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PALM TRAN
TRANSIT DEVELOPMENT PLAN
2011–2021

PALM BEACH COUNTY
Transit Development Plan

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In association with:
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Executive Summary

CHAPTER 1

Chapter 1 of the Transit Development Plan (TDP) describes Palm Beach County demographics and Palm Tran service and rider characteristics. The TDP process requires a significant amount of background data in order to draw widely applicable conclusions about existing service and potential improvements.

Palm Beach County is a challenging area from the perspective of a transit provider. It is the largest county in Florida, but it does not have a clearly dominant central business district. Commercial and residential land uses are generally separated, but the sidewalk and bicycle networks are limited or non-existent in certain parts of the county. In addition, Palm Beach County has many gated communities and low-density residential neighborhoods. The lower densities and segregated land uses create a challenging environment in which to provide efficient transit service.

Palm Tran is a very successful transit agency given that it serves a large area with a diverse population living in both urban and rural settings. Palm Tran currently offers over 740 miles of bus routing. Fixed-route service covers most of the urbanized portion of the county with the exception of the SR 7 corridor and some of the mid-western communities. CONNECTION, Palm Tran's complementary paratransit service, is offered in all areas of Palm Beach County that are within ¾ mile of an existing Palm Tran route. The City of Wellington, The Acreage, West Boca Raton (unincorporated), and West Riviera Beach (unincorporated) are the areas within Palm Beach County that have the highest unserved population densities.

The Palm Tran TDP process included gathering demographic information and evaluating existing service, as well as public involvement, accomplished through rider and employee surveys, stakeholder interviews and e-mails, and public open houses. In addition to a Palm Tran fixed-route system-wide rider survey, a rider survey was completed in western Palm Beach County to supplement the system-wide findings. Most surveyed riders had lower annual incomes and ride Palm Tran because they do not have a car available. Most indicated that they ride Palm Tran to get to work, and more than 20 percent of them are dependent on Palm Tran fixed-route service for transportation. In addition to the rider surveys, a fixed-route operator and employee survey was conducted to gain insight on rider perceptions. There were some similarities in the improvement areas identified by both the riders and employees, including:

- More frequent service on Saturdays;
- More frequent service on Sundays;
- More frequent service on weekdays; and
- Service that starts earlier/runs later.

The operators and employees also identified improvements that were not as prevalent in the rider survey, including:

- New routes in areas without service today;
- Better scheduled running time;
- Better communication between operators and administration;

- Improved route and schedule information;
- Added shelters along existing routes;
- Added lights at shelters; and
- Cleaner, better maintained buses.

Palm Tran CONNECTION riders and operators were also surveyed as part of the TDP process in order to obtain information about rider perceptions of existing service. Most CONNECTION riders use the service to get to work or to a medical appointment, and nearly 50 percent of them are dependent on CONNECTION for transportation. Overall, the results of the survey indicate that riders have a positive view of CONNECTION service, and the highly positive responses suggest that improvements are not needed. However, the results of the CONNECTION operator survey revealed three primary improvement areas, including:

- Better scheduling;
- Improved/additional vehicles; and
- Improved working conditions for employees (regarding respect, wages, etc.).

Additionally, the CONNECTION operators identified several supplemental improvement areas, including:

- Improved routing;
- Communication with/training for customers;
- Better vehicle checks/maintenance;
- Providing GPS in all of the buses/updating the GPS information; and
- Better communication (with riders, dispatch, etc.).

The stakeholder interviews, stakeholder e-mails, and open houses, coupled with the rider and employee surveys, provided a wide range of feedback that touched on bus stop infrastructure, transit-oriented development (TOD), agency administrative matters, funding, bus features, park-and-ride lots, behavior of captive and choice riders, paratransit scheduling and routing procedures, and fare collection methods. Overall, the common improvement areas identified by the riders, employees, stakeholders, and the public were the following:

- Bus service frequency improvements are needed.
- Service span extensions are needed.
- Some areas/populations in the county are underserved.

CHAPTER 2

Chapter 2 of the TDP proposes goals, objectives, and strategies to guide Palm Tran's planning and operations. The goals and objectives are as follows:

- Goal 1: Improve Service Quality
  - Objective 1-1: Improved fixed-route service quality (e.g., more evening and weekend service, more frequent buses, and route extensions).
  - Objective 1-2: Improve paratransit service quality (e.g., better on-time performance and shorter wait times).
  - Objective 1-3: Improve the quality of customer information.
- Goal 2: Improve Operational Efficiency
  - Objective 2-1: Fill funding gaps through more efficient operation.
  - Objective 2-2: Encourage paratransit customers to use fixed-route services when possible.
  - Objective 2-3: Explore opportunities for public/private partnerships.
  - Objective 2-4: Implement Intelligent Transportation Systems (ITS) technologies that improve data collection and operations analysis.
- Goal 3: Improve Mobility for Residents in Palm Beach County and Southeast Florida
  - Objective 3-1: Increase transit mode share in Palm Beach County
  - Objective 3-2: Provide better intermodal connectivity.
- Goal 4: Support Development and Economic Growth in Palm Beach County and Southeast Florida
  - Objective 4-1: Enhance transit service in transit-supportive areas.
  - Objective 4-2: Coordinate transportation services and land use planning.
  - Objective 4-3: Provide transit service to major activity centers and high-density residential areas.
  - Objective 4-4: Improve transit access to major tourist destinations.
- Goal 5: Improve Quality of Life for Palm Beach County Residents
  - Objective 5-1: Improve transit access to recreational facilities.
  - Objective 5-2: Ensure that low-income residential areas are adequately connected to major employment centers.
  - Objective 5-3: Provide services that optimize independence for the elderly and disabled.
- Goal 6: Demonstrate Exemplary Environmental Stewardship and Reduce Reliance on Non-Renewable Energy
  - Objective 6-1: Minimize vehicle emissions.
  - Objective 6-2: Continue to explore alternative energy sources.

  - Objective 6-3: Support land use that will reduce trip lengths.
- Goal 7: Enhance Safety and Security for Palm Tran Customers and Employees
  - Objective 7-1: Continue to provide safety and security training for Palm Tran operators.
  - Objective 7-2: Maintain a system-wide safety, security, and emergency service plan.
  - Objective 7-3: Ensure that all Palm Tran vehicles and facilities undergo routine safety inspections.
  - Objective 7-4: Locate transit stops to optimize safety and security.
  - Objective 7-5: Design transit stops for use by the disabled and elderly.
- Goal 8: Improve the Public Image of Existing Palm Tran Services
  - Objective 8-1: Upgrade and maintain existing infrastructure where appropriate.
  - Objective 8-2: Improve customer service.
  - Objective 8-3: Evaluate potential for high-capacity premium transit service.
  - Objective 8-4: Revisit the Palm Tran brand and marketing plan.
- Goal 9: Identify Available Funding Sources to Help Palm Tran Grow
  - Objective 9-1: Ensure that all planning and operational practices are consistent with state and federal funding requirements.
  - Objective 9-2: Identify transit projects eligible for state and federal grants and funding programs.
  - Objective 9-3: Promote consideration of transit needs in transportation impact fees.
  - Objective 9-4: Promote consideration of transit-supportive infrastructure in planned and programmed roadway improvement projects.
  - Objective 9-5: Establish a dedicated transit funding source.

The above goals and objectives, along with associated strategies, will further align Palm Tran's planning priorities with those of the Federal Transit Administration. Moving forward, the focus will be on continued improved performance, efficient spending, coordinating transit service with land use, and provision of high-quality service and better mobility for Palm Beach County residents.

As Palm Tran continues to serve those who rely on transit for their transportation needs, it will also seek opportunities to serve a greater number of people who do have other transportation options. By increasing its mode share, Palm Tran can improve conditions for all other transportation modes across the county.

CHAPTER 3

Chapter 3 of the TDP describes existing transit services in Palm Beach County. These services include 36 Palm Tran fixed-route bus service, door-to-door Palm Tran CONNECTION demand-response service, Tri-Rail commuter rail and shuttle service, Amtrak rail service, Broward County Transit (BCT) fixed-route bus service, and numerous local municipality shuttle services.

Chapter 3 also provides a performance review of Palm Tran service through performance measures targeted at historical Palm Tran trends and comparisons to transit agency peers. The peer

comparison is not a report card; it is an illustrative means of better understanding strengths and weaknesses to find areas of improvement.

A group of seven fixed-route agency peers was chosen. Four of the agencies selected were Florida peers, while the remaining three agencies reflect a representation of the country including the West Coast, East Coast, and Midwest. A group of eight demand-response agency peers were chosen. Four of the agencies selected were Florida peers, while the remaining four agencies reflect a representation of the country with southwest, east coast, and Texas agencies.

Palm Tran's transit investment per capita generally places it in the middle of the selected peers for the total of both modes. However, Palm Tran devotes a greater proportion of resources to demand-response service (approximately 34%) than does its peer and has a correspondingly smaller investment in fixed-route service. This higher-than-average funding commitment to demand-response is logical, as Palm Beach County also has the largest population of senior citizens of all peers.

Although Palm Tran devotes a smaller percentage of total operating costs to fixed-route service when compared to agency peers, it does provide significant fixed-route coverage. However, with reduced fixed-route operating funds available, the available service on existing routes is the lowest among peer groups. Relatively infrequent service is likely the biggest contributor to Palm Tran's low fixed-route ridership relative to its peers. This is particularly true in that Palm Tran's fixed-route fare average is second-lowest among peers—a measure that typically attracts ridership. In short, Palm Tran's effort to focus on transit coverage occurs in two ways: extensive demand-response service and extensive fixed-route service coverage. This results in few remaining resources left to operate the higher-frequency fixed-route service that would attract more choice riders. However, the service that is provided gets used at a rate near the peer average.

Palm Tran's average fleet age is approximately the same as the peer mean; however, the fixed-route service does have higher maintenance expenditures per vehicle than the peer average. Palm Tran's fixed-route fuel economy, although below the peer average, was in a group of five agencies with very similar results. Palm Tran has the highest fixed-route expense per revenue hour among the peers. Labor and maintenance expenses are the largest component of those overall expenses. While cost of living differences is a contributor to Palm Tran's higher costs, it is not the primary cause.

Palm Tran's demand-response service is generally performing as well as or better than its peers. The operating expense per passenger trip is below the peer average, and the average fare paid is above the peer average. Likewise, Palm Tran demand-response ridership is higher than the peer average and its ridership per capita is the second highest of all peers. In summary, Palm Tran devotes an above-average amount of funding and resources to demand-response service to serve an above-average number of users, and, in turn, provides a demand-response service that is one of the best performing of the selected peers.

CHAPTER 4

Chapter 4 summarizes Palm Tran improvements identified through stakeholder input and quantitative analysis, prioritizes the improvements, and forms a basis for developing a financial plan that accounts for the improvements anticipated to be needed over the 10-year span of the TDP. Chapter 4 also summarizes demand forecasts for fixed-route service and CONNECTION paratransit service.

The criteria assessed in Chapter 4 in order to identify needed improvements are route functional classification, existing ridership, ridership growth, productivity (riders per revenue hour), service frequency, span of service, transit-supportiveness, transit-dependency, relationship to planned and programmed improvements, stakeholder input, and relationship to strategic initiatives (i.e., the goals and objectives of Chapter 2).

The recommended 10-year improvement plan is shown in the table and the figure below. The following guidelines were used to identify projects for the 10-year plan:

- Focus on improving existing service to better serve existing riders and to attract choice riders.
- Focus on implementing advanced technology to improve data collection and operations analysis so that service can be provided more efficiently.
- Focus on Major North-South Routes and Major East-West Routes.
  - Major North-South Routes are Routes 1, 2, and 3. For these, a minimum 20-minute peak service frequency and a minimum 30-minute off-peak service frequency are recommended standards.
  - Major East-West Routes are Routes 31, 40, 43, 46, 62, 63, 73, 81, and 91. For these, a minimum 30-minute peak service frequency and a minimum 60-minute off-peak service frequency are recommended standards.
- Routes with high ridership, positive ridership growth since 2006, and productivity greater than 20 riders/hour should be considered for improvement.
- Service span increases are recommended to build ridership on the Express routes. A longer service span (i.e., more trips) is expected to give riders more flexibility in their travel schedules and greater assurance that they will not be stranded if they miss a bus.
- Assume that enhanced beach access will be provided by municipal shuttle services (which are indicated in the 2035 Needs Plan).

Chapter 4 also identifies long-term projects that are outside the 10-year time frame of the TDP. Tier One long-term improvements are expected to be just outside the 10-year time frame of the TDP and should be considered for addition to the TDP with each annual update. Tier Two long-term improvements are projects that are expected to be farther outside the 10-year time frame of the TDP but within the 2035 horizon of the LRTP.

Recommended 10-Year Improvements for Palm Tran

Funding Status	Year	Route	Recommended Improvement(s)	Justification	Cost
Cost-feasible	2012	N/A	▪ Install APCs on remainder of fixed-route fleet	Data collection Efficiency Strategic initiative (Goal 2)	$360,000
Cost-feasible	2012	N/A	▪ Develop a program for use of AVL and APC data	Data collection Efficiency Strategic initiative (Goal 2)	$50,000
Unfunded	2017	73	▪ Extend service west to SR 7	Major East-West Route Productivity Ridership potential Strategic initiative (Goal 5)	$613,952
Unfunded	2017	N/A	▪ Install AVL on CONNECTION fleet	Data collection Efficiency Strategic initiative (Goal 2)	$1,200,000
Unfunded	2017	11	▪ Add one a.m. peak trip and one p.m. peak trip (span and frequency improvement)	Express route Ridership potential Strategic initiative (Goal 3)	$69,165
Unfunded	2017	95	▪ Add one a.m. peak trip and one p.m. peak trip (span improvement)	Express route Ridership potential Strategic initiative (Goal 3)	$63,632
Unfunded	2018	2	▪ Increase weekday peak frequency to 20 minutes ▪ Increase weekend frequency to 30 minutes	Major North-South Route Ridership growth Productivity Strategic initiative (Goal 1)	$1,518,980
Unfunded	2019	3	▪ Increase Sunday frequency to 30 minutes	Major North-South Route Ridership growth Productivity Strategic initiative (Goal 1)	$157,092
Unfunded	2020	73	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Productivity Ridership potential Strategic initiative (Goal 1)	$179,829
Unfunded	2020	63	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity	$193,662
Unfunded	2020	81	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$414,990
Unfunded	2021	46	▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$110,664
Unfunded	2021	31	▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$55,332

NOTE: Additional, programmed capital improvements exist. See Chapter 5.


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Indiantown Rd
Pratt-Whitney Rd
710
95
Donald Ross Rd
Bee Line Hwy
PGA Blvd
Northlake Blvd
A1A
To Western Communities
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
Okeechobee Blvd
1
80
Southern Blvd
Forest Hill Blvd
Jog Rd
Military Tr
Lake Worth Rd
Lantana Rd
Hypoluxo Rd
7
Gateway Blvd
Boynton Beach Blvd
Congress Ave
Loxahatchee National Wildlife Refuge
Lake Ida Rd
441
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd
Inset: Western Communities
Lake Okeechobee
441
700
715
15
80
827
27
Legend
Tri-Rail Stations
Palm Tran Transit Routes
Transit Span Improvements
Transit Capacity Improvements
Transit Frequency Improvements
Transit Extension
Broward County Transit Routes
Tri-Rail
10 YEAR RECOMMENDED IMPROVEMENTS
PALM BEACH COUNTY, FLORIDA
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CHAPTER 5

Chapter 5 contains the financial plan for the TDP's 10-year improvement plan. The plan is prefaced by summaries of existing and potential funding sources.

The following are the key assumptions and findings of the financial plan:

- Palm Tran is anticipated to continue using its current mix of federal, state, and local funding sources to fund transit service. It must be noted, however, that there is significant uncertainty associated with the upcoming reauthorization of federal transportation funding. If federal transit funding is cut, such cuts must be addressed in annual TDP updates. There is also significant uncertainty associated with the level of gas tax funding that will be available in the future.
- Starting in 2015, new revenue sources are needed to fund operating shortfalls associated with maintaining existing levels of transit service. New revenue sources are needed to fund shortfalls associated with unfunded improvements in the 10-year plan.
- A total of $150 million of FTA capital grants is assumed to be available for Palm Tran for the next ten years to fund the TDP capital improvements as well as capitalized maintenance costs.

The financial plan is summarized in the table below. The provided summary does not include any new service or capital investments beyond what is required to maintain existing service levels and assumes no increase in Federal Transit Administration, Florida Department of Transportation, or locally generated contributions. Currently, projected funding levels will only maintain the existing system for the first three years of the plan. Funding will fall short beginning in 2015. Federal transportation funding sources are currently uncertain and should not be counted upon to meet funding requirements; therefore, Palm Tran will need to find additional local funding to close the funding gap if existing services are to be maintained. This should be monitored closely and modified as needed in future annual TDP updates as new funding sources are found.

10-Year Cost and Revenue Summary

Cost/Revenue	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-Year Total
Operating											
Costs											
Fixed Route - Maintain Existing Local	$44,145,339	$45,137,726	$46,152,422	$47,189,928	$48,250,758	$49,335,435	$50,444,496	$51,578,488	$52,737,972	$53,923,522	**$488,896,086**
Fixed Route - Maintain Existing Express	$251,763	$257,422	$263,209	$269,126	$275,176	$281,362	$287,687	$294,154	$300,767	$307,528	**$2,788,193**
Total Fixed Route Costs	**$44,397,101**	**$45,395,148**	**$46,415,631**	**$47,459,054**	**$48,525,934**	**$49,616,797**	**$50,732,183**	**$51,872,642**	**$53,038,739**	**$54,231,050**	**$491,684,280**
Paratransit - Maintain Existing	$23,042,034	$23,560,019	$24,089,648	$24,631,183	$25,184,892	$25,751,048	$26,329,932	$26,921,829	$27,527,032	$28,145,839	$255,183,455
Total Operating Costs	**$67,439,135**	**$68,955,167**	**$70,505,279**	**$72,090,238**	**$73,710,826**	**$75,367,845**	**$77,062,115**	**$78,794,471**	**$80,565,771**	**$82,376,889**	**$746,867,735**
Revenues											
Gas Tax	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	**$263,070,000**
Ad Valorem Funding	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	**$153,865,140**
Grants	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	**$94,765,860**
Fares/User Fees/Charges	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	**$110,404,010**
Interfund Transfers	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	**$1,433,360**
Other	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	**$2,266,300**
Total Anticipated Operating Revenues	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$625,804,670**
Capitalized Maintenance (Transfer from Capital)	$12,048,700	$5,988,440	$4,378,001	$5,246,540	$9,335,484	$11,556,654	$13,424,151	$9,832,920	$8,637,089	$10,061,901	$90,509,880
Total Revenues	**$74,629,167**	**$68,568,907**	**$66,958,468**	**$67,827,007**	**$71,915,951**	**$74,137,121**	**$76,004,618**	**$72,413,387**	**$71,217,556**	**$72,642,368**	**$716,314,550**
Revenues Minus Costs	**$7,190,032**	**($386,260)**	**($3,546,811)**	**($4,263,230)**	**($1,794,875)**	**($1,230,725)**	**($1,057,496)**	**($6,381,084)**	**($9,348,215)**	**($9,734,521)**	
Rollover from Prev. Year	**$0**	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	
Surplus/Shortfall	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	**($30,553,185)**	**($30,553,185)**
Capital											
Costs											
Vehicles	**$1,648,000**	**$8,911,560**	**$4,807,999**	**$7,653,460**	**$5,564,516**	**$3,343,346**	**$1,475,849**	**$5,067,080**	**$6,262,911**	**$4,838,099**	**$49,572,820**
Replace Existing Fleet	$1,648,000	$8,911,560	$4,807,999	$7,653,460	$5,564,516	$3,343,346	$1,475,849	$5,067,080	$6,262,911	$4,838,099	**$49,572,820**
Other Capital/Infrastructure	**$1,303,300**	**$100,000**	**$5,814,000**	**$2,100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$9,917,300**
Other Capital/Infrastructure	$1,303,300	$100,000	$5,814,000	$2,100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$9,917,300**
Total Costs	**$2,951,300**	**$9,011,560**	**$10,621,999**	**$9,753,460**	**$5,664,516**	**$3,443,346**	**$1,575,849**	**$5,167,080**	**$6,362,911**	**$4,938,099**	**$59,490,120**
Revenues											
Capital Grants	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	**$150,000,000**
Transfer to Operating as Capitalized Maintenance	-$12,048,700	-$5,988,440	-$4,378,001	-$5,246,540	-$9,335,484	-$11,556,654	-$13,424,151	-$9,832,920	-$8,637,089	-$10,061,901	**-$90,509,880**
Total Revenue	**$2,951,300**	**$9,011,560**	**$10,621,999**	**$9,753,460**	**$5,664,516**	**$3,443,346**	**$1,575,849**	**$5,167,080**	**$6,362,911**	**$4,938,099**	**$59,490,120**
Revenue Minus Cost	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Rollover from Prev. Year	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Surplus/Shortfall	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Cost/Revenue Summary											
Total Costs	$70,390,435	$77,966,727	$81,127,278	$81,843,697	$79,375,342	$78,811,192	$78,637,963	$83,961,551	$86,928,682	$87,314,988	**$806,357,855**
Total Revenues	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	**$775,804,670**
Surplus/Shortfall	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	**($30,553,185)**	**($30,553,185)**

CHAPTER 6

Chapter 6 is a general assessment of Palm Tran's organizational structure that was completed in order to ensure that staffing levels are sufficient to support enhancements to the transit network as identified in the 10-year improvement plan. This effort included a peer assessment and a general review of current staffing levels by major employment category as identified per National Transit Database reporting requirements. Key findings of this assessment are as follows:

- Compared to its peer agencies and their respective system sizes, the staffing levels at Palm Tran appear to be comparatively low in terms of administrative employee functions and slightly high in terms of vehicle maintenance and operating employee functions.
- Palm Tran's current governance structure under the Palm Beach County Board of County Commissioners is appropriate to support its current organization and its future growth.
- Palm Tran should continue to monitor staffing levels as the enhancements identified as part of the 10-year TDP process are implemented. It will be important for Palm Tran staff to maintain awareness that continued growth of the transit system will also require investment in sufficient staff to support expansion.

1.0 PALM BEACH COUNTY DEMOGRAPHICS AND PALM TRAN RIDER CHARACTERISTICS

1.1 Introduction

The Transit Development Plan (TDP) process requires a significant amount of background data on the demographics, geography, and needs and goals of those within the study area. Palm Tran serves a large area with a diverse population living in both urban and rural settings and with many different needs. The data presented in this chapter serves as the basis for the TDP.

The data that have been collected for the TDP are presented in three different categories: Geography and Infrastructure, Demographic and Economic, and Public Involvement. These data are derived from several sources including the 2010 Census, the 2009 American Community Survey, and the 2010 edition of the Bureau of Economic and Business Research's Florida Statistical Abstract.

1.2 County Geography and Infrastructure

COUNTY LOCATION

Palm Beach County is the largest county in Florida, with just under 2,000 square miles of land area. It is neighbored by Martin County to the north, Broward County to the south, and Hendry County to the West. The northwest corner of Palm Beach County is occupied by a portion of Lake Okeechobee.

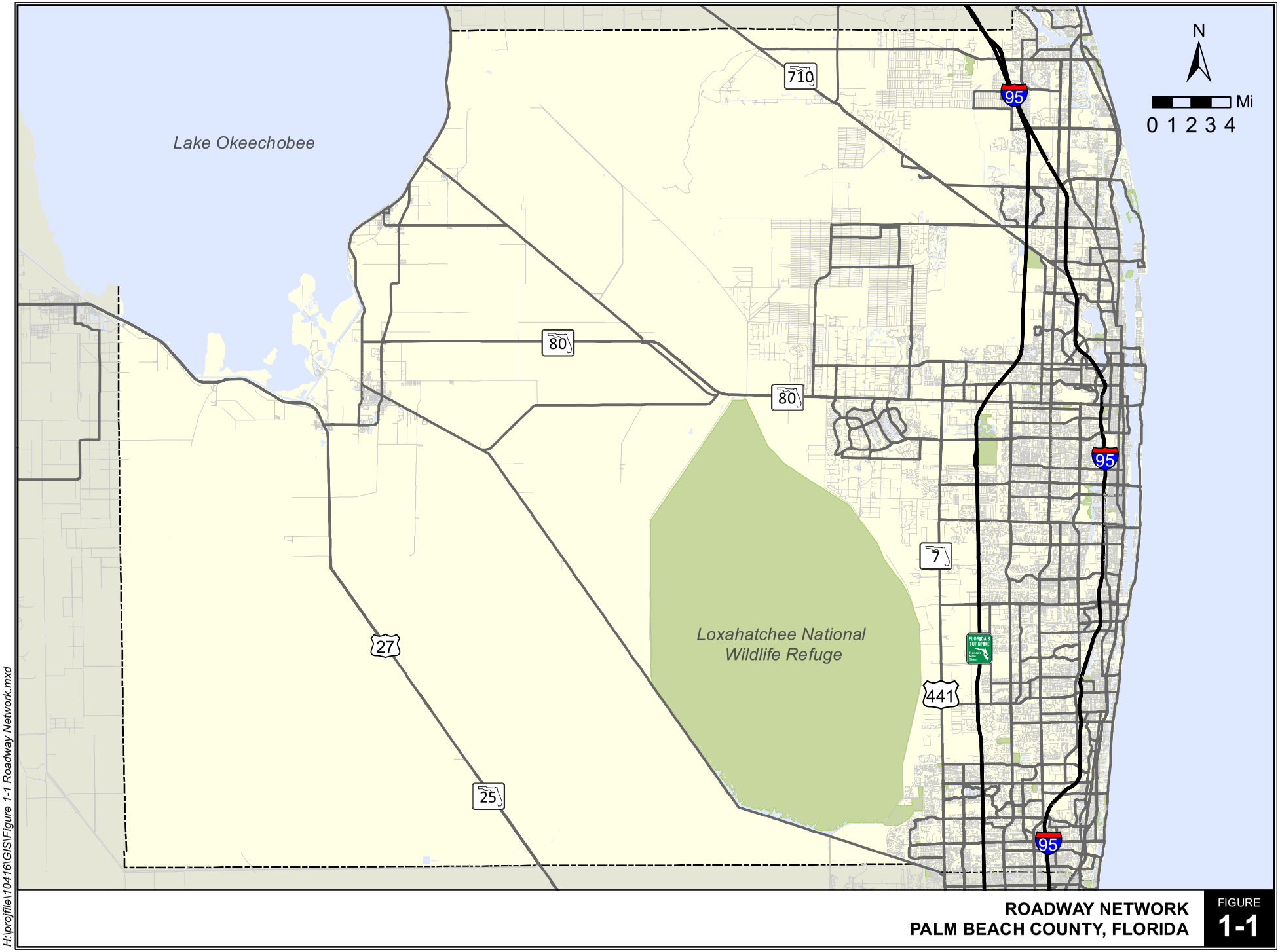
The population of Palm Beach County is heavily concentrated in the east, where most people live within 10 miles of the coast. There is a much smaller concentration of population in the western portion of the county in the Lake Okeechobee area. The central parts of the county have very low population densities and are used mostly for agriculture. Palm Beach County does not have a clearly dominant central business district, which makes it difficult to operate a traditional network of radial transit routes.

ROADWAY NETWORK

The most heavily populated areas of Palm Beach County have a well-established grid of state highways that are the backbone of the county's roadway system. There are two limited-access facilities (freeways) that run north-south through the full length of the county. The county's western communities near Lake Okeechobee are connected primarily by SR 80.

Local access between major state arterials is less developed. Local roadways in much of the county are of traditional suburban design, with curvilinear roads with long blocks and numerous culs-de-sac that offer poor connectivity and can pose barriers to effective pedestrian, bicycle, and transit transportation. Notable exceptions include downtown West Palm Beach and downtown Boca Raton.

Figure 1-1 shows the arterial network of roadways in Palm Beach County.



ROADWAY NETWORK
PALM BEACH COUNTY, FLORIDA

FIGURE **1-1**

H:\projfile\10416\GIS\Figure 1-1 Roadway Network.mxd

EXISTING AND PLANNED TRANSIT NETWORK

Palm Tran currently offers over 740 miles of bus routing. Palm Tran ridership is heavily concentrated on north-south routes along US 1, Congress Avenue, and Military Trail.

Palm Tran CONNECTION is Palm Tran's complementary paratransit service, which is offered in all areas of Palm Beach County that are within ¾ mile of an existing Palm Tran route. The Palm Tran CONNECTION service area covers 405 square miles, or about 20 percent of Palm Beach County.

Palm Beach County is also served by the South Florida Regional Transportation Authority's (SFRTA) Tri-Rail commuter rail service. Trains run near the I-95 corridor between West Palm Beach and Miami. SFRTA also runs shuttle services that connect Tri-Rail stations to nearby destinations such as educational, commercial, and employment centers. Palm Tran routes currently interface with Tri-Rail at several of the latter's stations within Palm Beach County and also with Broward County Transit (BCT) in southern Boca Raton. Palm Tran currently extends a commuter route into southern Martin County.

Several municipalities within Palm Beach County, such as West Palm Beach, offer shuttle and circulator services. These services are generally run by private entities that have been contracted directly through the municipalities. These services are intended to improve mobility for city residents who do not have access to a car. The shuttle services are intended to complement Palm Tran service and provide additional transit connectivity at the local level.

The Palm Beach County 2035 Long Range Transportation Plan (LRTP) states:

> "Palm Tran will continue to operate at current levels [in the long-term]. Minor enhancements to its services include an expansion of a route in the western communities (Glades area) and possible increases in frequency (e.g. reduction of headway) changes to Route 2 (Congress Avenue) and Route 3 (Military Trail). Local community bus system services may be accommodated for any of the areas of Jupiter, Palm Beach Gardens, Riviera Beach, Royal Palm Beach, West Palm Beach, Wellington, Greenacres, Lake Worth, Boynton Beach, Delray Beach, West Boca Raton, Boca Raton, and Belle Glade, if deemed financially feasible by the individual community. Water taxi service along the Intracoastal Waterway is also per individual area's financial feasibility."

The existing fixed-route network and Palm Tran CONNECTION service area are shown in Figure 1-2.

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To Western Communities

Inset: Western Communities

Lake Okeechobee

Loxahatchee National Wildlife Refuge

Indiantown Rd
Pratt-Whitney Rd
Bee Line Hwy
PGA Blvd
Northlake Blvd
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
Okeechobee Blvd
Southern Blvd
Forest Hill Blvd
Lake Worth Rd
Lantana Rd
Hypoluxo Rd
Gateway Blvd
Boynton Beach Blvd
Lake Ida Rd
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd
Donald Ross Rd
Jog Rd
Military Tr
Congress Ave
710
95
441
700
715
15
80
827
27
7
1
A1A
FLORIDA'S TURNPIKE

Legend

WalkShed

- 1/4 Mile Walkshed
- 1/2 Mile Walkshed

- Transit Routes
- Broward County Transit Routes
- Tri-Rail Stations
- Tri-Rail

EXISTING TRANSIT NETWORK
PALM BEACH COUNTY, FLORIDA

FIGURE **1-2**

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EXISTING AND PLANNED BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian access to bus stops is an important factor in ridership. Per the LRTP:

> "It is Palm Beach County's policy to provide all roadways with widening sufficient to include bicycle and pedestrian accommodations, if not already provided."
>
> "There are currently two area plans that identify existing and future pathway opportunities: the Northeast Everglades Natural Area and the South County Greenways and Trails Plan. A third countywide bicycle plan is currently under development and is nearing completion.… Currently, Palm Beach County allocates $1.5 million to its Pathway Program annually and is committed to do so through the timeline of the LRTP. The Pathway Program focuses on expanding the existing network of bicycle and pedestrian facilities."

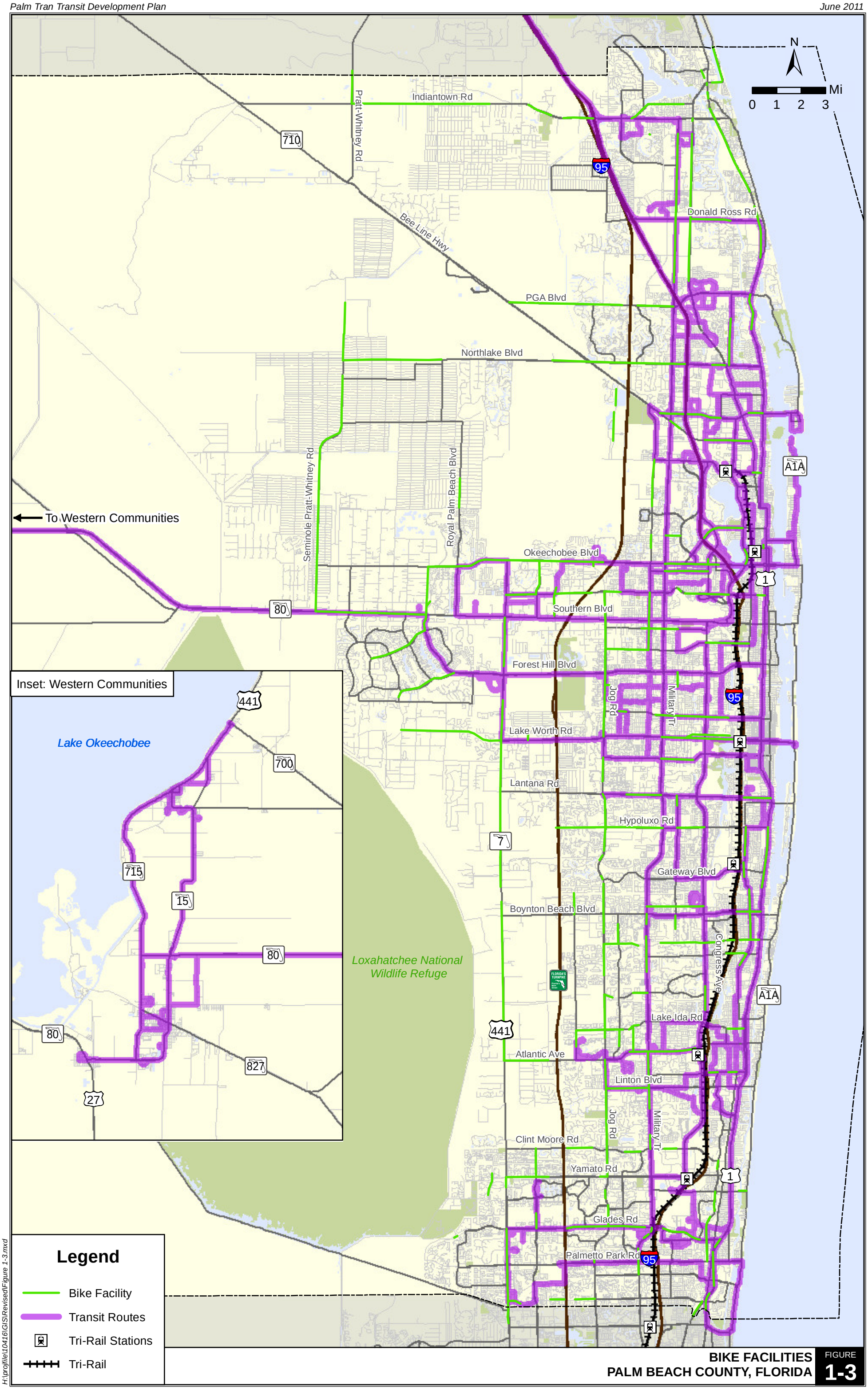
Figures 1-3 and 1-4 show the bicycle and pedestrian networks in Palm Beach County, respectively. The sidewalk network has few gaps along Palm Tran routes in the eastern portion of the county but is non-existent in the western areas. The bicycle network is much less complete and is a subject of growing interest in the county.

LAND USE

Other than City Place and the downtown area in West Palm Beach and Mizner Park in Boca Raton, most of the communities in Palm Beach County have developed according to a suburban land use pattern. Commercial and residential land uses are generally separated and are accessed most commonly by car. Most communities within Palm Beach County also limit density increases. The lower densities and segregated land uses create a challenging environment in which to provide efficient transit service because fewer people will live and work within a reasonable walking distance of any given bus stop and will opt to ride transit. The service will cost more and serve fewer people. A map of existing land use is provided in Figure 1-5.

TRIP ATTRACTORS

There are several areas and facilities in Palm Beach County that are likely to draw significant traffic. Today, most of that traffic is by car. Many significant trip generators were identified during the development of the Regional Long Range Transportation Plan (RLRTP) that was developed by the Southeast Florida Transportation Council (SEFTC). These generators include Palm Beach International Airport, the Port of Palm Beach, the Palm Beach County Fairgrounds, shopping centers, schools, and hospitals. Figure 1-6 shows locations of significant trip attractors in Palm Beach County and the transit service currently provided to them.



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BIKE FACILITIES
PALM BEACH COUNTY, FLORIDA

FIGURE **1-3**

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Indiantown Rd
Pratt-Whitney Rd
710
95
Donald Ross Rd
Bee Line Hwy
PGA Blvd
Northlake Blvd
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
A1A
To Western Communities
Okeechobee Blvd
1
80
Southern Blvd
Forest Hill Blvd
Jog Rd
Military Tr
Lake Worth Rd
Lantana Rd
Hypoluxo Rd
7
Gateway Blvd
Boynton Beach Blvd
Congress Ave
Lake Ida Rd
441
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd

Inset: Western Communities
441
Lake Okeechobee
700
715
15
80
827
27

Loxahatchee National Wildlife Refuge

Legend

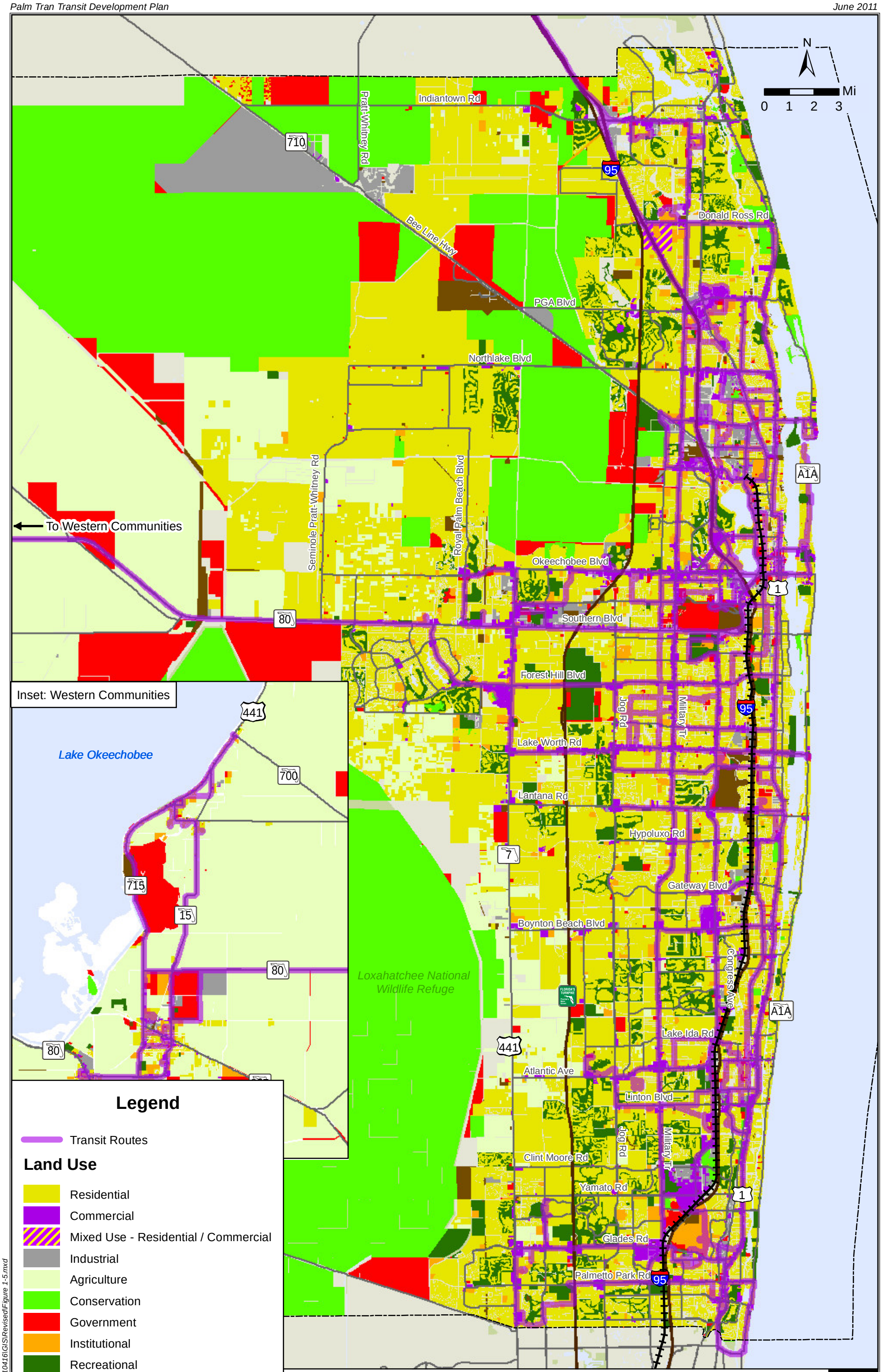
Sidewalks

- Both Sides of Street
- One Side of Street
- Transit Routes
- Tri-Rail Stations
- Tri-Rail

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SIDEWALK INVENTORY
PALM BEACH COUNTY, FLORIDA

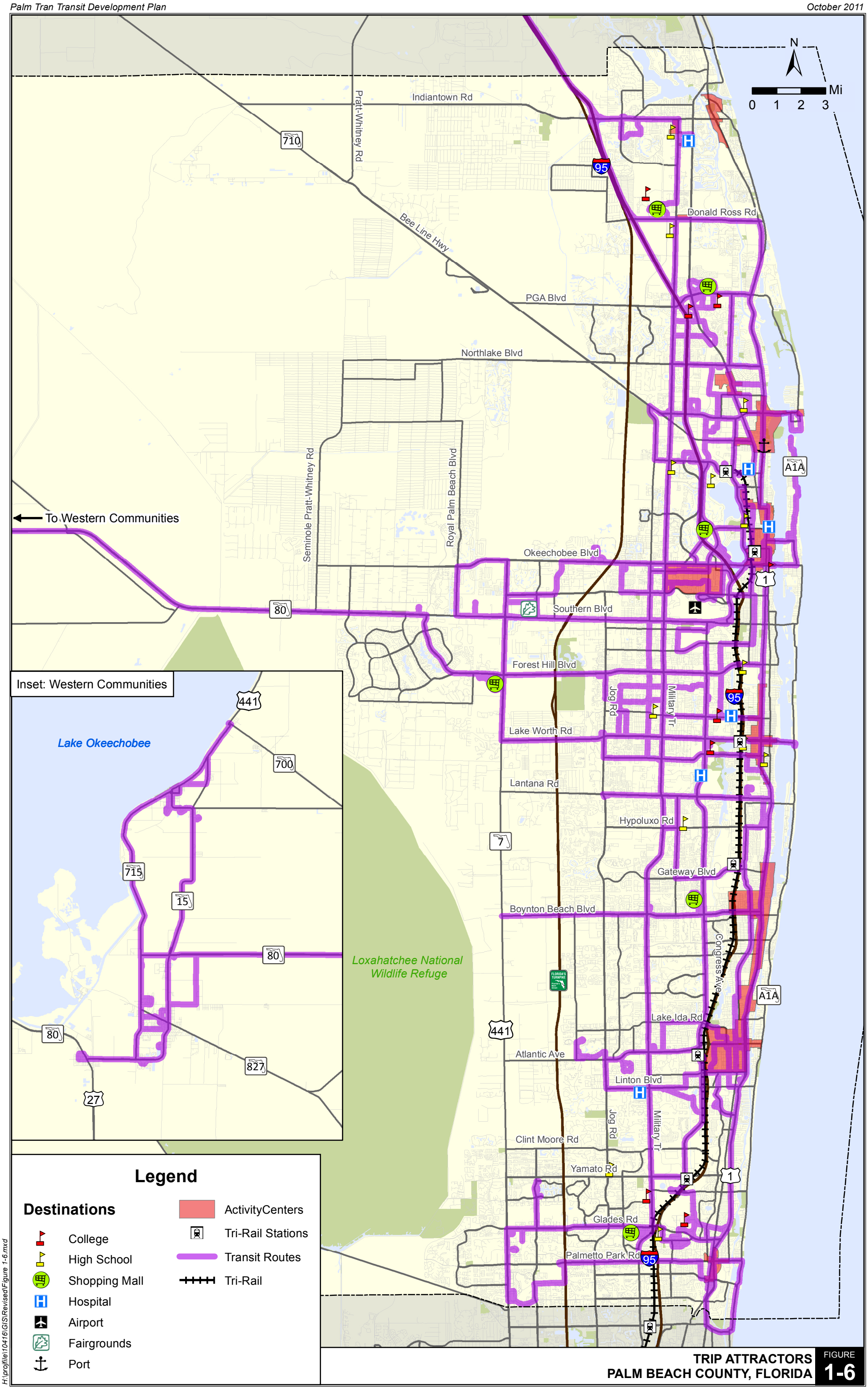
FIGURE
1-4



H:\projfile\10416\GIS\Revised\Figure 1-5.mxd

LAND USE
PALM BEACH COUNTY, FLORIDA

FIGURE **1-5**



TRIP ATTRACTORS
PALM BEACH COUNTY, FLORIDA

FIGURE **1-6**

CONSTRAINED NETWORK AND ROADWAY LEVEL OF SERVICE

Roadway segments and intersections that have been classified as Constrained Roadways at Lower Levels of Service (CRALLS) by Palm Beach County are depicted in Figure 1-7. The CRALLS designation indicates that the roadway is congested but it is not practical to widen the roadway or otherwise improve it. The CRALLS designation eliminates the Level of Service (LOS) requirement for that roadway. The majority of CRALLS facilities are located in the northern half of the county and serve mid-western communities, particularly the Acreage. Most of the current CRALLS facilities are not served by Palm Tran. Not providing regular service along CRALLS facilities allows buses to stay out of highly congested areas, thereby providing more timely service. However, the constrained roadways are not receiving the benefits of transit, which could help relieve congestion and provide greater accessibility to jobs, education, and entertainment. This is an area that could warrant adding service if it is implemented in conjunction with transit preferential treatment strategies, such as queue jump lanes where buses are given a green light ahead of other traffic to help them bypass congestion.

