and Ride facility in City Center, Broward County Transit (BCT) passengers were surveyed to collect data on user perceptions about service and its facilities at two I-95 Express Park and Ride locations in Pembroke Pines: CB Smith Park, approximately two (2) miles west of City Center, and North Perry Airport, approximately five miles east/southeast of City Center.

Methodology

Quest Project Manager Nannette Rodriguez drafted survey questions, which were approved by HNTB Project Manager Diane Gormley-Barnes, AICP, LEED, and BMPO Project Manager Andrew Riddle, AICP.

The survey focused on the following collections to determine the viability of a Park and Ride service at City Center:

- Method of transportation and distance used to arrive to the Park and Ride location.
- Purpose and frequency of use of the express service.
- Pros and cons of the current services and facilities.

Surveys were collected in-person by Quest team members on wireless tablets with data collected through an online portal. The survey was available in English, Spanish and Creole.

All data collected was reviewed and analyzed by Quest's team. Information was placed into tables and charts (within this report) to quantify public transit user opinions at the I-95 Express lots in the City of Pembroke Pines.

Results

CB Smith Park

CB Smith Park and Ride lot is located at 12430 Pines Boulevard, Pembroke Pines, approximately 1.7 miles from I-75, 9.3 miles from I-95 and 3.6 miles from Florida's Turnpike Extension.

The target audience of the survey included commuters using the BCT I-95 Express shuttle service (Route 109) between CB Smith Park/Ansin Sports Center and Miami/Brickell. The service includes connections to Miami-Dade County's Metrorail and Metromover services.

The in-person team met with I-95 Express BCT transit commuters waiting for and getting off buses, Miami-Dade residents arriving to work in western Broward County, and Broward County residents returning home after working an overnight shift in Miami-Dade. Passengers were surveyed at their cars, under the park shelter, and at the I-95 Express bus stop. The team surveyed 48 commuters. The nine-question survey took about five minutes to complete. The in-person survey data was collected from 5:45 a.m. to 8:45 a.m. on Thursday, December 19, 2018.

Overall, 15% of respondents were in favor of a I-95 Express Park and Ride facility at City Center because it was closer to their home and 85% were not in favor of a Park and Ride facility at City Center because it would be too inconvenient as many of these respondents live near or west of the Flamingo/I-75 corridor. The majority of the respondents were satisfied with the service and its distance from their home. Larger covered shelter and security were suggested improvements to the facility.

A unique finding at this location was reverse commuting – commuters traveling from Miami homes to Broward jobs.

North Perry Airport

North Perry Airport Park and Ride lot is located at the northeast corner of Pembroke Road and University Drive, 4.4 from I-95 and approximately seven (7) miles east of I-75 and 1.7 miles to Florida's Turnpike Extension.

The target audience of the survey included commuters using the BCT I-95 Express shuttle service (Route 108) between North Perry Airport and Miami's Civic Center/Health District. The service connects to the Miami-Dade County's Metrorail service.

The in-person team met with I-95 Express BCT transit commuters waiting for and getting off buses, pedestrians, drop-off passengers. Users were stopped at their cars, as they exited cars at the drop-off location and at the Park and Ride bus bench. The team surveyed 104 I-95 Express commuters. The nine-question survey took about five minutes to complete. The in-person survey data was collected from 5:15 a.m. to 8 a.m. on Thursday, January 3, 2019.

Overall, 37% of the respondents were in favor of a I-95 Express Park and Ride facility at City Center because it would be closer to their home and 63% were not in favor of a Park and Ride facility at City Center because it would be too inconvenient as many of these respondents live close to or east of the airport location. Lighting and covered shelter were facility improvements that were suggested.

Several respondents commented that colleagues that work the overnight shift in the Civic Center / Health District are unable to use the I-95 Express service because of the bus route's schedule.

Overall Summary

Commuters using the I-95 Miami Express Park and Ride services use them because they are convenient, located both near their home and place of employment. Most of the respondents live within five miles from the facility and work near the designated Miami stops. Covered shelter was the top suggested improvements at both locations.

Overall, the 30% that were favorable of a Park and Ride at City Center live in or near the City Center area. The two surveyed facilities have different schedules and Miami destinations. To consider a new facility at City Center, schedules and Miami destinations would need to be studied further.

Detailed Findings

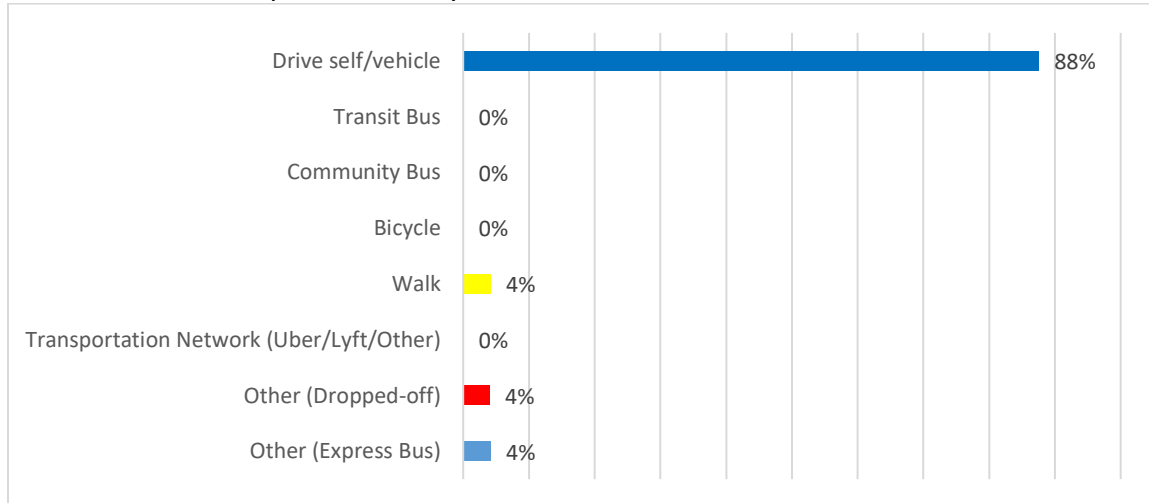
CB Smith Park / 95 Express Route 109

I-95 Express Park and Ride Questionnaire

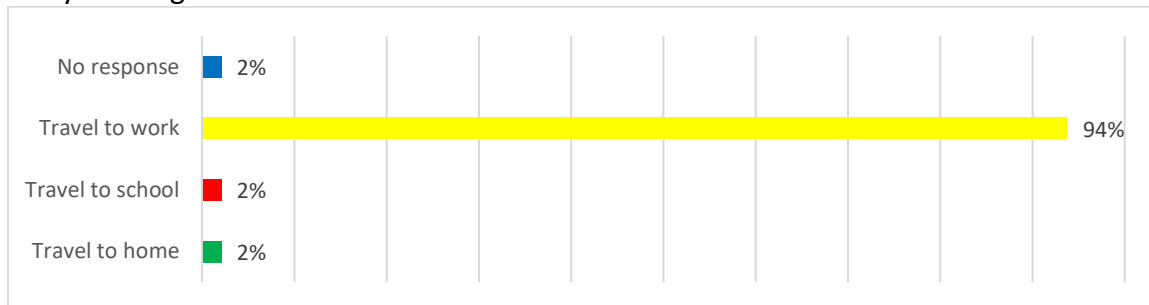
Thursday, December 19, 2018 | 5:45 a.m. to 8:45 a.m.

48 Respondents

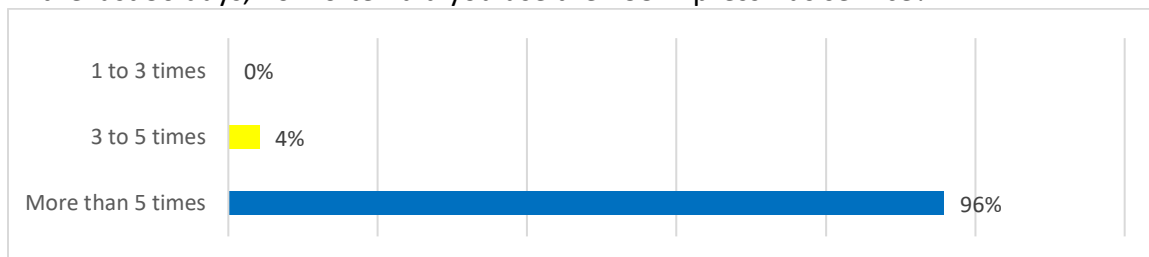
1. What mode of transportation did you use to arrive at this service location?



2. Are you using this service to travel to work or other?



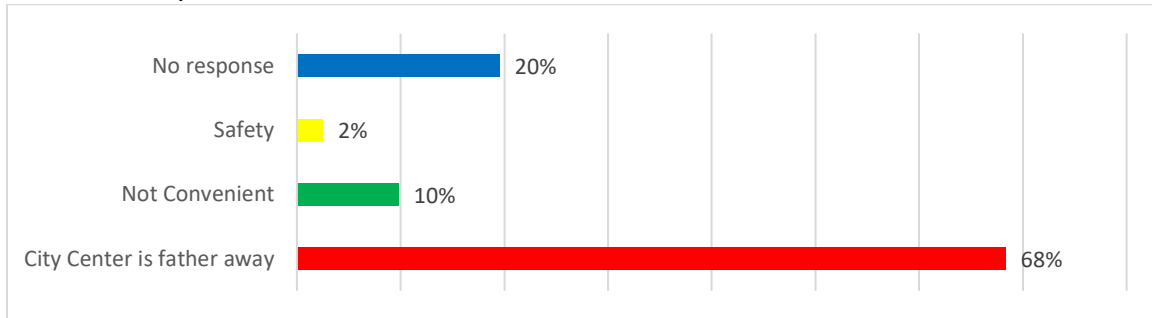
3. In the last 30 days, how often did you use the I-95 Express Bus service?



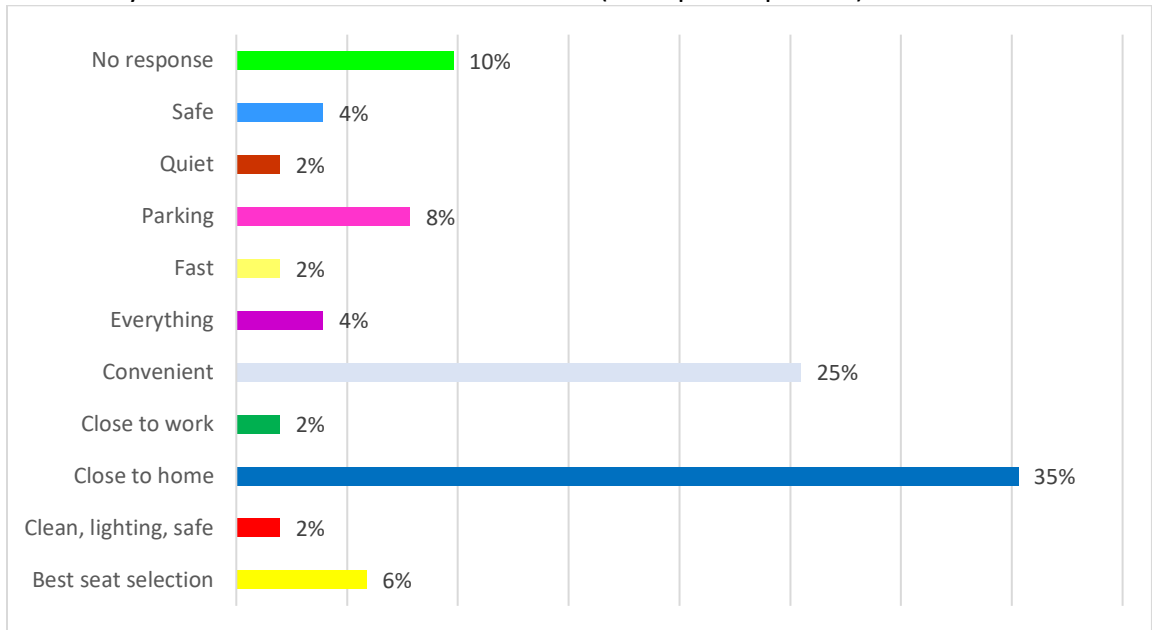
4. Would a similar service located at City Center be more convenient or appealing to you?



