

City of Key West Transit Development Plan

Draft Report

July 2019



KEY CONNECTIONS
A PLAN FOR TRANSIT



**Tindale
Oliver**



City of Key West Transit Development Plan Major Update 2020–2029

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Prepared for



Prepared by



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Section 1: Introduction

The Key West City Commission currently provides public transportation through the Key West Department of Transportation (KWDoT), also known as Key West Transit (KWT), which consists of local and regional fixed-route bus services in the city and connects it to the Lower Keys with service to Marathon.

KWT initiated this study in coordination with the City of Key West to update the City's Transit Development Plan (TDP). According to Florida Administrative Code (F.A.C.) Rule 14-73.001 – Public Transportation, “The TDP shall be the applicant’s planning, development and operational guidance document to be used in developing the Transportation Improvement Program and the Department’s Five Year Work Program.” The TDP serves as the strategic guide for public transportation in the city during the next 10 years and represents the transit agency’s vision for public transportation in its service area during this period.

Objectives of this Plan

The main objective of this study is to develop a TDP major update for KWT services in Key West, as currently required by State law. Upon completion, this TDP major update, referred to as *Key Connections: A Plan for Transit*, will result in a 10-year plan for transit and mobility needs, cost and revenue projections, and community transit goals, objectives, and policies.

TDP Requirements

As a recipient of state Public Transit Block Grant funds, the Florida Department of Transportation (FDOT) requires a major update of the KWT TDP every five years to ensure that the provision of public transportation is consistent with the mobility needs of local communities. The FDOT formally adopted the current requirements for TDPs on February 20, 2007. Major requirements of the regulation include the following:

- Major updates must be completed every 5 years, covering a 10-year planning horizon.
- A Public Involvement Plan (PIP) must be developed and approved by FDOT or consistent with the approved Metropolitan Planning Organization (MPO) public participation plan.
- FDOT, the Regional Workforce Development Board, and the MPO must be advised of all public meetings at which the TDP is presented and discussed, and these entities must be given the opportunity to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and 10-year implementation program.
- Estimation of the community’s demand for transit service (10-year annual projections) using the planning tools provided by FDOT or a demand estimation technique approved by FDOT.

The Florida Legislature added an additional requirement for the TDP in 2007 with the adoption of House Bill 985. This legislation amended Florida Statutes (F.S.) 341.071, requiring transit agencies to

“... specifically address potential enhancements to productivity and performance which would have the effect of increasing farebox recovery ratio.” FDOT subsequently issued guidance requiring the TDP and each annual update to include a 1–2-page summary report as an appendix to the major or annual TDP report on the farebox recovery ratio and strategies implemented and planned to improve it.

TDP Checklist

This TDP Update meets the requirements for a TDP major update in accordance with Rule Chapter 14-73, F.A.C. Table 1-1 is a list of TDP requirements from Rule 14-73.001 and indicates whether or not the item was accomplished as part of this KWT TDP, as well as its location within this 10-year plan.

Table 1-1: TDP Checklist

Public Involvement Process		TDP Section
√	Public Involvement Plan (PIP) drafted	4 & Appendix C
√	PIP approved by FDOT	4 & Appendix C
√	TDP includes description of Public Involvement Process	4
√	Provide notification to FDOT	4 & Appendix C
√	Provide notification to Regional Workforce Board	4 & Appendix C
Situation Appraisal		
√	Land use	5
√	State and local transportation plans	5
√	Other governmental actions and policies	5
√	Socioeconomic trends	5
√	Organizational issues	5
√	Technology	5
√	10-year annual projections of transit ridership using approved model TBEST	7
√	Assessment of land uses and urban design patterns that support/hinder transit service provision	5
√	Calculate farebox recovery	3 & Appendix B
Mission and Goals		
√	Provider's vision	6
√	Provider's mission	6
√	Provider's goals	6
√	Provider's objectives	6
Alternative Courses of Action		
√	Develop and evaluate alternative strategies and actions	8
√	Benefits and costs of each alternative	8
√	Financial alternatives examined	8, 9
Implementation Program		
√	Ten-year implementation program	9
√	Maps indicating areas to be served	8
√	Maps indicating types and levels of service	8
√	Monitoring program to track performance measures	9 & Appendix D
√	Ten-year financial plan listing operating and capital expenses	9
√	Capital acquisition or construction schedule	9
√	Anticipated revenues by source	9
Relationship to Other Plans		
√	Consistent with Florida Transportation Plan	5
√	Consistent with local government comprehensive plan	5
√	Consistent with regional transportation goals and objectives	5
Submission		
	Adopted by Key West City Commissioners	TBD
	Submitted to FDOT	TBD

Organization of Report

Section 2 summarizes the **Baseline Conditions** for the study area for Key West. This includes a physical description of the study area, a population profile, and demographic and socioeconomic profiles including transportation ownership, workforce, and journey-to-work characteristics. It also includes a review of economic conditions and tourism information. Land use trends, major transit trip generators and attractors, existing roadway conditions, major employers, and new developments also are explored. The information compiled and presented in this section provides the basis for more-detailed analysis in subsequent tasks of the TDP.

Section 3 summarizes the **Existing Services Evaluation** for the KWT system. The analysis documents fixed-route services using National Transit Database (NTD) information presenting a detailed examination of operating performance for fixed-route services in the Trend Analysis, and the Peer Review provides an opportunity for Key West to compare its system-wide effectiveness and efficiency indicators with peer transit systems to determine how well transit service in Key West is performing compared to similar transit agencies.

Section 4 summarizes the **Public Involvement** activities undertaken for the TDP. This includes a review of all outreach efforts completed and summaries of key themes and needs discussed as part of each outreach event. The preferences of the community with respect to current and future mobility needs, as served through transit, are reviewed and combined into a robust assessment of how KWT services might be improved during the planning period.

Section 5 presents the **Situation Appraisal**, which reviews the current overall planning and policy environment within the county to better understand transit needs. First, a review of local plans and documents is presented; assessment of these plans helps to identify and evaluate applicable federal and state policies, as well as local community goals and objectives, which relate to transit and mobility. Then, the appraisal examines the strengths and weaknesses of the system, as well as any existing threats to the provision of service in the county and key opportunities for addressing those threats and/or enhancing the transit-friendliness of the operating environment. Included in this section are detailed reviews of existing socioeconomic trends, travel behavior and trends, public involvement, land use, organizational attributes, funding, and technology.

Section 6 identifies **Goals and Objectives** to serve as a policy guide for implementation of the TDP. A review and update of the goals and objectives outlined in the previous TDP major update was completed to match the current goals of the local community with respect to transportation and land use.

Section 7 presents the results of a **Transit Demand Assessment**, summarizing the various demand and mobility needs assessments conducted as part of the TDP. The market assessment includes an examination of potential service gaps and latent demand using the GIS-based Transit Orientation

Index (TOI) and Density Threshold Assessment (DTA) analyses. Assessment techniques for forecasting ridership demand using Transit Boardings Estimation and Simulation Tool are summarized.

Section 8 discusses the development of **Transit Needs & Priorities**, followed by an **Alternatives Evaluation** process used to assess the identified alternatives, or potential improvements, for the TDP. The identified improvements for KWT services represent the transit needs for the next 10 years and were developed without consideration of funding constraints. The identified service improvements were prioritized using an evaluation process developed to rank and prioritize the transit service alternatives. The resulting ranking of alternatives is used to develop the 10-year implementation plan presented in Section 9.

Section 9 summarizes the **10-Year Transit Plan** developed for KWT's bus transit service. The Plan shows the recommended service and capital/technology/policy improvements, as well as the unfunded needs. It also includes a discussion of the revenue assumptions and capital and operating costs used. Thereafter, the 10-year phased implementation plan for the TDP is summarized. A set of service, capital/technology, and policy improvements are programmed for the 10-years period and the improvements that may not be funded now but should be considered if additional funding becomes available, are also listed.

Section 10 summarizes the techniques and approaches to help make **Plan Implementation and Coordination** for *Key Connections* after TDP adoption. This section identifies implementation strategies and ways to make use of the various relationships tools and outreach materials from the TDP process to continue and build support for the implementation of *Key Connections*.

Section 2: Baseline Conditions

This section reviews the study area in the context of *Key Connections* and documents existing baseline data to gain an understanding of the environment in which the transit system is operating. This information provides the foundation upon which to review trends and forecasting and helps identify areas of opportunity for development of future transit services. The following components were reviewed for consideration:



Physical Description of Study Area


Key West is located in the southern portion of Monroe County and is the southernmost city in the continental United States. It has a land area of 5.59 square miles, and its southern tip is located approximately 90 miles from Cuba. Stock Island is located immediately to the east of Key West; the portion of the island that is north of US-1 is considered part of Key West (excluding Raccoon Key), and the portion south of US-1 is an eponymous Census Designated Place (CDP) in Monroe County. In addition to Key West, the Florida Keys are divided into three sections: Upper Keys, Middle Keys, and Lower Keys. Map 2-1 provides a physical depiction of the boundaries of Key West, the study area for this TDP.

Map 2-1: Study Area



Legend

- Key West Transit Bus Routes
- Study Area



Source: Key West

Tindale Oliver

Population Profile

Population Trends

Population information from the 2000 and the 2010 Census, supplemented with information from the 2016 American Community Survey (ACS), were used to develop a population profile for the study area. As shown in Table 2-1, the population of Key West increased nearly 6.7 percent from 2010 to 2016, from 24,413 to 26,039. From 2010 to 2016, the labor force also continued to grow, but at a slower rate, approximately 3.3 percent.

Table 2-1: Population Characteristics, Key West, 2000–2016

Characteristic	2000	2010	2016	% Change 2000–2010	% Change 2010–2016
Population	25,478	24,413	26,039	-4.2	6.7
Households	11,016	10,929	9,653	-0.8	-11.7
Number of workers	18,795	18,011	18,611	-4.2	3.3
Land area (sq. mi.)	5.9	5.6	5.6 ¹	-5.3	0.0
Person per household	2.3	2.2	2.7	-3.4	20.8
Workers per household	1.7	1.6	1.9	-3.4	17.0
Persons per square mile of land area	4,318	4,367	4,658	1.1	6.7
Workers per square mile of land area	3,185	3,222	3,329	1.1	3.3

¹Uses 2010 Census.

Sources: 2000 and 2010 Census, ACS 5-Year Estimates 2012–2016

A review of population trends also was conducted for the entire Key West Census County Division (CCD). The trend analysis included Key West, Big Coppitt Key CDP, Stock Island CDP, and the remainder of the CCD. Table 2-2 provides population trends for the CCD for 2000, 2010, and 2016.

Table 2-2: Population and Trends, Key West, 2000–2016

Geography	2000	2010	2016	2010–2016		2000–2016	
				% Change	Recent Trend	% Change	Full Trend
City of Key West	25,478	24,413	26,039	6.7	▲	2.2	▲
Big Coppitt Key CDP	2,959	2,458	3,062	24.6	▲	3.5	▲
Stock Island CDP	4,410	3,919	4,214	7.5	▲	-4.4	▼
Remainder of CCD	1,247	1,379	1,557	12.9	▲	24.9	▲

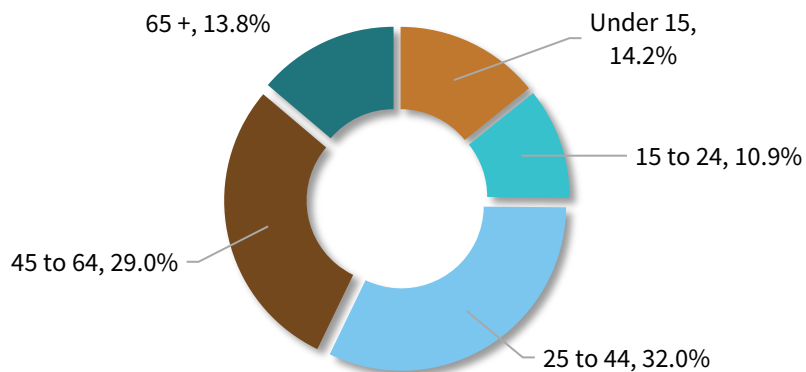
Sources: 2000 and 2010 Census, ACS 5-Year Estimates 2012–2016

Key West continues to have the largest population; however it has experienced less population growth proportionally in recent years. Big Coppitt Key experienced an approximately 25 percent population increase during the 2010–2016 period and is followed by the remainder of the CCD and Stock Island in terms of recent population growth rates.

Age Distribution

Age is an important factor affecting transit demand, as data show some age segments have more tendency to use transit than others. As shown in Figure 2-1, approximately 28 percent of Key West's population is below age 15 or above age 65, two groups that have a higher propensity for using public transportation. Map 2-2 shows the geographical distribution of older adults.

Figure 2-1: Age Distribution, Key West, 2016



Note: % may not add up to 100 due to rounding
Source: ACS 5-Year Estimates 2012-2016

Population and Employment Densities

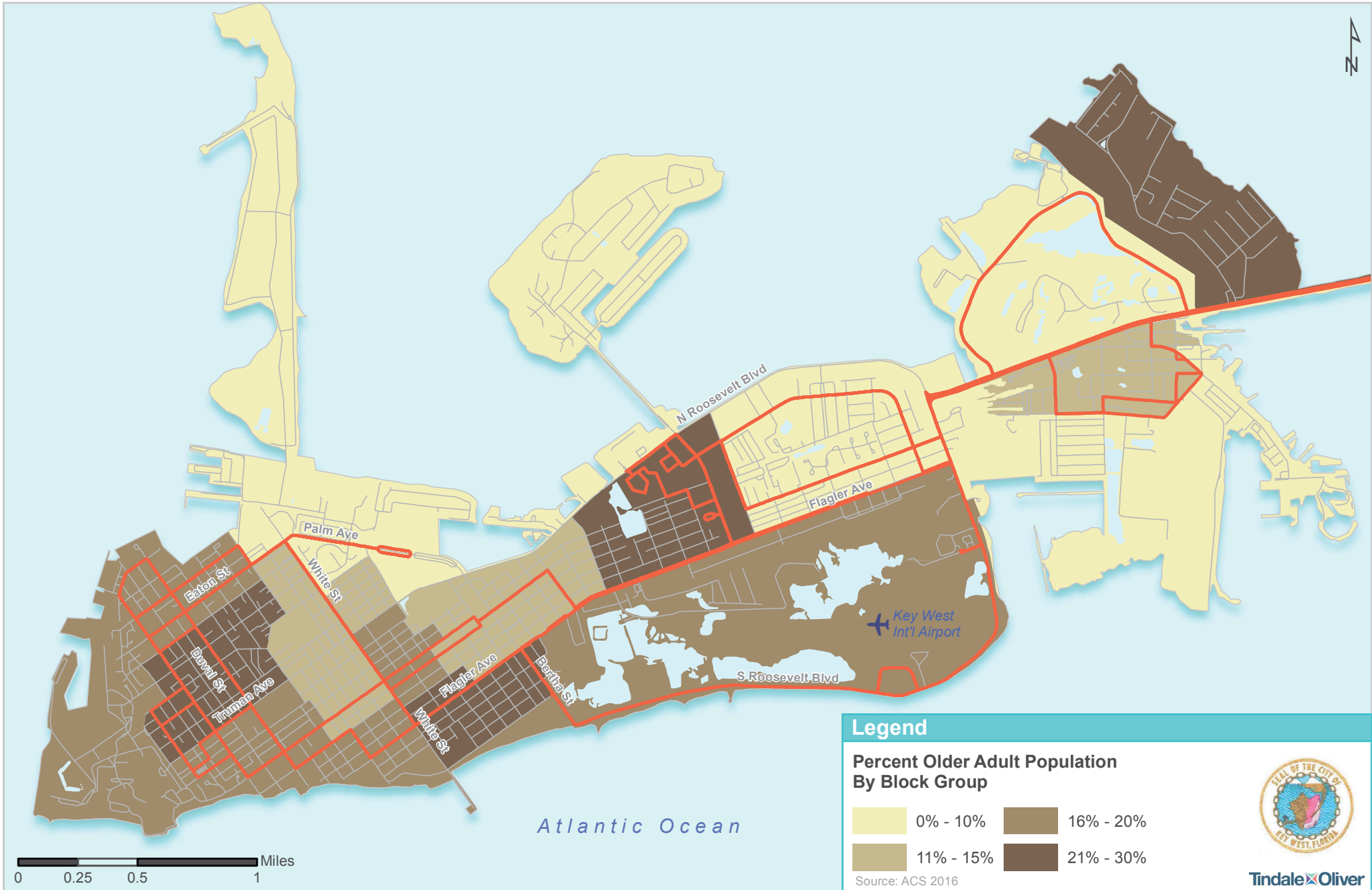
Population

Map 2-3 shows the population densities for Key West in 2016, developed based on the ACS Five-Year Estimates by block group. Currently, the highest population density is concentrated in the northwestern part of the city, just north of the airport. Other high population density areas include the Downtown business district and the central part of the Key.

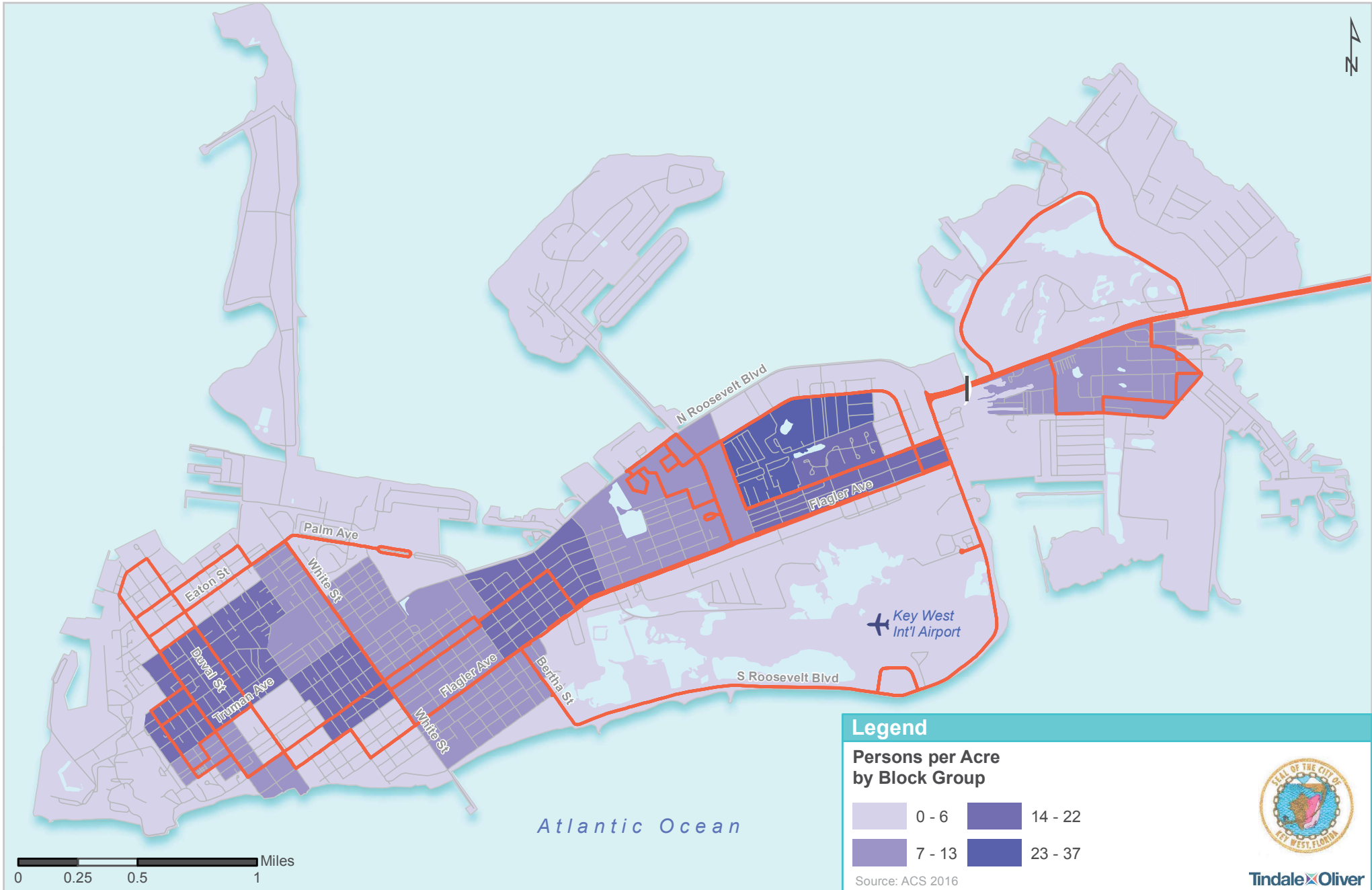
Employment

Map 2-4 shows the employment densities for Key West in 2016, also based on ACS Five-Year Estimates by block group. As expected, the majority of the employed are concentrated in the Downtown business district. Other dense employment areas include the southern corridor of the Key, areas where many attractions and retail destinations are located.

Map 2-2: Age 65 & Older



Map 2-3: 2016 Population Density



Map 2-4: 2016 Employment Density

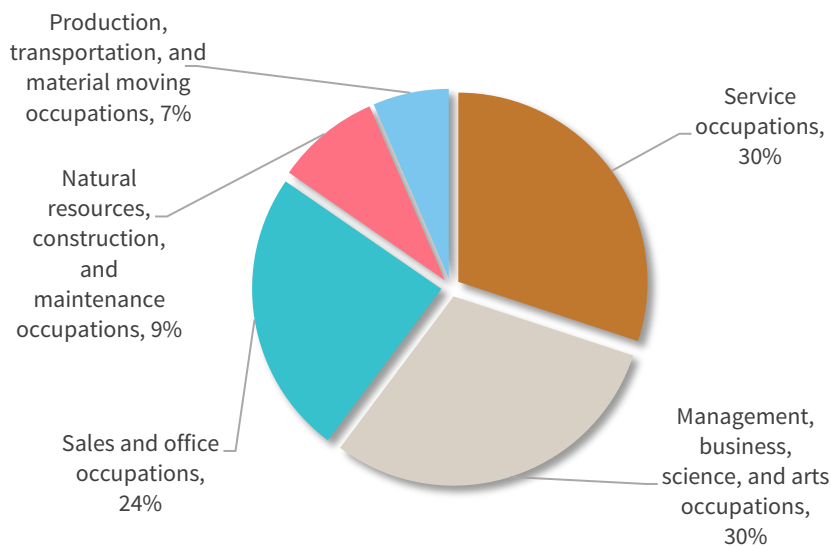


Socio-Demographic Characteristics and Trends

Labor Force

A review of the type of employment in Key West was conducted using ACS data, with the Key West economy broken down by industry sector, as shown in Figure 2-2. Based on these data for 2016, the two largest sectors are Service occupations (30%), as expected, due to the high number of visitors to the city, followed by Management, business, science, and arts occupations (30%), making up over half of the city’s employment. These sectors coincide with supporting Key West’s thriving tourist economy year round. The economy is rounded out by sales and office occupations, natural resources, construction, and maintenance occupations, and production, transportation, and material moving occupations.

Figure 2-2: Employment by Occupation, Key West, 2016

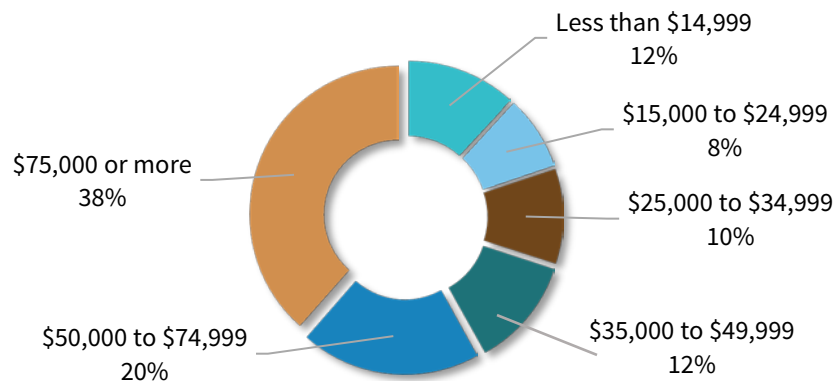


Note: % may not add up to 100 due to rounding
Source: ACS 5-Year Estimates 2012–2016

Income Distribution

Earned annual income also can be a key indicator for determining public transit needs of an area, as low-income populations tend to use transit more than the higher-income earners. According to 2016 ACS data, nearly 20 percent of Key West’s 9,653 households had an annual income of less than \$25,000. The U.S. Census Bureau defines the poverty threshold as under \$25,000 for a family of four with two children. Key West has seen a considerable increase in the amount of households in poverty since 2000, when only 5.8 percent received assistance. In addition, a significant portion of the population earned higher incomes, over \$75,000. However, although the higher-income segment of population typically is less inclined to use transit, conditions in Key West such as parking issues and traffic congestion may make transit a viable alternative. Figure 2-3 shows the annual household income range for current residents of Key West.

Figure 2-3: Income Distribution, Key West, 2016



Note: % may not add up to 100 due to rounding
Source: ACS 5-Year Estimates 2012–2016

Minority Populations

A relatively small number of minority populations live in Key West; however, the city is becoming more ethnically diverse. As shown in Table 2-3, from 2000 to 2016, Key West had gradual change in gender distribution and a notable increase in the number of residents of Hispanic or Latino origin. The percent of Black or African American residents rose 2.3, whereas the percent of Asian, American Indian, and Alaska Native residents stayed the same between 2000 and 2016. The percent of Native Hawaiian and Other Pacific Islanders decreased to 0, and those identifying as Other decreased to 2.9.

Table 2-3: Demographic Characteristics, Key West, 2000–2016

Characteristic	2000	2010	2016	Trend
Gender				
Male	55%	53.2%	51.9%	▼
Female	45%	46.8%	48.1%	▲
Race/Ethnicity				
White	84.9%	82.2%	84.4%	▼
Black or African American	9.3%	13.5%	11.6%	▲
American Indian and Alaska Native	0.4%	0.1%	0.4%	—
Asian	1.3%	1.6%	1.3%	—
Native Hawaiian and Other Pacific Islander	0.1%	0.2%	0%	▼
Other	4.1%	4.2%	3.9%	▼
Hispanic Origin				
Not of Hispanic/Latino origin	83.5%	81.3%	78.4%	▼
Hispanic/Latino origin	16.5%	18.7%	21.6%	▲

Note: % may not add up to 100 due to rounding

Source: 2000 Census, 2010 Census, ACS 5-Year Estimates 2012–2016

Limited English Proficiency (LEP)

Although the number of residents of Hispanic or Latino origin is increasing, so is the number of people who speak Spanish in some capacity. Nearly 66 percent of the Key West population speaks Spanish and English to a varying degree, and 34 percent speak only English, as shown in Figure 2-4. Only 4 percent of the population does not speak English at all, and 29 percent speak Spanish and English “very well.” Approximately 2 percent speak Polish, and approximately 1 percent speak French. Map 2-5 shows the distribution of LEP households are in Key West.

Foreign-Born Populations

In addition to typical rider markets, foreign-born populations, especially from areas with heavy transit use, may indicate support for transit. Key West is home to a diverse group of people, with approximately 20.3 percent of residents born outside the United States, 7 percent higher than the national average. Almost one quarter, 22 percent, are from European countries, which is more than double the rate in Florida (10%), 65 percent are from Latin American countries, and 11 percent are from Asian countries, a rate lower than the state average.

Map 2-5: Limited English Proficiency

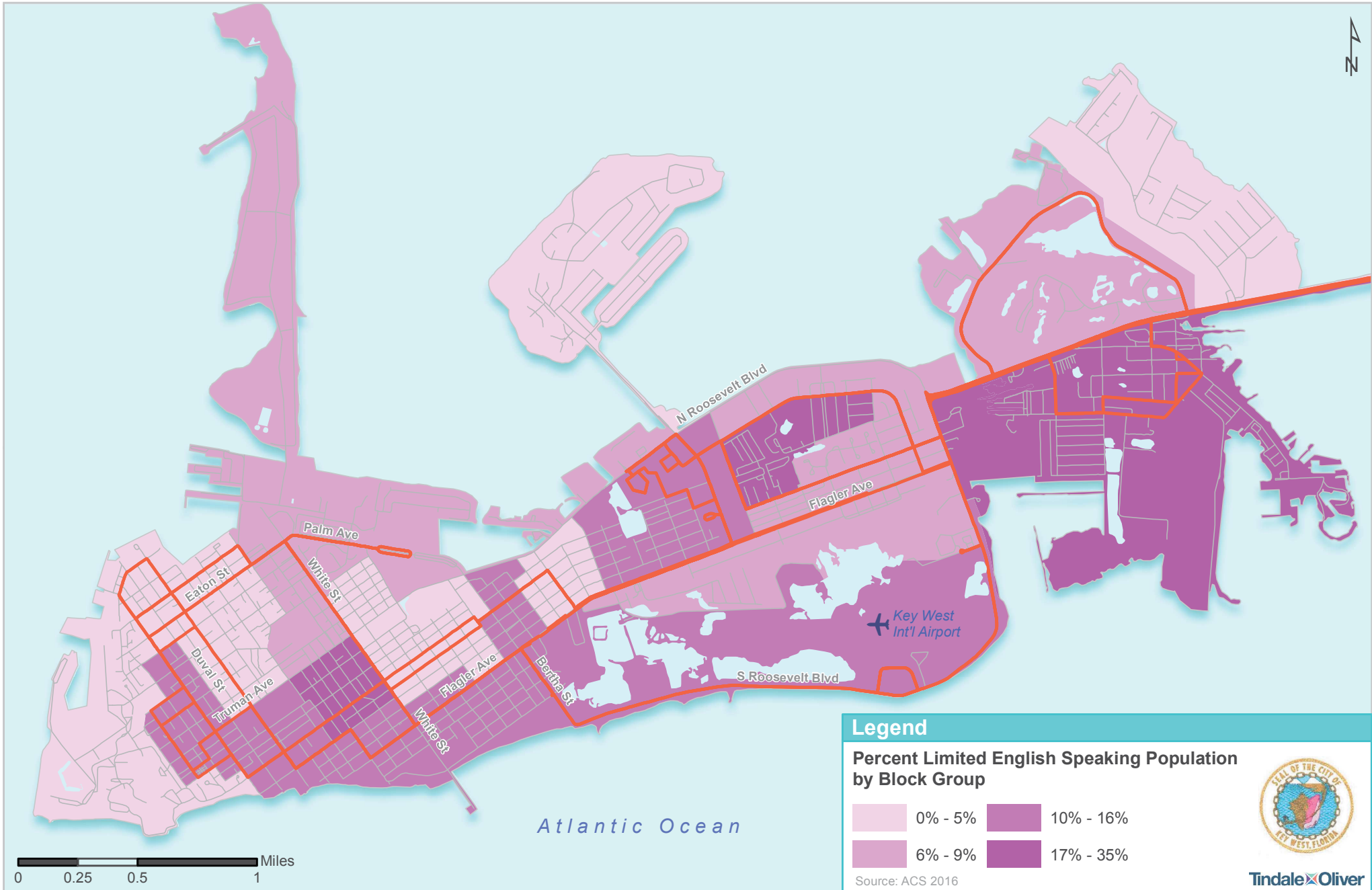
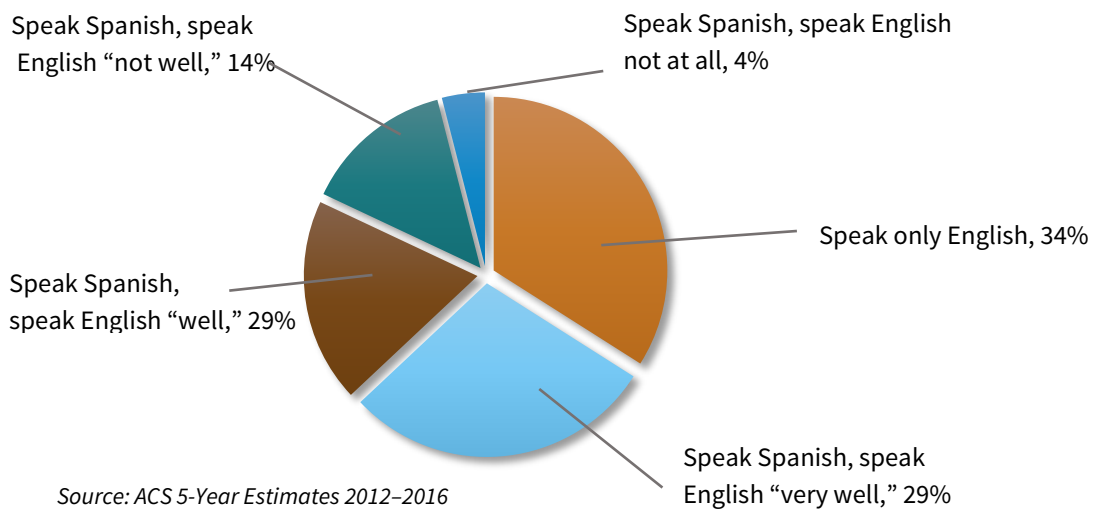


Figure 2-4: Languages Spoken, Key West, 2016



TD Population Trends

Monroe County Transit (MCT) provides public transportation to the transportation disadvantaged (TD) population in the Florida Keys (from mile marker 0 in Key West through mile marker 113 in Key Largo), including persons who are eligible for Commission for the Transportation Disadvantaged (CTD) sponsored trips, namely persons with disabilities, older adults, low-income persons, children who are high-risk or at-risk, and persons without their own mode of transportation.

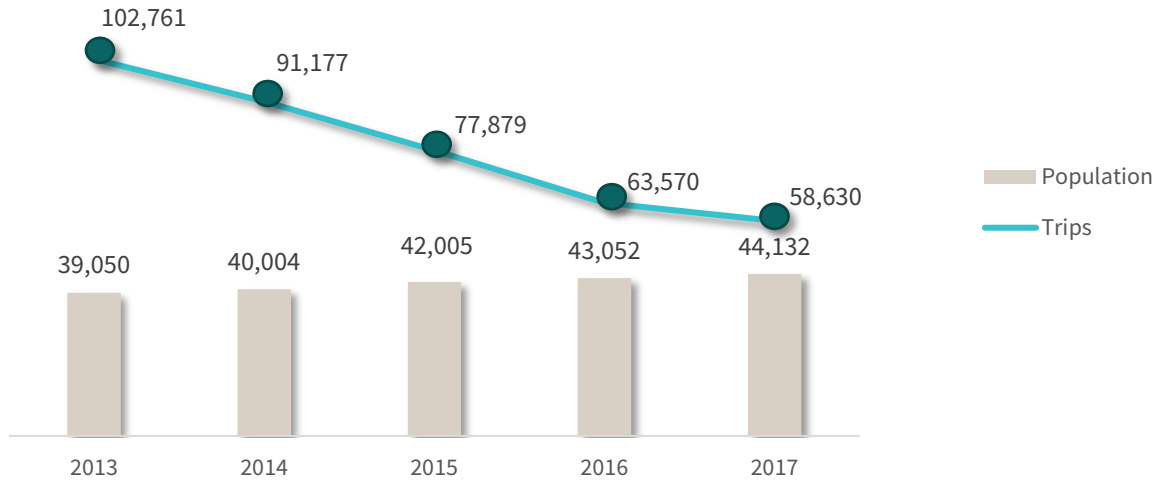
FDOT’s CTD 2017 Annual Operating and Performance Report explains the trends in TD population and how the population is served throughout the county. Table 2-4 shows that the Monroe County TD population rose by more than 10 percent, from 39,050 in 2013 to 44,132 in 2017. As of the end of 2017, roughly half of the number of TD rides served in 2013 were currently served from Monroe County’s TD services. Figure 2-5 shows the number of TD passengers served and the total TD population during the five-year period during 2013–2017. The noticeable decline in trips, even with the increase in TD population, may be partially related to the reclassification of Medicaid to other providers and the reduction of funding made available to the CTC.

Table 2-4: TD Population and Trips Trend, 2013–2017

Year	2013	2014	2015	2016	2017	2013–2017 % Change
Potential TD Population	39,050	40,004	42,005	43,052	44,132	13%
TD Trips	102,761	91,177	77,879	63,570	58,630	43%

Source: FDOT CTD 2017 Annual Operating and Performance Report

Figure 2-5: TD Population and Trips Trend, 2013–2017

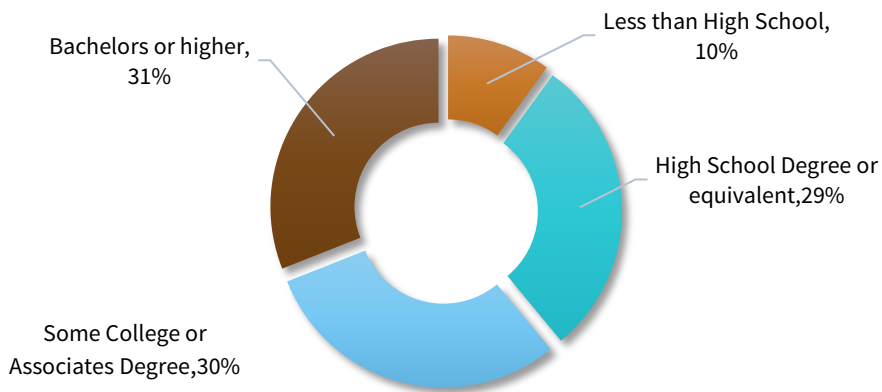


Source: FDOT CTD 2017 Annual Operating and Performance Report

Education Attainment

Education level is an important factor in an area’s population make-up, as the level of education has been shown to correlate with income, which affects the population’s use of public transit. Key West’s education attainment has rapidly increased since 2010, with the number of people holding a bachelor’s degree or higher increasing by 2.5 times, from 12 percent in 2010 to 31 percent in 2016. Although the number of advanced degrees has rapidly increased, the number of people who have completed high school degree or the equivalent has fallen 6 percent, from 35 percent in 2010 to 29 percent in 2016. Figure 2-6 shows the level of education attainment that Key West has achieved.

Figure 2-6: Educational Attainment, Key West, 2016



Source: ACS 5-Year Estimates 2012–2016

Poverty Levels

A minor but consequential increase in the proportion of people living below the poverty level and receiving supplemental income assistance indicates growth in transit-dependent riders. The proportion of families living below the poverty level in Key West since 2000 grew by approximately 16 percent as of 2016; moreover, households receiving public assistance income grew by approximately 87 percent over the same period. However, a decrease of approximately 21 percent was observed among households receiving Supplemental Security Income, which provides stipends to low-income individuals and persons with disabilities who are age 65 and older, as shown in Table 2-5.

Table 2-5: Poverty, Key West, 2000–2016

Threshold	2000		2010		2016		Trend
	Key West	Florida	Key West	Florida	Key West	Florida	Key West
Families below poverty level (last 12 mos)	5.8%	9.0%	7.0%	9.9%	6.7%	11.7%	▲
Households with Supplemental Security Income	3.3%	4.2%	2.2%	3.6%	2.6%	5.0%	▼
Households with public assistance income (cash)	1.5%	2.8%	1.7%	1.5%	2.8%	2.2%	▲
Households with Food Stamp/SNAP benefits	n/a	n/a	6.6%	8.5%	7.1%	14.8%	▲

Sources: 2000 and 2010 Census, ACS 5-Year Estimates 2012–2016

Low-Income Households

Income level is an important indicator for planning transportation needs in a city. Those who tend to earn less income or are below the poverty level may tend to rely on public transportation in greater proportions. According to the ACS, approximately 6.7 percent of Key West residents live below the poverty level, making public transportation a critical need for many Key West residents. Map 2-6 shows the distribution of households that are low-income.

Low-Income Employees

Based on LEHD data from the U.S. Census, approximately 2,800 residents earn less than \$1,250 per month or less than \$15,000 per year, a segment of low-income population that has higher tendency to use transit as a mode of travel in Key West. Table 2-6 provides several descriptive statistics about this population cohort, and Figure 2-7 is a geographic representation of the concentration of the related employer locations within the city. More than 25 percent of this employee group are above age 54; nearly 14 percent are of Hispanic origin, and 10 percent are Black or African American, segments of the population with a higher propensity to use transit.