Many roadways in Palm Beach County currently do not meet their adopted LOS standards. Many of those roadways are not served by Palm Tran. Roadway LOS is shown in Figure 1-8.

1.3 Demographics and Economics

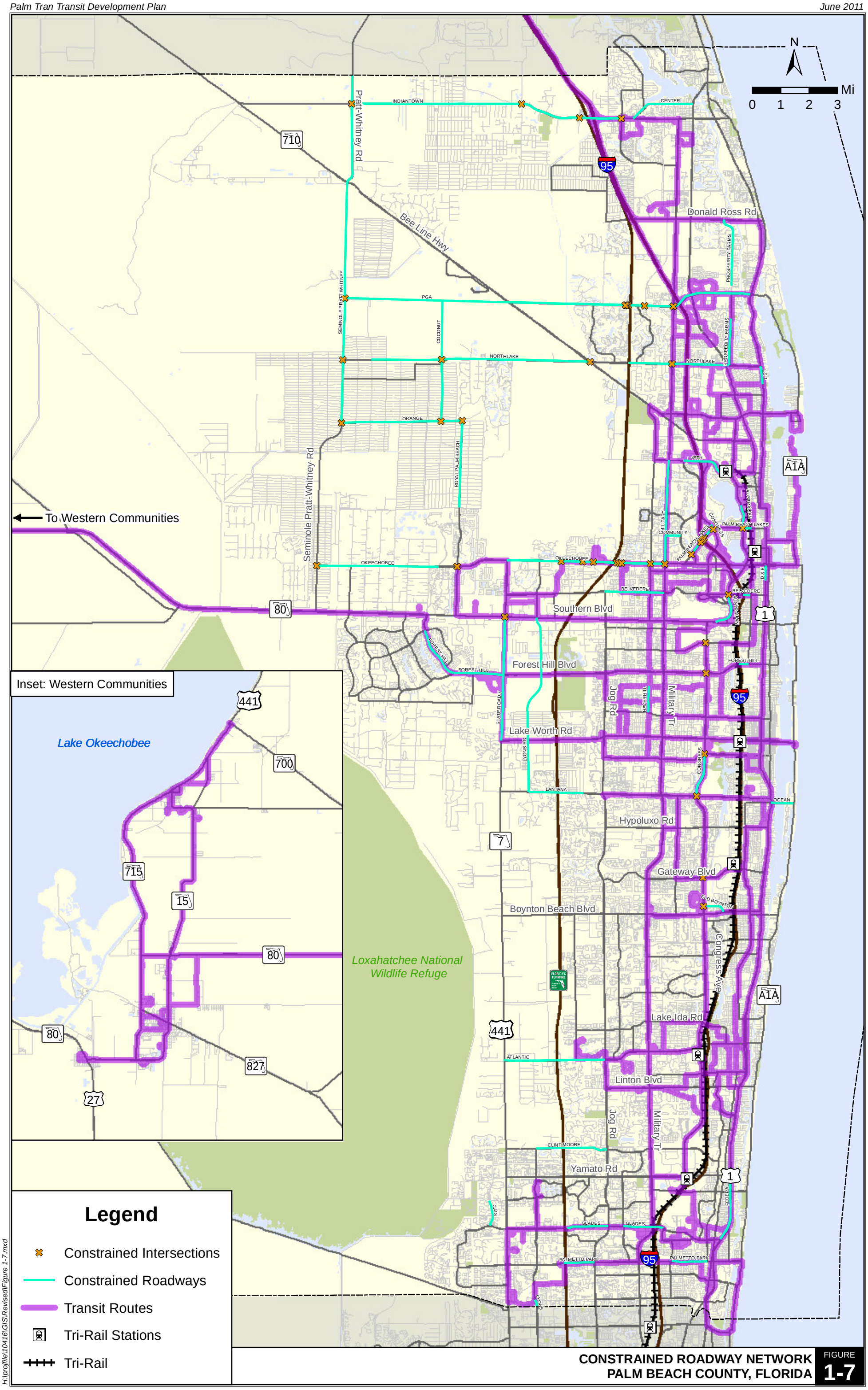
POPULATION COUNTS

The population of Palm Beach County has increased nearly twice as fast as that of other South Florida counties over the last 10 years but at a similar rate to that of Florida as a whole. Table 1-1 compares Palm Beach County population growth to that of other local counties and Florida as a whole. Palm Beach County has a comparable per capita investment in transit operations to Broward County but falls behind other jurisdictions with larger populations.

Table 1-1 Palm Beach County Population

Area	2000	2010	% Change
Palm Beach County	1,131,184	1,320,134	14.3
Broward County	1,623,018	1,748,066	7.2
Miami-Dade County	2,253,362	2,496,435	9.7
Florida-wide	15,982,378	18,801,310	15.0

The population of Palm Beach County is heavily concentrated within 10 miles of the coast on the eastern side of the county. The central portion of Palm Beach County is primarily designated for agriculture and wilderness preserve. There are some small communities located near the western boundary of the county in the area of Lake Okeechobee. Population distribution in Palm Beach County is shown in Figure 1-9, and the change in population between the 2000 and 2010 Censuses is shown in Figure 1-10. The distribution of population in Palm Beach County creates a very challenging environment for Palm Tran by requiring very long routes that often run through sparsely populated areas to connect different centers.



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CONSTRAINED ROADWAY NETWORK
PALM BEACH COUNTY, FLORIDA

FIGURE **1-7**

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To Western Communities

Inset: Western Communities

Lake Okeechobee

Loxahatchee National Wildlife Refuge

Indiantown Rd
Pratt-Whitney Rd
Bee Line Hwy
PGA Blvd
Northlake Blvd
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
Okeechobee Blvd
Donald Ross Rd
Southern Blvd
Forest Hill Blvd
Jog Rd
Military Tr
Lake Worth Rd
Lantana Rd
Hypoluxo Rd
Gateway Blvd
Boynton Beach Blvd
Congress Ave
Lake Ida Rd
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd

710 95 A1A 1 80 441 700 715 15 7 827 27

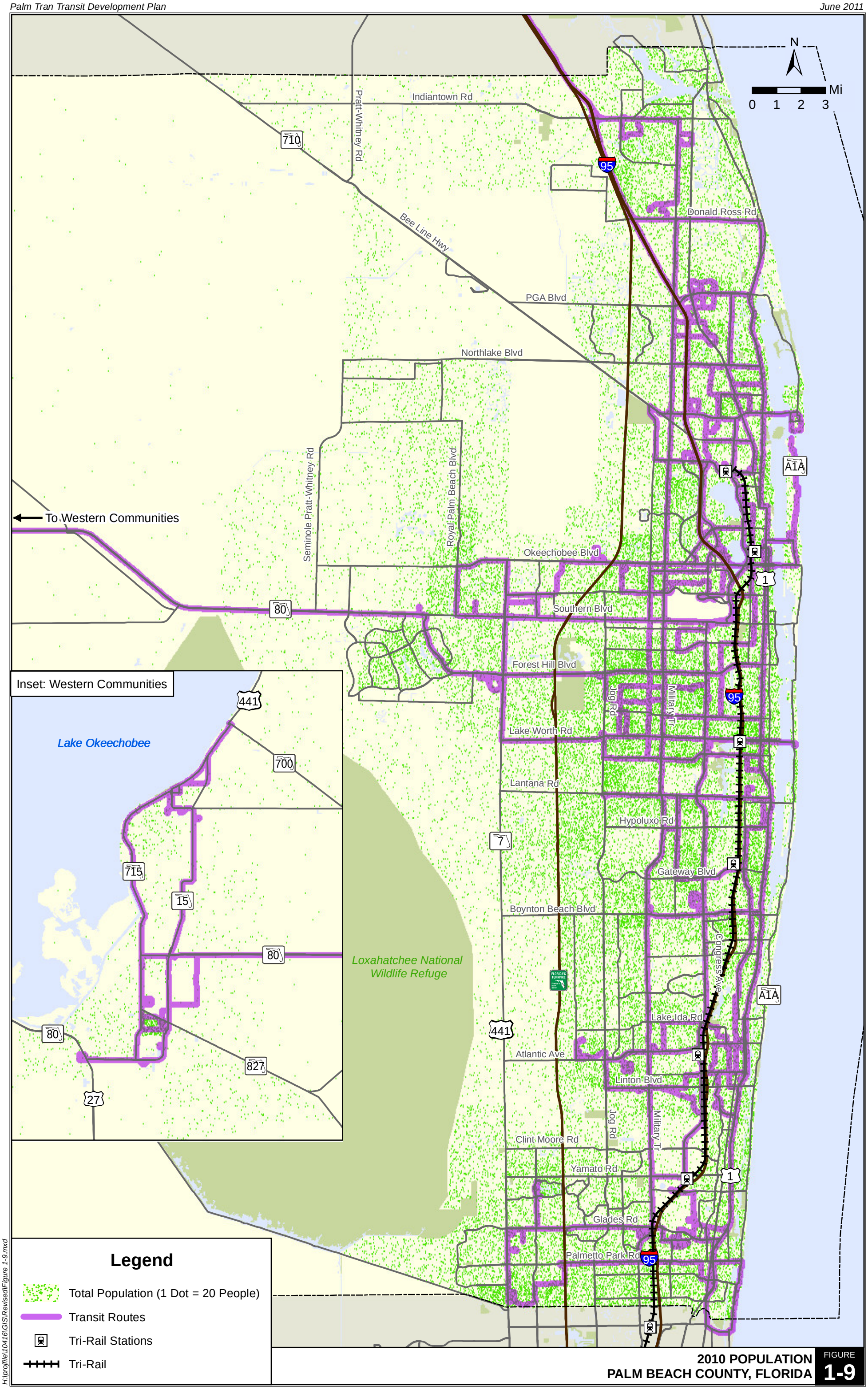
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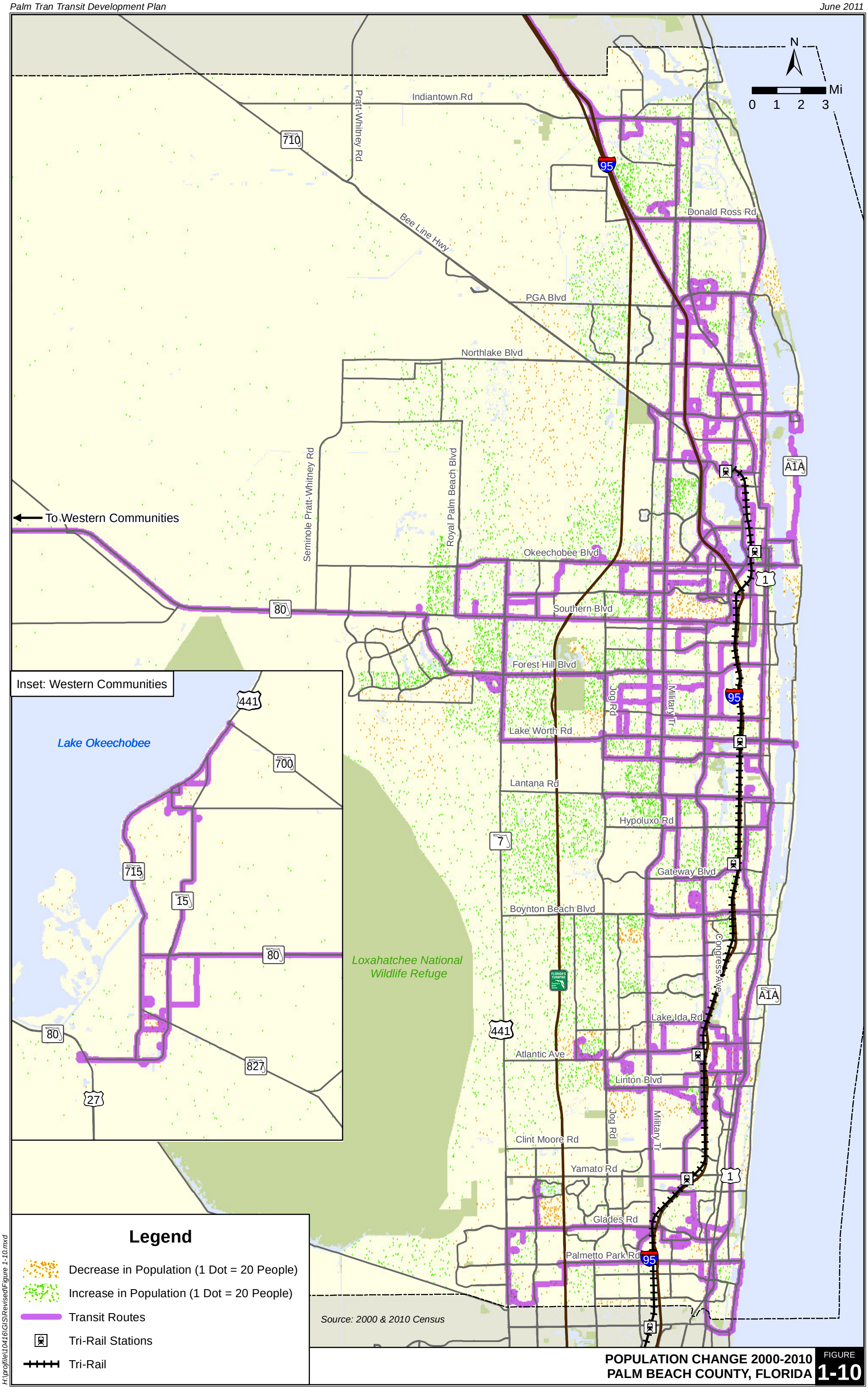
- E LOS or Worse
- Transit Routes
- Tri-Rail Stations
- Tri-Rail

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ROADWAY LOS
PALM BEACH COUNTY, FLORIDA

FIGURE **1-8**


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Donald Ross Rd
Bee Line Hwy
PGA Blvd
Northlake Blvd
To Western Communities
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
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Jog Rd
Military Tr
Lake Worth Rd
Lantana Rd
Hypoluxo Rd
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Gateway Blvd
Boynton Beach Blvd
Congress Ave
Loxahatchee National Wildlife Refuge
Lake Ida Rd
441
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd
Inset: Western Communities
Lake Okeechobee
700
715
15
827
27
Legend
Total Population (1 Dot = 20 People)
Transit Routes
Tri-Rail Stations
Tri-Rail
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2010 POPULATION
PALM BEACH COUNTY, FLORIDA
FIGURE
1-9



POPULATION CHANGE 2000-2010
PALM BEACH COUNTY, FLORIDA

FIGURE **1-10**

Table 1-2 shows the comparative growth rates for incorporated municipalities within Palm Beach County. Population growth has been highest in the mid-western communities and communities in the northern part of the county. Population losses have occurred in several communities along the coast. Growth in the unincorporated areas of the county is largely concentrated along the western boundaries of cities on the SR 7 corridor and in the Acreage. The overall density in Palm Beach County is increasing. Because density in some areas is increasing faster than in others, there are opportunities to advocate for transit-oriented development and other practices that will help Palm Beach County become more transit-supportive and allow Palm Tran to offer a higher level of service to its residents. It is also possible that shifting population densities will require Palm Tran to revisit its current route structure to optimize service where population densities are highest.

POPULATION PROFILE

The most likely age groups to be dependent on transit are those under the age of 18 and those over the age of 65. Per the 2010 Census, 268,884 (or 20%) of Palm Beach county residents were under the age of 18. The 2009 American Community Survey estimates that 120,241 (or 9%) of Palm Beach County residents are at or over the age of 65.

The youth population of Palm Beach County is not concentrated in specific locations. The unincorporated areas west of Delray Beach have very few people under the age of 18.

The senior population of Palm Beach County is concentrated. Many seniors live to the west of Delray Beach, west of Boca Raton, and in a small area south of West Palm Beach. Many of the areas with the highest concentrations of seniors are not currently served by Palm Tran fixed-route service. There are many gated communities and low-density residential neighborhoods that are difficult to serve in these areas.

Figure 1-11 shows the distribution of youth and seniors within Palm Beach County.

Table 1-2 Palm Beach County Growth by Municipality

Municipality	2000	2010	Change	Percent Change
Loxahatchee Groves	-	3,180	-	-
South Palm Beach	699	1,171	472	67.5%
Palm Springs	11,699	18,928	7,229	61.8%
Royal Palm Beach	21,523	34,140	12,617	58.6%
Wellington	38,216	56,508	18,292	47.9%
Mangonia Park	1,283	1,888	605	47.2%
Briny Breezes	411	601	190	46.2%
Jupiter	39,328	55,156	15,828	40.2%
Palm Beach Gardens	35,058	48,452	13,394	38.2%
Greenacres	27,569	37,573	10,004	36.3%
Haverhill	1,454	1,873	419	28.8%
Hypoluxo	2,015	2,588	573	28.4%
Manalapan	321	406	85	26.5%
South Bay	3,859	4,876	1,017	26.4%
West Palm Beach	82,103	99,919	17,816	21.7%
Belle Glade	14,906	17,467	2,561	17.2%
Boynton Beach	60,389	68,217	7,828	13.0%
Boca Raton	74,764	84,392	9,628	12.9%
Lantana	9,437	10,423	986	10.4%
Gulf Stream	716	786	70	9.8%
Golf Village	230	252	22	9.6%
Ocean Ridge	1,636	1,786	150	9.2%
Riviera Beach	29,884	32,488	2,604	8.7%
Jupiter Inlet Colony	368	400	32	8.7%
Tequesta	5,273	5,629	356	6.8%
Delray Beach	60,020	60,522	502	0.8%
Atlantis	2,005	2,005	0	0.0%
North Palm Beach	12,064	12,015	-49	-0.4%
Lake Worth	35,133	34,910	-223	-0.6%
Lake Clarke Shores	3,451	3,376	-75	-2.2%
Juno Beach	3,262	3,176	-86	-2.6%
Pahokee	5,985	5,649	-336	-5.6%
Highland Beach	3,775	3539	-236	-6.3%
Lake Park	8,721	8,155	-566	-6.5%
Palm Beach Shores	1,269	1,142	-127	-10.0%
Cloud Lake	167	135	-32	-19.2%
Palm Beach	10,468	8,348	-2,120	-20.3%
Glen Ridge	276	219	-57	-20.7%
Unincorporated	521,447	587,844	69,577	11.8%

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To Western Communities

Inset: Western Communities

Lake Okeechobee

Loxahatchee National Wildlife Refuge

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Pratt-Whitney Rd
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Northlake Blvd
Seminole Pratt-Whitney Rd
Royal Palm Beach Blvd
Okeechobee Blvd
Southern Blvd
Forest Hill Blvd
Jog Rd
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Lake Worth Rd
Lantana Rd
Hypoluxo Rd
Gateway Blvd
Boynton Beach Blvd
Congress Ave
Lake Ida Rd
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd
Donald Ross Rd

710 95 441 700 715 15 80 827 27 7 1 A1A

Legend

- Population Under 18 (1 Dot = 20 People)
- Population Over 65 (1 Dot = 20 People)
- Transit Routes
- Tri-Rail Stations
- Tri-Rail

Source: 2000 & 2010 Census

POPULATION DISTRIBUTION
PALM BEACH COUNTY, FLORIDA

FIGURE **1-11**

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RACE AND ETHNICITY

Palm Beach County is home to people of many backgrounds and ethnicities. Per the 2010 Census, nearly 74% of Palm Beach County residents are white, 17% are African-American, 2% are Asian, 0.6% are American Indian or Native Hawaiian, and 4% are identified as another race. Of all county residents, 19% identified themselves as Hispanic. Many ethnic communities are traditionally underserved by transit and have been historically excluded from the planning process. Palm Tran is committed to providing equal levels of service across the county based on population and potential ridership. Every effort is made to reach out to traditionally disadvantaged communities to engage them in the planning process.

The African-American population is concentrated in particular areas of the county:

- West Palm Beach, north of Okeechobee Boulevard and east of I-95
- Delray Beach, east of I-95
- Boynton Beach, east of I-95
- Belle Glade

The population that identifies as Hispanic is more spread out but has the heaviest concentration in the unincorporated areas south of Southern Boulevard, Greenacres, Palm Springs, and Atlantis.

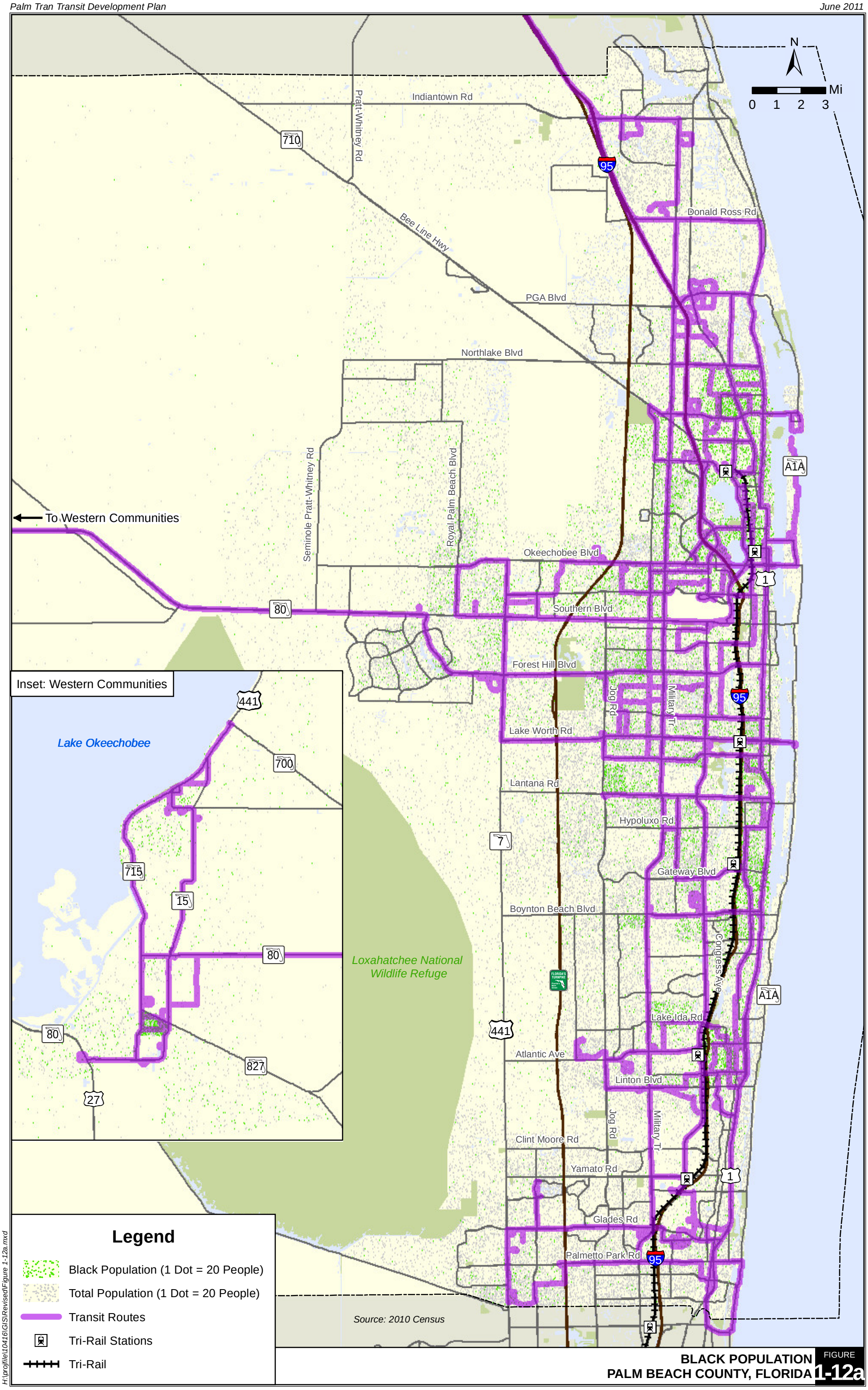
A map showing the population distribution by race has been provided in Figures 1-12a and 1-12b.

HOUSEHOLD DENSITY

There are 664,594 housing units recorded in the 2010 Census for Palm Beach County. There is an average of 2 people per housing unit across the county. Figure 1-13 shows the distribution of households across the county, while Figure 1-14 shows the average occupancy rate by Census tract. Areas with higher household densities indicate greater concentrations of individual residences and, if densities are high enough, these areas could be transit-supportive.

AVERAGE INCOME

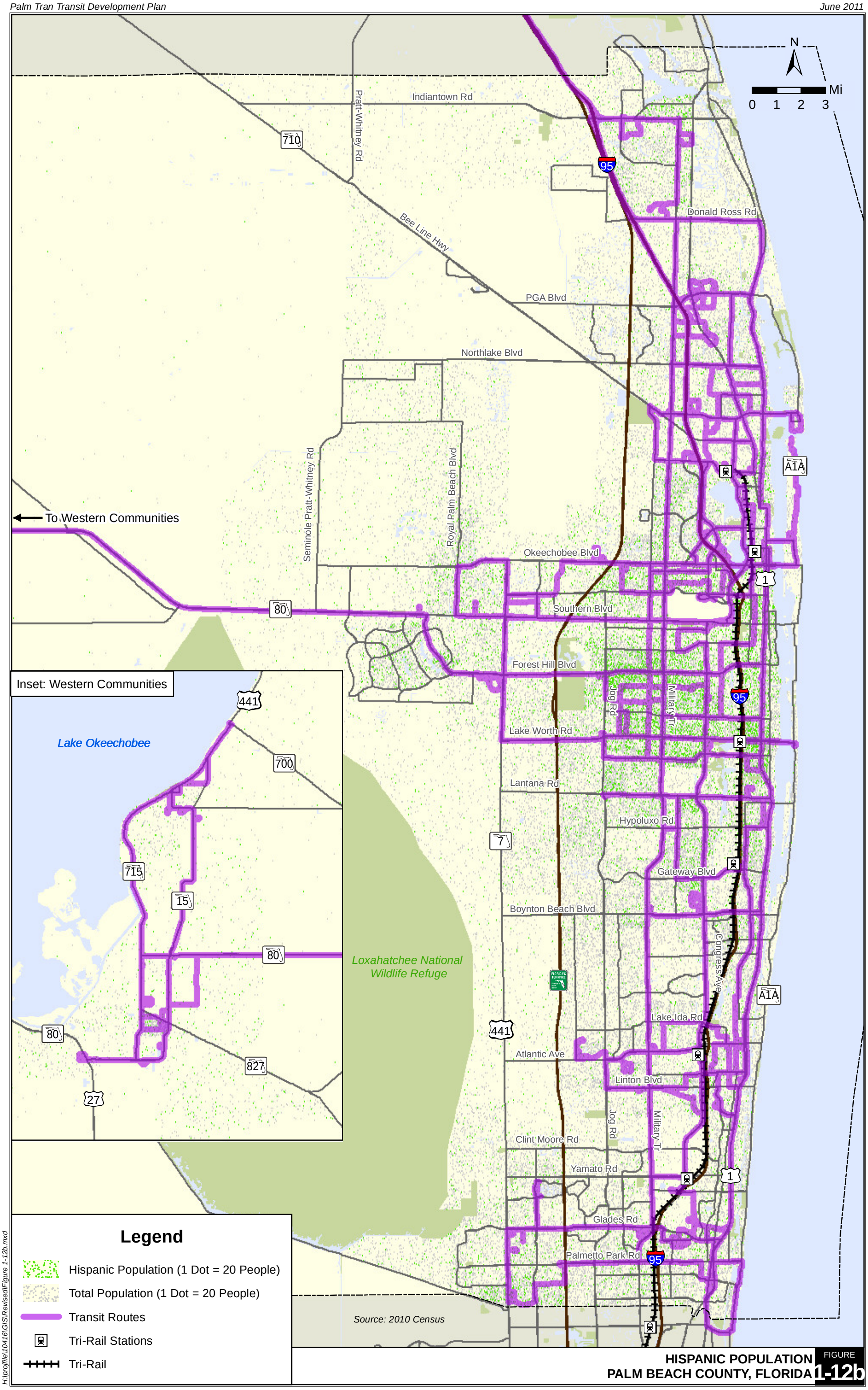
The median household income for Palm Beach County was $52,807 as estimated by the U.S. Census 2008 QuickFacts. Figure 1-15 shows the distribution of households making less than $35,000 according to the American Community Survey. The City of West Palm Beach, the unincorporated areas west of Delray Beach and Boca Raton, and the western communities have the highest proportion of households making below $35,000 per year. It is critical that Palm Tran serve areas with high numbers of low-income households as transit is often the only means available to get to work or school. Higher-income areas are often less sensitive to transit improvements as a means to combat congestion unless the service that is provided is competitive with private automobile transportation.



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BLACK POPULATION
PALM BEACH COUNTY, FLORIDA

FIGURE **1-12a**



HISPANIC POPULATION
PALM BEACH COUNTY, FLORIDA

FIGURE **1-12b**

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Donald Ross Rd
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Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd

Inset: Western Communities

Lake Okeechobee
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Loxahatchee National Wildlife Refuge

Legend

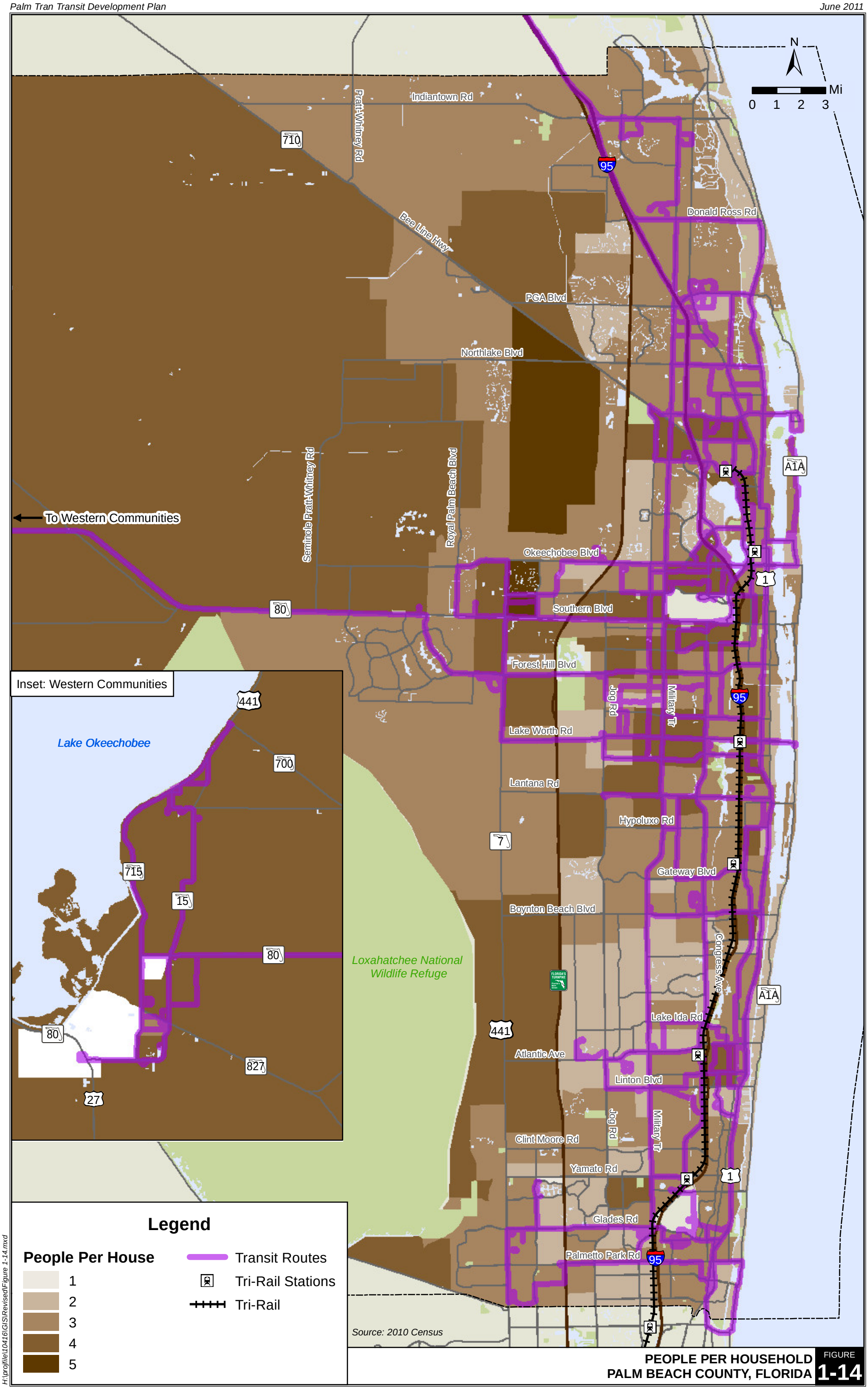
- Occupied Housing (1 Dot = 20 Households)
- Transit Routes
- Tri-Rail Stations
- Tri-Rail

Source: 2010 Census

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HOUSING DENSITY
PALM BEACH COUNTY, FLORIDA

FIGURE **1-13**



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PEOPLE PER HOUSEHOLD
PALM BEACH COUNTY, FLORIDA

FIGURE **1-14**

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Glades Rd
Palmetto Park Rd

Inset: Western Communities

Lake Okeechobee
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Loxahatchee National Wildlife Refuge

Source: 2005-2009 ACS 5-Year Estimate

Legend

Income Less than 35K Households Per Acre

- 0 - 1
- 2
- 3
- 4
- 5

Transit Routes
Tri-Rail Stations
Tri-Rail

HOUSEHOLD INCOMES UNDER $35K
PALM BEACH COUNTY, FLORIDA

FIGURE **1-15**

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AUTO OWNERSHIP

Households that do not have access to a car are most commonly located in Lake Worth, downtown West Palm Beach, Belle Glade, and the northern part of Jupiter. These households are much more likely to rely on transit for access to work and school than those that do have a car. The density of households without car access is shown in Figure 1-16.

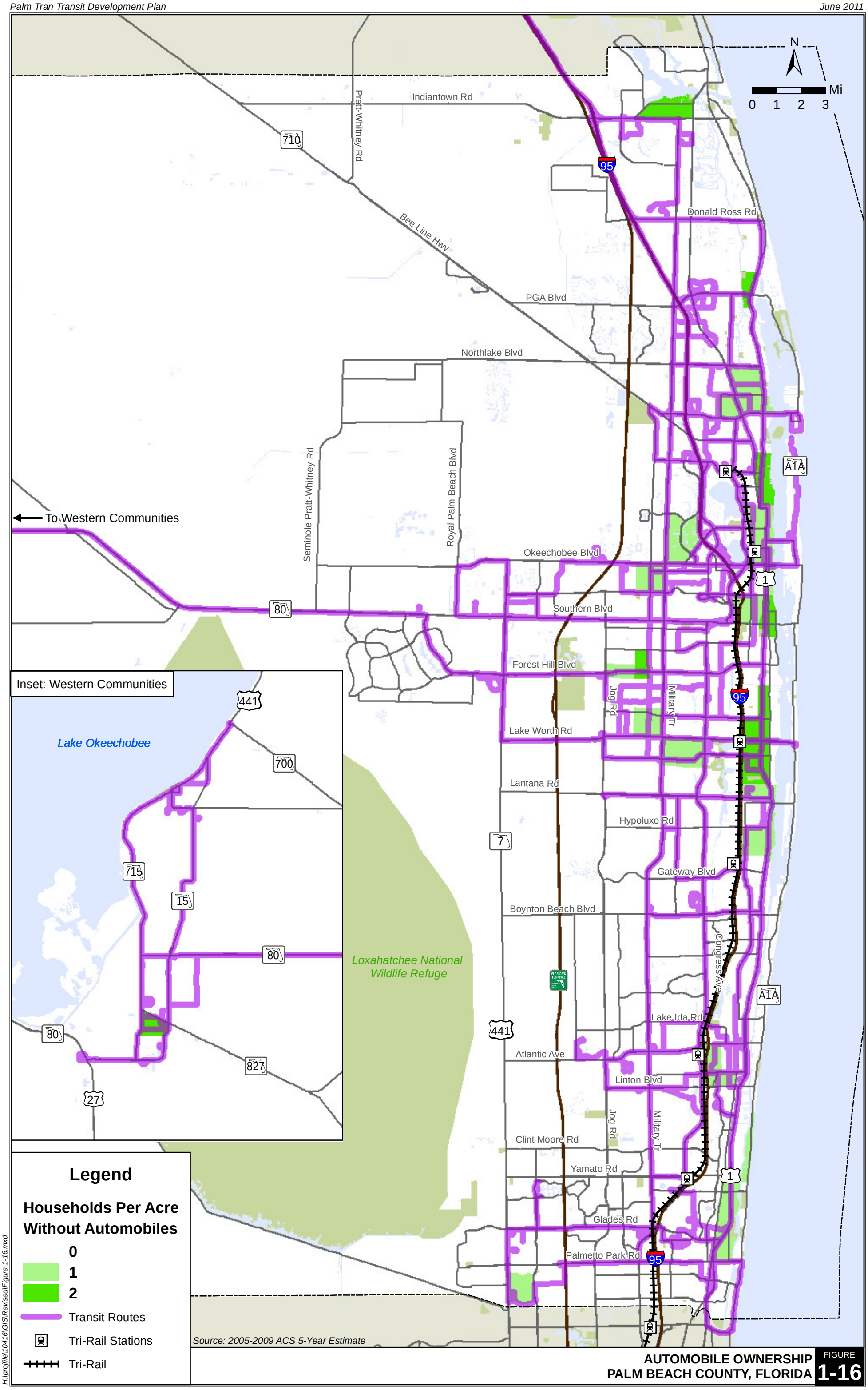
AVERAGE COMMUTE LENGTH

In 2000, average commute length in Palm Beach County was calculated to be approximately 26 minutes. The 2009 American Community Survey estimated an average commute time of just over 17 minutes. The reduction in commute time is likely related to the overall drop in vehicle miles traveled throughout Palm Beach County since fuel prices have been increasing and economic conditions have been poor. Shorter commute times make it more challenging to attract choice riders to transit, but the conditions that create shorter commutes (e.g., housing located closer to jobs and less congestion) also reduce the cost to provide equivalent transit service.