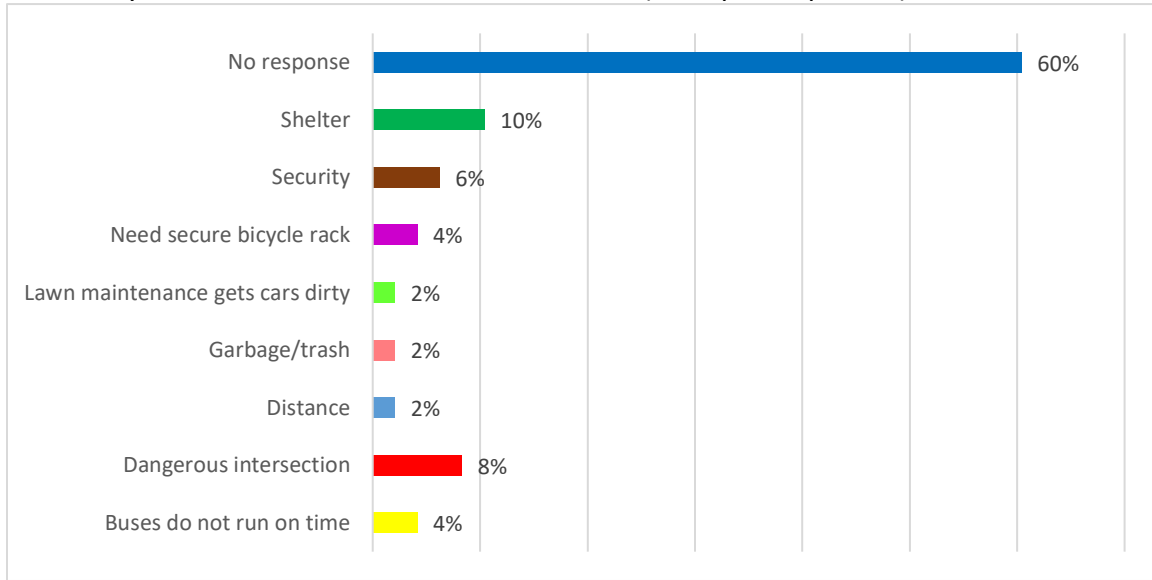
4a. If no, why?



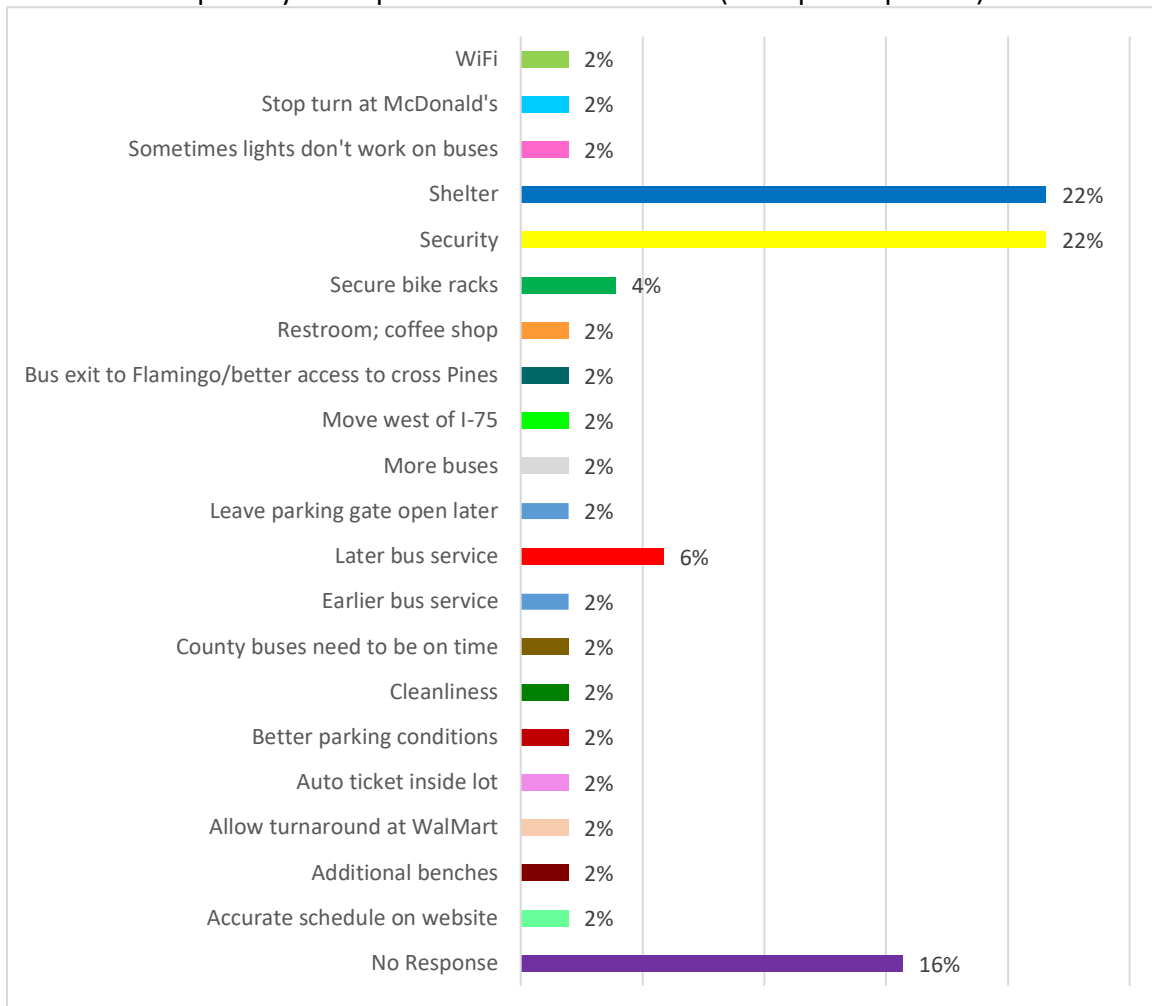
5. What do you like about this service location? (Multiple responses)



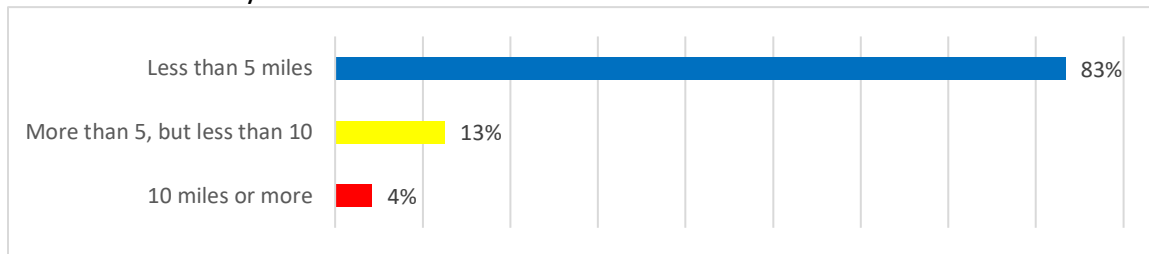
6. What do you dislike about this service location? (Multiple responses)



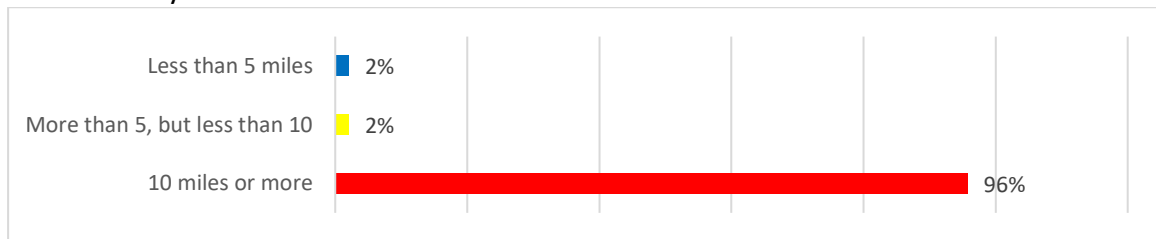
7. What could improve your experience at this location? (Multiple responses)



8. What distance do you live from here?



9. How far do you work from here?



Detailed Findings

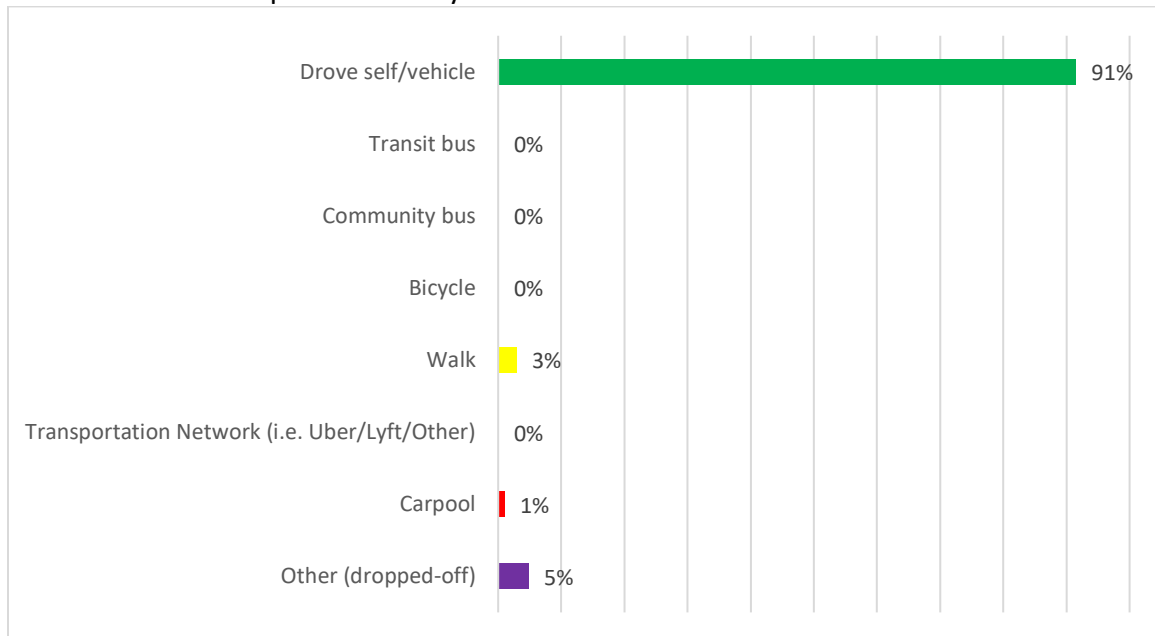
North Perry Airport / 95 Express Route 108

I-95 Express Park and Ride Questionnaire

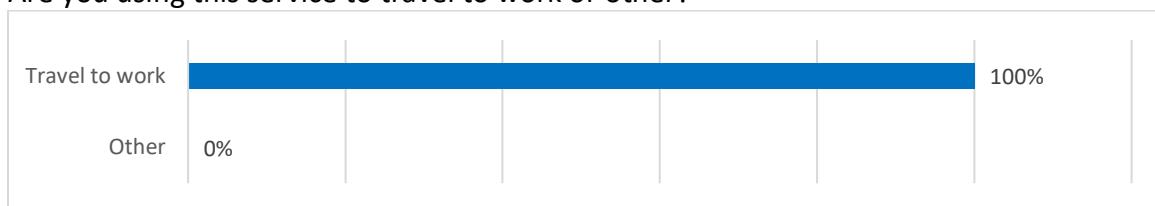
Thursday, January 3, 2019 | 5:15 a.m. to 8 a.m.