Map 2-6: Households Below Poverty

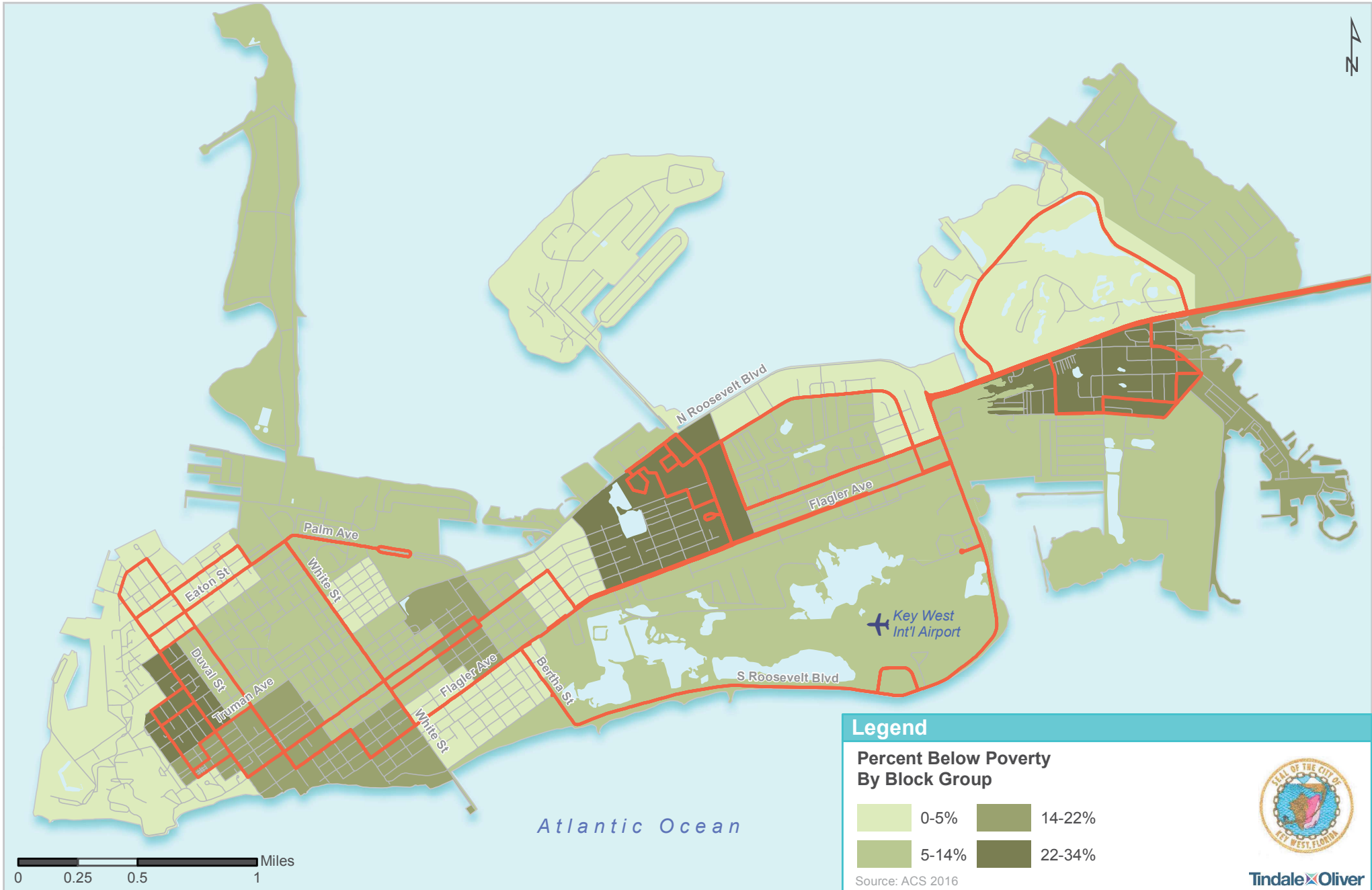


Table 2-6: Profile of Employees Earning \$15,000 or Less Annually, Key West, 2015

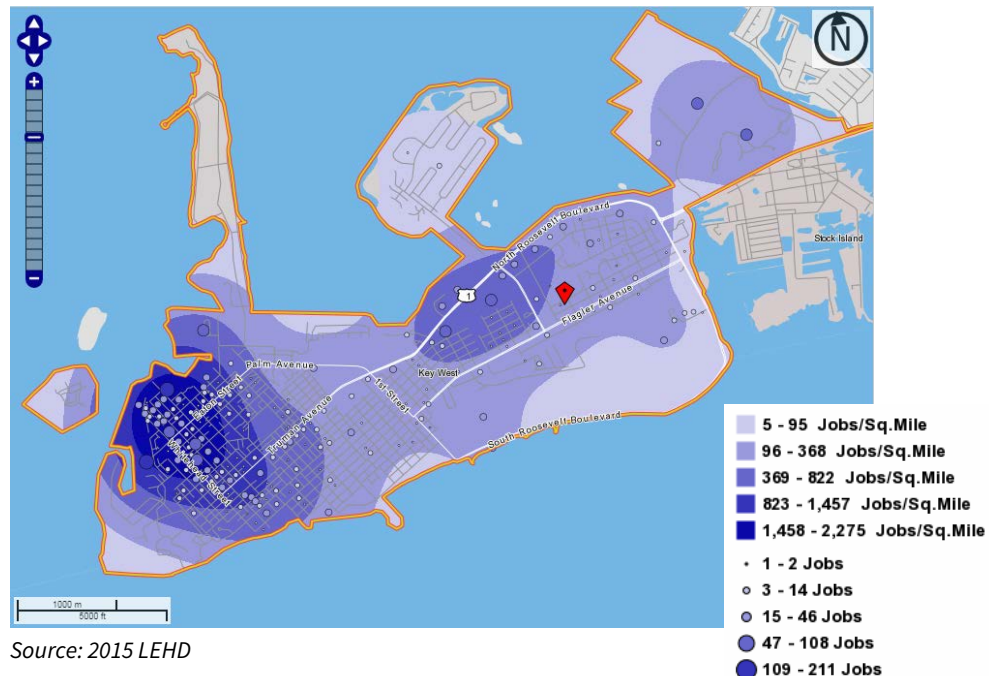
Characteristic	Total	Percent
Total Employees Earning Less than \$15,000 Annually		
Employees	2,802	16.5%*
Employee Age		
Age 29 or younger	932	33.3%
Ages 30 to 54	1,155	41.2%
Age 55 or older	715	25.5%
Top Industries		
Accommodation and Food Services	1,130	40.3%
Retail Trade	605	21.6%
Educational Services	180	6.4%
Administration & Support, Waste Management and Remediation	155	5.5%
Health Care and Social Assistance	123	4.4%
Employee Race		
White	2,414	86.2%
Black or African American	268	9.6%
American Indian or Alaska Native	12	0.4%
Asian	54	1.9%
Native Hawaiian or Other Pacific Islander	2	0.1%
Other	52	1.9%
Employee Hispanic Heritage		
Not Hispanic or Latino	2,417	86.3%
Hispanic or Latino	385	13.7%

* Total number of employees taken from US Census

Note: % may not add up to 100 due to rounding

Source: 2015 LEHD

Figure 2-7: Locations of Jobs Paying Less than \$15,000 Annually, Key West



Source: 2015 LEHD

Travel Behavior and Commuting Trends

Data available from the ACS also were used to assess travel behaviors and patterns in Key West for people who commute for work. This analysis provided geographic commuting patterns of jobs by the employment. Table 2-7 shows that public transit's mode share, defined as the percentage of travelers using public transportation, increased from 2000 to 2016, as did driving alone and other modes (i.e., bicycling, taxi, motorcycle). Carpooling decreased from nearly 11 percent to approximately 6 percent, and walking and working from home decreased marginally. Travel times increased marginally across the board, with approximately three-quarters of people traveling for more than 10 minutes in 2016 than 2000.

Table 2-7: Journey-to-Work Characteristics, Key West, 2000–2016

Characteristic	2000	2010	2016	Trend
Place of Work				
Worked inside county	n/a	90.9%	85.2%	▼
Worked outside county	n/a	9.1%	14.8%	▲
Mode to Work				
Drive alone	55.8%	54.2%	57.9%	▲
Carpool	10.9%	7.1%	6.1%	▼
Public transit	1.2%	1.8%	2.6%	▲
Walk	8.0%	7.4%	7.0%	▼
Work at home	5.7%	7.7%	5.2%	▼
Other	18.4%	21.8%	21.2%	▲
Travel Time to Work				
<10 minutes	31.1%	39.2%	26.4%	▼
10–19 minutes	53.7%	48.3%	55.4%	▲
20–29 minutes	9.3%	7.9%	11.4%	▲
30–44 minutes	3.8%	3.0%	4.2%	▲
45+ minutes	2.2%	1.5%	2.7%	▲
Departure Time to Work				
6:00–9:00 AM	63.8%	56.8%	60.5%	▼
Other times	36.2%	43.2%	39.5%	▲
Private Vehicle Occupancy				
2-person carpool	9.2%	5.4%	5.0%	▼
3-person carpool	1.0%	1.4%	0.8%	▼
4+-person carpool	0.4%	0.3%	0.2%	▼

Sources: 2000 & 2010 Census, ACS 5-Year Estimates 2012–2016

Automobile Ownership

The number of households without access to a vehicle may also indicate the attractiveness of transit, as automobile ownership heavily influences the need to rely on public transit. Household vehicle ownership showed noteworthy changes during the 2010–2016 period; households zero vehicles fell

from 11.4 percent in 2010 to 7.1 percent in 2016, and households with two vehicles rose substantially, to 40.9 percent, as summarized in Table 2-8. Map 2-7 shows the areas of concentrations of zero-vehicle households in Key West.

Table 2-8: Vehicle Availability, Key West, 2010 and 2016

Characteristic	2010	2016	Trend
None	11.4%	7.1%	▼
One	38.4%	36.9%	▼
Two	33.5%	40.9%	▲
Three or more	16.7%	15.1%	▼

Sources: 2010 Census, ACS 5-Year Estimates 2012–2016

Commuting Inflows/Outflows

To assess local trends and patterns of commuters, an analysis using 2015 Longitudinal Employer-Household Dynamics (LEHD) and Longitudinal Origin-Destination Employment Statistics (LODES) data (“OntheMap,” U.S. Census Bureau) was completed. This analysis provided geographic commuting patterns of jobs by employment and residential locations based on composite information of local unemployment insurance earnings data, Quarterly Census of Employment and Wages data of where workers live and work, firm characteristics such as industry, and survey data.

Table 2-9 and Figure 2-8 show the aggregate of local commuting patterns by commuter outflow and inflow for Key West using 2015 LODES data. Approximately 67 percent of employed Key West residents work in the city, and approximately 33 percent commute outside Key West. Commuters leaving the city commute to Stock Island (7.0%), Big Coppitt Key (4.2%), Marathon (3.2%), and Big Pine Key (2.7%), as shown in Table 2-9. Some commuters travel as far as Homestead or Miami to work.

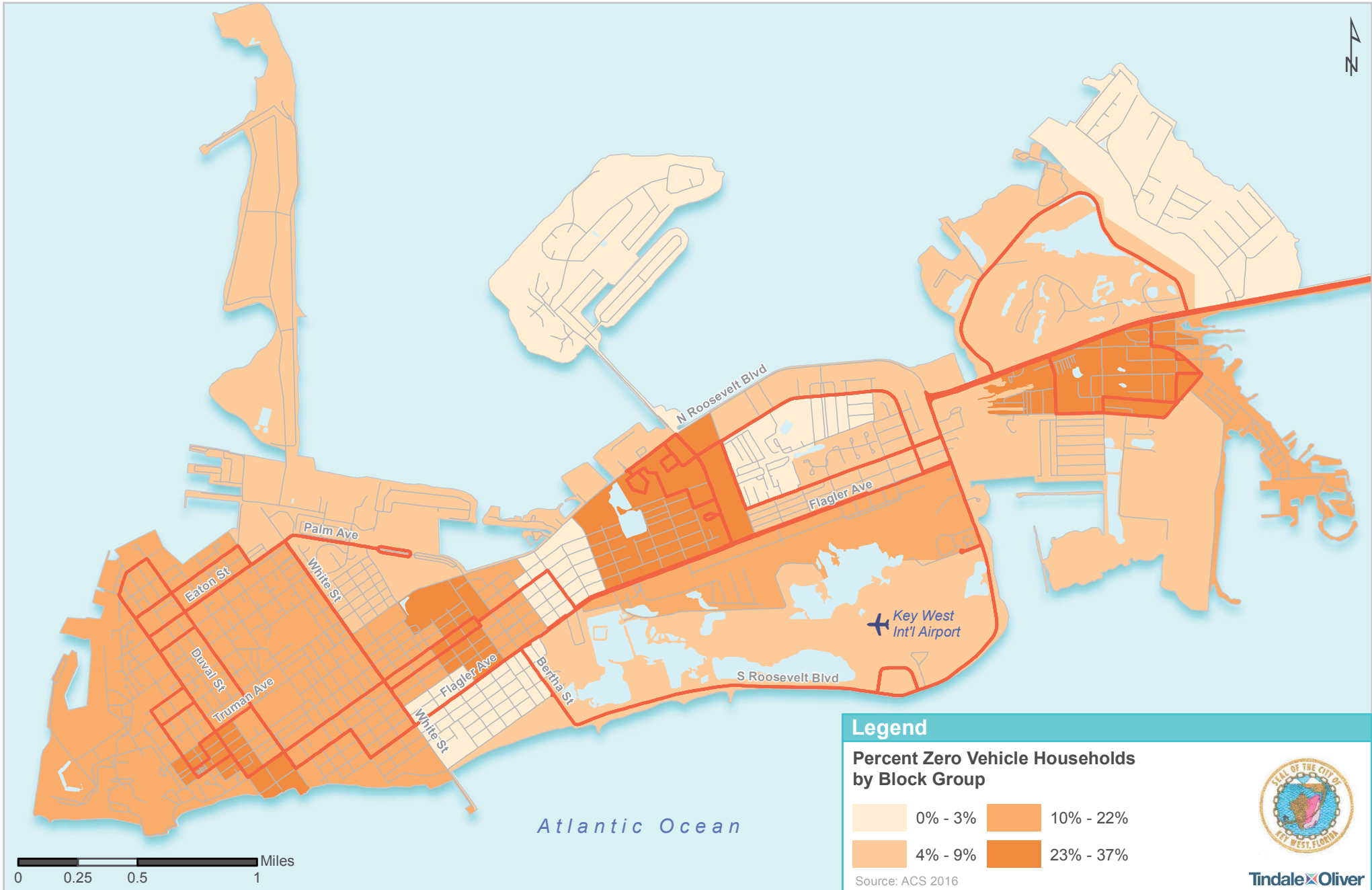
Table 2-9: Commuter Outflows, Key West, 2015

Geography	Number of Workers	Percent
Stock Island CDP	1,134	7.0%
Big Coppitt Key CDP	684	4.2%
Marathon	527	3.2%
Big Pine Key CDP	479	3.0%
Key Largo CDP	436	2.7%
Cudjoe Key CDP	291	1.8%
Islamorada, Village of Islands	201	1.2%
Homestead	105	0.6%
Miami	92	0.6%
All Other Locations	3,908	24.1%

Note: Of Key West’s 8,368 workers, 66.7% work in the city.

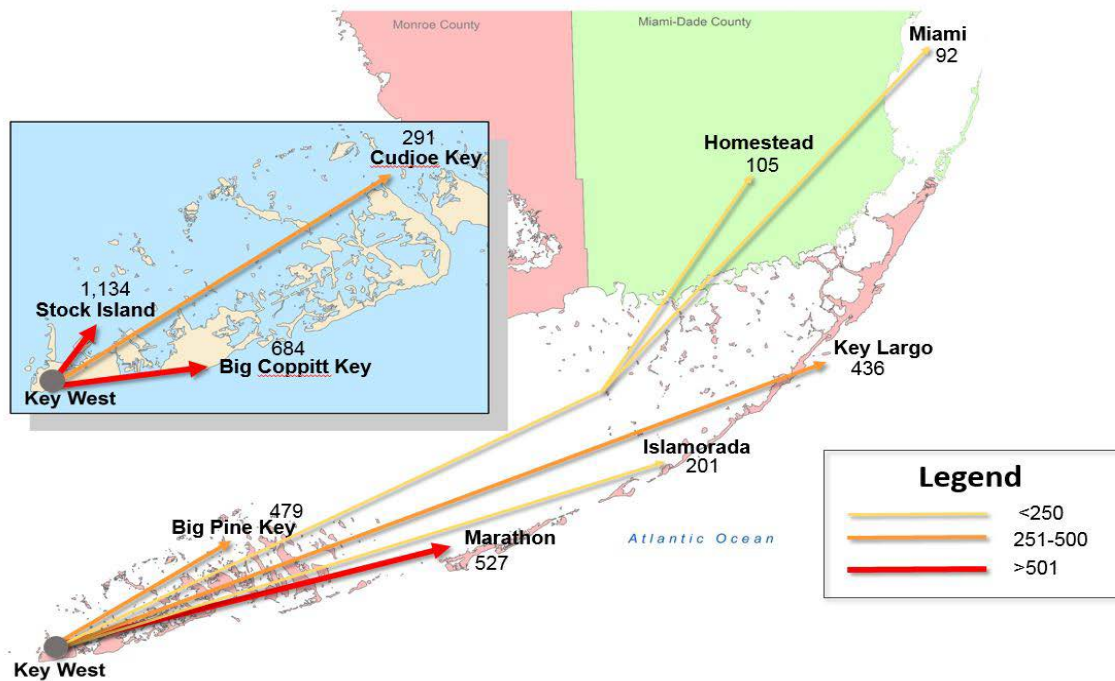
Source: 2015 LEHD

Map 2-7: Zero Vehicle Households



Stock Island had the highest percent of commuter inflow into Key West in 2015, at 2.7 percent, followed by Miami at 1.6 percent and Marathon at 1.3 percent, as shown in Table 2-10. Some commuters traveled from as far as Boca Raton and Hialeah for work-related purposes.

Figure 2-8: Key West Commuter Outflows



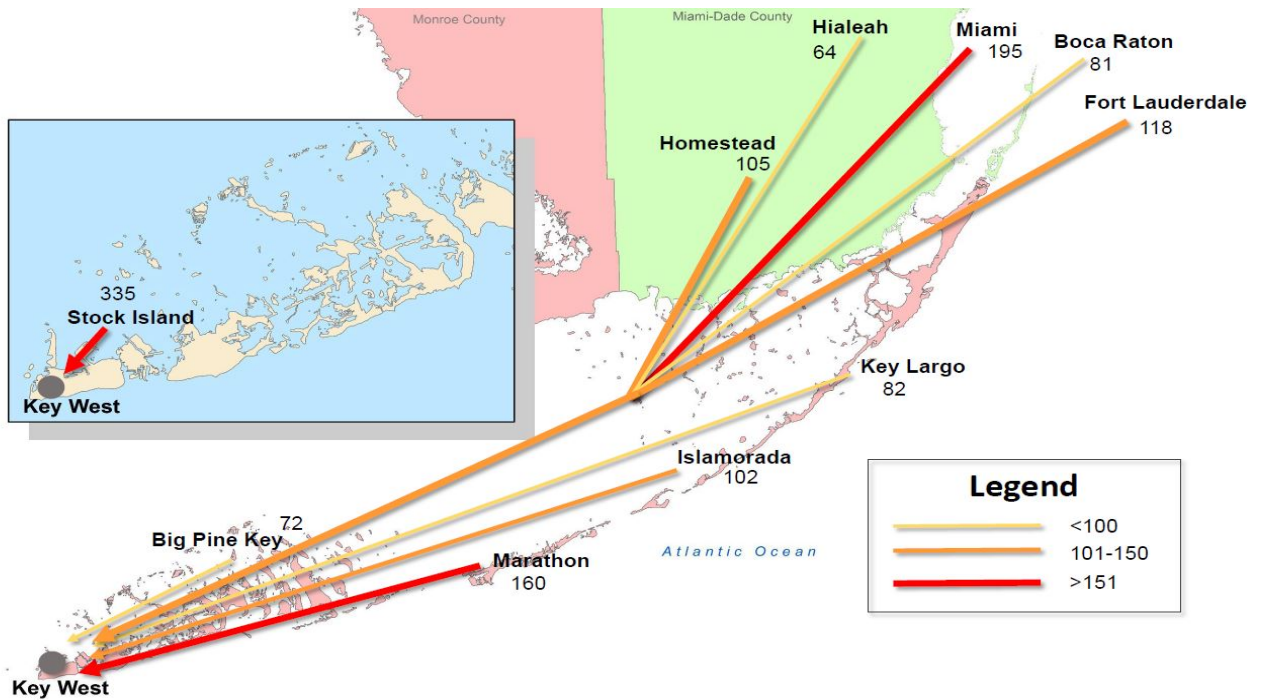
Note: Of Key West's 8,368 workers, 66.7% work in the city.

Source: 2015 LEHD

Table 2-10: Commuter Inflows, Key West, 2015

Geography	Number of Workers	Percent
Stock Island CDP	335	2.7%
Miami	195	1.6%
Marathon	160	1.3%
Fort Lauderdale	118	0.9%
Islamorada, Village of Islands	102	0.8%
Key Largo CDP	82	0.7%
Boca Raton	81	0.6%
Big Pine Key CDP	72	0.6%
Hialeah	64	0.5%
All Other Locations	2,968	23.7%

Figure 2-9: Key West Commuter Inflows



Note: Of Key West's 8,368 workers, 66.7% work in the city.
Source: 2015 LEHD

Major Activity Centers and Trip Generators

Major trip attractors are places with a great need for residents to travel to them either for employment, recreation, or shopping and include medical facilities, recreational areas, educational establishments, major shopping centers, and government or business offices. Although Key West is not home to major educational establishments or regional malls, it attracts millions of people from all over the world with its signature trip generators of beaches, cultural celebrations, leisure resorts, retail, and outdoor attractions.

In addition to many world-renowned beaches and luxurious resorts, Key West also is home to the third largest coral barrier reef system in the world and is the only living reef system in the continental U.S. This attraction is more than 5,000 years old and is considered a historical attraction.

The major hub of activity in Key West is its Downtown District, which includes Mallory Square and the Duval Street corridor. Mallory Square has been a favorite community meeting place since it was established in the 1820s as a location from which to watch sunsets and shop. The Downtown District, also known as Old Town, is the historic district of Key West with more than 2,400 historic buildings and most tourist attractions on the west side of the island. Duval Street, while only about one mile long, contains a diverse set of popular restaurants, shops, and bars; it also has tour services, museums, and an aquarium.

Another key set of trip generators in an area is its major employers. The top 10 major employers in Key West are listed in Table 2-11. The largest employer, the US Armed Services, has a naval air station and a military airport stationed in Key West, four miles east of the central business district. This site supports the U.S. Department of Defense, the U.S. Department of Homeland Security, the Air National Guard, the Army National Guard, and other federal agencies.

Table 2-11: Major Employers, Key West

Rank	Employer Name	Employees
1	US Armed Services	2,190
2	Monroe County Schools	1,183
3	Ocean Reef Club	1,123
4	Monroe County Government	570
5	Publix	540
6	Monroe County Sheriff's Office	539
7	City of Key West	501
8	Lower Keys Medical Center	437
9	Casa Marina/Reach Resort	356
10	Spottswood Properties	355

Source: Key West Chamber of Commerce

Major Developments & Activity

One of the most notable major developments in Key West is the new Truman Waterfront Park, shown in Figure 2-10, which opened recently and increased the amount of public space in the city. Once fully completed, this space will include a community recreation center of more than 24,000 square feet that will include a gym, industrial kitchen, and public classroom space and space for concerts and community interactive events. The City plan retrofits other buildings on the property and add a playground, interactive water feature, sports field, amphitheater, public art, bicycle parking, pedestrian paths, and open space for the public to enjoy. Figure 2-11 and Figure 2-12 show the amphitheater and the bus stop that connects passengers to the Duval Loop.

Tourist and Visitor Levels

Key West is a world-famous travel destination, with tourists hailing from all over the globe to experience what the city has to offer. It has a thriving tourist industry that welcomes millions of visitors every year and, as a result, has a gross economic output of billions of dollars every year. Key West's tourism has experienced increases of more than two million tourists per year since 2009.

As shown in Table 2-12 and Figure 2-13, the number of international visitors to Key West is more than one million per year, with the highest percentage from Canada, Germany, the United Kingdom, France, and China, which make up 65 percent of tourists; 68 other countries make up the remaining 35 percent of annual visitors, as shown in Figure 2-12.

Figure 2-12: Truman Waterfront Park Concept Plan



Figure 2-11: Truman Waterfront Park Amphitheater

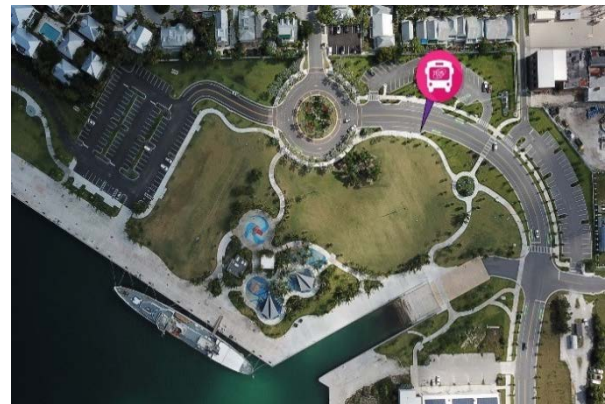


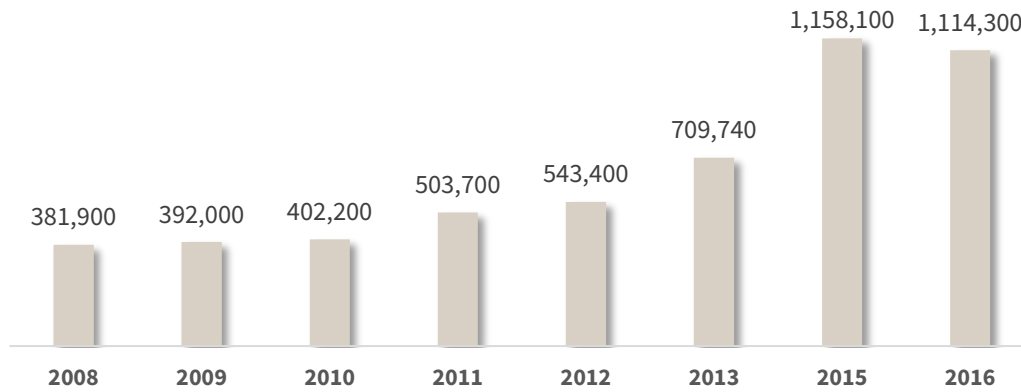
Figure 2-10: Truman Waterfront Park Duval Loop bus stop access

Table 2-12: Foreign Tourists, Key West, 2008–2016

Year	Number of Tourists
2008	381,900
2009	392,000
2010	402,200
2011	503,700
2012	543,400
2013	709,740
2015	1,158,100
2016	1,114,300

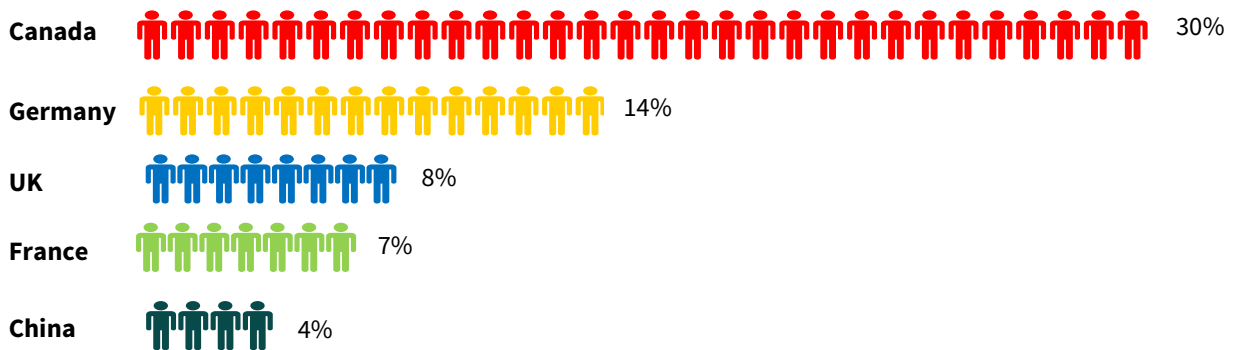
Note: 2014 data unavailable
Source: Key West Travel Guide

Figure 2-13: Foreign Tourists, Key West, 2008–2016



Note: 2014 data unavailable
Source: Key West Travel Guide

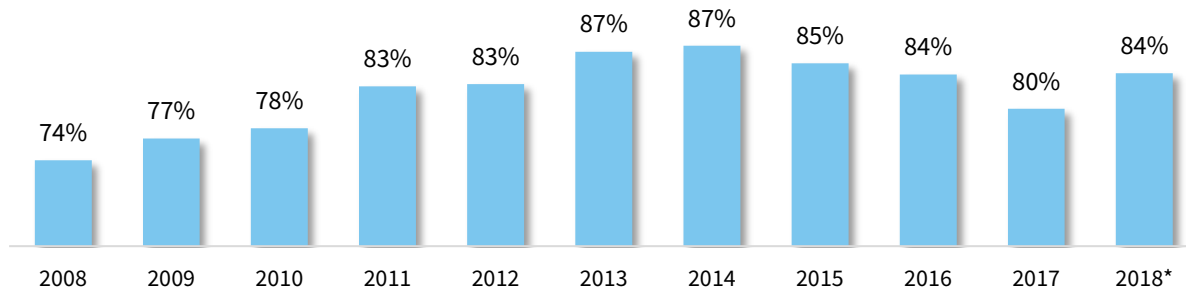
Figure 2-14: Top 5 Origins of Foreign Tourists, Key West, 2016



Source: Analysis of data from Key West Travel Guide

In addition to the number of tourist visits and compositions, hotel occupancy trends were also reviewed. Currently, the City has permitted 39 hotels, 29 motels, 45 bed and breakfast lodgings, 118 transient multi-unit complexes, and 307 vacation rentals, making up the 6,796 rental units available to tourists. The city experienced an increasing lodging occupancy until peaking in 2014, then had three consecutive years of decreasing occupancy rates through 2017, as shown in Figure 2-15. The average occupancy from 2008 to 2018 was 82 percent. Although occupancy rates decreased from 2014 to 2017, 2018 was projected to trend upwards and match the average occupancy rate for 2016 at 84 percent. For month-based occupancy, the highest is March, with an average of 93 percent of units occupied, and the lowest is September, with an average of 60 percent.

Figure 2-15: Hotel Occupancy Rates, Key West, 2008–2018



**Note: 2018 statistics based on reported statistics from January through June; July through December projections based on statistics from previous five years.*

Source: Key West Chamber of Commerce

As Key West is a city with a lot of history and surrounded by water, it is a popular place for cruise ships to stop, with, on average, more than 750,000 visitors per year. These tourists are unique in that they have no form of transit and do not occupy units in the city. A consequence of Key West receiving tourists from all over the world is that most do not have access to a vehicle or may not chose to drive in a city already congested with traffic and, therefore, may rely on public transit during their stay.



Source: Carnival.com/key-west-cruises

Weather

Although Key West has a healthy and abundant tourist industry, most attractions are dependent on weather and the elements. The city is known for the sunshine and nice beaches all year, but inclement weather from hurricanes is sometimes a deterrent to tourists. The quality of weather has an impact on transportation services due to its impacts on local economy and the community overall.

Roadway and Traffic Conditions

Traffic congestion is a major issue in Key West, especially in key tourist areas such as Old Town, and is worse during tourist season. The City responded with many strategies to reduce the use of vehicles in the often-narrow roadways and, most recently, increased parking rates and limited parking spaces. However, congestion continues to be a major issue impacting residents and visitors. Table 2-13 shows some of the most congested segments of roadway in Key West.

Table 2-13: Congested Roadways, Key West

Road	Classification	Adopted LOS	Existing LOS
Duval Street	Minor Arterial	D	F
Palm Avenue	Minor Arterial	D	E
Truman Avenue	Principal Arterial	C	F
US-1	Principal Arterial	C	E

LOS indicates roadway level of service, measured from A to F, with A being Free Flow and F being forced or breakdown flow.

Source: Monroe County and City of Key West

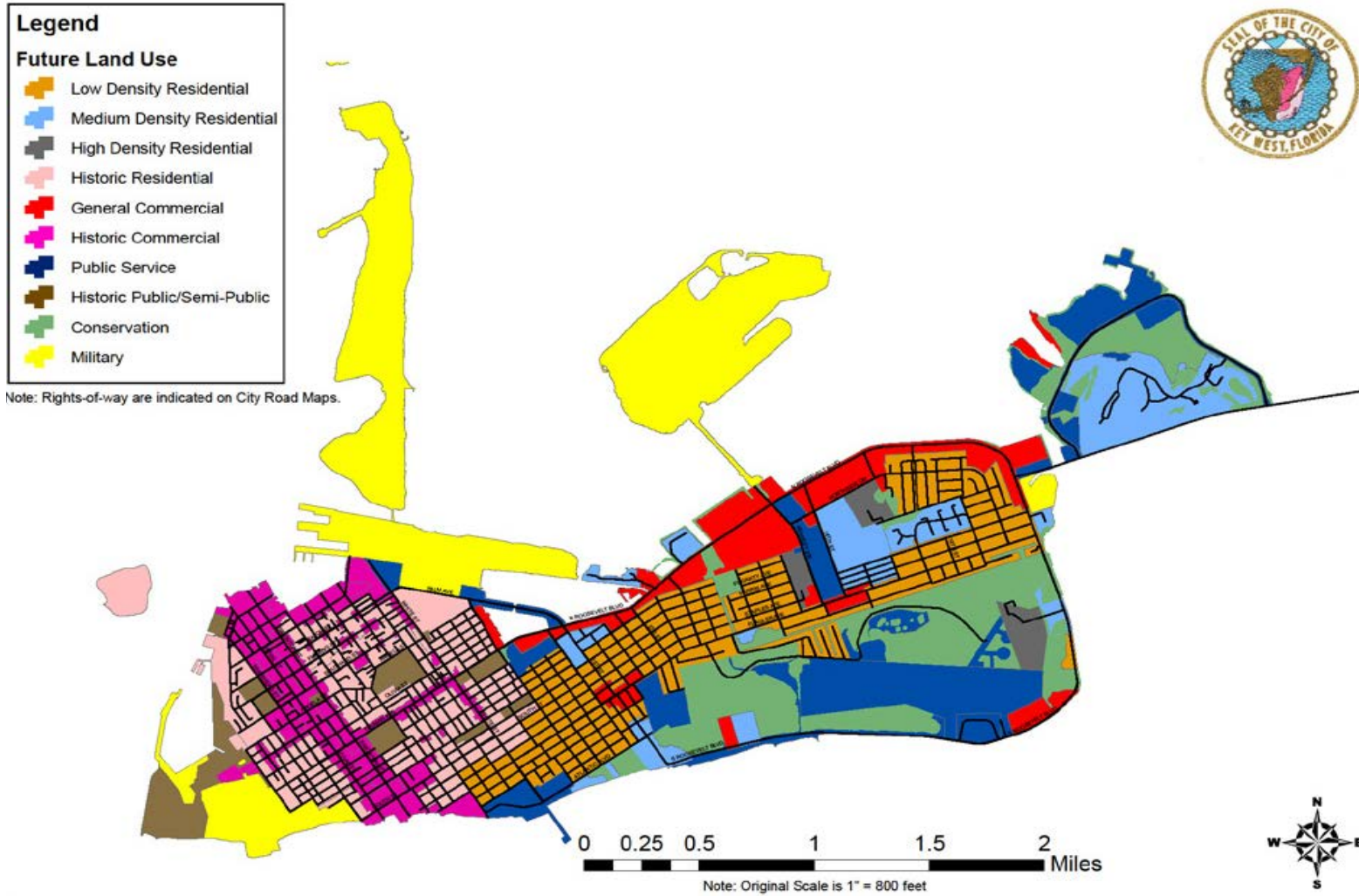
A traffic study developed by the Old Town area in late 2017 indicated the importance of using design principles that discourage auto travel and promote alternative modes of transportation such as pedestrian walkability, bicycle connectivity, and transit use.

Current and Future Land Use and Densities

A review of emerging land uses was conducted for the baseline conditions assessment, as shown in Figure 2-16. Key West emphasizes historic preservation in the city, with a chapter of the City’s municipal code dedicated to outlining efforts to keep the character of Key West intact, which is important to tourism appeal as well as to permanent residents. Although historic preservation is important, new development in the city is keeping it innovative. Key West has invested in opening new public spaces along the waterfront to encourage tourists and residents to enjoy the community space. Current and future land use are designed to promote community appearance and enhance natural amenities. As shown in Figure 2-16:

- A significant amount of land use is dedicated to military (yellow) and conservation (green) land use. Military allocation is very prominent in the northwest and southern extremities of Key West, and conservation dominates the southwest region.
- Much of the concentrated town area is dedicated to historic purposes, either historic commercial (dark pink), historic residential (light pink), or historic public/semi-public (brown).
- The low-density residential (orange) area is in a grid organization that is surrounded by conservation (green), medium-density (light blue), and general commercial (red) uses.

Figure 2-16: Key West 2030 Future Land Use Map



Source: Key West Comprehensive Plan

Section 3: Existing Services Evaluation

Existing public transportation services in Key West include fixed-route bus service provided by the City and paratransit service provided by Monroe County. This section presents an overview of public transportation services and facilities provided by KWT, and information on other transportation services in Key West is summarized. A performance trend analysis and a peer agency review were conducted to assess how efficiently KWT supplies its fixed-route transit services and how effectively those services meet the needs of the area. These analyses include use of critical performance indicators to provide a starting point for understanding the existing system’s level of performance.

Overview Existing Transit Services

Fixed-Route Bus Service

Fixed-route service has been provided in Key West since 1972 and has been expanded multiple times, currently serving the city and reaching as far north as Marathon. Current service includes six routes that operate seven days per week and two routes (Orange and Red) that operate Monday through Saturday. Route frequencies vary based on the route and day of service but typically are 1–2 hours, except the Duval Loop, which operates every 30 minutes from 6:00–10:00 AM and thereafter at 15-minute frequencies until 12:00 AM. The earliest bus operation begins at 5:00 AM with the Blue route and ends with the Duval and Lower Keys routes at 12:00 midnight.

Paratransit Service

In addition to fixed-route bus, services for persons qualifying under the Americans with Disabilities Act (ADA) are provided, complementing the existing public transportation service for residents who live within $\frac{3}{4}$ mile on either side of the fixed-route system but are unable to access it due to an eligible disability. Monroe County provides and schedules appointments for ADA service one hour prior to a trip and Monday–Friday 8:00 AM–5:00 PM. Scheduled pickup times for ADA service are 8:00 AM–5:00 PM, and trips have a 30-minute pickup window.

Monroe County Transit (MCT) provides paratransit in the Florida Keys from mile marker 0 in Key West through mile marker 113 in Key Largo. Its meets the requirement of the ADA and provides door-to-door service to those who qualify.

The Guidance/Care Center is the designated Community Transportation Coordinator (CTC) for Monroe County. It has three locations throughout the Keys—Upper Keys, Middle Keys, and Lower Keys. The remainder of trips under the ADA, TD, and Agency categories is supplied by six other contracted providers.

Fixed-Route Service Overview

A summary of KWT’s current fixed-route service, fare structure, recent ridership trends, and inventory of transit facilities and vehicles is presented in Table 3-1. As shown, the newly-introduced and free

Duval Loop carries more than 317,000 riders, about half of system ridership. The route with the next-highest ridership demand is the Lower Key shuttle, which connects more than 88,000 riders to the city for work and other purposes. Currently, Orange is the lowest-performing route, with 28,000 riders.

Table 3-1: Key West Transit Service Summary

Route Color/Name	Key Locations/Corridors Served	Weekday Service Frequency	Weekday Span	Weekend Service Frequency	Weekend Span	2018 Ridership
Duval Loop	Old Town/ Downtown Key West bordering Duval St	30 min 6:00 AM–10:00 PM; 15 min 10:00 AM–12:00 AM	6:00 AM–12:00 AM	30 min 6:00 AM–10:00 PM; 15 min 10:00 AM–12:00 AM	6:00 AM–12:00 AM	317,320
Lower Keys Pink	Old Town/ Downtown Key West to Marathon	58/173 min	5:40 AM–11:59 PM	86/173 min	5:40 AM–11:59 PM	48,790
Red	Hospital loop through northern part of Key via Roosevelt Blvd, Palm Ave, Simonton St, Truman Ave	103/123 min	6:00 AM–8:36 PM	103/123 min	6:00 AM–8:36 PM; Sun no service	48,384
Blue	Hospital loop through CBD via Roosevelt Blvd, Caroline St, Whitehead St, Simonton St, Flagler Ave	94/120 min	5:00 AM–8:25 PM	94/120 min; Sun 92/116 min	5:00 AM–8:25 PM; Sun 6:26 AM–8:19 PM	48,160
Green	Hospital loop through CBD via Roosevelt Blvd, Caroline St, Whitehead St, Flagler Ave	92/114 min	5:30 AM–10:31 PM	92/114 min; Sun 84/114 min	5:30 AM–10:31 PM; Sun 5:35 AM–8:59 PM	47,839
Lower Keys Lime	Old Town/ Downtown Key West to Marathon	53/160 min	5:35 AM–11:43 PM	78/160 min	5:35 AM–11:43 PM	39,798
Orange	Hospital loop through southern part of Key via Flagler Ave, Truman Ave, Roosevelt Blvd	106/126 min	6:15 AM–7:28 PM	106/126 min	6:15 AM–7:28 PM; Sun no service	27,715

Source: Key West Transit

Map 3-1 shows the existing fixed-route service provided, and Figure 3-1 shows a map of the Duval Loop, which circulates the Old Town historic section. It was introduced by KWT to serve the Old Town residents and workers and to shuttle visitors within the area and travels to popular spots, including the Key West Lighthouse, Mallory Square, Truman Waterfront Park, Key West Library, and Key West Theater, with frequencies every 30 minutes from 6:00–10:00 AM and every 15 minutes from 10:00 AM–12:00 midnight.

Map 3-1: Existing Services





KEY CONNECTIONS
A PLAN FOR TRANSIT

Figure 3-1: Duval Loop



Source: Carfreekeywest.com

Transit Facilities

In 2016, KWT unveiled its new LEED Silver-certified facility to help serve the community on College Road in Stock Island, adjacent to Key West. It is the “nerve center” of the transit systems and currently accommodates the KWDoT (which runs KWT) administrative offices, bus operators, and transit mechanics. This capital improvement was funded by the Florida Department of Transportation (FDOT) and the Federal Transit Administration (FTA).



Park-and-Ride Facilities

The current park-and-ride facility for KWT is a 300-space public parking garage located at Grinnell and Caroline streets. Parking is available 24 hours per day, 7 days per week, with daily and hourly parking available to the general public and KWT bus riders. Anyone who uses the park-and-ride garage may ride any KWT route except the Lower Keys Shuttle for free until the \$4-per-hour/\$32-per-day parking ticket expires.



With current KWT policy, anyone who parks at the parking facility can present a parking ticket stub to a KWT bus driver in lieu of a ticket when they board the bus except for the free Duval Loop. A number of KWT bus stops are located in close proximity to the garage for easy access to KWT buses.

Vehicle Inventory

KWT’s fleet consists of 22 active vehicles, as shown in Table 3-2. These fixed-route buses are equipped with Automatic Passenger Counters (APC) and real-time bus routing software that allows people to access their location by website or text message. The majority of the vehicles (68%) are still within their useful life, based on years according to FTA.

Table 3-2: Key West Transit Vehicle Inventory

Description	Year	Coach Type	Vehicle Past Recommended Life?
29' Bus	2018	Gillig	No
29' Bus	2018	Gillig	No
29' Hybrid Bus	2018	Gillig	No
35' Bus	2018	Gillig	No
29' Bus	2017	Gillig	No
29' Bus	2017	Gillig	No
29' Bus	2016	Gillig	No
35' Bus	2016	Gillig	No
35' Bus	2016	Gillig	No
29' Bus	2015	Gillig	No
29' Bus	2015	Gillig	No
29' Bus	2015	Gillig	No
29' Hybrid Bus	2015	Gillig	No
35' Bus	2008	Gillig	No
35' Bus	2008	Gillig	No
29' Bus	2003	Gillig	Yes
29' Bus	2003	Gillig	Yes
29' Bus	2003	Gillig	Yes
29' Bus	2003	Gillig	Yes
29' Bus	2003	Gillig	Yes
29' Bus	2003	Gillig	Yes
29' Bus	2001	Gillig	Yes

Source: Key West Transit

Fares

The current regular one-way adult cash fare on the KWT system is \$2.00. Several other fare options are included in the current KWT fare structure, including 1-day, 7-day, and 31-day passes, as shown in Table 3-3. Several discounted fare options also are available, including for students (up to age 21), individuals with disabilities, military personnel, and seniors on the Lower Keys Shuttle. Seniors 60 years and older who live in the City of Key West are fare free on City Routes and 100% Service-Connected U.S. Armed Services disabled veterans are fare free on the entire system. To receive a free or reduced fare, riders must show their ADA eligibility card or applicable photo ID. One-Way, 1-Day, and 7-Day passes can be purchased from the bus driver directly; 31-day passes may be ordered by mail or purchased with debit/credit cards at the following locations:

- Department of Transportation, 5701 College Road, Key West, FL 33040
- City of Key West Revenue Department, 1300 White Street, Key West, FL 33040

The current regular one-way adult cash fare on the KWT Lower Keys Shuttle is \$4.00. Structured like City routes, there are multiple fare options including the 1-Day Pass, 7-Day Pass, and the 31-Day Pass, shown in Table 3-3. KWT's Lower Keys Shuttle offers discounted fares for students (up to age 21), older

adults (age 60 and older), individuals with disabilities, and military personnel. KWT also offers a One Day Super Pass that is valid on both City and the Lower Keys Shuttle for \$12.00.

Table 3-3: KWT Current Fare Structure

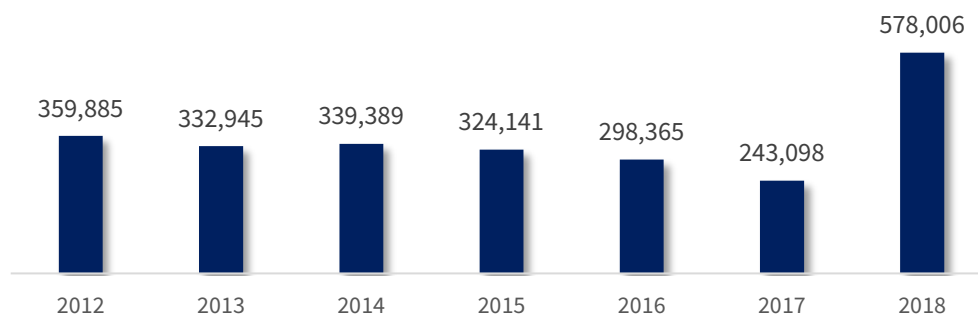
Fare Category	Regular	Reduced	Older Adults
City			
One-Way	\$2.00	\$1.00	Free
1-Day Pass	\$4.00	-	-
7- Day Pass	\$8.00	\$5.00	-
31-Day Pass	\$25.00	\$15.00	-
Lower Keys			
One-Way	\$4.00	\$2.00	\$1.00
1-Day Pass	\$8.00	-	-
7- Day Pass	\$25.00	\$15.00	\$15.00
31-Day Pass	\$75.00	\$45.00	\$45.00

*Note: One Day Super Pass valid on both City and Lower Keys routes.
Source: Key West Transit*

Ridership Trends

A summary of the of ridership trends for KWT 2012–2018 is provided in Figure 3-2. Based on the data shown, the ridership for the system gradually decreased until 2017. With reconfiguration and implementation of a modified system with the new Duval Loop, ridership has increased significantly, more than doubling in 2018.