Table 1-3 Commuters by Trip Length

Commute Length (Minutes)	Number of Workers	Percent
<5	11,564	2.2%
5-9	46,330	9.0%
10-14	78,888	15.3%
15-19	87,432	17.0%
20-24	80,899	15.7%
25-29	34,048	6.6%
30-34	83,155	16.2%
35-39	15,493	3.0%
40-44	15,789	3.1%
45-59	30,825	6.0%
60-89	21,731	4.2%
>90	8,549	1.7%

SOURCE: Table B08012, American Community Survey, 2009


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Lake Worth Rd
Lantana Rd
Hypoluxo Rd
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Gateway Blvd
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Lake Okeechobee
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Loxahatchee National Wildlife Refuge
Boynton Beach Blvd
Congress Ave
Lake Ida Rd
Atlantic Ave
Linton Blvd
Clint Moore Rd
Yamato Rd
Glades Rd
Palmetto Park Rd
Legend
Households Per Acre Without Automobiles
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1
2
Transit Routes
Tri-Rail Stations
Tri-Rail
Source: 2005-2009 ACS 5-Year Estimate
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AUTOMOBILE OWNERSHIP
PALM BEACH COUNTY, FLORIDA
FIGURE
1-16

ANNUAL TOURIST VISITS

As shown in Table 1-4, Palm Beach County hosted an estimated 3,616,960 visitors in the 2008-2009 fiscal year according to the most recent annual report prepared for the Tourist Development Council of Palm Beach County.

Table 1-4 Annual Tourism Statistics

Item	2004-05	2005-06	2006-07	2007-08	2008-09	5 Year Average
Estimated Hotel Guests	2,150,112	2,238,230	2,354,297	2,089,936	1,808,480	2,127,011
Estimated Visitors	4,300,224	4,476,460	4,708,594	4,167,872	3,616,960	4,254,022
Average Party Size	2.1	2.1	2.1	2.0	2.0	2.1
Average Stay (nights)	4.0	3.6	3.3	3.4	3.6	3.6

Based on the number of visitors and the average length of their stay, an average night will see that a little over 3% of the people in Palm Beach County are tourists. Palm Tran can contribute to improving the experience of tourists by providing fast, affordable, and efficient transportation between tourist destinations. This is one opportunity for Palm Tran to support economic development in Palm Beach County.

EMPLOYMENT BY INDUSTRY

According to the American Community Survey, education is Palm Beach County's largest employer, followed by professional services, retail, and jobs related to arts and entertainment. As shown in Table 1-5, it is estimated that 544,364 people are employed in Palm Beach County. Different industries have different transportation needs. Employees with lower-paying jobs are more likely to rely on transit, while office workers with fixed schedules are often attracted to high-quality reliable transit options that may save money on parking and allow productive time while commuting.

Table 1-5 Palm Beach County Employment and Commute Mode by Industry

Industry	Total	Drives Alone	Carpool	Transit
Total	544,364	77.7%	11.5%	1.3%
Education	104,156	83.6%	9.6%	1.2%
Professional, scientific	82,015	67.7%	15.8%	1.0%
Retail trade	73,635	83.2%	9.1%	1.6%
Arts and entertainment	62,288	75.3%	9.6%	1.9%
Finance, insurance and real estate	42,985	80.6%	7.7%	1.3%
Construction	40,064	74.5%	17.5%	1.2%
Other	32,828	78.4%	9.3%	0.0%
Manufacturing	28,266	71.8%	12.7%	2.0%
Transportation and warehousing	24,117	80.1%	12.2%	2.1%
Public administration	20,794	92.0%	6.9%	1.3%
Wholesale trade	16,839	72.6%	11.8%	0.0%
Information	9,029	78.6%	12.6%	0.0%
Agriculture	6,821	48.2%	30.8%	5.5%
Armed forces	527	75.5%	24.5%	6.6%

1.4 Public Involvement

The Public Involvement Plan for the TDP was developed to be consistent with the public involvement process that was adopted by the Palm Beach Metropolitan Planning Organization (MPO) in 2008. The plan consists of the following eight elements:

- Open houses
- Stakeholder interviews (10 selected by Palm Tran and the consultant plus the 13 members of Palm Tran's Service Board)
- Fixed-route and paratransit rider surveys
- Service Board discussion group
- Fixed-route and paratransit employee surveys
- Community and advisory group meetings
- Public presentations
- Project website

The project team received no public requests for ADA accommodation above and beyond the provided venues and media. The Public Involvement Plan is provided in Appendix A. The following sub-sections describe the findings of the public involvement effort. Additional information documenting the public involvement effort can be found in Appendix B.

RIDER SURVEYS

Riders of both Palm Tran fixed-route and paratransit services were surveyed during Spring 2011 in order to obtain information from riders about existing services and potential improvements that could be made to Palm Tran. The fixed-route survey results are discussed first, followed by the paratransit rider survey results.

System-Wide Fixed-Route Survey

Methodology

The fixed-route rider surveys were distributed to riders as they boarded buses, and the surveys were collected as riders alighted. Two-thousand nine-hundred seventy-three (2,973) completed surveys were returned, representing approximately 10 percent of all Palm Tran riders. A completed survey was defined as one that had at least 65 percent of the questions on the first page of the two-page survey answered. The survey results were weighted to adjust for non-response at the trip level and to expand the results to account for total ridership on each route. The 25-question survey instrument is available in Appendix C, and the results of each question are discussed in detail in the following sub-sections. The percentages that are referenced throughout the following sub-sections, unless otherwise noted, refer to the percentage of respondents answering that particular question (not the percentage of the total number of surveys).

Survey Respondent Demographics

The last section of the survey asked riders to provide demographic information.

Question 17: Rider Age

Question 17 asked riders to identify their age. The age category that received the most responses was 18 to 24 years old, with 580 riders (22 percent) responding (as seen in Figure 1-17). The majority of surveyed Palm Tran riders are between 18 and 54 years old.

Question 18: Rider Gender

Question 18 asked riders to identify if they are male or female. Palm Tran ridership has nearly an equal number of men and women represented in the fixed-route survey. Fifty-one percent of the surveyed riders indicated that they are male, while 49 percent of the surveyed riders indicated that they are female (as seen in Figure 1-18).

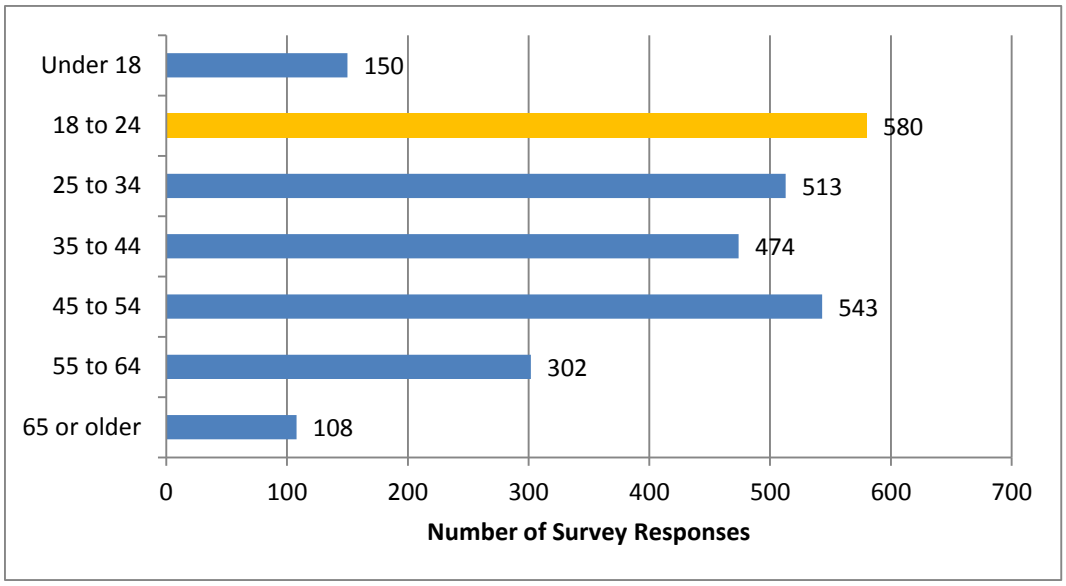


Figure 1-17 Rider Age

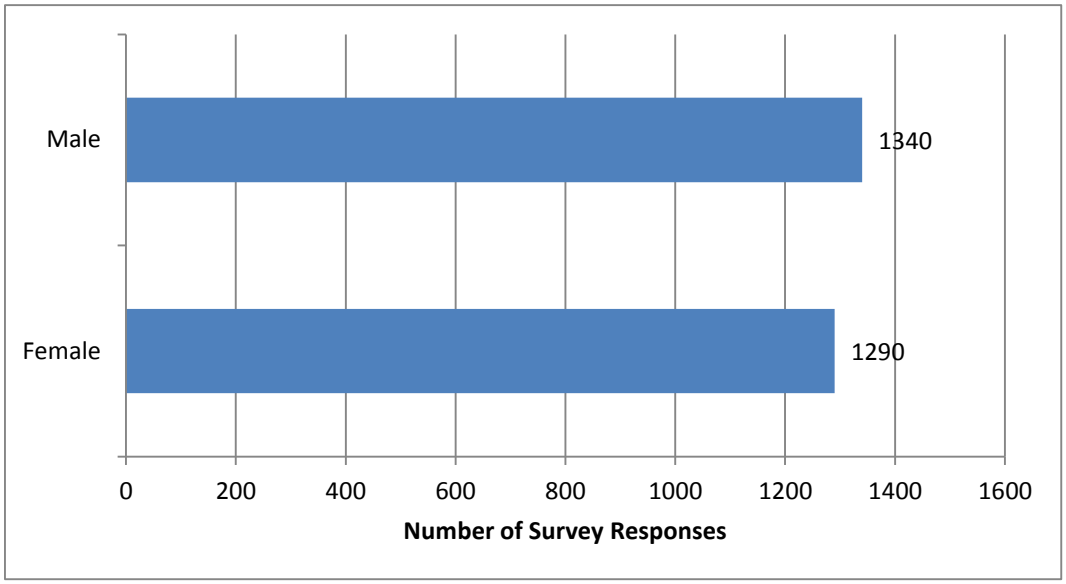


Figure 1-18 Rider Gender

Question 19: Driver's License

Question 19 asked riders if they have a driver's license. The number of surveyed riders with a driver's license is nearly equal to the number of riders without a driver's license. One-thousand three-hundred sixty-eight riders (53 percent) responded that they do have a driver's license, while the other 47 percent responded that they do not have a driver's license (as seen in Figure 1-19).

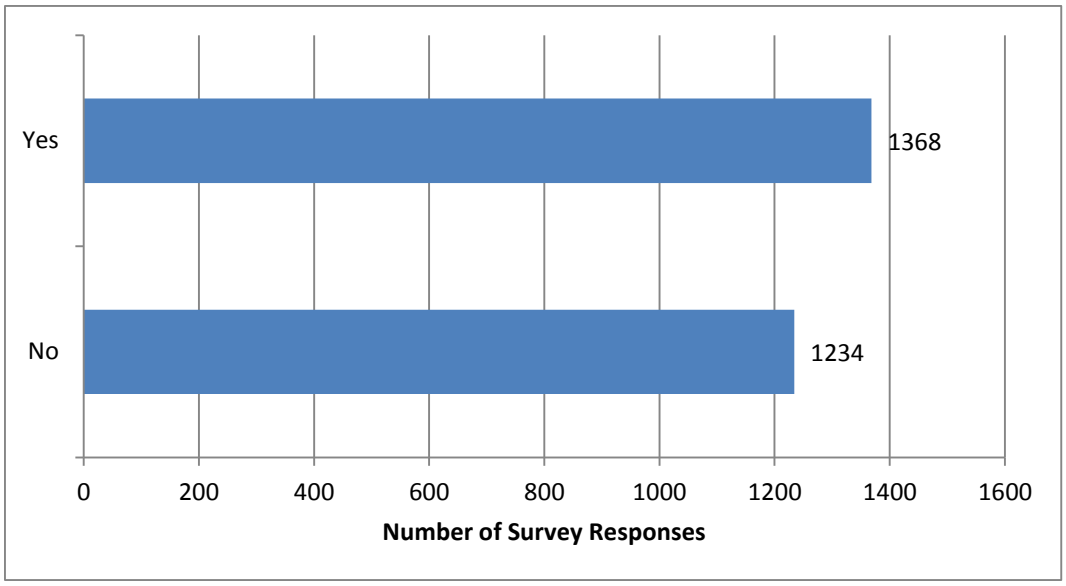


Figure 1-19 Possession of a Driver's License

Question 20: Working Vehicles Available

Question 20 asked riders to identify how many working vehicles are available in their household. The answer that received the most responses was none, with 1,155 surveyed riders (44 percent) indicating that they do not have a working vehicle available in their household (as shown in Figure 1-20). Only 21 percent of surveyed riders have more than one working vehicle available in their household.

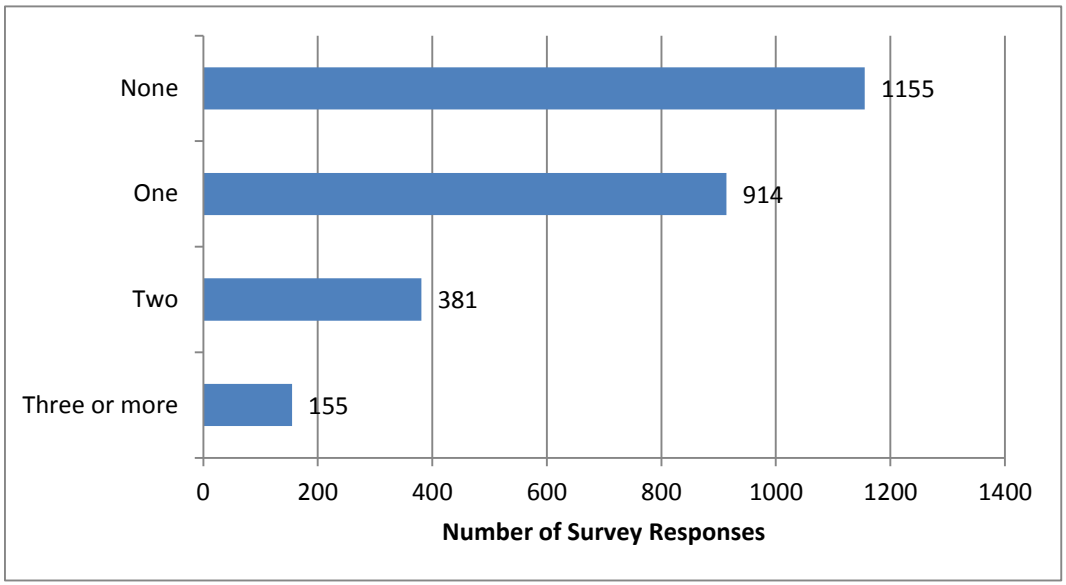


Figure 1-20 Working Vehicles Available in Household

Question 21: Spanish, Hispanic, or Latino Origin

Question 21 asked riders to identify if they are of Spanish, Hispanic, or Latino origin. Most riders are not of Spanish, Hispanic, or Latino origin. Five-hundred seventy-two riders (23 percent) responded that they are of Spanish, Hispanic, or Latino origin, while the other 77 percent of riders responded that they are not (as shown in Figure 1-21).

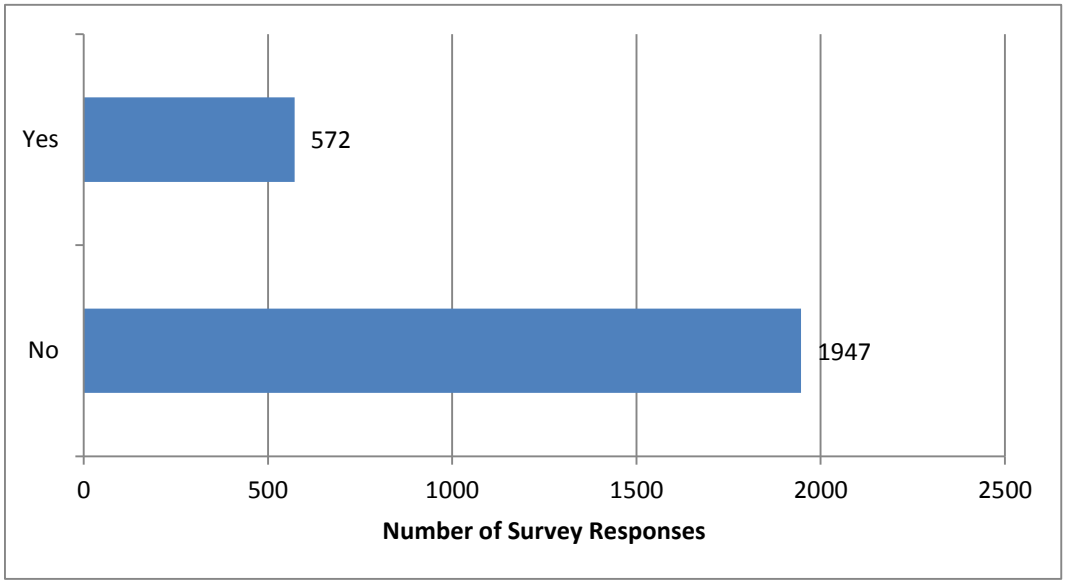


Figure 1-21 Spanish, Hispanic, or Latino Origin

Question 22: Rider Race

Question 22 asked riders to identify their race. African-American is the race that was most represented, with 1,014 surveyed riders (42 percent) indicating that they are African-American (as seen in Figure 1-22). The other race that is highly represented in the Palm Tran ridership is Caucasian. Eight-hundred thirty-four surveyed riders (34 percent) identified that they are Caucasian.

Question 23: Born in the United States or a U.S. Territory

Question 23 asked riders if they were born in the United States or another U.S. territory. The majority of respondents answered that they were born in the U.S. or a U.S. territory. One-thousand seven-hundred ninety-nine surveyed riders (71 percent) responded that they were born in the United States or another U.S. Territory, while the other 29 percent responded that they were not (as seen in Figure 1-23).

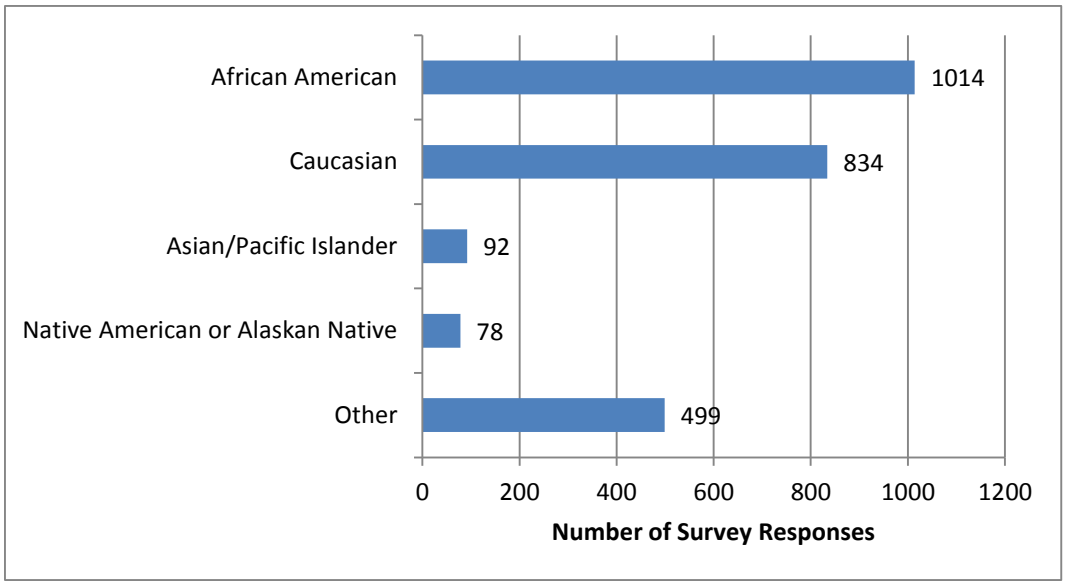


Figure 1-22 Rider Race

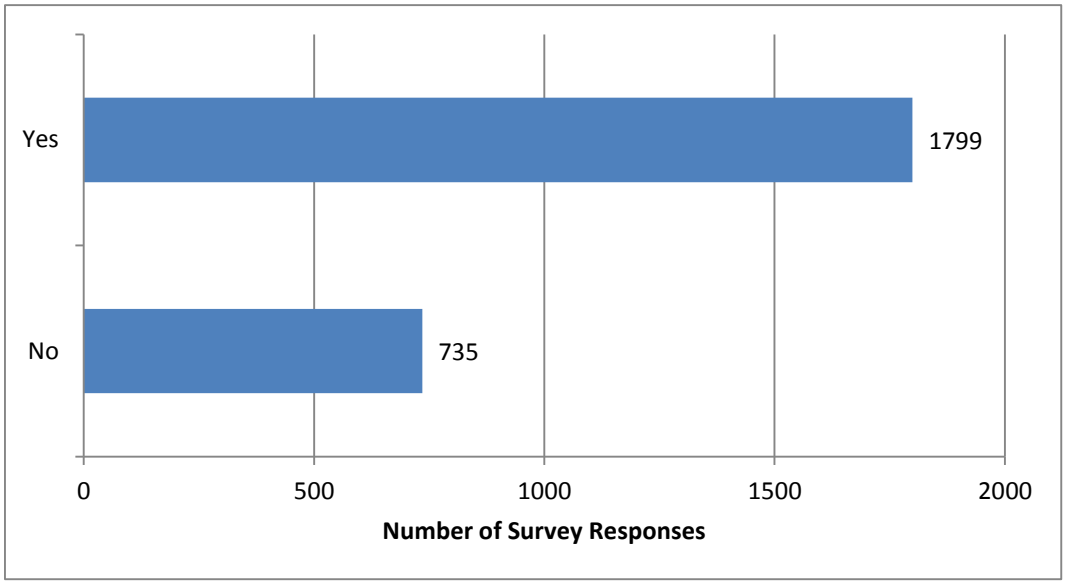


Figure 1-23 Born in the U.S. or a U.S. Territory

Question 24: Rider Language

Question 24 asked riders to identify if English is their first language or second language or if they find it difficult to understand English. Most surveyed riders are fluent in English. One-thousand eight-hundred twenty-six riders (73 percent) responded that English is their first language (as shown in Figure 1-24). Only eight percent of surveyed riders find it difficult to speak or understand English.

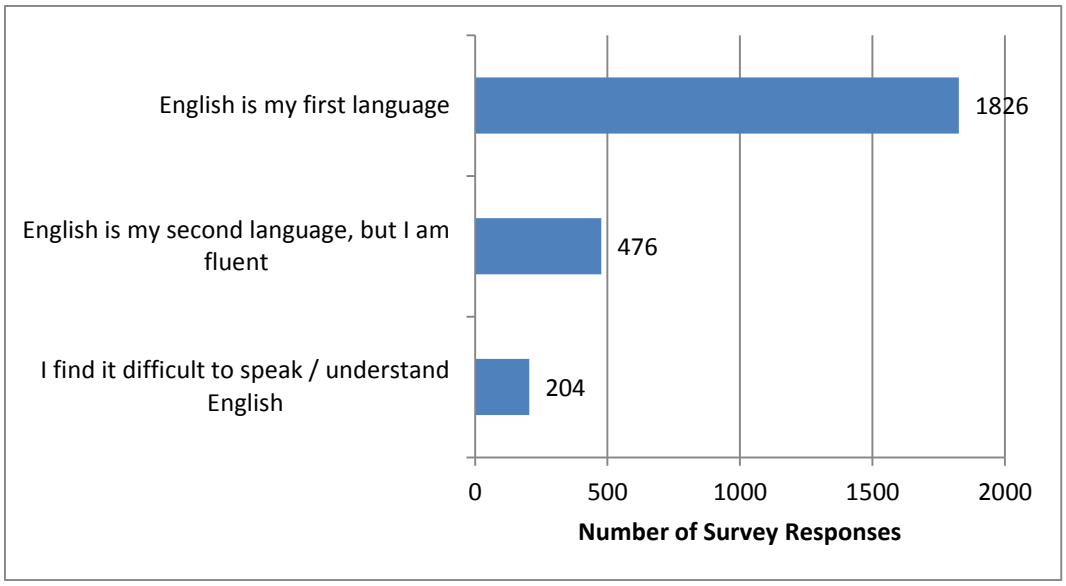


Figure 1-24 Rider Language

Question 25: Household Income

Question 25 asked riders what their total household income was for 2010. The majority of Palm Tran riders have lower annual household incomes. Less than $10,000 was the income category that received the most responses, as 946 surveyed riders (41 percent) indicated that their total household income was less than $10,000 for 2010 (as seen in Figure 1-25). Sixty-four percent of surveyed riders had total household incomes that were less than $20,000 for 2010, and only six percent of riders indicated that their 2010 household income was more than $50,000.

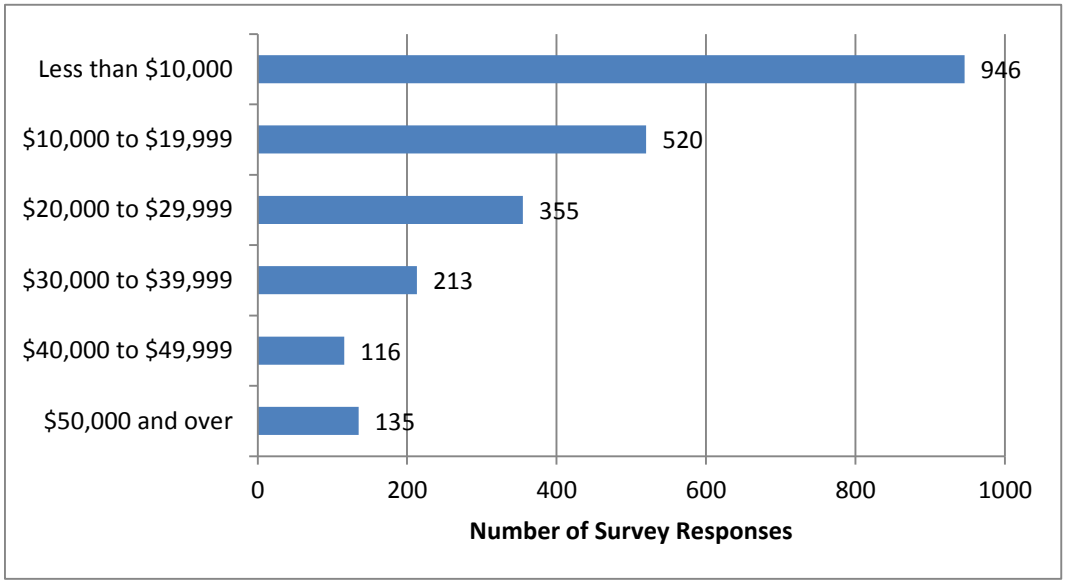


Figure 1-25 Household Income for 2010

Survey Language

The fixed-route rider surveys were made available in three languages: English, Spanish, and Creole. Two-thousand five-hundred thirty-four riders (85 percent) chose to complete the survey in English (as shown in Figure 1-26). Ten percent of riders completed the survey in Spanish, and five percent of riders completed the survey in Creole.

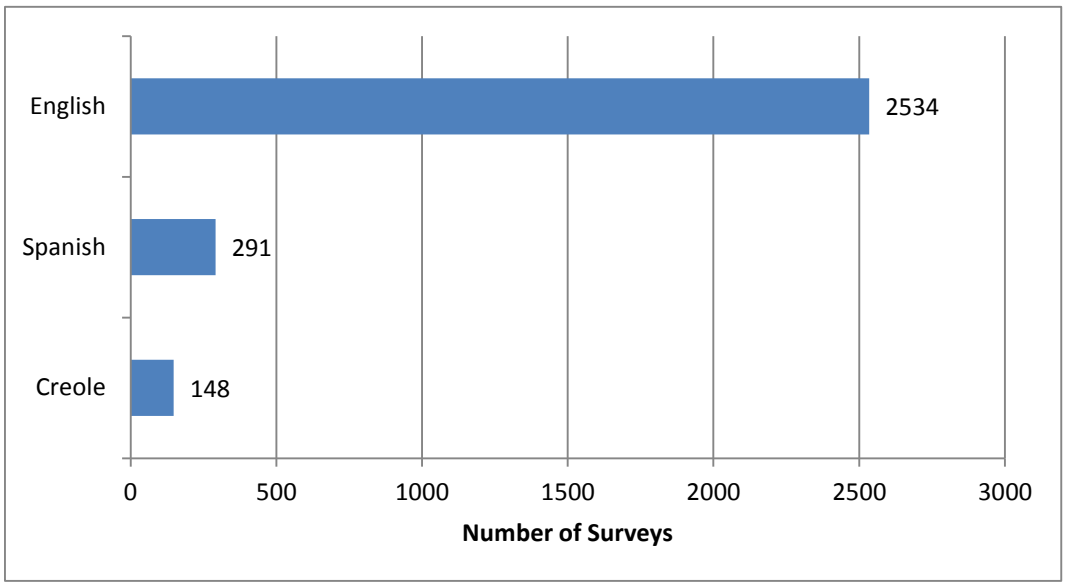


Figure 1-26 Survey Language

Rider Habits

The demographic information provided general knowledge about the type of people using Palm Tran fixed-route service, but it is also important to understand how riders typically use Palm Tran service.

Question 1: Rider Experience with Palm Tran

Question 1 asked riders how long they have been riding Palm Tran bus service. The results are presented in Figure 1-27. Eight-hundred one surveyed riders (28 percent) have been riding Palm Tran bus service for more than five years. The majority of surveyed riders are experienced riders. Only four percent of those surveyed were first time riders, while 69 percent have been riding Palm Tran for over one year.

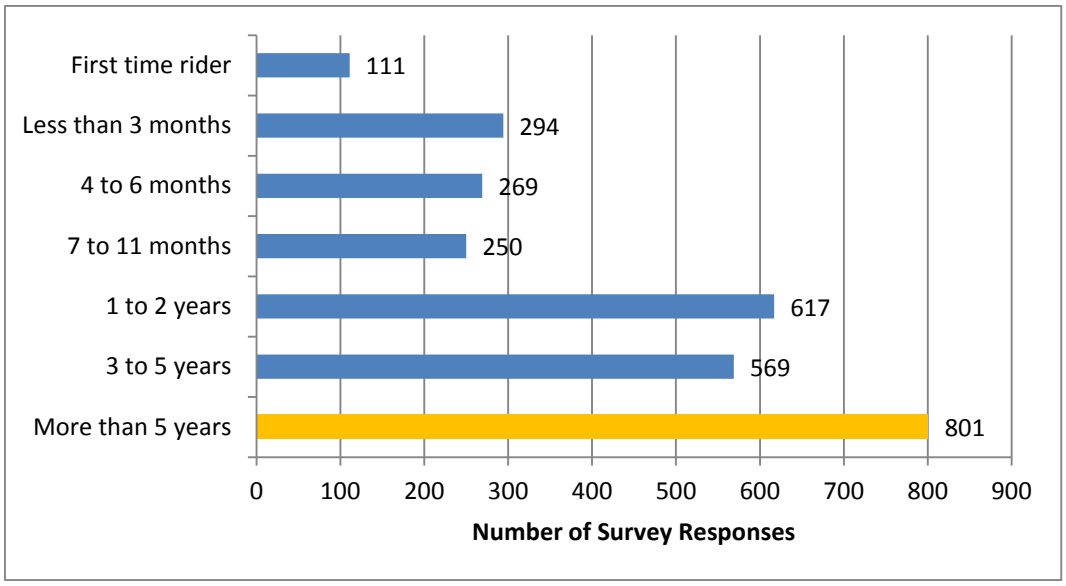


Figure 1-27 Rider Experience with Palm Tran

Question 2: Frequency of Palm Tran Use

Question 2 asked riders how often they ride Palm Tran buses. The answer that received the most responses was four to five days per week, with 1,032 riders (36 percent) responding (as seen in Figure 1-28). The majority of surveyed riders indicated that they ride Palm Tran buses more than four days per week.

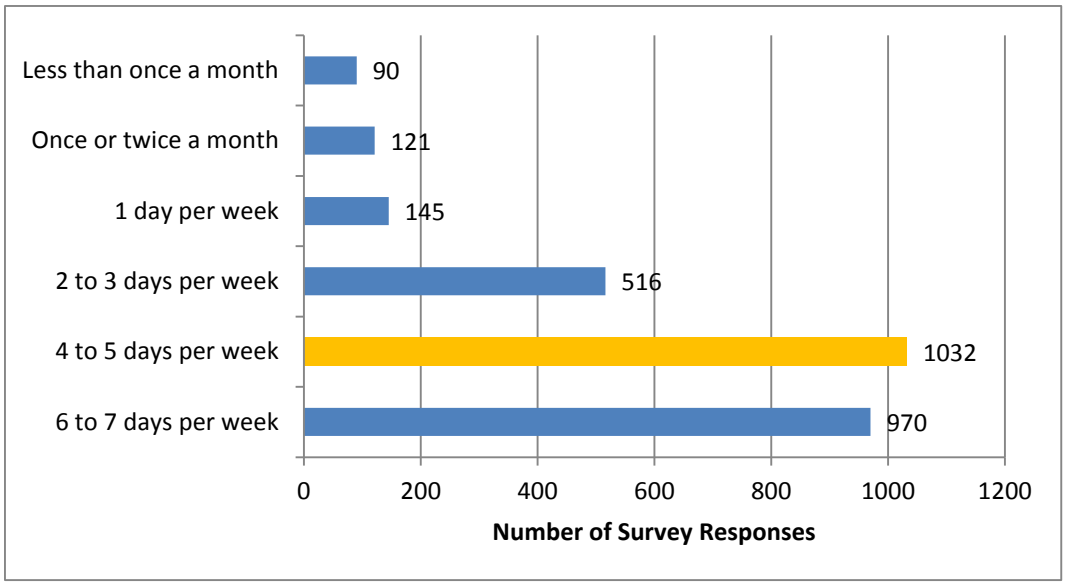


Figure 1-28 Frequency of Palm Tran Use

About This Trip

The surveys also collected data about the trip that the rider was on while filling out the survey.

Question 3: Fare Category

Question 3 asked riders what fare category applies to them. Most surveyed riders (1,818 riders or 64 percent) responded that they pay the full fare (as shown in Figure 1-29).

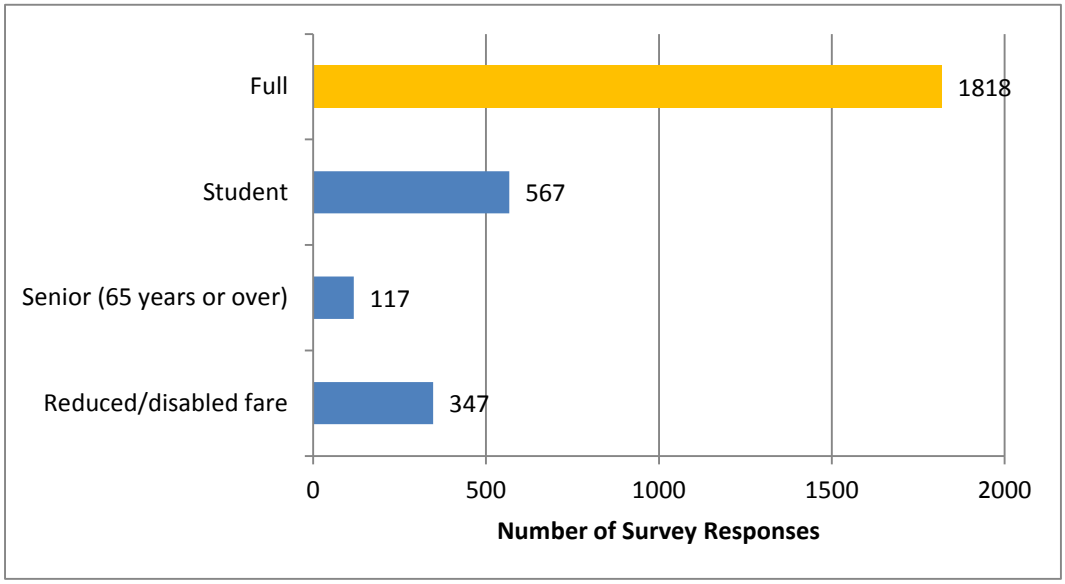


Figure 1-29 Palm Tran Rider Fare Category

Question 4: Reason for Riding Palm Tran

Question 4 asked riders why they ride Palm Tran. The majority of people answered that they ride Palm Tran because they do not have a car available. There were 1,995 respondents (50 percent) who indicated that the lack of an available car was the reason they ride Palm Tran (as seen in Figure 1-30).

Question 5: Type of Fare

Question 5 asked riders how much fare they paid for their trip. The fare category that received the most responses was regular cash fare ($1.50), with 883 surveyed riders (30 percent) choosing that answer (as shown in Figure 1-31). The TD 31-Day Quik Pass ($10/$15) also received a large proportion of responses, with 600 riders (20 percent) indicating that they used that type of fare for their ride.

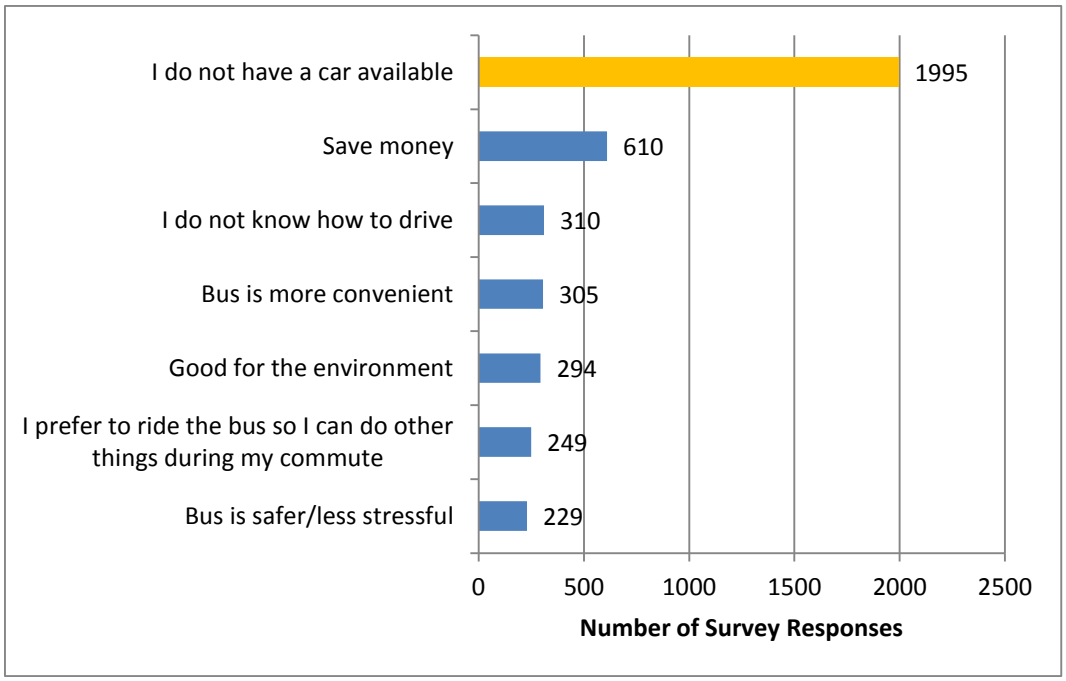


Figure 1-30 Reason for Riding Palm Tran

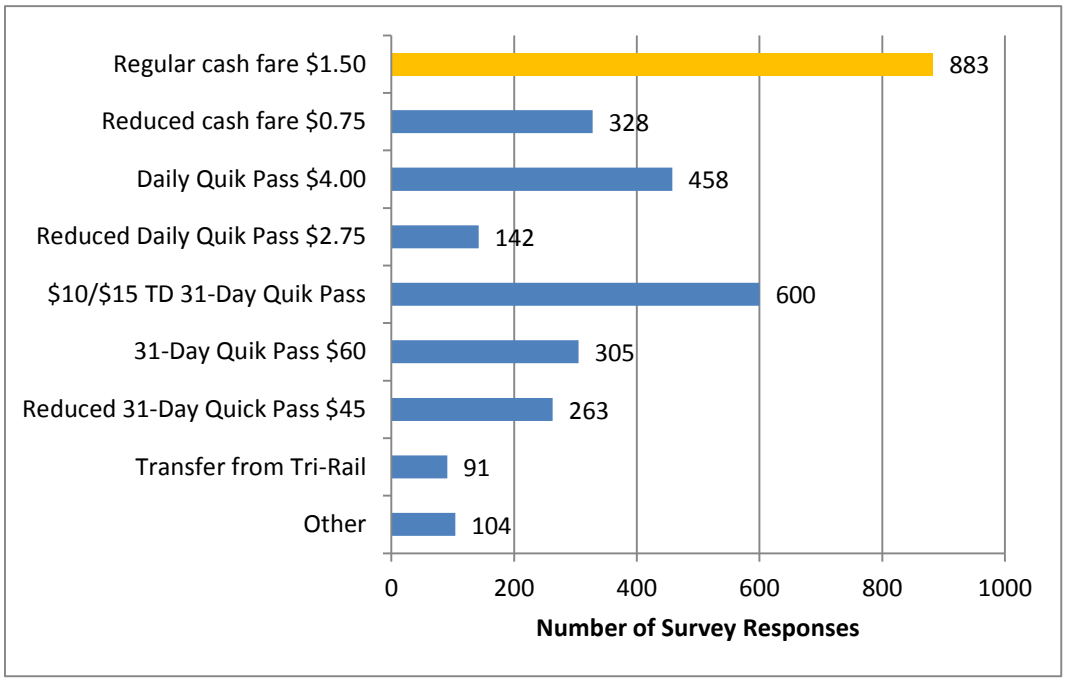


Figure 1-31 Type of Fare

Question 6: Traveling to the Bus Stop

Question 6 asked riders how they arrived at the bus stop. The answer that received the most responses (1,188 riders or 40 percent) indicated that surveyed riders walked for less than five minutes to get to the bus stop (as seen in Figure 1-32). Combined with those riders who indicated that they walked five to ten minutes to get to the bus stop, 68 percent of riders walked ten minutes or less to get to the bus stop. It should be noted that the number of riders who selected "Used Palm Tran CONNECTION" is unexpectedly high. It is possible that some riders did not recognize "CONNECTION" as the name of Palm Tran's paratransit service and selected "Used Palm Tran CONNECTION" to indicate that they transferred from another fixed-route bus before boarding the bus on which they were surveyed. Question 6 was intended to learn how the riders traveled from their origin to the *first* bus stop in their trip.