104 Respondents

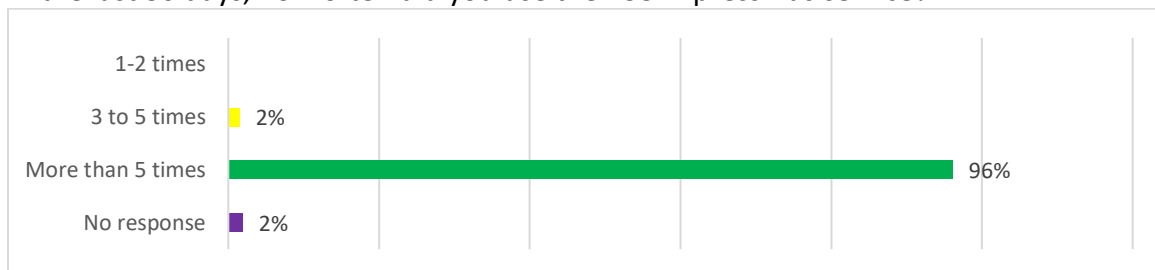
1. What mode of transportation did you use to arrive to this service location?



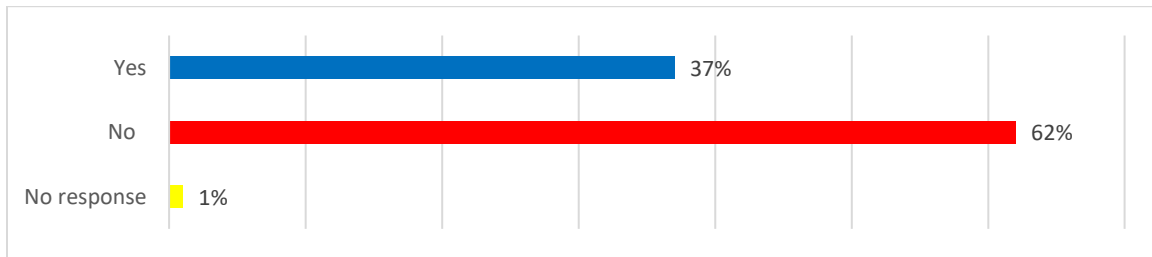
2. Are you using this service to travel to work or other?



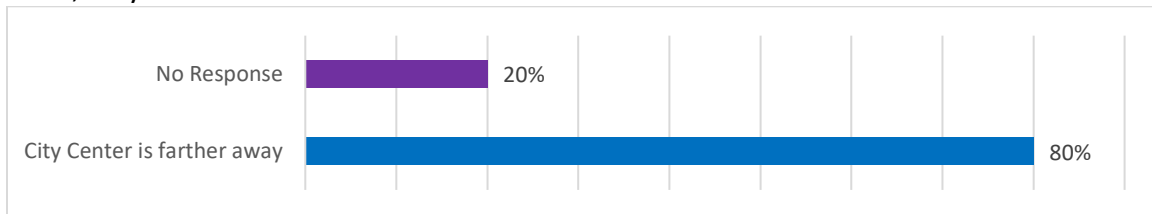
3. In the last 30 days, how often did you use the I-95 Express Bus service?



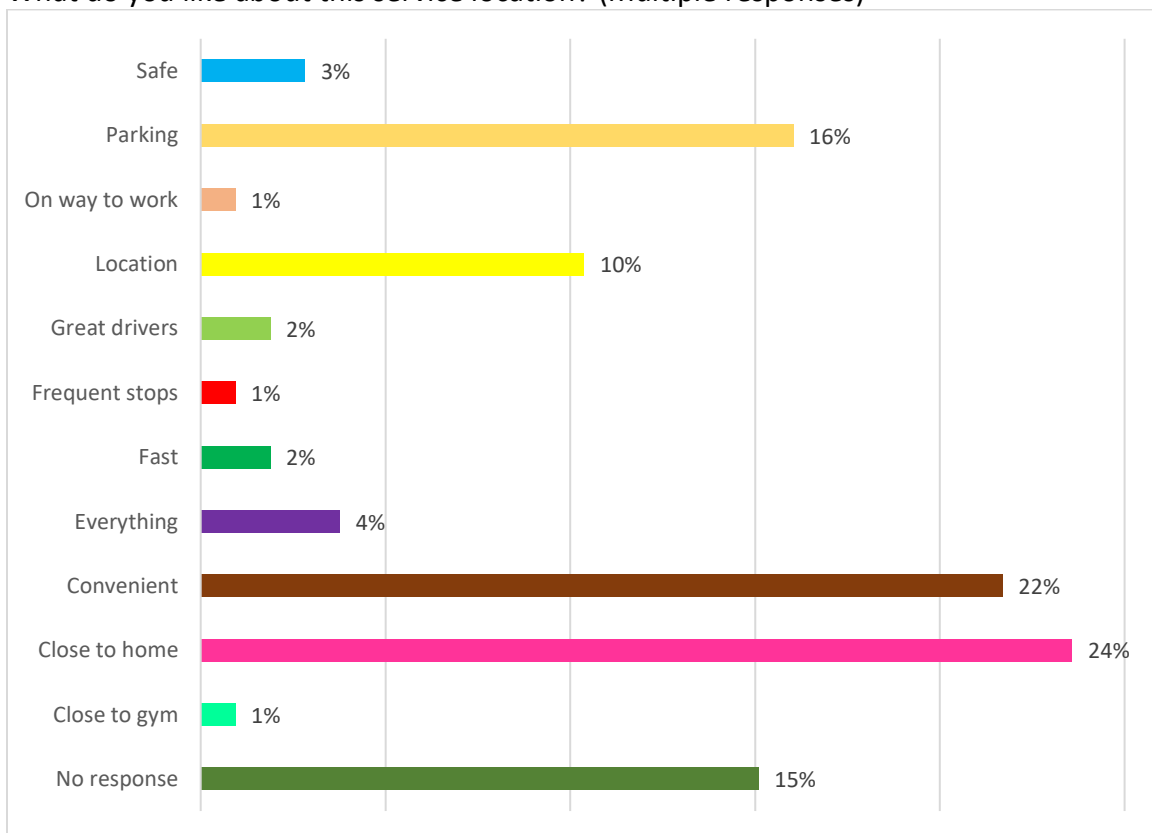
4. Would a similar service located in City Center be more convenient or appealing to you?



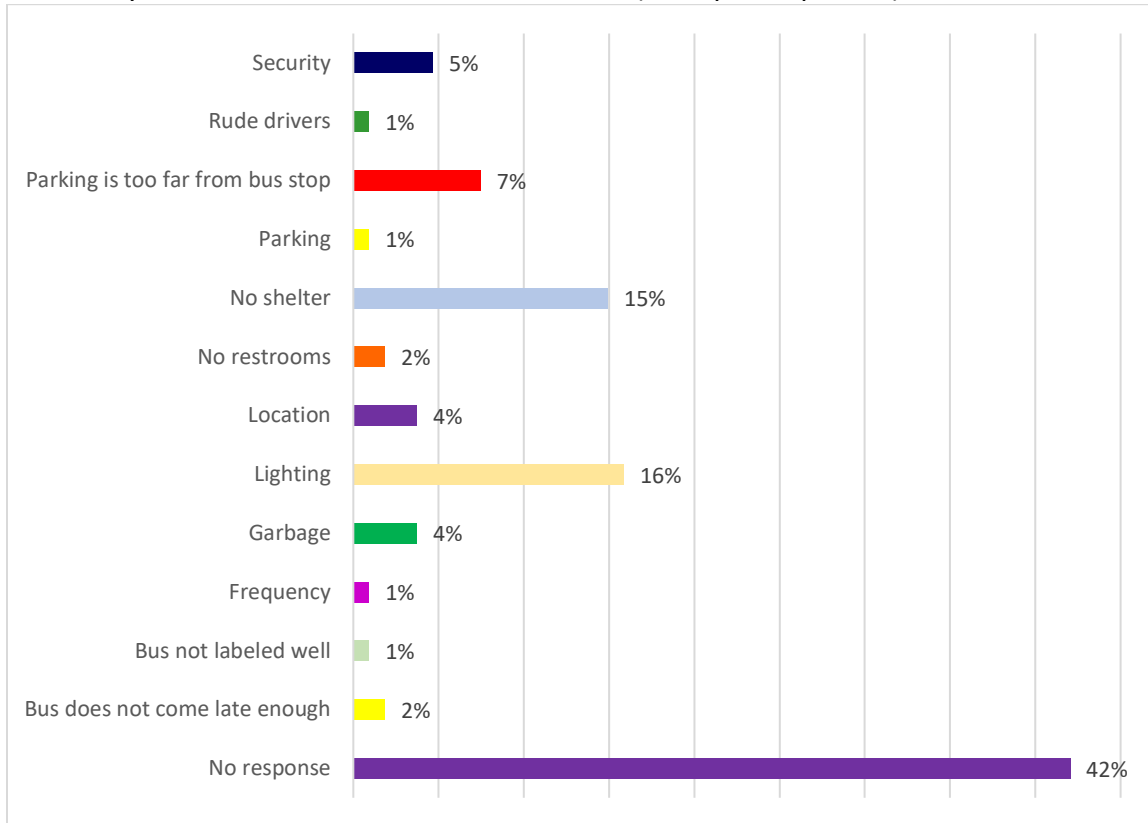
4a. If no, why?