Figure 3-2: Key West Transit Ridership Trends



Source: Key West Transit

Inventory of Other Transportation Providers

Other private and public agencies offer transportation services for specific client groups, as shown in Table 3-4. These providers were contacted for general information about the services offered, and the information provided is summarized in the table.

Table 3-4: Other Transportation Providers – Key West

Provider	Types of Services Provided			Levels of Service		Fare Structure	Types of Vehicles	Phone	Email
	General Service Area	Eligible Trip Purposes	Eligible Riders	Days of Operation	Hours				
CTC-Coordinated Contractors									
Center for Independent Living	Key West	Any	Older adults	Mon–Sun	8:00am–5:00pm	Free for members	Wheelchair van	(305) 453-3491	n/a
Florida Keys Homeless Outreach Coalition	Key West	Any	Transport of own clients	Mon–Sun	24/7	Free for members	Wheelchair van, sedan	(305) 295-7580	jduvall@fkoc.org
The Children's Shelter in Tavernier	Key West	Any	Transport of own clients	Mon–Sun	24/7	Free	Wheelchair van, sedan	(305) 852-4246	n/a
Monroe County Social Services Transportation	Monroe County	Any	Disabled, older adults, transportation disadvantaged	Mon–Fri	8:00am–5:00pm	Free for older adults, \$2.00 one-way for all other passengers	Wheelchair van	(305) 292-4408	francis-lourdes@monroecounty-fl.gov
Guidance Clinic of the Middle Keys	Miami-Dade, Monroe counties	Medical	General public, Medicaid eligible, transportation disadvantaged	Mon–Fri	8:30am–5:00pm	\$2.00 round trip in county, \$5.00 round trip out of county	Ambulatory van, wheelchair van	(305) 434-7660	maureen.gryniewicz@gc.mk.org
Monroe Association for ReMARCable Citizens, Inc.	Key West	Any	Transport of own clients	Mon–Sat	9:00am–4:45pm	Free for members	Wheelchair van, sedan	(305) 852-3282	ross4197@bellsouth.net
Samuels House	Key West	Medical	Transport of own clients	Mon–Sun	7:00am–10:00pm	Free for members	Sedan	(305) 296-0240	n/a
Other Transportation Providers									
Conch Tour Train	Key West	Any	Private pay consumer	Mon–Sun	9:00am–4:30pm	\$31.45/adult	Trolley	1-888-916-8687	n/a
Five 6 Cab Co.	Monroe County	Any	Disabled, older adult, private pay consumer	Mon–Sun	24/7	\$2.75 first 1/5 mile, \$.60 every 1/5 mile	Sedan, wheelchair van	(305) 296-6666	gstevenson@keywesttaxi.com
Key West Limo	All Keys, Miami, Fort Lauderdale Airport	Any	Private pay consumer	Mon–Sun	24/7	Key West Airport to thruout Keys to Ft Lauderdale \$75-\$650; in Key West \$200-\$350 depending on time	Limousine	(855) 539-9333	Reservations@keywestlimos.com

Table 3-5: Other Transportation Providers – Key West (cont'd)

Provider	Types of Services Provided			Levels of Service		Fare Structure	Types of Vehicles	Phone	Email
	General Service Area	Eligible Trip Purposes	Eligible Riders	Days of Operation	Hours				
Old Town Trolley	Key West	Any	Any	Mon–Sun	9:00am–4:30pm	\$37.75/1 day/adult	Trolley	(855) 623-8289	n/a
AAA Limo	All Florida Keys, Miami, Ft Lauderdale, Palm Beach Airport	Any	Private pay consumer	Mon–Sun	24/7	To Key West Airport \$75; to Florida Keys, Miami, Fort Lauderdale \$100–\$550	Sedan, limousine	(305) 731-4340	aaalimogr@gmail.com
A1 Royal Airport Transportation and Limo Service	South Florida	Any	Any	Mon–Sun	24/7	Varies	Wheelchair van, limousine	(239) 369-8300	airportservice@a1royalllimousine.com
Conch Limo	All Florida Keys, Miami, Ft Lauderdale, Palm Beach Airport	Any	Private pay consumer	Mon–Sun	24/7	Key West Airport \$76–\$150, to thruout Florida Keys \$175–\$350; to Miami, Fort Lauderdale, Palm Beach, Fort Myers \$500–\$750	Sedan, SUV, van, stretch limousine	(305) 240-9757	n/a
Florida Keys Group Transportation	Key West	Any	Private pay consumer	Mon–Fri	8:00am–5:00pm	Key West Airport \$12/person To Key Activity Centers: \$6.00–\$9.00	Van, wheelchair van	(305) 296-1800	n/a
Florida Sunshine Shuttle	Brevard, Broward, Hillsborough, Miami-Dade, Monroe counties	Any	Disabled, older adult, private pay consumer	Mon–Fri; Sat–Sun	9:00am–5pm; 9:00am–2:00pm	Variable, typically \$25/ride	Bus, limousine, mini-bus	(305) 831-0990	reservations@floridasunshin shuttle.com
Florida Sunshine Shuttle	Brevard, Broward, Hillsborough, Miami-Dade, Monroe counties	Any	Disabled, older adult, private pay consumer	Mon–Fri; Sat–Sun	9:00am–5:00pm; 9:00am–2:00pm	Variable, typically \$25/ride	Bus, limousine, mini-bus	(305) 831-0990	reservations@floridasunshin shuttle.com

Table 3-4: Other Transportation Providers – Key West (cont'd)

Provider	Types of Services Provided			Levels of Service		Fare Structure	Types of Vehicles	Phone	Email
	General Service Area	Eligible Trip Purposes	Eligible Riders	Days of Operation	Hours				
Mobility Freedom of Florida	Statewide	Recreation, Errands	Disabled	Mon–Fri	9:00am–5:00pm	Variable	Wheelchair van	(877) 275-4907	n/a
Monroe County Veterans Affairs	Monroe County	Medical	Veterans	Mon–Fri	8:00am–5:00pm	Free	Wheelchair van	(305) 294-4641	ballard-lindsey@monroecounty-fl.gov
Uber	National	Any	Any	Mon–Sun	24/7	Variable	Sedan	n/a	support@uber.com
Wheelchair Getaways of Ft. Myers	Charlotte, Collier, Hendry, Lee, Monroe counties	Any	Disabled, older adult, private pay consumer	Mon–Fri	9:00am–5:00 pm	100 free miles, \$0.35 per mile over 100 miles	Wheelchair van	(239) 910-2475	missannabell@msn.com

Trend Analysis

To assess how efficiently Key West Transit supplies fixed-route transit service and how effectively those services meet the needs of the area, a trend analysis of critical performance indicators and measures was conducted to examine the performance of its fixed-route services over a five-year period.

To complete this trend analysis, data from the Florida Transit Information System (FTIS) were used, including the most recent validated NTD data for transit agencies in the U.S. As 2018 data were still not available from FTIS, data from KWT were obtained and used for 2018.

Using the same measures used for the system trend analysis, a peer system review analysis also was conducted and summarized, followed by a trend analysis for KWT. This compares various KWT fixed-route performance characteristics to a group of selected transit agency peers using the most complete and recent national transit data at the time of this analysis, which included 2017 NTD data.

Analysis Indicators and Measures

Various performance measures are used to present the data that relate to overall system performance. Three categories of indicators and performance measures were analyzed for the trend and peer analysis of the existing transit service:

- **Performance Indicators** – quantity of service supply, passenger and fare revenue generation, and resource input
- **Effectiveness Measures** – extent to which the service is effectively provided
- **Efficiency Measures** – extent to which cost efficiency is achieved

The trend analysis is organized by type of measure or indicator and includes statistics, figures, and tables to illustrate KWT's performance over the past five years. This analysis includes statistics that summarize selected system performance indicators, effectiveness, and efficiency measures for the five-year period.

The summary findings of the trend analysis are presented by indicator in Table 3-5, and a detailed summary of the results is provided in Appendix A.

Table 3-6: Key West Fixed-Route Trend Analysis, 2014–2018

Indicator/ Measure	2014	2015	2016	2017	2018	% Change (2014– 2018)	Status ¹	Desired Trend ²
General Indicators								
Passenger Trips	358,475	342,583	316,162	309,178	619,261	72.7%	↗	↗
Service Area Population	33,240	34,198	34,684	35,394*	36,104*	8.6%	↗	↗
Service Area Population Density	1,838	1,891	1,918	1,966	2,006	9.1%	↗	↗
Revenue Miles	604,459	601,466	568,901	562,474	675,232	11.7%	↗	↗
Revenue Hours	36,283	35,906	37,595	36,127	51,337	41.5%	↗	↗
Total Operating Expense	\$2,510,466	\$2,467,112	\$3,018,623	\$3,477,633	\$3,652,463	45.5%	↘	↘
Vehicles Operated in Max Service	6	6	8	8	20	233.3%	↗	↗
Effectiveness Measures								
Revenue Miles per Capita	18.18	17.59	16.40	15.58	18.70	2.8%	↗	↗
Passenger Trips per Capita	10.78	10.02	9.12	8.74	17.15	59.0%	↗	↗
Passenger Trips per Revenue Hour	9.88	9.54	8.41	8.56	12.06	22.1%	↗	↗
Average Age of Fleet (in years)	11.00	9.06	8.78	8.23	6.68	-39.3%	↘	↘
Efficiency Measures								
Operating Expense per Capita	\$75.52	\$72.14	\$87.03	\$97.41	\$101.16	33.9%	↘	↘
Operating Expense per Passenger Trip	\$7.00	\$7.20	\$9.55	\$11.15	\$5.90	-15.8%	↘	↘
Operating Exp. per Revenue Mile	\$4.15	\$4.10	\$5.31	\$6.13	\$5.41	30.2%	↘	↘
Operating Expense per Revenue Hour	\$69.19	\$68.71	\$80.29	\$95.43	\$71.15	2.8%	↘	↘
Farebox Recovery (%)	21.27	23.49	16.17	13.74	11.41	-46.4%	↘	↗
Average Fare	\$1.49	\$1.69	\$1.54	\$1.53	\$0.67	-55.0%	↘	↗

*2017 and 2018 Service Area Population numbers were based on data for 2013-2016.

¹ Status assigned only if trend is outside one standard deviation of trend average.

² Desired trend for general indicators based on expanding transit system.

Source: NTD FTIS

Trend Analysis Summary

- **General Indicators** – All general indicators have been increasing over the five-year analysis period. Passenger trips increased the most, by 73%, primarily due to adding the Duval Loop to the system. This addition also increased operating costs. Overall, an increasing number of people in the city are using KWT services, and more is service being supplied to keep up with growing demand.
- **Effectiveness Measures** – All effectiveness measures have increased since 2014 except for average fleet age. Due to the purchase of more than a dozen new buses in the last five years, the average age of the fleet has decreased, indicating a growing fleet of vehicles to keep up with the growing demand. The upward trend of revenue miles per capita, passenger trips per capita, and passenger trips per revenue hour indicate more consumption of service.
- **Efficiency Measures** – All operating expense metrics for KWT increased over the five-year period, except for operating expense per passenger trip (-15.8%). Increasing operating expense per capita, operating expense per revenue mile, and operating expense per revenue hour combined with a steadily declining farebox recovery ratio indicate that KWT’s operating costs continue to outpace ridership growth.

Peer Review Analysis

A peer system review was conducted to assess how KWT compares to similar/peer transit agencies. The peer review analysis, when combined with the trend analysis of an overall transit performance evaluation, provides an excellent starting point for understanding the efficiency and effectiveness of a transit system.

Peer System Selection Methodology

A fixed-route peer system selection was conducted using 2017 NTD data available in the FTIS database, the most recent data available for all reported systems. The 2017 data for all systems reported in the NTD were then compared with 2018 data for KWT. Instead of comparing the other agency 2017 data to 2017 data for KWT, 2018 data were used due to the significant difference in ridership, service supply, and costs in 2018 for KWT due to the implementation of the Duval Loop.

The pool of possible peers was assessed and subsequently scored through an objective assessment of nine standard variables, including the following:

- Geography (southeastern US)
- Average speed (revenue miles/revenue hours)
- Passenger trips
- Revenue miles
- Service area population
- Service area population density

- Total operating expense
- Vehicles operated in maximum service
- Revenue hours

The peers were first selected based on geographic location (southeastern states), including Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Fixed-route systems operating in these states were added to the pool of possible peers and were analyzed based on the eight remaining criteria described previously. A potential peer received 1.0 points when one of the eight criteria was within 1 standard deviation of KWT’s performance value and 0.5 points for each criterion that fell within 2 standard deviations of KWT’s value.

Table 3-6 shows the final set of peers selected using the methodology summarized above. These peers were then used for the peer system review analysis summarized in the remainder of this section.

Table 3-7: Selected Peer Systems for Key West Transit Peer Review Analysis

Agency Name	Location
Richmond County Transit Department (RCT)	Augusta, GA
Beaumont Municipal Transit (BMT)	Beaumont, TX
City of Fairfax CUE Bus (CUE)	Fairfax, VA
Midland-Odessa Urban Transit District (EZ Rider)	Midland, TX
Bay Town Trolley (BTT)	Panama City, FL

Peer Review Analysis Summary

The results of the peer review analysis of KWT’s fixed-route bus service is shown in Table 3-7. It shows the findings by key indicators/measures in terms of their deviation above or below the peer group mean and a general assessment of the result.

- **General Performance Indicators** – KWT scored above the peer mean in all general performance measures, with the exception of service area population and service area population density. Scoring above the peer mean by various distances in passenger trips, revenue miles, revenue hours, and vehicles operated during maximum service indicate that KWT supplies more service than the rest of its peers. Although KWT scored above the peer mean in total operating expense (5.8%), it has the least variance of all the general performance measures from the peer mean.
- **Effectiveness Measures** – KWT scored below the peer mean on passenger trips per revenue hour (-11.2%) and average age of fleet. This suggests that service consumption is less than typically experienced in terms of frequency but is serving the population as a whole. KWT scored below the peer mean for the average age of fleet due to its recent purchase of four 2018 buses and the fact that 68% of its fleet is still within FTA useful years measures.
- **Efficiency Measures** – KWT scored below peer means on all efficiency measures except for operating expense per capita. Its farebox recovery is 35.5% below the peer mean, indicating

that fares do not cover as much of operation expenses as the peer systems. This may be partially due to lower average fares, which are approximately 33.2% below the peer mean average.

Table 3-8: Key West Transit Fixed-Route Peer Review Analysis, 2017

Indicator/Measure	Key West Transit % from Mean	Assessment
General Indicators		
Passenger Trips	10.4%	Good
Service Area Population	-60.5%	-
Service Area Population Density	-40.9%	-
Revenue Miles	16.3%	Good
Revenue Hours	20.3%	Good
Total Operating Expense	5.8%	Can Improve
Vehicles Operated During Max Service	62.2%	Good
Effectiveness Measures		
Revenue Miles per Capita	86.4%	Good
Passenger Trips per Capita	61.2%	Good
Passenger Trips per Revenue Hour	-11.2%	Can Improve
Average Age of Fleet (in years)	-2.7%	Good
Efficiency Measures		
Operating Expense per Capita	60.9%	Can Improve
Operating Expense per Passenger Trip	-9.6%	Good
Operating Expense per Revenue Mile	-10.6%	Good
Operating Expense per Revenue Hour	-12.9%	Good
Farebox Recovery (%)	-35.5%	Can Improve
Average Fare	-33.2%	Can Improve

Source: NTD FTIS

Section 4: Public Involvement

The purpose of this section is to review the public involvement activities undertaken for *Key Connections* and summarize the key findings from each of the events. Public involvement efforts provide critical support and the basis for the developing the 10-year transit needs in the community by obtaining information to ascertain community perceptions and expectations on local transit services. To guide the public involvement activities, KWT first prepared a Public Involvement Plan (PIP) that describes all outreach activities to be undertaken during the development of the TDP. The activities included in the PIP provide numerous opportunities for involvement by the general public and representatives of local agencies and organizations. A copy of the PIP developed for *Key Connections* is included in Appendix C.

Public Involvement Techniques

Numerous public involvement techniques were used in the public involvement process to engage a full range of community stakeholders and facilitate their active participation in the plan development process. The public involvement techniques can be organized into two major categories. Direct and indirect, as shown in Figure 4-1.

Figure 4-1: Public Involvement Techniques



The remainder of this section outlines the public involvement activities completed for *Key Connections*. It Then provides detailed summarizes of the findings from these outreach activities in both written and graphical formats to paint a complete picture of the desires and vision of the

community for the city’s transit services going forward. The community desires and the input on vision for transit derived from these activities will be used to develop and also evaluate the 10-year transit priorities for the City of Key West.

Summary of Key West Transit Public Involvement Activities

As mentioned previously, several public involvement techniques and activities were used in the *Key Connections* process to ensure the opportunity for a range of community stakeholders to actively participate in plan development. These activities and techniques are summarized in greater detail in the following sections. A summary of the participation by outreach event is provided in Table 4-1.

Table 4-1: TDP Public Involvement Summary

Outreach Activity	Date	Participants
Interviews		
Community Stakeholders	December 2018–February 2019	13
KWT Bus Operators	March 2019	9
Total		22
Surveys		
On-Board Survey	January 2019	1,013
Public Input Survey	January 2019–March 2019	110
Alternatives Survey	May 2019–June 2019	220
Total		1,343
Public Workshops		
Phase I, Workshop #1	March 4, 2019	12
Phase I, Workshop #2	March 5, 2019	35
Phase II, Workshop #1	May 28, 2019	95
Phase II, Workshop #2	May 29, 2019	80
Total		222
Discussion Group Workshops		
Business and Economic Development Discussion Group	March 5, 2019	11
Social Services Discussion Group	March 6, 2019	8
Total		19
Other Media		
Email	January 2019–May 2019	55
Facebook	February 2019–June 2019	Many
Websites	February 2019–June 2019	Many
Total		55
Total Participants		1,661*

**Total does not include Facebook and website engagements.*

Project Review Meetings

Several project review meetings/conference calls were held to help guide the overall TDP update effort. Review team members included KWDOT staff and representatives from various departments of the City of Key West.

- **Meeting #1** – On November 15, 2018, a video conference meeting was held with KWT staff and representatives from Budget, Engineering, and other City departments. The meeting also functioned as the kick-off meeting for the project and included discussions on overall objectives for the TDP, review of the project schedule including future meetings, upcoming public outreach activities, and various data needs.
- **Meeting #2** – An in-person meeting was held on March 5, 2019, at the Key West Transit facility at 5701 College Road to review the schedule for upcoming public outreach activities and discuss current TDP priorities and expectations for the development of alternatives.
- **Meeting #3** – Another in-person meeting was held at the Key West Transit facility during the Phase II of the TDP outreach process to review the 10-year draft needs and obtain any additional input on the needs. In addition, the plan for the outreach events was discussed and materials reviewed. Data needs to develop the financial plan for the TDP also was discussed at the meeting.
- **Conference Calls** – Several conference calls with members of KWT staff were conducted as needed throughout the projects timeframe to coordinate on various components of the TDP.

Stakeholder Interviews

One-on-one stakeholder interviews provide an effective forum to gather input from key leaders from agencies and the general community concerning the vision for public transportation in their community. Interviews were conducted from December 2018 to February 2019. Table 4-2 provides a summary of the individuals contacted and interviewed as part of this outreach effort.

Table 4-2: Stakeholder Information

Name	Organization	Title
Terri Johnston	City of Key West	Mayor
Billy Wardlow	City Commission, City of Key West	Commissioner
Greg Davila	City Commission, City of Key West	Commissioner
Mary Lou Hoover	City Commission, City of Key West	Commissioner
Clayton Lopez	City Commission, City of Key West	Commissioner
Sam Kaufman	City Commission, City of Key West	Commissioner
Manuel Castillo	Key West Housing Authority	Executive Director
Vanessa Naranjo	Health Council of South Florida	Office Administrator
Roger McVeigh	Parking Alternative Transportation Group	Chairman
Maureen Dunleavy	Westcare (CTC for Monroe County)	Area Director
Virginia Panico	Key West Chamber of Commerce	Executive Vice President
Rita Irwin	Tourist Development Council	Chairman
Eric Detwiler	Alternative Parking Transportation Group	Member

Interview Summary

A list of questions and discussion topics was developed for the interviews, and each stakeholder was provided the same questions and topics. The input received during these interviews was reviewed, and major themes were identified and are summarized in the following sections.

General Summary

- Overall, the stakeholders expressed the need for more frequent transit services and more reliable service to help serve residents and tourists.
- Most stakeholders were in agreement that transit could be a meaningful solution to the major parking and traffic problems plaguing the island.
- Stakeholders mentioned frequently that they would like to see fewer cars on the island and more alternative options such as walking and bicycling in combination with transit. They commented that it was important that transit become a part of and fit into the island culture.

Improvements to Existing Service

Some stakeholders were current riders of the transit system, and all stakeholders agreed that KWT needs more frequent service to attract more riders and support the current ridership base.

- *More frequent service* – Stakeholders agreed that KWT needs more frequent service, citing the success of the Duval Loop. Also mentioned was that infrequent service is inconvenient for workers and commuters, and, with a booming tourism industry, it is also necessary for tourists to get around the island and not have to rely on having a personal automobile.
- *Route Structure* – All stakeholders commented that the current KWT routes are very long and cover the same area. Although the routes overlap, it was mentioned that the service is still too infrequent and extended.
- *Direct routes* – Stakeholders agreed that KWT could be more efficient and direct by having more routes like the Duval Loop. It was frequently mentioned that the Duval Loop had high ridership due to its concise and frequent nature. Stakeholders also mentioned the need for more connectors or loop type fixed-route services throughout the island.
- *Bus stop placement* – Stakeholders commented that bus stops might need to be prioritized and reorganized to help with service efficiency. It was also mentioned that there could possibly be fewer stops on each route, making the service more effective.

New Ideas/Types of Service

- *Shuttles* – KWT currently uses large buses for its routes, and stakeholders commented that using smaller buses may help. They mentioned using these smaller buses or trolleys frequently due to the culture of the island and the narrow streets. Bigger buses could be used on major roads and on routes that would need a higher carrying capacity.

- *Microtransit* – Most stakeholders mentioned needing innovative ideas to combat the traffic congestion problems and the growing demand for parking. Solutions included implementing mobility-on-demand solutions for older adults and those who are transportation disadvantaged.
- *Connections and loops* – Stakeholders frequently stated that there is a need to change the style of routing to become a more direct network. Connecting the various parts of the island through more structured service was mentioned by all, and connecting Old Town and Stock Island directly for college students, hospital staff, and tourists was specifically indicated.

Capital/Infrastructure Improvements

- *Transit center or major parking garage* – A major concern for stakeholders was relieving traffic congestion and encouraging day-trippers or other tourists to leave their cars off the main corridors of the island.
- *Bus stop infrastructure* – Stakeholders commented that bus stops are not always visible and enhancement could possibly raise awareness of the service. Real-time displays and more benches were mentioned to make the service more attractive. It was also mentioned that dedicated funding and revenue could be brought in from advertising at stops.

Fare Policy Ideas

- *Private partnerships* – Partnering with private hotels that have an established shuttle program and employers that have workers using the service was a high priority for most stakeholders. Fostering relationships with participating entities could support routes that patrons or workers use and would ride with free fares. Stakeholders also mentioned reaching out to developers to incorporate bus stops within their plans for developments.
- *Free fares* – Stakeholders attributed much of the Duval Loop’s success to having a free fare. Making all routes free would incentivize using transit for all tourists and to not use cars when visiting and would encourage residents to use the service. Due to the amount of tourism that Key West experiences, stakeholders mentioned having the Tourist Development Council help fund the services.
- *Taxes* – Some stakeholders mentioned implementing or raising taxes to invest in KWT. Making fares for all routes free would require funding support from parking or an extra tax, and there may be support for a tax to fund transit services if it would relieve traffic and parking problems on the island.

General Input from Stakeholders

- KWT could use a route like the Duval Loop in New Town.
- Older adults, tourists, and the transportation disadvantaged use the service more.
- Tourists depend on the transit system to sightsee and get to tourist attractions around the island.

- More visible bus stop signs are needed to denote where buses stop.
- Public transit will be a big help in relieving parking and traffic congestion.
- Current fares are reasonable.
- Marketing routes like the Duval Loop will help bring awareness to the entire system.
- Some workers on the islands have multiple jobs and cannot use KWT due to infrequent timing.
- Land use perhaps should be changed to support transit-oriented developments.

Rider and Non-Rider Surveys

Bus Rider Survey

A rider survey on-board KWT buses was conducted in January 2019 to collect demographic, travel behavior, and user satisfaction information from current transit riders. Surveys were distributed on all bus routes for three weekdays and a Saturday (covering 100% of KWT routes). The 17-question survey was distributed to all passengers on the buses on each bus route, the majority of which were via a tablet format. (See Appendix C for a copy of the survey instrument.) The survey was translated into Spanish and Creole for non-English-speaking passengers. It was administered by a team of trained survey personnel who had completed an orientation session that instructed them on their responsibilities and discussed possible issues or concerns that might arise while conducting the survey.

Survey Characteristics

The survey consisted of questions to identify passenger socio-demographics, travel characteristics, and rider satisfaction, as summarized below.

Travel Characteristics

- Method for reaching the bus for this trip
- Trip destination for this trip
- Number of one-way bus trips typically made per week
- Most important reason for riding the bus
- Length of time using Key West Transit services
- Fare type used
- Retrieval method of information relating to bus service

Socio-Demographics

- Age
- Race
- Gender
- Household income
- City residency status

Improvement Priorities and Rider Satisfaction

- Top service improvements
- Overall level of satisfaction with Key West Transit

Survey Results

In total, 1,013 Key West Transit passengers responded to the survey, as shown in Table 4-3. As shown in Table 4-4, on average, 728 passengers responded to each question, for a completion rate of 72 percent.

Table 4-3: Completed Surveys by Day of Week

Day	Number Completed	Percent
Saturday	651	64%
Weekday	362	36%
Total	1,013	100%

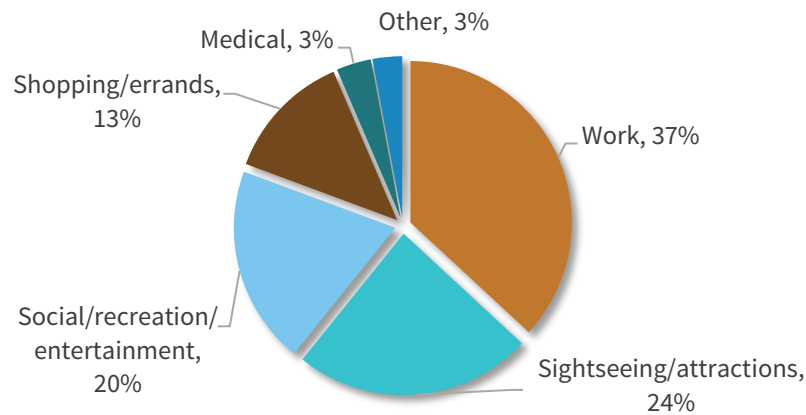
Table 4-4: Rate of Responses Received by Question

Question #	Question Description	Responses Received	
Q1	Route	1,013	100%
Q2	Purpose of Trip	918	91%
Q3	Method for Reaching Bus	762	75%
Q4	Transfer	653	64%
Q5	Number of Trips per Week	749	74%
Q6	Length of Key West Transit Use	741	73%
Q7	Reason for Riding Bus	730	72%
Q8	Retrieval Method of Information	711	70%
Q9	Fare Type	612	60%
Q10	Residence Status	718	71%
Q11	Service Improvements	855	84%
Q12	Gender	973	96%
Q13	Race	737	73%
Q14	Age	731	72%
Q15	Household Income	496	49%
Q16	Overall Satisfaction	713	70%
Q17	Comments	257	25%
Total Surveys Received		1,013	
Average Responses Received for Each Question		728	72%

Passenger Travel Characteristics

Passengers were asked to identify the purpose of their current trip (Figure 4-2). In total, 349 passengers (37%) said work, 226 (24%) said sightseeing/attraction, 188 (20%) said social/recreation/entertainment, and 122 (13%) said shopping/errands. Travel to medical appointments was noted by 33 passengers (3%) and Other by 28 passengers (3%).

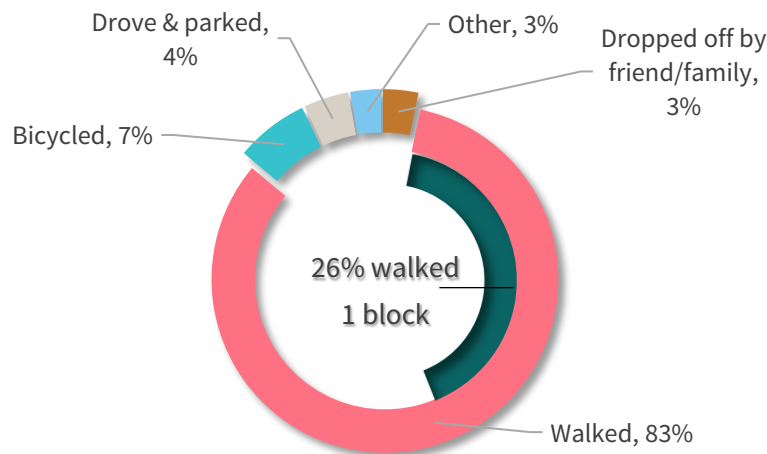
Figure 4-2: Purpose of Trip



**Chart totals will not equate to actual number of total survey responses because respondents were given the opportunity to select more than one trip purpose.*

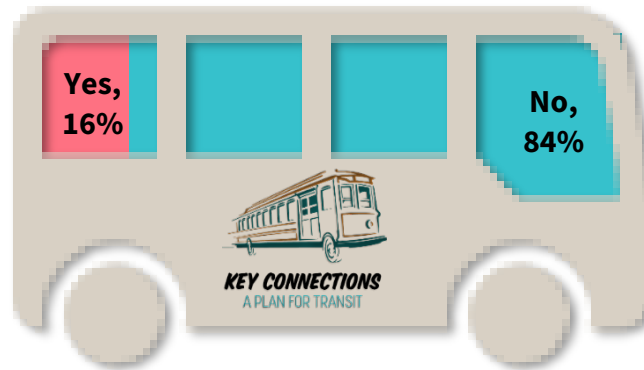
Passengers were asked to identify how they arrived at the bus stop for their current trip (Figure 4-3). In total, 631 passengers (83%) said they walked or used a wheelchair to reach the stop, 52 (7%) used a bicycle, and 25 (3%) were dropped off, and 3 percent rode with someone or drove and parked nearby. Passengers who walked/used a wheelchair, bicycled, or drove and parked also were asked how far they traveled to reach the stop; 34 passengers (26%) who walked or used a wheelchair traveled one block, 24 (19%) traveled three blocks, 24 (12%) traveled three blocks, and 9 (6%) traveled four blocks.

Figure 4-3: Method for Reaching Bus



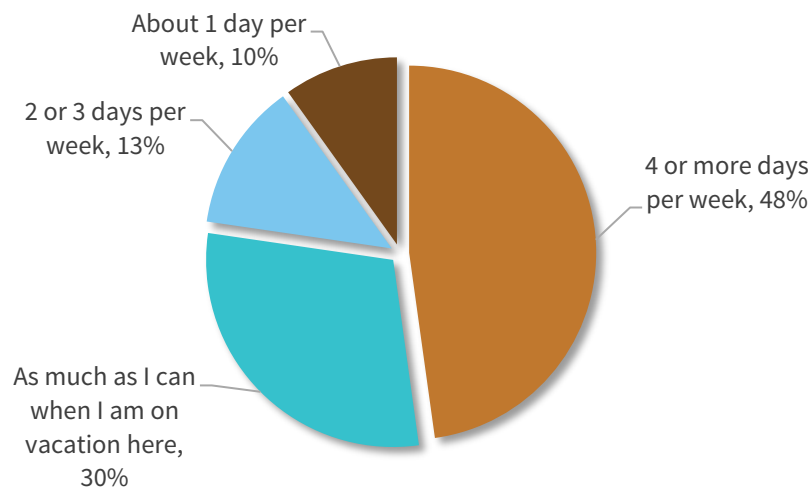
Passengers were asked if they made a transfer on the trip they were currently on (Figure 4-4). In total, 107 (16%) indicated yes and 546 (84%) indicated no.

Figure 4-4: Transfers by Survey Respondents



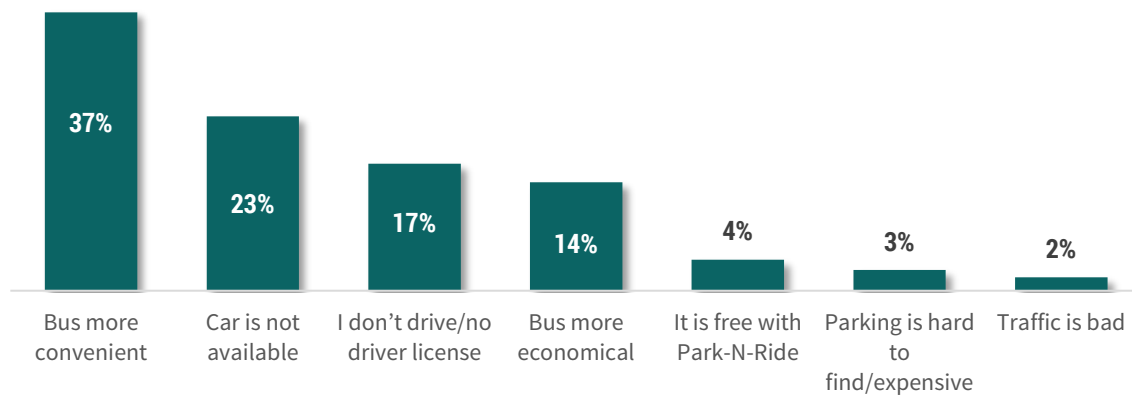
Passengers were asked how often they used KWT bus services (Figure 4-5). Passengers who generally use the bus on a regular basis (48%, 358) said they use it more than 4 days per week, 30 percent (221) said as often as they can when on vacation in Key West, 13 percent (48) said 2–3 days per week, and 10 percent (74) said about once per week.

Figure 4-5: Number of Trips per Week



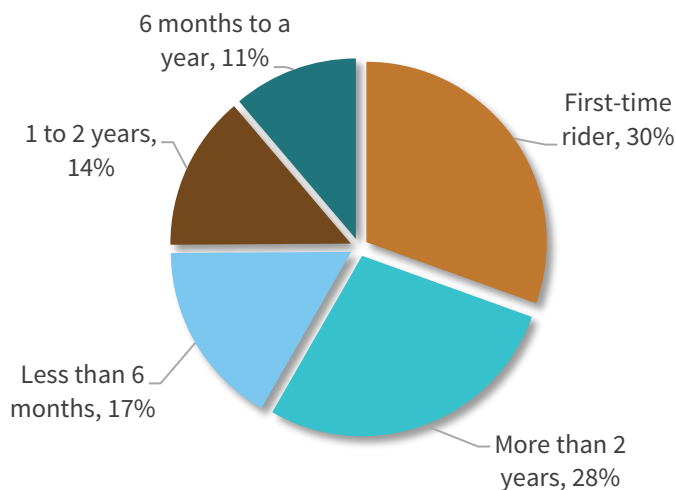
To identify the most important reasons why passengers ride the bus, seven choices were provided (Figure 4-6). “Bus more convenient” was cited as the most important reason for 270 riders (37%), and “Car is not available” (23%) and “I don’t drive/no driver license” (17%) also were key reasons, followed by “Bus more economical (14%), “It is free with Park-N-Ride” (4%), “Parking is hard to find/expensive” (3%), and “Traffic is bad” (2%).

Figure 4-6: Reason for Riding Bus



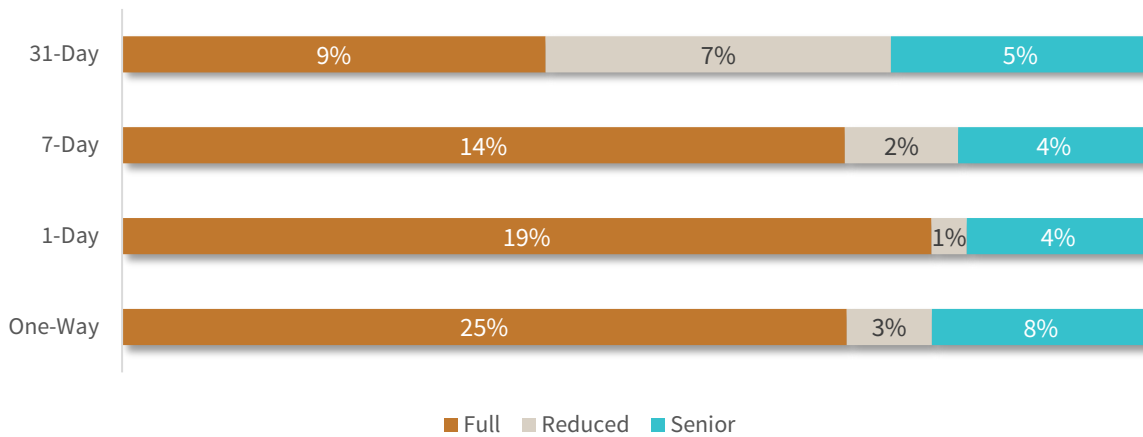
Passengers were asked about the length of time they had been using Key West Transit services. Figure 4-7 shows that the majority of riders, about 30 percent (226 passengers), were first-time users, approximately 28 percent (206 passengers) said more than 2 years, approximately 17 percent (123 passengers) said less than 6 months, and approximately 14 percent said 1–2 years.

Figure 4-7: Length Using Key West Transit



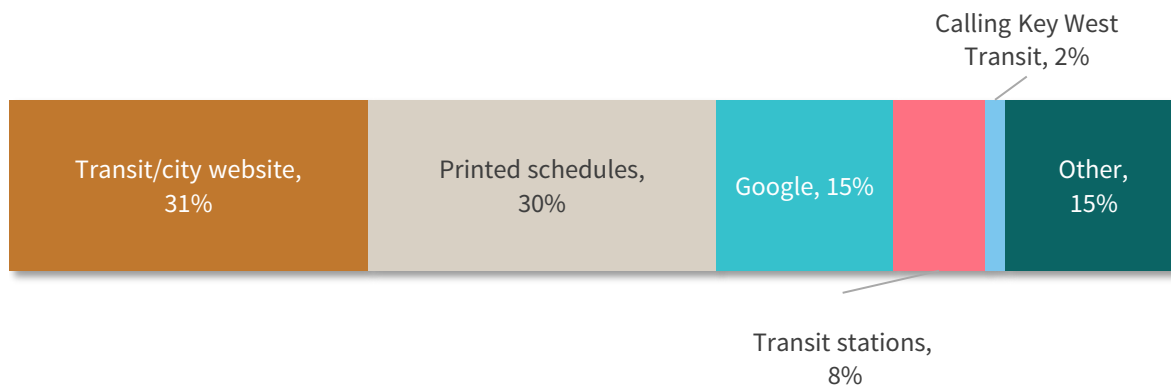
Passengers were asked which type of fare they usually pay when they ride the bus. Most passengers (405, 66%) paid the full cash-fare. Figure 4-8 shows that 153 (25%) paid the full-fare one-way fare, 115 (19%) used a full-fare one-day pass, (14%) used a full-fare seven-day pass, 54 (9%) used a full-fare 31-day pass, and 46 (8%) used a senior fare one-way pass. Senior passes made up 21% of sales and reduced fare made up 13%. In total, 211 passengers took the Duval Loop, a free route, which is not represented in Figure 4-8.

Figure 4-8: Fare



Methods by which passengers received information about KWT bus service (Figure 4-9) included 256 (31%) receiving information from the Key West website, 249 (30%) from printed schedules, 126 (15%) from Google, 66 (8%) from information provided at transit stations, and 14 (2%) from calling KWT. Other sources included posted bus signs/shelters or word of mouth, representing about 15 percent of responses received.

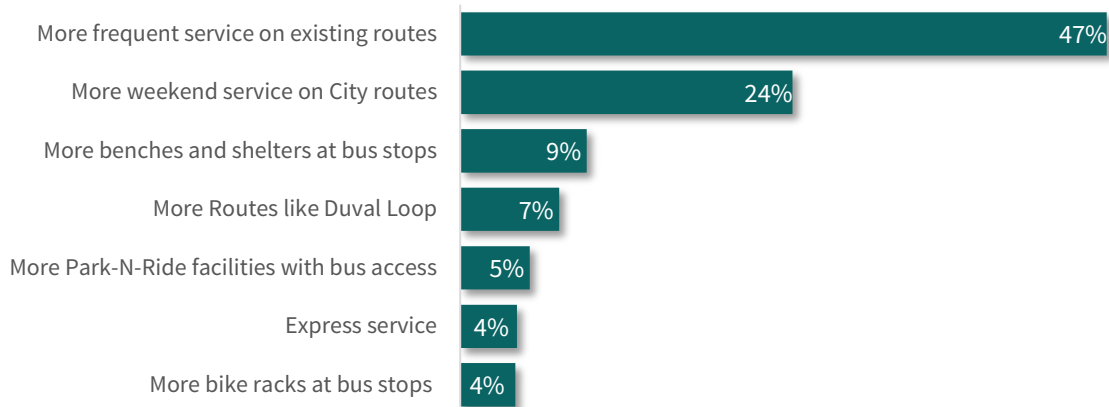
Figure 4-9: Method of Receiving Information



Improvement Priorities

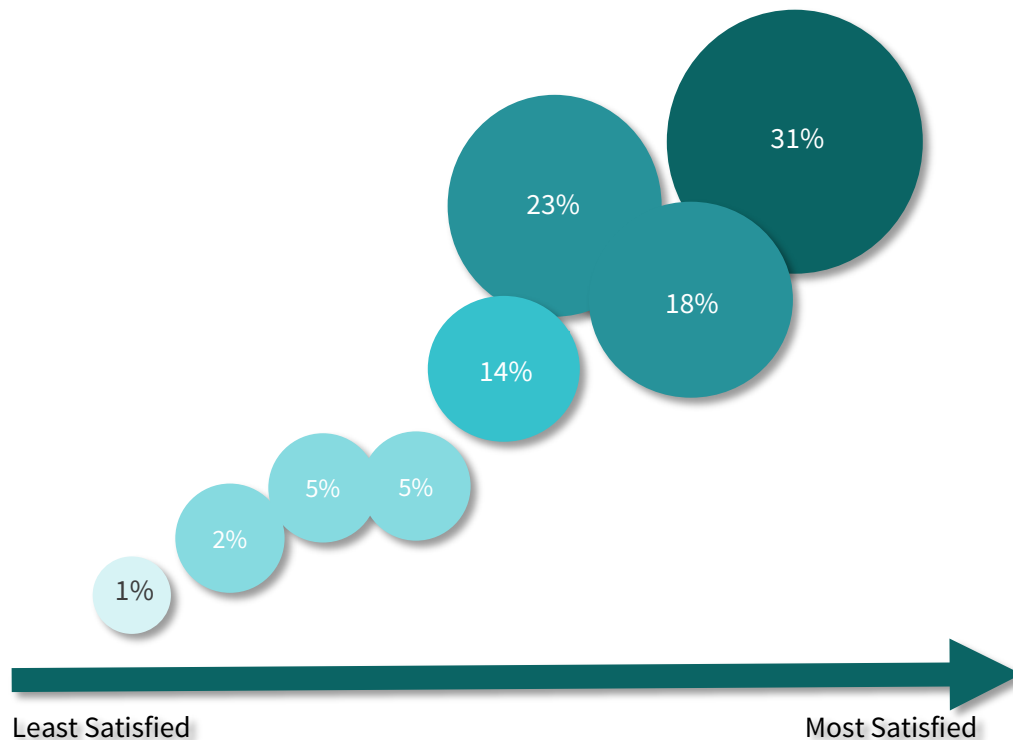
Passengers were asked to indicate the top three service improvements from a list of eight that would make KWT better for their use (Figure 4-10); a ninth selection was available for other improvement priorities not on the list. In total, 47 percent said more frequent service on existing routes, 22 percent said more weekend service on city routes, 9 percent said more benches and shelters at bus stops, and 7 percent said more routes like the Duval Loop.