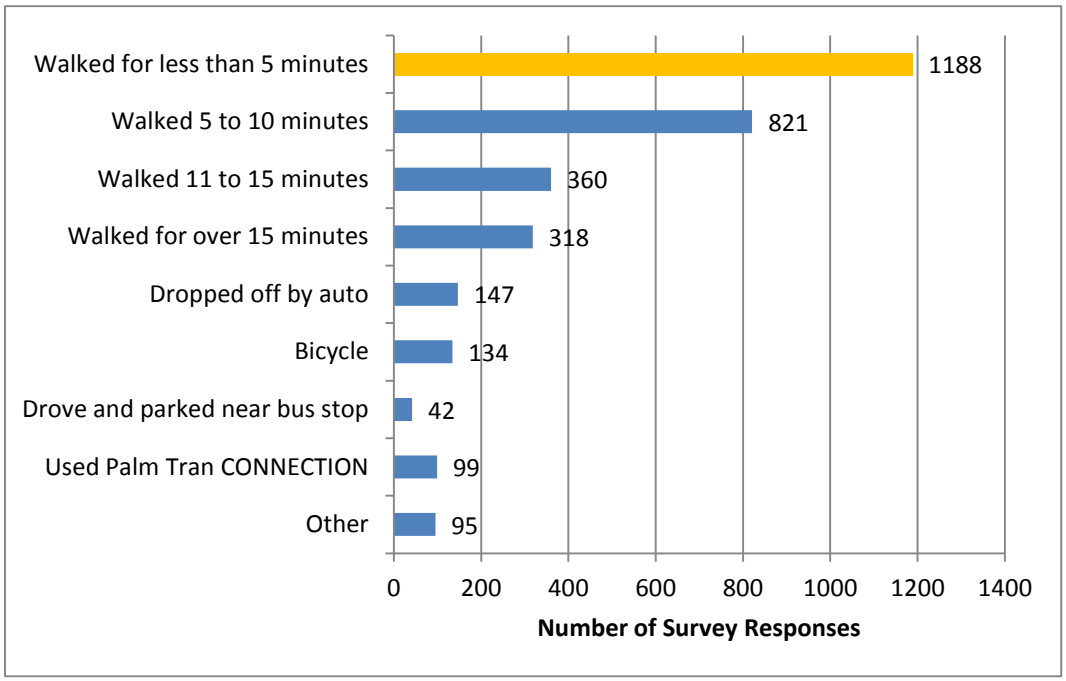


Figure 1-32 Traveling to the Bus Stop

Question 7: On-Time Bus Arrival

Question 7 asked riders if their bus arrived on time. The majority of riders (81 percent) responded that their bus did arrive on time (as shown in Figure 1-33).

Question 8: Traveling from the Bus

Question 8 asked riders how they planned to get to their destinations after departing from the bus. One-thousand one-hundred sixty-four surveyed riders (40 percent) indicated that they would walk less than five minutes to get to their destination (as shown in Figure 1-34). Combined with those who would be walking five to ten minutes to get to their destinations, 69 percent of riders indicated that they would walk ten minutes or less to get to their destination, which is nearly the same percentage of riders who indicated that they would walk ten minutes or less to get to the bus stop.

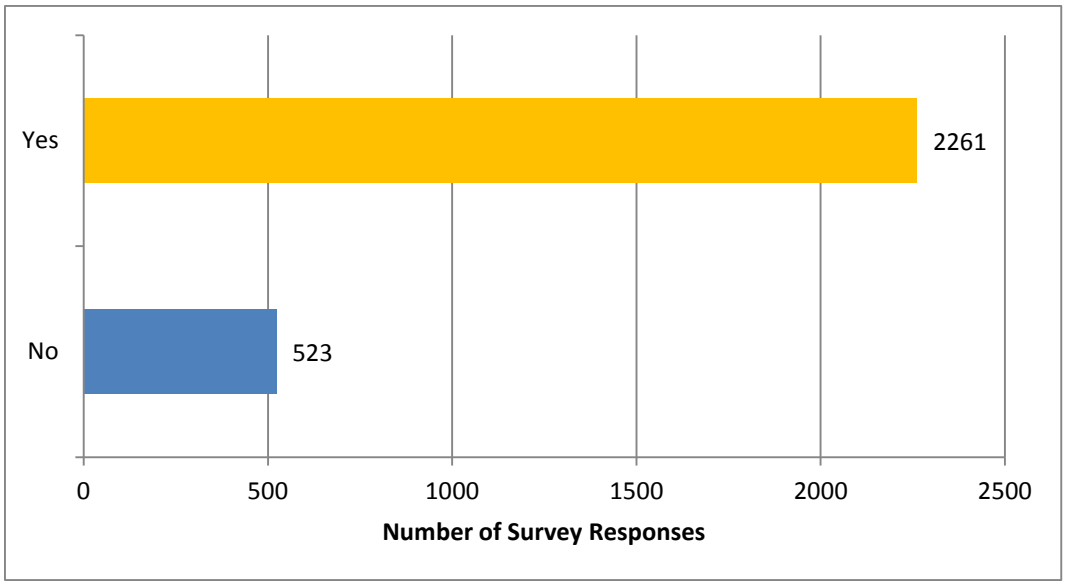


Figure 1-33 On-Time Bus Arrival

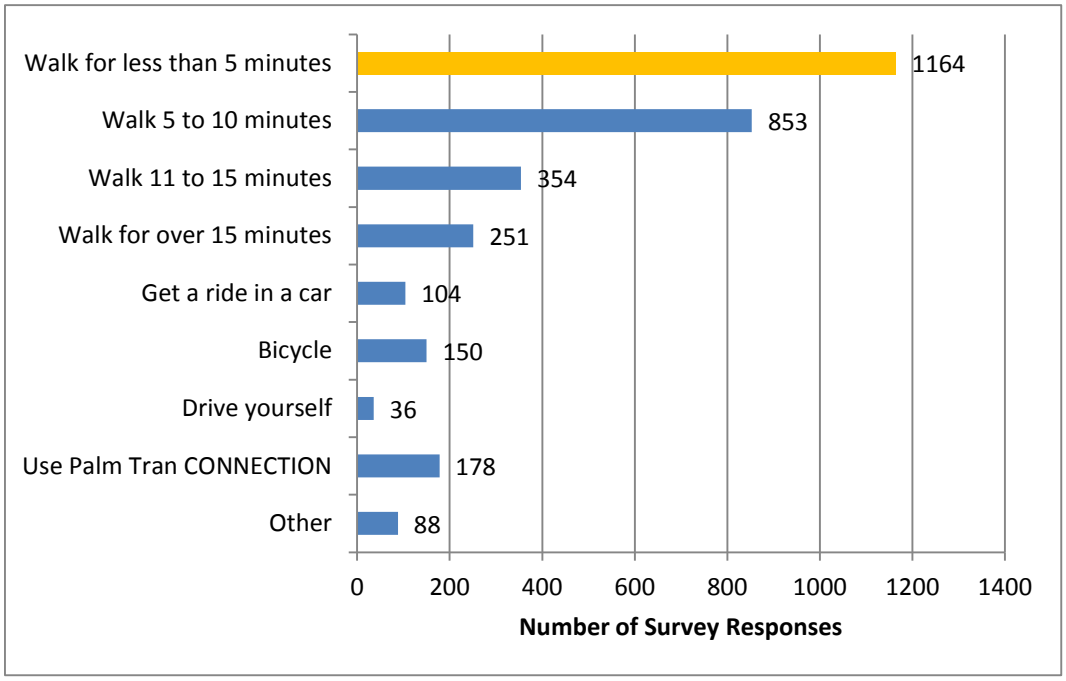


Figure 1-34 Traveling from the Bus

Question 9: Primary Purpose of Trip

Question 9 asked riders to identify the primary purpose of their trip. Most people ride Palm Tran to get to work. There were 1,195 surveyed riders (46 percent) who indicated that the primary purpose of their trip was commuting to or from work (as shown in Figure 1-35).

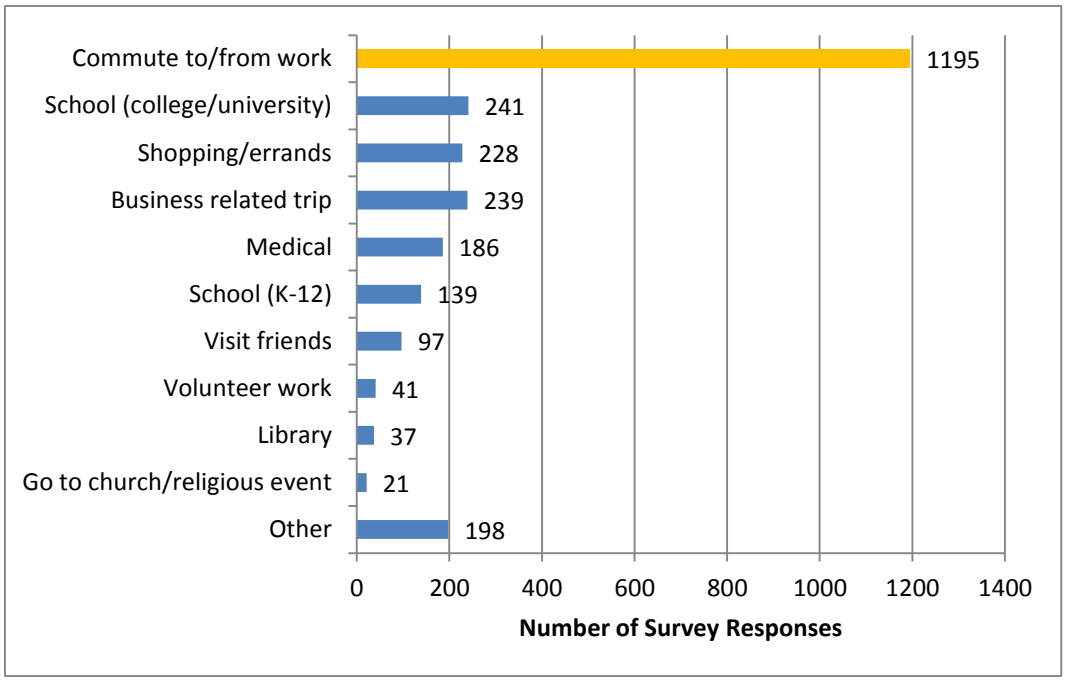


Figure 1-35 Primary Purpose of Trip

Question 10: Bus Transfers

Question 10 asked riders if their trip required more than one bus. Figure 1-36 shows that 1,506 riders (53 percent) did have to transfer from another bus. Figure 1-37 reveals which buses those riders transferred to or from. The answer that had the most responses indicated that 773 surveyed riders (51 percent of the riders who had to use more than one bus for their trip) transferred to or from another Palm Tran route.

An unexpected number of surveyed riders (26 percent) indicated that they transferred to or from a Palm Tran CONNECTION bus. After speaking with Palm Tran staff, this appears to be an unrealistically high number of Palm Tran CONNECTION transfers. It is possible that respondents did not understand that CONNECTION is the name of the paratransit service provided by Palm Tran, and believed that "Palm Tran CONNECTION" was referring to a Palm Tran fixed-route bus transfer.

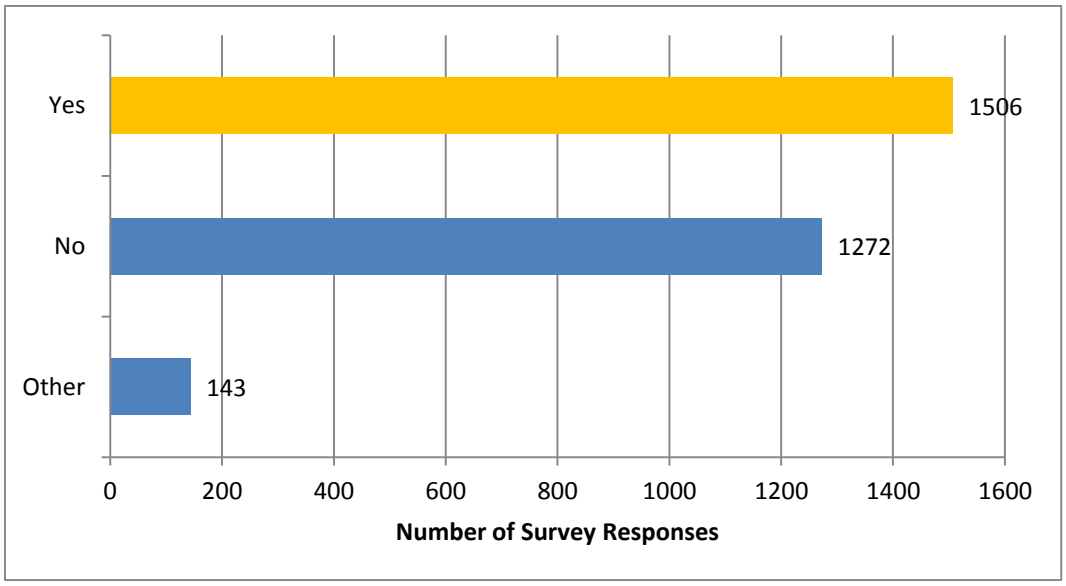


Figure 1-36 Bus Transfer Required

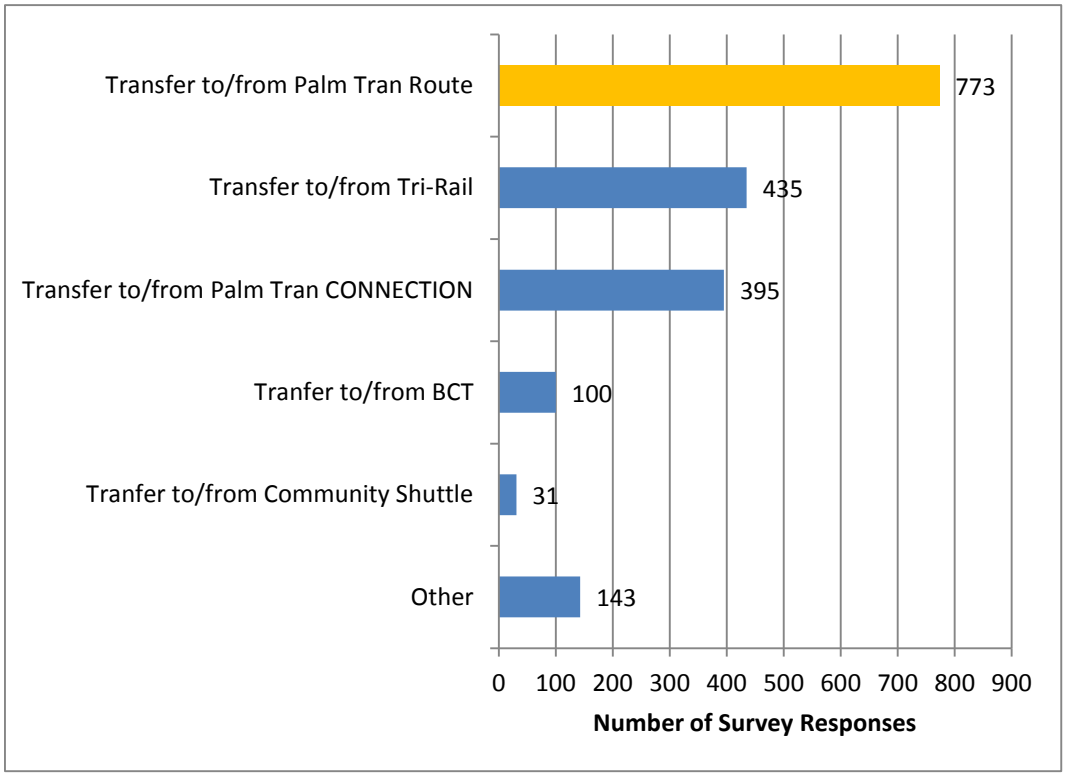


Figure 1-37 Bus Transfers

Question 11: Alternative Trip Methods

Question 11 asked riders to identify how they would make their trip if the bus service did not exist. The answer that received the most responses indicated that 771 riders (27 percent) would walk (as shown in Figure 1-38). However, 737 surveyed riders (25 percent) would ride with someone and 672 surveyed riders (23 percent) would not make their trip at all. This question highlights that 23 percent of Palm Tran riders are dependent on the Palm Tran fixed-route service for transportation.

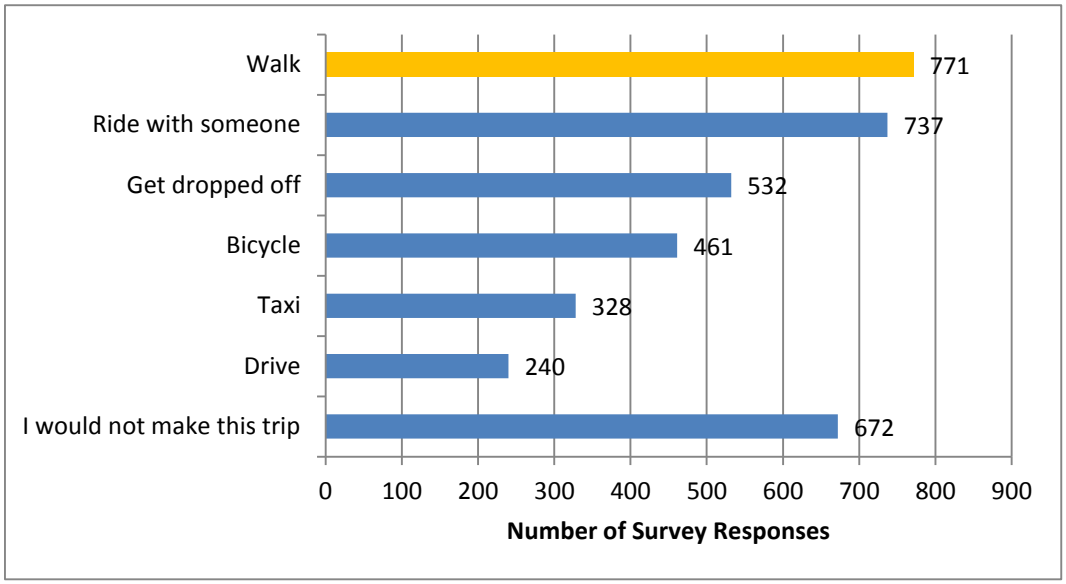


Figure 1-38 Alternative Trip Methods

Satisfaction with Palm Tran

After giving background information on themselves and their trips, Palm Tran riders were asked to provide feedback on their satisfaction with Palm Tran fixed-route service.

Question 12: Overall Satisfaction

Question 12 asked riders how satisfied they are with Palm Tran. Eight-hundred thirty-five surveyed riders (37 percent) are very satisfied with Palm Tran service (as seen in Figure 1-39). Combined with those who are somewhat satisfied, 70 percent of riders indicated a level of satisfaction with Palm Tran services.

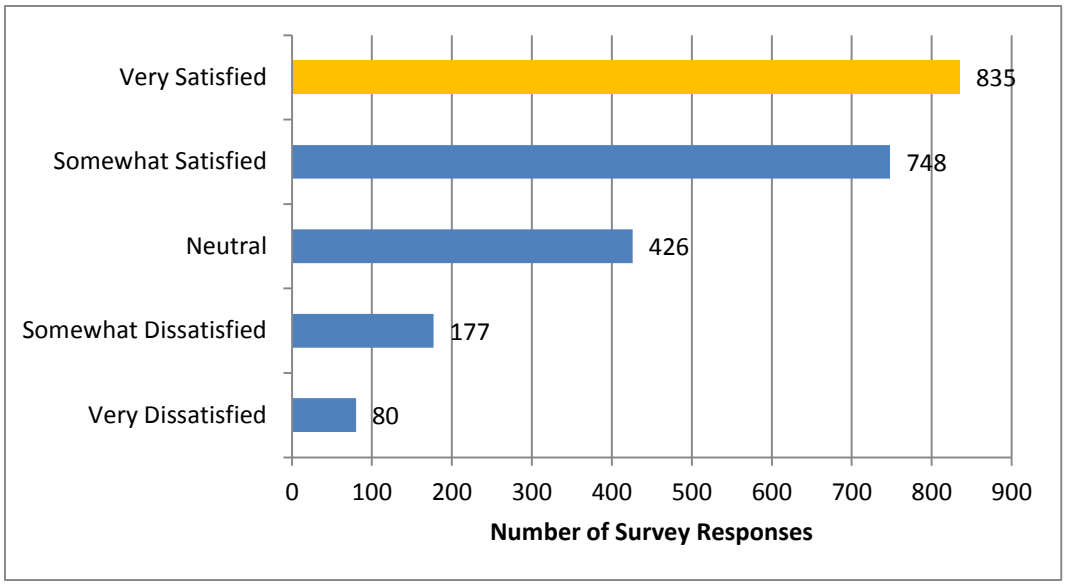


Figure 1-39 Overall Satisfaction with Palm Tran Service

Question 13: Satisfaction with Different Aspects of Service

Question 13 asked riders to identify how satisfied they are with 15 categories having to do with Palm Tran service. Using a one to five scale (with one being very dissatisfied and five being very satisfied), average scores were calculated for each of the categories. As shown in Figure 1-40, the three aspects of Palm Tran service that surveyed riders are most satisfied with are (1) the bus driver's ability to drive, (2) personal safety while riding the bus, and (3) availability of route information. The three aspects of Palm Tran service that surveyed riders are most dissatisfied with are (1) how early in the morning/late in the evening buses run, (2) how often buses run on Saturday, and (3) how often buses run on Sunday. However, on average, the only aspect of Palm Tran service that had a score below neutral (i.e., 3.0) is how often buses run on Sunday.

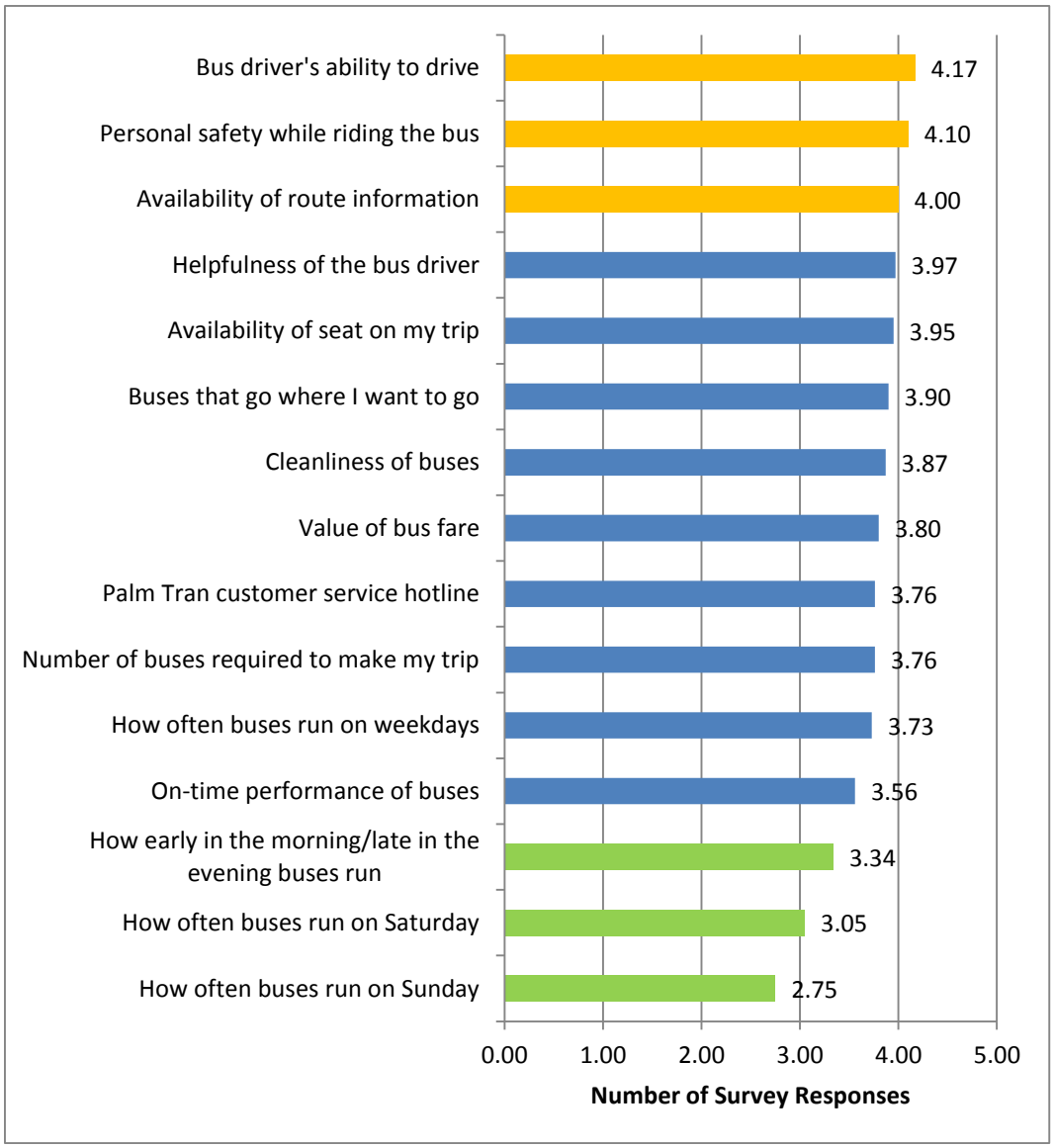
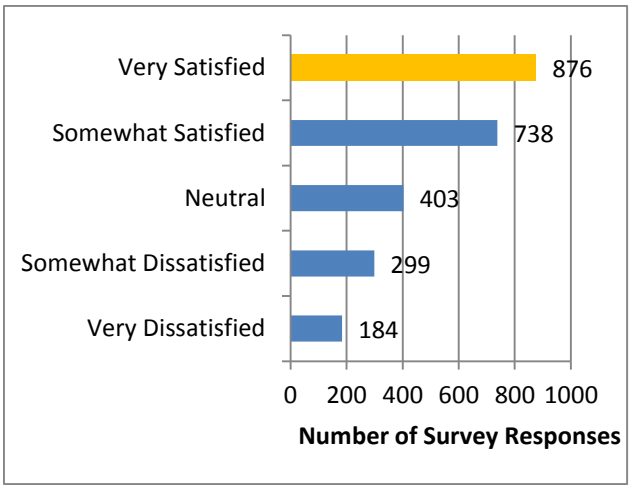
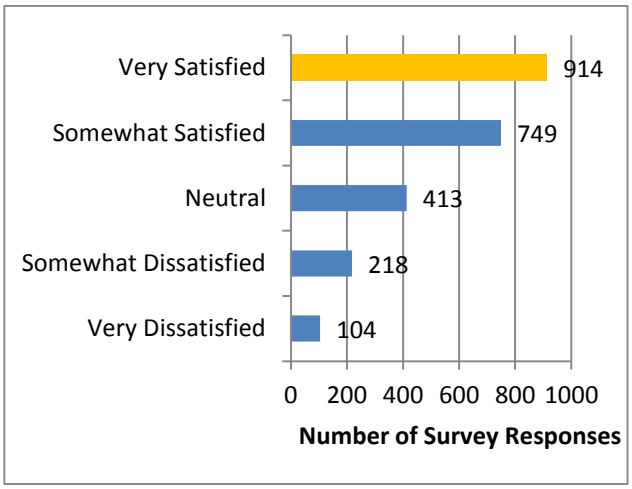


Figure 1-40 Rider Satisfaction Scores

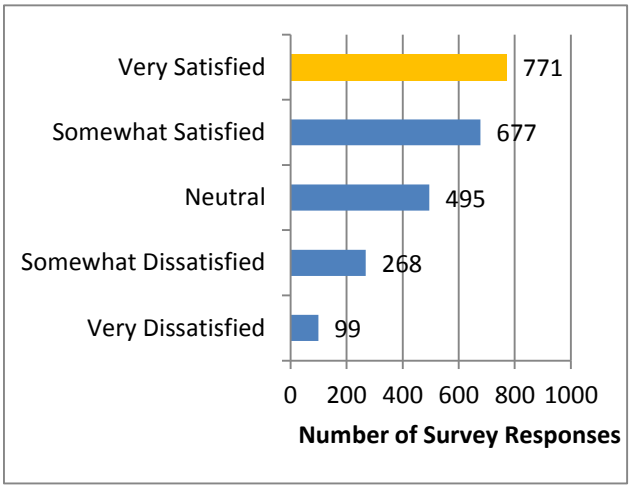
Figures 1-41(A) through 1-41(O) show the responses to the individual categories of Palm Tran service portrayed in Figure 1-40. Surveyed riders indicated that they were very satisfied with the majority of the service categories. The only categories that did not have a majority of very satisfied responses were (1) how often buses run on Saturday (with the highest number of responses being neutral) and (2) how often buses run on Sunday (with the highest number of responses being very dissatisfied).



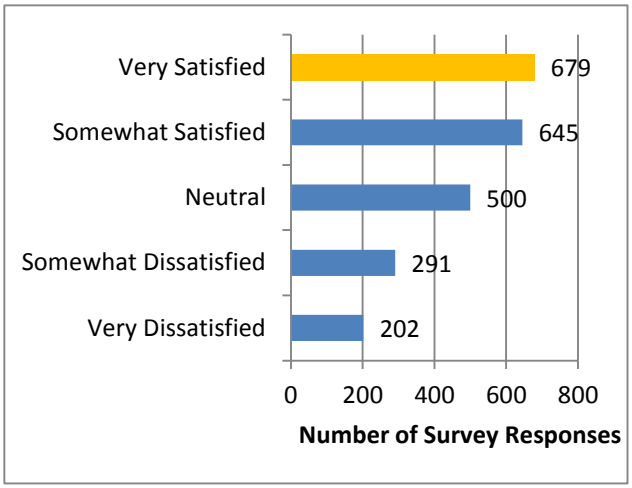
(A) How often buses run on weekdays



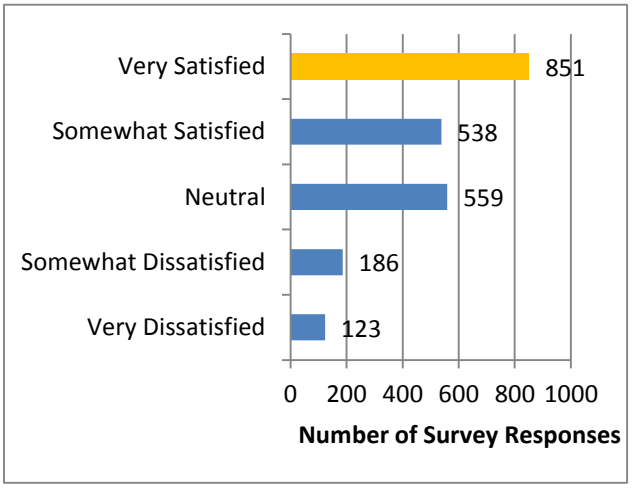
(B) Buses that go where you want to go



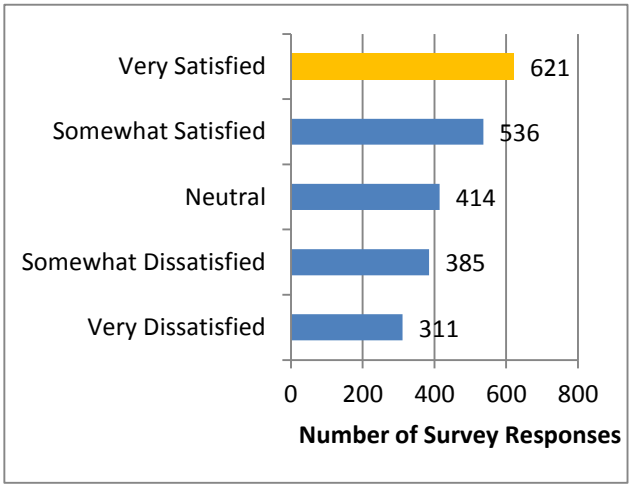
(C) Number of buses required to make trip



(D) On-time performance of buses

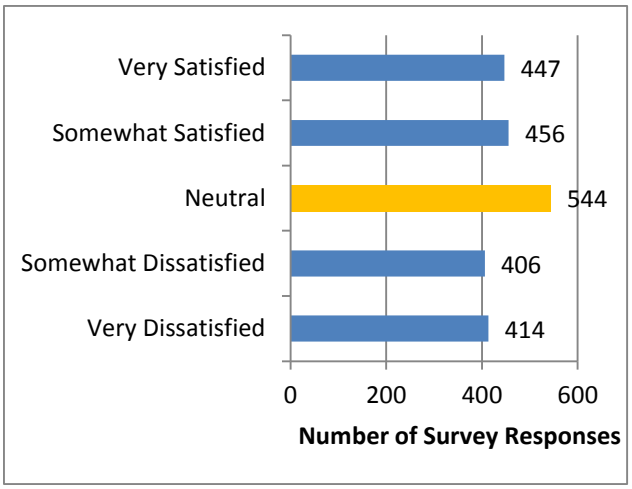


(E) Value of bus fare

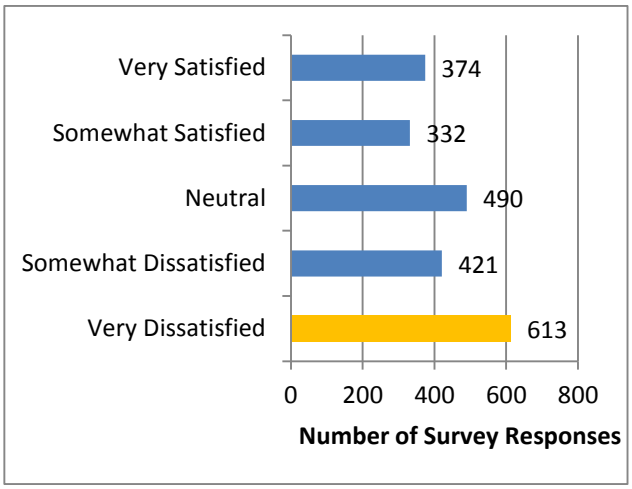


(F) How early in the morning/late in the evening buses run

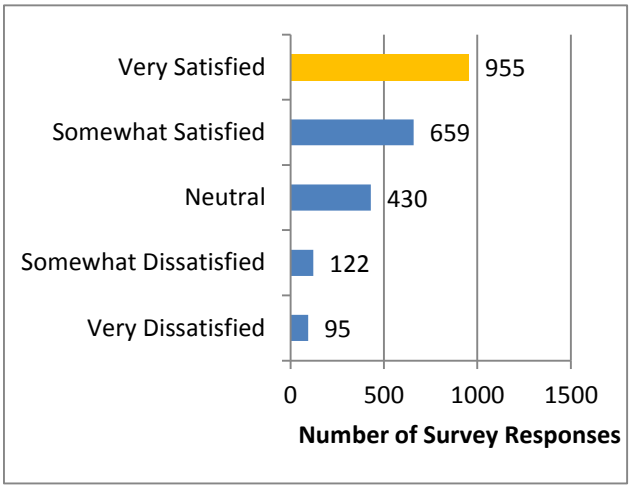
Figure 1-41 Rider Satisfaction with Palm Tran Service



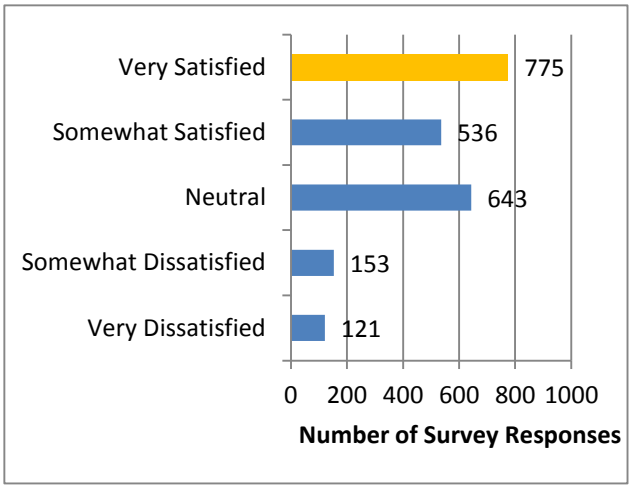
(G) How often buses run on Saturday



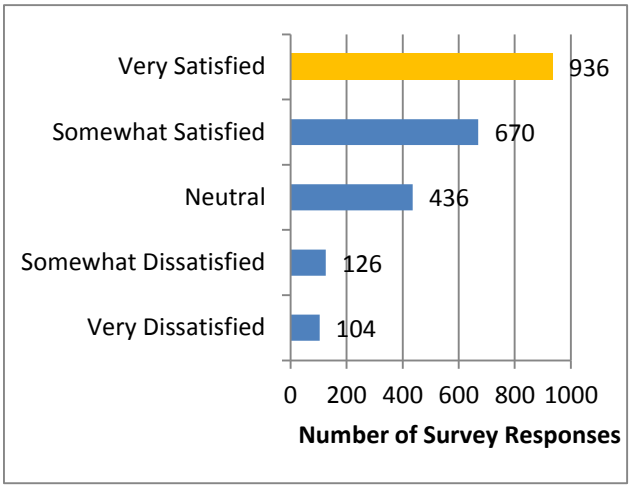
(H) How often buses run on Sunday



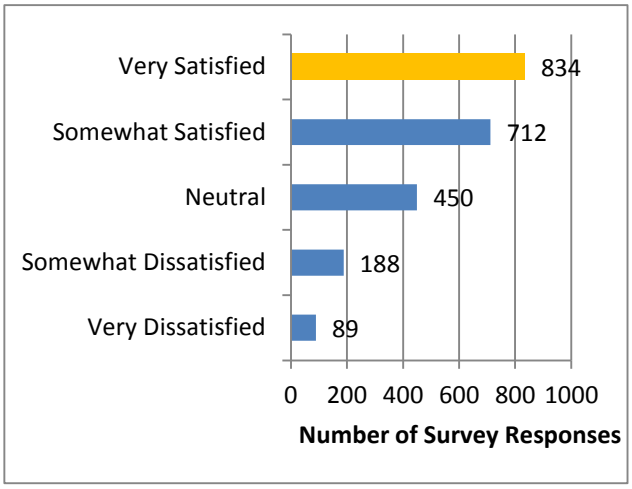
(I) Availability of route and schedule information



(J) Palm Tran customer service hotline

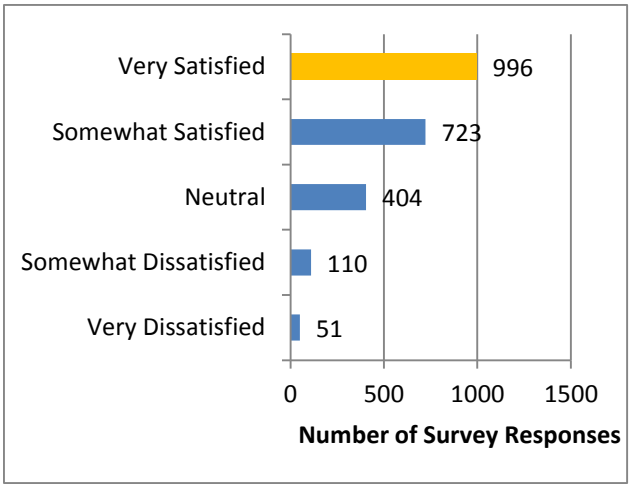


(K) Helpfulness of the bus driver

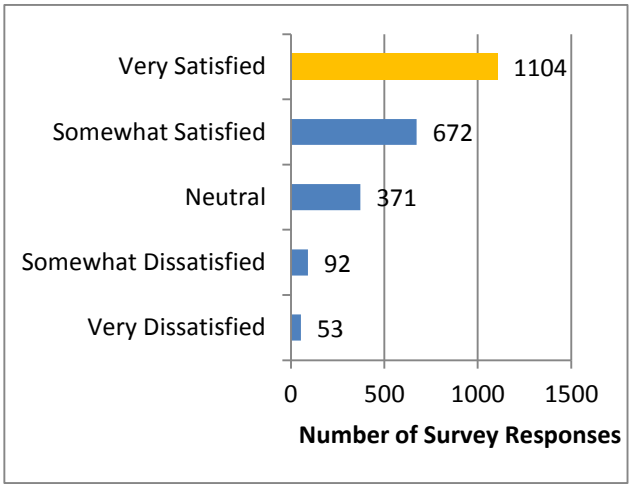


(L) Cleanliness of the buses

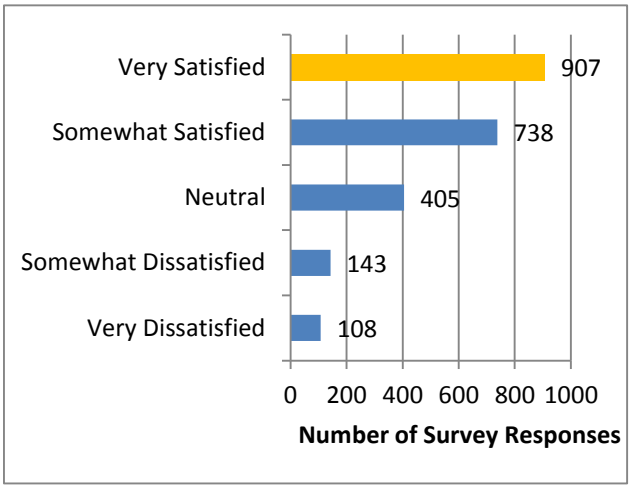
Figure 1-41 (continued) Rider Satisfaction with Palm Tran Service



(M) Personal safety while riding the bus



(N) Bus driver's ability to drive



(O) Availability of seats on your trip

Figure 1-41 (continued) Rider Satisfaction with Palm Tran Service

Question 14: Top Three Palm Tran Improvements

Question 14 asked riders to identify the three areas, using the service categories from Question 13, that they would most like to see improved. As shown in Figure 1-42, the top three improvements identified by surveyed riders are (1) how often buses run on weekdays, (2) how often buses run on Sunday, and (3) how often buses run on Saturday.