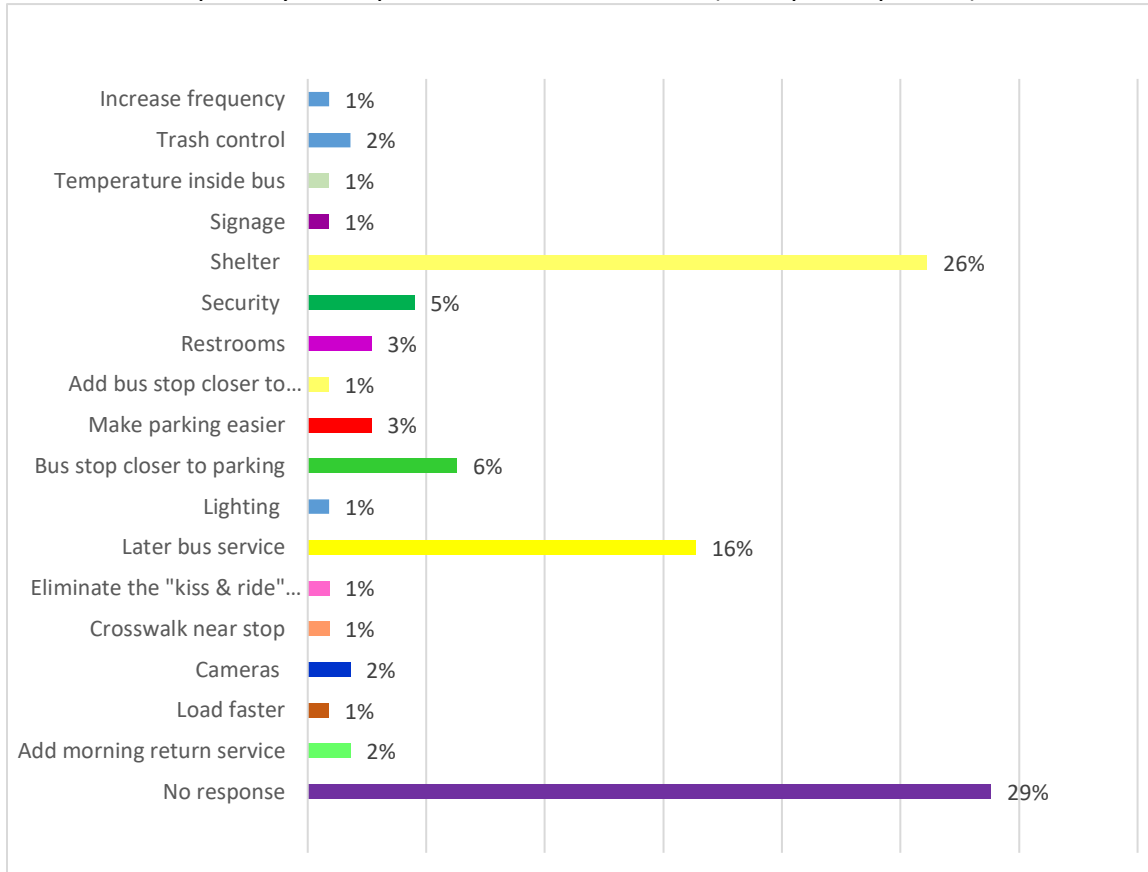
5. What do you like about this service location? (Multiple responses)



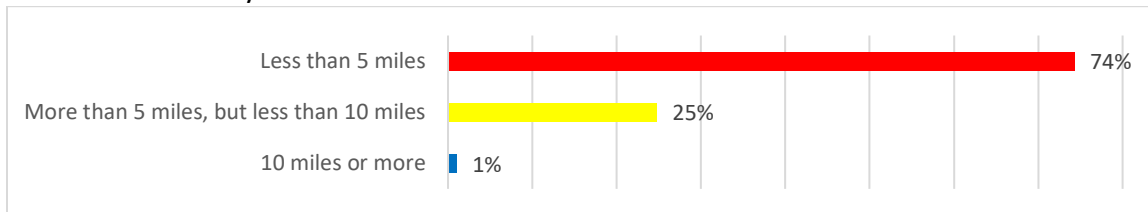
6. What do you dislike about this service location? (Multiple responses)



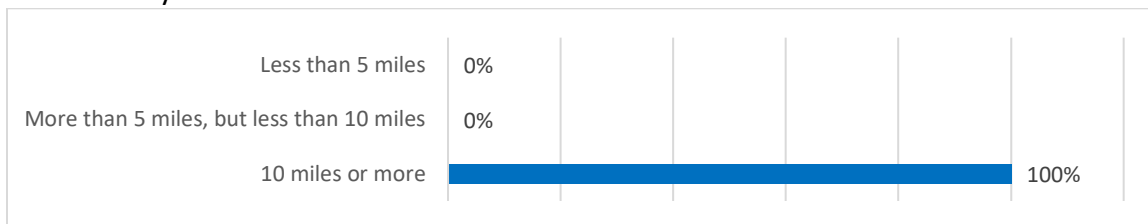
7. What could improve your experience at this location? (Multiple responses)



8. What distance do you live from here?



9. How far do you work from here?



-- End of Survey Results --

In-person Questionnaire / Park & Ride & I-95 Express Bus (CB Smith & North Perry Airport)

(Note: Location / Time)

What mode of transportation did you use to arrive to this service location?

- Drove self / vehicle
- Transit bus
- Community bus
- Bicycle
- Walk
- Transportation Network Company (i.e. Uber/Lyft/Other)
- Carpool
- Other_____

Are you using this service to travel to work or other _____?

In the last 30 days, how often did you use the I-95 Express Bus service?

First time 1 to 3 times 3 to 5 times More than 5 times

Would a similar service located in City Center be more convenient or appealing to you?

Yes

No

If no, why? _____

What do you like about this service location? _____

What do you dislike about this service location? _____

What could improve your experience at this location? _____

What distance do you live from here?

Less than 5 miles ___ More than 5 miles but less than 10 miles ___ 10 miles or more ___

How far do you work from here?

Less than 5 miles ___ More than 5 miles but less than 10 miles ___ 10 miles or more ___

###

APPENDIX C:

DOCUMENTATION OF STAKEHOLDER ENGAGEMENT

Pembroke Pines Mobility Hub Master Plan Kick-off Meeting

Thursday, August 30, 2018

9 a.m. – 11:30 a.m.

City of Pembroke Pines' Charles F. Dodge City Center

Planning & Economic Development Conference Room, Third Floor

601 City Center Way, Pembroke Pines, Florida

I. Introductions / Attendance:

Michael Stamm, Director of Planning & Economic Development, City of Pembroke Pines
Cole William, Planner, City of Pembroke Pines,
Karl Kennedy, City Engineer, City of Pembroke Pines
James Cromar, Director of Planning, Broward MPO
Andrew Riddle, Project Coordination Manager, Broward MPO
Charlene Burke, Principal Planner, Broward MPO
Vilma Croft, Project Manager, HNTB
Diane Gormely-Barnes, Principal Planner, HNTB
Marc O'Keefe, Transportation Planner, HNTB
Eric Liff, Market/Economic Consultant, Lambert Advisory
Todd Peterson, Market/Economic Consultant, Lambert Advisory
Nannette Rodriguez, Public Outreach Consultant, Quest Corporation of America
Lisa Maack, Strategic Planner, Marlin Engineering

II. Overview of the Broward Metropolitan Planning Organization (BMPO) Mobility Hub Master Planning Initiative

Andrew Riddle (Project Coordination Manager, Broward MPO) /
James Cromar (Director of Planning, Broward MPO)

The BMPO provided an overview of the Hub Mobility Program that first includes the planning framework (evaluation, context, market analysis and outreach) and master planning (design concepts and implementation strategy). Design at 30 percent completion includes the right-of-way permit search, traffic studies and the cost estimates for the conceptual design, and NEPA. When the project reaches final design and construction, the City and MPO must approve a sub-recipient agreement, receive FTA approvals and then begin implementation. Oversight will continue when the project is complete to ensure City maintenance.

There is \$2.6 million for implementation of near-term improvements which must be implemented within five years. The BMPO asked for direction from the City on reporting mechanisms to City, City boards and elected officials. MPO has flexible FTA funds as City moves forward with implementation.

III. Master Plan Purpose, Scope and Schedule & Outreach Strategy/Protocol
Diane Gormely-Barnes (HNTB, Principal Planner & Project Lead)

HNTB's Diane Gormely-Barnes introduced the team and their roles. Diane will be the Master Plan lead with Marc O'Keefe serving as the local contact and Vilma Croft as the project manager. Quest will support with meetings and outreach. Marlin Engineering will support with data collection, conceptual design and cost estimates. Lambert Engineering will develop the market analysis and implementation recommendations. Not all team members are involved yet at this early stage, such as Bermello Ajamil who will handle the concept renderings and WTL+a who will support implementation strategy.

Diane introduced the master planning process as occurring in two stages:

I. The development of the planning framework that includes hub evaluation, planning context, market analysis, and outreach; and, II. The development of recommendations such as design concepts and implementation strategy before the masterplan is finalized. Consensus on the framework will be sought prior to "pivoting" to more detailed design concepts and cost estimates.

During the planning context stage (September - November 2018), Diane explained that existing and planned transportation, land use, urban design, plans, policies, codes/standards will be reviewed. Stakeholder outreach is important at this stage. Meetings will take place with multiple agencies such as FDOT, BCT, Broward County Planning and Traffic Engineering, City officials and boards and the community. Homeowner association and school representatives could be engaged. If deemed helpful, QCA could also directly engage bus riders via a survey.

During the discussion, Michael Stamm suggested to bring all City boards together for a joint workshop where the public will also be invited. The meeting will be aired on the City's government channel (Pembroke Pines TV). The City will need five weeks advance notice to set-up the meeting. It was advised to hold the meeting in the evening. A mid-November workshop, possibly the week of November 11, may be attainable.

Diane continued the discussion on the outreach to the business community. Lambert will look at recent market activity for the market analysis (September – December 2018). They will reach out to developers such as Terra and Sterling groups during this stage to obtain a near-term outlook and long-term trends.

Michael shared that PMG recently conducted a business survey in Pembroke Pines and the results are due on October 3 with preliminary results in mid-September. He also said that the City would consider acquiring property across from Pines City Center to create an expanded City Center in the future.

The planning framework (December 2018 – January 2019) will determine near-term improvement priorities, the viability of local circulator services, and long-term initiatives. There will be up to two City/MPO prep sessions prior to any public presentations of the planning framework. Other meetings will be held in the strategy implementation and final planning stages.

IV. Group Discussion

Michael Stamm (City of Pembroke Pines, Director of Planning & Economic Development)

Pines City Center is a multi-use developmental project that includes retail, commercial, government, public spaces, and high-density residential. City Center has already attracted visitors from the region and as other retailers and restaurants open, usage will increase. The City Center auditorium has hosted events from corporate meetings to cultural events.

The City installed parking lots and parks along the FPL easement but there are new challenges. James asked if a transit hub in the easement could be considered. Michael explained that the Miami International Airport's jet fuel line runs along the FPL easement and the Federal Energy Regulatory Commission is considering relocating the Florida Gas Transmission line from along Florida's Turnpike to the FPL easement. The potential implications of this are not yet fully understood.