Figure 4-10: Top Three Service Suggestions



Passengers were asked to rate their overall satisfaction with KWT’s services (Figure 4-11). Most gave the highest rating (“10”, followed by “8” (13%), and “9” (18%). The majority of responses reflected a higher overall rating of the agency, with an average score of 8.26 out of 10.

Figure 4-11: Satisfaction with Key West Transit



Passenger Socio-Demographic Information

When asked about their residency, most respondents indicated they reside in Key West permanently (46%), approximately 41 percent responded less than six months, and 13 percent said six months to

one year. As shown in Figure 4-12, 86% reported their residence as within Key West, 8 percent elsewhere, and six percent in Marathon.

Figure 4-12: Residency

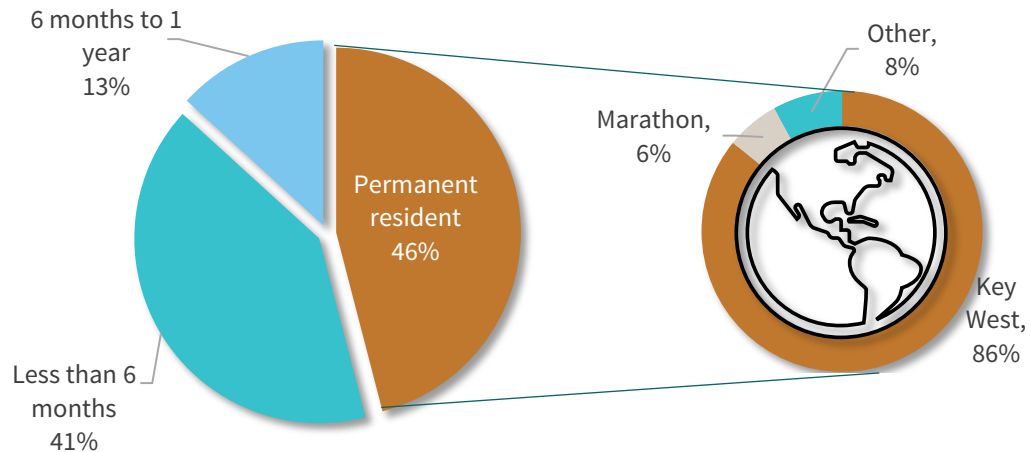
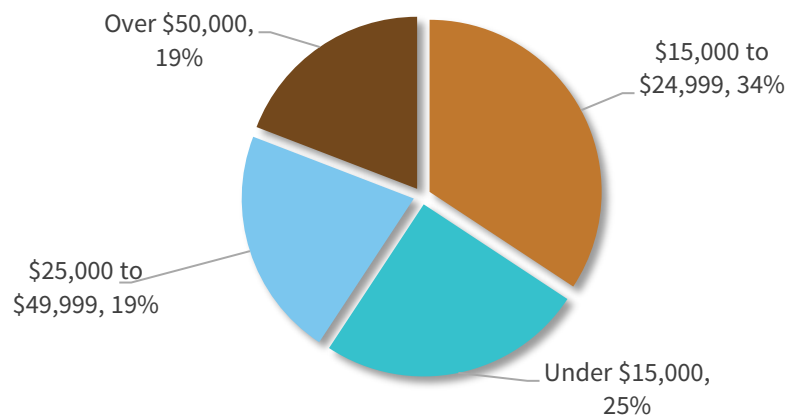


Figure 4-13 shows the responses that passengers indicated when asked about household income. In total, 170 (34%) passengers said \$15,000 to \$24,999, 124 (25%) said less than \$15,000, 107 (22%) said \$25,000 to \$49,999 and 95 (19%) said over \$50,000.

Figure 4-13: Household Income



Passengers were asked to indicate their race from a list of seven choices (Figure 4-14). In total, 467 passengers (63%) said they were White, 99 (13%) said Other, 79 (11%) said American Indian or Alaska Native, and 69 (9%) said Black or African American. Approximately 54 percent were male and 46 percent were female (Figure 4-15).

Figure 4-14: Race

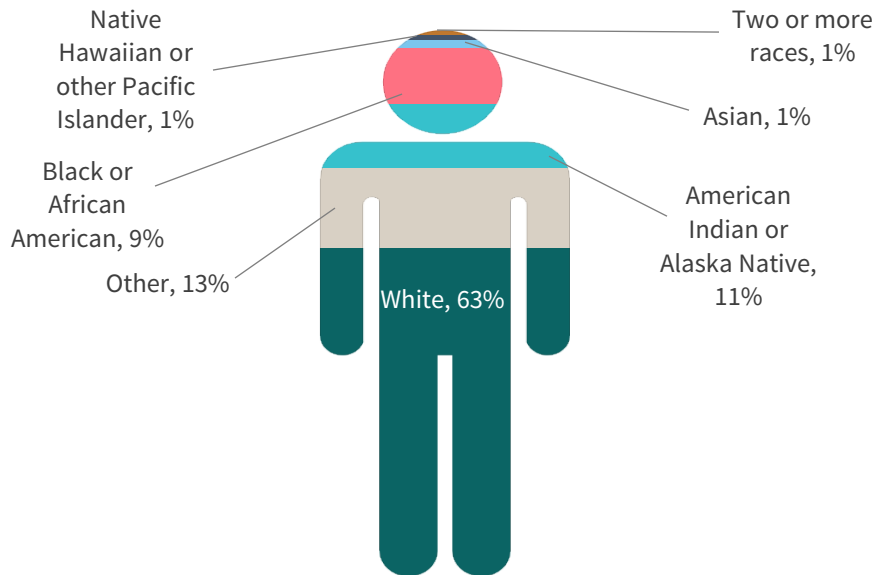
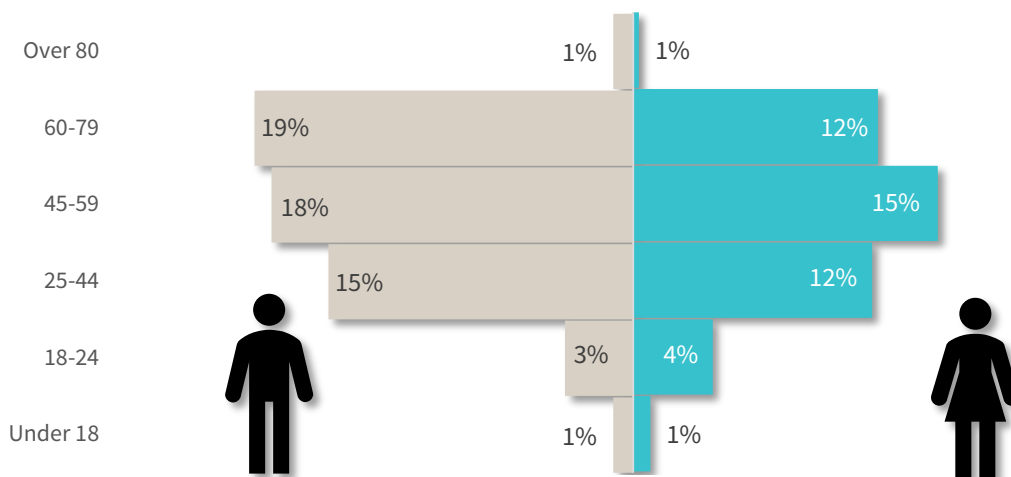


Figure 4-15 shows that 238 (33%) were ages 45–59, 223 (31%) were 60–79, 193 (26%) were 25–44, 54 (74%) were 18–24, and passengers under age 18 and age 80 years or older made up 3%.

Figure 4-15: Gender and Age



Public Input Survey

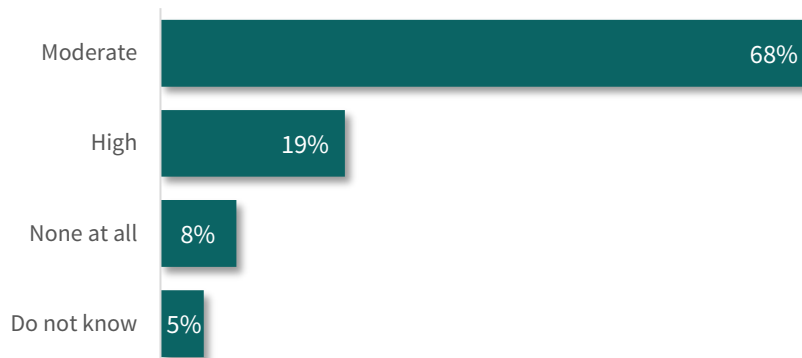
An online public survey was initiated in January 2019 and made available via social media platforms created for the TDP (discussed later in this section), email blasts, and the KWT website; it was also available during the public workshops. Periodically, KWT sent reminders and posted information about completing the survey on its social media and online platforms.

In total, 14 questions were asked to gather opinions about current services, willingness to use public transit, and the community’s transit needs. The survey was also designed to gauge public awareness of transit in Key West and to gather socio-demographic information of survey respondents. A total of 110 surveys were completed.

Summary of Public Input Survey Results

Survey respondents were asked how much awareness there was about transit and public transportation in the city. The majority responded that awareness was “moderate” (68%). Figure 4-16 shows the remainder of responses from greatest to least, including High (19%), None at all (8%), and Do not know (5%).

Figure 4-16: How much awareness is there in the city about transit/public transportation?



Although the 68% of respondents indicated there was only “moderate” awareness of the public transit services, 74 percent said that it must be provided (Figure 4-17). Approximately 18 percent responded that it might be useful, followed by not sure it is useful (4%), and it does not matter to me (4%).

As shown in Figure 4-18, respondents were asked about their perception of transit’s role in the city. Approximately 40 percent agreed that it was to serve workers and commuters, followed by relieving parking/congestion (31%), serving tourists/visitors (27%), and connecting the islands (2%).

Figure 4-17: What do you think of Key West Transit service?

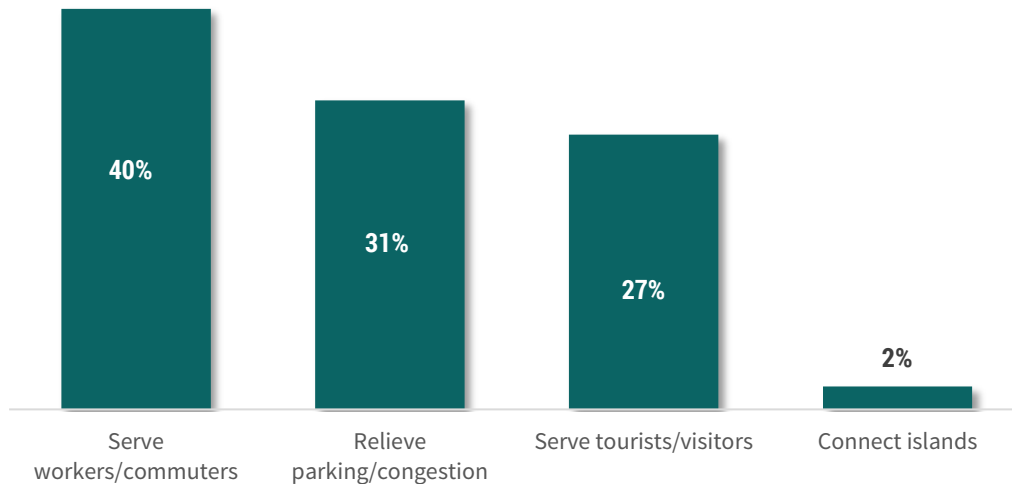
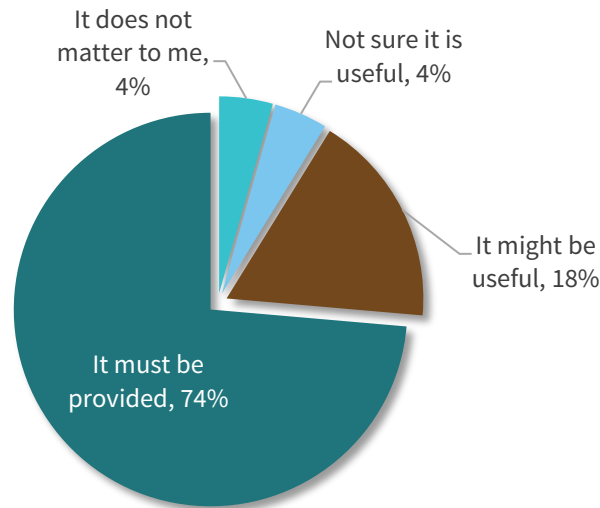
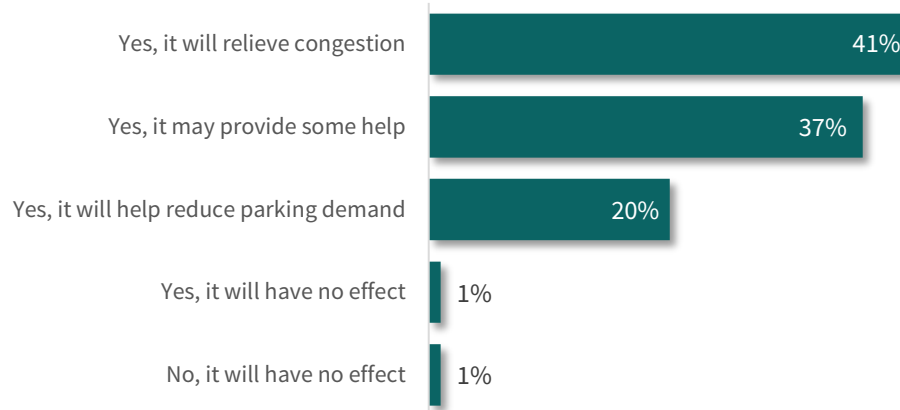


Figure 4-18: What is your perception of transit's role in the city?



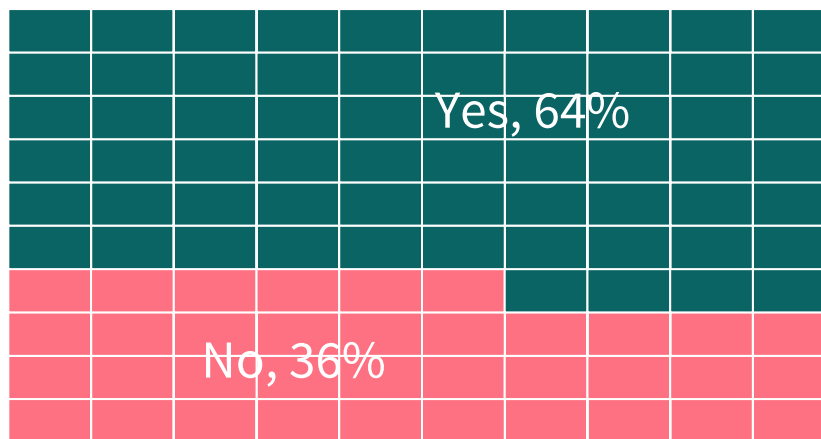
When asked if traffic congestion is a problem in Key West, 99 percent of respondents agreed that it was. As shown in Figure 4-19, 41 percent responded that traffic congestion was a problem and that transit would relieve congestion and 37 percent agreed that traffic congestion was a problem and that transit may provide some help. Approximately 20 percent indicated that traffic congestion was a problem and that transit would help reduce parking demand, and 2 percent did not think transit would have an effect whether or not they thought traffic congestion was a problem.

**Figure 4-19: Is traffic congestion a problem in Key West?
What role do you see transit playing alleviating the situation?**



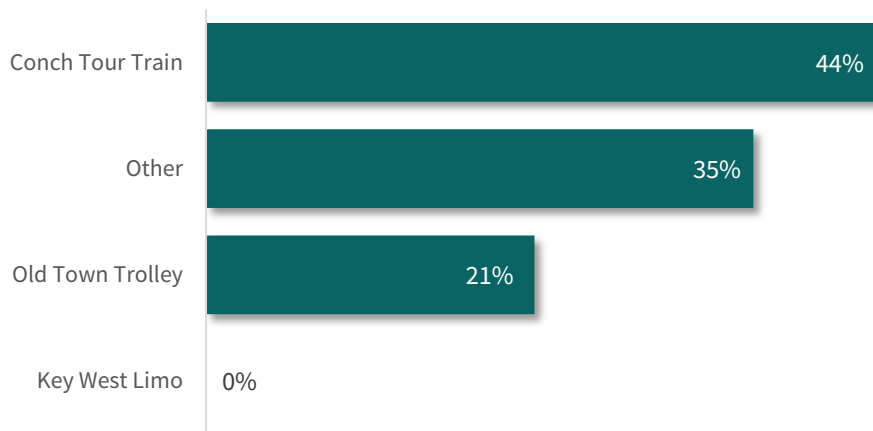
To gauge the perception of respondents, they were asked if they had ever used KWT. As shown in Figure 4-20, approximately 64 percent had used it before and 36 percent had not.

Figure 4-20: Have you used Key West Transit?



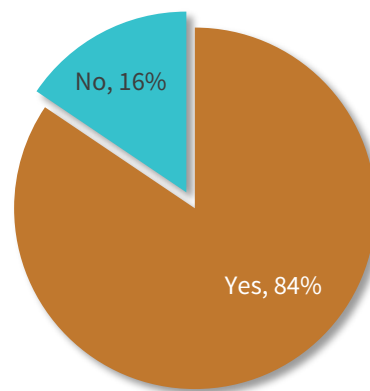
When asked if they had used any other transportation services in Key West, the most popular response was the Conch Tour Train (44%). “Other” services were indicated as the next highest response, followed by the Old Town Trolley (21%); no respondents indicated that they used Key West Limo service. When were asked to elaborate what services when choosing “Other,” the most popular responses included Uber, Lyft, or taxi.

Figure 4-21: Have you used any of the following other services in Key West?



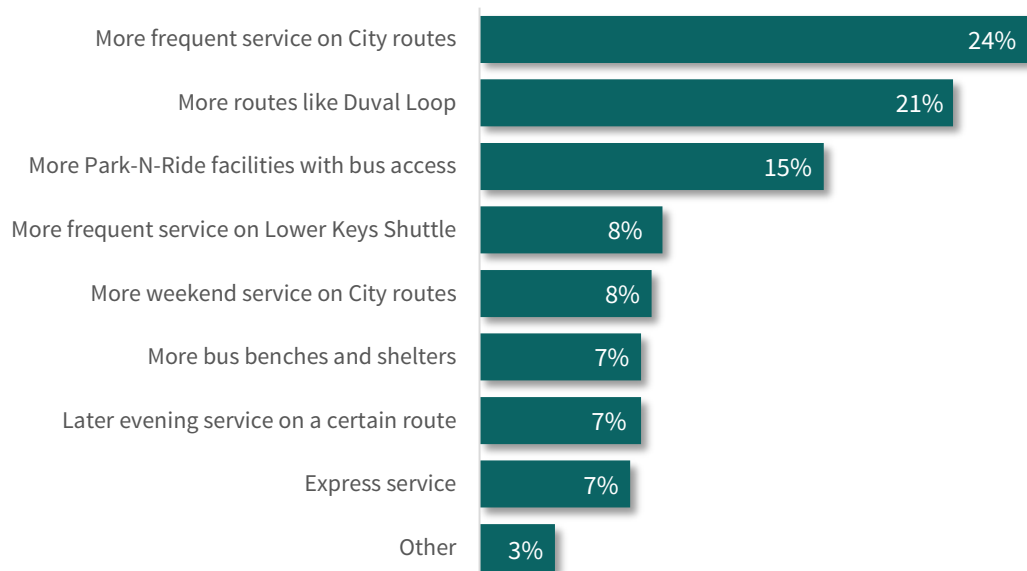
Respondents were asked if there was a need for additional transit services in Key West. As shown in Figure 4-22, approximately 84 percent agreed that there was and 16 percent did not.

Figure 4-22: Do you think there is a need for additional transit services in Key West?



Respondents were asked to indicate what improvements they would like to see in Key West if additional services were needed (Figure 4-23). The top three responses were more frequent service on city routes (24%), more routes like the Duval Loop (21%), and more park-and-ride facilities with bus access (15%). Other responses included more frequent service on the Lower Keys Shuttle (8%), more weekend service on city routes (8%), more benches and shelters (7%), later evening service on a certain route (7%), express service (7%), and other (3%). Respondents were asked what other improvements they would like to see if they indicated that option; responses included a route in New Town, a Stock Island route, and an Old Town route.

Figure 4-23: What are the top three improvements you would most like to see?



Respondents were asked to provide socio-demographic information, including residence status, age, and income. As shown in Figure 4-24, respondents indicated how many months of the year they reside in Key West or the Lower Keys. Approximately 24 percent responded that they were there for less than six months, nine percent indicated six months to the whole year, and approximately two-thirds (66%) indicated that they were permanent residents. If they indicated that they were a permanent resident, they were asked to provide their ZIP code. Approximately 93 percent lived in Key West or on Stock Island, 5 percent on Big Pine Key, and 2 percent on Cudjoe Key (Figure 4-25).

Figure 4-24: How many months of the year do you reside in Key West/Lower Keys?

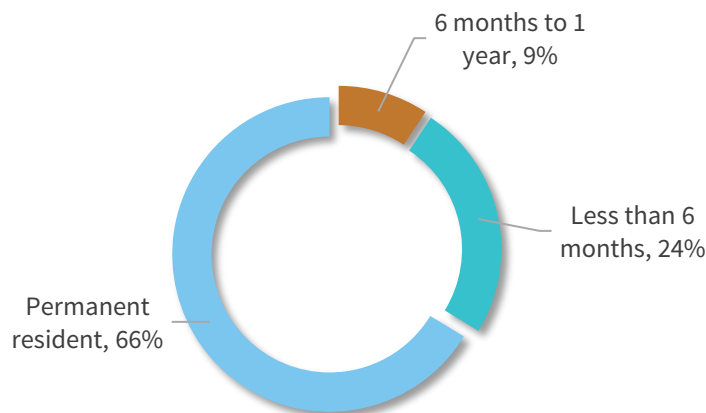
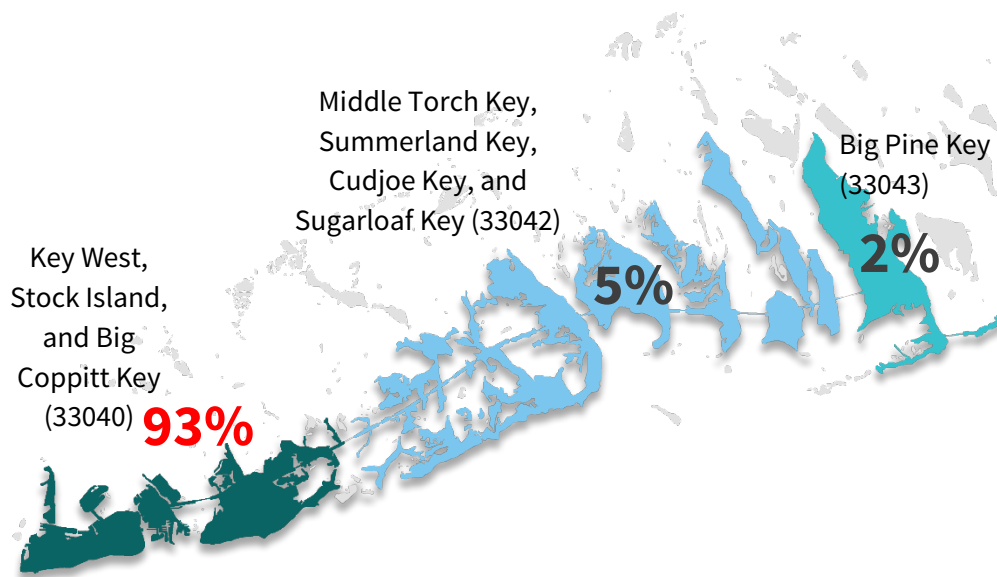
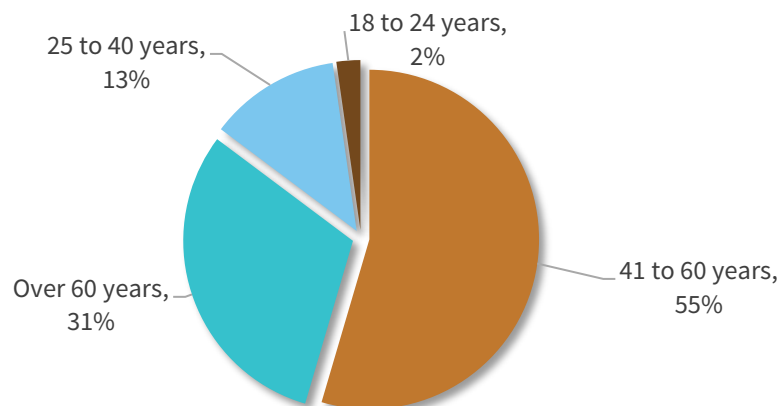


Figure 4-25: If a permanent resident, where do you live?



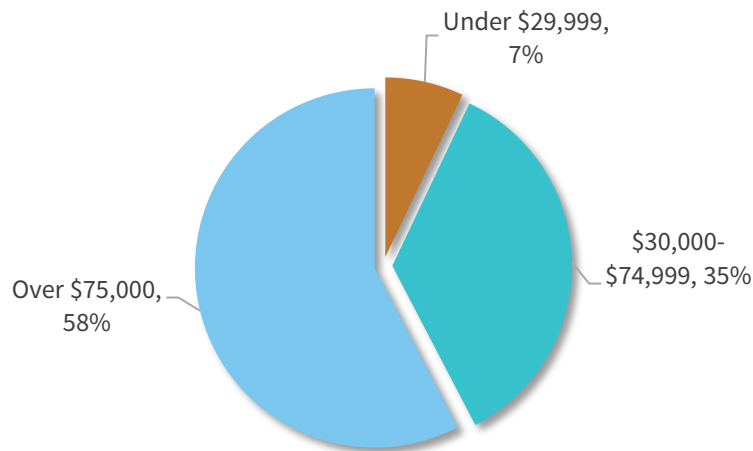
When asked about their age, more than half of respondents (55%) indicated that they were ages 41–60, approximately 30 percent said over 60, 13 percent said 25–40, 2 percent said 18–24, and none said under 18 (Figure 4-26).

Figure 4-26: Age



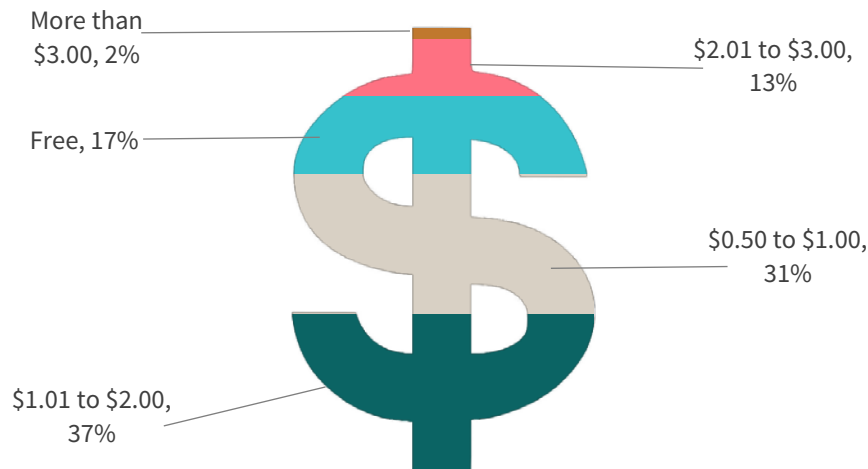
As shown in Figure 4-27, the majority (58%) indicated their annual household income level as over \$75,000. Other responses include \$30,000 to \$74,999 (35%) and seven percent indicated under \$29,999.

Figure 4-27: Household Income



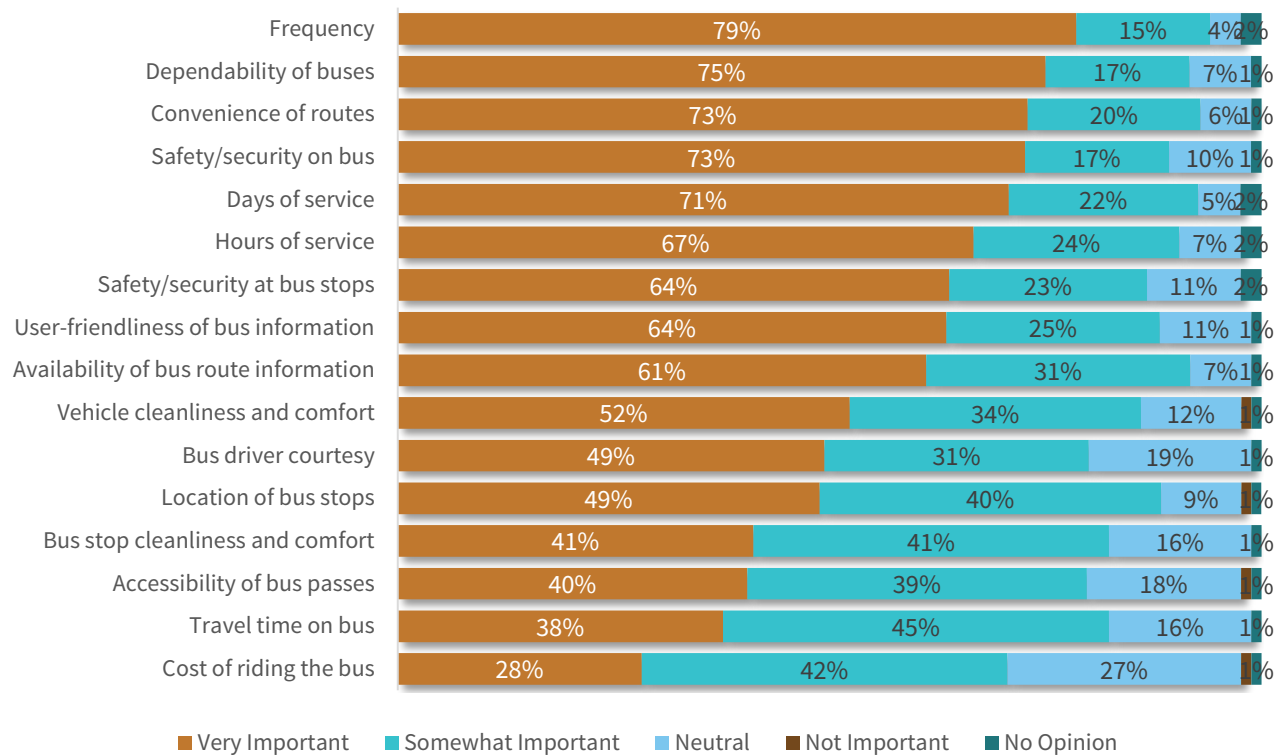
When asked what a reasonable one-way fare to pay for transit is, the most popular response was \$1.01 to \$2.00 (37%). Other responses were \$0.50 to \$1.00 (31%), free (17%), \$2.01 to \$3.00 (13%), and more than \$3.00 (2%), as shown in Figure 4-26.

Figure 4-28: What do you think is a reasonable one-way fare to pay for transit?



Passengers were asked to rate characteristics of service; Figure 4-29 shows the findings. Frequency, dependability of buses, and the convenience of routes were the top priorities.

Figure 4-29: Importance of Service Aspects



Phase I Outreach Public Workshops

To identify transit needs in the community and how KWT can improve its services in the next 10 years, two public workshops were held in March 2019. Each included instruments to gather general attitudes regarding transit in Key West and desired service and facility improvements to the current transit system. The open house-style workshops allowed City transit staff to engage with members of the public who could come and go as they pleased.

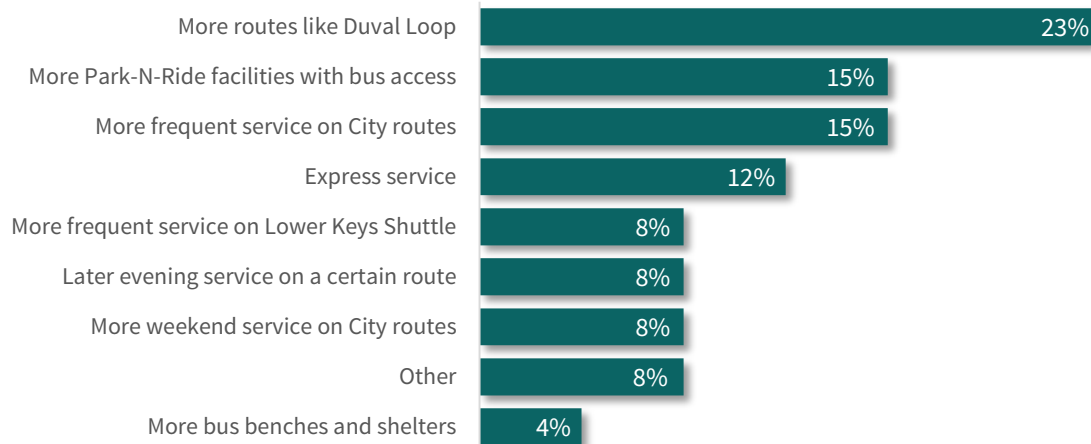


Public Workshop #1

The first public workshop was held at the City Commission Chambers Courtyard in Old Town from 3:00–5:00 PM on March 4, 2019. It was attended by 12 participants who asked questions and provided input, with 9 completing a tablet-based online survey. Figure 4-30 is a summary of the priorities expressed at the first workshop on future transit services in Key West. Participants indicated more

routes like the Duval Loop, more park-and-ride facilities with bus access, and more frequent service on city routes as the most important improvements in Key West for the next 10 years.

Figure 4-30: What service improvements would make KWT better for you to use?

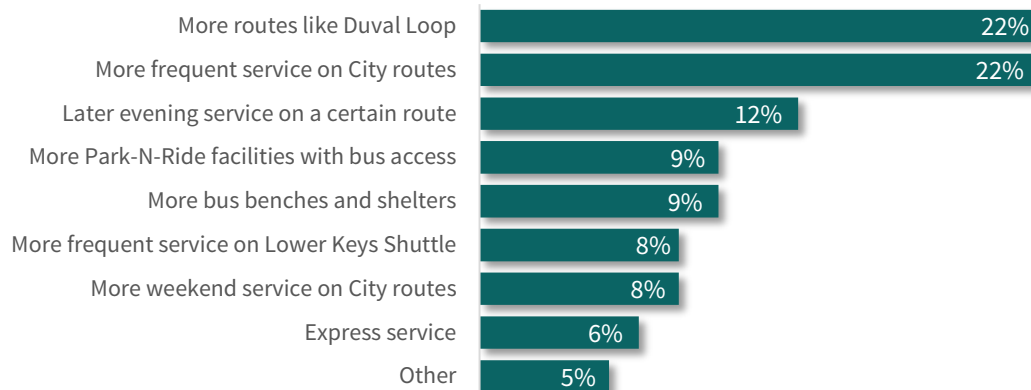


Public Workshop #2

The second public workshop was held at the City Commission Chambers Courtyard from 2:00–4:00 PM on March 5, 2019. It was attended by 35 participants who asked questions and provided input, with 27 completing surveys.

Figure 4-31 is a summary of the improvement priorities expressed at the March 5 workshop. The top three service improvements were more routes like the Duval Loop, more frequent service on city routes, and later evening service on a certain route. Particular routes mentioned for later service included the Duval Loop and in the New Town area. This echoes previous workshops that indicated more service supply and more frequent service.

Figure 4-31: What three service improvements would make KWT better for you to use?



Discussion Group Workshops

Business and Economic Development Discussion Group

A discussion group workshop was held with business leaders and hotel managers to gauge existing and future public transportation needs in Key West on March 5, 2019, from 10:00 AM to 12:00 pm at the KWT Conference Room of KWDoT facility at 5701 College Road in Stock Island. Attendees included representatives of the Key West Chamber of Commerce and Tourist Development Council, former members of the Alternative Parking Transportation Group, and representatives from Florida Keys Community College, the Tropical Soup Group, the Lower Keys Medical Center, and the Historic Florida Keys Foundation, who participated in a discussion for KWT to learn more about the public transportation needs for the people and organizations in Key West. There were 12 attendees at this workshop, including other stakeholders and staff from various City agencies. Each attendee was provided with meeting materials and took part in viewing a detailed project presentation, which was followed by productive discussion session.



Key Input received from and needs identified by workshop attendees included the following:

- A major concern of discussion group members was traffic and connectivity issues due to the construction of Cow Keys Bridge (connecting Key West to Stock Island and rest of the Keys), which will make traffic issues worse on already-congested US-1. Participants were very interested in using transit as a solution/remedy to relieve the congestion and also thought this alternative could translate into permanent ridership.
- Another priority for the group was to make routes shorter, easy to understand, and more frequently available so residents and tourists can to use them for work, shopping, sightseeing, recreation, and other purposes more easily.
- The group was in agreement that larger buses should be used only on major arterials and/or for more popular/high ridership routes (such as Duval Loop) to help with capacity issues. They recommended that the smaller buses be implemented in areas with narrower roads and low ridership routes or when there is less demand for transit, such as at night.

- Consideration of fare free service was discussed to make the routes more attractive and encourage tourists to not drive. Some stakeholders indicated the need for the whole system to be free to entice residents and visitors who have not used transit.
- Discussions included the need for and importance of local businesses providing bus passes to workers and hotels providing visitors with bus passes.
- Awareness about transit in the city was discussed; all agreed that more awareness and marketing may help residents, workers, and visitors understand the convenience of using transit in the city and help them switch to this mode when possible.
- Participants agreed that the location and number of bus stops needs to be addressed. They felt that there was an excess of bus stops that was slowing down the system that could be either eliminated or reallocated to areas that may need it.
- Most participants were not in favor of raising taxes, but agreed that there could be revenue from private partnerships, tourism fees, or parking.

The following is feedback from participants who chose to complete the survey:

- The top three choices indicated by participants in the Business and Economic Development Discussion Group were more routes like the Duval Loop (22%), more frequent service on city routes (22%), and later evening service on a certain route (12%). Participants who responded that they would like to see later evening service on certain routes indicated the Duval Loop.
- Implementing more capital improvements such as bus benches, bus shelters, and park-and-ride locations were supported by discussion group participants. Participants commented that more bus infrastructure could be placed at popular bus stops on frequently used routes such as the Duval Loop.
- Approximately 82 percent of participants responded that they thought KWT must be provided. When asked about the most important aspects of choosing to ride KW, participants said frequency of service and convenience.

Social Services Agencies Discussion Group

Another discussion group workshop was held with area social service and workforce development agency stakeholders to gauge existing and future public transportation needs in Key West on March 6, 2019, from 10:00–11:30 AM at the same previous location. Attendees included representatives from Westcare, Key West Housing, the Florida Keys Coalition, Habitat for Humanity, Vocational Rehabilitation services, Monroe County Social Services, and Key West Community Services participated, in addition to City of Key West staff. There were eight attendees at this workshop, and each was provided with meeting materials and received a brief project overview presentation.

Input received and needs identified from workshop attendees included the following:

- Need a reliable schedule for workers; if there is an unexpected delay or shift in schedule, it can affect someone getting to work.
- KWT helps with parking congestion but could help more. The service is overall underused.
- KWT should establish a presence at hotels to increase ridership by tourists.
- More frequent service would be helpful for workers and tourists.
- Congestion becomes an even bigger problem during Fall when residents return from their northern homes.
- KWT should advertise more to senior centers, as most older adults do not have cars or cannot drive and need transportation. More free ride days should also be implemented to help with visibility and increase regular ridership.
- Service is needed in the New Town area—a loop or a short and concise route.
- There is a need to coordinate more with Miami-Dade County to help obtain passes for connections via MDT 301 route. Currently, passengers can purchase passes only in Miami-Dade County.

The following is feedback from participants who chose to take a survey:

- More weekend service on city routes (20%), more park-and-ride facilities with bus access (17%), and more frequent service on city routes (17%) were the top choices indicated by social service agency participants. Participants commented that if there was more service supply, tourists would not feel the need to rent a car or those who arrived by car could park it at the park-and-ride for the extent of their stay. Overall, participants emphasized that transit could be a solution to the traffic and parking problem in Key West.
- Echoing the other discussion group workshop, participants agreed that more bus stop infrastructure such as benches and shelters was needed on more popular routes. Adding these amenities and making the stops attractive could aid persuading tourists to use transit.
- All participants indicated that KWT must be provided. Safety and security on buses and at bus stops were the most popular responses when participants were asked about important aspects of riding KWT.

City Commission Visioning Workshop

A transit visioning workshop was held with Key West City Commissioners on March 5, 2019, to provide an overview of the TDP process and an update on the outreach and work to date and to engage the Commissioners for input and guidance for the future of KWT and the services it provides in the city for the next 10 years.

All Commissioners and the Mayor were present and were asked a series of questions to gauge what aspects of transit they believed were important, where improvements were needed, and the future of the system. The following is a summary of the discussion from the meeting:

- All participants agreed that transit services in the city could be improved further to benefit the residents, workers, and tourists.
- All indicated that a top concern was traffic congestion and parking.
- The Commissioners agreed that the Duval Loop has been very successful and agreed that KWT should consider similar efforts, as that approach can help grow the system and improve KWT routes (Figure 4-32).

Figure 4-32: Policy Questions on Vision



- It was also agreed that transit services in the city can help service industry workers with more frequent and dependable transit, including service on holidays, to help them access work and help increase ridership.
- There was support for the development of an intermodal center on Stock Island to facilitate as a park-and-ride and as a transfer station.
- When asked about innovative approaches or how technology could play a role in advancing the system (see Figure 4-33), it was suggested that there should be Wi-Fi on all buses and at stops and that there should be real-time information displayed on the app and at key location stops to make it easier for riders. Another suggestion was to increase the bike-carrying capacity on buses to aid with first/last mile connections.

Figure 4-33: Policy Questions on Innovation



- When asked about partnerships and funding to implement new or enhanced services (Figure 4-34), the Commissioners indicated that Monroe County should be a partner, as should hotels and other tourist service entities to help promote leaving cars and using transit.

Figure 4-34: Policy Questions on Partnerships & Funding



Bus Operator Interviews

As ambassadors of KWT, bus operators have the most opportunity for and the greatest depth of contact with existing patrons on a day-to-day basis. This makes them a valuable asset both for vetting rider input and for providing important insights into route-level and system network issues related to operations, safety, scheduling, etc.

In addition to input from the general public, stakeholders, and City agencies, KWT had consultants spend time in the bus operator break room to informally interview them about existing services,

potential enhancements, and frequent comments on rider needs and complaints. In addition to one-on-one discussions, a surveys was distributed to those who were unable to attend the workshop.

Input Summary

As the primary connection between transit passengers and operations, KWT bus operators can provided a unique perspective on transit needs and frequent challenges based on their experiences. Some of the key highlights include the following:

- In general, riders are happy with the service. The operators indicated that the riders like that the buses are reliable and mostly on-time and that buses always provide them with a comfortable ride to their destinations.
- The most frequent complaints operators heard were the need for more frequent service, weekend service on some routes without weekend service, and more service in the evenings.
- Other common complaints included the need for more shelters and benches. Some also mentioned missing bus stop signs and not having bus maps and schedules at bus stops so they can see the direction of the bus and when it may be arriving. Some stops have damaged bus stop signs that may need to be addressed.
- Drivers expressed that they like working for KWT and like most everything about KWT.