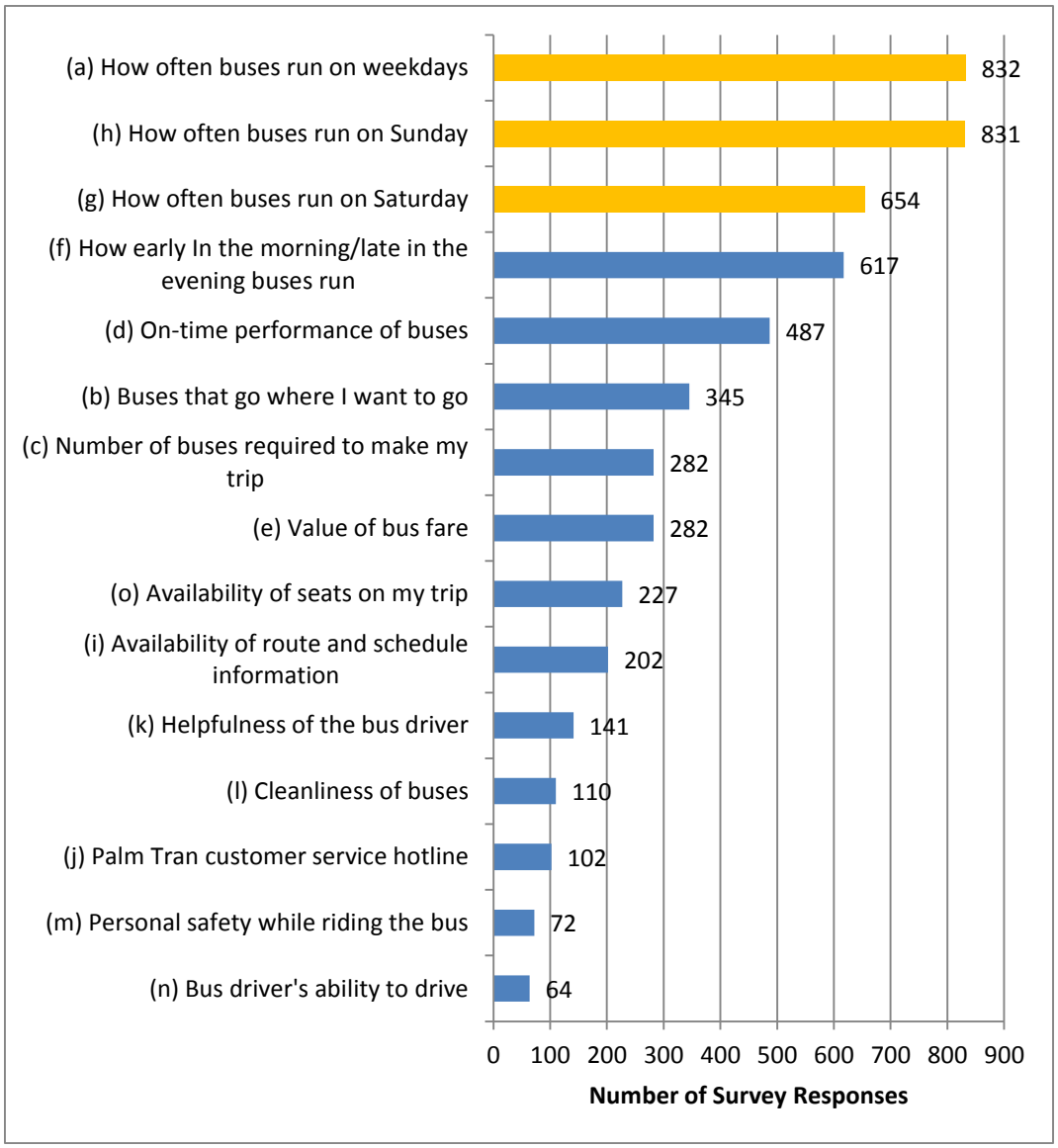


Figure 1-42 Palm Tran Improvements

Question 15: Ability to Arrive at the Bus Stop

Question 15 asked riders to identify obstacles that affect their ability to get to the bus stop. The majority of respondents (1,883 riders or 76 percent) answered that none of the listed obstacles affect their ability to arrive at the bus stop (as shown in Figure 1-43). The obstacle that most affects surveyed riders' ability to arrive at the bus stop is lack of sidewalks.

Question 16: Palm Tran Information Resources

Question 16 asked riders to identify how they get information about Palm Tran. According to respondents, bus drivers are the resource that is utilized most often by riders. Eight-hundred fifty-seven surveyed riders (36 percent) responded that they use bus drivers to get information about Palm Tran (as shown in Figure 1-44).

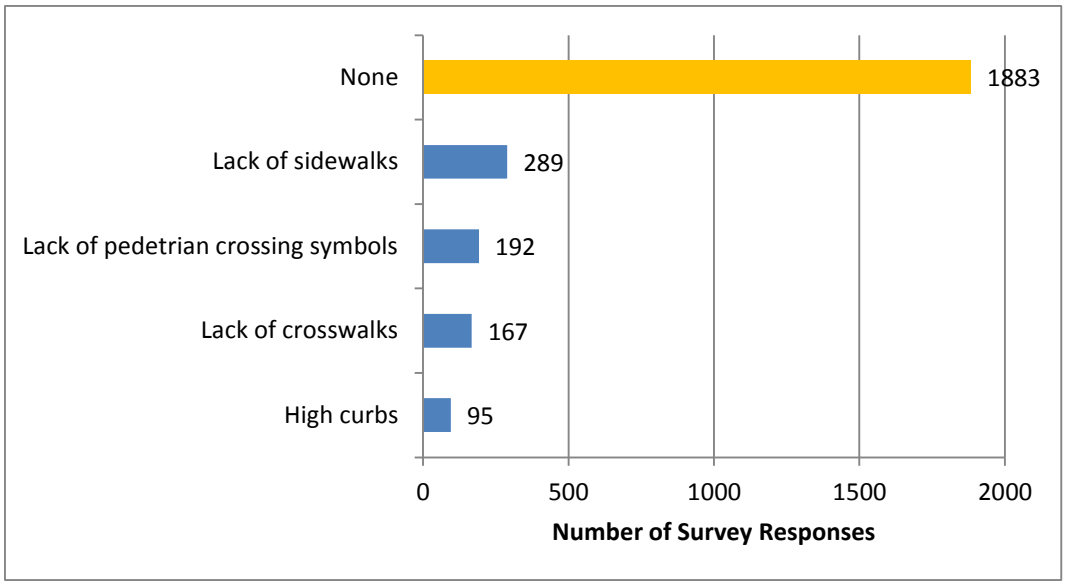


Figure 1-43 Obstacles Affecting Ability to Reach Bus Stop

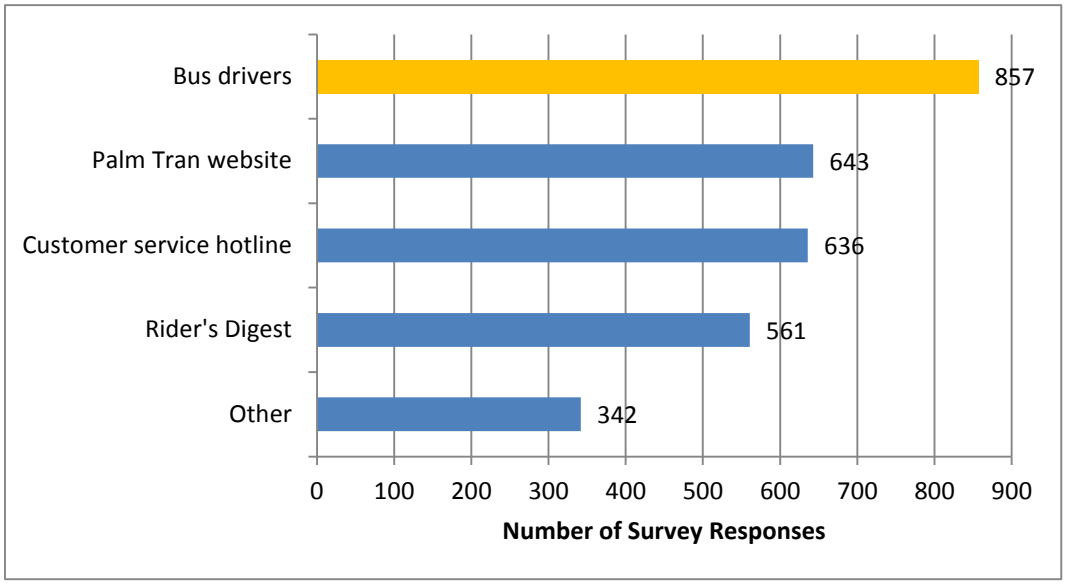


Figure 1-44 Palm Tran Information Resources

Supplemental Fixed-Route Survey

An additional on-board survey was completed in western Palm Beach County to supplement the information and findings from the system-wide fixed-route survey. Similar to the fixed-route rider survey, the supplemental on-board surveys were distributed to riders as they boarded buses and were collected as riders alighted. A total of 86 surveys were collected over eight hours. Most of the surveys were collected during off-peak hours (middle of the morning or middle of the afternoon), capturing many respondents who had atypical work hours or used transit for purposes other than peak hour commutes to work.

The questions in the supplemental survey had some significant differences from the system-wide survey results. These differences are described in the following sub-sections.

Question 3: Fare Category

Question 3 asked respondents to indicate which fare category applied to them. Figure 1-45 indicates that the adult fare category was the primary fare category for both surveys. However, the supplemental survey had a significantly higher percentage of respondents in the student fare category, approximately 18 percent more than the system-wide survey.

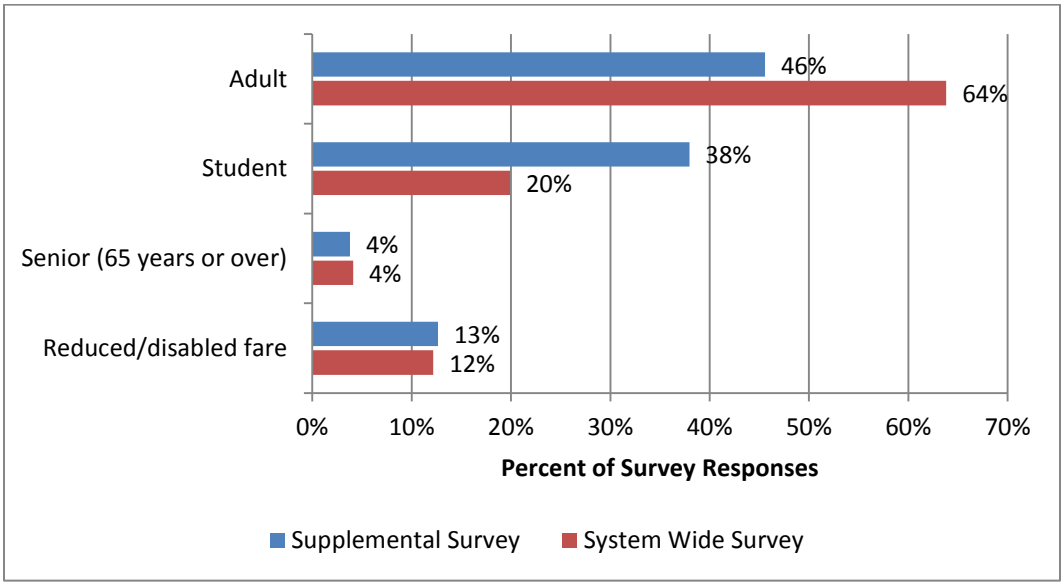


Figure 1-45 Comparison of Fare Category

Question 10: Number of Buses the Surveyed Trip Required

Question 10 asked respondents to indicate whether their trip required one or more buses. Figure 1-46 shows the net percent of respondents who required more than one bus to make their trip (regardless of which transit service completed the connection) compared to the percent of respondents who did not require more than one bus to make their trip. Figure 1-46 indicates that seventy (70) percent of the respondents of the supplemental survey required a second bus to make their trip, while only fifty-three (53) percent of the respondents of the system-wide survey required more than one bus to make their trip.

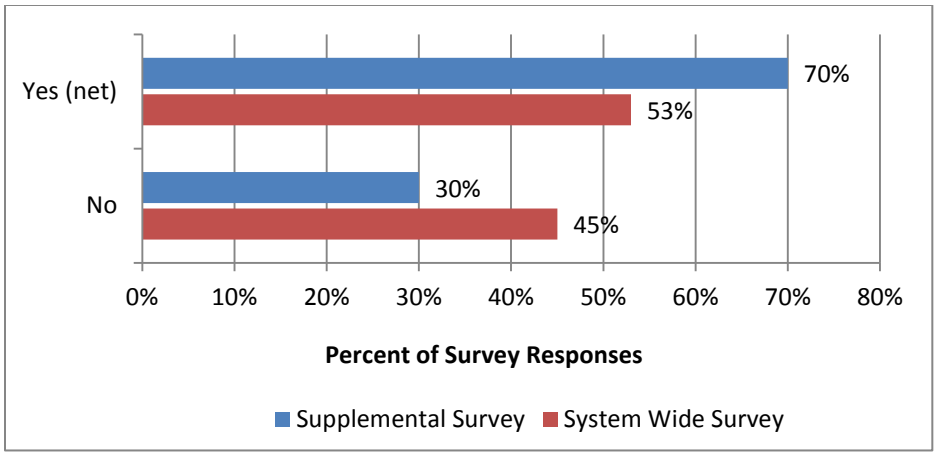


Figure 1-46 Comparison of Respondents Who Required More Than One Bus for Their Trip

Question 13: Satisfaction with Different Aspects of Service

The portion of the survey that required respondents to indicate the top three areas of improvement for Palm reveals differences between the system-wide survey and the supplemental survey. As indicated in Figure 1-47, how often buses run on the weekdays and Sundays was in the top three priorities for both sets of surveys. However, while the system-wide survey prioritized improvement in how early in the morning/late in the evening the buses run, more frequent service on Saturday was considered a priority in the supplemental survey.

Figure 1-47 also shows that, while two out of the top three priorities are similar, the percent difference between the system-wide and supplemental survey was significant in a number of other areas of improvement. For instance, 5 percent more respondents in the supplemental survey believed that personal safety while riding the bus could be improved, 4 percent more respondents in the supplemental survey felt the value of the bus fare could be improved, and 3 percent more respondents in the supplemental survey indicated that route and schedule information availability could be improved. Riders surveyed for the supplemental survey indicated less need for on-time performance improvements than did riders surveyed for the system-wide survey.

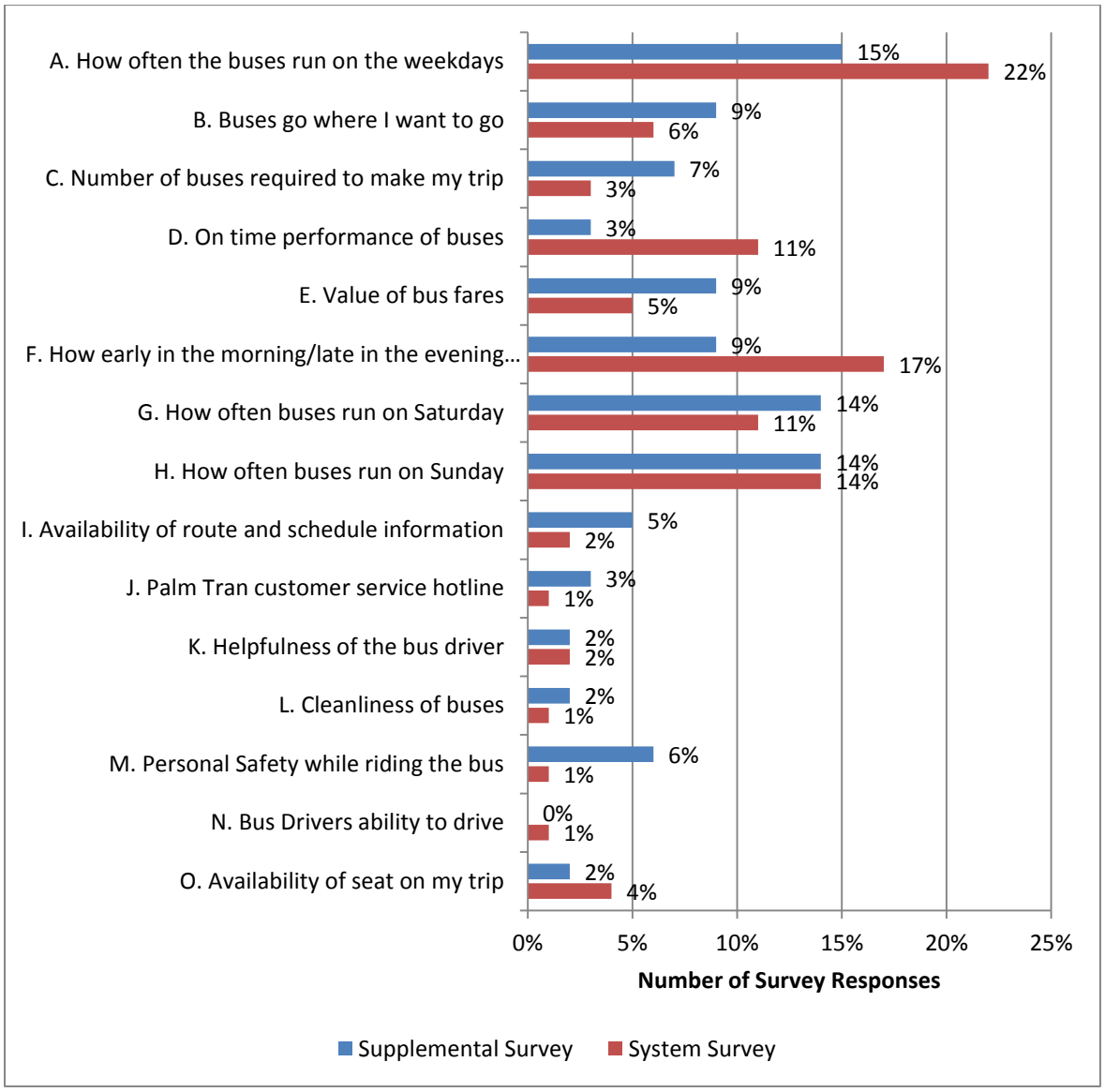


Figure 1-47 Comparison of Priority of Service Improvements

Question 20: Working Vehicles Available

Question 20 asked respondents how many working vehicles were available in their household. Figure 1-48 indicates that 44 percent of respondents to the system-wide survey did not have a working vehicle in their household, while 29 percent of respondents to the supplemental survey did not have a working vehicle in their household. The figure also indicates that 15 percent of respondents had three or more working vehicles in their household in the supplemental survey while the system-wide survey only showed six percent of the respondents with three or more working vehicles in their household.

A possible explanation for these discrepancies is that, due to the off-peak time period during which much of the supplemental survey was conducted, the surveyed riders may be dependents in a car-owning household but do not use the car themselves. This hypothesis is supported by other

statistics from the supplemental survey. For instance, 14 percent of the supplemental survey respondents were under the age of 18 compared to the six percent in the system-wide survey. Similarly, 32 percent of the supplemental survey respondents were between the ages of 18 and 24, while only 22 percent of the system wide survey fell into this bracket. It is reasonable to consider that, if someone commutes to work in the peak hour by transit it may be because their household does not own a car. An off-peak traveller, however, may live in a household that owns a car but it is prioritized for another member of the household (i.e., a parent travelling to work).

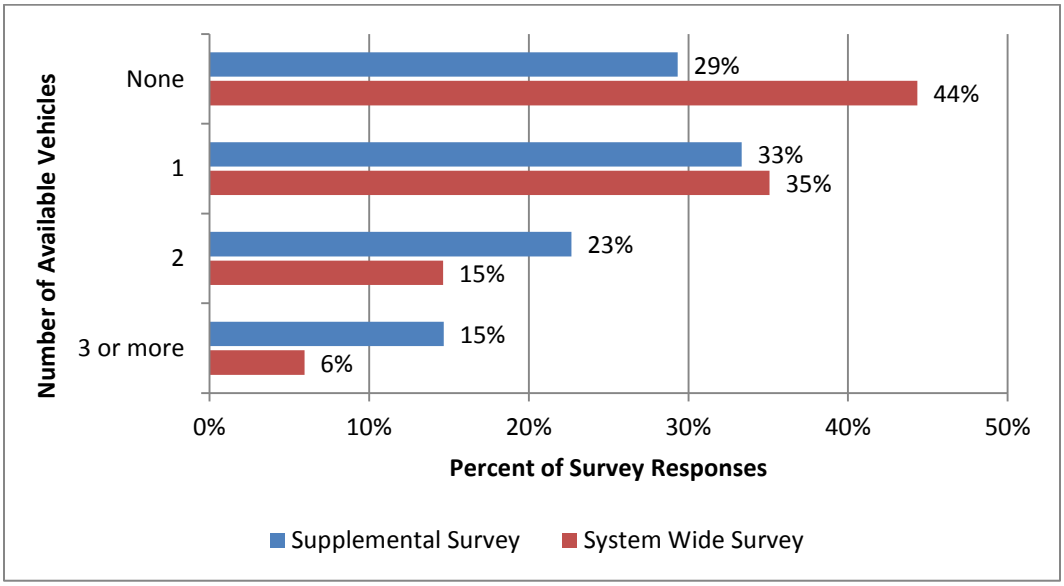


Figure 1-48 Comparison of Available Vehicles in the Respondent's Household

Question 25: Household Income

Figure 1-49 compares the percent of respondents of each income level for both surveys. The most significant difference in the table is the difference between the two surveys for the income bracket of $10,000 or less. The supplemental survey respondents showed a higher percentage of riders who fall into this bracket.

Question 26: Rider Race

Figure 1-50 shows the difference in the race respondents identified between the system-wide and supplemental survey. The figure shows that, while both surveys indicated the greatest percent of respondents were African-American, the supplemental survey had a significantly higher percentage of respondents identifying themselves as African-American.

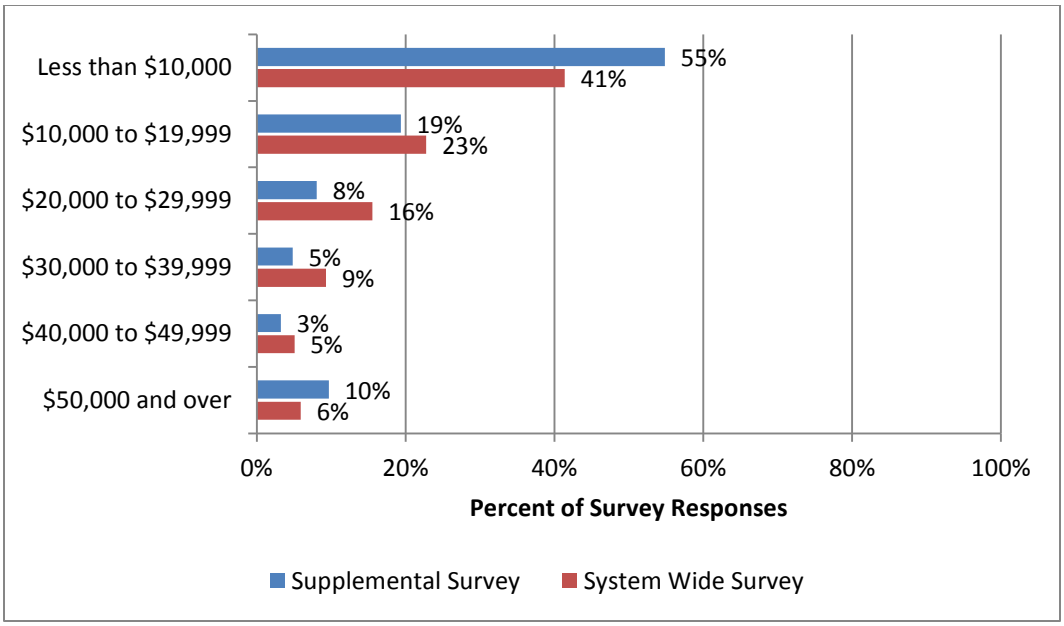


Figure 1-49 Comparison of Household Income

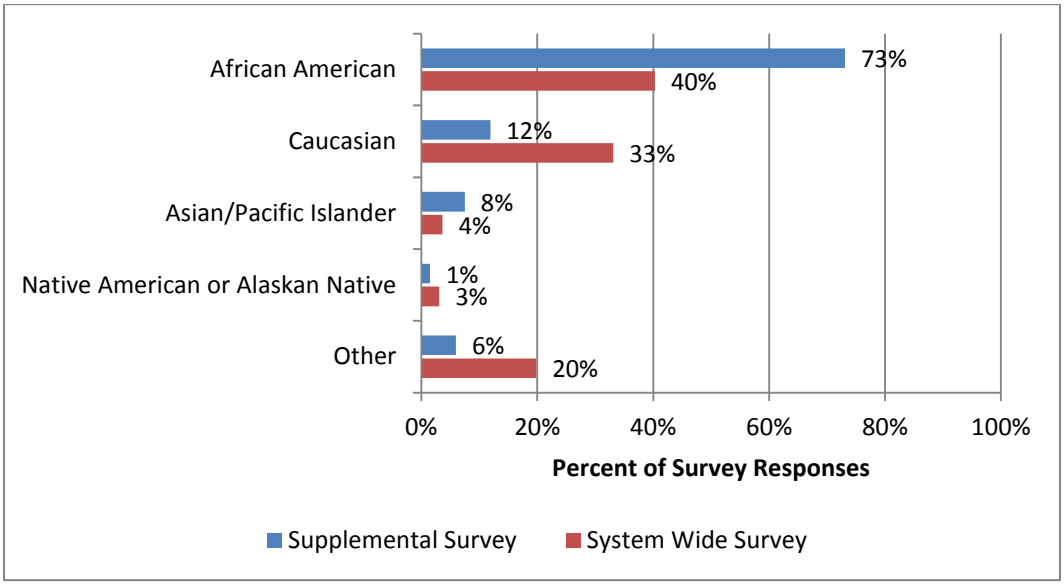


Figure 1-50 Comparison of Respondent Race

Conclusions of Fixed-Route Rider Surveys

Based on the results of the fixed-route rider surveys, there are four main areas that riders would most like to see improved:

- How often buses run on Saturday
- How often buses run on Sunday
- How often buses run on weekdays

- How early in the morning/late in the evening buses run

Paratransit Rider Surveys

Paratransit rider surveys were conducted in order to obtain information from CONNECTION users about rider perceptions of existing services and potential improvements that could be made to CONNECTION.

Methodology

The paratransit rider survey was mailed to riders in the CONNECTION database in June 2011. Two hundred sixty-four (264) surveys were returned by the deadline and are included in this analysis. The next sub-sections summarize the results of the paratransit rider survey. The 19-question survey instrument is available in Appendix C.

Riding Habits

The survey asked questions about how riders typically use CONNECTION.

Question 1: Rider Experience with CONNECTION

Question 1 asked riders how long they have been riding CONNECTION. The results are presented in Figure 1-51. One hundred four (104) surveyed riders (40 percent) have been riding CONNECTION for more than five years. The majority of surveyed riders are experienced riders.

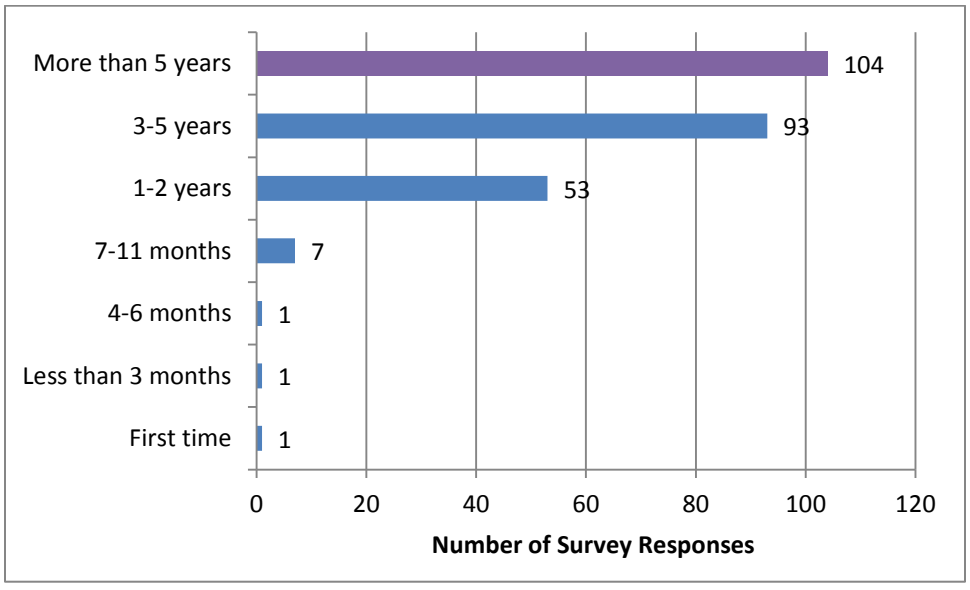


Figure 1-51 Rider Experience with CONNECTION

Question 2: Frequency of CONNECTION Use

Question 2 asked riders how often they use CONNECTION. The answer that received the most responses was four to five days per week, with 132 riders (52 percent) responding (as seen in Figure 1-52). The majority of surveyed riders indicated that they ride Palm Tran buses more than two days per week.

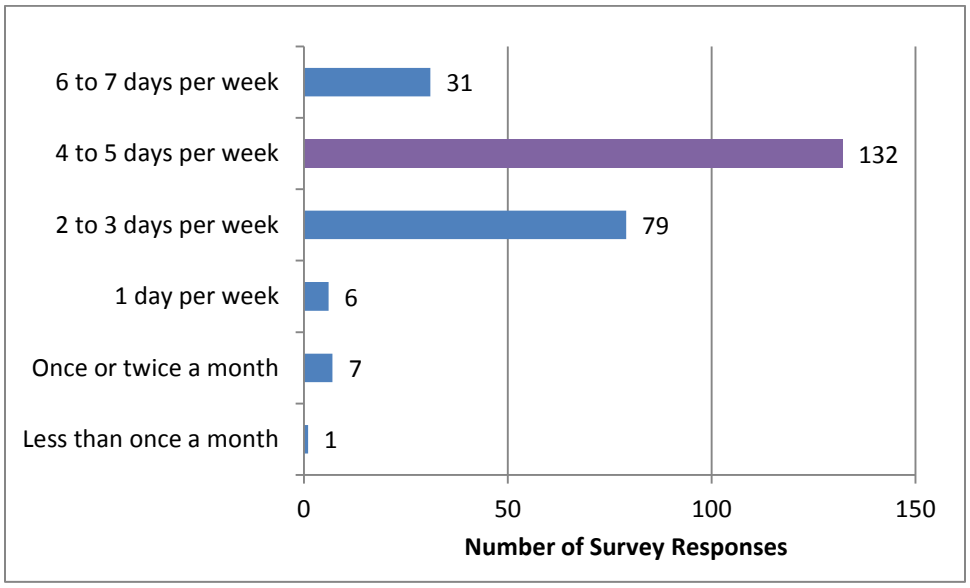


Figure 1-52 Frequency of CONNECTION Use

About Your Usual Trip

The surveys also collected data about the typical trip that the rider makes using CONNECTION.

Question 3: Type of Fare Usually Paid

Question 3 asked riders what type of fare they usually pay. Most surveyed riders (153 riders or 60 percent) responded that they pay the cash fare (as shown in Figure 1-53).

Question 4: Getting to CONNECTION

Question 4 asked riders how they usually access CONNECTION. The answer that received the most responses (245 riders or 94 percent) indicated that surveyed riders are picked up at their home by CONNECTION (as shown in Figure 1-54).

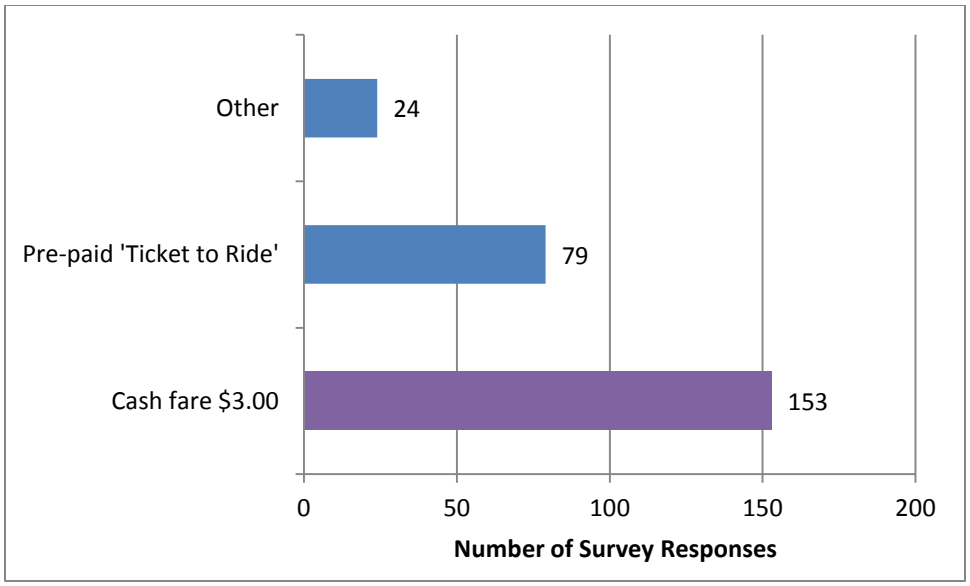


Figure 1-53 Fare Usually Paid

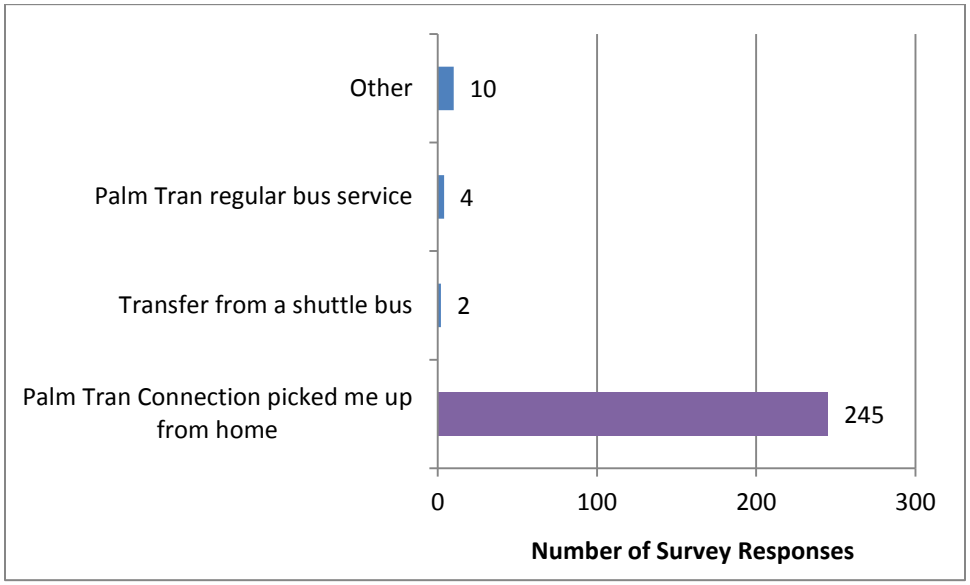


Figure 1-54 Getting to CONNECTION

Question 5: Traveling from CONNECTION to Your Destination

Question 5 asked riders how they get to their destinations after departing CONNECTION. Two hundred fifty (250) surveyed riders (97 percent) indicated that CONNECTION drops them off at their destination (as shown in Figure 1-55).

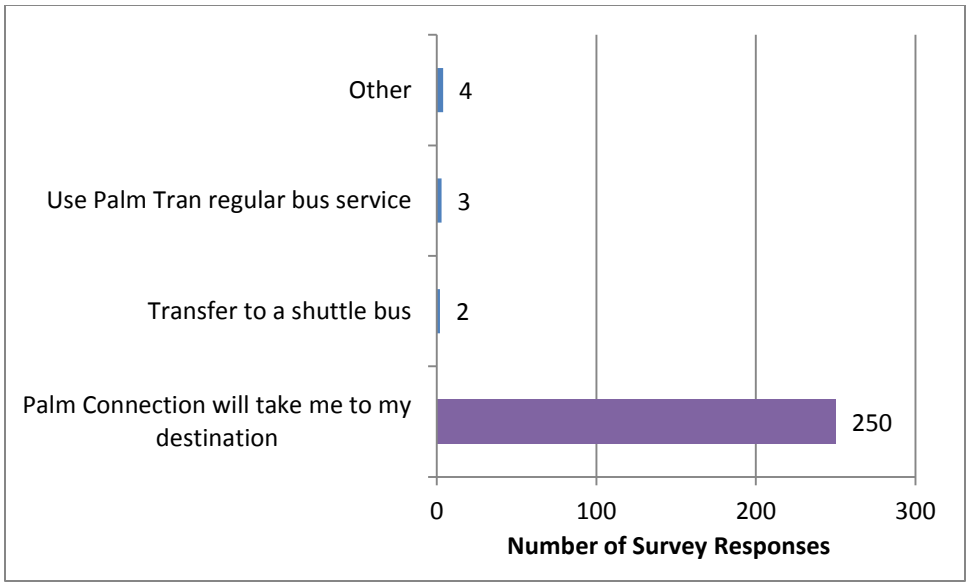


Figure 1-55 Traveling from CONNECTION

Question 6: Primary Purpose of CONNECTION Trips

Question 6 asked riders to identify the primary purpose of their CONNECTION trips. Most people ride CONNECTION to get to work or to a medical appointment (as shown in Figure 1-56).

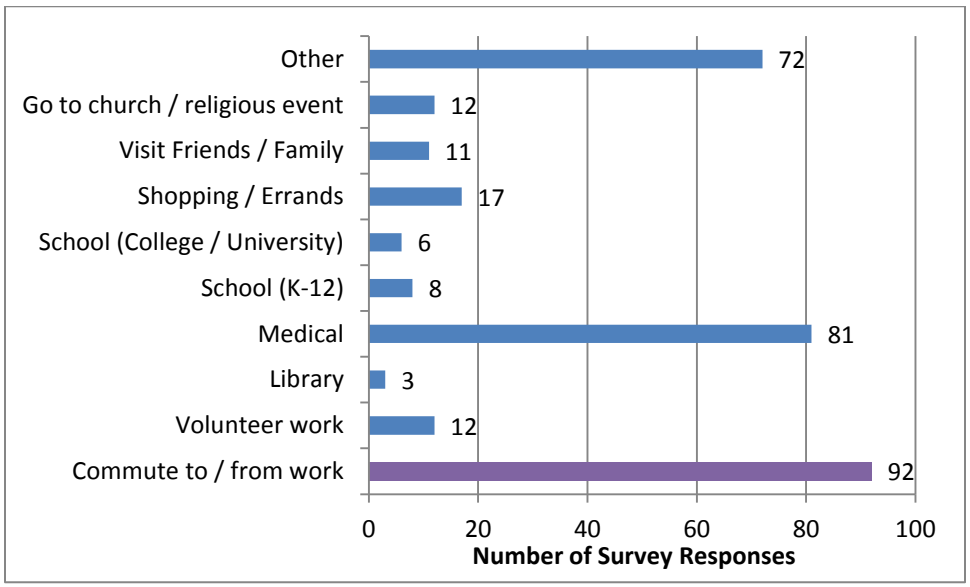


Figure 1-56 Primary Purpose of CONNECTION Trips

Question 7: Alternative Trip Methods

Question 7 asked riders to identify how they would make their trip if CONNECTION did not exist. The answer that received the most responses indicated that 124 riders (48 percent) would not make the trip (as shown in Figure 1-57). Seventy-nine (79) surveyed riders (31 percent) would ride with someone.

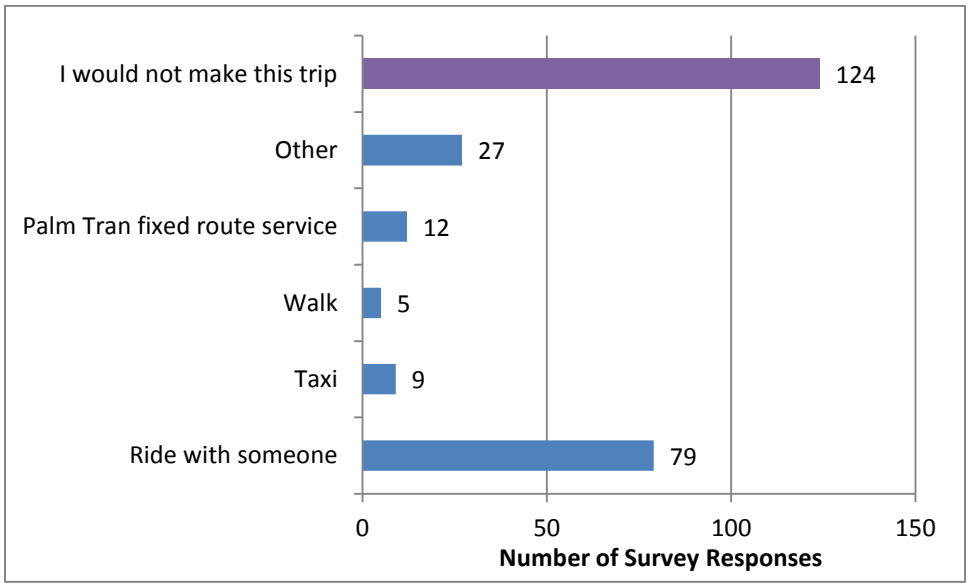


Figure 1-57 Alternative Trip Methods

Question 8: Barriers to Fixed-Route Bus Access

Question 8 asked riders about factors that prevent them from using fixed-route bus service. The answer that received the most responses was lack of sidewalks (37 percent) (as shown in Figure 1-58).

Question 9: CONNECTION Information Resources

Question 9 asked riders to identify how they get information about CONNECTION. According to respondents, the call center is the most common means of getting information about CONNECTION (as shown in Figure 1-59).