Pembroke Pines' circulator shuttle is very successful, and the route was recently modified to better coordinate with Broward Transit bus routes. Popular stops include Century Village. Seniors in the community depend on public transportation and are a vocal constituency.

The City has been considering other bus hubs. There is limited space available. Bus hubs currently include those at Pembroke Lakes Mall by the movie theater, at the senior center, and at Memorial Medical Center. Currently, there are two commuter bus hubs (CB Smith Park and North Perry Airport).

Michael provided overviews of opportunities and challenges surrounding the City Center area that included the senior center residents' access to Sedano's shopping center and lack of safe pedestrian crossing of Pines Boulevard to City Center. There is currently a paved cut-through path between the senior center and the back of the shopping center.

Renaissance Charter School is located at a former K-mart, and student drop-off and pick-up has become a challenge as vehicles queue on-site in the shopping center parking lot, although a partial solution was implemented.

Residents want a traffic signal at 106th Avenue. City inquired if funds can be used for signalization. FDOT denied it several years ago; however, modification to 106th Avenue to the north were recently completed that could reopen discussion. James Cromar said that the menu of improvements could potentially include a pedestrian bridge.

Lisa Maack asked about the City's bicycle/pedestrian plans. Michael explained that the City Commission recently passed a bike share moratorium, sponsored by Commissioner Thomas Good. Commissioner Good wants more public participation. City Center currently does not have bike racks to somewhat discourage cycling until construction is complete and all roadways and paths are open.

Washington Avenue lends itself for bicycle and pedestrian use; however, the route is not complete. There is a parcel between a public school to the west and where Washington ends that is used by students to cut through currently.

Karl Kennedy emphasized that there is currently a mobility impediment at Palm Avenue immediately south of Pines Boulevard. There are also no sidewalks on the westside of Palm Avenue going southbound to Washington Avenue. There is a proposed hotel and a WaWa in the early planning stages at the Palm Avenue and Pines Boulevard intersection, where the former City Hall was located.

For this project, Diane suggested engaging the educational community, as the charter school (Charter School USA, Renaissance) is in the project boundary and the public school on Washington Avenue is not currently accessible to students coming from the east.

Some of the mobility-related challenges and opportunities in the Hub planning area include north to south connectivity on Pines Boulevard at Pines City Center, and safety and mobility improvements to Palm Avenue and Washington Avenue.

V. Data / Research Needs

The City was well prepared with lots of documentation and data that was provided to the team on a thumb drive. Marc O'Keefe will be the HNTB team contact for any additional data transfer.

VI. Conclusion

Next steps are to collect and review the data provided, begin the development of the planning context and market analysis, and begin scheduling stakeholder outreach.

Prepared by Nannette Rodriguez
Quest Corporation of America

Plantation and Pembroke Pines Mobility Hubs Broward County Coordination Meeting

Wednesday, October 17, 2018

9 a.m. – 10:30 a.m.

Broward County Government Center

115 South Andrews Avenue, Conference Room GC329F, Fort Lauderdale, FL 33301

I. Introductions / Attendance

Andrew Riddle, Project Coordination Manager, Broward MPO
Diane Gormely-Barnes, Principal Planner, HNTB
Vilma Croft, Project Manager, HNTB
Marc O’Keefe, Transportation Planner, HNTB
Jeff Weidner, Vice President, Marlin Engineering
Christina Fermin, Marlin Engineering
Nannette Rodriguez, Public Outreach Consultant, Quest Corporation of America
Richard Tornese (via phone), Director of Engineering, Broward County
Nicholas (“Nick”) Sofoul, Planning and Development Management Division, Broward County

II. Overview of the Broward Metropolitan Planning Organization (BMPO) Mobility Hub Master Planning Initiative

Andrew Riddle, Project Coordination Manager, Broward MPO /
Diane Gormley-Barnes, HNTB

Andrew Riddle provided a brief overview of the Hub Mobility Program, and noted that the process is the same as executed with the City of Hollywood. Currently the team is working on the planning for the cities of Pembroke Pines and Plantation. Kick-off meetings have already been held with the cities. The goal is to identify near-term projects that can move forward.

Vilma Croft explained that since the kick-off meetings were held, data has been gathered and a presentation will be shown.

Diane Gormely-Barnes provided an overview of the process, which is like the one completed for Hollywood. The meeting with the County is to understand what is planned in both areas so that the mobility hub planning can be coordinated accordingly. The current focus is to provide the infrastructure to make short-term improvements supporting the framework for long-term solutions.

Lambert is working on the market assessment and the team is meeting with other agency stakeholders too.

Plantation Midtown

The area's bicycle and pedestrian accident reports and BCT transit data were presented. Diane explained that future local transit and shuttle options present an opportunity in the area.

Pembroke Pines City Center

The area's bicycle and pedestrian accident reports and BCT transit data were presented. City has had success with regional and local bus services. They are currently looking into some modifications to service to further improve them. The City is also looking at long-term redevelopment of the shopping center northwest of Pines Boulevard and Palm Avenue.

III. Discussion

Plantation's Midtown was the first area presented for discussion.

Nick Sofoul, Broward County, noted that the intersection at Broward Boulevard and University Drive poses a challenge as hub developments at major intersections have not been successful.

With regards to connectivity, Nick said that Plantation had a very successful shuttle system, but the city dissolved the service. During the recession, the city initiated a fare that caused a decline in ridership. The city used the lower ridership data to justify its demise in 2013-14. The shuttle was funded by the City with a subsidy from Broward County Transit (BCT). BCT can provide more data.

The County is planning on expanding the Emergency Operation Center (EOC), which may require a relocation of BCT's regional transit terminal that is located adjacent to the property. The courthouse is also identified for a capital improvement project.

The canal and adjacent easements that run parallel to the south side of Broward Boulevard belong to the Old Plantation Water Control District (OPWCD). There was previously an issue with an eastbound bus service due to an encroachment. The OPWCD is not open to infrastructure within or near their rights-of-way, including additional bridges, as it affects their operations. Creating a large culvert could be a long-term solution.

Overhead utilities pose a conflict on the north side of Broward Boulevard. The lines are within the Broward County rights-of-way. There could be an opportunity to bury the lines; they are not transmission lines.

BCT usually does not move bus routes unless an opportunity opens.

There are drainage issues along the northwest quadrant frontage road at Broward Boulevard and University Drive.

Richard Tornese explained that Pine Island Road had already been expanded and there is no anticipated need for further improvements there.

Nick continued to provide an overview of the area's challenges and opportunities. There are private roads, drainage issues and some of the bridges over the canal do not support pedestrian traffic. He explained that employees working just north of Broward Boulevard occasionally walked to the mall to have lunch but would likely not consider walking to the Publix that is located north of the government center area due to distance. Most employees drive their car to their lunch destination. There could be

an opportunity for a bike share system in the area including Publix. Nick indicated it appears that the lower parking ratio allowed at the Publix is working fine.

He explained that bus shelters in Plantation must adhere to the city's strict design standards. Stops along the south side of Broward Boulevard do not have shelters due to limited space for the City's required shelters. BCT provides a bus route (22) to the mall's food court entrance, but otherwise stays on the major roads or serves the transit center.

City suggests that the bus terminal should be relocated to the mall property, similar to Palm Beach County's bus terminal at Boca Town Center. Nick also said that a greenway crossing could cause concern.

(Note: Richard Tornese left the meeting.)

Pembroke Pines' City Center was then discussed. Nick explained that Pembroke Pines has a strong community shuttle system and that they adjust as needed. There is a very active bus stop at Pembroke Lakes Mall.

Diane provided an overview of the meeting with Pembroke Pines. She explained that the city is looking for connectivity across Pines Boulevard and have suggested a pedestrian bridge. City has expressed interest in potentially purchasing the shopping center property at the northwest corner of Pines Boulevard and Palm Avenue, if that would facilitate appropriate redevelopment. There is a senior housing facility north of the center that currently connects to the back of the shopping center via an informal pedestrian connection through the rear loading dock area.

Another need is to complete the Washington Avenue connection between Hiatus Road and 114 Avenue, where there is currently a "cowpath" connection.

Diane said that there are opportunities with the lots at City Center, including the utility easement where the city has already made improvements with parking lots. It was also mentioned that secondary streets could benefit from Complete Streets improvements.

Nick said that the traffic patterns along Pines Boulevard differ on weekdays and weekends.

He said that the proposed County surtax includes projects that will expand services in the area. If the tax does not pass the projects are still desired, however, they may not come to fruition as quickly.

City is holding a Mobility Workshop on November 8. The County will also be presenting at the meeting to discuss greenways. (Note: request copy of the County's presentation.)

The Flamingo Road greenway project is planned in the near future along the westside between Pembroke Road and Pines Boulevard. Pedestrian connectivity north of Pines Boulevard may meander to the eastside of Flamingo Road where sidewalks currently exist. The city has already entered into an Interlocal Agreement.

IV. Data /Research Needs

Plantation's community bus ridership, and any available more recent transit ridership figures. Available information will be requested from BCT and the communities.

V. Conclusion

Next steps are to meet with other agencies, attend advisory board meetings at the cities, and continue to collect and analyze data.

Prepared by Nannette Rodriguez
Quest Corporation of America

Plantation and Pembroke Pines Mobility Hubs Florida Department of Transportation (FDOT) Coordination Meeting

Wednesday, October 17, 2018

3 p.m. – 4 p.m.

Florida Department of Transportation, District Four

3400 W Commercial Boulevard, Fort Lauderdale, FL 33301

I. Introductions / Attendance

James Cromar, Director of Planning, Broward MPO
Andrew Riddle, Project Coordination Manager, Broward MPO
Diane Gormely-Barnes, Principal Planner, HNTB
Vilma Croft, Project Manager, HNTB
Jeff Weidner, Vice President, Marlin Engineering
Lisa Maack, Strategic Planner, Marlin Engineering
Christina Fermin, Strategic Planner, Marlin Engineering
Nannette Rodriguez, Public Outreach Consultant, Quest Corporation of America
Marjorie Hilaire, Project Manager, Florida Department of Transportation
Allison Glunt, Arterial Operations Manager, Florida Department of Transportation

II. Overview of the Broward Metropolitan Planning Organization (BMPO) Mobility Hub Master Planning Initiative

Andrew Riddle, Project Coordination Manager, Broward MPO /
Diane Gormley-Barnes, HNTB

Andrew Riddle opened the meeting saying that the discussion will focus on the Mobility Hub Program planning for the cities of Pembroke Pines and Plantation. FDOT is familiar with the Hollywood project, and the process will be similar for these plans. Kick-off meetings have already been held with the cities. The projects are being planned at the same time; however, they are not linked.

Diane Gormely-Barnes reviewed the planning process for both areas. She explained that the focus now is on building a consensus and to identify short-term and long-term projects, and nothing is off the table at this early point in the discussions. There will be further coordination with the stakeholder agencies and cities. The planning framework should wrap up in early 2019 with the development of design concepts to follow. Design work may eventually require joint agreements and approvals.