Phase II Outreach Public Workshops

Two additional open house public workshops were conducted as part of Phase II outreach in May 2019. The primary goal of these workshops was to present the transit operating and capital needs identified for the next 10-years and to obtain public input to help KWT set its priorities. In these informal workshops, participants could come and go as they pleased, and KWT staff were available to engage with the public to answer their questions and obtain their input.

Public Workshop #3

The third public workshop was held outside the Publix Supermarket in the Key Plaza Shopping Complex on North Roosevelt Boulevard. It was conducted by KWT transit staff and the TDP Project Team from 3:00–6:00 PM on May 28, 2019. The workshop was attended by 95 participants who asked questions and provided input, with 57 completing surveys.



A summary of the priorities expressed at this third workshop is as follows:

- After reviewing the 10-year service plan, the most desired future KWT improvements were adding the Key West Intermodal Center (KWIC) Connector to connect the future intermodal facility in Stock Island to the park-and-ride garage in Old Town, keeping the popular Duval

Loop as is, and adding a new North Connector. (See Section 8 for a complete list of needs improvements.)

- Adding the Stock Island Circulator, the New Town Loop, and the Old Town Loop were seen by participants as the next set of priorities in the next decade.
- Other improvements included mobile fare payment, improving user-friendliness and convenience of using KWT, and expanding the transit marketing/awareness campaign.
- Overall, comments from the workshop indicated that most desire simpler, more straightforward route structures and smaller loops than the current ones. Also mentioned was the need for easy-to-understand and more accessible information through technology.

Public Workshop #4

The fourth and final public workshop was held at the same location as the previous one, from 8:30–11:00 AM on May 29, 2019. The workshop was attended by 80 participants who asked questions and provided input, with 50 completing surveys.



The following is a summary of the priorities expressed:

- Modifying the Lower Keys shuttle, adding the KWIC Connector, keeping it a truly “quick” connection to shuttle people who may park or connect at Stock Island to the city, and keeping the Duval Loop as is were indicated as the top three most important transit improvements.
- Other priorities included adding an Airport Connector, North Connector, and the Stock Island Circulator, which would help many workers connect to routes more quickly due to the new simpler and smaller route structure.
- The top three capital and technology improvements supported by participants were establishing a program to allow free transit rides, implementing/enhancing a bus locator app, and establishing the KWIC.
- Many full-time and seasonal residents, both young and older, stopped by to provide input and indicate their strong desire to use transit in Key West if it is convenient. Some currently use Uber and taxi services to get around and indicated how expensive it is and how that restricts their mobility in the city. They mentioned that the fare is not a concern for them (as the other services generally cost more) and that simpler, smaller loops in neighborhoods and buses on major roads that comes often are what is needed and will make them use transit.

Transit Needs Survey

An online public survey was initiated in March 2019 via social media platforms created for the TDP (discussed later in this section), email blasts, and the KWT website. The survey was available during

the open house public workshops to continue gathering public input, and KWT posted information about completing the survey on its online platforms beginning in March 2018. The survey continued until late June 2018 and was promoted periodically during this period via email and social media.

Several questions were asked on the survey to determine support for potential service improvements, presented as a map and tables both online and at display boards during the workshops. In total, 220 surveys were completed during the course of this TDP.

Public Input Survey Results

Similar to the second round of public workshops, adding the KWIC connector, keeping the Duval Loop as is, and adding an Airport Connector received the most support for service improvements for KWT (Figure 4-35). Support for adding the KWIC Connector and keeping the Duval Loop as is was notable throughout the second phase of the public involvement process. The top three capital and technology improvement were improving the user-friendliness and convenience of using KWT, adding mobile fare payment options, and implementing/enhancing the bus locator app. As shown in Figure 4-36, the majority of capital and technology improvements were received favorably.

Figure 4-35: Top Service Improvements

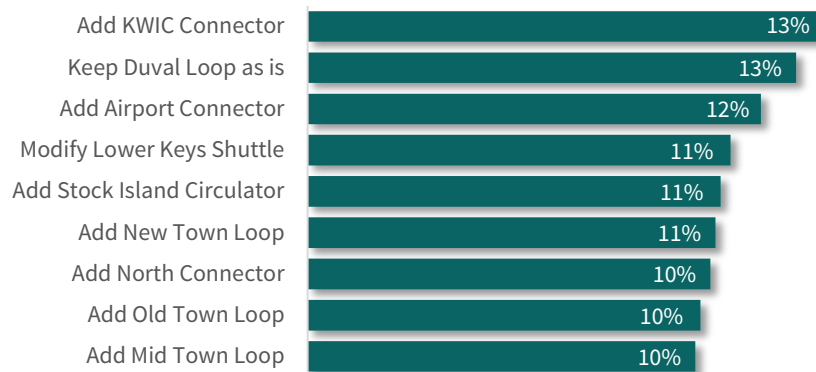
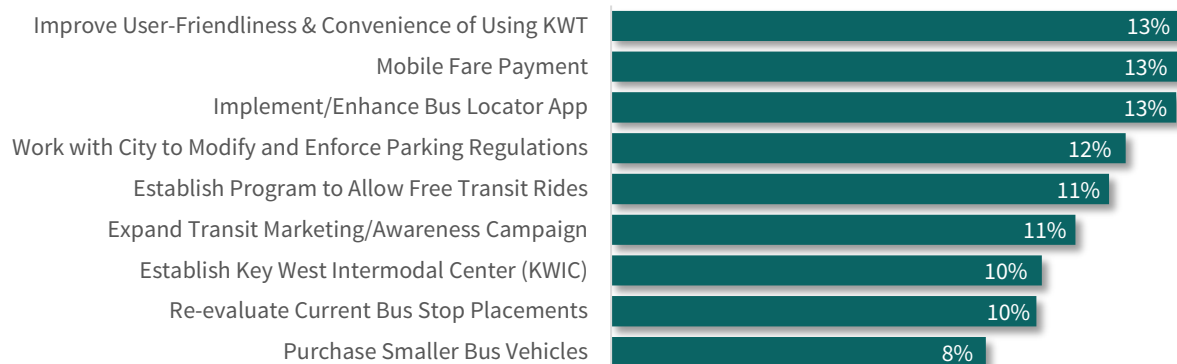
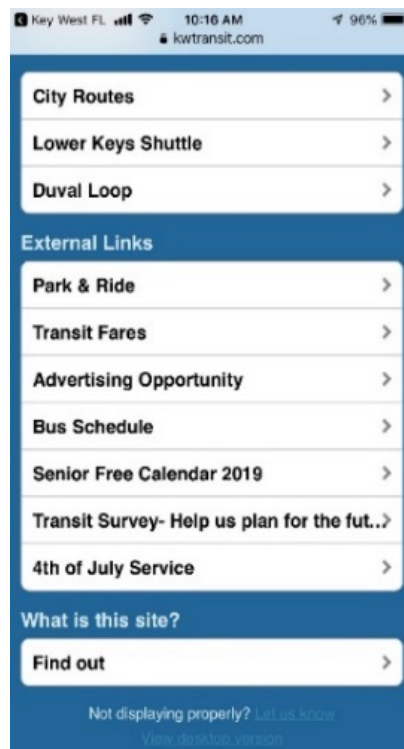


Figure 4-36: Top Capital/Technology Improvements



Other Outreach Activities

In addition to the many direct and indirect techniques described previously, KWT used available public engagement electronic media platforms, such as the kwtransit.com webpage and Facebook sites in the community to expand TDP awareness and engagements with residents and tourists. KWT also used the City’s mobile app, which it uses to promote transit services to residents and tourists. On social media, KWT coordinated with Car-Free Key West Facebook page administrators to use that and their other channels to provide a platform on which the public could complete the general public surveys in addition to raising awareness about opportunities for public participation at workshops and other events and access information and updates on the progress of TDP development.



Section 5: Situation Appraisal

A TDP is a strategic planning document that includes an appraisal of factors within and outside a service area that affect the provision of transit service. The following sections synthesize the previous efforts in the TDP and a plans review to develop an assessment of the full operating environment for KWT. This assessment serves as the basis for the formulation of KWT’s future goals and objectives.

Conducting a situation appraisal is a key requirement under the TDP Rule and helps a transit agency examine its strengths and weaknesses as well as any existing/potential threats and opportunities for the provision of its services.

A review of local, State, and Federal plans was conducted to ensure consistency between the 10-year plan goals and initiatives with other government policies and planning efforts. The current overall planning and policy environment in the city was reviewed to better understand transit needs; included are reviews of existing socioeconomic trends, travel behavior/patterns, land use, community feedback, organizational issues, technology, and funding.

Review of Plans and Studies

At the local and regional levels, several agencies/organizations conduct studies to produce plans and policies for addressing local and regional transportation issues and intermodalism that may impact KWT services. Various Federal and State plans and regulations also may impact the provision of transit services. This plans and policy review helps KWT understand and support the pursuit of existing goals while pursuing its own goal of creating a viable and accessible transit system in Key West.

Relevant transportation planning and programming documents are summarized, with an emphasis on issues having implications for KWT. Additionally, selected plans produced for the City of Key West related to land use were reviewed to summarize and call attention to community goals, objectives, and policies that may have implications for current and future transit services.

The following local, regional, State, and Federal plans and studies were reviewed to understand current transit policies and plans with potential implications for Key West Transit service:

- Local Plans
 - City of Key West Comprehensive Plan
 - City of Marathon Comprehensive Plan
 - Monroe County Comprehensive Plan
 - Key West 2015–2024 TDP Major Update
 - Key West Bicycle and Pedestrian Master Plan
 - Key West TDP 2018 Annual Progress Report

- Monroe County Transportation Disadvantaged Service Plan (TDSP)
- Regional Plans
 - Miami-Dade Transit Development Plan
 - Miami-Dade 2040 Long Range Transportation Plan (LRTP)
- State and Federal Plans
 - Florida Transportation Plan: Horizon 2060
 - State of Florida Transportation Disadvantaged Five-Year/Twenty-Year Plan
 - Florida’s Strategic Intermodal System Strategic Plan
 - FAST ACT
 - Implications to Public Transportation of Emerging Technologies

The transportation planning and programming documents reviewed are summarized in Tables 5-1, 5-2, and 5-3 by their geographic applicability, type of plan, responsible agency, overview of the plan/program, and key considerations for the situation appraisal.

Table 5-1: Local Plans, Policies, and Programs

Plan Title	Geographic Applicability	Most Recent Update	Type of Plan	Responsible Agency	Plan/Program Overview	Key Considerations/Implications for TDP
City of Key West Comprehensive Plan	City of Key West	2013	CP	City of Key West	Addresses land use, transportation, capital projects, public facilities, recreation, government coordination, conservation, and development goals, among others, for city.	Provides goals for ensuring a safe, efficient, and quality transportation system. Plan expresses support for expanding transit service to help reduce headway, traffic congestion, parking problems. In addition to supporting County in its efforts to provide and improve public transportation services (i.e., providing bus stops, constructing connections to transit routes, increasing public awareness), policies are set to support objective of strengthening entire multimodal network: <ul style="list-style-type: none"> • Development regulations (compact, mixed-use development in prioritized corridors) and design standards for parking (maximum parking requirements or elimination thereof, park-and-ride lots, and on-street parking), circulation systems, and access points will ensure adequate transit, bicycle, and pedestrian site access to promote these modes in place of single occupant vehicles. • Bicycle and pedestrian connections from residential areas will be provided. • Site plan review and traffic circulation system will encourage transit-friendly design features along roadways.
City of Marathon Comprehensive Plan	City of Marathon	2013	CP	City of Marathon	Addresses land use, transportation, capital projects, public facilities, recreation, government coordination, conservation, and development goals, among others, for city.	Provides goals for development of coordinated transportation system for residents, visitors, and transportation disadvantaged people within the city limits. Coordination with Miami-Dade and the City of Key West is encouraged to keep connectivity and options for transportation opportunities.
Monroe County Comprehensive Plan	Monroe County	2016	CP	Monroe County	Addresses land use, transportation, capital projects, public facilities, and economic development goals, among others, for the county.	Discusses intention to invest in upgrading several existing transit shelters and building more where necessary. Prescribes transit-supportive goals, objectives, and policies, such as need to develop regulations that require new developments to become more mass transit-oriented, encourage maximum use of right-of-way, improve connections with pedestrian and bicycle networks, promote expansion of aviation, coordinate with other transit agencies to meet regional mobility needs.
Key West 2015–2024 TDP Major Update	City of Key West	2015	TDP	Key West Transit	Emphasizes transit improvements and additions during peak hours; outlines cost feasibility plan, focuses on limiting traffic congestion.	Emphasizes need to promote mass transit as a primary form of transportation to decrease demand for parking in popular areas. Creating new routes and expanding transit shelters encouraged. New downtown loop proposed for free. Maintain communication with Miami-Dade to ensure regional connection. Priorities include: <ul style="list-style-type: none"> • Replace aging fleet that has passed useful life benchmark. • Construct new facility for KWDoT. • Add storage and maintenance facility that has capacity for all vehicles. • Establish super stop that can accommodate large amount of riders and can be used as transfer center.
Key West Bicycle and Pedestrian Master Plan	City of Key West	2018	MP	City of Key West	Addresses city’s current transportation networks and emphasizes need for alternative transportation options.	Discusses alternative transportation options and implementation explored including: <ul style="list-style-type: none"> • Off-street path connections, bike boulevards, bike boxes, pedestrian networks, and neighborhood traffic circles designed around transit stops • Establishing multi-modal transfer center at airport • Integrating pedestrian travel and bicycle use with transit • Using technology to encourage multimodal transportation coordination
Key West TDP Annual Progress Report	City of Key West	2018	APR	Key West Transit	Annual update that outlines past year’s accomplishments, revisions for coming year, revised financial plan, revised goals and objectives.	Provides updates on variety of capital, facility, and service projects: <ul style="list-style-type: none"> • KWT updated its fleet to include three 2018 Gillig buses and one 2018 Gillig Hybrid Diesel/Electric bus; 20 buses and over two-thirds of buses are within useful life. • KWT plans to add fuel canopy to 15,000 gallon above-ground fuel tank, may order additional equipment for maintenance and operations staff contingent on grant funding. • KWT changed Duval Loop service from 4 days per week to 7 due to high demand for system.
Monroe County TDSP	Monroe County	2012	TDSP	Monroe County	Major TDSP update, emphasizes transit improvements and additions that serve needs of TD population in efficient and cost-effective manner.	Supports overall goal of assuring availability of efficient, cost-effective, and quality transportation services for TD people. Developing short- and long-term goals to enhance local TD efforts to supply demand for all trips. Priorities include: <ul style="list-style-type: none"> • Create more awareness of Monroe County TD Program through marketing • Pursue additional funding to help with service as demand surpasses revenue • Improve referral systems with transportation providers to help meet demand of users

Table 5-2: Regional Plans, Policies, and Programs

Plan Title	Geographic Applicability	Most Recent Update	Type of Plan	Responsible Agency	Plan/Program Overview	Key Considerations/Implications for TDP
Miami-Dade TDP	Miami-Dade County	2019	TDP	Miami-Dade County	Addresses transportation, capital projects, improvement of existing bus, light rail, monorail systems.	Update of major goals and objectives in Miami-Dade County that include expanding and enhancing regional service to accommodate growing population in South Florida. Encourages growth of connectivity in South Florida area, citing Dade-Monroe Express that connects Miami to Marathon. MDT currently contracts out a fixed route (Routes 301) that connects to Key West via Lower Keys Shuttle on US-1.
Miami- Dade 2040 Long Range Transportation Plan (LRTP)	Miami-Dade County	2014	TDP	Miami-Dade MPO, County	Evaluates long-term plans of Miami-Dade area, including region as a whole and how to better connectivity.	Introduces inclusion of new projects that would improve efficiency of current operating system. Long-term goals include reducing roadway congestion that is projected to dramatically increase in next 10–20 years. No mention of specific connections to KWT in current plan.

Table 5-3: State and Federal Plans, Policies, and Programs

Plan Title	Geographic Applicability	Most Recent Update	Type of Plan	Responsible Agency	Plan/Program Overview	Key Considerations/Implications for TDP
State of Florida Transportation Disadvantaged 5-Year/20-Year Plan	Florida	2007	State	Florida Commission for the Transportation Disadvantaged (FCTD)	Purpose to accomplish cost-effective, efficient, unduplicated, cohesive TD services in service area.	Develop and field-test model community transportation system for persons who are transportation disadvantaged; create strategy for FCTD to support development of universal transportation system.
FDOT Complete Streets Implementation Update: Handbook and Design Manual	Florida	2018	State	FDOT	Developed to create alternative transportation systems to facilitate “Complete Streets” focused design.	Plan includes: <ul style="list-style-type: none"> • Revising guidance, standards, manuals, policies, other documents • Updating how decision making processed • Modifying evaluation of performance • Managing communication between agencies • Update training and education in agencies
Florida Transportation Plan: Horizon 2060 (FTP)	Florida	2005	State Transportation Plan	FDOT	Requires, as part of Florida Statutes, pursuit to make Florida’s economy more competitive and communities more livable. Looks at 50-year transportation planning horizon and calls for fundamental change in how and where State investments in transportation are made.	Supports development of state, regional, and local transit services through series of related goals and objectives, emphasizing new and innovative approaches by all modes to meet needs today and in future.
FAST Act	National	2015	Federal Transportation legislation	114 th US Congress	Enacts five years of funding for US surface transportation infrastructure, including transit systems and rail transportation network. Provides long-term certainty and more flexibility for states and local governments, streamlines project approval processes, maintains strong commitment to safety.	<ul style="list-style-type: none"> • Increases dedicated bus funding by 89% over life of bill. • Provides stable formula funding and competitive grant program to address bus and bus facility needs. • Reforms public transportation procurement to make Federal investment more cost effective and competitive. • Consolidates and refocuses transit research activities to increase efficiency and accountability. • Establishes pilot program for communities to expand transit through use of public-private partnerships. • Provides flexibility for recipients to use federal funds to meet their state of good repair needs. • Provides for coordination of public transportation services with other federally assisted transportation services to aid in mobility of older adults and individuals with disabilities.
Implications to Public Transportation of Emerging Technologies	National	2016	Research Report	National Center for Transit Research	White paper that explores possible consequences for public transportation as a result of introduction of new technologies such as autonomous vehicles, connected vehicles, other innovations that impact efficiency, cost-effectiveness, overall demand for transportation.	Identifies key factors expected to influence public transportation system and current and potential users. Outlines potential impacts on travel behavior and travel decision-making; outlines areas that may be impacted by changes in travel costs for various existing and emerging modes; identifies potential implications on traveler safety along with traveler perceptions of emerging travel modes. Identifies current transit services as testbed for new technology deployment. Key areas of opportunity and savings include automated buses, enhancing quality of service via automation, and demand-response services. Key policy issues and potential hurdles are identified with recommendations for overcoming them.

Situation Appraisal

A critical part of the *Key Connections* update was an appraisal of KWT’s operating environment so the agency can develop an understanding of the context for providing transit in Key West. This includes several specific elements through which KWT will be assessed, including the following:

- Socioeconomic trends
- Travel behavior and commuting trends
- Tourism/hospitality industry trends
- Community feedback
- Land use policies and trends
- Organizational attributes and funding
- Technology trends



Socioeconomic Trends

To better assess the impact of the growth in population on public transportation needs, it is important to understand the trends and markets that could be impacted by or may benefit from public transportation services in Key West. Major findings from an assessment of socioeconomic trends are summarized as follows:

- According to current data, Key West’s population has held somewhat steady at 26,000, with no major population growth or loss in recent years. Although the number of visitors arriving in the city has steadily increased and may continue to rise, Key West has not added and is not expected to add any major housing developments in the coming years.
- The most population-dense areas in Key West are in the northwestern portion adjacent to Dredger’s Key between Flagler Avenue and N Roosevelt Boulevard, according to the ACS). This area consists of single-family dwellings and medium-density residential.
- The Downtown Historic District between Truman Avenue and Fleming Street has the most concentration of jobs. This area hosts major attractions such as Duval Street, museums, and restaurants.
- Key West is relatively “young” compared to most other planning areas in Florida, with a median age of approximately 41; only 14% of the city’s population is over age 65.
- Although the annual income of 38% of Key West households is \$75,000 or more, 20% earn \$25,000 or less. The poverty rate has increased from 5.8% in 2000 to 7.1% today.
- Key West is home to a large foreign-born population, with approximately 20.3% of residents born outside the U.S., which is 7% higher than the national average.
- Public space is increasing in Key West, improving the bicycle/pedestrian activity that may benefit from transit. The recently-opened 28-acre, public Truman Waterfront Park includes a

playground, restaurants, green space, and an amphitheater to host community events. The amphitheater and playground were completed in 2018; the park is expected to be fully complete by 2020.



Implications

Although Key West has been a frequent target of hurricanes due to its geographic location, it has continued to grow in population and jobs, creating more demand for alternative modes of transportation such as transit. It has a comparatively younger population (average age 41) than most other areas in Florida. Although nearly 40% of households have higher incomes (\$75,000+ per year), there still are sizable segments of older adults (age 65+) and low-income households in the city, which typically are considered to be more inclined to use transportation, an indication of why the City should continue to provide and improve transit for access jobs and other services. In addition, foreign-born populations, especially those originally from areas with heavy transit use such as Europe or most South American nations, also may indicate a potential market for transit.

Due to its tourism and the hospitality industry, Key West is home to thousands of jobs, but the workforce has not been sufficient to supply the demand for workers. Many must commute to Key West for jobs, as living in a city with a median home value of \$535,600 and average monthly rent of \$1,707 may not be feasible for low-wage workers. The City is addressing its affordable housing issue, but current regulations allow the addition of only 500 units over the next 10 years, so the availability of affordable housing will be slow and may not be adequate. This indicates the need for transit to continue to bring in the necessary workers to keep its economic engine running.

In addition, Key West is promoting more use of its recreation with the addition of new public spaces and bike paths, all of which are part of creating an accessible and connected city where transit also can play a key role as a viable mode.



Travel Behavior and Commuting Trends

It is important to understand existing travel and commuting behaviors and patterns to determine possible impacts or benefits affecting public transportation services. Some key findings are as follows:

- A majority of commuters in Key West continue to use their personal vehicles to commute. However, unlike most other areas in Florida, alternative transportation modes such as biking, transit, telecommuting, and walking make up a larger percent of commute modes, higher than that typical for Florida. However, the share of commuters using transit is low, at about 2–3%, although still much higher than the transit mode share in most areas in Florida.

- Commute patterns show that 67% of Key West workers are employed at locations inside the city and the remaining 33% commute to areas outside the city to work. A total of 4.6% commute into the city from other areas, primarily the Lower Keys.
- Traffic congestion in Key West is a major issue, with major roads operating at or below their adopted roadway Level of Service (LOS) standards. Congestion has impacted commute times, which since 2000 have steadily increased.
- With the increased use of automobiles in Key West, parking demand also has increased. The City recently followed the recommendations of a group that studies the issue and increased parking fees as a step to mitigate the parking problem.
- Based on the data collected and input from outreach activities, the portion of Key West's workforce that lives in the Lower Keys and Florida City use the Lower Keys Shuttle to access employment opportunities in Key West and depend on KWT services and the Miami-Dade Transit (MDT) connection north of Marathon to access the Lower Keys Shuttle.



Implications

As a city established before the invention of the automobile, Key West offers some key ingredients for developing a well-used transit system, including areas with a well-designed grid network of roadways and a relatively high-density population. However, due to its small size and geographic location, transit has not become as widely used as most other older pre-automobile cities in the U.S. KWT has continued its efforts to improve services and has done so successfully with the available resources. With its limited resources, the agency continues to design a system that encourages city residents and tourists to ride transit instead of using automobiles. Although traffic congestion, parking demand, and the higher cost of parking in Key West provide an opportunity for improving transit, until routes run more frequently, attracting new ridership may be difficult.

To attract more workers who live outside the city to use transit, KWT should explore increasing awareness/marketing campaigns for the current Lower Keys Shuttle service and continue to coordinate with MDT to improve existing connections to the Lower Keys Shuttle. Although current bus frequencies are reasonable, a more frequent route may attract more ridership. However, due to the length of the route, expanding this regional service to meet the needs of the labor force residing outside of Key West will have funding implications that need careful consideration.

Expanding services in the city and regional enhancements to the Lower Keys Shuttle may also mean identifying efficiencies for current services. A comprehensive operational analysis of the existing route structure should be considered, as it may lead to efficiency improvements that may result in additional resources that could be used to increase service on the Lower Keys Shuttle. Also, partnerships with regional partners such as Monroe County and FDOT may play an integral part in improving and providing any additional regional transit services.



Local Tourism/Hospitality Industry Trends

In addition to the key focus areas typically included in a TDP Situation Appraisal, a discussion of the local tourism is included for *Key Connections* due to its importance in the overall operating environment for KWT. The city welcomes millions of tourists worldwide every year, with a majority from areas with good transit services. Key findings from the assessment of tourism-related data include the following:

- More than 1 million tourists come from foreign countries, with many from heavy transit use areas.
- More than 1.3 million tourists are cruise ship or ferry passengers or arrive via the airport, according to the Key West Chamber of Commerce. Although visitors arriving through the airport tend to stay for a few days or longer and may use transit, cruise ship passengers may not use transit due to their short visit.
- Hotel occupancy rates in Key West have been consistently high over the last several years and may indicate an opportunity for transit. Approximately 5,500 rooms were available in 2018, with an 83% occupancy rate, a 3% increase from 2017.
- Increased visitor arrivals and hotel occupancy rates mean an increased need for service workers who may not live in the city and must travel to the city for lower-paying jobs and therefore may need transit.



Implications

In a city in which the total number of people present on any typical day is significantly larger than the actual number of residents, efficient and well-planned transportation is key so residents can live a quality life and visitors can enjoy their destinations. This significant daily population total creates an operating environment that must meet the transportation needs of visitors and service industry workers and provide services to day trippers, overnight visitors, and cruise ship passengers. The visiting population adds more rental cars or other modes such as scooters with drivers who have little familiarity with the travel environment, thus increasing traffic congestion and incidents. Adequate and convenient public transit service can help mitigate traffic congestion and parking demand and can help the visitors access their destinations more quickly.



Community Feedback

Many public involvement activities were conducted to gather feedback from area residents and transit users, including three public workshops, stakeholder feedback, public input surveys, and on-board

surveys. These activities generated a wide range of ideas for existing service and future transit enhancements. Several key themes emerged from the TDP public outreach, including the following:

- *Who currently rides and where* – Nearly 50% of KWT riders are frequent riders who use the service at least four times per week. Almost 60% are from low-income households with less than \$25,000 annual household income. About 32% of riders are age 60 or older. Most important, 37% of current KWT riders use the service to get to work.
- *More frequent service* – Nearly half of current riders identified having more frequent bus service as the most important improvement and also indicated a desire for more weekend service and more routes like the Duval Loop. An overwhelming majority of the general public agreed that there is a need for more transit in the city, and more than 45% indicated the need for more frequent, Duval Loop-type routes in other areas in the city.
- *Capital improvements* – Recurring themes in both the on-board survey and the public input survey included adding more amenities such as benches and shelters at bus stops.
- *Transit as a viable alternative* – Most general public respondents in Key West viewed transit as a needed alternative and a way to relieve congestion/parking issues and connect workers and visitors to their destinations. A large majority (nearly 80%) said transit would relieve congestion or at least provide some help.



Implications

Input from the community indicated that current bus service is an integral part of the total transportation network in the city, and both current riders and the general public want KWT transit to continue to improve transit services for the city’s residents and visitors. Feedback also showed a strong belief that transit can help mitigate current traffic congestion and parking issues, implying that improvements such as better frequencies on bus routes may attract choice riders (people who have access to a car but choose to ride transit instead of drive). The success of a transit system relies heavily on the volume of its ridership, and having more choice riders using transit will help KWT reduce its cost per trip and increase its fare revenues. Most important, transit will become a viable mode for the city’s residents and tourists.



Land Use Policies and Trends

To better assess the impact of local land use conditions and policies on public transportation needs, it was important to identify the current and future areas of the city that may benefit the most from the provision of public transportation services. Key findings from a review of current and future land use conditions are as follows:

- A majority of the residential areas allocated to single-family dwellings are in the northern part of Key West.

- The Downtown area has the most employment concentration and comprises historic uses. This area is filled with medium and high density uses that can support to transit.
- The southeastern part of Key West is dedicated to conservation and the airport; the northern part is dedicated to military uses.
- The City has implemented land use/design guidelines in the Historic District to preserve and protect the architectural and unique characteristics of its historic neighborhoods. These guidelines assist the City’s Historic Architectural Review Commission (HARC) in making appropriate decisions concerning construction/renovations, including transit facilities in Key West’s Historic District.



Implications

Key West is a city with population and employment densities that are supportive of transit. It is also mostly built out and inclusive of land use conditions that provide transit an opportunity to thrive. However, although the dense, compact nature of the city with its grid pattern road network may benefit transit, Florida land-use decisions have mostly favored the automobile for a very long time. Until recently, personal vehicle use, even in the historic Downtown area, has been high and parking cheap. However, for the last decade or so, congestion has steadily increased, and the City has increased parking fees to discourage the use of personal vehicles by visitors. In addition, the City is encouraging the inclusion of transit in its new developments, such as Truman Waterfront Park, whose design includes established areas with access to transit. KWT should continue to work with the City on developing and implementing transit that is supportive of Land Development Codes and policies. With local leaders who are supportive of land use policies that require coordination with transit, there is an opportunity to continue walkable, transit-friendly development patterns in the areas within and outside of the Historic District.



Organizational Attributes and Funding

KWT currently functions as a department (KWDoT) of the City of Key West to provide fixed-route bus services. Although KWT is the provider of fixed-route transit, Monroe County operates TD services, including ADA complementary paratransit. KWT is also responsible for operations of the park-and-ride garage. The current organizational structure includes 6 operations/administration staff and 16 bus operators.

KWT is a rural transit system and, as the City is not part of a metropolitan planning organization (MPO), KWT does not function in collaboration with an MPO as in the typical functional framework for transit agencies in most other areas in Florida. The MPO is usually relied upon to ensure State and Federal funding for existing and future transit operating and capital expenditures. Without an MPO, KWT is in a

unique position when it comes to Federal and State funding and currently coordinates directly with FDOT for transportation planning functions and funding.



Implications

The current organizational structure should continue for Key West Transit, as it has been able to establish a solid foundation for providing transit in the city and, with addition of the Duval Loop and technological and other improvements, it has expanded the reach of transit services over time. However, if KWT needs to significantly improve its services and facilities to serve the city’s residents and growing visitor population, it may need a steady stream of new sources of funding.

As previously noted, Key West is not designated as an urban area and must rely on rural and some non-traditional funding sources from the FDOT. The City receives rural public transit formula funding as a subrecipient of FDOT under the Federal Transit Administration’s Section 5311 program; allocations from this source are limited and the annual amounts budgeted would not be sufficient to fund the Key West transit system. Therefore, FDOT has enhanced the funding by requesting and transferring funding from the Federal Highway Program to the 5311 transit program. This transfer is allowed through the flexible program authorizations authorized by Congress and provides Key West with a larger portion of Federal funding than normal formula allocations, helping to leverage State of Florida Public Transit Block Grant program funding from FDOT as well as the local tax funding or assessments the City approves and expends in the transit program.

KWT is also funded by a number of local sources, including gas taxes, advertising revenues, and parking fees. Another local option that may be explored to fund transit is a hotel bed tax, which could help KWT’s efforts to improve the existing transit system to a level that may attract more visitors and hotel guests to use the service in lieu of rental cars or hotel transportation. With improved transit service and other riding arrangements with KWT, hotels may be able to rely on KWT services to provide necessary transportation to their guests, resulting in hotels moving away from transporting people.



Technology and Trends

KWT continues to explore innovative ways to enhance the overall transit experience for its patrons by implementing new technologies. It currently offers a live map of bus routes online and operates an arrival information application for the next bus on its website, by telephone, and by text message. Several other technologies and trends are being considered to improve the efficiency and attractiveness of transit services, including the following:

- *Real time bus tracking* – KWT uses Synchronomatics software that allows passengers to track the real-time location of its buses. Although presented as an option in the City’s mobile app, the real-time bus tracking application is now available on any mobile device and on personal

computers, allowing residents and visitors to download and navigate routes to locate and use bus service to travel within and to the island and minimize wait time at bus stops.

- *Using software to track performance* – KWT buses are equipped with APCs to obtain ridership information; APC data are used to compare passenger counts with passenger statistics from its Syncromatics software.



Implications

KWT has continued to use technology as a tool to improve the riding experience and to streamline its processes, such as performance monitoring and fleet maintenance. However, some technologies offered to the rider may need more awareness and continued enhancements. The real-time bus tracking option has made KWT services much easier to access and use, but public input has shown that awareness of the app is low and, as it is offered as part of the City's mobile app, which also includes access to a number of other services, it may be more difficult to locate for use. Therefore, KWT should consider using an app exclusively for transit once it can afford the investment, which could attract choice riders who may feel more comfortable using the system if they know that

real-time bus locations can be tracked using smartphones.

Transit fare collection technologies have improved in recent years, and improving fare collection methods could significantly improve bus on-time performance and efficiency; KWT should consider an evaluation of fare collection technologies on the routes on which it currently charges a fare.

In addition, transit agencies are increasingly opting to use hybrid and electric vehicles by making use of current technological advances in green technology. Findings from the TDP public outreach indicated that communities desire a greener, more environmentally-friendly Key West. Greener buses may also attract more choice riders who may be avoiding diesel buses. Although converting totally to electric may require more resources and facilities, KWT should continue its purchases of hybrid diesel electric buses.

KWT should also evaluate emerging technologies such as autonomous vehicles (AV) and connected vehicles in order to determine implementation within the system. Since Key West Transit is classified as a small property, technology could help improve services without increasing workforce or assets. Technology such as connected vehicles could improve system on-time performance, reliable, and frequency.

Section 6: Goals and Objectives

This section summarizes the transit goals and objectives for *Key Connections*. These goals and objectives are a critical component of the TDP, providing the policy direction to guide the agency to achieve the community’s vision for transit in the city.

The transit goals and objectives for the next 10 years were developed by updating the adopted TDP goals/objectives for KWT. The update was based on a review and assessment of existing conditions, feedback received from the community and TDP stakeholders at the public involvement process, findings in the Situation Appraisal, and discussions with City staff.

The updated goals and objectives for 2020–2029 TDP are presented below. The agency’s overall mission and vision is provided and is followed by the goals, objectives, and policies designed to help accomplish the transit mission.

Mission

To provide a safe and reliable public transportation service that is efficient, effective, and environmentally sensitive.

Vision

To operate transit services on a tropical island with unique community character in harmony with the diversity of its people and with its environment.

Goals and Objectives

Goal 1: Provide effective, efficient, safe, and convenient service while increasing ridership and accessibility for current and potential riders.

Objective 1.1: Increase ridership and accessibility on fixed-route system.

Strategy 1.1.1: Enhance frequency to at least one bus every 15–20 minutes on core corridors.

Strategy 1.1.2: Provide a feeder bus network serving neighborhoods at least one bus every 15–30 minutes.

Strategy 1.1.3: Regularly review schedules to determine where routing and efficiency improvements can be made.

Strategy 1.1.4: Add/modify local and regional services to quickly connect employment, shopping, recreational, medical, and education centers to residents, commuters, and visitors.

Strategy 1.1.5: Work with FDOT Commuter Services program to identify and approach major employers and initiate employee commuter programs, sale of passes, introduce new routes, and/or other commute options to improve access to current and emerging jobs.

Objective 1.2: Establish operational/seasonal schedules.

Strategy 1.2.1: Work with Chamber of Commerce to determine peak and off-peak times and include additional service options to address the peak.

Strategy 1.2.2: Develop relationships with key tourist sector employers, hotels, and attractions, and partner as appropriate to implement new rider initiatives and temporary services or other options that will attract visitors.

Objective 1.3: Encourage training opportunities for transit fleet maintenance employees.

Strategy 1.3.1: Conduct monthly webinars for staff.

Strategy 1.3.2: Strive to include one training opportunity per year for staff in the budget.

Strategy 1.3.3: Use travel training staff to educate the community of the benefits of public transportation and build working relationships with community groups and organizations.

Strategy 1.3.4: Coordinate with FDOT to consider opportunities and bring training to Key West.

Goal 2: Provide excellent customer service.

Objective 2.1: Reduce the number of complaints by one percent annually each year through 2029.

Strategy 2.1.1: Continue the monitoring and tracking of customer feedback. Develop and use periodic reports to identify potential customer needs and improvements.

Strategy 2.1.2: Use social media, website, and on-board video technology platforms to facilitate public communications and enhance community relations.

Strategy 2.1.3: Enhance the user-friendliness of customer information and expand its availability.

Strategy 2.1.4: Provide bus schedule and system information at high ridership bus stops and at key public places in the city for residents and visitors.

Strategy 2.1.5: Perform periodic comprehensive operational analyses and review results from on-board surveys to optimize scheduling by route.

Strategy 2.1.6: Research and pursue funding for incorporating advanced technologies such as bus locator mobile apps and mobile fare payment.

Goal 3: Sustain and enhance capital/infrastructure program.

Objective 3.1: Bus Replacement Program

Strategy 3.1.1: Develop replacement bus schedule that allows purchase of a minimum of two vehicles per year, as funding allows.

Strategy 3.1.2: Purchase smaller bus vehicles for feeder/circulator routes and establish necessary maintenance facilities for smaller vehicles. Track savings realized through reduced driver certification and licensing.

Strategy 3.1.3: Maintain and routinely update inventory of transit stops and bus stop infrastructure.

Strategy 3.1.4: Maintain a vehicle replacement program and coordinate with the Transit Asset Management Plan to ensure targets are met.

Objective 3.2: Establish Key West Intermodal Center.

Strategy 3.2.1: Secure funding for and expand current Key West Transit administrative and maintenance facility on College Road to establish Key West Intermodal Center.

Objective 3.3: Bus Stop Infrastructure Program

Strategy 3.3.1: Continue to identify capital funding and contract with the existing private provider to add one shelter and replace one shelter per year as appropriate for the number of stop locations to achieve at least 50 percent coverage of stops requiring such amenities.

Strategy 3.3.2: Increase passenger comfort through the provision of passenger shelters, benches, and other amenities at bus stops. Develop and track thresholds for stops to have bench, shelter, or other amenities.

Strategy 3.3.3: Improve passenger safety and accessibility by ensuring KWT bus stops meet minimum ADA accessibility requirements. Maintain transition plan for ADA accessibility needs and track progress.

Strategy 3.3.4: Coordinate with the City's Sustainability Coordinator and Key West Bicycle and Pedestrian Master Plan to locate bicycle and pedestrian facilities adjacent to transit corridors and bus stop infrastructure.

Goal 4: Enhance regional coordination.

Objective 4.1: Coordinate with the Monroe County and City of Key West Planning departments.

Strategy 4.1.1: Provide proposed policies and/or comments on policies for incorporation by the Planning Department's into the Comprehensive Plans and Land Development Codes.

Strategy 4.1.2: Hold at least one meeting per year with local officials of all jurisdictions within Monroe County and the County Commissioners to discuss transit needs, benefits, and future direction.

Strategy 4.1.3: Establish annual meeting with Miami-Dade Transit to review service connectivity is maintained.

Objective 4.2: Promote additional commuter services programs with FDOT assistance.

Strategy 4.2.1: Work with FDOT to distribute Commuter Services Program information through the City of Key West Sustainability Coordinator and the Chamber.

Strategy 4.2.2: Meet with the FDOT Commuter Services Program to develop a plan of action for commuter programs in Key West, especially for workers accessing Key West via US-1.

Strategy 4.2.3: Investigate connections to other regional transportation providers, such as Greyhound, Key West Express Ferry (from Fort Myers), and other service providers.

Objective 4.3: Promote employer-provided subsidies.

Strategy 4.3.1: Work with the FDOT Commuter Services Program and coordinate through the Chamber to provide information on transit options and federal pre-tax and subsidy programs to employers within Key West.

Goal 5: Seek additional and alternative funding options.

Objective 5.1: Continue to explore use of local and State funding.

Strategy 5.1.1: Stay abreast of what other local areas are doing to create or promote transit funding.

Objective 5.2: Review private funding options.

Strategy 5.2.1: Develop marketing materials and pamphlets on economic benefits of transit and use Chamber, Realtors, and Innkeepers Association to market private ventures for funding.

Strategy 5.2.2: Coordinate and establish partnerships with hotels/resorts, colleges, hospitals, and other key employers for funding support and/or pre-paid transit fare programs for their employees.

Objective 5.3: Research and apply for additional federal and state funding opportunities.

Strategy 5.3.1: Work with the City of Key West and FDOT District 6 to identify new or additional sources of funding for transit operations.

Strategy 5.3.2: Set up auto alerts on www.grants.gov for any funding opportunities related to transit.

Goal 6: Improve system visibility and image.

Objective 6.1: Maintain efforts to develop a unified public image and marketing approach.

Strategy 6.1.1: Add system information at stop locations per local codes to inform and educate residents and visitors.

Strategy 6.1.2: Enhance bus schedules and brochures to advertise system features.

Strategy 6.1.3: Implement a separate KWT mobile app/s with for live bus tracking and fare payment options.

Strategy 6.1.4: Consider annual bus painting contest for either internal or external advertisement with local museums or schools.

Strategy 6.1.5: Conduct customer satisfaction survey every three years.

Objective 6.2: Develop a community outreach and education program.

Strategy 6.2.1: Evaluate and update community service and special event policies.

Strategy 6.2.2: Attend at least one community event each quarter to promote transit service and educate attendees.

Strategy 6.2.3: Set up an annual community meeting on state of the system which could be incorporated into a Rodeo event.

Strategy 6.2.4: Develop, implement, and monitor an ongoing system marketing plan/program.

Goal 7: Reduce environmental impacts caused by public transit and promote sustainable concepts to promote the community's social and environmental values.

Objective 7.1: Reduce KWT's carbon footprint and fuel costs.

Strategy 7.1.1: Evaluate budgets and replacement plan to allow for replacement of diesel buses with all electric buses.

Strategy 7.1.2: Coordinate with partners such as FDOT and Greyhound to explore opportunities to establish charging stations for all electric bus vehicles.

Strategy 7.1.3: Meet with Sustainability Coordinator annually to explore mitigating potential negative environmental impacts by public transit emissions.

Strategy 7.1.4: Continue to monitor and maintain involvement in City land use planning efforts that encourage transit-supportive land uses and redevelopment along existing corridors

Strategy 7.1.5: Work with City to identify transportation demand management strategies that will lower travel demand within Key West and improve negative impacts of inefficient travel modes.

Section 7: Transit Demand Assessment

Latent demand assessments are a key component of TDPs and yield the building blocks for determining the transit needs for the community when it is combined with the baseline conditions assessment and findings from public outreach and relevant plan reviews. The purpose of this section is to summarize the demand and mobility needs assessment conducted as part of the 10-year TDP for KWT.

Transit demand and mobility needs were assessed using the following techniques:

- *Transit Market Assessment* – Two market assessment tools were used to assess demand for transit services for the next 10 years. The tools assessed traditional and discretionary transit user markets in Key West for various time periods.
- *Ridership Demand Assessment* – Projected ridership demand for the existing fixed-route transit network was analyzed to gauge route-level and systemwide demand to maintain the current transit service levels and facilities. The projections were prepared using the Transit Boardings Estimation and Simulation Tool (TBEST), the FDOT-approved ridership estimation software for TDPs.

These assessment techniques are summarized below, followed by the results of each technical analysis used to assess the demand for transit services in Key West.