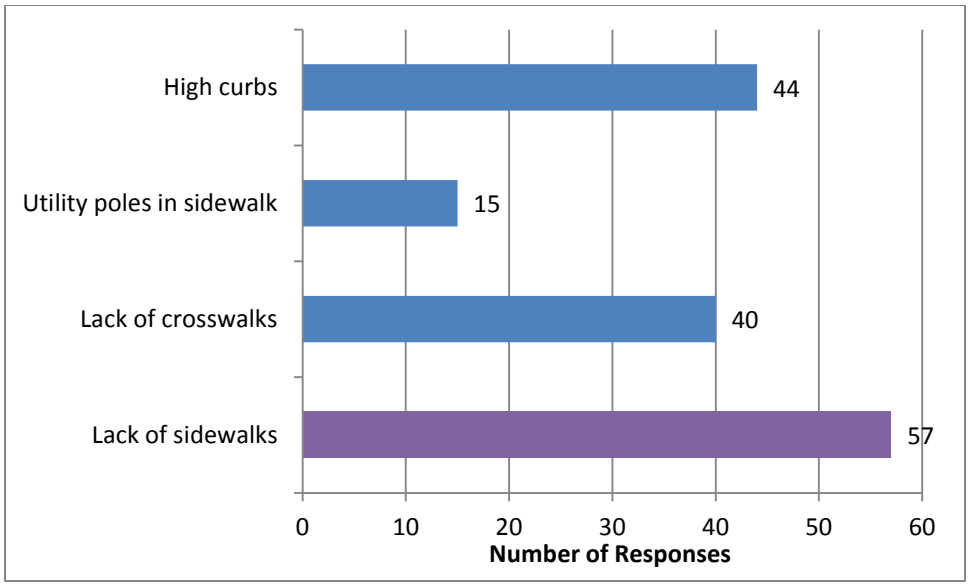


Figure 1-58 Barriers to Fixed-Route Bus Access

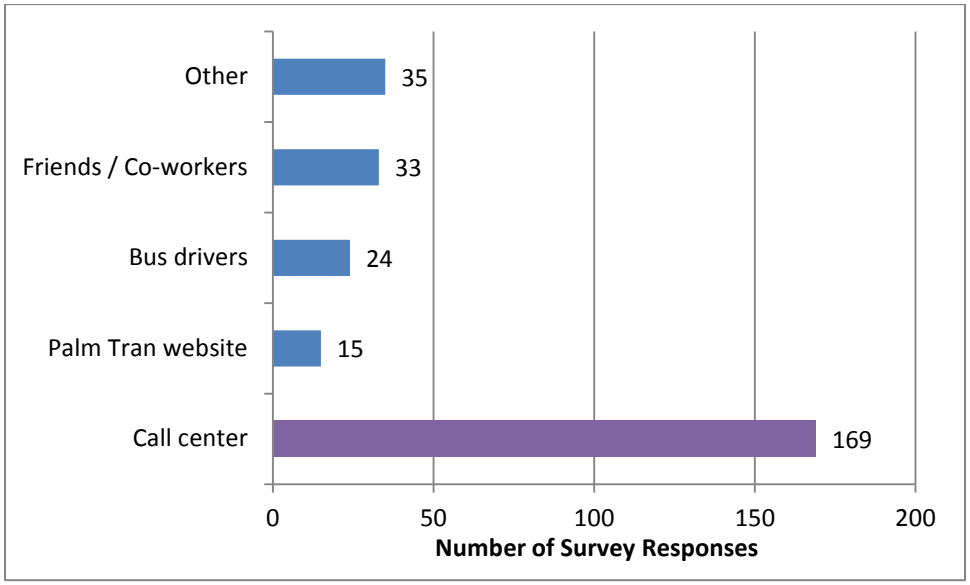


Figure 1-59 CONNECTION Information Resources

Satisfaction with CONNECTION

Palm Tran riders were asked to provide feedback on their satisfaction with CONNECTION.

Question 10: Overall Satisfaction

Question 10 asked riders how satisfied overall they are with CONNECTION. One hundred forty-seven surveyed riders (56 percent) are very satisfied with Palm Tran service (as seen in Figure 1-60). Combined with those who are somewhat satisfied, 79 percent of riders indicated satisfaction with Palm Tran services.

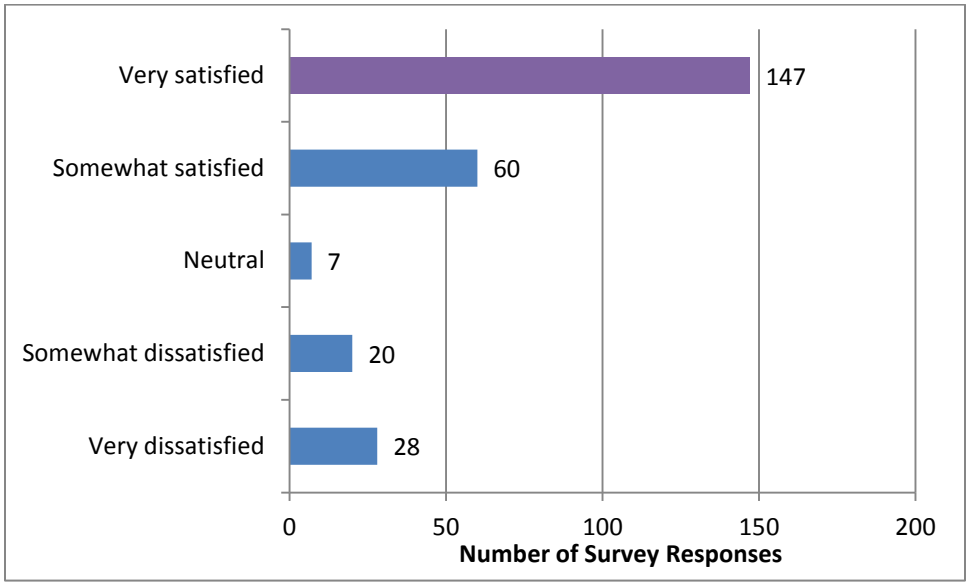


Figure 1-60 Overall Satisfaction with CONNECTION

Question 18: Satisfaction with Different Aspects of Service

Question 18 asked riders to identify how satisfied they are with 12 categories having to do with CONNECTION. Using a one to five scale (with one being very dissatisfied and five being very satisfied), average scores were calculated for each of the categories. As shown in Figure 1-61, the three categories of Palm Tran service that surveyed riders are most satisfied with are (1) ability to get where I want to go, (2) personal safety while riding the bus, and (3) helpfulness of the bus driver. However, all categories have an average score that indicates some level of rider satisfaction (i.e., no average scores are less than 3.0).

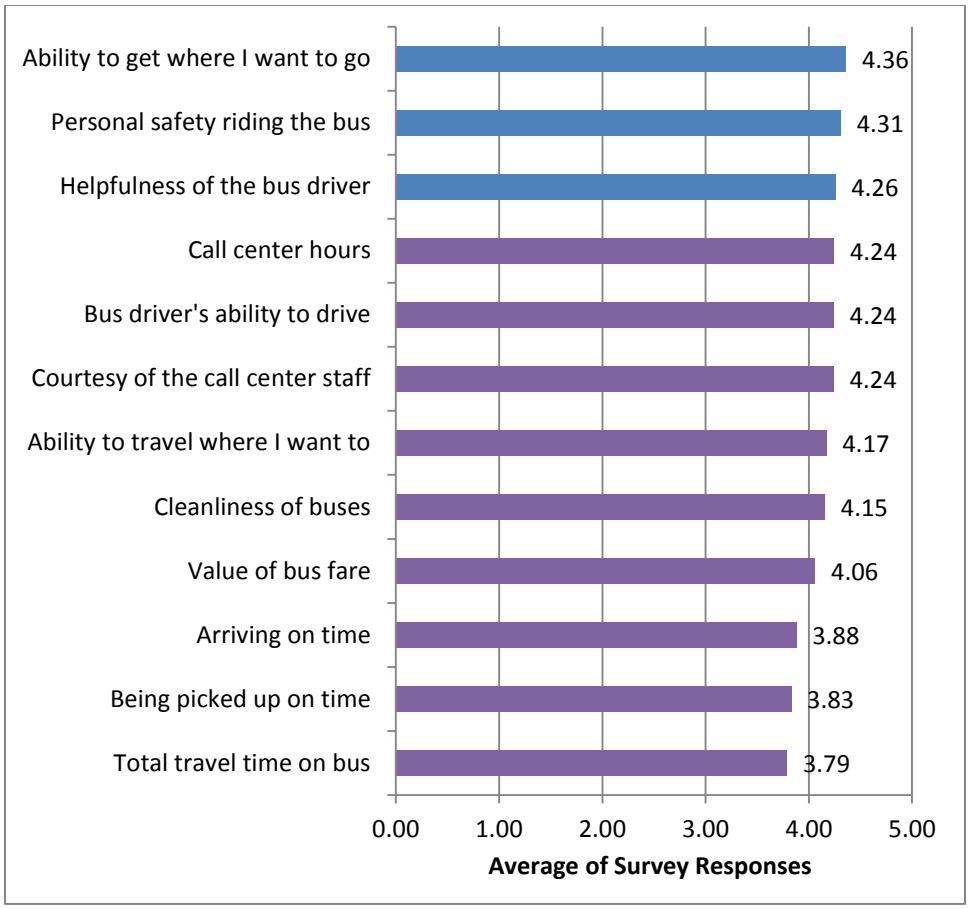
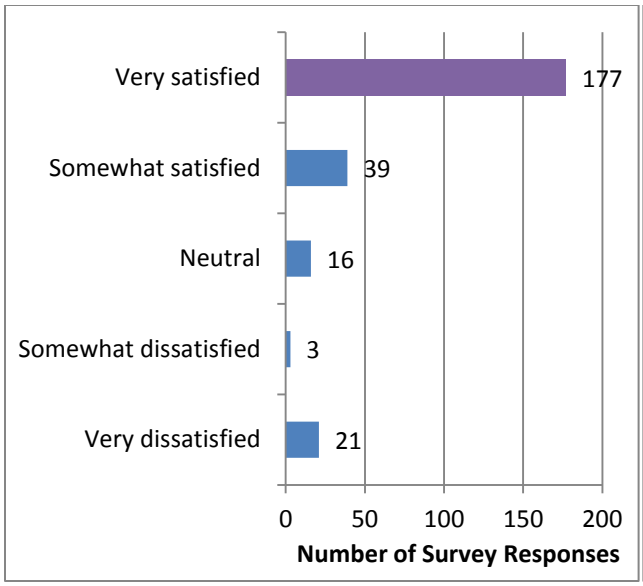
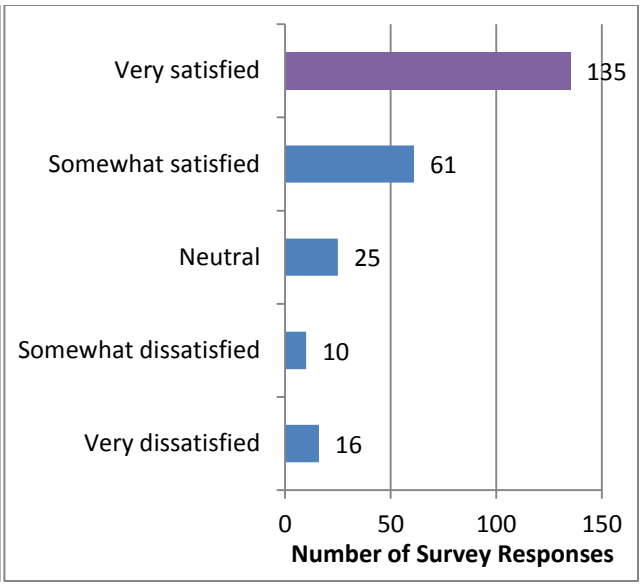


Figure 1-61 Average Rider Satisfaction Scores

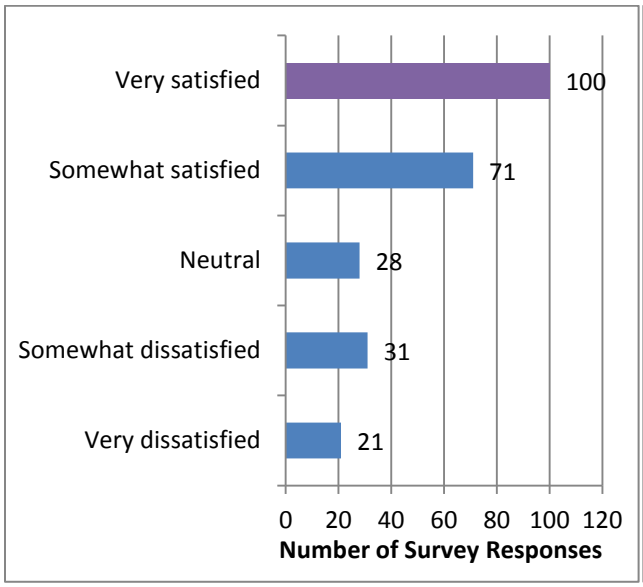
Figures 1-62(A) through 1-62(L) show the responses to the individual categories of Palm Tran service portrayed in Figure 1-61.



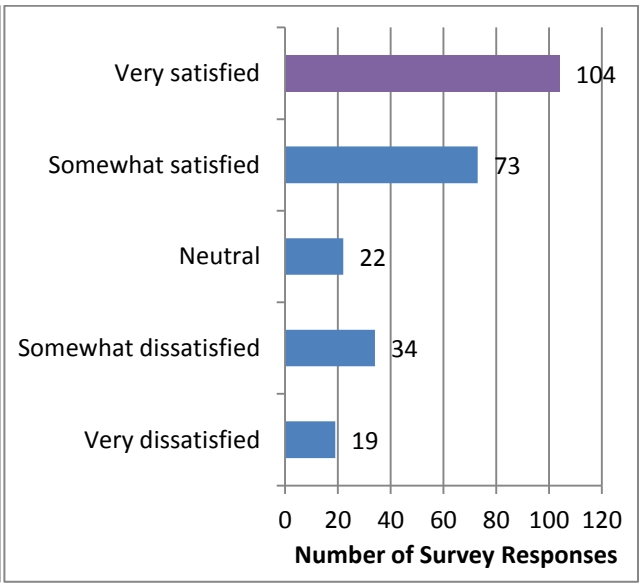
(A) Ability to get where I want to go



(B) Ability to travel where I want to

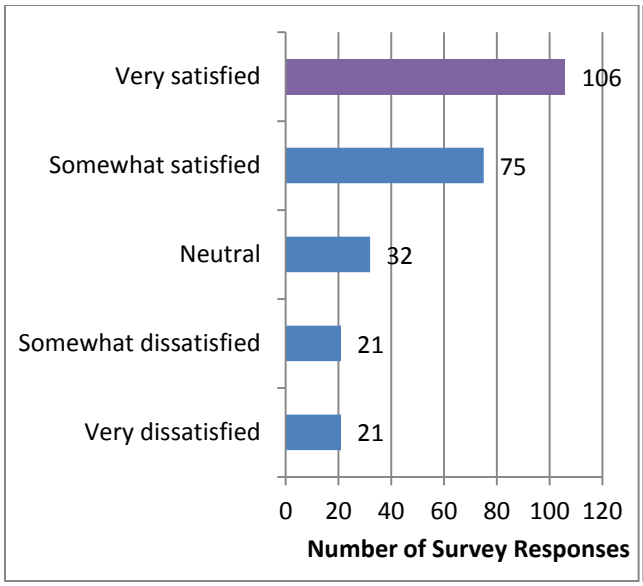


(C) Total travel time on bus

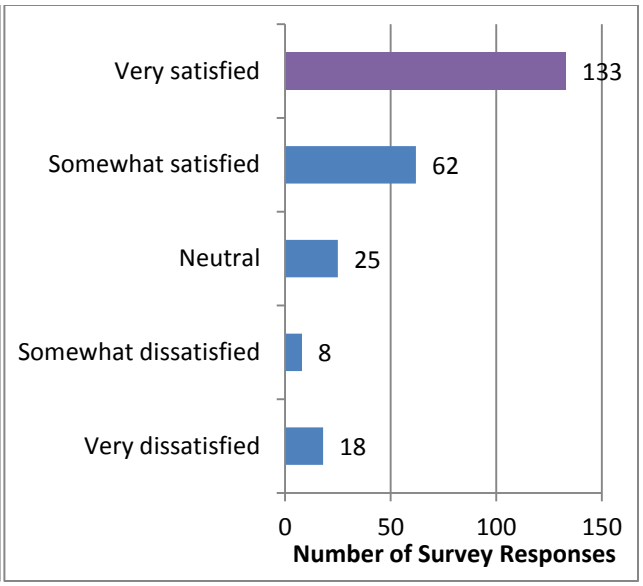


(D) Being picked up on time

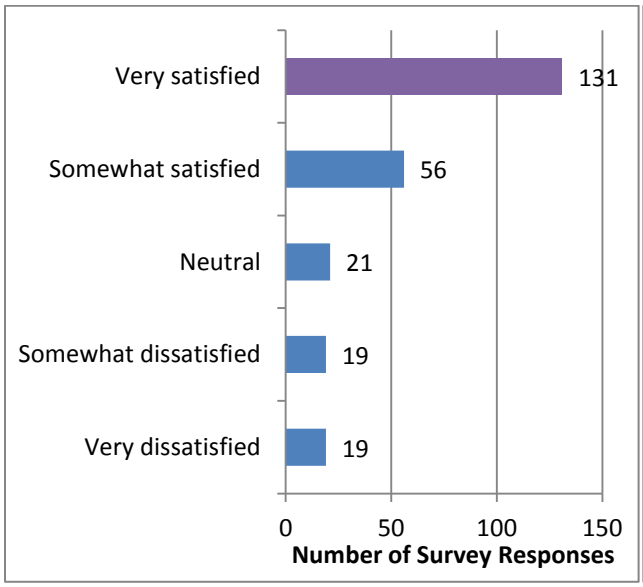
Figure 1-62 Rider Satisfaction with CONNECTION



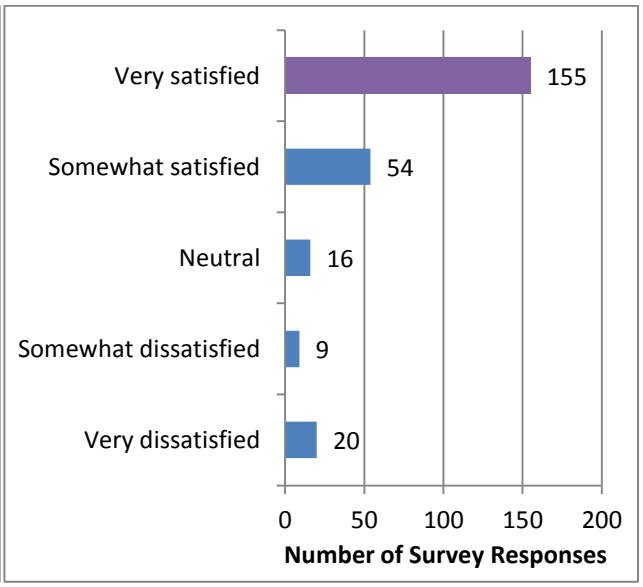
(E) Arriving on time



(F) Cleanliness of buses

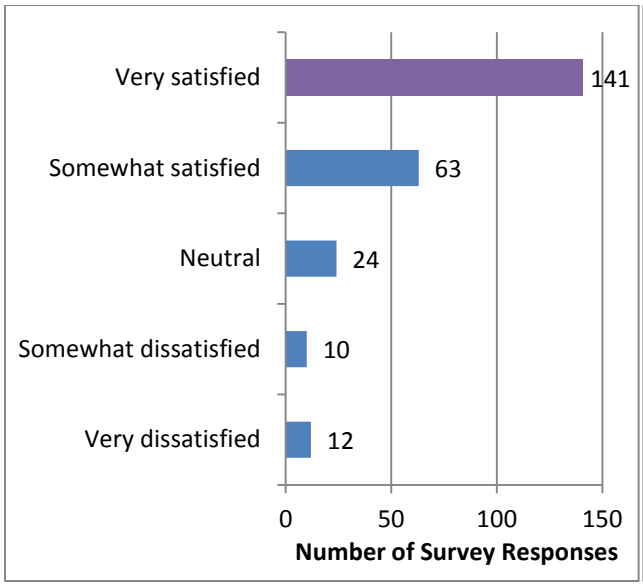


(G) Value of bus fare

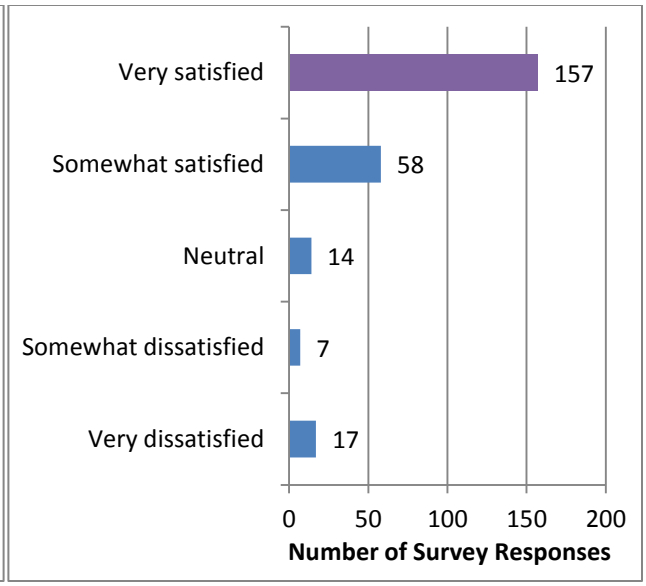


(H) Courtesy of the call center staff

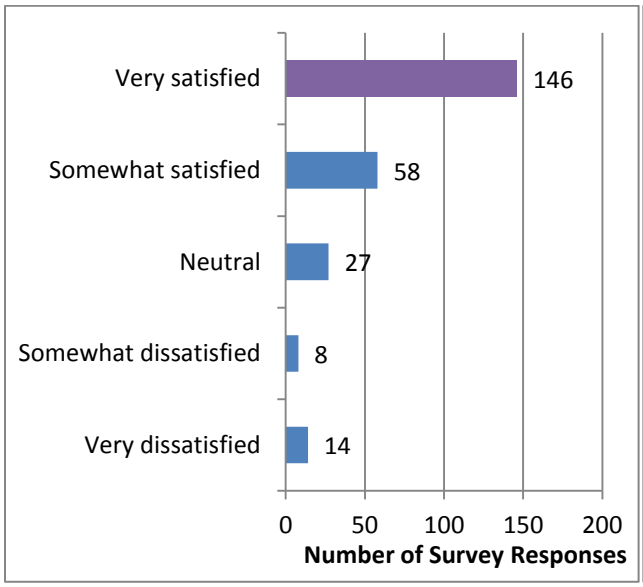
Figure 1-64 (continued) Rider Satisfaction with CONNECTION



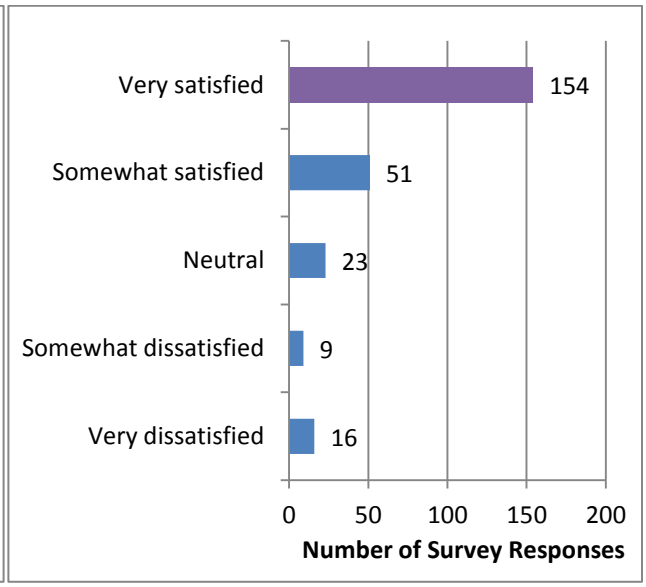
(I) Call center hours



(J) Personal safety riding the bus



(K) Bus driver's ability to drive



(L) Helpfulness of the bus driver

Figure 1-64 (continued) Rider Satisfaction with CONNECTION

Question 19: Top Three CONNECTION Improvements

Question 19 asked riders to identify the three areas, using the service categories from Question 18, that they would most like to see improved. The top three improvement areas identified by riders are (1) being picked up on time, (2) arriving on time, and (3) total travel time on the bus (as shown in Figure 1-63).

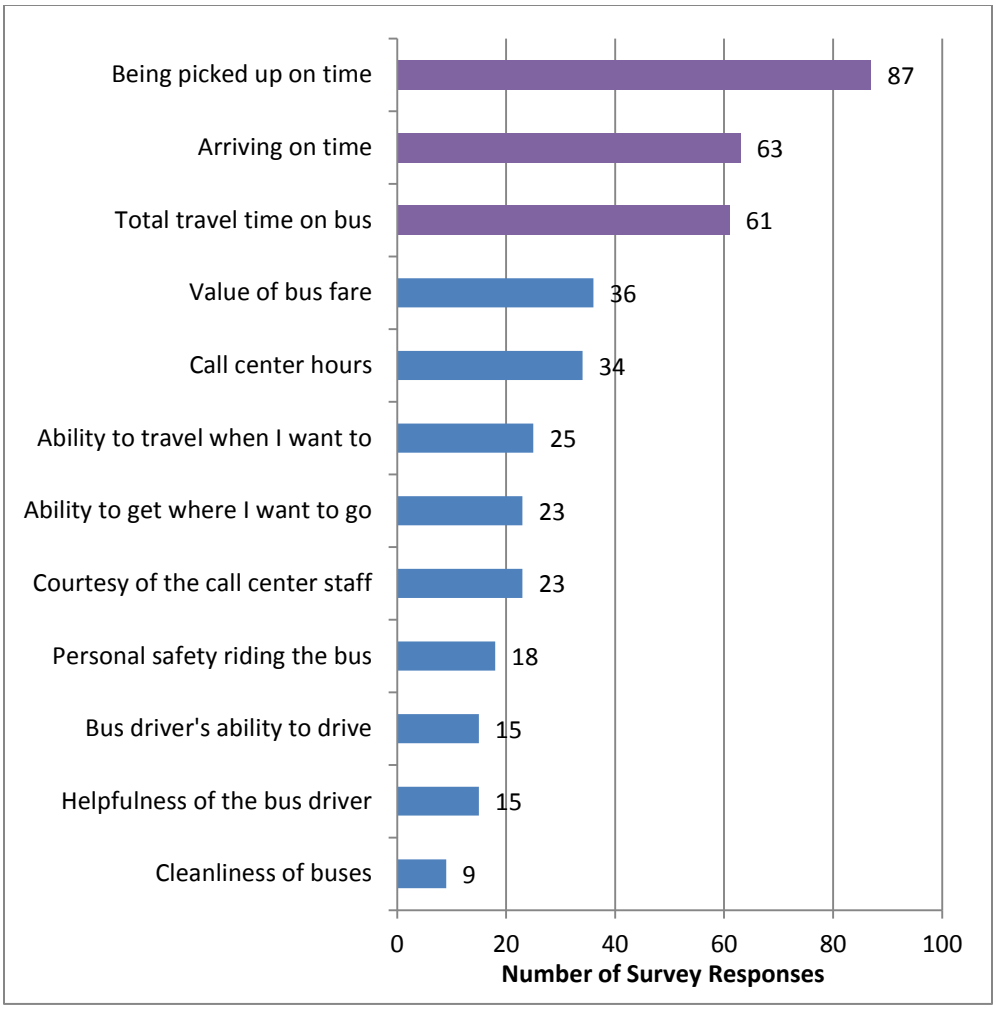


Figure 1-63 CONNECTION Improvements

Survey Respondent Demographics

The survey asked CONNECTION riders to provide demographic information.

Question 11: Rider Age

Question 11 asked riders to identify their age. The age category that received the most responses was 65 or older, with 115 riders (44 percent) responding as such (as seen in Figure 1-64).

Question 12: Rider Gender

Question 12 asked riders to identify if they are male or female. More females (54 percent) than males (46 percent) use CONNECTION (as shown in Figure 1-65).

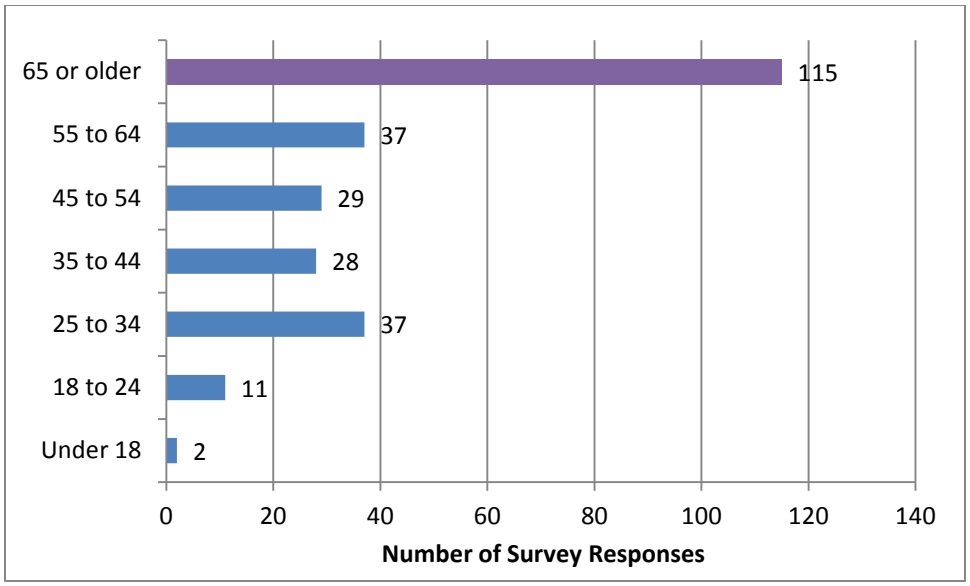


Figure 1-64 Rider Age

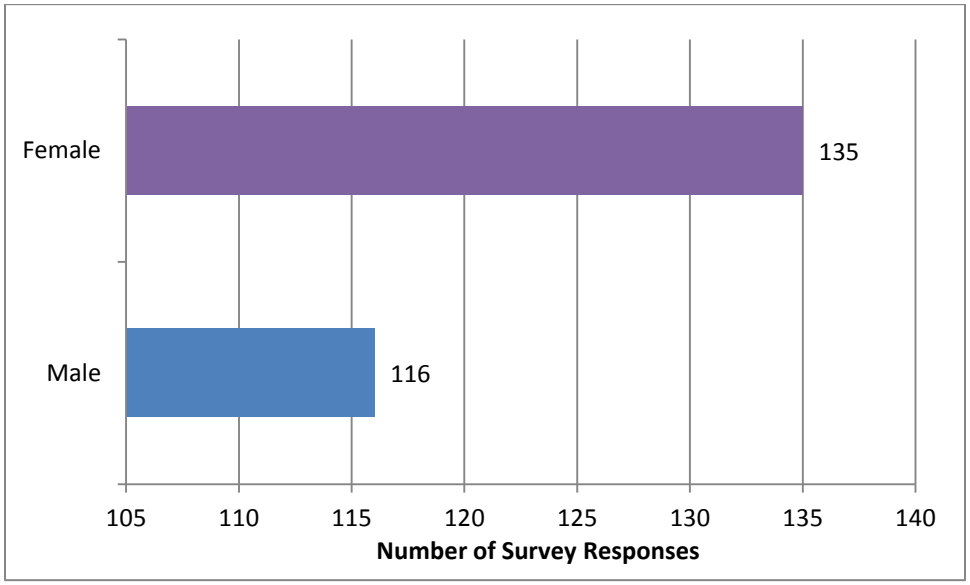


Figure 1-65 Rider Gender

Question 13: Spanish, Hispanic, or Latino Origin

Question 13 asked riders to identify if they are of Spanish, Hispanic, or Latino origin. Most riders are not of Spanish, Hispanic, or Latino origin. Thirty-three (33) riders (13 percent) responded that they are of Spanish, Hispanic, or Latino origin (as shown in Figure 1-66).

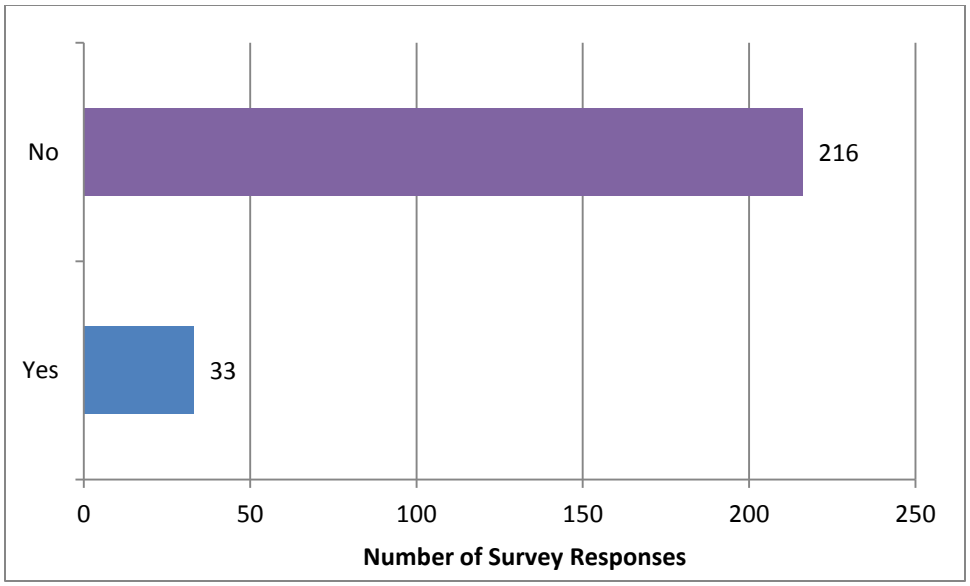


Figure 1-66 Spanish, Hispanic, or Latino Origin

Question 14: Rider Race

Question 14 asked riders to identify their race. Caucasian is the race that was most represented, with 156 surveyed riders (62 percent) indicating that they are Caucasian (as seen in Figure 1-67). The other race that is highly represented in CONNECTION ridership is African-American. Sixty-three (63) surveyed riders (25 percent) identified that they are African-American.

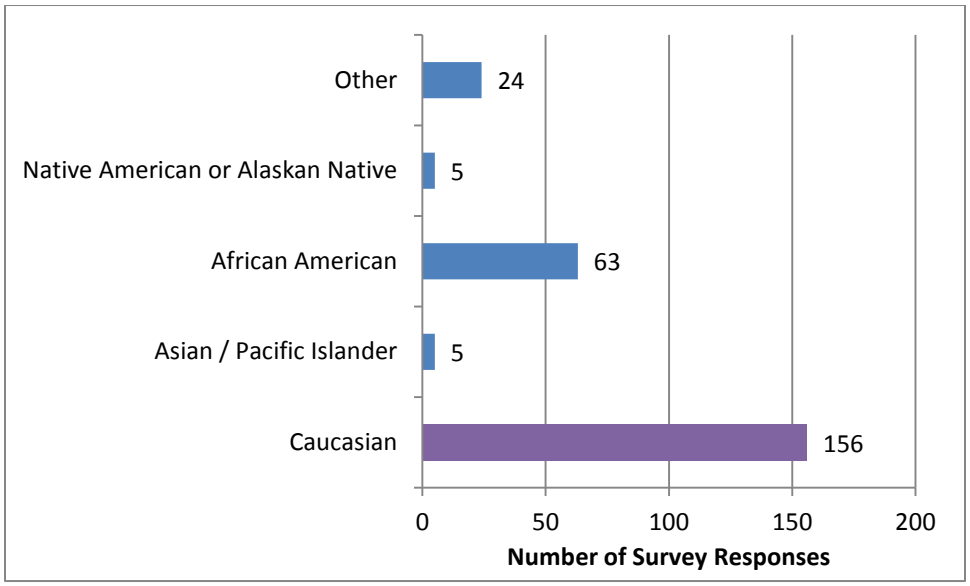


Figure 1-67 Rider Race

Question 15: Born in the United States or a U.S. Territory

Question 15 asked riders if they were born in the United States or another U.S. territory. Two hundred four (204) surveyed riders (80 percent) responded that they were born in the United States or another U.S. Territory (as seen in Figure 1-68).

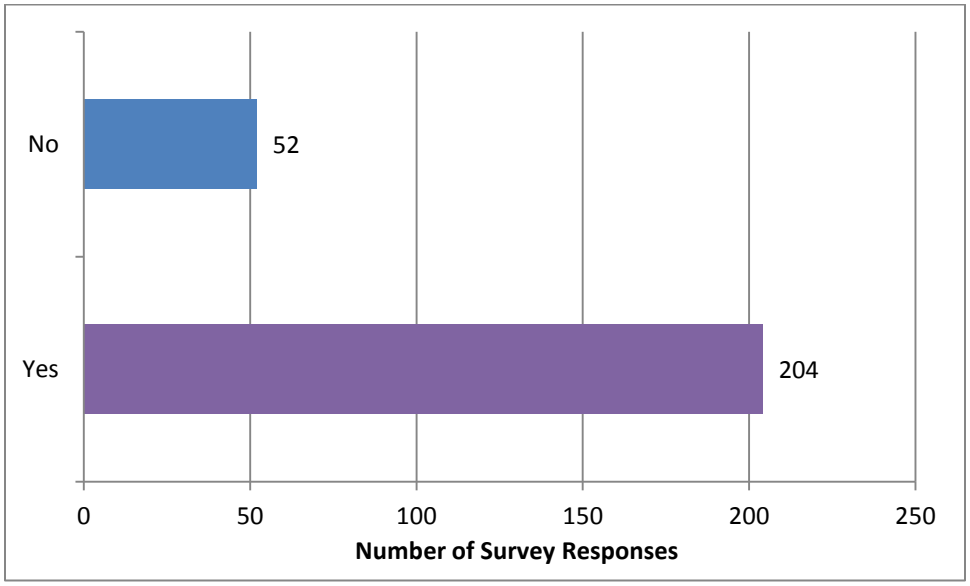


Figure 1-68 Born in the U.S. or a U.S. Territory

Question 16: Rider Language

Question 16 asked riders to identify if English is their first language or second language or if they find it difficult to understand English. Two hundred fourteen (214) riders (85 percent) responded that English is their first language (as shown in Figure 1-69). Only nine percent of surveyed riders find it difficult to speak or understand English.

Question 17: Household Income

Question 17 asked riders what their total household income was for 2010. Less than $10,000 was the income category that received the most responses, as 106 surveyed riders (51 percent) indicated that their total household income was less than $10,000 for 2010 (as seen in Figure 1-70). Only five percent of riders indicated that their 2010 household income was more than $50,000.

Conclusions about Paratransit Rider Surveys

Overall, the results of the CONNECTION rider surveys indicate that riders have a positive view of CONNECTION service and a level of satisfaction with it. Although improvements were identified in Question 19, the highly positive responses to Question 18 suggest that major CONNECTION improvements are not needed.

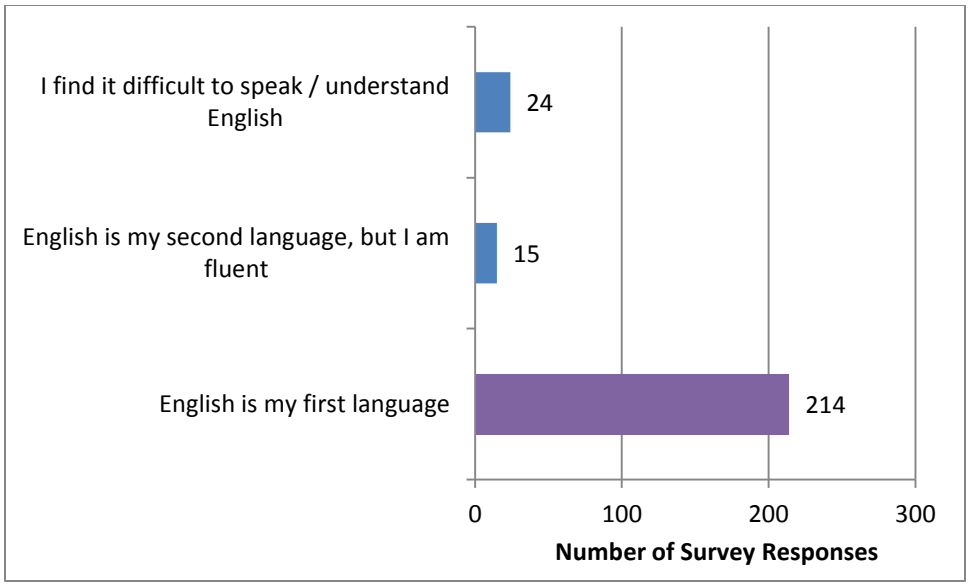


Figure 1-69 Rider Language

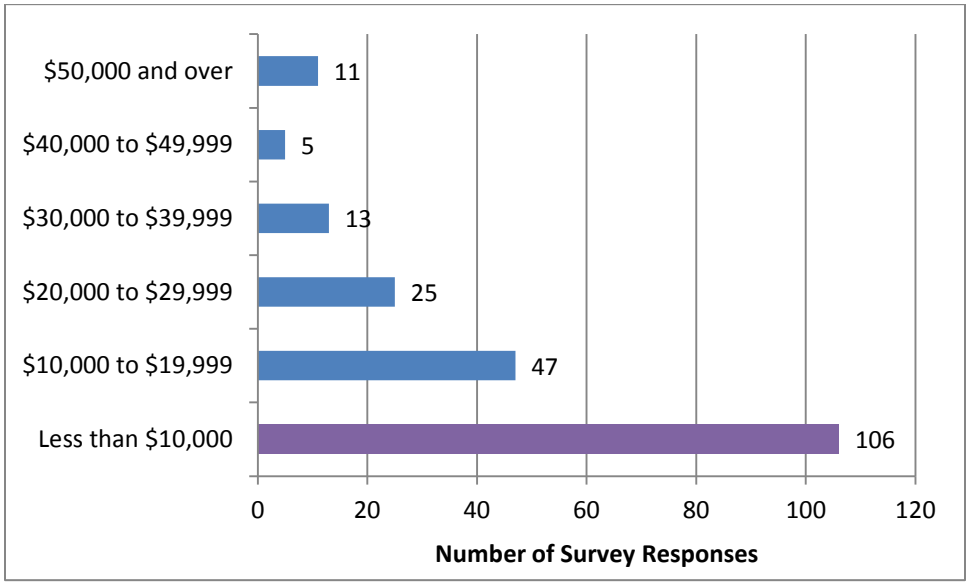


Figure 1-70 Household Income for 2010

PALM TRAN EMPLOYEE SURVEYS

Fixed-route operator and employee surveys were conducted in order to obtain information from bus operators and customer service representatives about rider perceptions of existing services and potential improvements that could be made to Palm Tran.