Plantation Midtown

Diane introduced the Plantation Midtown area map and discussed the area as a whole. The focus is now on short-term improvements on Broward Boulevard from University Drive to Pine Island Road and a focus on the Broward County Transit's (BCT) regional bus terminal. Broward Boulevard is a county roadway west of University Drive. Broward Boulevard is an FDOT roadway east of University Drive. Diane explained that some of the roadway along Broward Boulevard is in the drainage district (Old Plantation Water Control District, OPWCD) right-of-way.

Pembroke Pines City Center

The focus is the areas north and south of Pines Boulevard from Palm Avenue to approximately 108th Avenue. There is a lot of redevelopment in the area with the City's new City Center. The city has improved the utility right-of-way with public parking facilities. The area is just about built out. Pines Boulevard is an FDOT route. Palm Avenue is a city right-of-way north of Pines and is a county right-of-way south of Pines.

III. Discussion

The cities will be responsible for implementation with assistance from the BMPO. Andrew mentioned that traffic signal timing has yet been brought up as an issue by either city. The City of Plantation did emphasize that there must be close coordination with FDOT.

James Cromar and Margorie Hilaire discussed the other mobility hub projects. Hollywood, State Road 7, is in the implementation stage with construction planned next year. There is a meeting with Cypress Creek next week about transfer of rights with Andrews Way.

Marjorie asked how engaged the cities were with regards to taking ownership. Andrew explained that there are resolutions adopted for both Pembroke Pines and Plantation. There is a planning process that each city is committed to following. A project tracking system is in the works so that stakeholders can monitor the status of each project. James added that the cities of Coral Springs and Sunrise are coming up next. Funding is in place for Plantation and Pembroke Pines. If a city delays too much, funding will go to the next city that is ready.

Marjorie was also interested in what the market analysis shows. Andrew said that hub planning will advance in locations where there is movement on the private investment side. Diane mentioned that Lambert Advisory presented to the City of Plantation earlier in the day. The city's previous analysis was considered aggressive for the short-term. Their market analysis is looking at absorption into the future to better understand trends. In Plantation, reduced parking is optional but not mandatory. New parking requirements have not been codified, but one recent development (Publix) was approved with reduced parking due to significant nearby residential development.

The FDOT planning representative could not attend this meeting. Ron Carreba (?) was developing the scope of a FDOT planning study in the Plantation area. Scott was the liaison and he recently retired. John (?) asked Allison Glunt to attend the meeting to discuss current studies.

Allison reported that FDOT is looking at signal timing on state roads in Davie, Plantation and Sunrise and conducting an areawide bottleneck analysis of hotspots. The arterial study, which may be followed up with PD&E, does not yet have a scope yet.

Marjorie updated the group that FDOT is still working on the scope for the I-595 Connectivity Study (Turnpike to 136 Avenue). The project has moved to Shi-Chiang Li's office. They are looking at improvements to the north/south connector streets. This is not an interstate study. They are looking at areas that can be improved due to bottlenecks. They are still working on the scope.

Many of the traffic concerns in Plantation are caused by congestion in Davie; FDOT has a lot of traffic data for University Drive. Ron will be reaching out to the MPO. University has seen a lot of new development that will impact traffic levels.

Some of the comments received from Plantation Midtown Board meeting were questioning the need for transit. Diane indicated that for the Plantation Midtown area, the study may focus more on internal circulation than University Drive. For example, the city is interested in taking control of the private road around the mall.

Jeffrey Weidner mentioned that the county said that the Emergency Operation Center (EOC) was expanding. Dan Holmes, City of Plantation, had suggested that the transit should be more centrally located at the mall area, similar to the Boca's Town Center.

There is also a greenway project that is planned along State Road 84. Plantation city officials want to consider adding a bridge over the canal to State Road 84.

Jeffrey discussed the current challenges at the BCT transfer center. It is hidden, and pedestrian mobility is a challenge due to many obstructions such as hedges and parking lots. Other Broward County facilities in the area also do not have connectivity. It was mentioned that the team is meeting with BCT on Thursday. James emphasized that there is an opportunity in the area to explore alternatives, but implementation challenges will need to be discussed.

The proposed EOC expansion project and the opportunity to relocate the transit center was discussed. If the Plantation hub moves to the mall, a long-term agreement or property purchase will be required to ensure the hub remains open, due to the potential for mall ownership turnover. Current redevelopment in the area includes the Sears store to a multi-use entertainment complex and Pine Island Park improvements that include the addition of an outdoor entertainment facility.

Marjory said she would invite others to talk about transit at the next meeting.

Diane explained that a local transit system in Plantation was discontinued; Broward County reported that it was successful, whereas Plantation representatives described it as failing due to low ridership. The team will request data from BCT to evaluate.

Diane continued with a presentation on Pembroke Pines City Center. The issue in Pembroke Pines is connectivity to and from City Center from the north where there is a shopping center, school and senior housing. There is no traffic signal at 106th Street. FDOT acknowledged that they have received complaints about 106th Street. There is a western exit from the City Center to Hiatus Road without having to exit onto Pines Boulevard. On Washington Avenue there is an opportunity for a pedestrian and bicycle trail due to a wide right-of-way.

The city has local community bus routes and have talked about a location for a long-term express route stop. The parking area on the FPL easement poses an opportunity.

A pedestrian bridge for Pines Boulevard was briefly discussed. Marjorie mentioned that a PD&E study would have to be held for a pedestrian bridge. She suggested that the current planning study should look at the alternatives. Andrew suggested to present all the pros and cons in the final report.

Allison explained that pedestrians using a pedestrian button delays signal timing and vehicular flow. This could be a concern especially on Pines Boulevard. She suggested alternatives such as a high-visibility crossing and lighting.

Marjorie mentioned that several safety studies have been conducted along Pines Boulevard. Allison noted that emergency evacuation routes should be verified; an evacuation route designation would preclude the possibility of a pedestrian bridge.

IV. Data /Research Needs

Plantation's community bus ridership and any recent transit ridership data will be requested from BCT. Obtain and review the safety studies reports that Marjorie mentioned.

V. Conclusion

Next steps are to meet with other agencies, attend board meetings at the cities, and continue to collect data. Pembroke Pines is having a Mobility Workshop with all advisory boards on November 8. Follow up with Bill Cross to ensure he is working with both cities and identify a transit liaison as part of the planning.

Draft Prepared by Nannette Rodriguez
Quest Corporation of America

Plantation and Pembroke Pines Mobility Hubs Broward County Transit (BCT) Coordination Meeting

Thursday, October 18, 2018

2 p.m. – 4 p.m.

Broward County Transit Offices

1 North University Drive, Plantation, Florida 33324

I. Introductions / Attendance

Tara Crawford, Senior Planner, Broward County Transit
Ryan Hatch, Broward County Transit
Jonathan Roberson, Broward County Transit
James Cromar, Director of Planning, Broward MPO
Andrew Riddle, Project Coordination Manager, Broward MPO
Vilma Croft, Project Manager, HNTB
Diane Gormely-Barnes, Principal Planner, HNTB
Peter F. Dobens, Public Outreach Consultant, Quest Corporation of America
Jeffrey Weidner, Vice President, Marlin Engineering
Lisa Maack, Strategic Planner, Marlin Engineering
Christina Fermin, Strategic Planner, Marlin Engineering

II. Overview of the Broward Metropolitan Planning Organization (BMPO) Mobility Hub Master Planning Initiative and the impact with BCT Andrew Riddle (Project Coordination Manager, Broward MPO) / Diane Gormley-Barnes, HNTB

Andrew Riddle provided an overview of the Hub Mobility Program and explained that the project is funded through FTA. He discussed the cooperation with Broward County Transit (BCT) on the downtown Fort Lauderdale project and these projects in Pembroke Pines and Plantation.

The team provided a slide presentation to explain the planning process. Mobility Hub near-term implementation will be FTA funded with Plantation and Sunrise expected to share \$3 million for short-term investment. \$2.6 million has been allocated for Pembroke Pines.

Diane Gormely-Barnes explained that the first phase of the project includes a review of the physical area and documenting the existing conditions relevant to the study before developing a framework. The second phase will be developing concepts and affixing costs.

The team is incorporating what the municipalities envision for the future and working to understand their needs and desires and the essential role BCT plays in this process. In this phase, the team is attempting to understand sources of trip generation, where people are going, and where they begin their trip.

As part of this initial phase, Lambert Advisory is conducting a market assessment including reviewing approved new dwelling units and business and assessing how market trends may generate new mobility needs. The review will document projected development in the area to assist in long-range planning for mobility options to better serve existing and future transit riders.

The two projects, Plantation and Pembroke Pines kicked off together because they were ready and there is a distinct advantage to completing both along the same developmental track.

III. Discussion

Tara Crawford, BCT, explained that this is an uncertain time. Broward County voters are being asked to approve a sales tax increase. If the tax is approved, BCT can move ahead adding routes in the Pembroke Pines and Plantation areas. Compounding the uncertainty is that whether or not the tax is approved, the Broward County Department of Emergency Management is considering expanding the Emergency Operations Center (EOC) next to the Plantation BCT hub. The expansion of the EOC could require the relocation of the BCT West Terminal station or redesigning it. If the EOC expands, there will be no room for expansion of the West Terminal. One possibility for relocations is the mall property to the south. The specifics will depend on the EOC plans. She said that if the EOC expands and the transfer station must be relocated, it would be in the same general area to continue to service the Broward County Library and Broward Courthouse. Whether the Plantation BCT hub moves or not, the number of bus bays and the level of rider amenities needs to be increased.

However, the vote will determine all plans. If the surtax is rejected, the plans will be scaled back and expansion of BCT routes will be curtailed. Regardless of the surtax referendum outcome, BCT plans to have the Breeze begin serving the Plantation transit center next year.

Diane Gormely-Barnes said the team is doing a physical assessment of the area to understand everything that is happening today and in the future. Lambert Advisory team members are conducting a market assessment including the impact of recent and planned development in the area. The results will inform the need for pedestrian and bicycle traffic to access the BCT hub. Once a planning framework is completed in both cities, design concepts can be formulated.

Ryan Hatch of BCT lives near Midtown and understands the needs of pedestrians in the area. He mentioned how difficult it is for pedestrians to cross University Drive and Broward Boulevard. He said few pedestrians venture across the roads because of the wide width and the traffic level. He sees very few bike riders in the area because of the traffic and speeds on the two thoroughfares.

Team members asked about the B-Cycle service and if it was accessible in the area. B-Cycle is a coastal service and is not provided in Plantation or Pembroke Pines.

James Cromar, Broward MPO, stressed that making the areas more pedestrian and bicyclist friendly is an essential element of the plans. He said this may include the addition of wayfinding signs to assist in locating services.

The location of a potential hub in the City of Pembroke Pines was then discussed. Pembroke Pines has created an abundance of parking in the FPL right of way in the southwest quadrant of City Center Boulevard and Palm Avenue/NW 101st Ave, where vehicles could be parked while using a transit hub. The City of Pembroke Pines is working to establish viability of a park-and-ride location in the area with a “95-Express” type service along I-75 to Miami. Several private shuttles operate in the area already, in addition to fixed community routes.