Transit Market Assessment

Using available and applicable demographics data, a transit market assessment provides evaluations from the perspectives of the discretionary rider market and the traditional rider market, the two predominant ridership markets for bus transit service.

Analytical tools for conducting each market analysis for Key West include a Density Threshold Assessment (DTA) for the discretionary rider market and a Transit Orientation Index (TOI) for the traditional rider market. These tools can be used to determine whether existing transit routes are serving areas of the city considered to be transit-supportive for the corresponding transit market and also identify areas that may need to be covered or covers more in the future. The transit markets and the corresponding market assessment tool used to measure each are described below.

Discretionary Rider Markets

The discretionary market refers to potential riders residing in higher-density areas of the city that may choose to use transit as a commuting or transportation alternative. The analysis conducted uses industry-standard density thresholds to identify the areas in Key West that exhibit transit-supportive residential and employee density levels today as well as in the future. Socioeconomic data for Key West, including dwelling unit/population and employment data from the 2017 ACS (the most recent available) were reviewed and used to conduct the DTA.

Three density thresholds, developed based on industry standards/research, were used to indicate whether an area contains sufficient density to sustain some level of fixed-route transit operations:

- *Minimum Investment* – reflects minimum dwelling unit or employment densities to consider basic fixed-route transit services (i.e., local fixed-route bus service).
- *High Investment* – reflects increased dwelling unit or employment densities that may be able to support higher levels of transit investment (i.e., more frequent service, longer service span, etc.) than areas meeting only the minimum density threshold.
- *Very High Investment* – reflects very high dwelling unit or employment densities that may be able to support more significant levels of transit investment (i.e., very frequent services, later service hours, weekend service, etc.) than areas meeting the minimum or high-density thresholds.

Table 7-1 presents the dwelling unit and employment density thresholds (in terms of Block Groups) associated with each threshold of transit investment.

Table 7-1: Transit Service Density Thresholds

Level of Transit Investment	Dwelling Unit Density Threshold ¹	Employment Density Threshold ²
Minimum Investment	4.5–5 dwelling units/acre	4 employees/acre
High Investment	6–7 dwelling units/acre	5–6 employees/acre
Very High Investment	≥8 dwelling units/acre	≥7 employees/acre

¹ TRB, National Research Council, TCRP Report 16, Volume 1 (1996), “Transit and Land Use Form,” November 2002, MTC Resolution 3434 TOD Policy for Regional Transit Expansion Projects.

² Based on review of research on relationship between transit technology and employment densities.

Map 7-1 illustrates the results of the 2017 DTA analyses conducted for Key West, identifying areas that support different levels of transit investment based on existing dwelling unit and employment densities. These maps also include the existing KWT system routes to gauge how well the current transit network covers the areas of Key West that are considered supportive of at least a minimum level of transit investment.

Results

The 2017 DTA analysis indicates that the discretionary transit markets are derived mainly from population densities rather than from employment densities and can be summarized as follows:

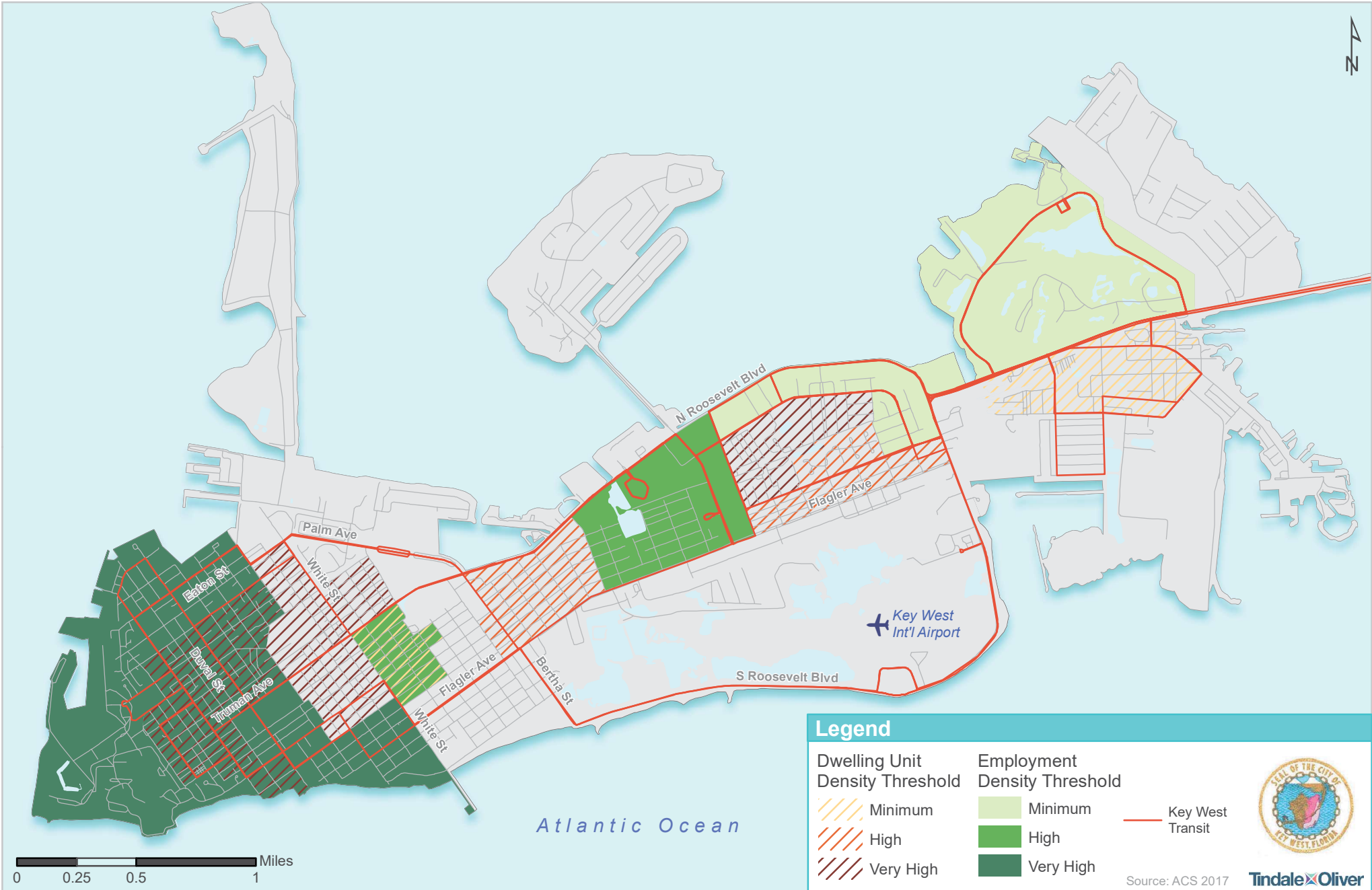
- All areas that meet the threshold for minimally-supportive dwelling units of transit investment in 2017 are concentrated in Key West, but also are located in Stock Island.
- The areas that are considered “very high” dwelling unit thresholds for transit investments are concentrated in Old Town between White Street and Fort Street and in New Town adjacent to Northside Drive and Duck Avenue.

- Areas between Roosevelt Boulevard and Flagler Avenue adjacent to First Street and adjacent to Flagler Avenue and Donald Avenue meet the threshold for “high” dwelling units for transit investments. These areas are in Old Town and in the center of the island.
- Areas that meet the “minimum” threshold in Stock Island are south of US-1 and in Old Town adjacent to White Street.
- Areas that meet “high” and “very high” employment thresholds are:
 - Concentrated in the Old Town area, starting at White Street to the edge of the island running along Margaret Street, including restaurants and attractions on Duval Street, Mallory Square, the Key West Aquarium, Truman Waterfront Park, and various museums.
 - Adjacent to White Street and Truman Avenue including various schools, worship centers, and restaurants.
 - In New Town between Roosevelt Boulevard and Flagler Avenue, including Keys Plaza, the Housing Authority of Key West, various shopping, and education centers.
- The most concentrated area for “very high” employment and dwelling unit thresholds is in Old Town south of White Street towards the edge of the island. Based on the 2017 DTA, a majority of the areas in Key West meet the minimum thresholds for employment and dwelling units.

Traditional Rider Markets

A traditional rider market refers to population segments that historically have had a higher propensity to use transit or are dependent on public transit for their transportation needs. Traditional transit users include older adults, youths, and households that are low-income and/or have zero vehicles. For some individuals, the ability to drive is greatly diminished with age, so they must rely on others for their transportation needs. Likewise, younger persons not yet of driving age but who need to travel to school, employment, or for leisure may rely more on public transportation until they reach driving age. For lower-income households, transportation costs are particularly burdensome, as a greater proportion of income is used for transportation-related expenses than it is for higher-income households. Households with restricted income, such as those with no private vehicle, are more likely to rely on public transportation.

Map 7-1: 2017 DTA



A Transit Orientation Index (TOI) was developed to assist in identifying areas of the city where these traditional rider markets exist. To create the TOI for this analysis, demographic data from the ACS 5-Year Estimates (2012–2016) were analyzed at the block group level for the demographic and economic variables shown in Table 7-2.

Table 7-2: TOI Variables

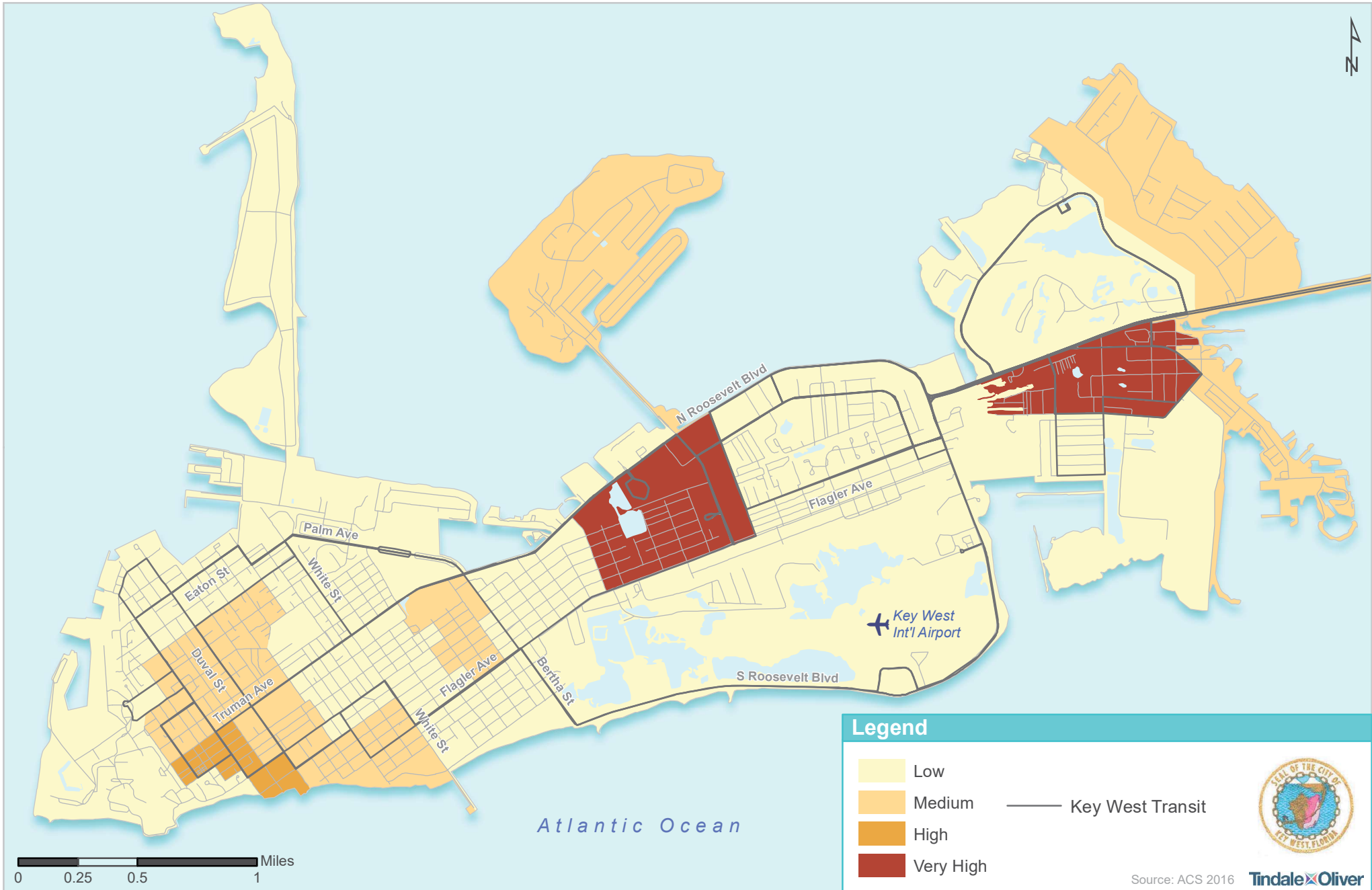
TOI Variable	Units
Population Age 14 and Under	Youth residents
Low-Income Population	\$25,000 or less annual income for 4-person household
Households with Zero Vehicles	Zero-vehicle households
Population Age 65 and Over	Older adults

Using data for these characteristics and developing a composite ranking for each census block group, each area was ranked as “Very High,” “High,” “Medium,” or “Low” in their respective levels of transit orientation. Map 7-2 illustrates the 2016 TOI, reflecting areas throughout the city with varying traditional market potential. The existing transit route network shows how well Key West Transit covers those areas.

Results

- There are a few areas that exhibit “high” or “very high” orientation towards transit are scattered throughout the island and are adjacent to transit routes.
- Areas exhibiting a “very high” orientation towards transit are adjacent to Roosevelt Boulevard and Flagler Avenue and between US-1 and 5th Avenue.
- An area considered to be “high” orientation is located between Truman Avenue and Simonton Street in the Bahama Village neighborhood.
- Areas that are considered “medium” orientation are concentrated in Old Town adjacent to Fleming Street along Margaret Street to the edge of the island, Dredger’s Key, between Bertha Street and Flagler Avenue, north of US-1 adjacent to College Road, and south of US-1 adjacent to Maloney Avenue.
- All areas that have a “medium” orientation or higher to transit are adjacent to a transit route.

Map 7-2: Transit Orientation Index



Forecast Ridership Analysis

In addition to using the GIS-based tools to assess latent demand, as summarized previously, demand for ridership for the next 10 years was conducted. Ridership forecasts were prepared using the most recent version of T-BEST (Version 4.4), the FDOT-approved transit demand forecasting tool.

T-BEST is a comprehensive transit analysis and ridership-forecasting model that can simulate travel demand at the individual route level. The software was designed to provide near- and mid-term forecasts of transit ridership consistent with the needs of transit operational planning and TDP development. In producing model outputs, T-BEST also considers the following:

- *Transit network connectivity* – The level of connectivity between routes within a bus network; the greater the connectivity between bus routes, the more efficient the bus service becomes.
- *Spatial and temporal accessibility* – Service frequency and distance between stops; the larger the physical distance between potential bus riders and bus stops, the lower the level of service utilization. Similarly, less frequent service is perceived as less reliable and, in turn, utilization decreases.
- *Time-of-day variations* – Peak-period travel patterns are accommodated by rewarding peak service periods with greater service utilization forecasts.
- *Route competition and route complementarities* – Competition between routes is considered. Routes connecting to the same destinations or anchor points or that travel on common corridors experience decreases in service utilization. Conversely, routes that are synchronized and support each other in terms of service to major destinations or transfer locations and schedule benefit from that complementary relationship.

The following section outlines the model input and assumptions, describes the T-BEST scenario performed using the model, and summarizes the ridership forecasts produced by T-BEST.

Model Inputs / Assumptions and Limitations

T-BEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling the KWT system in T-BEST are presented below. The model used the recently-released T-BEST Land Use Model structure (T-BEST Land Use Model 2018), which is supported by parcel-level data developed from the Florida Department of Revenue (DOR) statewide tax database. The DOR parcel data contain land use designations and supporting attributes that allow the application of Institute of Transportation Engineers (ITE)-based trip generation rates at the parcel level as an indicator of travel activity.

It should be noted, however, that the model is not interactive with roadway network conditions. Therefore, ridership forecasts will not show direct sensitivity to changes in roadway traffic conditions, speeds, or roadway connectivity.

Transit Network

The transit route network for all existing KWT routes was created to reflect 2019 conditions, the validation year for the model. General Transit Feed Specification (GTFS) data for KWT as of February 2019 were obtained from the Florida Transit Data Exchange (FTDE) as the base transit system. Data include:

- Route alignments
- Route patterns
- Bus stop locations
- Service spans
- Existing headways during peak and off-peak periods (frequency at which a bus arrives at a stop—e.g., 1 bus every 60 minutes)

The GTFS data were verified to ensure the most recent bus service spans and headways; edits were made as needed. Transfer locations were manually coded in the network properties.

Socioeconomic Data

The socioeconomic data used as the base input for the T-BEST model were derived from ACS Five-Year Estimates (2012–2016), Bureau of Labor Statistics, the Bureau of Economic Analysis, 2015 InfoUSA employment data, and 2015 parcel-level land use data from the Florida DOR. Using the data inputs listed above, the model captures market demand (population, demographics, employment, and land use characteristics) within ¼-mile of each stop.

T-BEST uses a socioeconomic data growth function to project population and employment data. Using ACS socioeconomic data, population and employment growth rates were calculated. Population and employment data are hard-coded into the model and cannot be modified by end-users. As applied, the growth rates do not reflect fluctuating economic conditions as experienced in real time.

Special Generators

Special generators were identified and coded into T-BEST to evaluate the opportunity for generating high ridership. KWT special generators include the following:

- University – Florida Keys Community College
- Transfer Hub – Holiday Inn (Marathon), Lower Keys Medical Center
- Shopping Mall – Overseas Market
- Hospital – Lower Keys Medical Center
- Airport – Key West International Airport

T-BEST Model Limitations

It has long been a desire of FDOT to have a standard modeling tool for transit demand that could be standardized across the state, similar to the Florida Standard Urban Transportation Model Structure (FSUTMS) model used by MPOs in developing long range transportation plans (LRTPs). However, whereas T-BEST is an important tool for evaluating improvements to existing and future transit services, model outputs do not account for latent demand for transit that could yield significantly higher ridership. In addition, T-BEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in fare service for customers, fuel prices, parking supply, walkability and other local conditions and, correspondingly, model outputs may over-estimate demand in isolated cases.

Although T-BEST provides ridership projections at the route and bus stop levels, its strength lies more in its ability to facilitate relative comparisons of ridership productivity. As a result, model outputs are not absolute ridership projections, but, rather, are comparative for evaluation in actual service implementation decisions. T-BEST has generated interest from departments of transportation in other states and continues to be a work in progress that will become more useful as its capabilities are enhanced in future updates to the model. Consequently, it is important for KWT to integrate sound planning judgment and experience when interpreting T-BEST results.

Ridership Forecast

Using these inputs, assumptions, and route level ridership data obtained from KWT, the T-BEST model was validated. Using the validation model as the base model, T-BEST ridership forecasts for this TDP major update planning starting year (2019) and horizon year (2029) were developed. The generated annual ridership forecasts reflect the estimated level of service utilization if no changes were to be made to any of the fixed-route services.

Table 7-3 shows the projected number of total annual riders by route in 2019 and 2029 as well as average annual ridership growth rates from 2019 to 2029 derived from T-BEST. Tables 7-4, 7-5, and 7-6 show the projected annual riders on weekdays, Saturdays, and Sundays from 2019 to 2029.

Table 7-3: Total Annualized Ridership and Growth Rates with No Improvements, 2019–2029*

Route	Annual Ridership, 2019	Annual Ridership, 2029	Absolute Change, 2019–2029	10-Year Growth Rate, 2019–2029
Blue	51,135	56,151	5,016	9.8%
Duval Loop	322,720	338,619	15,899	4.9%
Green	50,785	55,642	4,857	9.6%
Lower Keys Shuttle	91,770	102,738	10,968	12.0%
Orange	26,655	29,435	2,780	10.4%
Red	50,450	56,010	5,560	11.0%
Totals	593,515	638,595	45,080	7.6%

*Based on T-BEST model

Table 7-4: Weekday Annualized Ridership and Growth Rates with No Improvements, 2019–2029*

Route	Annual Ridership, 2019	Annual Ridership, 2029	Absolute Change, 2019–2029	10-Year Growth Rate, 2019–2029
Blue	35,955	39,718	3,763	10.5%
Duval Loop	221,850	233,028	11,178	5.0%
Green	36,210	40,077	3,867	10.7%
Lower Keys Shuttle	68,340	78,034	9,694	14.2%
Orange	22,695	25,136	2,441	10.8%
Red**	42,585	47,464	4,879	11.5%
Totals	427,635	463,457	35,822	8.4%

*Based on T-BEST model

Table 7-5: Saturday Annualized Ridership and Growth Rates with No Improvements, 2019–2029*

Route	Annual Ridership, 2019	Annual Ridership, 2029	Absolute Change, 2019–2029	10-Year Growth Rate, 2019–2029
Blue	6,655	7,153	498	7.5%
Duval Loop	51,920	53,963	2,043	3.9%
Green	6,490	6,856	366	5.6%
Lower Keys Shuttle	13,090	13,704	614	4.7%
Orange	3,960	4,299	339	8.6%
Red	7,865	8,546	681	8.7%
Totals	89,980	94,521	4,541	5.0%

* Based on T-BEST model

Table 7-6: Sunday Annualized Ridership and Growth Rates with No Improvements, 2019–2029*

Route	Annual Ridership, 2019	Annual Ridership, 2029	Absolute Change, 2019–2029	10-Year Growth Rate, 2019–2029
Blue	8,525	9,280	755	8.9%
Duval Loop	48,950	51,628	2,678	5.5%
Green	8,085	8,709	624	7.7%
Lower Keys Shuttle	10,340	11,000	660	6.4%
Orange**	--	--	--	--
Red**	--	--	--	--
Totals	75,900	80,617	4,717	6.2%

* Based on T-BEST model

** No Sunday service

Forecast Ridership Analysis

Based on the T-BEST model results shown in Table 7-3, maintaining the status quo will result in only a small increase in KWT ridership for all routes over time. According to the projections, overall annual ridership is only expected to increase by nearly 8 percent by 2029, an annual growth rate of less than one percent. Weekend service shows even slower rate of growth between 2019 and 2029. The model ridership projections seem to indicate that maintaining the existing route structure/alignments may provide only minimal growth for the system over the next 10 years. These results, combined with the input from public outreach, may imply that a revision or a reimagining of the current network with frequency enhancements may lead to more ridership productivity.

Section 8: Alternatives Development and Evaluation

This section summarizes the development of potential transit improvements for the KWT 10-year TDP. The needed improvements, referred to as alternatives, represent the transit needs for the next 10 years. It should be noted that these needs were developed without any consideration of funding constraints to reflect the true needs of the community.

The alternatives were developed based on information gathered through various data collection and outreach efforts conducted for the TDP. The identified service alternatives are then prioritized. The prioritized list of improvements is used to develop the 10-year implementation and financial plans, to be summarized in the full Draft TDP.

Development of Transit Needs

The 2020–2029 TDP transit alternatives consist of improvements that enhance existing KWT services and expand service to new areas. The alternatives reflect the transit needs for the next decade and have been developed based on information gathered through the following methods:



Community Needs & Vision – Many direct and indirect public outreach techniques were used to obtain public input on transit vision and corresponding needs throughout the *Key Connections* planning process. Public input surveys, public workshops, rider surveys, operator interviews, stakeholder interviews, public workshops, discussion groups, and other communications were conducted to gather input from the public, stakeholders, elected officials, and the community regarding the transit needs and vision for the next 10 years.



Situation Appraisal – Major updates to 10-year TDPs are required by State law to include a situation appraisal of the environment in which the transit agency operates. This helps to develop an understanding of KWT’s operating environment in the context of key elements as specified in the TDP Rule. The implications from the situation appraisal findings were considered in identifying potential transit alternatives.



Key West Transit Goals & Objectives – Objectives and policies often provide insight into transit needs within the community and the potential means with which to meet them. KWT’s goals and objectives, updated as part of this 10-year TDP, re-emphasize many of the agency’s priorities and outline new and enhanced priorities to make transit a truly viable choice of travel for residents and visitors in Key West.



Transit Demand Assessment – As presented previously, an assessment of transit demand and needs also was conducted for Key West. The assessment included the use of various GIS-based analysis tools and methodologies that used demographics data conducive to transit. These technical analyses, together with the baseline conditions assessment and performance reviews previously conducted, also were used to help identify areas with transit-supportive characteristics when developing the list of transit alternatives.

Based on these methods, alternatives were identified and grouped into four categories—Service, Infrastructure, Technology, and Policy Improvements. Specific improvements identified within each category are summarized below and depicted in Map 8-1.

10-Year Needs Plan

The proposed alternatives of the *Key Connections* TDP include a major restructuring of the KWT system, including more direct routing designed to connect riders throughout the city, additional circulator routes to move people quickly within the major hubs or activity centers within the city, and more frequent service for reduced wait times throughout the entire system.

All routes would operate seven days per week to match the current Duval Loop for service span, 6:00 AM to 12:00 midnight. With the new structure, KWT is considering revision of its fare policies that includes an array of pass options but retains the \$2.00 fares for connector routes, \$0.50 for circulators/loops (except KWIC Connector and Duval Loop), and other free or reduced fare opportunities.

Service Needs

Major Connector Network

The proposed 10-year plan for KWT includes a major connector network that will use larger buses (switching to smaller buses for later night service) and would operate primarily on major corridors in Key West. The routes were designed after reviewing the demographics data and stakeholder and public input and also through a closer review of the most heavily-used/high activity bus stops in the current KWT network.

- **KWIC Connector** – Establish a new 15-minute frequency service between the new KWIC and KWT’s park-and-ride at Grinnell and Caroline to shuttle riders transferring from the Stock Island Circulator (discussed later) and the modified Lower Keys Shuttle (also discussed later). This high-frequency connection will also allow any visitor who wants to use the free parking at KWIC to enjoy a fast and relaxing ride to the city. This “KWIC Ride” will be provided free for anyone transferring from Stock Island Circulator, the Lower Keys Shuttle, or connecting from KWIC to the parking garage. For those who plan to use transit in the city, the Wi-Fi available on

the KWIC Connector will allow them to download the new mobile payment app and pay for city buses.

- **Airport Connector** – This route would travel primarily on South Roosevelt and provide a connection from the airport to the KWT park-and-ride at Grinnell and Caroline. The route would begin at Seaside Drive near Ocean Walk apartments and would connect to the airport and the park-and-ride every 20 minutes.
- **North Connector** – Service on this route would begin at Seaside Drive near Ocean Walk apartments and would travel primarily on N Roosevelt, ending at the park-and-ride at Grinnell and Caroline. The service would be offered every 15 minutes.
- **Modified Lower Keys Shuttle** – The Lower Keys Shuttle would terminate at KWIC, eliminating the need to cross the bridge or get into city traffic congestion. The service would operate at 45-minute frequencies in the AM and PM peaks and every 90 minutes at other times. It would continue to connect riders with the regional service provided by MDT to Marathon.

Feeder Loop/Circulator Network

The proposed 10-year plan for KWT also includes maintaining/modifying some of the current loop/circulator routes and establishing new services, as summarized below. Similar to developing connector routes, these routes also were designed after reviewing demographics data, stakeholder and public input, and the high activity bus stops in the current KWT network.

- **New Town Loop** – This feeder loop would serve on and north of Kennedy Drive on the island. The route would provide service every 15 minutes and would begin at the Overseas Market transfer location and also would serve the Senior Center transfer location.
- **Mid-Town Loop** – This service would serve the area between the Kennedy Drive and White Street and connect riders in those neighborhoods or any connecting riders to City Hall, the Senior Center, or the Overseas Market transfer locations. The route would provide service every 15 minutes.
- **Old Town Loop** – This feeder loop would join the current Duval loop to provide 15-minute service coverage in the Old Town area and would shuttle visitors, commuters, and others to and from the park-and-ride to their destinations in Old Town.
- **Duval Loop** – The current loop would be maintained at 15-minute frequencies and would continue to be free.
- **Stock Island Circulator** – A new circulator is proposed to serve Stock Island at 15-minute frequencies. The route would serve more locations in Stock Island than the current KWT coverage, but riders would have to use the KWIC Connector to get to the city to access the rest of the city routes.

Capital/Infrastructure/Technology Needs

- **Key West Intermodal Center** – The current KWT facility in Stock Island would be expanded to establish an intermodal center with bus transfer facilities and a park-and-ride for personal vehicles and tour buses. The state-of-the-art facility would be the nerve center for the new transit system previously described, allowing the reduction of ever-increasing congestion and parking demand. Eventually, even water-borne services, taxis, or ferries could connect the KWIC with the seaport and/or other locations.
- **Smaller bus vehicles** – Smaller, non-CDL operator buses should be added to serve midtown, New Town, and the Stock Island loop/circulator. These smaller buses would also be used for other routes when ridership is low in off-peak periods, such as at night.
- **Bus locator app** – Instead of the current transit app that is included within the City app, an app should be implemented exclusively for KWT (e.g., OneBusAway) to allow users to locate bus stops and bus arrival times at those stops relative to where they are.
- **Mobile fare payment** – A mobile app for fare payment by residents, commuters, and visitors should be implemented.
- **Improved user-friendliness and convenience** – A simple-to-understand bus map should be displayed at most bus stops, next bus information should be included on electronic displays, Wi-Fi should be provided, and bike parking at key transfer locations should be provided.

Policy/Other Needs

- **Work with City of Key West to modify and enforce parking regulations** – Work with the City to significantly increase cost of tour bus parking so the free parking at KWIC is utilized and transit is promoted in the city instead of large tour buses. In addition, work with the City to increase parking costs for visitors to promote free parking at the KWIC and visitors using transit in the City instead of personal vehicles.
- **Free transit rides for hotel employee/guests** – KWT and the City should work with the hotels and other establishments to allow free rides for employees and visitors if they provide financial contributions to transit operations.
- **Marketing/awareness campaign** – KWT and the City should work with current advertising vendors to expand the advertising program, including electronic displays of local information and key points of interest on buses, including restaurant and attraction ads by paid advertisers. In addition, they should work with interested advertisers to announce their business/location information when a bus reaches a stop close to those locations.

Map 8-1: 10-Year Needs Plan



Legend

	Airport Connector		Duval Loop
	KWIC Connector		Midtown Loop
	North Connector		New Town Loop
	Lower Keys Shuttle		Old Town Loop
			Stock Island Circulator

Evaluation of Alternatives

The remainder of this section summarizes the evaluation process for service alternatives developed for the *Key Connections* TDP. Because many alternatives are identified, ranging from expansion of existing routes to implementation of new routes, it is important for KWT to prioritize these improvements to effectively plan and implement them within the next 10 years using existing and/or new funding sources.

Alternatives Evaluation Methodology

A quantitative-qualitative methodology was developed to evaluate and prioritize the transit alternatives presented in the previous section. To prioritize and program these service improvements, it was important to weigh the benefits of each service improvement against the others. By conducting an alternatives evaluation, KWT can better prioritize projects and allocate funding using an objective prioritization process. The remainder of this section identifies and defines the evaluation criteria used to prioritize the service improvements.

Three evaluation categories were identified for determining criteria for the evaluation:

- Public Outreach
- Transit Markets
- Productivity & Efficiency

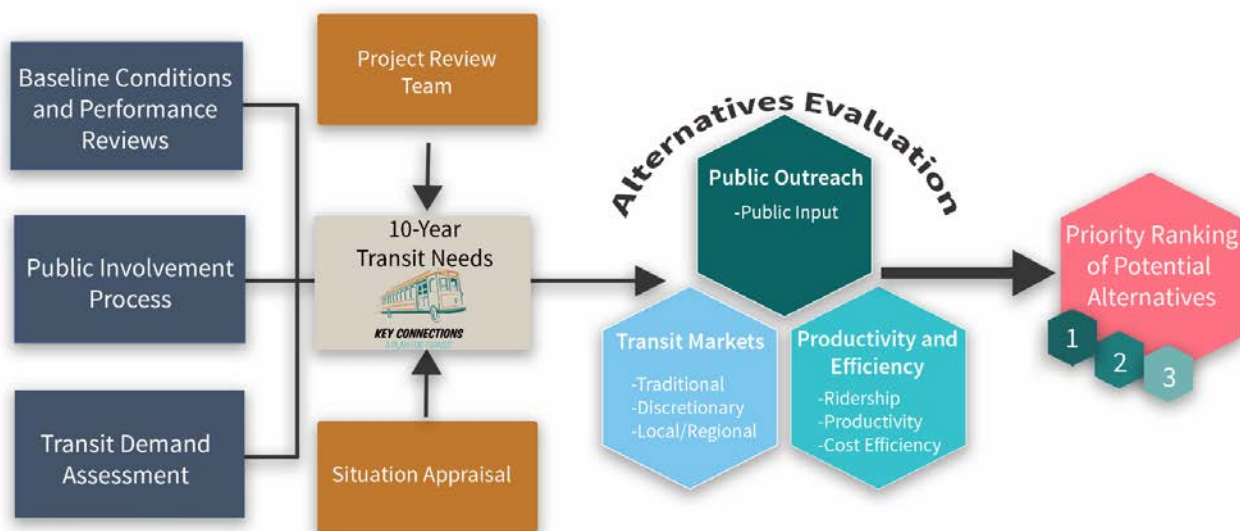


Table 8-1 lists these categories and their corresponding criteria, the associated measure of effectiveness, and the assigned weighting for each. A description of the elements in the table follows.

Table 8-1: Alternative Evaluation Measures

Category	Criteria	Measure of Effectiveness	Relative Weighting	Overall Category Weight
Public Outreach	Survey Results	Level of interest in specific alternatives (Very High, High, Moderate, None), as indicated by Transit Priorities Survey	20%	40%
	Public Input	Level of interest in specific improvements (Very High, High, Moderate, None), as gathered from overall public input	20%	
Transit Markets	Traditional Market	Percent of corridor in “High” or “Very High” transit orientation area	15%	40%
	Discretionary Market	Percent of corridor area that meet “Minimum” Density Threshold Assessment (DTA) threshold for employment or dwelling-unit density	15%	
	Local/Regional Market	Connectivity to key activity centers/hubs locally and regionally	10%	
Productivity & Efficiency	Productivity	Trips per hour (TBEST generated trips per revenue hour of service)	10%	20%
	Cost Efficiency	Cost per trip (including new trips)	10%	
Total			100%	100%

Public Outreach

An extensive public outreach process was conducted for this TDP effort and resulted in numerous opinions and suggestions on transit services from transit users and non-users and local businesses/organizations. In addition, the public outreach process included discussions with policy leaders and KWT and City staff to gauge their views on transit services. Based on an in-depth review of input received, interest in a particular route or type of service was categorized as “None,” “Moderate,” “High,” or “Very High” in the alternatives evaluation process.

Transit Markets

For the evaluation of alternatives, three transit markets were identified:

- *Traditional Market* – existing population segments that historically have had a higher propensity to use transit and/or are dependent on public transit for their transportation needs. For the alternatives evaluation, the proportion of each corridor operating within a “High” or “Very High” transit-oriented area was calculated.
- *Discretionary Market* – potential riders living in higher-density areas of the city that may choose to use transit as a commuting or transportation alternative. The proportion of each

corridor meeting at least the “Minimum” dwelling unit or employment density threshold in the 2020 DTA was calculated and used for the alternatives evaluation.

- *Local/Regional Market* – each potential route was assessed for potential local/regional connectivity. Routes connecting to key hubs and area within and outside of the city were considered for the alternatives evaluation. Inner- and inter-city routes with connections to key activity centers (existing and future) or hubs were scored higher than those not serving such locations. Based on conclusions drawn from public involvement input, quick and convenient connectivity between major activity centers is a desired attribute for future KWT routes.

Productivity and Efficiency

Productivity is generally measured in terms of ridership productivity and cost-efficiency measures used by transit agencies to gauge how well it uses existing resources. Ensuring productivity and cost-efficiency is critical to the success of the agency, and services projected to perform well in terms of their productivity and efficiency should receive a higher priority. Forecasts of ridership, revenue hours, and operating costs for each individual alternative are used in this evaluation process.

- *Ridership* productivity – measured in terms of annual passenger trips per revenue hour of service. To provide for an equal comparison between alternatives, passenger trips and revenue hours of service were generated using output from TBEST 2029 ridership data.
- *Cost efficiency* – evaluated for each alternative using a transit industry standard efficiency measure, operating cost per passenger trip, which uses KWT performance data and TBEST 2029 ridership data.

A detailed summary of various measures used in the evaluation, as well as the alternatives scoring thresholds, are presented next.

Alternatives Scoring Thresholds

As noted, each criterion is assigned a weight. Weighting the criteria affords the opportunity to measure the relative importance of each among the group of criteria to be applied. For each transit alternative, a score was determined either through the computation of the selected measure or through the educated judgment of the assessor. Scores for the more qualitative criteria (i.e., public input and regional connectivity) were assigned based on a relative comparison of each transit alternative with other transit alternatives. A higher score is consistent with a higher ranking for a given alternative for the criterion being evaluated.

The thresholds for computation-based criteria (traditional market, choice market, trips per hour, and operating cost per trip) were determined using the average of the entire data set and one standard deviation above or below the average. Table 8-2 shows the thresholds and scoring for each criterion used in the alternatives evaluation.

Table 8-2: Alternatives Evaluation – Scoring Thresholds

Criteria	Range	Score
Survey Results – Transit Priorities Survey	Less than (Average – 1 SD)	1
	Between (Average – 1 SD) to Average	3
	More than Average to (Average + 1 SD)	5
	More than (Average + 1 SD)	7
Public Input – General Observations	None	1
	Moderate	3
	High	5
	Very High	7
Traditional Market Potential (% Serving Traditional Market)	Less than (Average – 1 SD)	1
	Between (Average – 1 SD) to Average	3
	More than Average to (Average + 1 SD)	5
	More than (Average + 1 SD)	7
Discretionary Market Potential (% Serving Choice Market)	Less than (Average – 1 SD)	1
	Between (Average – 1 SD) to Average	3
	More than Average to (Average + 1 SD)	5
	More than (Average + 1 SD)	7
Local/Regional Connectivity	None	1
	Moderate	3
	High	5
	Very High	7
Trips per Hour	Less than (Average – 1 SD)	1
	Between (Average – 1 SD) to Average	3
	More than Average to (Average + 1 SD)	5
	More than (Average + 1 SD)	7
Operating Cost per Trip	More than (Average + 1 SD)	1
	More than Average to (Average + 1 SD)	3
	Between (Average – 1 SD) to Average	5
	Less than (Average – 1 SD)	7

Note: SD = statistical Standard Deviation

Alternatives Evaluation Results Summary

Table 8-3: 10-Year Transit Service Alternatives Ranking

Rank	Proposed Improvement Reordered by Rank	Evaluation Score
1	Keep Duval Loop as is	5.6
2	Add KWIC Connector	5.5
3	Modify Lower Keys Shuttle	4.4
4	Add Airport Connector	4.1
5	Add North Connector	3.9
6	Add Old Town Loop	3.6
7	Add New Town Loop	3.3
8	Add Mid Town Loop	3.3
9	Add Stock Island Circulator	3.0

Each alternative received a score by using the process summarized previously. The alternatives were then ranked based on their respective scores. Priority rank order and resulting scores from the evaluation are presented in Table 8-3.

The top three improvements resulting from the alternatives evaluation are keeping the Duval Loop as is, adding the new KWIC Connector to connect the planned intermodal center and other key locations in new and mid-town to the City park-and-ride, and modifying the Lower Keys Shuttle to terminate at KWIC. These results are consistent with the community’s vision of making transit a true alternative for travel in the City in the next 10-years.

Section 9: 10-Year Transit Plan

This section summarizes the recommended 10-year transit plan for Key Connections TDP. As mentioned previously, the recommended 10-year Key Connections plan include a major restructuring of the current transit system in Key West to include more direct routing designed to connect riders throughout the city, additional circulator routes to move people quickly within the major hubs or activity centers within the city, and more frequent service for reduced wait times throughout the entire system.

First, this section presents the recommended service and infrastructure/technology plan for the next 10 years. Thereafter, a summary of the assumptions for capital and operating costs used in developing the 10-year costs and revenues for the recommended plan are presented. Finally, the implementation plans and financial plans for the recommended 10-year transit plan are presented.

Service Improvements

The recommended *Key Connections* TDP 10-year service improvements were determined based on service priorities identified in Section 8 and careful consideration of financial resources and assumptions, as summarized later in this section and continued in Section 10. Table 9-1 presents the service characteristics for the recommended 10-year *Key Connections* transit plan.

Table 9-1: 10-Year Transit Plan Service Characteristics

Service Improvement	Frequency	Operating Characteristics			Day of Service
		Service Span (Hours)			
		Weekday	Saturday	Sunday	
KWIC Connector	15 min (20 min at night)	15	15	12	Every day
Duval Loop	15 min (30 min 6-10 am)	18	18	18	
Airport Connector	20 min	15	15	12	
Old Town Loop	22 min	15	15	12	
Mid Town Loop	25 min	15	15	12	
New Town Loop	30 min	15	15	12	
North Connector	30 min	15	15	12	
Stock Island Circulator	30 min	15	15	12	
Modified Lower Keys Shuttle	90 min	15	15	12	

Major Connector Network

The major connector route network for the recommended 10-year plan for KWT is summarized below and will use larger bus vehicles (switching to smaller buses for later night/low ridership service) and would mostly operate on major corridors in Key West.

- **KWIC Connector** – Establish 15-minute frequency service (20-minute service at night) between the new Key West Intermodal Center (KWIC) and the KWT park-and-ride at Grinnell and Caroline in Key West.
- **Airport Connector** – Implement connection from airport to Key West Transit park-and-ride at Grinnell and Caroline. The route begins at Seaside Drive near Ocean Walk apartments and would connect to airport and park-and-ride every 20 minutes.
- **North Connector** – Service would begin at Seaside Drive near Ocean Walk apartments and travel mostly on N Roosevelt to end at park-and-ride at Grinnell and Caroline. Service would be offered every 30 minutes.
- **Modified Lower Keys Shuttle** – Shuttle would terminate at KWIC and operate every 90 minutes, connecting the city regionally with Miami-Dade Transit at Marathon.

Feeder Loop/Circulator Network

The feeder loop/circulator network for the major connector network is summarized below. These routes, except for the current Duval Loop, would use smaller buses if and when available. The Duval Loop will continue to use larger buses due to ridership demand but would also use smaller buses at low ridership time periods or days.

- **Duval Loop** – Continue the current Duval Loop with 15-minute frequency service (30-minute service from 6:00–10:00 AM) without any service changes.
- **New Town Loop** – Add feeder loop to serve on and north of Kennedy Drive on the island with service every 30 minutes. The route will begin at the Overseas Market transfer location and would also serve the Senior Center transfer location.
- **Mid-Town Loop** – Add a loop every 25 minutes to serve the area between Kennedy Drive and White Street and connect City Hall, the Senior Center, and the Overseas Market transfer location.
- **Old Town Loop** – Add another loop to serve other areas of the Old Town every 22 minutes.
- **Stock Island Circulator** – Add a new circulator to connect riders in Stock Island every 30 minutes to the proposed new KWIC facility, connecting them to the new KWIC Connector and the LKS routes.

Capital/Infrastructure/Technology Needs

- **Establish Key West Intermodal Center** – Expand the current KWT facility in Stock Island to establish an intermodal center with bus transfer facilities and a park-and-ride for personal vehicles and tour buses.
- **Purchase smaller bus vehicles** – Purchase smaller, non-CDL operator buses as fleet replacements to serve midtown, new town, and stock island loop/circulator. The smaller

buses will also be used at other routes once the ridership is low in off-peak periods, such as at night.