Fixed-Route Operators and Customer Service Personnel

Methodology

The fixed-route operator and customer service employee survey was distributed to employees with their paycheck in February 2011. Forty-three (43) surveys were returned by the deadline and are included in this analysis. The next sub-section summarizes the results of the fixed-route operator and customer service employee survey. The nine-question survey instrument is available in Appendix D.

Survey Results

Question 1: Public Transportation Services

Question 1 asked employees to rate the public transportation services currently provided by Palm Tran. The results are presented in Figure 1-71. Forty-one (41) employees, out of the 43 total employees who submitted a survey, answered Question 1. Using the highest number of responses, Palm Tran public transportation services would be rated as average (with 13 responses). Fourteen employees rated Palm Tran public transportation services as above average, while fourteen employees rated the services below average. This result varies from rider perceptions, as the fixed-route rider survey revealed that the majority of riders are satisfied with Palm Tran services.

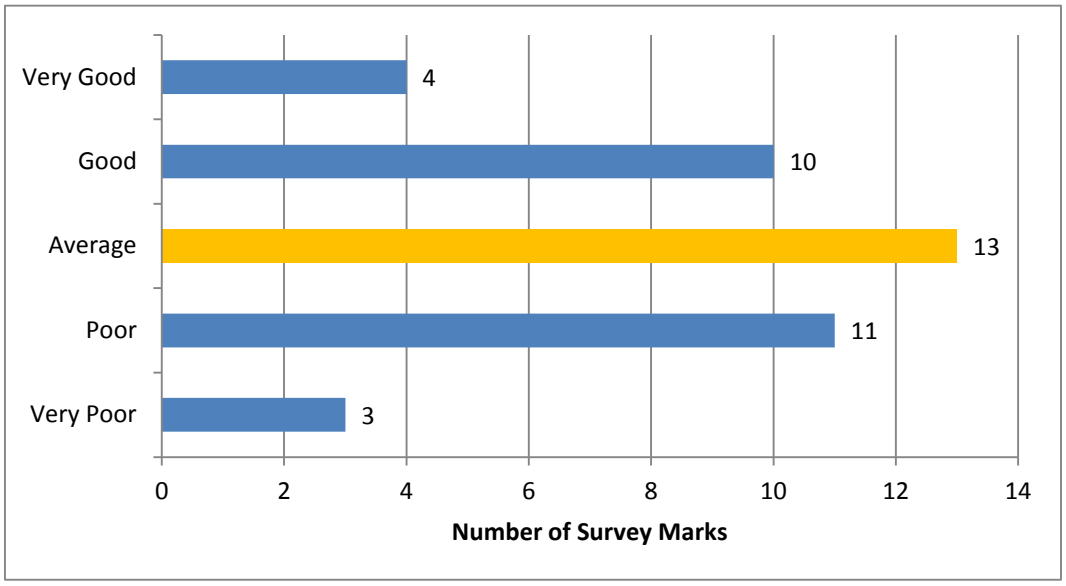


Figure 1-71 Employee Ratings of Palm Tran Services

Question 2: Common Passenger Complaints

The operators and employees were asked to identify the three most common complaints they hear from passengers about Palm Tran. All 43 of the employees who returned the survey answered Question 2. However, only 27 employees answered the question as directed; 16 employees identified more or less than three common complaints. Figure 1-72 presents the answers for Question 2, using only responses from the 27 employees who answered the question as directed.

The top three complaints heard from passengers are that (1) service hours are not late enough, (2) service is too limited on weekends, and (3) the bus does not go where they want to go. Figure 1-73 presents all 43 responses, including the answers that identified more or less than three complaints. The results are similar to those in Figure 1-72. Figure 1-73 indicates that the top three complaints from passengers are that (1) service hours are not late enough, (2) service is too limited on the weekends, and (3) service is not frequent enough. In both Figure 1-72 and Figure 1-73, the lateness of service hours is clearly the top complaint reported.

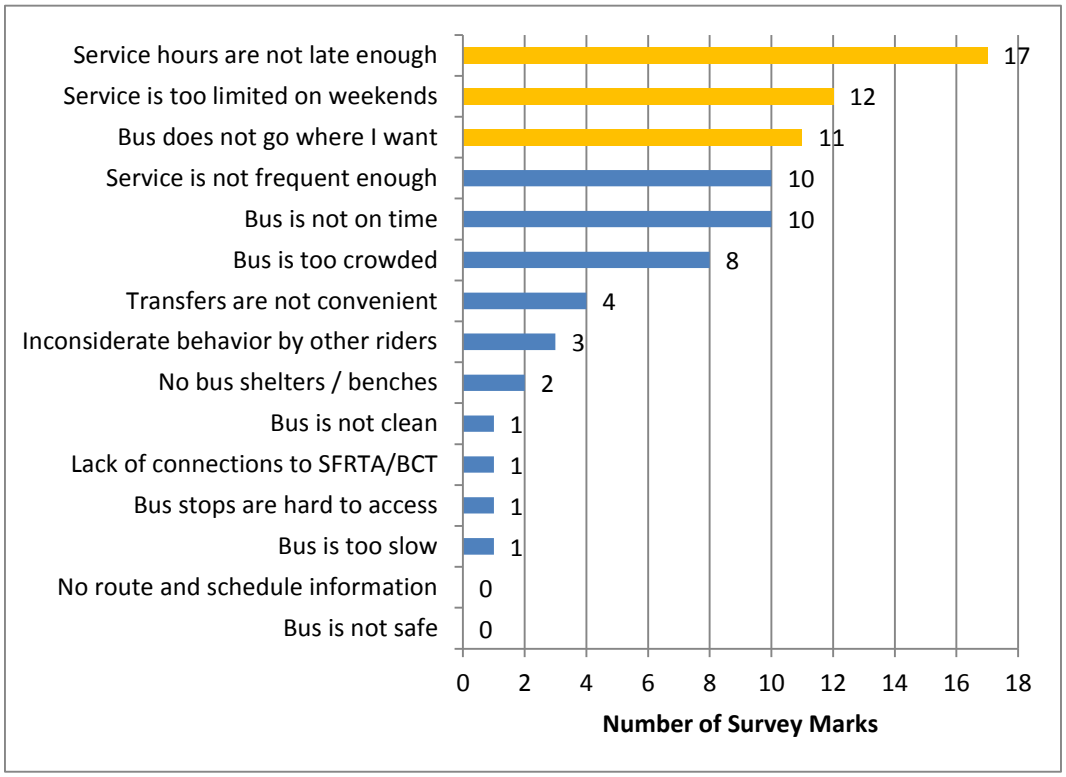


Figure 1-72 Top Three Complaints Heard from Passengers

Question 3: High Priority Improvements

Question 3 asked employees to rank the top five improvements (from one to five, with one being the highest priority and five being the fifth highest priority) that Palm Tran should make for its customers. All 43 employees, who returned surveys, answered Question 3. However, only 21 employees answered the question as directed. Three of the employees ranked every improvement using a one-to-five scale. The remaining 19 employees either marked answers without using a one-to-five scale or marked less than five improvements.

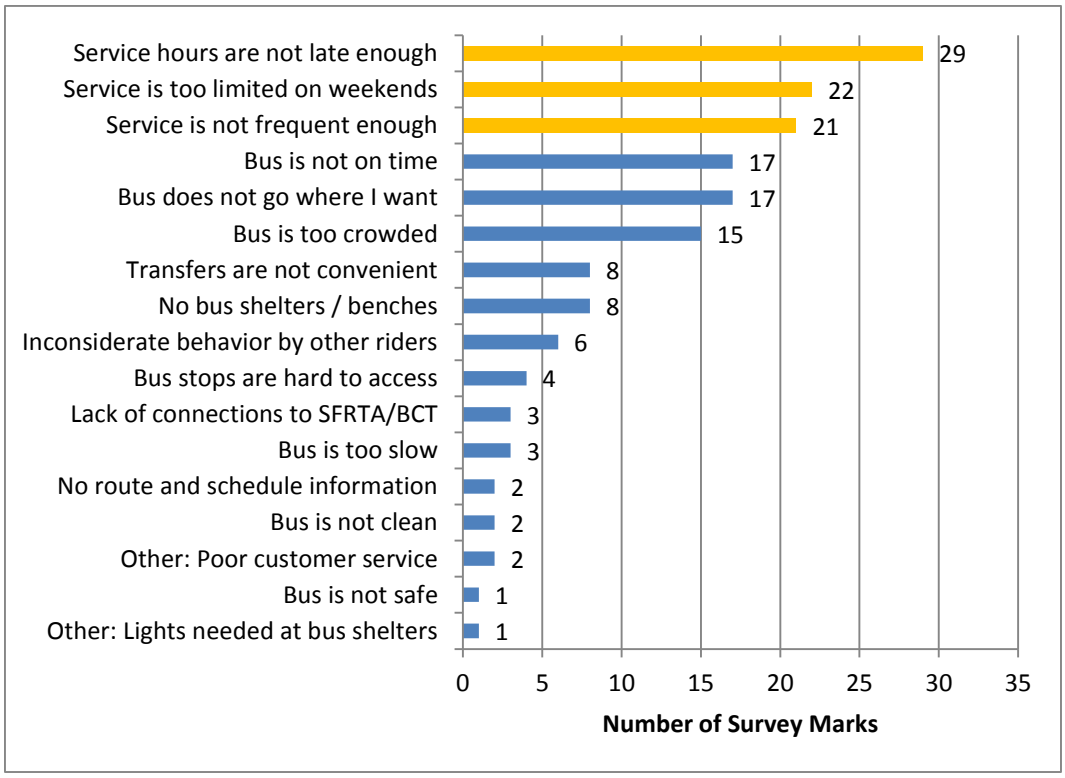


Figure 1-73 Most Complaints Heard from Palm Tran Passengers

Figure 1-74 uses the 21 responses that answered Question 3 as directed. The five improvements identified by the employees were ranked in reverse order (with the highest priority being assigned a value of five and the fifth highest priority being assigned a value of one), so that the highest priorities would be easily identifiable. In other words, the highest priorities have the largest relative values in Figure 1-74. The results indicate that the top five improvements are (1) more frequent buses on existing routes, (2) new routes in areas without service today, (3) better scheduled running time, (4) service that starts earlier/runs later, and (5) more routes operating on Saturday and Sunday.

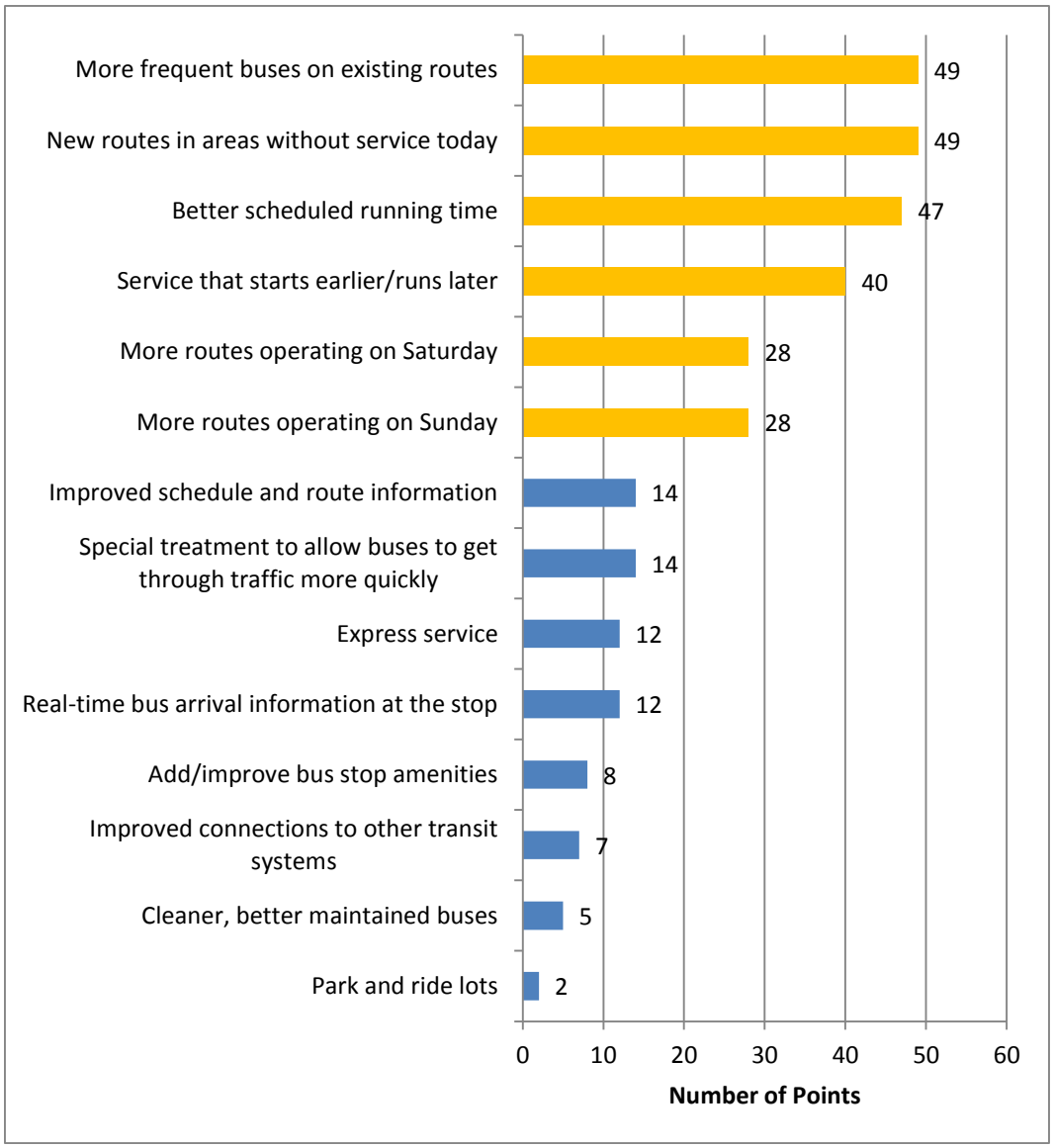


Figure 1-74 Top Five Improvements Needed for Customers

Figure 1-75 uses all of the 43 responses. Instead of considering the one-to-five rankings, the responses were treated as if the question had requested that the employees simply identify improvements that Palm Tran should make for its customers. The results, presented in Figure 1-75 are very similar to those found in Figure 1-74. The results indicate that the top five improvements are (1) new routes in areas without service today, (2) more frequent buses on existing routes, (3) service that starts earlier/runs later, (4) better scheduled running time, and (5) more routes operating on Sunday.

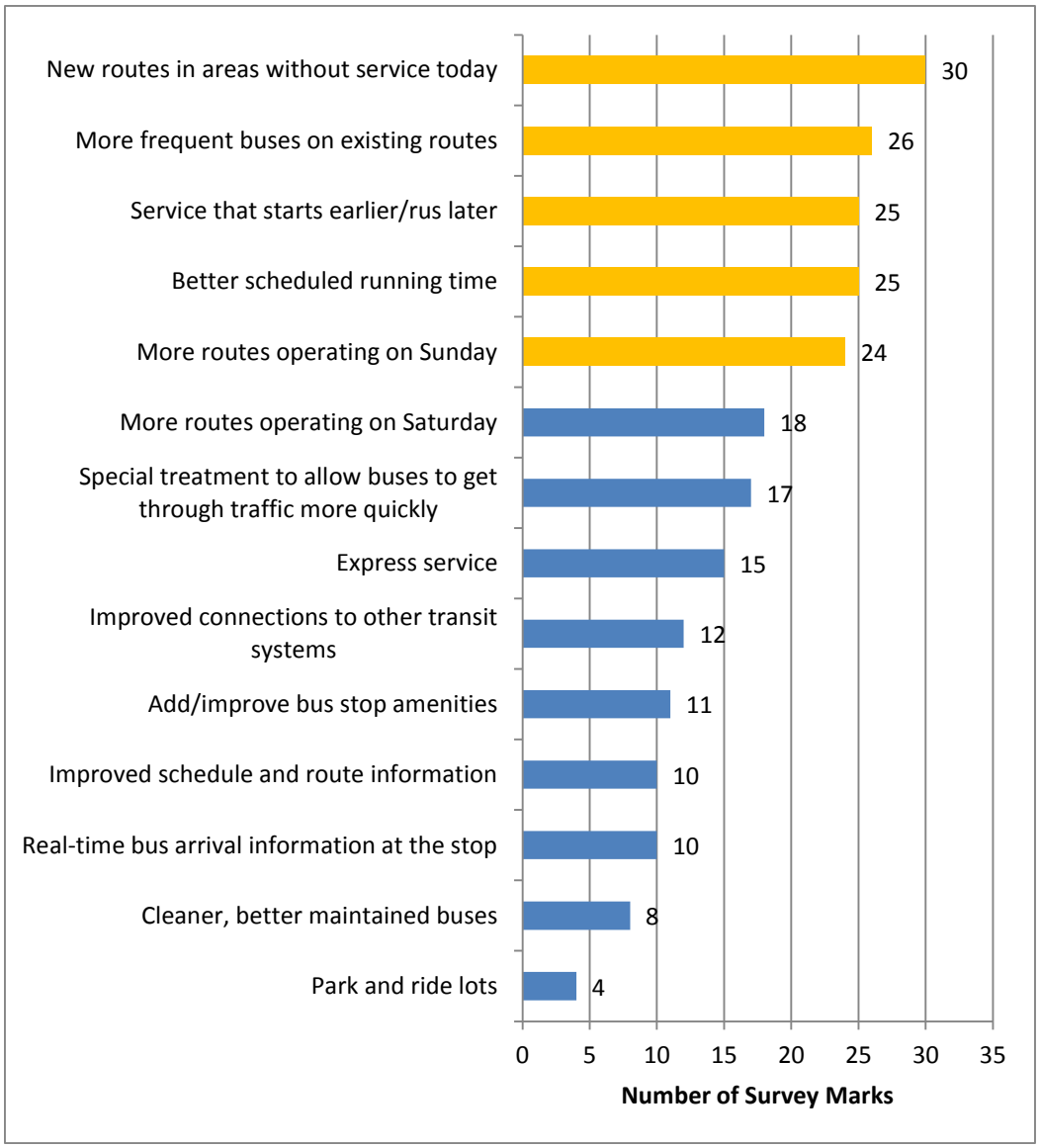


Figure 1-75 All Suggested Improvements for Customers

Question 4: Changes on Existing Routes

Question 4 was an open-ended response question that asked the employees to identify changes that Palm Tran should make on existing routes. Thirty employees, out of the 43 employees who returned surveys, answered this question as directed. The remaining 13 employees either did not write a response or wrote a response that did not directly identify a route that needs to be changed. Figure 1-76 presents the results of Question 4. The routes that had the most comments were Route 73, Route 3, and Route 2. The changes that the employees proposed for each route are identified in Figure 1-77. The survey comments were grouped into the following categories: more frequent buses on existing routes, service that starts earlier/runs later, new routes in areas without service today, express service, better scheduled running time, more routes operating on Sunday, and other comments. Most of the suggested improvements for Route 73 had to do with providing new routes

in areas without service today, and most of the comments for Route 2 and Route 3 had to do with providing more frequent buses on existing routes.

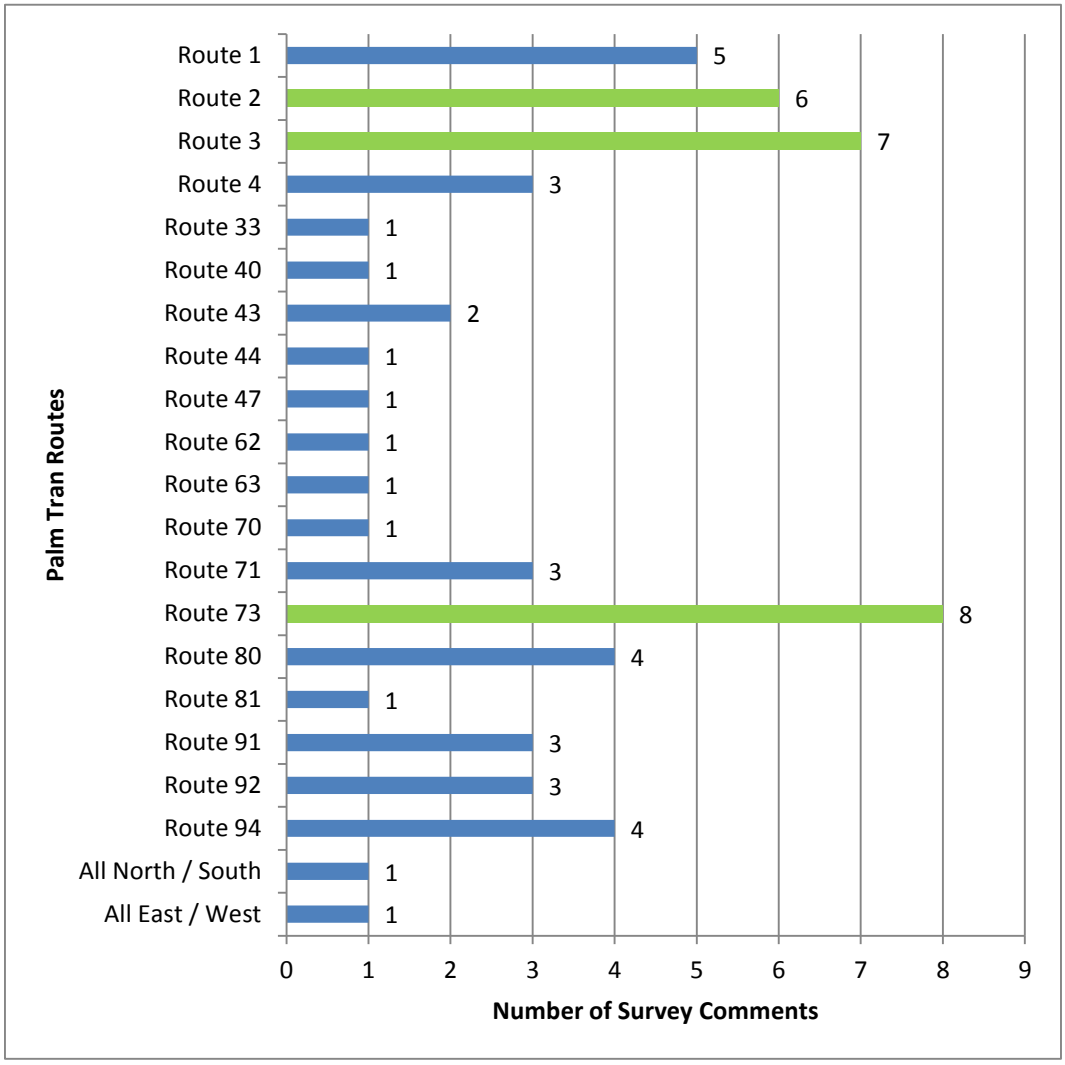


Figure 1-76 Routes with Suggested Changes

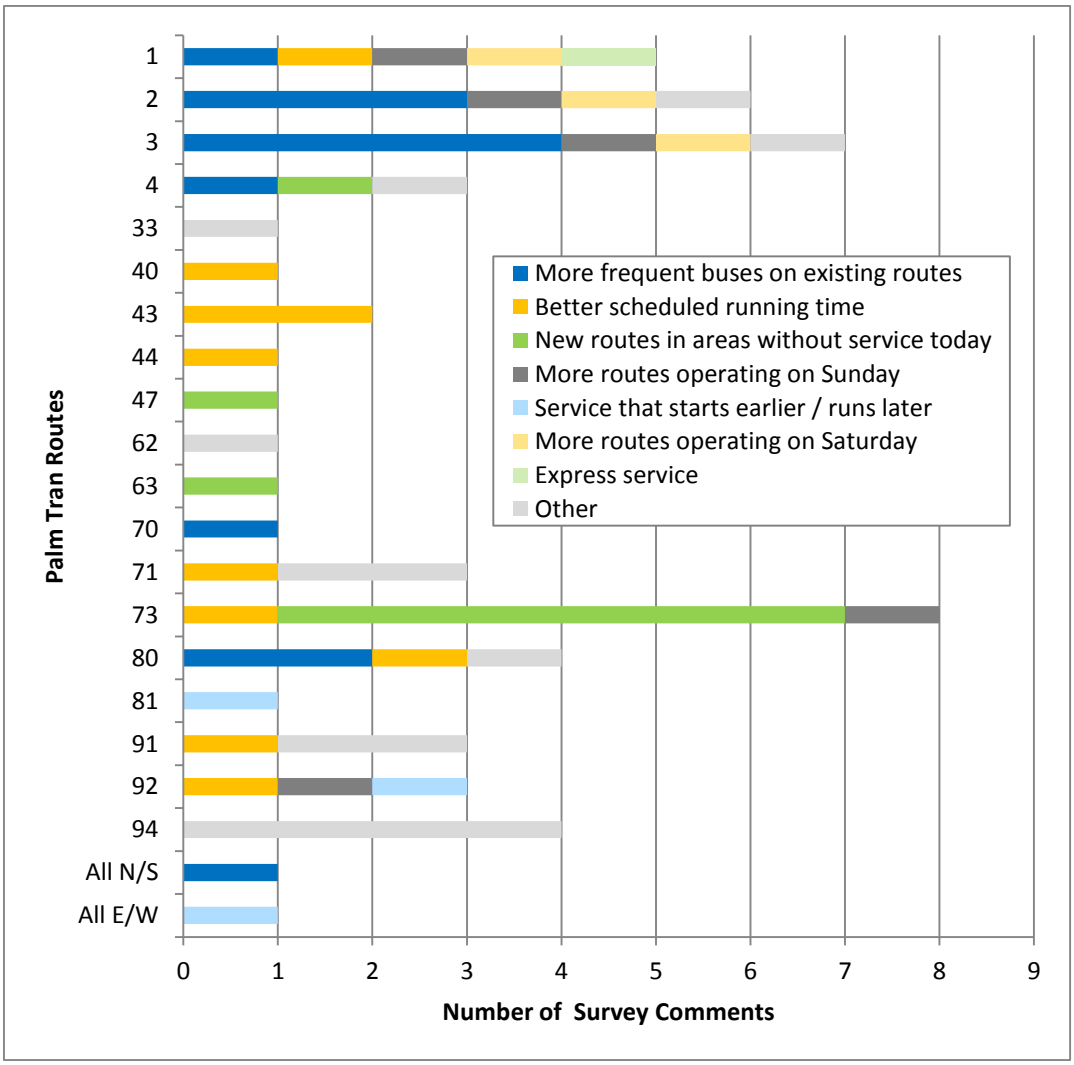


Figure 1-77 Suggestions for Changes to Existing Palm Tran Routes

Question 5: Streets and Areas that Need Fixed-Route Service

Question 5 was an open-ended response question that asked employees to identify streets and areas of Palm Beach County that are not currently served by Palm Tran but need fixed-route service. Thirty of the surveys clearly identified streets or areas that need fixed-route service. The comments were grouped into categories based on the general streets and areas identified. Figure 1-78 presents the results of Question 5. The streets and areas that received the most employee comments were Jog Road, US 441, and the Wellington Mall area.

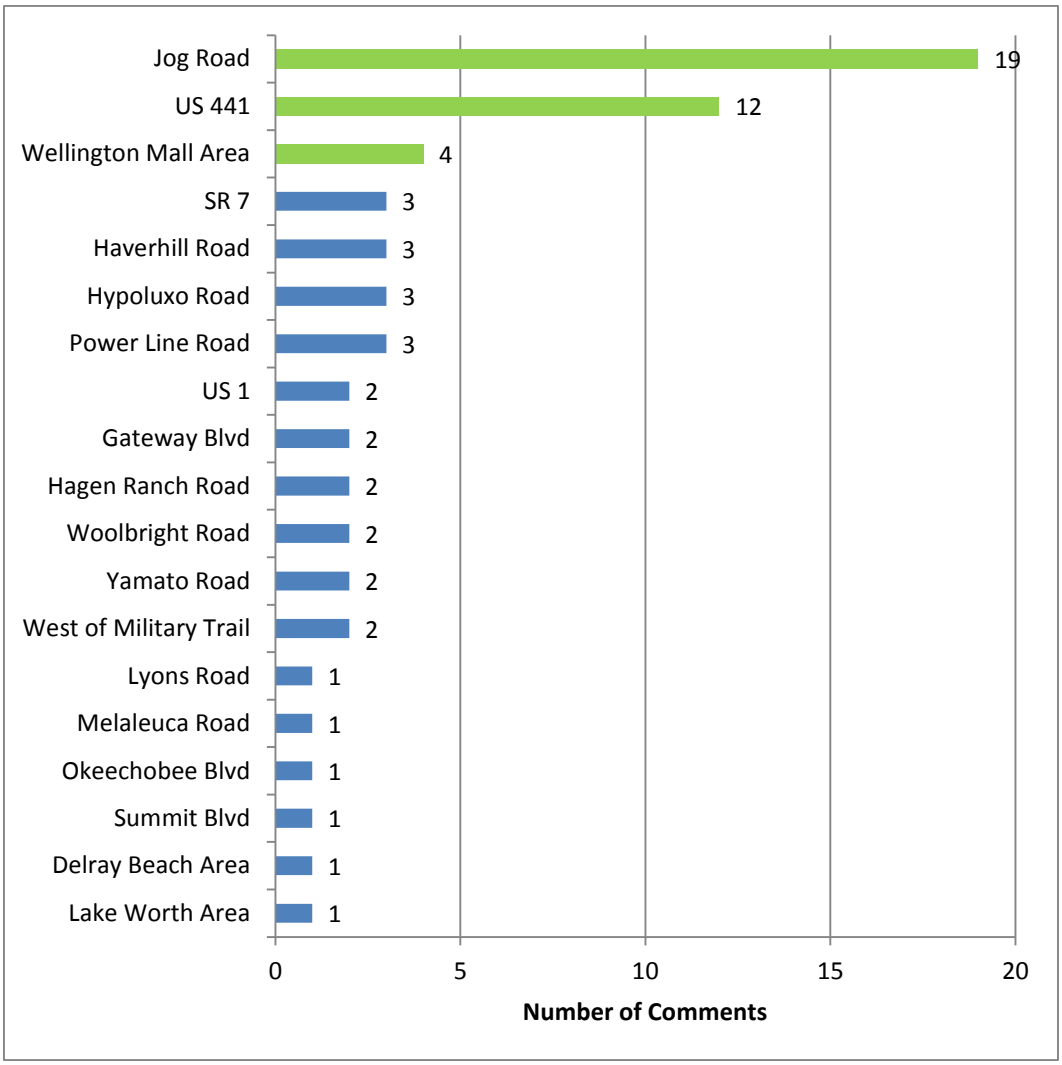


Figure 1-78 Palm Beach County Areas Needing Fixed-Route Service

Question 6: High Priority Improvements

Palm Tran employees were asked to identify top priority improvements in seven categories based on the assumption that Palm Tran has unlimited funds. The categories included service on the street, technology, stops and shelters, vehicles, maintenance, customer information, and facilities (parking/garages). Twenty-five employees, out of the 43 employees who returned surveys, supplied an answer to at least one of the seven categories. Figure 1-79 provides an overview of the number of comments received for each of the categories.

Figure 1-79 indicates that employees have the most concern over improvements to stops and shelters. The comments for each category varied in their level of detail, so the comments were grouped.

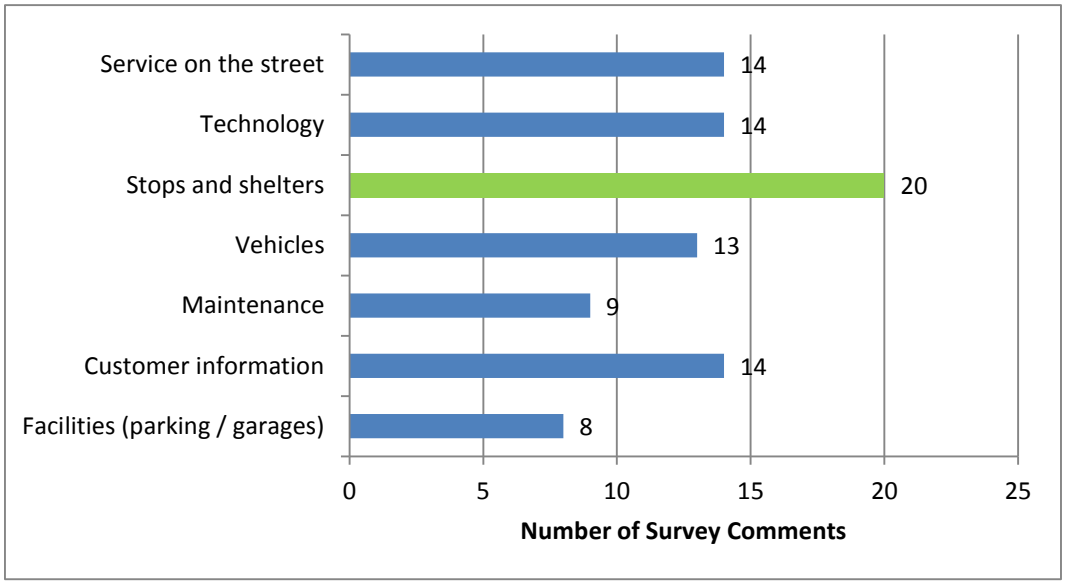


Figure 1-79 Priority Improvements

Figure 1-80 provides the detailed results of Question 6 for each of the seven categories. It reveals that the operators and employees believe that the top priority improvements should include (1) improved route and schedule information, (2) added shelters along existing routes, (3) added lights on shelters, and (4) cleaner, better maintained buses.



Figure 1-80 Detailed Priority Improvements by Category

Question 7: Idea of a Successful Palm Tran

Question 7 was an open-ended question that asked the employees to describe their idea of a successful Palm Tran. Thirty employees answered Question 7. The comments varied in their level of detail, so the comments were grouped into categories. The results of Question 7 can be viewed in Figure 1-81. The three ideas that received the most comments for a successful Palm Tran were (1) better communication between operators and administration, (2) more frequent buses on existing routes, and (3) service that starts earlier/runs later.

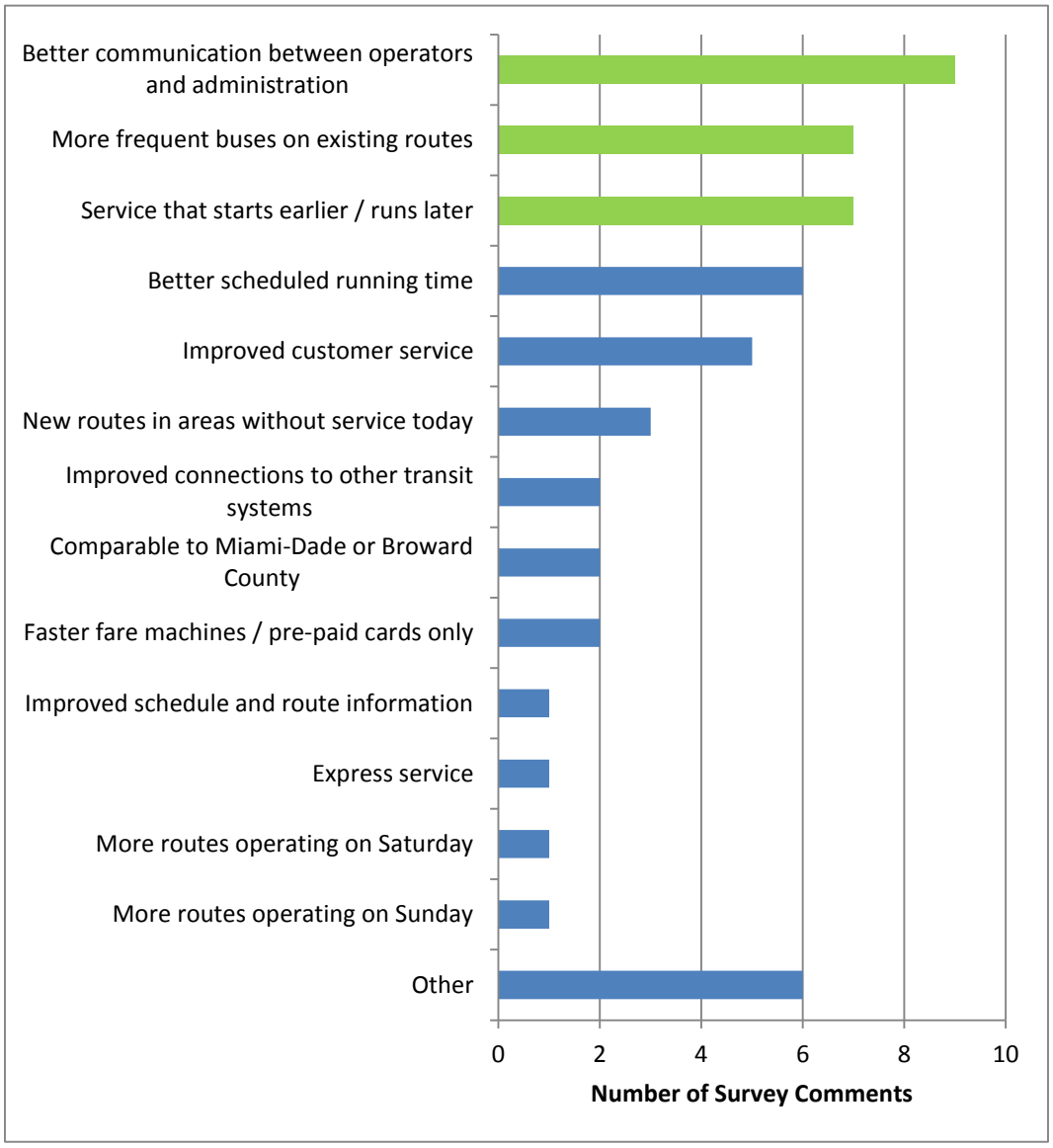


Figure 1-81 Employee Ideas of a Successful Palm Tran

Question 8: Previous Changes with Positive Results

Operators and employees were asked in Question 8 to describe previous changes that have had positive results that should be explored further. Twenty-two employees provided answers to Question 8. Because the comments ranged in the details provided, the comments were grouped into categories. Figure 1-82 provides the results of Question 8. The two previous changes that received the most positive comments are (1) improvements to the schedule and route information and (2) the Intermodal Center.

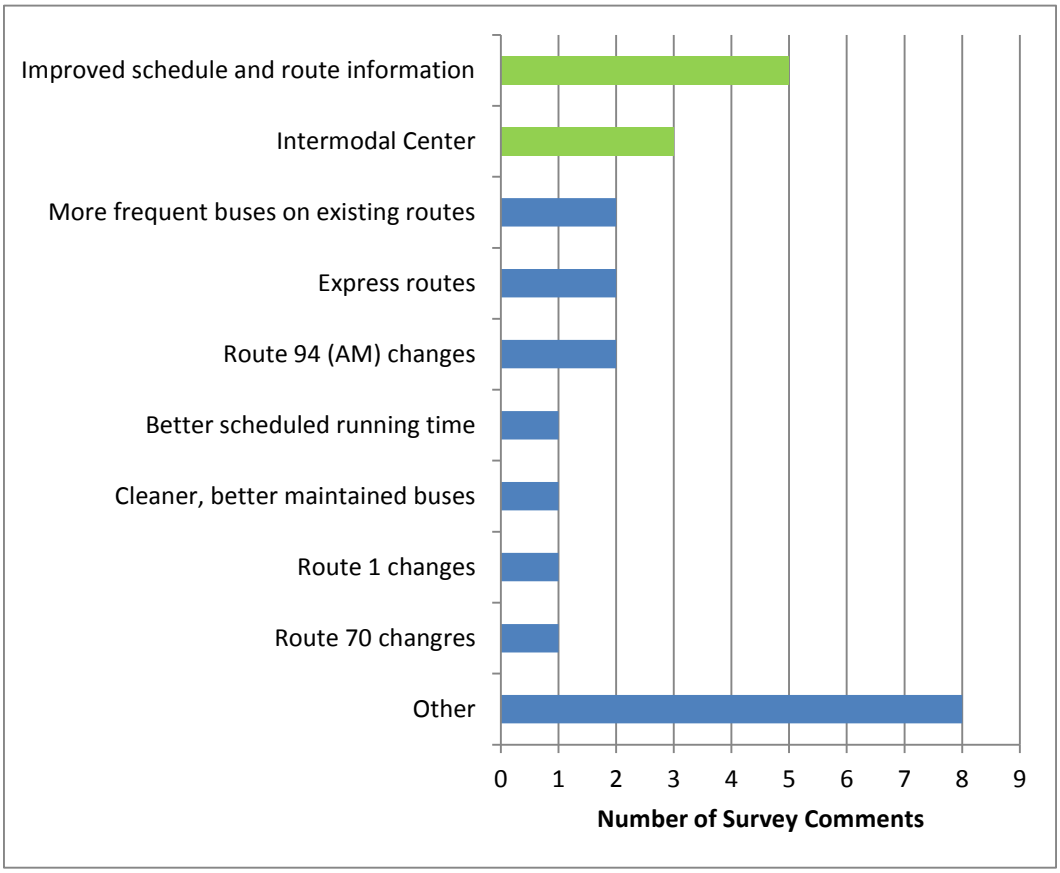


Figure 1-82 Previous Changes with Positive Effects

Question 9: Additional Comments

Question 9 asked employees to share any additional comments that will help build a successful transit system over the next ten years. Twenty-eight employees wrote a comment for Question 9. The comments varied in their level of detail, so the comments were grouped into categories. Figure 1-83 provides the results for Question 9. The three ideas for building a successful transit system that received the most comments are (1) improved communication between operators and administration, (2) service that starts earlier/runs later, and (3) better scheduled running time.