Development potential north of Pines Boulevard and pending approved developments will be part of the Lambert Advisory review. The Pembroke Place Shopping Center on the north side of Pines Boulevard is aging. Property owners indicated they may be amenable to a through road connecting residents from the north to Pines Boulevard, and across to the new commercial district on the south side of Pines Boulevard. The team will also examine the viability of a new traffic signal at Pines Boulevard and 106th Avenue to increase safety for pedestrians and bicyclists.

The team discussed generally the role that hubs will play in connecting with community bus shuttle services. Also, the team suggested identifying “kiss and ride” locations and drop-off locations at the mobility hubs for vehicles for hire such as Lyft and Uber.

IV. Data /Research Needs

To assist in the review, Jeff Weidner of Marlin Engineering requested historical annual passenger count (APC) data and Shape files from BCT. He requested the last five years of available data for BCT and the community bus services in Plantation and Pembroke Pines. Plantation discontinued the community bus service in 2013, so data from 2009 to 2013 will be provided. Also, the Town of Davie has a community bus service that connects with the City of Plantation; data on that route will also be reviewed in the study.

Tara Crawford will provide the APC for the past five years, and the shape file data for 2017. BCT does not have onboard survey data available, but is planning to conduct a COA in 2020 that will include a survey.

Marlin Engineering will provide BCT with the pending redevelopment plan for the Sears anchor property at the Broward Mall.

V. Conclusion

Next steps are to collect and review the BCT data, and evaluate the data compiled by Lambert Advisory, before any recommendations are developed. An advisory boards workshop is scheduled in Pembroke Pines on November 8 at which local stakeholder input will be solicited.

Draft Prepared by Peter F. Dobens
Quest Corporation of America

Pembroke Pines Mobility Hub Planning Framework Review Meeting Notes

Planning & Econ Dev't Dept., Charles F. Dodge City Center, 601 City Center Way, Pembroke Pines
Monday, April 29, 2019 1:00 p.m. to 2:30 p.m.

Attendees

City of Pembroke Pines

Karl Kennedy, PE, City Engineer
Michael Stamm, Jr., Director
Cole Williams, Planner/Zoning Technician
Joseph Yaciuk, Planning Administrator

Broward Metropolitan Planning Organization

Chadwick Blue, Project Coordination Manager
James Cromar, Strategic Initiatives Deputy Executive Director

Consultants

Vilma Croft, PE, CPM, Transportation Planning Manager, HNTB
Christina Fermin, AICP, LEED Green Associate, Strategic Planner, Marlin Engineering
Diane Gormely-Barnes, AICP, LEED^R AP, Principal Planner, HNTB
Christopher Gratz, AICP, Senior Planner, HNTB
Eric Liff, Principal, Lambert Advisory

Topics Discussion/Summary

Bus

- Ample ROW available on the north side of Pines Boulevard, especially west of NW 106th Street for bus bay.
- City desires Bus Shelters to have the City branded architectural styling
- Premium bus service is planned along Pines Boulevard for 2030. BCT to implement transit along Palm Avenue in the near future.
- Community Services Department runs the City's shuttle buses, works closely with the Planning and Economic Development Department.

Development Related

- Affordable housing units are available in the City's pool of flex/reserve units.
- Assisted Living Facility (ALF) that is 130 beds under contract for the property north of City Center 7 Apartments - \$45,000 towards traffic impacts being paid

- New 5-story Police Station with its own parking garage under is proposed next to the ALF, the item will have to go to referendum. City owes the County money in relation to previous approved development that never occurred on the parcels.
- Hotel with 125 keys proposed on the old City Hall parcel as well as a Self-Storage facility and a Wawa Gas Station. Developer has to resolve a drainage issue on this site.
 - Wawa will be extending right turn lane in from Pines Boulevard, developer desires southbound turn out to Palm Avenue but cost is very high to go over the canal.
- Gym near NW 103rd Street – taking FPL easement parking north of City Center Boulevard
- Apartments under construction quickly going on line and fully leased immediately
- Shopping center at the northeast corner of Pines Boulevard and Palm Avenue recently sold, where redevelopment potential previously had been identified. Charter School not included in the sale.
 - Mike Stamm to reach out to the new shopping center developer.
- City Center originally platted for 300K sq. ft. office & 100K sq. ft. of commercial and the opposite has been developed due to market demand; corporate office uses prefer to be closer to I-75.
- City wants to consider mobility options for Washington Avenue; the City has ample ROW available along the roadway and currently building a park at Washington Avenue and Hiatus Road which will lead to the Flamingo Road Greenway.
- City is exploring awarding flex and/or reserve units to enlarge the apartment complex to the south of Washington Avenue, The Landings.
- Many charter school students live within the area between Pembroke Road and Washington Avenue, and many of these students utilize existing shuttle service, walk or ride their bicycles to/from school.
- West Regional Hospital recently purchased old Petco/Toys R Us outparcel at the mall and will be expanding their campus south, rather than pursuing a surgical center in the City Center area.
- Gas line is moving forward and will be placed within the existing FPL easement.

Park and Ride potential

- Currently there are 700 parking spaces within the FPL easement under the City's control. The spaces under FPL easement north of City Center Boulevard are no longer under the City's control and will now serve a new gym and restaurant use.
- City considering a 400-600 space parking garage east of City Hall/Civic Center
 - Looking for partners, possible Public Private Partnership, potential to use spaces during the day for Park and Ride. City events are very popular with 5,000 attendees requiring large amount of parking that is only used at peak times.

Pedestrian Enhancements

- Enhanced crossing needed at Pines Boulevard and NW 103rd Avenue, a crossing guard is being used due to Renaissance Charter School children.
- Enhanced crossing needed at Pines Boulevard and NW 106th Avenue

- Good visual representation needed to present to the City of what enhanced pedestrian crossings could look like.
- Sidewalk on the west side of Palm Avenue is included in the MPO's LRTP, no ROW due to canal, expensive proposition.
- Pedestrian traffic from NW 103rd Street via the sidewalk behind the shopping center robust; this is the area identified for potential ROW connection and community shuttle re-routing.

Traffic Light warrant studies are being conducted

- Pines Boulevard at NW 106th Avenue/City Center Boulevard - a redesign to connect south to City Center development is desired by residents.
 - Palm Avenue at SW 7th Street – SW 7th Avenue is the entrance to a gated multifamily development City Center 7 Apartments. The light could hopefully create a gap in traffic for northbound turns from the access road to the north by the old City Hall; City understands that intersection at the access road will not qualify for a light.
-
- Bike share ordinance moving forward for 2nd reading.

Follow-ups/Action Items

- City of Pembroke Pines – any additional comments or corrections on the Planning Context and Framework documents by June 10, 2019
- City of Pembroke Pines – results of the traffic signal warrant studies being conducted.
- HNTB – once additional comments received, edit documents, provide to BMPO for comment/review
- HNTB to make presentation to City's next available advisory board meeting when documents are finalized and exhibits prepared.

Mobility Hubs

Coral Springs, Pembroke Pines, Plantation, and Sunrise

BCT Coordination Meeting

1 North University Drive, Suite 3100A, Plantation, FL 33324

Tuesday, April 30, 2019 9:00 a.m. - 11:15 a.m.

Attendees

Broward County Transit

Tara Crawford, Senior Planner

Ryan Hatch, Planner

Jonathan Roberson, AICP, Senior Planner

Broward Metropolitan Planning Organization

Chadwick Blue, Project Coordination Manager

James Cromar, Strategic Initiatives Deputy Executive Director

Consultants

Vilma Croft, PE, CPM, Transportation Planning Manager, HNTB

Christina Fermin, AICP, LEED Green Associate, Strategic Planner, Marlin Engineering

Diane Gormely-Barnes, AICP, LEED^R AP, Principal Planner, HNTB

Christopher Gratz, AICP, Senior Planner, HNTB

Jeffrey Weidner, Vice President, Marlin Engineering

Topics Discussion/Summary

General Update

- FTL Mobility Hub to break ground for construction in August, to be completed in May 2020.
- Cypress Creek Mobility Hub within the design phase. Complete Streets and Transit improvements are about 2-3 years away.
- Hollywood Mobility Hub approaching 30% design.
- MPO to contact Broward County's Real Estate personnel Brian Maloney regarding BBT center.
- Future Mobility Hub projects will only be funded by the MPO if cities to apply for the construction of Mobility Hub improvements due to little variation in the ranking system superimposed on all proposed Mobility Hubs within the County.
- BCT looking at Comprehensive Operations Analysis (COA) by the end of the year. Followed by extensive public outreach. COA would be implemented in 4-5 years. BCT will be conducting onboard survey's in addition to collecting ridership data. Data should be available within 18-24 months.

Trade Centre South | 100 West Cypress Creek Road, Suite 650 | Fort Lauderdale, FL 33309-2181 | BrowardMPO.org

For complaints, questions or concerns about civil rights or nondiscrimination; or for special requests under the Americans with Disabilities Act, please contact Erica Lychak, Title VI Coordinator at (954) 876-0058 or Lychake@browardmpo.org

- HNTB/MPO to provide BCT with most recent documents.

Coral Springs

- Downtown Coral Springs DRI (SWC of University Drive and Sample Road) has numerous requirements for roadway and transit improvements that are triggered when certain development thresholds are met.
 - Bus Pullout Bays – NBD University Drive near 31st Court, EBD Sample Road near University Drive.
 - Turn Lanes, Sidewalks, Signalization, School Zone Flashers.
 - Neighborhood Transit Center and shuttle system
 - Kiss and Ride, walk to outside destinations, bike storage, and bus transfer operation facilities, dependent upon being in conjunction with BCT funding.
 - Not intended to be a Park and Ride facility.
 - Does it make sense to pull buses off main routes for a transit center?
 - Operation and maintenance of transit center is not funded. Requirements for the center are not viable due to this funding issue. Who will maintain the transit center?
 - DRI developer recently filed Trafficways Plan amendment application to which BCT objected; not dedicating the ultimate ROW would negatively impact the ability to make improvements for transit.
- Queue jumps, transit lanes and signal priority are all being explored and a plus for the study area.
- University Drive has been identified for premium service in 5-7 years and would benefit from a transit hub.
- Existing service includes Route 2 and 102 along University Drive, Route 34 along Sample Road and two shuttle buses that operate within the City.
- BCT exploring the use of micro transit and flex routes. Route proposed along Wiles Road.
- University Breeze (Route 102) and Route 2 have some of the highest ridership within the County. Not looking at park and ride opportunities at this time, most of these facilities are owned and operated by FDOT.
- BCT working on branding for premium service transit along with enhanced shelters.
- BCT plans (via surtax) on service improvements west of University Drive along Sample Road.
 - GIS layers of surtax-funded improvements are available
- BAT lanes will be used at 20-minute frequency – due to this headway, BCT is exploring innovative ways to utilize the BAT lanes such as register carpools, rideshare, taxi's, etc.
- Bus Islands have several safety concerns, especially with right turn lane. BCT not looking at BRT or bus islands at this time.
- Explore shuttle stop locations and micro transit connections/opportunities.
- Coral Springs Shuttle service begins and ends at Broken Woods Road.
- City has reached out to BCT for shuttle route realignment and new routes.
- BCT exploring the use of zonal areas within the Broward Municipal Districts for micro transit, looking to implement this by this fall.