- **Explore implementing bus locator app** – Explore implementing an app exclusively for KWT to allow users to locate bus stops and bus arrival times at those stops relative to where they are.
- **Explore mobile fare payment** – Explore establishing a mobile app for residents, commuters, and visitors.
- **Improve user-friendliness and convenience of using the system** – Provide a simple-to-understand bus map display at most bus stops.

Policy/Other Needs

- **Modification/enforcement of parking regulations** – Work with the City of Key West to modify and enforce parking regulations to increase the cost of tour bus parking at the Coty Park-and-Ride so free parking at KWIC is used instead. In addition, parking costs for visitors should be increased to promote use of free parking at KWIC and use of city buses to get around the city.
- **Expand marketing/awareness campaign** – Work with current advertising vendor to expand the current advertising program, including electronic displays of local information and key points of interest on buses such as restaurant and attraction ads by paid advertisers. In addition, work with interested advertisers to announce their business/location information when a bus reaches a stop close to those locations.
- **Establish program to allow free transit rides for hotel employee/guests** – Work with city hotels and other establishments to allow free rides for their employees and visitors if they provide financial contribute to transit operations.

10-Year Financial Plan

This section presents the capital and operating cost assumptions and the assumptions for projecting revenues to fund the previously-summarized 10-year Transit Plan for Key West. A summary of the costs and revenues by year also is presented.

Cost Assumptions

Numerous cost assumptions were made to forecast transit costs from 2020 through 2029. These operating and capital costs assumptions are based on a variety of factors, including the 2019/2020 Transit System Budget for the City of Key West, service performance data from current KWT services, information from other recent Florida transit plans, and discussions with KWT staff. These assumptions are summarized as follows:

- Based on information from KWT staff, an average annual inflation rate of 4 percent was used for operating cost projections.
- Based on the Consumer Price Index (CPI)-based inflation data for the last 10 years, from 2008 to 2018, an average annual inflation rate of 2 percent was used for all operating cost projections.
- Annual operating cost for the proposed bus services is based on the total revenue hours for each route multiplied by the costs per revenue hour. The cost per revenue hour was determined using 2018 NTD data for KWT. A cost of \$71.15 per revenue hour (2018\$) and the CPI-based inflation rate of 2 percent was used.
- Large 35' Hybrid bus replacements are assumed to cost \$680,000 each, based on information from KWT staff. Replacement small buses (22') are assumed to cost \$70,000, based on recent bus purchase data available from FDOT's Transit Research Inspection Procurement Services (TRIPS) database for Florida transit agencies.
- A vehicle replacement schedule is presented in Table 9-2. This schedule assumes purchase of 10 smaller 22' buses, 4 Gillig 29' buses, and one 35' Hybrid bus as replacements in the next 10 years.

Table 9-2: Vehicle Replacement Plan

Year	Small 22' Buses	Regular 29'-35' Buses	35' Hybrid Buses
2020	0	4*	0
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	2	0	0
2025	0	0	0
2026	0	0	0
2027	3	0	0
2028	3	0	1
2029	2	0	0
Total	10	4	1

*Already programmed replacement. Not included in the TDP financial plan.

- A 10-year total of \$275,000 is assumed for continuing development and implementation of a Bus Stop Infrastructure Program to install signs, benches, bike racks, and shelters as needed. This includes \$75,000 initially for the new system rollout and \$25,000 per year thereafter.

Revenue Assumptions

Revenues for the recommended Plan are based on information from the 2019/2020 Transit System Budget for the City of Key West, farebox performance data, and numerous discussions with FDOT District 6 and KWT staff. The assumptions for TDP revenue sources for the next 10 years includes the following:

- Farebox revenues were assumed using a farebox recovery ratio of 11 percent, based on 2018 NTD data for KWT. However, no fares were assumed for the KWIC Connector and Duval Loop, which are assumed to be free of charge.
- Annual revenues from Federal, State, and local sources included in the 2019/2020 KWT Budget were projected to continue and were inflated at two percent per year.
- Additional advertising revenue due to the expanded advertising programs with the new system rollout is expected to generate an additional \$75,000 per year (in 2021\$).
- Additional Federal grants for vehicle replacements was assumed to fund the purchase of the 10 smaller vehicles and one 35' Hybrid vehicle.
- This plan assumes an additional FDOT operating funding at \$1.6 million per year (2021\$) to support implementation of the *Key Connections* plan in 2021. As discussed in detail in Section 10, KWT should work with FDOT District 6 to initiate this long-term operating assistance funding via the FTA Section 5311 program.
- To leverage this potential new operating assistance from FDOT, this plan also assumes a 50 percent match at an additional \$1.6 million (2021\$) in City/local revenues.

10-Year Costs/Revenues

The costs and revenues summary developed for the *Key Connections* TDP by using these operating/capital cost and revenue assumptions is summarized below. Figure 9-1 illustrates the operating and capital costs for the plan, and Figure 9-2 shows the total costs and revenues for the next 10 years. The detailed 10-year financial plan is presented in Table 93.

Figure 9-1: Annual Operating and Capital Costs (millions)

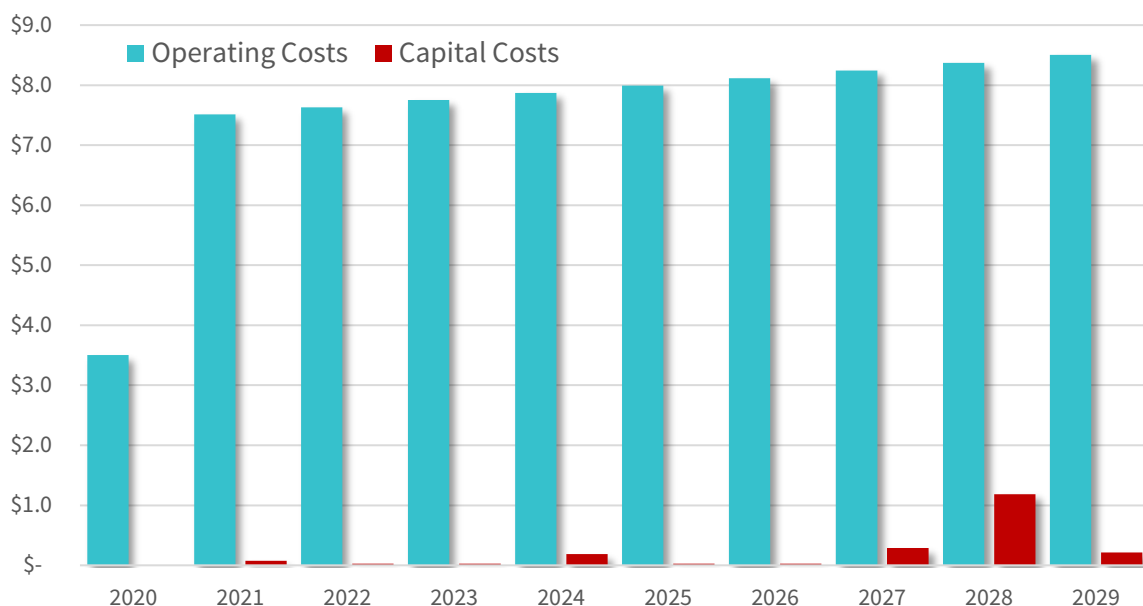


Figure 9-2: Costs and Revenues (millions)

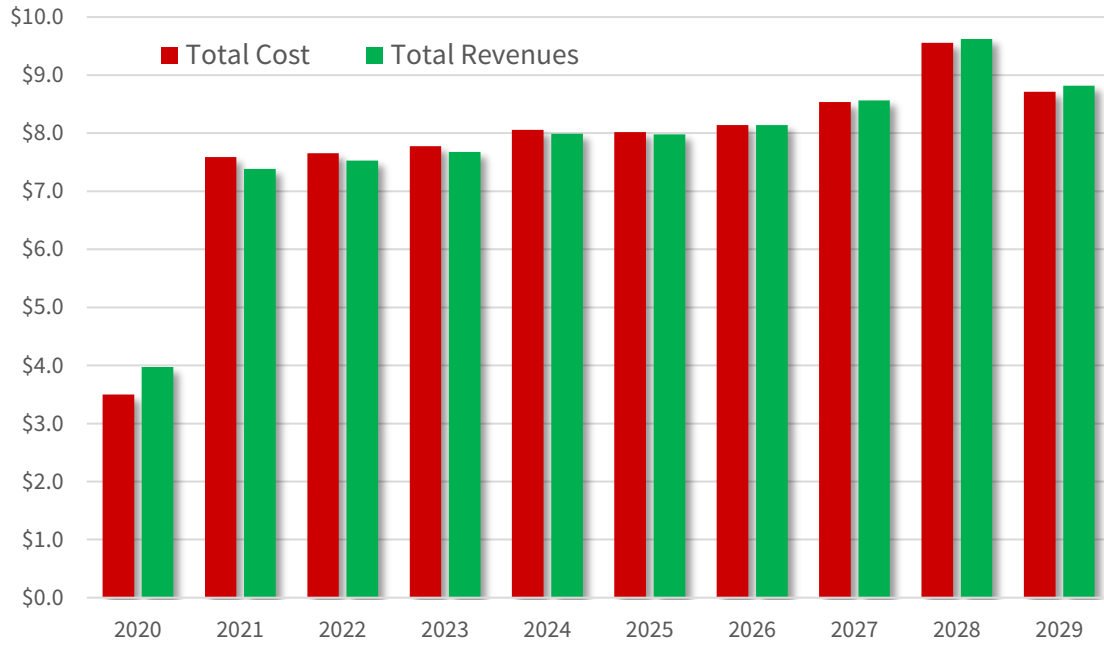


Table 9-3: 10-Year Financial Plan

Cost/Revenue	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	10-Year Total
Operating Costs											
Maintain Existing Services	\$3,501,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,501,399
Implement Key Connections TDP Network	\$0	\$7,514,061	\$7,631,055	\$7,749,870	\$7,870,536	\$7,993,080	\$8,117,532	\$8,243,922	\$8,372,280	\$8,502,636	\$71,994,971
Total Operating Costs	\$3,501,399	\$7,514,061	\$7,631,055	\$7,749,870	\$7,870,536	\$7,993,080	\$8,117,532	\$8,243,922	\$8,372,280	\$8,502,636	\$75,496,370
Capital Costs											
Vehicles	\$0	\$0	\$0	\$0	\$162,298	\$0	\$0	\$266,022	\$1,161,248	\$188,148	\$1,777,717
Replacement Vehicles	\$0	\$0	\$0	\$0	\$162,298	\$0	\$0	\$266,022	\$1,161,248	\$188,148	\$1,777,717
Other Capital/Infrastructure	\$0	\$75,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$275,000
Bus Stop Infrastructure Program - Signs, Benches, Shelters	\$0	\$75,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$275,000
Total Capital Costs	\$0	\$75,000	\$25,000	\$25,000	\$187,298	\$25,000	\$25,000	\$291,022	\$1,186,248	\$213,148	\$2,052,717
Operating Revenues											
Federal Section 5311	\$509,462	\$519,651	\$530,044	\$540,645	\$551,458	\$562,487	\$573,737	\$585,212	\$596,916	\$608,854	\$5,578,467
FDOT Block Grant	\$228,000	\$232,560	\$237,211	\$241,955	\$246,795	\$251,730	\$256,765	\$261,900	\$267,138	\$272,481	\$2,496,536
FDOT Commuter Assistance	\$435,000	\$443,700	\$452,574	\$461,625	\$470,858	\$480,275	\$489,881	\$499,678	\$509,672	\$519,865	\$4,763,129
Parking Revenues	\$543,132	\$553,995	\$565,075	\$576,376	\$587,904	\$599,662	\$611,655	\$623,888	\$636,366	\$649,093	\$5,947,144
Fare Revenues	\$475,000	\$538,498	\$546,883	\$555,398	\$564,045	\$572,828	\$581,746	\$590,804	\$600,003	\$609,345	\$5,634,551
Bus Advertising	\$95,900	\$97,818	\$99,774	\$101,770	\$103,805	\$105,881	\$107,999	\$110,159	\$112,362	\$114,609	\$1,050,078
Motor Fuel Tax Rebate	\$18,500	\$18,870	\$19,247	\$19,632	\$20,025	\$20,425	\$20,834	\$21,251	\$21,676	\$22,109	\$202,570
Transportation	\$435,000	\$443,700	\$452,574	\$461,625	\$470,858	\$480,275	\$489,881	\$499,678	\$509,672	\$519,865	\$4,763,129
Misc Revenues	\$34,100	\$34,782	\$35,478	\$36,187	\$36,911	\$37,649	\$38,402	\$39,170	\$39,954	\$40,753	\$373,385
Other Sources	\$875,000	\$892,500	\$910,350	\$928,557	\$947,128	\$966,071	\$985,392	\$1,005,100	\$1,025,202	\$1,045,706	\$9,581,006
New Additional FDOT Operating Assistance	\$0	\$1,600,000	\$1,632,000	\$1,664,640	\$1,697,933	\$1,731,891	\$1,766,529	\$1,801,860	\$1,837,897	\$1,874,655	\$15,607,405
New Advertising	\$0	\$75,000	\$76,500	\$78,030	\$79,591	\$81,182	\$82,806	\$84,462	\$86,151	\$87,874	\$731,597
New Local Contribution	\$0	\$1,600,000	\$1,632,000	\$1,664,640	\$1,697,933	\$1,731,891	\$1,766,529	\$1,801,860	\$1,837,897	\$1,874,655	\$15,607,405
Additional Federal Grants for Vehicle Replacements	\$0	\$0	\$0	\$0	\$162,298	\$0	\$0	\$266,022	\$1,161,248	\$188,148	\$1,777,717
Mass Transit Capital	\$325,000	\$331,500	\$338,130	\$344,893	\$351,790	\$358,826	\$366,003	\$373,323	\$380,789	\$388,405	\$3,558,659
Total Revenues	\$3,974,094	\$7,382,574	\$7,527,840	\$7,675,974	\$7,989,332	\$7,981,075	\$8,138,159	\$8,564,367	\$9,622,943	\$8,816,419	\$77,672,778
10-Year Cost & Revenue Summary											
Total Revenues	\$3,974,094	\$7,382,574	\$7,527,840	\$7,675,974	\$7,989,332	\$7,981,075	\$8,138,159	\$8,564,367	\$9,622,943	\$8,816,419	\$77,672,778
Total Costs	\$3,501,399	\$7,589,061	\$7,656,055	\$7,774,870	\$8,057,834	\$8,018,080	\$8,142,532	\$8,534,944	\$9,558,528	\$8,715,785	\$77,549,087
Revenues Minus Costs	\$472,695	(\$206,486)	(\$128,214)	(\$98,896)	(\$68,502)	(\$37,004)	(\$4,373)	\$29,423	\$64,415	\$100,635	
Rollover from Prev. Year	\$0	\$472,695	\$266,209	\$137,994	\$39,098	(\$29,404)	(\$66,408)	(\$70,781)	(\$41,358)	\$23,057	
Surplus/Shortfall	\$472,695	\$266,209	\$137,994	\$39,098	(\$29,404)	(\$66,408)	(\$70,781)	(\$41,358)	\$23,057	\$123,692	\$123,692

10-Year TDP Implementation Plan

The implementation plan in Table 9-4 outlines funded and unfunded improvements for KWT from 2020 through 2029. The table also shows the implementation years for funded improvements based on information available at this time. It is important to emphasize that the implementation schedule shown in the table does not preclude the opportunity to delay or advance any projects. As priorities change, funding assumptions do not materialize, or more funding becomes available, this project implementation schedule should be adjusted.

Table 9-4: 10-Year Implementation Plan and Unfunded Needs

Improvement	Frequency (Bus coming every)	Implementation Year
Key Connection Network		
KWIC Connector	15 Min. (20 min. at night)	2021
Duval Loop	15 Min. (30 min. 6 am -10 am)	Ongoing
Airport Connector	20 Min.	2021
Old Town Loop	22 Min.	2021
Mid Town Loop	25 Min.	2021
New Town Loop	30 Min.	2021
North Connector	30 Min.	2021
Stock Island Circulator	30 Min.	2021
Modified Lower Keys Shuttle	90 Min.	2021
Enhanced Frequency on Old Town, Mid Town, New Town Loops and Stock Island Circulator	15 Min.	Unfunded
Bus every 45-min. on Modified Lower Keys Shuttle	45 Min.	Unfunded
Capital/Infrastructure/Technology		
Purchase Smaller Bus Vehicles		2020-2029
Explore Implementing Bus Locator App		2020
Explore Mobile Fare Payment		2020
Improve the User-Friendliness and convenience of Using the System		2020-2029
Establish Permanent Facility for Key West Intermodal Center (KWIC)		Unfunded
Implement Bus Locator App		Unfunded
Implement Mobile Fare Payment		Unfunded
Policy/Other		
Work with City of Key West to Modify and Enforce Parking Regulations		2020-2029
Expand Marketing/Awareness Campaign		2020-2029
Establish Program to Allow Free Transit Rides for Hotel Employee/Guests		2020-2029

Section 10: Plan Implementation and Coordination

Obtaining the support of decisionmakers who approve the budget required to implement the TDP is only the first step in a longer process of bringing the TDP to fruition. This section provides key elements to consider as Key West implements its plan to successfully grow the system into the vision that is outlined in the TDP.

Post Adoption Recommendations

Due to inevitable changes in operating environment, adoption of the TDP does not necessarily mean KWT/Key West will be able to adhere to the implementation plan according to schedule. The action items listed below should be carefully considered and followed through to ensure that public support and funding and operational support are preserved until the next major TDP update.

- **Funding “Plan of Action”** – Address each recommendation and outline steps to take in the current year and succeeding years to secure the best chance possible of obtaining the needed funding.
- **Operational Support** – Establish a blueprint to determine how a recommended alternative will be incorporated into the existing network from an operational perspective.
- **Progress beyond Adoption** – Use the adopted TDP as a tool to justify and explain the reasons for continued investments to transit services and facilities.
- **TDP Annual Progress Report** – Use updates to provide needed motivation to reiterate the benefits of the recommended alternatives.

Continued Marketing/Outreach

Promoting the TDP after adoption will improve the likelihood of achieving the implementation plan. KWT has already conducted extensive public outreach as part of the TDP process that can be expanded to market other planning efforts, such as service initiation efforts, marketing programs and campaigns, and budget plans. The branding used for the TDP can serve as the foundation for a post-TDP marketing campaign, which can be developed for the full TDP or for individual recommendations.

Role of *Key Connections* Executive Summary

Promotion of the TDP should extend beyond the adoption of the TDP. The *Key Connections TDP Executive Summary*, which will be completed after plan adoption, should be used as a promotional tool and an effective medium to continue generating support for the TDP’s recommendations.

Building on TDP Efforts/Relationships

Throughout the TDP public involvement process, KWT identified advocates while educating the public overall and can leverage these relationships to continue building support for the implementation strategies. These individuals may serve as facilitators for a “grassroots” outreach program or could become transit cheerleaders/ambassadors that can provide a foundation/support network for future outreach. These future efforts can build upon the tools and lessons afforded by the TDP and aid in prioritizing specific target markets to engage.

Plan Coordination/Integration

In the future, KWT should consider coordination of the TDP major updates with other planning efforts:

- **Comprehensive Operational Analysis (COA)** – With potential implementation of regularly-scheduled transit, it is recommended that KWT consider a service efficiency assessment in 3–5 years after the new system launch and repeat it at least every 5 years to maintain operational health. Effective coordination on the timing of a COA may be beneficial in the goal to provide efficient transit services. The findings of a COA can be fed into the capital and operational recommendations for the initial years of the 10-year plan so that near-term system improvements can be set.
- **Coordination with Other Plans** – Ensuring consistency with key State, regional, and local plan priorities should be a primary focus of *Key Connections*. Coordinating the timing of the TDP with the new Transit Asset Management Plan requirement should be considered, as both plans are designed to govern investment strategies based on needs.
- **Informing Other Plans** – The analyses completed during *Key Connections* can be used to help update required plans for ADA access and Title VI service provisions, as it documents how the system will meet or serve older adults, persons with disabilities, and populations that fall under Title VI protections. The adopted TDP can also be useful for other entities with subsequent planning efforts, such as local comprehensive plans, plans to develop affordable housing, and Florida’s SIS Needs Plan.

Implementation/Action Plan

Implementing the plan will require the actions generally outlined above; however, following are several key steps to get implementation in motion and to move forward successfully. During the first year after adoption, Key West staff should engage in the following:

Prior to and During Cow Key Bridge Construction (2019–2021)

- **Meet with FDOT District 6 office leadership** to fully understand and identify the impact of the Cow Key Bridge construction. Discussion should lead to the implementation of options that

would minimize interruptions and/or route scheduling/operations. The parameters of the construction project include the following impacts and potential considerations:

- Reduced lanes, from two in each direction to alternating with two onto and one off in the AM and one on and two off in the PM, limiting the lanes for KWT’s direct access to their Stock Island facilities and any connection to the Lower Keys Shuttle.
- Limited turning movements at S College Road, with right-turn-only and no/limited signalization, requiring KWT to reroute existing services, limit connections, and increasing deadhead or redundant services.
- Increased turning activity with full signalization at N College Road competing with potential routing alternatives planned by KWT.
- **Develop and implement alternative routing/facilities** during the Cow Key Bridge construction duration, from approximately April 2020 through May/June 2021 (expected completion). Initial thoughts on route adjustments include the following:
 - Changing the southern terminus of the Lower Keys Shuttle to Stock Island and improving the transfers/connections to other routes going into Key West.
 - Potential Transit Signal Priority (TSP) applications on US-1 at S College Road on Stock Island and Roosevelt Boulevard in Key West.
 - Potential use of shoulder on Cow Key Bridge and approaches as a bus-only or bus and right-turn-only lane.
 - Immediate or expedited development of the KWIC (while using current facility temporarily until a new and expanded permanent facility is complete) on Stock Island, with park-and-ride opportunity to help reduce traffic going into Key West, provide a transfer point for transit routes, and provide a focal point for other transportation demand strategies.
 - Discuss with District 6 staff the need and source of funding to develop the KWIC bus-only lane and TSP application, as well as temporary operating funding to successfully implement route changes and improvements.
- **Start a marketing/awareness campaign**, including targeting meetings, activities, events, and other venues at which to share the Executive Summary and provide details of the planned transit growth to educate the community and leaders while keeping the momentum of the TDP process and effort fresh and moving ahead. These may include homeowner/senior/community associations, civic clubs, service organizations, elected and/or appointed boards or committees, public events or festivals, and/or other locations as identified.
- **Meet with FDOT District 6 Commuter Services program staff** to develop a plan of action for commuter programs in Key West, especially for workers accessing Key West via US-1.

- **Identify potential grants and apply for funding** to implement transit alternatives, and use the information provided in the TDP to develop project applications, including defining/describing the projects, justifying needs, providing service and operational parameters, outlining a proposed budget, and providing performance measures. These efforts should include FDOT District 6 coordination for temporary or unusual sources due to the construction project.

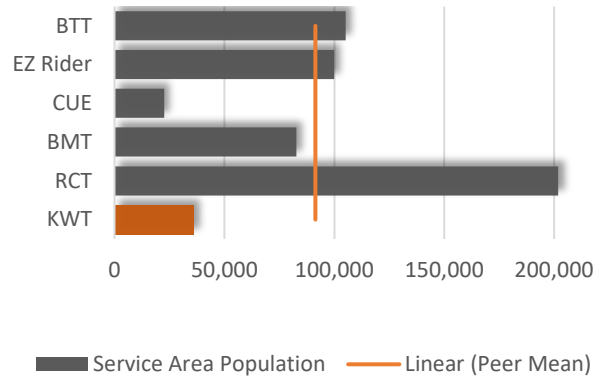
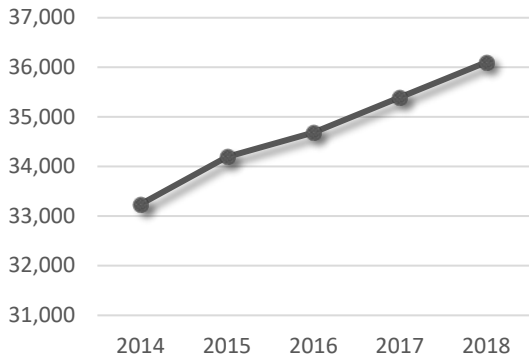
During and After Cow Key Bridge Completion (2023–2029)

- **Continue the marketing/awareness campaign**, assess where additional efforts would be beneficial, and develop plans to initiate.
- **Work with District 6 to initiate long-term funding** via the FTA Section 5311 program. With no urban funding available, KWT is dependent on the FDOT to provide Federal funding opportunities for capital and operating their transit system. D6 has been supportive by transferring funding into the 5311 (Rural Public Transportation) program and has indicated consideration to increasing the level of funding with the City’s commitment of additional funding and improved services.
- **Submit applications for funding** as identified to implement alternatives included in the implementation plan and/or unfunded needs list.
- **Develop a permanent Key West Intermodal Center** as a primary facility/hub on Stock Island with ample park-and-ride spaces, direct bus route connections, bus, trolley, and/or tram transfers, potential water-borne access, and other services as identified.
- **Working with District 6 Commuter Services program staff**, identify and approach major employers to initiate employee commuter programs, sale of passes, introduction of new routes, and/or other commute options to improve access to current and emerging jobs.
- **Working with City leadership**, plan and implement at least the minimum projects and/or expanded services as approved in the TDP Implementation Plan and identify adequate local funding to leverage potential revenue increases from FDOT and/or other sources.
- **Plan and implement the Restructured Transit System** as identified in *Key Connections*, with a launch date after the completion of the Cow Key Bridge construction. This would include modifying routes for more direct connector services, new circulator or loop services, and enhanced services for the Lower Keys Shuttle. This would include a detailed Operations Service Plan.
- **Develop an introduction and marketing strategy** for the revamped KWT system specifically outlining how the new system will be introduced and what roll-out events will be conducted to involve community members and ensure awareness throughout the city. The marketing strategy will include ongoing goals, strategies, and efforts to maintain momentum.

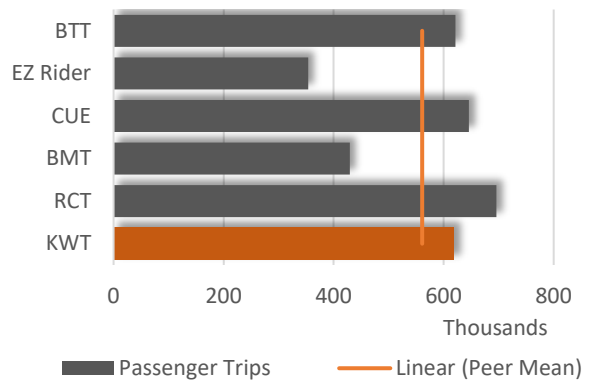
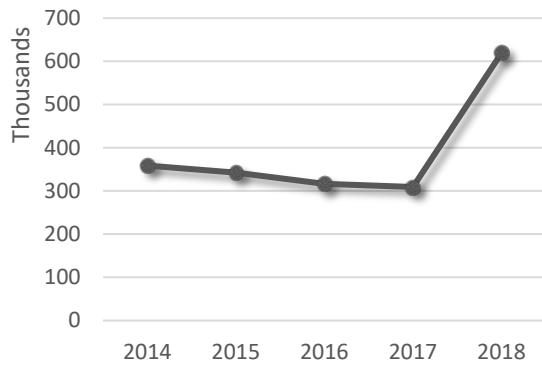
- **Assess and prepare/implement an ADA Transition Plan** for bus stop and facility accessibility, especially in light of expanded and restructured services and the new facilities and stops required for implementation of *Key Connections*.
- **Prepare and submit annual progress reports** using the preparation and approval process to continue the annual progress updates to the adopted *Key Connections* TDP.
- **Complete a Comprehensive Operations Analysis (COA)** for the restructured KWT system within four years of the rollout of the new system to ensure that operations are efficient and provide ample opportunities for regular riders and visitors.

Appendix A: Peer and Trend Figures

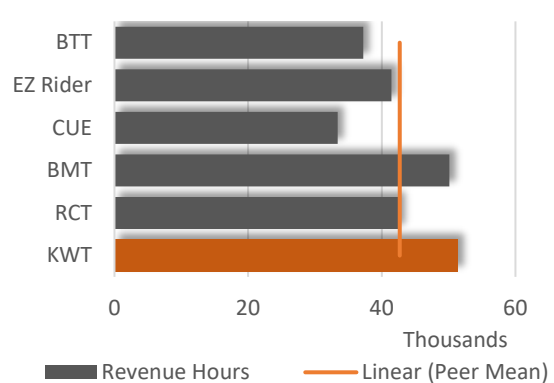
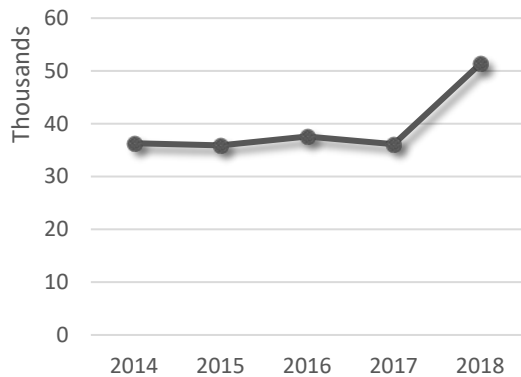
Service Area Population



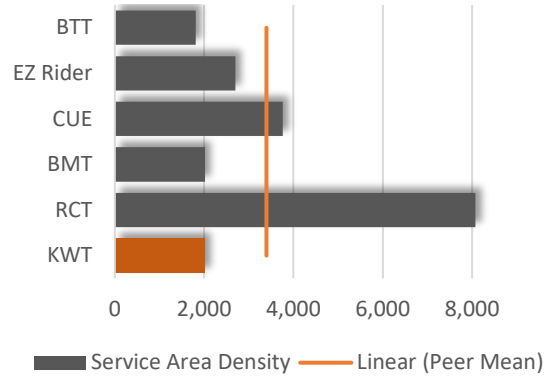
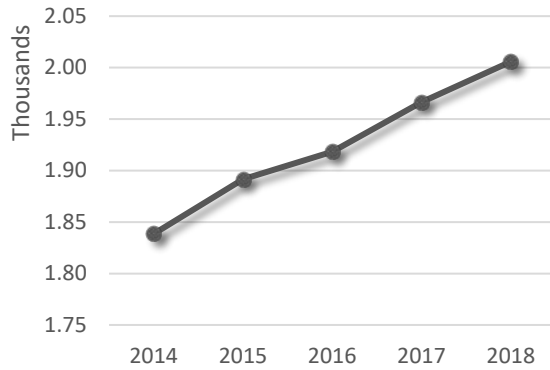
Passenger Trips



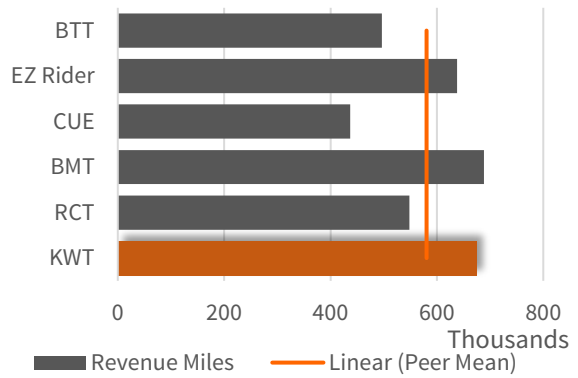
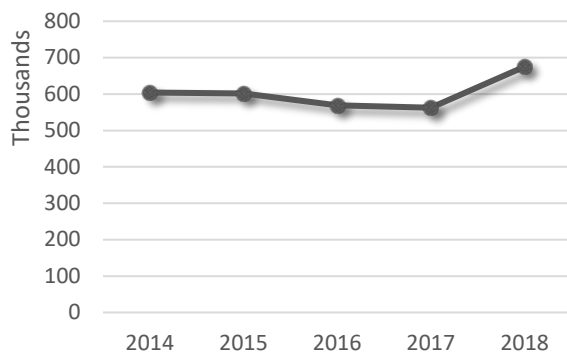
Revenue Hours



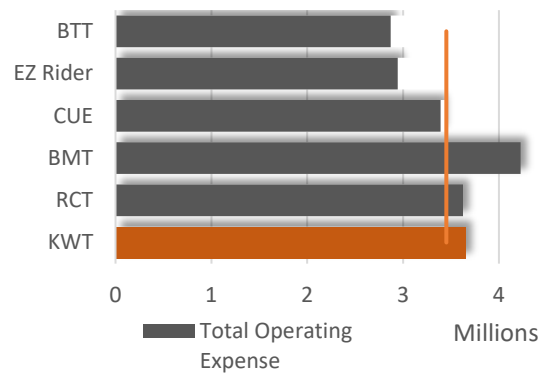
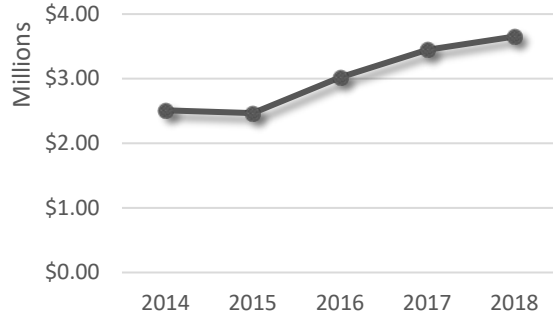
Service Area Population Density



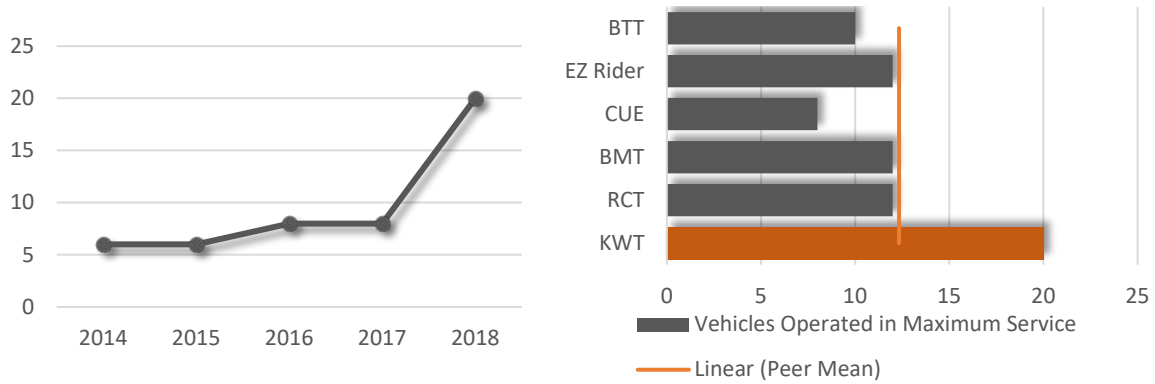
Revenue Miles



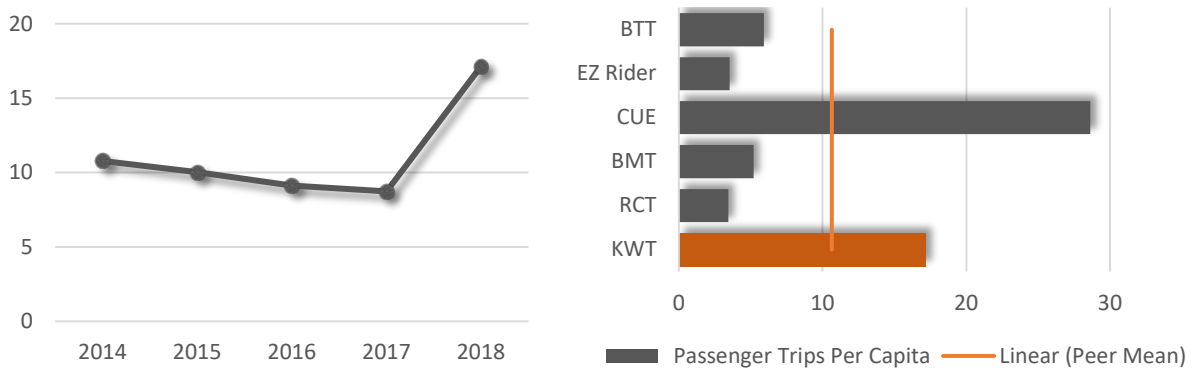
Total Operating Expense



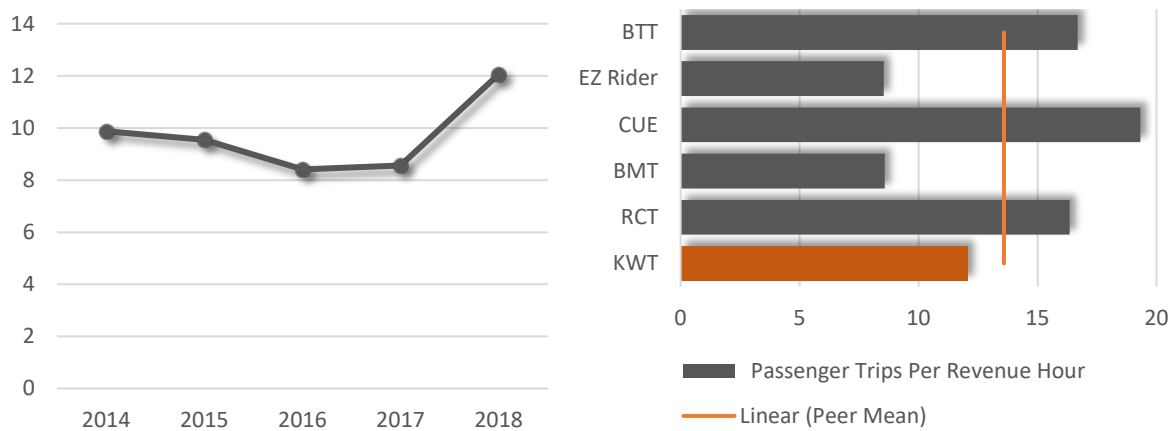
Vehicles Operated During Maximum Service



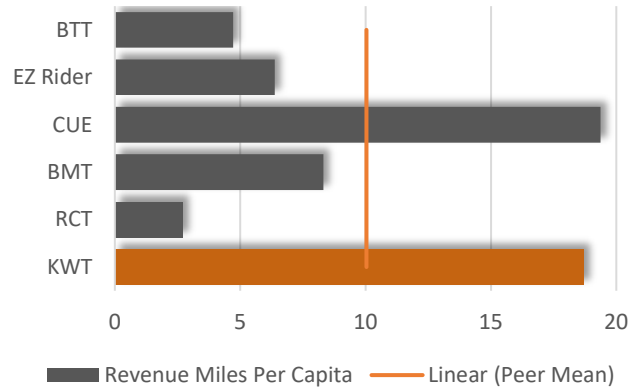
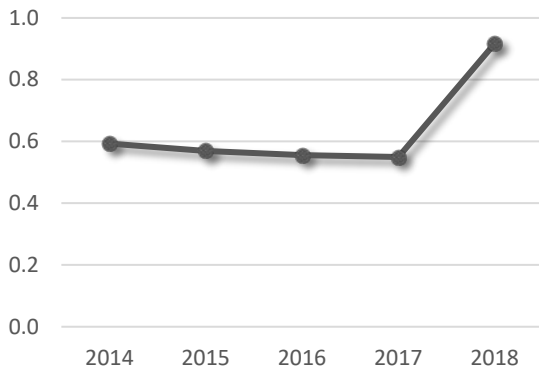
Passenger Trips per Capita



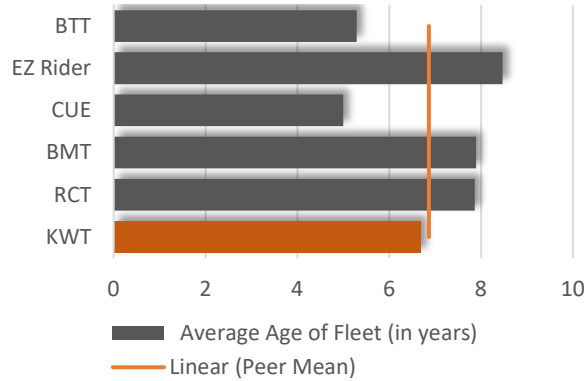
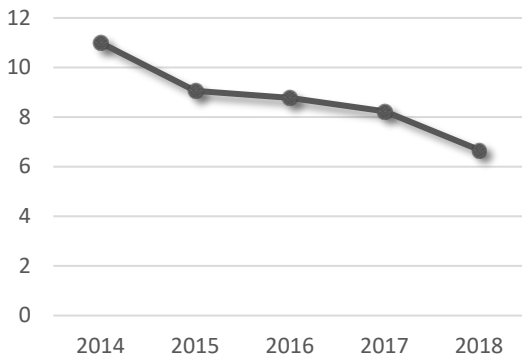
Passenger Trips per Revenue Hour



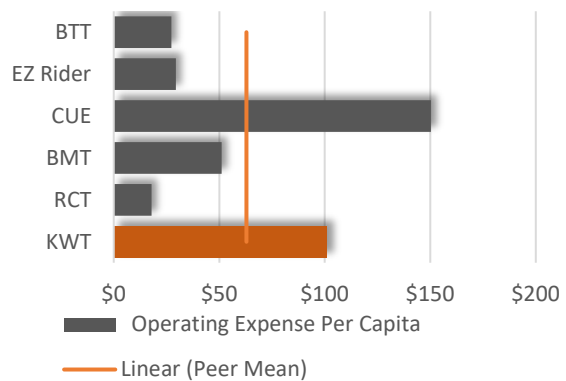
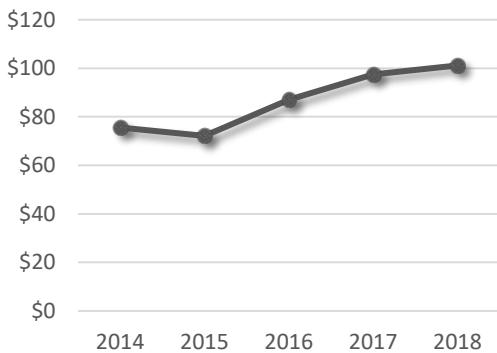
Revenue Miles Per Capita



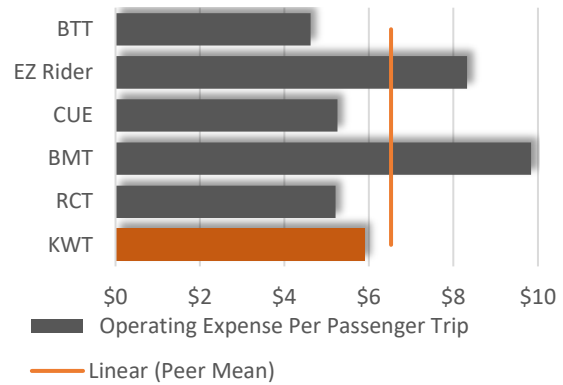
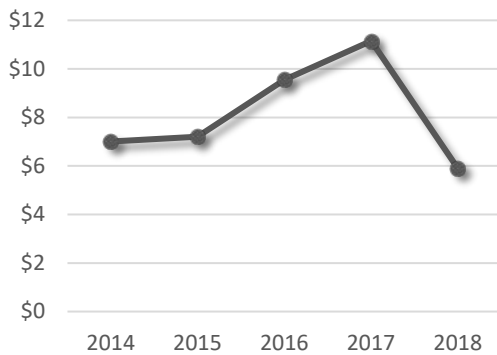
Average Age of Fleet



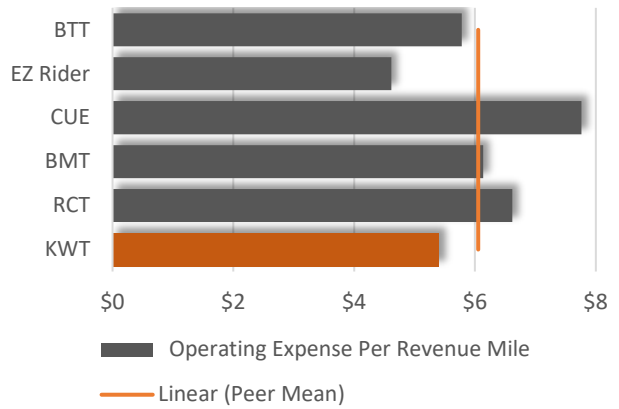
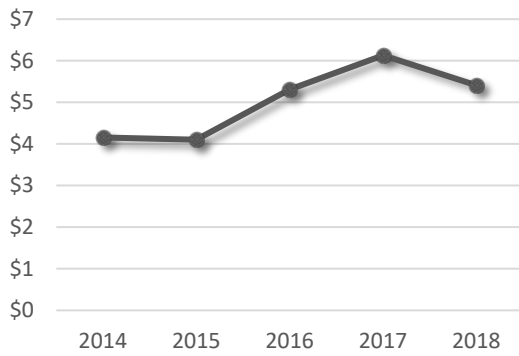
Operating Expense per Capita



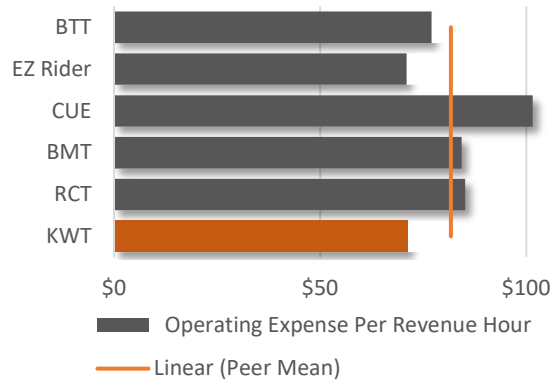
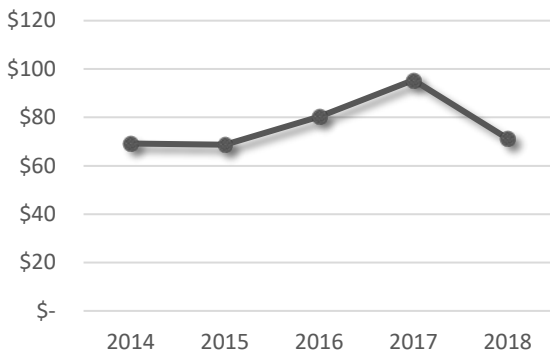
Operating Expense per Passenger Trip



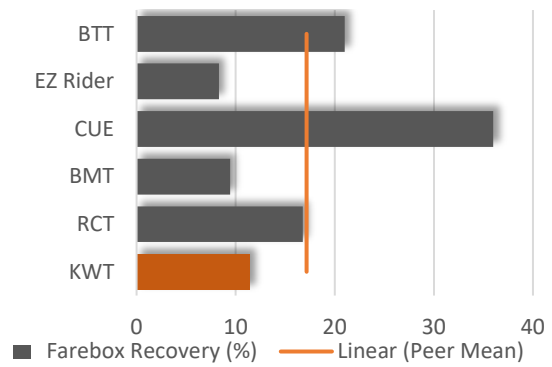
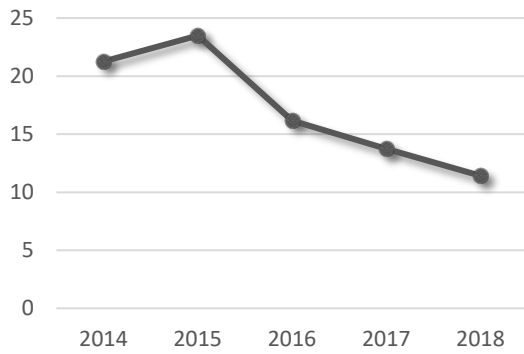
Operating Expense per Revenue Mile



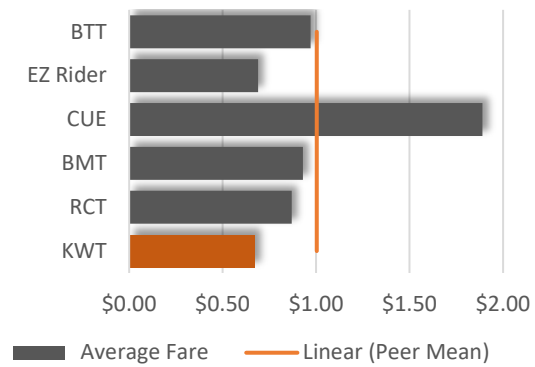
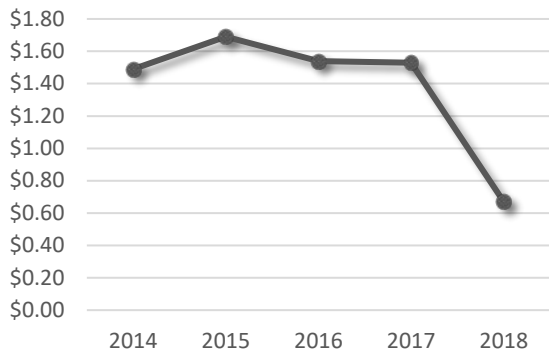
Operating Expense per Revenue Hour



Farebox Recovery (%)



Average Fare



Appendix B: Farebox Report

Annual Farebox Recovery Ratio Report

Key West Transit Fixed-Route Bus System, Key West, Florida

July 2019

Current Farebox Recovery Ratio

The farebox recovery ratio (FRR) for Key West Transit (KWT), the public transportation provider for the City of Key West, was 11 percent in FY 2018. This number shows a 46 percent decrease over the five-year period from FY 2014 to FY 2018. However, this decline is primarily due to the addition of fare-free Duval in late 2017.