Sunrise

- Sunrise would like us to explore the feasibility of an AV shuttle around the mall.
 - What would be the purpose of an AV shuttle?
 - BCT has no opinion on AV shuttle if it occurs along the private ring road/private property. If the service were to go onto County roadways there would be an issue since BCT Traffic Engineers would require a number of infrastructure investments that may or may not be feasible.
 - Hillsborough County explored the use of an AV shuttle, but very specific and to shuttle people to/from parking area.
- ULI study looked at the redevelopment of the BBT Center.
- BCT conducting meetings with the BBT Center which will likely impact recommendations we can make on Transit Hub location and improvements – should have an update by the end of May.
- Mall DRI includes bus bays along the ring road between Green Toad Road and Red Snapper Road. The City did not consult BCT when these negotiations occurred, and the required transit bays do not meet BCT's requirements. BCT, City and developer are in current negotiations.
 - Would a layover location on Green Toad Road be better than the Food Court?
 - BCT serves many mall employees
- BCT exploring the possibility of a vertical transit hub with transit center at the ground floor and parking above. More information available by the end of May.
- Several routes are planned for the area including Route 56 extending to Sawgrass Mall, Breeze service along Flamingo Road and Oakland Park Boulevard, in addition to new route service for Hiatus Road and Nob Hill.
- Other items to consider include the potential exit onto Pat Salerno Drive off the Sawgrass and a Park and Ride lot expansion at the BBT Center.
 - Park and Ride locations owned by FDOT
- City looking at the use of Freebie type service, in negotiations. Has met with BCT for shuttle route funding.
- BCT exploring funding options for Freebie type service, need to meet specific federal funding guidelines.
- BCT planning for light rail to Sawgrass Mall area with a stop at BB&T Arena parcel.
- Marlin to coordinate with BCT on data collection efforts for Sunrise and Coral Springs.

Plantation

- Two new routes are planned to extend to Westfield Mall by the end of the year.
- EOC improvements will allow for the WRT to remain in existing location. Investments are planned for Fall 2019 to address needs for the next 5 years. Investments to include parking, pedestrian, roadway, drainage, bus bays, shelters, etc. Buses will be diverted during construction.
- Route 12 to be removed from WRT; Route 88 to extend to serve and layover at the Mall by mid-July 2019 and serve the theatre entrance.
- BCT meeting with the City to kick off 2 new shuttle routes.

- Several challenges with canal ROW and bus stops. Landscape medians can be retrofitted for use as a pedestrian refuge.
- Site observations includes many riders who exit buses at the mall walk to the west and to the south.
- City is looking at a LUPA for Midtown.
- BCT exploring the longer-term relocation of the WRT closer to Pine Island Road or SW 84th Avenue. All concepts show improvements to the Access Road, including a possible straightening of the road.
- Mall has masterplan for outparcels along Broward Boulevard. Tara has contact info for Mall to share.

Pembroke Pines

- BCT Route planned along Palm Avenue.
- Bikeshare coming to City Center.
- BCT Planning for premium service along Pines Boulevard to extend to Flamingo Road.
- Many Route 7 riders on Pines transfer at University.
- City is interested in express park and ride lot, but FDOT is not interested at this time. FDOT prefers park and ride facilities near the expressways. Miramar also has an existing park and ride lot – too close. Area is currently not in demand for express service.
- Express route 107 was recently discontinued, while route 109 is very successful.
- Express service on Hiatus stops to pick up passengers several times, at locations that don't provide parking.

Follow-ups/Action Items

- MPO to contact Broward County's Real Estate personnel Brian Maloney regarding BBT center.
- HNTB/MPO to provide BCT with most recent documents by May 14, 2019 if not sooner.
- BCT to provide GIS layers of surtax-funded improvements.
- BCT to provide results of meetings with the BBT Center by the end of May.
- BCT exploring the possibility of a vertical transit hub with transit center at the ground floor and parking above in Sunrise. More information to be provided by the end of May.
- BCT (Tara Crawford) has contact info for Westfield Mall to share to get an understand of their future plans.
- Marlin and HNTB will coordinate with BCT to identify locations to conduct field observations and counts prior to initiating the work; to be done by May 10, 2019 if not sooner, critical to get data before school year is over.
- HNTB – once additional comments/data received, edit documents, provide to BMPO for comment/review.

Pembroke Pines Mobility Hub Update Meeting Notes

**Planning & Econ Dev't Dept., Charles F. Dodge City Center, 601 City Center Way, Pembroke Pines
Wednesday, January 15th, 2020 11:00 a.m. to 12:30 p.m.**

Attendees

City of Pembroke Pines

Karl Kennedy, PE, City Engineer

Michael Stamm, Jr., Director

Cole Williams, Planner/Zoning Technician

Joseph Yaciuk, Planning Administrator

Broward Metropolitan Planning Organization

Chadwick Blue, Project Coordination Manager

Charlene Burke, Local Government Services Principal Planner

James Cromar, Strategic Initiatives Deputy Executive Director

Consultants

Vilma Croft, PE, CPM, Transportation Planning Manager, HNTB

Diane Gormely-Barnes, AICP, LEED^R AP, Principal Planner, HNTB

Christopher Gratz, AICP, Senior Planner, HNTB

Topics Discussion/Summary

- City met with Broward County Transit on Monday, January 13th, 2020
 - 13-15 new bus shelters will be installed in the City with Surtax funds.
 - City is responsible for maintenance.
 - City's bus bench vendor maintains its benches and the BCT bus shelters.
- City wants to consolidate the two eastbound bus stops on Pines Boulevard by eliminating the stop by the former City Hall site (bench only) and moving the stop on the west side of NW 103rd Avenue to the east side.
- HNTB presented bus shelter design concept with City Center branded architectural styling.
 - City concerned about: cost and availability of replacement parts, prefers vandalism proof materials. Recently had time delay and high cost of \$900 to replace glass on Barco bus shelter.
 - City desires a Community Shuttle stop at the new mini-park, and at park entrance on Washington Street. The Porte Cochere at City Center is a ready-made stop, just needs signage.

- Conceptual intersection improvements at Pines Boulevard and NW 103rd Avenue, and NW 106th Avenue at Pines Boulevard need to be revised to eliminate the enhanced east-west crosswalks, the north-south enhancements are most important.
- NW 106th Avenue through City Center will be dedicated to the City after the developer completes improvements.

Action Items

- City to provide any comments on the Framework documents to the BMPO by the end of the week (January 17).
- BMPO to send sample subrecipient agreement to the City.
- HNTB to revise conceptual design improvements and cost estimates.
- HNTB to Finalize Planning Framework document once City comments are received.
- Target April 1st or April 15th to do a presentation to the City Commission.

Mobility Hubs

Coral Springs, Pembroke Pines, Plantation, and Sunrise

BCT Update Meeting

1 North University Drive, Suite 3100A, Plantation, FL 33324

Thursday, February 20th, 2020 11:00 a.m. - 12:15 p.m.

Attendees

Broward County Transit

Tara Crawford, Senior Planner

Jonathan Roberson, AICP, Senior Planner

Broward Metropolitan Planning Organization

Chadwick Blue, Project Coordination Manager

Paul Calvaresi, Local Government Services Manager

Renee Cross, AICP, Senior Project Manager

Consultants

Christopher Gratz, AICP, Senior Planner, HNTB

Topics Discussion/Summary

General Update

- FTL Mobility Hub under construction, substantial completion expected October 2020.

Coral Springs

- Discussed the unlikelihood of the Neighborhood Transit Center requirements being triggered by the Downtown DRI.
- BCT ok with the idea of having a Bus Pullout Bay for northbound University Drive near Sample Road to lessen the distance for transfers to and from the westbound Sample Road near University Drive bus stop.

Pembroke Pines

- BCT is fine with the bus stop on the west side of NW 106th Avenue and Pines Boulevard moving to the east side of the intersection and combining stops; it is preferential to be not be in the right-turn lane.

Plantation

- BCT will be continuing to work with the City on their proposed shuttle routes, their proposal needs revisions with no more than 30% overlap with BCT routes and not just focus on commercial destinations, include more origins.

Sunrise

- BCT stated the transit stop at Metropica being required by the City does not meet their requirements and will not be utilized by their buses.
- BCT does not plan to expand their existing service footprint within the Sawgrass Mall property.
- If the initial discussion with Sawgrass Mills Mall on relocation of service is positive, then involve BCT with a subsequent meeting. Finding a layover site off the Mall property would be desirable.

Pembroke Pines Mobility Hub Public Elements Update Meeting Notes

Zoom Meeting

Monday, April 6th, 2020 2:00 p.m. to 2:30 p.m.

Attendees

City of Pembroke Pines

Michael Stamm, Jr., Director, Planning and Economic Development
Joseph Yaciuk, Planning Administrator, Planning and Economic Development
Cole Williams, Planner/Zoning Technician

Broward Metropolitan Planning Organization

Chadwick Blue
James Cromar
Renee L. Cross

Consultants

Vilma Croft, PE, CPM, Transportation Planning Manager, HNTB
Christina Fermin, AICP, LEED Green Associate, Strategic Planner, Marlin Engineering
Diane Gormely-Barnes, AICP, LEED^R AP, Principal Planner, HNTB
Christopher Gratz, AICP, Senior Planner, HNTB

Topics Discussion/Summary

- City concurs that the enhanced crosswalk improvements for NW 106th Avenue and NW 103rd Avenue at Pines Boulevard should include the east-west portions provided there is no conflict with pavers that the developer in City Center is installing.
- City requested verification that the green bike lane has been included at all conflict points along Pines Boulevard between NW 108th Avenue and Palm Avenue.
- City inquired if bus pullout bays could be provided at all four (4) stops on Pines Boulevard.
- City requested clarity on plans and cost estimates on what are FTA eligible items. MPO requested that the cost estimates be provided on the CSLIP Cost Estimate form which provides for clear differentiation of participating and non-participating costs.

- City inquired if a bus shelter on Washington Street and on NW 106th Avenue would be FTA eligible items.
 - Yes, up to the amount in which FTA will approve for shelters. Cost estimates have been prepared.
- City requested bike lanes or multiuse path on Washington Street.
- City requested that once the conceptual designs are finalized to contact FDOT if the improvements would be accepted prior to presenting them to the City Commission.

Action Items

- Marlin to revise conceptual plans and cost estimates to include east-west crosswalks at both NW 106th Avenue and NW 103rd Avenue at Pines Boulevard.
- Marlin to verify that the green bike lane has been included at all conflict points along Pines Boulevard between NW 108th Avenue and Palm Avenue.
- HNTB to contact Broward County Transit to see if bus pullout bays would be acceptable at all four (4) stops on Pines Boulevard. If yes, then contact FDOT, if FDOT amenable then the plans and cost estimates would be revised by Marlin.
- HNTB to verify if the City requested bike lanes or multiuse path on Washington Street are eligible expenses, if so addition funds for designs and cost estimates for Marlin to perform the work will be needed.
- BMPO to check with the City on April 16th for a City Commission meeting date to make a presentation to them.