Prior Year Fare Studies and Changes

The last KWT fare change was implemented in 2011. As a result, the current full fare on the fixed-route system is \$2.00, \$1.00 for reduced fare, and \$0.50 for seniors. Fares for the Lower Key Shuttle remained the same for the full fare and reduced fare, \$4.00 and \$2.00, respectively. The senior fare decreased from \$1.50 to \$1.00 for seniors on the Lower Keys Shuttle. The Duval Loop was implemented in 2017 as a fare-free service to serve the Old Town area.

Strategies that Will Affect Farebox Recovery Ratio

The 2020-2029 Transit Development Plan (TDP) Major Update identifies strategies that will be used to maintain or increase the farebox recovery ratio, including the following:

- Monitor key performance measures for individual routes.
- Ensure that transit serves major activity centers and parking garages, potentially increasing the effectiveness of service.
- Increase ridership through enhanced marketing and community relations activities.
- Form partnerships with local hotels and employers with incentives for transit use.
- Improve attractiveness of service to riders through implementation of technology.
- Monitor opportunities to secure additional funding to improve frequencies on existing routes and attract new riders.
- Prioritize routes to add additional buses to improve frequencies, improve the customer experience, and attract new riders.
- Meet with cities in the Lower Keys to form partnerships for funding improved transit service along the Overseas Highway.
- Conduct on-board surveys every three years to gather information on how to make services more convenient and useful to patrons.
- Complete ongoing preventative maintenance activities and replace fareboxes as needed to ensure the fare collection equipment is performing at optimum capacity.

Appendix C: Public Involvement Materials

City of Key West Transit Development Plan 2020–2029

Public Involvement Plan

Draft

November 2018

Prepared for



Prepared by





INTRODUCTION

Key West Transit, the transit agency serving the city of Key West and adjacent areas, is preparing its 10-year Transit Development Plan (TDP), which will provide a guide for development of the transit system over the next 10 years. As required by State statute, this is a major update to its TDP, which is required every five years. The update covers FY 2020 through 2029.

The Public Involvement Plan (PIP) provides an overview of the public outreach activities that will be undertaken as part of the TDP process. The PIP is designed to comply with TDP State statutory requirements.

Rule 14-73.001 requires that the TDP preparation include the following activities:

- A PIP approved by the Florida Department of Transportation (FDOT) and also approved by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA).
- Description of the process used and the public involvement activities undertaken.
- Solicitation of comments from FDOT and the regional Workforce Development Board (i.e., CareerSource Research Coast) on the mission, goals, objectives, alternatives, and 10-year implementation program.
- Notification of all public meetings at which the TDP is presented to or discussed with FDOT and the regional Workforce Development Board.

Although the City of Key West is not under the jurisdiction of a Metropolitan Planning Organization (MPO), some aspirational strategies established by most MPOs in Florida emphasize that the overall public participation strategy should, to the maximum extent possible, (1) hold public meetings at convenient and accessible locations and times, (2) employ visualization techniques to describe transportation plans and programs, and (3) make public information available in an electronically-accessible format, such as the City's website, as appropriate, to afford reasonable opportunities for consideration of public comment and opinion.

TDP PUBLIC INVOLVEMENT PROCESS

The public involvement process for the development of the TDP seeks Key West Transit user and non-user public input on transit needs, priorities, and implementation strategies to enhance public transportation in the City of Key West and the region. As part of an effort to use the TDP process to improve Key West Transit's services, this outreach effort will ensure that a broad range of groups is consulted as part of the process, including passengers, stakeholders, social service providers, bus operators, and the general public.

Additionally, Commuter Services of South Florida (SFCS) (the FDOT District 4 and 6 joint rideshare program) will be available to assist in additional outreach activities for the TDP. These activities may include targeted workshops and/or community events and will be noted in the applicable sections later in the PIP.



Key Objectives

The objectives of the TDP PIP include the following:

- To develop a multi-faceted communication model that will keep the general public and all stakeholder groups informed about the status of the project.
- To clearly define the TDP purpose and objectives early in the process.
- To identify and document the concerns, issues, and needs of key stakeholders.
- To provide stakeholders with baseline information about the current state of Key West Transit and keep them fully informed throughout the study.
- To encourage participation of all stakeholder groups within the project area while paying special attention to underserved communities.
- To provide frequent opportunities and a consistent access point for community input.
- To identify tools to gather information from stakeholders who cannot participate in meetings, such as via websites, email, online surveys, social networking tools, etc.
- To respond to community questions and comments when requested and provide contact information.

Phases of TDP Outreach

The City of Key West's approach to this TDP's outreach consists of two phases:

- *Phase I* – Key West Transit will conduct outreach to the community to seek public input on transit needs, including service and capital/infrastructure needs for the next 10 years. Discussion group workshops, stakeholder interviews, bus rider and operator surveys, and website/email/social media communications will be part of this phase.
- *Phase II* – Following extensive evaluation of the input received and development of recommendations, additional outreach will occur to seek public input (via a public input survey, public listening sessions, and website/email/social media communications) on the recommendations, including service, priorities, and implementation strategies to enhance public transportation in Key West.

PUBLIC INVOLVEMENT ACTIVITIES

Numerous public involvement techniques were selected for inclusion in the PIP to ensure the active participation of the community. Table 1 presents the types of activities that will be completed for the TDP and the tools associated with each type of activity.

The remainder of this section summarizes these activities in detail, including composition of the various committees, workshops, and audiences for each of the activities along with an anticipated timeline for completion by month.



Table 1
TDP Public Involvement Activities

Activity		TDP PIP
Project Review/Coordination Meetings		✓
Website Communications		✓
Social Media Networking & Email Outreach		✓
Collateral Materials & Visual Aids	Flyers & informational items	✓
	Branding	✓
	Visual aids	✓
Community Engagement, Review & Comment	Bus rider/operator surveys	✓
	Stakeholder interviews	✓
	Discussion group workshops	✓
	Paper & online surveys	✓
	Public workshops	✓
	Email, mail, in-person, and telephone comments	✓
Agency Coordination	Regional coordination	✓
	Regional, County and City officials	✓

Project Kick-off Meeting

A kickoff meeting for the project was held to discuss the project scope, project schedule, milestones, and deliverables. The following items were key topics on the agenda:

- Discuss TDP goals and objectives – what this plan should achieve.
- Review project tasks and deliverables.
- Discuss project coordination and review meetings.
- Discuss strategy for public involvement efforts.

During this meeting, the Project Team clarified the high-level objectives for the TDP and how they can fit in with other planning efforts in Key West. Additionally, key timelines, particularly for near-term anticipated completion dates, were discussed and clarified, and a substantial discussion took place regarding the composition and timeline for the public involvement activities.



Completed: November 2018

Project Review/Coordination Meetings

In addition to the kickoff meeting, three meetings with Key West Transit staff and representatives of any other agency invited by Key West Transit are scheduled for the duration of the TDP planning process. These meetings will be conducted to provide an update on the project progress and discuss any deliverables/input on the TDP.



In addition, one meeting with the Parking and Alternative Transportation Group (PATG), a volunteer group formed to help the Key West City Commission find solutions to parking and traffic congestion issues in the downtown area, is planned to obtain their input on transit in Key West.



Anticipated Completion: February-June 2019

Branding

The Project Team will work with City staff to develop and implement a brand to use during the development of the 2020–2029 TDP. Building a TDP brand is an important step toward making the planning and public involvement processes more recognizable to the public. To meet the campaign goal of increased public awareness, a variety of strategies and objectives will be developed, including, but not limited to, the following:

- Create a brand logo and color schemes for branding.
- Associate branding with all key TDP material, including public notices, flyers, presentations, reports, displays, websites, and social media.



Anticipated Completion: December 2018

Conduct Stakeholder Interviews

The Project Team will conduct interviews with representatives of key public and private sector organizations to obtain feedback about public transportation issues, needs, necessary service enhancements, and priorities. This is a key component of the public involvement effort and will enhance the understanding of local conditions from those who rely on or who work with others who rely on transit to get to and from work or to conduct important trips.

Up to 10 stakeholder interviews will be conducted. Stakeholders will be provided with a briefing packet that will include information on the purpose of the TDP, ways to stay involved, and other pertinent information. Prior to conducting the interviews, a draft interview questionnaire will be submitted to Key West Transit for review and approval. The interviews will be scheduled in advance and conducted either in person or by phone, whichever is preferred by the interviewee.



Anticipated Completion: December 2018

On-Board Survey

A bus on-board survey will be conducted on 100 percent of Key West Transit's scheduled fixed-route bus runs for typical weekday and Saturday service to obtain information related to demographic



attributes, travel behaviors, and rider satisfaction of current riders for market research purposes. This information will enable Key West Transit to focus on relevant transit needs and issues such as modifying bus schedules, locating bus stops, modifying the fare structure, planning for future service, focusing on marketing campaigns, and identifying historical trends in rider satisfaction.

The on-board survey methodology and implementation will be coordinated closely with agency staff to ensure that study objectives are met and data collection efforts are efficiently integrated with the agency's operations. In addition, Key West Transit's most recent survey questionnaire will be consulted to promote consistency of questions. The completed on-board surveys are expected to cover a sample of all routes and runs for all times of day for a representative weekday and Saturday of service levels. The survey will accommodate English and Spanish languages, as necessary.

In support of this effort, the following activities will be completed:

- Use electronic tablets to facilitate the collection of data during the survey process.
- Collection of a sufficient amount of data to meet sampling requirements.
- Organization of collected data according to route.
- Assurance that all bus riders have an equal chance to complete a survey.
- Compilation of cross tab reports and statistics.
- Assurance of quality control and accuracy standards throughout the on-board survey effort.



Anticipated Completion: January 2019

Bus Operator Interviews

The Project Team will plan for and conduct two group interview sessions with bus operators. The session will include open-ended discussion about what the operators consider to be key needs and priorities for Key West Transit. Additionally, a short survey will be administered and collected to ensure that details are gathered related to specific route improvements and other potential needs.



Anticipated Completion: January 2019

Public Input Survey

The Project Team will conduct two public input surveys for the TDP. The Phase I survey will be a survey of the general public (targeting non-riders) to obtain information related to attitudes, latent demand, and general support of the community related to public transit services and to augment findings of the on-board survey. The Phase II survey will be conducted after the development of potential service alternatives for the TDP. Both surveys will be available online, through social media, and in hard copy formats. Access to the online versions will be provided via links on the City, Key West Transit, and other websites, as available. A tablet-based and/or hard copy format will be provided at



workshops, listening sessions, and partnering agencies. Participants will be encouraged to complete the surveys via tablets to improve the ease and accuracy of data collection and reporting.

Email-blasts, social media, and websites will be used to promote the online survey effort. In addition, participants attending the discussion groups will be requested to disseminate the survey links. Participants of the stakeholder interviews will be asked to distribute the link through their places of business, and agency and City staff will distribute the link through other means, as appropriate.



Anticipated Completion: Phase I - February 2019



Anticipated Completion: Phase II - May 2019

Discussion Group Workshops

Two discussion group workshops will be scheduled and held at different locations in the city to ensure representation that is geographically distributed. These workshops typically will involve a smaller group of participants (8–12 persons) in an intimate meeting setting that promotes more in-depth, open-ended discussion about issues, needs, and opportunities from the perspectives of non-users. To generate interest and participation, the Project Team will work with agency staff to identify and invite potential participants to each workshop. Each discussion group will be attended by participants of similar backgrounds to provide for more robust discussion. (Two additional workshops may also be conducted with the assistance from SFCS to engage the communities served and riders using the Lower Keys Shuttle. This service connects bus riders to Key West from Marathon and further north with a connection to Miami-Dade Transit.)



Anticipated Completion: February 2019

Phase I Open House Workshops

The Project Team will facilitate two open house-style public workshops at different locations as part of the TDP outreach process. These will be held as standalone events at locations where the general public gathers, such as shopping malls, or at transit hubs to obtain input from the general public about the TDP update process.

Both sessions will be planned early in the process to collect input on transit needs and necessary service and capital improvements. These sessions will include displays and interactive information exchange, printed and tablet-based public input surveys, and enlistment for social media. They will be designed to capture information from seasonal and permanent residents about community values, needs, and priorities.



Anticipated Completion: March 2019

Phase II Public Workshops

Two additional open-house public workshops will be hosted to solicit feedback regarding TDP alternatives and priorities in Phase II of the TDP outreach process. These workshops will occur later in the TDP public involvement process to illustrate proposed transit service alternatives to the public. The workshops will use maps, fact sheets, and other visuals and a survey to provide an opportunity to the public to offer input on the effectiveness of the transit alternatives proposed to address the needs of the communities served by the Key West Transit.

The Project Team will coordinate with Key West Transit staff to plan and schedule each workshop to target appropriate venues. To maximize opportunities for citizen participation, locations will be selected to ensure geographic coverage. The second public input survey, in both printed and tablet form, will be administered at these workshops to obtain comments and input on the proposed transit alternatives.



Anticipated Completion: April 2019

Review Comments and Suggestions from Key West Citizens

The Project Team will review any available comments and suggestions collected and provided by Key West Transit from Key West citizens (riders and non-riders) regarding existing and future transit services in the city for consideration in the TDP. The major themes and topics of this feedback will be summarized as part of the TDP's public outreach.



Anticipated Completion: June 2019

Social Media Outreach

The Project Team will develop content for social media such as Facebook and/or Twitter. After consultation with agency staff, the content will be provided to Key West Transit for posting on its Facebook and Twitter accounts. It is envisioned that posts to social media will occur as necessary or as requested by Key West Transit staff.



Anticipated Completion: May 2019



Web and Email Outreach

The Key West Transit website will also be used as a platform to distribute information on the TDP process and any upcoming public outreach events. The Project Team will provide information, including flyers/notices on public workshops, links to public input surveys, and any project materials as appropriate to Key West Transit staff for posting on the website. In addition, contact information will be provided on the website so the public can engage directly with Key West Transit staff or the Project Team.

Additionally, the Project Team will facilitate the dissemination of emails to key contacts within the community, as provided by Key West Transit staff, to provide information and updates similar to that available on the TDP webpage. The Project Team will coordinate with Key West Transit staff and develop content for the e-mail blasts to:

- Encourage participation in online survey/outreach events in Phase I of TDP outreach.
- Notify recipients of Phase II of TDP outreach and the TDP transit priorities survey



Anticipated Completion: May 2019

TDP Presentations

Two PowerPoint presentations of the TDP will be developed and conducted at publicly-advertised meetings after drafts have been reviewed by Key West Transit staff. One presentation will be used to educate elected officials about the TDP and its processes and obtain their input and direction on the future of transit in Key West for the next 10 years. The other will be conducted at the end of the TDP process to present the TDP and obtain approval from the City. These presentations will be scheduled and made as directed by Key West Transit staff.



Anticipated Completion: June 2019

Other Outreach Efforts

In addition to the activities summarized previously, the Project Team will coordinate with SFCS on potentially conducting grassroots outreach events/additional open house workshops at community events and other applicable locations.

As part of the public outreach effort, flyers, fact sheets, and other materials also will be developed as public involvement tools to distribute information about public outreach activities and upcoming public workshops, facilitate education about the Key West Transit system during outreach events, and provide participants with a means for asking questions.

Potential public involvement tools and resources include the following:



- *Fact sheets* will include information to distribute to the public at outreach events and public workshops and will offer an overview of the TDP and Key West Transit and promote the value and importance of public involvement. They also will direct and encourage the public to reach out to Key West Transit staff to share questions and concerns.
- *Media releases* will be prepared and provided to the City Public Information Office for distribution, as appropriate.
- *Flyers* will be developed to share information with the public, provide TDP updates, and educate the public on the public involvement process and the value of their participation. Flyers will direct the public to visit the TDP website and the branded Facebook and Twitter pages to stay involved with and informed about the development of the TDP.
- *Project presentations* that are user-friendly and graphical will be developed to support the communication and adoption of the TDP and will be available for use by Key West Transit staff beyond adoption of the TDP.
- *Display boards* will include exhibits such as service and demographic maps, plan proposals, and more at public workshops.



Anticipated Completion: May 2019

Table 2

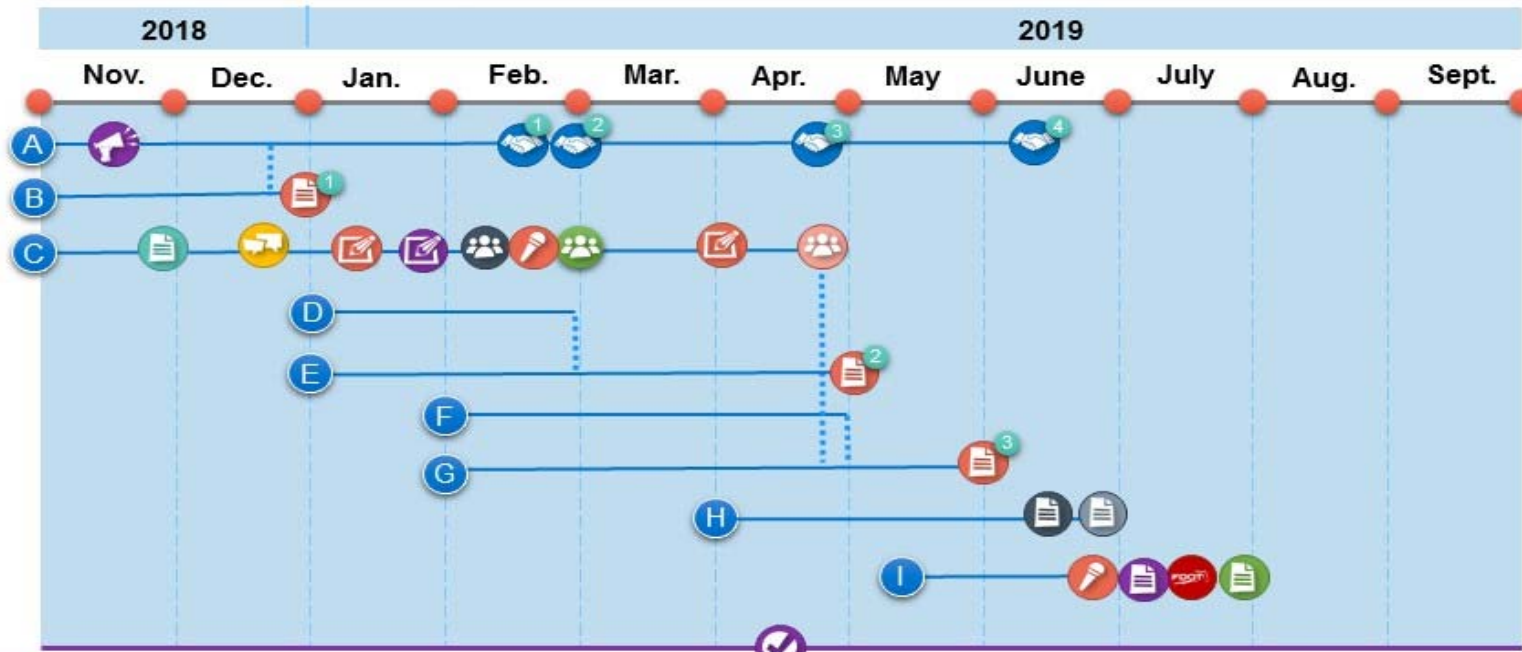
Tentative Public Outreach Schedule

Event	Anticipated Date
Project Coordination/Review Meetings	February–June 2019
Stakeholder Interviews	December 2018
On Board Survey	January 2019
Bus Operator Interviews	January 2019
Phase I – Public Input Survey	January–February 2019
Phase I – Public Workshops	February 2019
Discussion Group Workshops	February 2019
Phase II – Public Workshops	April 2019
Phase II – Public Input Survey	April–May 2019
Social Media Outreach	May 2019
Web/Email Outreach	May 2019
Project Presentations	June 2019



TDP Project Schedule

City of Key West Transit Development Plan (TDP) Major Update



Project Tasks	On-Board Survey & Operator Interviews	Listening Sessions	Public Input Survey	Draft TDP	Final Exec. Summary & Other Deliverables
Kick-off Meeting	Stakeholder Interviews	Public Workshops	Public Involvement Plan	Draft Exec. Summary	Submission to FDOT
Review Committee Meetings	Discussion Group Workshops	Presentations	Tech Memos/Reports	Final TDP	Coordination with the City of Key West

STAKEHOLDER INTERVIEW QUESTIONS

2020-2029 KEY WEST TDP

PURPOSE OF INTERVIEW

- Working with the City of Key West to develop 10-year transit development plan (TDP) for the Key West Transit that meet FDOT requirements for state funding eligibility.
- As part of the TDP process, meetings are held with members of the local business and political community to gauge their awareness of current public transit, as well as garner input as to need and viability of transit services in the county.
- The TDP also serves as an opportunity to discuss improvements that might be needed to the transit system and to discuss initiatives for future system growth.

BACKGROUND INFORMATION

- A TDP is a strategic guide for public transportation development in the City of Key West.
- The TDP:
 - Evaluates existing services,
 - Reviews demographic information of riders and their travel behaviors,
 - Summarizes local community and transit policies and priorities,
 - Gauges public perception through accessible activities for the general public and interested parties,
 - Compares the local transit system or community to other similar systems, and
 - Reviews performance of the local system.
- It is a ten-year implementation plan which provides recommendations on:
 - How, where, when, and if new transit services should be introduced to the transit system, and,
 - Adjusting, removing, or improving aspects of the transit system that may not be adequately serving the public or that is not meeting performance measures.
- Finally, a ten-year financial plan is constructed as part of the TDP that:
 - Estimates costs of existing and new services, and,
 - Projects known and potential revenues.
- Although transit systems are required to submit a TDP to FDOT, TDPs can also be very useful as they provide a review of the current transit system, provide a forum for public input, recommendations for improvements, and outline the cost of improvements.
- TDPs are not budgets or CIPs and do not necessarily bind decision-makers to elements of the TDP. However, great effort is put into developing a comprehensive overview of the transit system and planning for the future needs of the general public that can:
 - Encourage residents, businesses, and government officials to support and advocate use of public transportation,
 - Use transit to improve/manage congestion in the local area
 - Promote sustainable and environmentally friendly transportation, and
 - Provide transportation options that improve overall quality of life of residents
- Candid discussions and continued participation from stakeholders in the transit development process allows:
 - Decision-makers to become more knowledgeable about the transit planning process and,

- The City to construct and support a plan that not only has input from the public, private and government sector, but helps foster consensus in the decision-making process (“everyone is on the same page”).

INTERVIEW QUESTIONS

1. Are you currently aware of Key West’s public transit system (Key West Transit) and its services?
2. Do you use Key West Transit? Why? Why not?
3. Who do you believe uses the transit system? (Workers, Students, Unemployed, Elderly, Tourists/Visitors)
4. What groups of travelers seem to experience the most difficult transportation conditions (elderly, tourists, commuters, the disabled, low-income, etc.)? Why?
5. What type of transit services would you like to see more of in Key West? (More Frequent Fixed-Route, Vanpools, Trolley, Increased Weekend Service, Late Evening Service, micro-transit (on-demand smaller bus with app), subsidized rideshare, autonomous bus).
6. Is there a need for more service in core areas currently served by Key West Area Transit in the City of Key West and the Lower Keys? Is there a need for transit service in other areas of Monroe County?
7. What do you think are the most significant transportation issues in Key West?
8. Do you believe that public transportation can relieve congestion and parking problems in the City of Key West?
9. What do you think are the most significant issues for current and potential transit users in Key West?
10. What are reasonable passenger fares for transit service?
11. What are the major destinations within your immediate community?
12. What are the major destinations outside of your community where people are traveling to, from your area?
13. Is more regional transportation needed to connect the City of Key West with surrounding areas (Lower Keys, Middle Keys, Upper Keys, Miami, etc.)?
14. Are you willing to pay additional local taxes for an expanded transit system?
15. What types of local funding sources should be used to increase transit service in the future? (i.e. private partnerships, fare increases, ad valorem tax, sales tax, gas tax)
16. Where do you see Key West Transit ten years from now?
17. Do you believe Key West Transit has done an effective job providing transit service?
18. Do you believe Key West Transit has done an effective job marketing transit service options?

19. Are you supportive of Land Development Codes and policies that require coordination of and funding for transit services that connect to and support land uses that promote transit oriented developments within the community?



KEY WEST TRANSIT

WANTS YOUR INPUT!



Key West Transit 10-Year Transit Development Plan

Public Transit Workshops

The City of Key West and Key West Transit (KWT) is planning for its future, and we want your input! Please stop by any time during the following two public workshops and let us know how you think Key West Transit should grow.

Public Workshop #1

Monday, March 4, 2019 (3 PM - 5 PM)

City Commission Chambers Courtyard

Key West City Hall

1300 White Street

Key West, FL 33040

KWT Bus Routes: Orange, Blue, Green, and Lower Keys Shuttle

Public Workshop #2

Tuesday, March 5, 2019 (2 PM - 4 PM)

City Commission Chambers Courtyard

Key West City Hall

1300 White Street

Key West, FL 33040

KWT Bus Routes: Orange, Blue, Green and Lower Keys Shuttle

**If needed, transportation will be provided for workshop attendees immediately following the workshop. Please contact Key West Transit at (305) 809-3910 for arrangements.*

If you are unable to attend one of the workshops, written comments will be accepted through March 31, 2019, and may be sent to:

Key West Transit

Attn: Director of Transportation

5701 College Road

Key West, FL 33040

(305) 809-3910

chaia@cityofkeywest-fl.gov

SPECIAL ACCOMMODATIONS

Any person requiring special accommodations to attend or participate, pursuant to the Americans with Disabilities Act, should contact KWT within at least three (3) business days before the meeting at (305) 809-3910.

For additional KWT route and schedule information, please contact KWT at (305) 600-1455 or www.kwtransit.com.



KEY CONNECTIONS
A PLAN FOR TRANSIT



**Tindale
Oliver**



KEY WEST TRANSIT SURVEY

Please take a minute to help us plan for transit needs in Key West!



(1) How much awareness is there in the city about transit/public transportation?

- High
- Moderate
- None at all
- Do not know

(2) What do you think of Key West Transit service?

- It must be provided
- It might be useful
- It does not matter to me
- Not sure it is useful
- We do not need it

(3) What is your perception of transit's role in the city?

- Serve tourists/visitors
- Serve workers/commuters
- Relieve parking/congestion
- Connect islands

(4) Is traffic congestion a problem in Key West?

- Yes
- No

(5) If you answered yes to question 4, what role do you see transit playing in alleviating the situation?

- It will relieve congestion
- It may provide some help
- It will help reduce parking demand
- It will have no effect
- It will make congestion worse

(6) Have you used Key West Transit?

- Yes
- No

(7) Have you used any of the following other services in Key West?

- Conch Tour Train
- Key West Limo
- Old Town Trolley
- Other _____
(please specify)

(8) Do you think there is a need for additional transit service in Key West?

- Yes
- No

(9) If you answered yes to question 8, the top THREE transit improvements you would most like to see?

- More frequent service on City routes
- More weekend service on City routes
- Later evening service on _____Route
- More Routes like Duval Loop. Where? _____
- More frequent service on Lower Keys Shuttle
- Express service. Where? _____
- More bus benches and shelters
- More Park-N-Ride facilities with bus access
- Other, specify _____

(10) How many months out of the year do you reside in Key West/Lower Keys?

- Less than 6 months
- 6 months to 1 year
- Permanent resident (my zip code is _____)

(11) What do you think is a reasonable one-way fare to pay for transit service?

- Free
- \$0.50 to \$1.00
- \$1.01 to \$2.00
- \$2.01 to \$3.00
- More than \$3.00

(12) Your age is...

- Under 18
- 18 to 24 years
- 25 to 40 years
- 41 to 60 years
- Over 60 years

(13) What is the range of your total household income for 2018?

- Less than \$20,000
- \$20,000 - \$29,999
- \$30,000 - \$59,999
- \$60,000 - \$74,999
- \$75,000 - \$100,000
- \$100,000 or greater

Please continue survey on the other side of this page.

(14) If you were going to consider using Key West Transit services, please rate how important each of the following aspects of transit service would be in your decision-making process.

	Very Important	Somewhat Important	Neutral	Not Important	No Opinion
Service	a. Days of service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Frequency (how often buses run)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Hours of service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location	d. Convenience of routes (where buses go)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Location of bus stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time	f. Dependability of buses (on time)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g. Travel time on bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$	h. Cost of riding the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease	i. Accessibility of bus passes (ease of purchase)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	j. Availability of bus route information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	k. User-friendliness of bus information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort/Safety	l. Vehicle cleanliness and comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	m. Bus stop cleanliness and comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	n. Bus driver courtesy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	o. Safety/security on bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	p. Safety/security at bus stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Comments and Suggestions



THANK YOU FOR YOUR PARTICIPATION!
Please return your survey to your survey taker.



KEY CONNECTIONS
A PLAN FOR TRANSIT



KEY CONNECTIONS A PLAN FOR TRANSIT

KEY WEST TRANSIT DEVELOPMENT PLAN

Discussion Group Workshop

March 5, 2019, 10 AM

AGENDA

❖ Welcome & Introductions

❖ Workshop Overview

- Who we are and what we do
- Why we are here
- Overview of discussion

❖ Review Material

- **Discussion Packet (Yours to keep)**
 - Agenda
 - Key Connections Fact Sheet
 - Existing Key West Transit Map
 - Bus Schedule and Route Maps
- **Planning Packet (Return to us)**
 - Existing Key West Transit Map
 - Workshop Survey

❖ Workshop Presentation & Discussion

❖ Wrap-up

Fact Sheet



What is Key West Transit?

Key West Transportation (KWT) provides bus services in the City of Key West and along A1A to Marathon. Regular service includes six routes—five routes on the island of Key West, and one shuttle route that circulates inside the City to Marathon.

Services are also available for persons unable to access transit because of a disability or distance from a route. Most routes operate 5:30 AM–8 PM on weekdays and weekends with 100-minute frequency. The free Duval Loop in the downtown district of Key West operates on a 15-minute frequency. The regular cash fare is \$2.00, with discounts offered for students, seniors, individuals with disabilities, and military.

What is Key Connections?

Key Connections: A Plan for Transit is being developed for KWT to serve as a guide for the future of public transportation in Key West from 2020 to 2029. It will represent the transit agency's vision to promote transit growth and improvement over the next decade.



KEY CONNECTIONS A PLAN FOR TRANSIT

Why Do We Need Your Input?

Public participation is an important part of developing *Key Connections*, and numerous public outreach activities will support the plan, including discussion groups, a bus on-board survey, a City Commissioner workshop, open house public workshops, online surveys, social media interaction, general marketing and awareness

For more info,
visit
www.kwtransit.com
or contact Key
West Transit at
(305) 600-1455





KEY CONNECTIONS
A PLAN FOR TRANSIT

KEY WEST

TRANSIT DEVELOPMENT PLAN

PUBLIC WORKSHOPS

Help us prioritize improvements for the City's 10-Year Transit Development Plan!

Tuesday, May 28, 2019

4:00 PM — 6:00 PM

Publix Super Market at Key Plaza
Shopping Center
1112 Key Plaza
Key West, FL 33040

Wednesday, May 29, 2019

9:00 AM — 11:00 AM

Publix Super Market at Key Plaza
Shopping Center
1112 Key Plaza
Key West, FL 33040

Please stop by at any of these Open House Public Workshops and let us know how you think public transportation in Key West should grow!!



Can't attend? Take the on-line survey:

Go to: www.surveymonkey.com/r/KeyWestTDPPublicInputSurvey Or

If you are unable to attend one of the workshops, written comments will be accepted through June 15, 2019, and may be sent to:

Key West Transit
Attn: Director of Transportation
5701 College Road
Key West, FL 33040
(305) 809-3910
chaia@cityofkeywest-fl.gov

SPECIAL ACCOMMODATIONS
Any person requiring special accommodations to attend or participate, pursuant to the Americans with Disabilities Act, should contact KWT within at least three (3) business days before the meeting at (305) 809-3910.

Scan:



For additional KWT route and schedule information, please contact KWT at (305) 600-1455 or www.kwtransit.com.

PLAN DE DESARROLLO DE TRANSITO DE KEY WEST



KEY CONNECTIONS
A PLAN FOR TRANSIT

TALLERES PUBLICOS

¡Ayúdenos a priorizar las mejoras para el Plan de Desarrollo de Transito de 10 años de la ciudad!

Martes, Mayo 28, 2019

4:00 PM – 6:00 PM

Publix Super Market en el centro
comercial de Key Plaza

1112 Key Plaza
Key West, FL 33040

Miércoles, Mayo 29, 2019

9:00 AM – 11:00 AM

Publix Super Market en el centro
comercial de Key Plaza

1112 Key Plaza
Key West, FL 33040

¡Visítenos en cualquiera de los dos talleres públicos y háganos saber como cree que debería crecer el transporte publico en Key West!



¿No puede Asistir? Tome la Encuesta en Linea:

Visite la pagina de web: www.surveymonkey.com/r/KeyWestTDPPublicInputSurvey O escanear:

Si no puede asistir a uno de los talleres, puede enviar sus comentarios por escrito antes del 15 de Junio del 2019 a esta direccion:

Key West Transit
Attn: Director of Transportation
5701 College Road
Key West, FL 33040
(305) 809-3910
chaia@cityofkeywest-fl.gov

ACOMODACIONES ESPECIALES

Cualquier persona que necesite alojamientos especiales para asistir o participar, de conformidad con el Acta de Americanos con Discapacidades, debe ponerse en contacto con KWT al menos tres (3) dias habiles antes del taller llamando al (305) 809-3910.



Para obtener informacion adicional sobre las rutas y horarios de KWT, por favor contactar a KWT al (305) 600-1455 o visite la pagina de web: www.kwtransit.com.



KEY CONNECTIONS

A PLAN FOR TRANSIT

Key West Transit (KWT) is conducting a public input survey for the City of Key West 10-year Transit Development Plan (TDP), also known as Key Connections. Please answer the following questions to help us understand how we can better meet the City's transit needs in the next 10 years!

1. Please indicate **your level of agreement** with the following potential improvements.

	Strongly Agree		Neutral		Strongly Disagree	No Opinion
New Major Connector Network						
Add KWIC Connector (bus every 15-minutes)	5	4	3	2	1	0
Add Airport Connector (bus every 20-minutes)	5	4	3	2	1	0
Add North Connector (bus every 15-minutes)	5	4	3	2	1	0
Modify Lower Keys Shuttle (Bus every 45- to 60-minutes from Marathon to Stock Island)	5	4	3	2	1	0
New Feeder Network (bus every 15-min)						
Keep Duval Loop as is	5	4	3	2	1	0
Add New Town Loop	5	4	3	2	1	0
Add Mid Town Loop	5	4	3	2	1	0
Add Old Town Loop	5	4	3	2	1	0
Add Stock Island Circulator	5	4	3	2	1	0
Capital/Technology Improvements						
Establish Key West Intermodal Center (KWIC)	5	4	3	2	1	0
Reevaluate Current Bus Stop Placements	5	4	3	2	1	0
Implement/Enhance Bus Locator App	5	4	3	2	1	0
Mobile Fare Payment (pay using a smartphone)	5	4	3	2	1	0
Improve User-Friendliness & Convenience of Using KWT	5	4	3	2	1	0
Establish Program to Allow Free Transit Rides	5	4	3	2	1	0
Expand Transit Marketing/Awareness Campaign	5	4	3	2	1	0
Purchase Smaller Bus Vehicles	5	4	3	2	1	0
Work with City to Modify and Enforce Parking Regulations	5	4	3	2	1	0

2. If you have **any comments**, please use the space below and back of this page.

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The City of Key West and Key West Transit (KWT) are planning for its future, and **we want your input!** Please fill out the short survey or email chaia@cityofkeywest-fl.gov
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Appendix D: Performance Monitoring Report

Performance Monitoring Program

Performance Measures and Indicators

Once the proposed transit services are implemented, the following performance indicators and measures should be monitored by KWT on a quarterly basis for its fixed-route services as part of the recommended performance-monitoring program:

- **Passenger trips**- Annual number of passenger boardings on the transit vehicles.
- **Revenue Hours**- Number of annual hours of vehicle operation while in active service (available to pick up revenue passengers).
- **Revenue Miles** – Number of annual miles of vehicle operation while in active service (available to pick up revenue passengers).
- **Passenger Trips per Revenue Hour** – Ratio of passenger trips to revenue hours of operation.

However, as fixed-route-type services typically take up to three years to become established and productive, the performance data up to that point should be reviewed and interpreted cautiously. Although adjustments/modifications are encouraged, outright discontinuations based on performance monitoring data alone are discouraged.

Evaluation, Methodology, and Process

This process is based on two measures, trips per mile and trips per hour, which are weighted equally to derive an overall route score. An individual route's score for a particular measure is based on a comparison of the measure as a percentage of the system average for that particular measure. These individual measure scores are added together and divided by two to get a final aggregate score. This final composite performance score is an indication of a route's performance for the two measures when compared to the system average for those measures. A higher score represents better overall performance when compared to other routes.

The noted comparative performance evaluation can be beneficial, but caution should be exercised when using the final scores and rankings, because these figures are comparing routes to one another and may not reflect the specific goals established for a particular route (i.e., geographic coverage vs. ridership performance). The process is particularly useful, however, in highlighting those routes that may have comparative performance-related issues. These routes can then be singled out for closer observation in future quarters or years to determine specific changes that may help mitigate any performance issues.

Once a route score is determined, routes can be ranked to show the highest performing and lowest performing routes. The rankings are a useful proxy for determining the comparative performance of

any route, as well as highlighting changes in performance over time. To track the performance variation over time, three performance levels have been developed:

- **Level I – Good ($\geq 75\%$)** – Transit routes in this category are performing efficiently compared with the average level of all the agency’s routes.
- **Level II – Monitor (30–74%)** – Routes in this category exhibit varying levels of performance problems and require more detailed analysis (e.g., ride checks, on-board surveys, increased marketing efforts, etc.) to aid in identifying specific changes that can be made to help improve the route’s performance.
- **Level III – Requires Attention ($\leq 29\%$)** – Routes in this category exhibit poor performance and low efficiency. Recommendations for these routes may include truncation of the route, reduction in the route’s number of revenue hours, or discontinuation of the route.

Figure D-1 illustrates the three evaluation levels and notes the recommended thresholds for each level.

Figure D-1: Route Performance Evaluation Levels