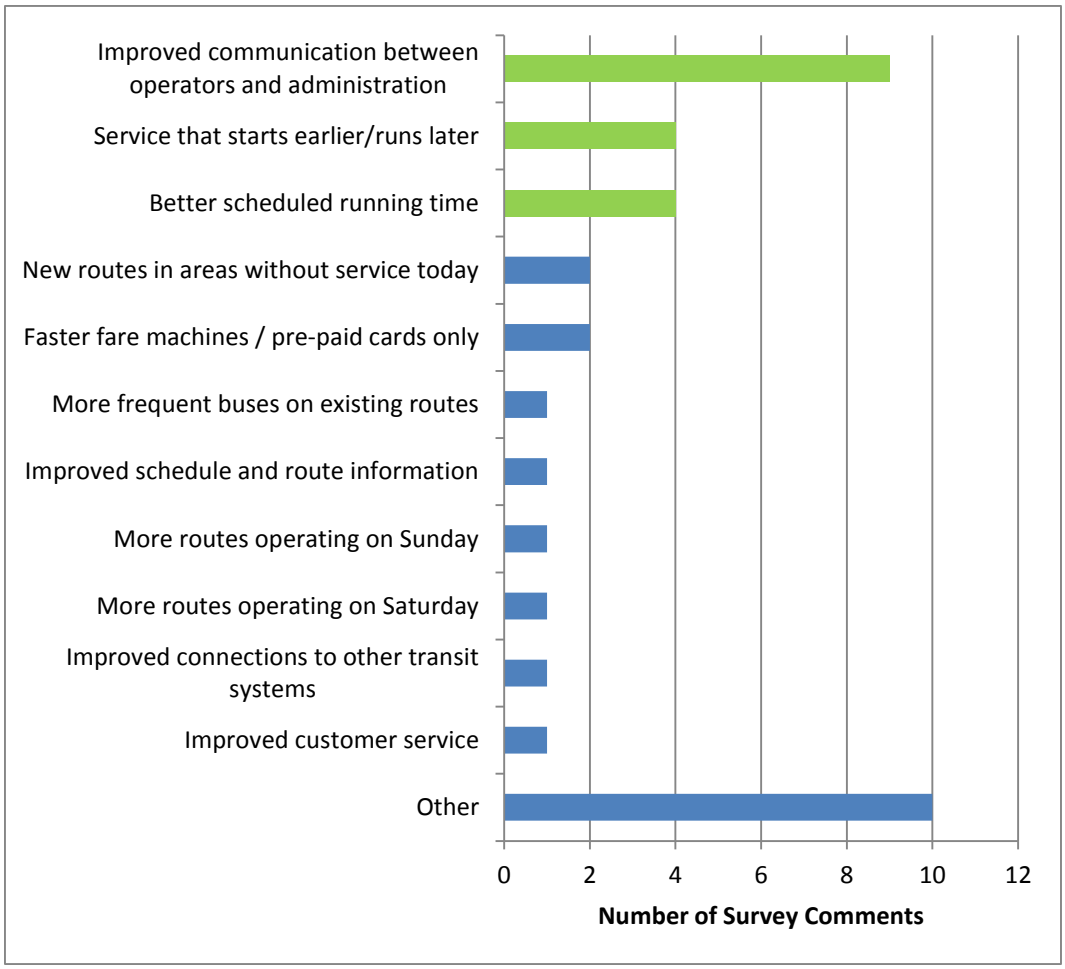


Figure 1-83 Ideas for a Successful Transit System

Conclusions

The results of the fixed-route operator and employee survey mirror the results of the fixed-route rider survey. The four improvement areas identified in the rider survey also appear throughout the fixed-route operator and employee survey:

- Service that starts earlier/runs later
- Service is too limited on Saturdays
- Service is too limited on Sundays
- Service is not frequent enough on existing routes (particularly along Route 2 and Route 3)

The fixed-route operators and employees also identified improvements that they believed were important for Palm Tran to consider that were not as prevalent in the rider survey:

- New routes in areas without service today (particularly along Route 73)
- Better scheduled running time
- Better communication between operators and administration

- Improved route and schedule information
- Added shelters along existing routes
- Added lights at shelters
- Cleaner, better maintained buses

Paratransit Operators

Methodology

The paratransit operator survey was distributed to employees with their paychecks in Spring 2011. Eighty-two (82) surveys were returned by the deadline. The seven-question survey instrument is available in Appendix D. This sub-section summarizes the results of the paratransit operator survey.

Survey Results

Question 1: Paratransit Services

Question 1 asked employees to rate the paratransit services currently provided by Palm Tran CONNECTION. The results are presented in Figure 1-84. Eighty-one (81) employees out of the 82 total employees who submitted a survey answered Question 1. Using the highest number of responses, Palm Tran paratransit services would be rated as good (with 32 responses). Fifty-four employees rated Palm Tran public transportation services as above average, while only four employees rated the services below average.

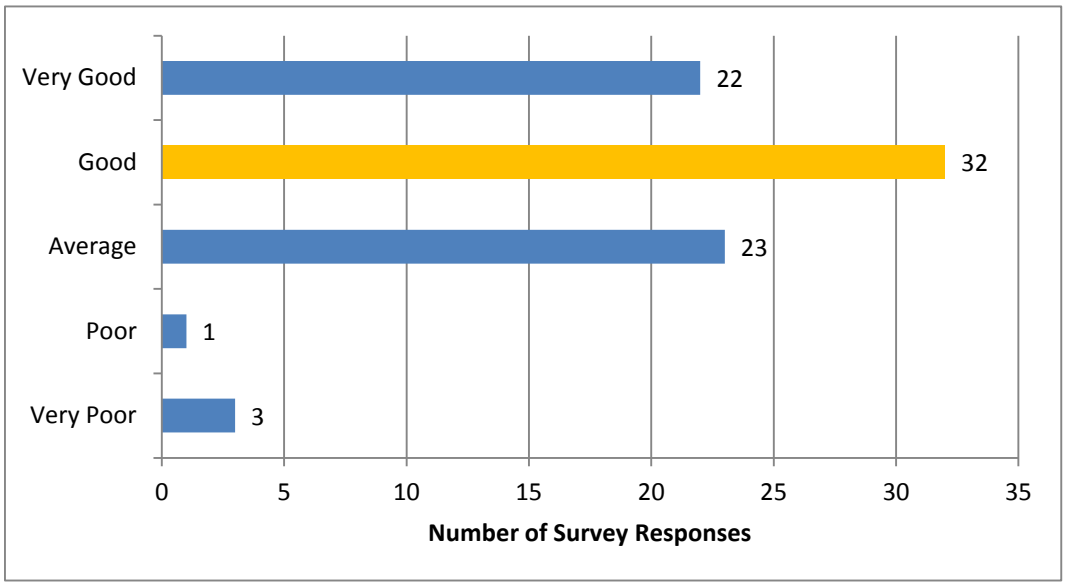


Figure 1-84 Palm Tran Paratransit Services Ratings

Question 2: Common Customer Complaints

The operators were asked to identify the three most common complaints they hear from customers about Palm Tran CONNECTION. All 82 of the employees who returned the survey answered Question 2. However, only 54 employees answered the question as directed. Twenty-eight (28) employees identified more or less than three common complaints. Figure 1-85 presents the answers for Question 2, using only responses from the 54 employees who answered the question as directed. The figure indicates that the top three complaints from passengers are that (1) it takes too long to get to their destinations, (2) that service hours are not early/late enough, and (3) there is inconsiderate behavior by other riders.

Figure 1-86 presents all 82 responses, including the answers that identified more or less than three complaints. The results found using all of the responses, presented in Figure 1-86, indicate that the top three complaints from passengers are that (1) it takes too long to get to their destinations, (2) there is inconsiderate behavior by other riders, and (3) that service hours are not early/late enough. Disregarding the order of the complaints, those found using all of the responses are the same as those found using only the responses from the employees who answered the question as directed.

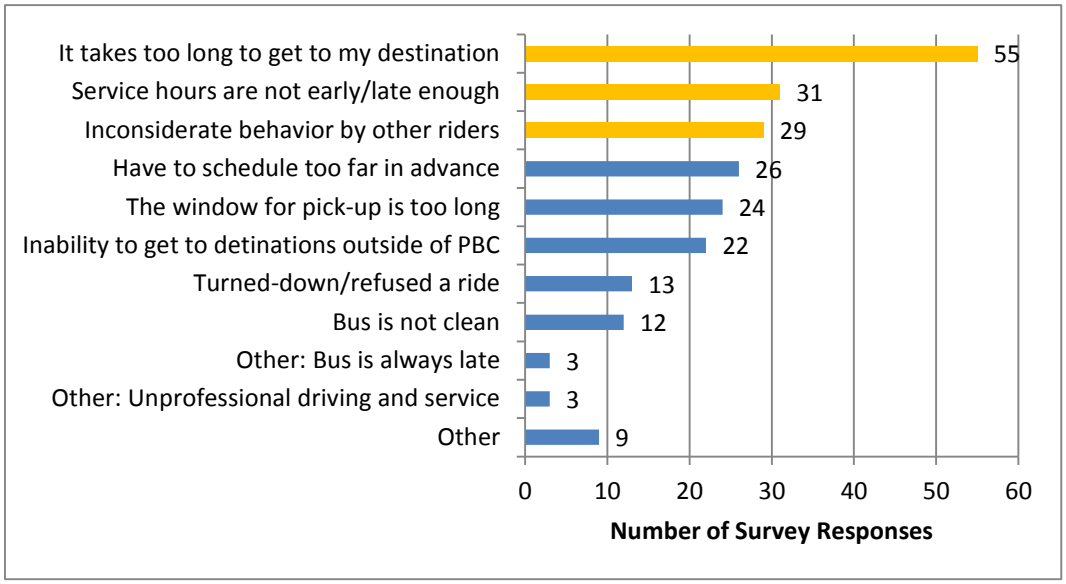


Figure 1-85 Most Common Complaints from CONNECTION Customers (Top Three)

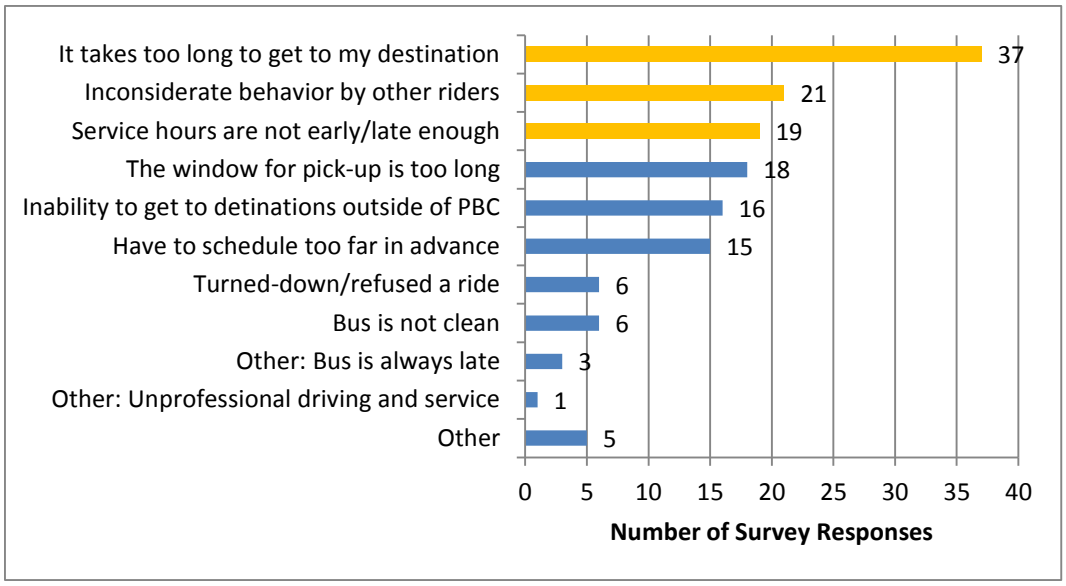


Figure 1-86 Most Common Complaints from CONNECTION Customers

Question 3: High Priority Improvements

Question 3 was an open-ended response question that asked employees to identify the top five improvements that Palm Tran CONNECTION should make to improve the customer experience for riders. Sixty-three employees, out of the 82 employees who returned surveys, answered Question 3. However, only eight of the employees identified five *unique* improvements, and several employees provided answers that focused on the employee experience rather than the customer experience. Figure 1-87 uses all of the responses from the 63 employees that answered Question 3. The results indicate that the top five improvements that Palm Tran CONNECTION should make are (1) better scheduling, (2) improved/additional vehicles, (3) improved routing, (4) improved working conditions for employees (respect, wages, etc.), and (5) communication with/training for customers.

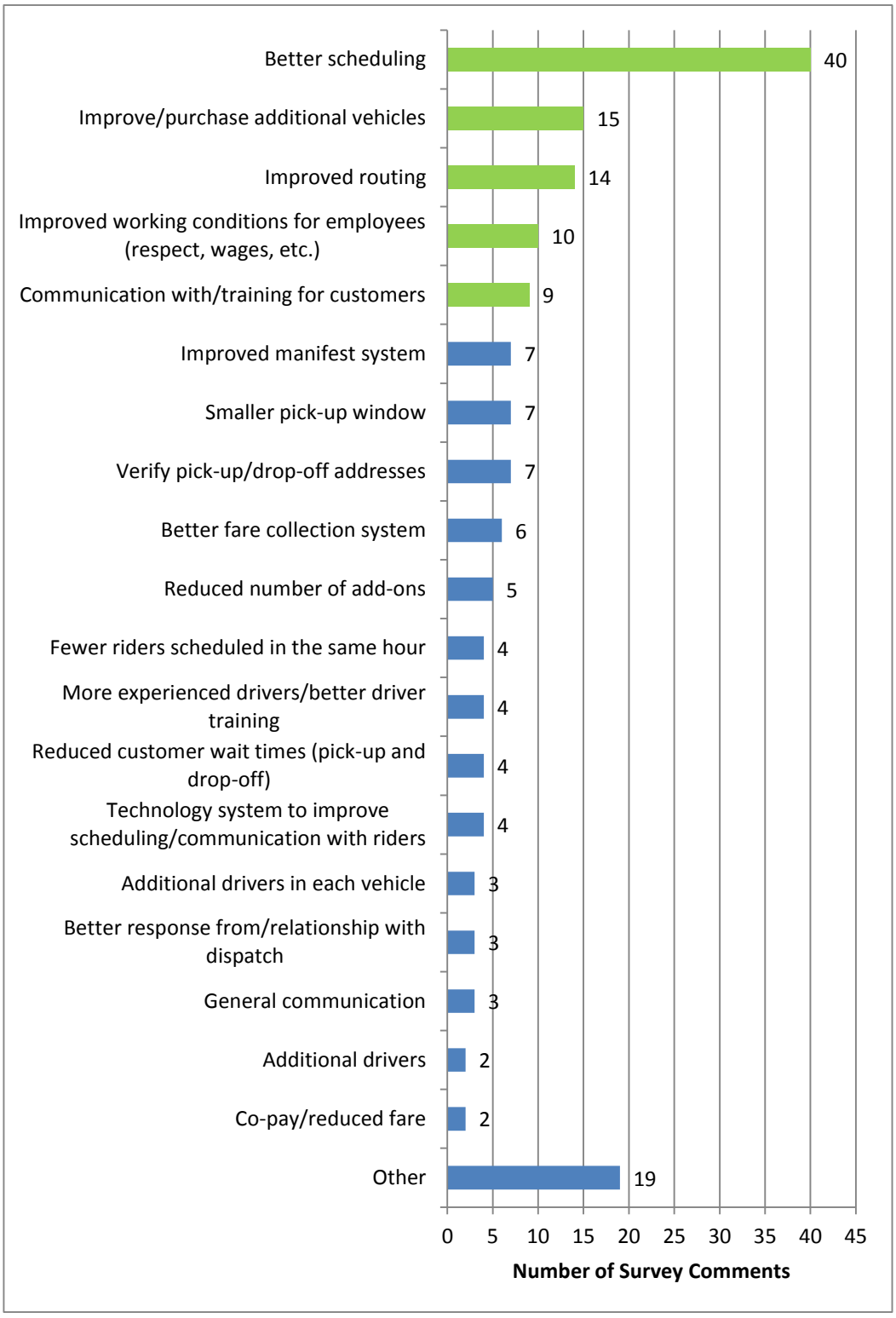


Figure 1-87 Improvements that Palm Tran CONNECTION Should Make for Its Customers

Question 4: New Fixed Route Bus Service Warrants

Question 4 was an open-ended response question that asked the operators to identify any areas of Palm Beach County with enough paratransit demand to warrant new fixed-route bus service. In addition, operators were asked to provide information on the routes and times that the new fixed-route bus service would be most used in those areas. Only 19 operators, out of the 82 operators who returned surveys, answered this question. Figure 1-88 presents the results of Question 4. The areas that had the most comments, from the 19 employees who answered the question, are Boca Raton, Loxahatchee, and Delray Beach. Only five of the operators commented on the times that the areas would receive the most use. One operator suggested that new fixed routes in the areas of Loxahatchee, Wellington, Royal Palm Beach, and West Palm Beach County would receive the most use from 5:00 a.m. to 9:00 p.m., while another operator suggested that new fixed routes in the areas of Loxahatchee and Wellington would receive the most use in the mornings. Two of the operators suggested that new fixed routes in the Boca Raton area would receive the most use in the afternoon from 2:00 p.m. to 7:00 p.m. and 1:00 p.m. to 6:00 p.m., while another operator suggested that fixed-route service from 6:00 to 10:00 is necessary in the Boca Raton area (although whether a.m. or p.m. is meant was not specified).

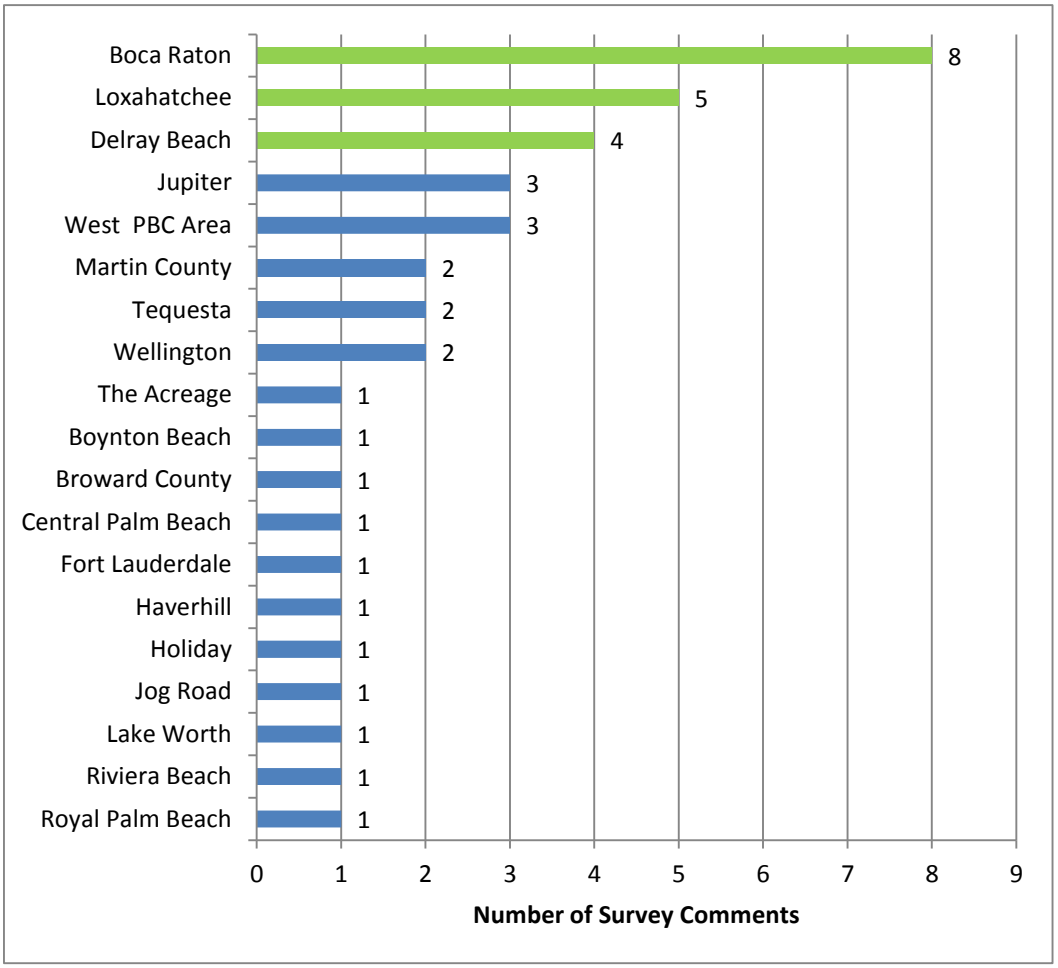


Figure 1-88 Areas with Enough Paratransit Demand to Warrant New Fixed-Route Bus Service

Question 5: Palm Tran CONNECTION Improvements

Palm Tran CONNECTION operators were asked to identify improvements that they would like to see implemented in seven categories. These categories are service on the street, technology, stops and shelters, vehicles, maintenance, customer information, and facilities (parking/garages). Thirty-one employees, out of the 82 employees who returned surveys, supplied an answer to at least one of the seven categories. Figure 1-89 provides a comprehensive overview of the number of comments received for each of the categories. The figure indicates that operators have the most concern over improvements to vehicles. The comments for each category varied in their level of detail, so the comments were grouped.

Figure 1-90 provides the results of Question 5 for each of the seven categories. The paratransit operators indicated that the top priority improvements across the seven categories are (1) improving vehicles overall/purchasing new vehicles, (2) better vehicle checks/maintenance, and (3) providing GPS in all of the buses/updating the GPS information.

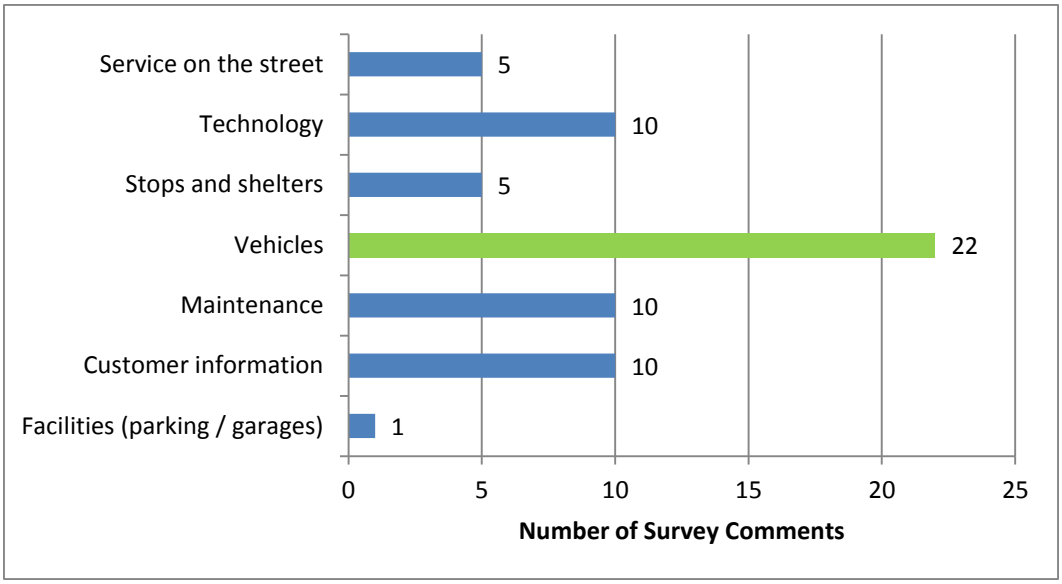


Figure 1-89 Priority Improvement Categories Identified by CONNECTION Operators

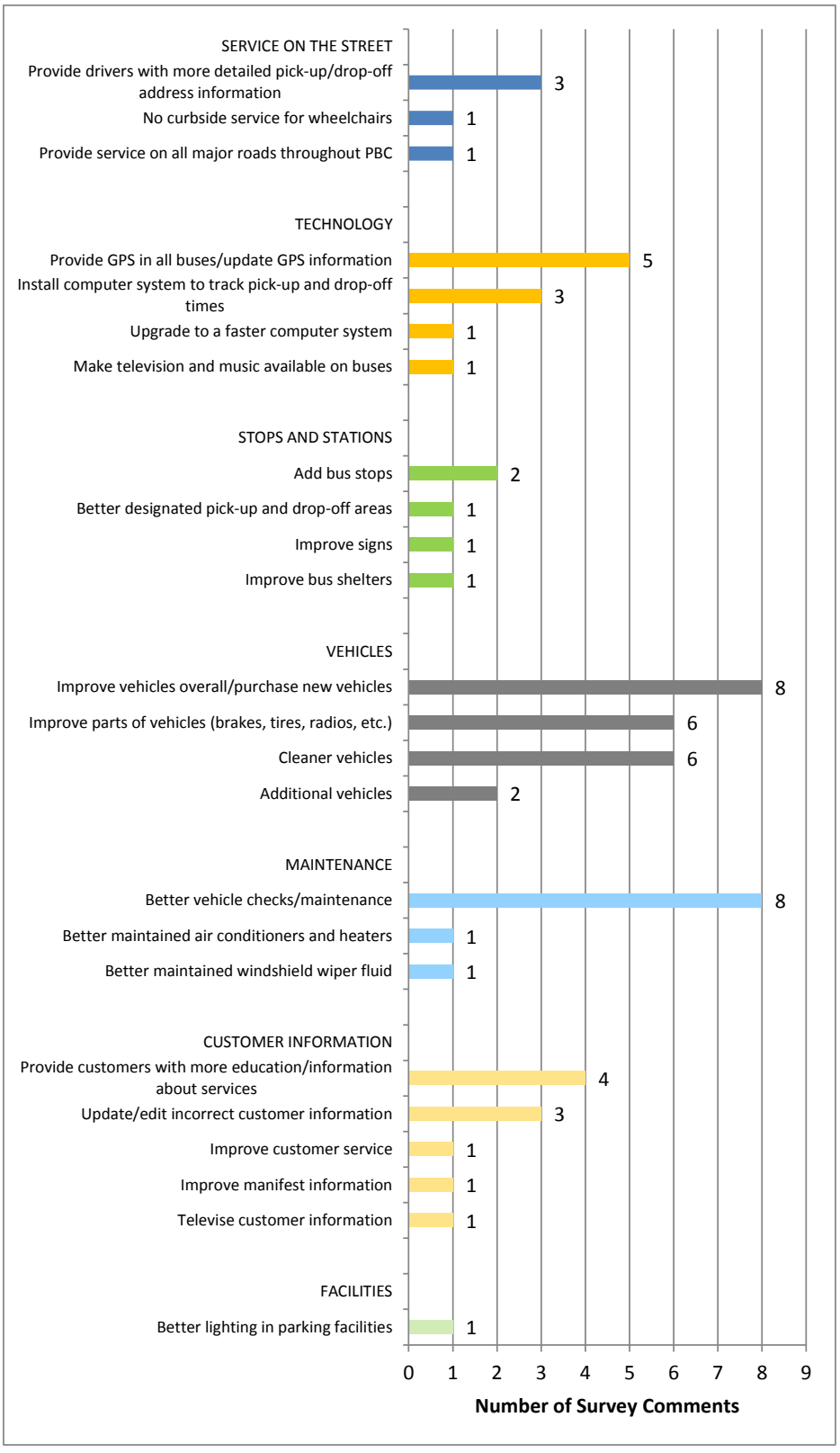


Figure 1-90 Priority Improvements Identified by CONNECTION Operators in 7 Categories

Question 6: Improved Customer Experience

Question 6 was an open-ended response question that asked the operators to describe what could be done to improve customer experience with Palm Tran CONNECTION. Forty-seven employees answered Question 6, although several employees provided answers that focused on the employee experience rather than the customer experience. The comments varied in their level of detail, so the comments were grouped into categories. The results of Question 6 can be viewed in Figure 1-91. The three ideas that received the most comments for improving customer experience with Palm Tran CONNECTION are (1) better scheduling, (2) improved working conditions for employees (respect, wages, etc.), and (3) better communication (with riders, dispatch, etc.).

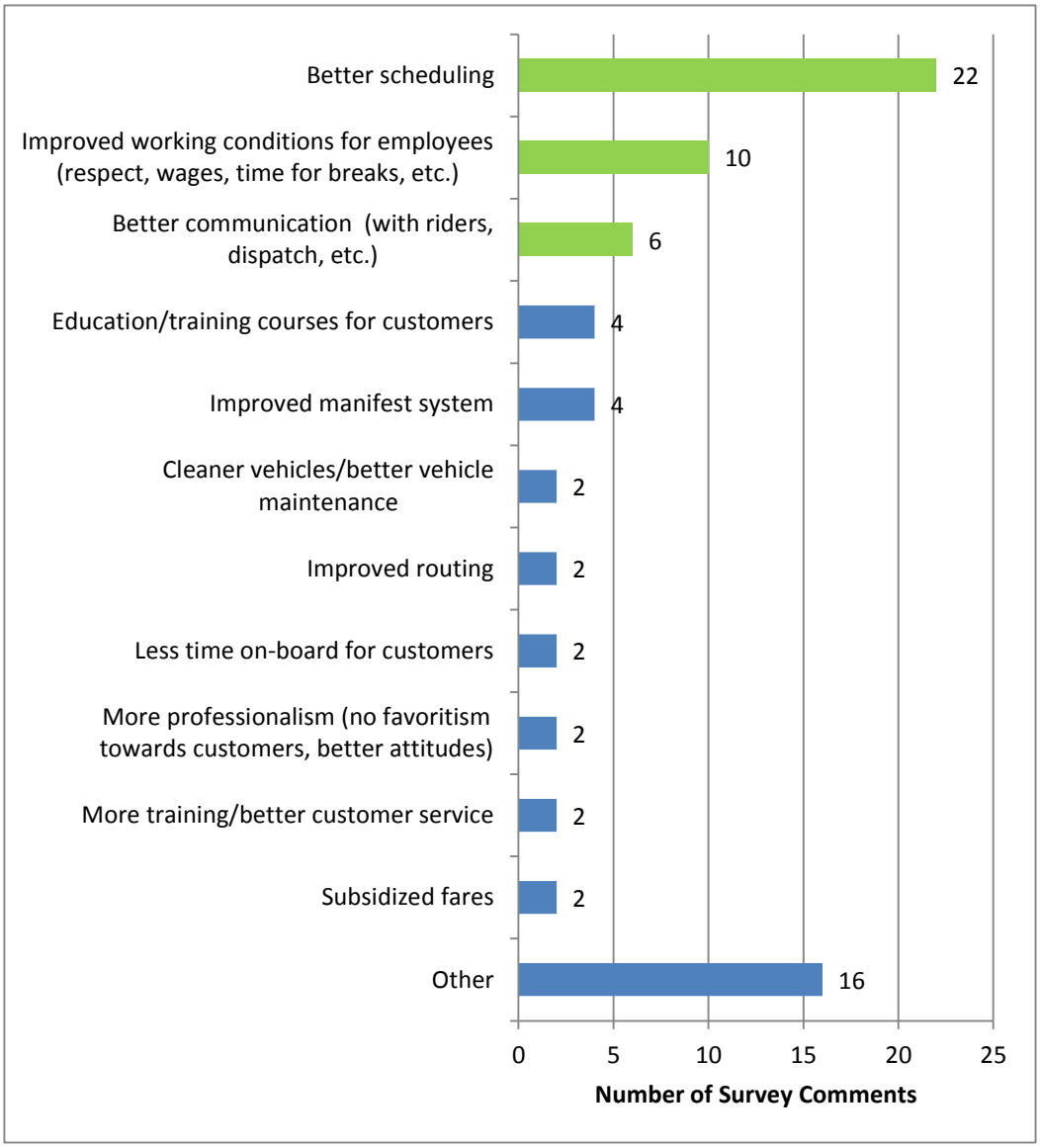


Figure 1-91 Employee Ideas for Improving Customer Experience with CONNECTION

Question 7: Additional Comments

Question 7 asked operators to share any additional comments that would help build a successful transit system over the next ten years. Forty-three employees wrote a comment for Question 7. The comments varied in their level of detail, so the comments were grouped into categories. Figure 1-92 provides the results for Question 7. The three ideas for building a successful transit system that received the most comments were (1) improved working conditions for employees (respect, wages, etc.), (2) better scheduling, and (3) improved vehicles.

Improved operator morale and compensation can benefit a transit system if it results in less turnover and absenteeism among operators and it promotes operator health and wellness. Increased turnover translates to increased training costs. Increased absenteeism can adversely impact service reliability. Declining health and wellness can lead to increased absenteeism and a lower level of customer service.

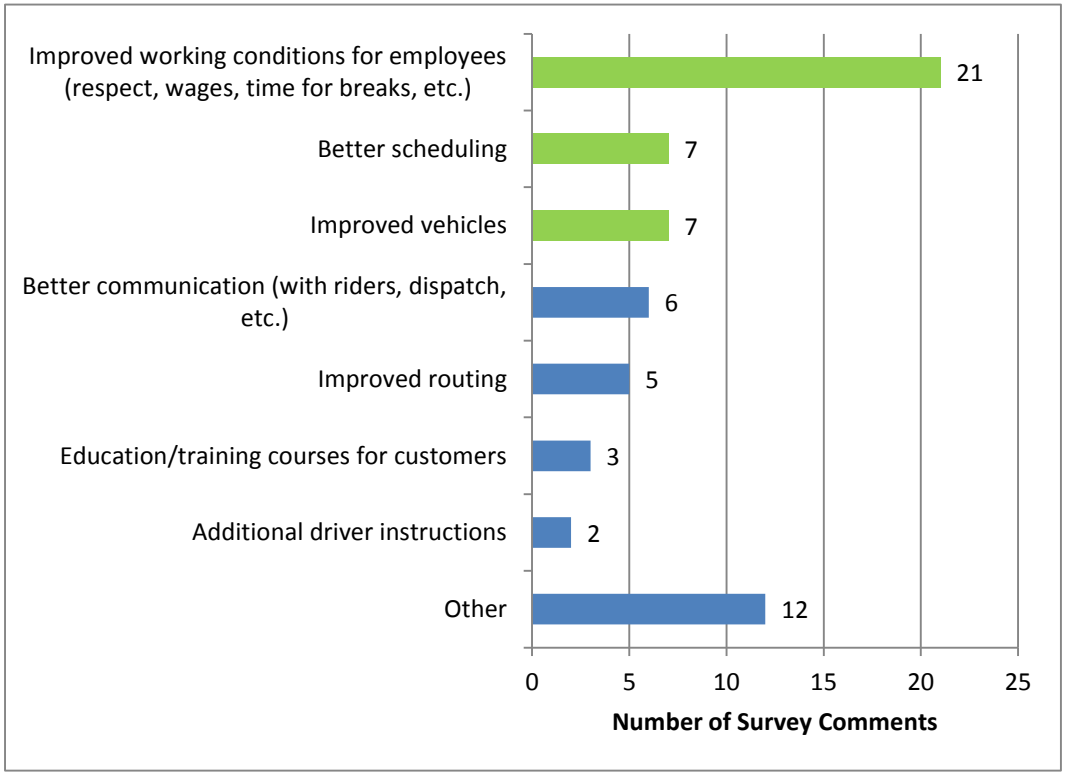


Figure 1-92 Additional Ideas for Building a Successful Transit System over the Next 10 Years

Conclusions

The paratransit operator surveys revealed three primary areas that operators would like to see Palm Tran CONNECTION improve:

- Improved working conditions for employees (regarding respect, wages, etc.)
- Better scheduling
- Improved/additional vehicles

In addition to those three primary areas, the paratransit operator surveys also revealed several additional areas that operators would like improved:

- Improved routing
- Communication with/training for customers
- Better vehicle checks/maintenance
- Providing GPS in all of the buses/updating the GPS information
- Better communication (with riders, dispatch, etc.)

STAKEHOLDER INTERVIEWS

Stakeholder interviews took place on March 21st and March 22nd at the Palm Beach County administration offices. The interviewed stakeholders were:

- George Webb, Palm Beach County Engineer
- Karen Marcus, Board of County Commissioners, District 1
- Jess Santamaria, Board of County Commissioners, District 6
- Fred Pinto, City of Royal Palm Beach
- Bob Weissman, County Administrator
- Brad Merriman, Assistant County Administrator
- Paulette Burdick, Board of County Commissioners, District 2
- Kelly Smallridge, President, Business Development Board
- Steve Abrams, Board of County Commissioners, District 4
- Shelley Vana, Board of County Commissioners, District 3
- Priscilla Taylor, Board of County Commissioners, District 7
- Burt Aaronson, Board of County Commissioners, District 5

Stakeholders were presented with a list of questions before the interviews began. These questions were used to categorize the feedback received through the interviews. All of the interviewed stakeholders viewed transit as an essential service for Palm Beach County that should be maintained and, if possible, developed. None of the stakeholders felt that additional public funding could be made available for transit improvements in the near future. The following summary of stakeholder feedback includes suggestions and information received from all of the interviewed stakeholders.

How is Palm Tran viewed by the public in your area? What do people appreciate the most about Palm Tran?

- Gated communities in the northern part of the county are more affluent and there is a focus on individual vehicles. Boca Raton and residents of similar communities will not shift to transit until gas prices are higher.

- If Tri-Rail is introduced further north, rail connections will become more important. Currently, there is not a lot of interest in getting more service, unless Tri-Rail is extended, which would be important. Environmental concerns are expected to drive the growth of Palm Tran.
- Circulator services to college campuses was offered at one point, but cut due to lack of use. Once service was cut, many complaints were issued which led to restoration of service. Campus connections are now considered as a need.
- Residents in the area oppose density increases, which are controlled by cities' decisions on land use designations, but some areas could have public support for higher density. With increased density, transportation will improve but currently is challenged by lack of a compact street grid. It is expected that, as gas prices increase, Palm Tran should grow. Transit that is cost-feasible with current densities is not likely to attract choice riders.
- The perception is that transit is a very expensive service and is an inefficient use of funds. There are currently 40- to 50-passenger buses with very few passengers on them. Some of the population like the service and are willing to pay current prices, but may resist fare increases. It is viewed that transportation is important for jobs and economic development; with accessible transportation, jobs may be located anywhere. Fare increases should be considered for increased revenue. There is a need to fix the public's perception that buses do not sync with each other. Commissioners are worried that Tri-Rail is losing money.
- Many Palm Beach County residents view Palm Tran as a service for the elderly and not useful for themselves, but is thought by some to be a good and reliable service. It is thought that Palm Tran has an inflexible schedule and is not reliable for long commutes, making it an undesirable alternative to passenger cars.
- Generally, citizens in West Boynton do not use transit. Some of the population has the perception that transit brings undesirable people to their areas. Some businesses have asked that transit stops be removed.
- Western communities are less supportive of bus services. People who ride Palm Tran like it, while others see empty buses. The general population is satisfied with the service, but would like to see more fixed routes. Military Trail (north-south) routes are very important to the system. The spread-out population is challenging to cover with transit. Floridians are hard to sway to not use vehicles.

What are the most common concerns that are brought to your attention?

- No safety concerns have been brought to the commissioners' attention other than drivers talking on their cell phones.
- The US 1 corridor is overcrowded, which leads to discussing how buses are being utilized with empty buses running on other corridors.
- Scheduling issues with connections to rail travel options
- Passengers being passed by because the bus is full

Do you believe that Palm Tran's fixed-route service adequately meets the needs of county residents?

- Five years ago, there were more empty buses, which indicated that buses were too large, which may still be true. There is now standing room only on some buses because Palm Tran works with the Service Board. In the Palm Beach County 2035 Long Range Transportation Plan (LRTP), two-thirds of transportation funding is projected to keep Palm Tran running at its current level of service. The local MPO plan projects the transportation system to stay the same. Tri-Rail is mostly operating in municipalities where it is under a no-horn ordinance.
- There is potential for SR A1A service improvements due to higher density in the areas along the corridor. There are many New York travelers in the area that are used to transit and many other tourists who walk to nearby beaches, but could be exposed to many other destinations in the area through transit. It may be necessary to reach out to residents who used to live in transit-oriented areas.
- As new travel destinations develop or the population expands, Palm Tran could add more routes. Delray could have a local service. Transit should be considered in emergency evacuation situations. In an effort to attract riders, off-peak fare incentives should be considered. Passes are not easy to buy because locations are not convenient.

What is your vision for Palm Tran in the future for the 10 years included in this TDP?

- Downtown parking is expensive and traffic is bad, which should present the opportunity to improve transit facilities. Evaluation is needed to ensure that there is adequate capacity to meet the needs during peak hours. More bike capacity on congested routes is important, along with pedestrian issues. Bus stops are only suitable for people who are able to get up and are not convenient for the blind. The adult disabled community, including the mentally disabled, will need medical services and will depend on public transportation.
- Smaller vehicles running with shorter headways would help increase use of buses. Royal Palm is considered a high-density area by Palm Tran and is considered a beneficial place for a park-and-ride.
- There should be implementation of safe, long-term satellite airport parking with no security concerns with an emphasis on faster services, especially during rush hour.
- The demand-response system could be expanded by utilizing better scheduling and dispatching to improve efficiency. There should be a strong connection between Palm Tran and Broward County Transit (BCT).

What role do you see Palm Tran playing in regional transit connectivity?

- Tri-Rail is chosen by businesses for its reliability, permanence, and connection between West Palm Beach, Fort Lauderdale, and Miami.

Do you believe that the county is adequately providing for the transportation needs of the elderly, disabled, and transportation-disadvantaged?

- The elderly and disabled get very good access because the community is active. Transfers are sometimes difficult, which makes it hard for passengers to get to their destination, even

though most destinations are served, but it is not a complete system that can serve all functions.

- The adult disabled community is particular vulnerable and should be provided with service as needed.

Is Palm Tran doing enough to support economic development?

- The West Palm Beach Intermodal Center site did not support West Palm Beach development because pedestrian traffic has been diverted away from the business centers and City Place.
- An express connection from the Dixie Highway/Lake Worth TOD project near Tri-Rail to downtown is an example of a desirable service between downtown and a community area. TOD is also needed in the Glades area. Small community bus trips to downtown should run late enough to accommodate dinner trips and should have a schedule suitable for commuters.
- City Place is not well served by transit but could do better with more traffic.

How can Palm Tran make itself more attractive to riders with other means of transportation?

- Free Wi-Fi should be considered on buses for improved attraction to choice riders. Use of a fare card is an important option to make seamless transfers. People plan travel to meet their needs and an online trip planner or schedule system would make transit more appealing to travelers. More amenities are needed at bus stops. Palm Tran is considering bus rapid transit (BRT) from Wellington Mall to SR 7/Okeechobee. A park-and-ride at the mall could be done as a pilot study. High-occupancy vehicle (HOV) lanes on major facilities improve speed of transit. Palm Beach County is a suburban county that is currently not developed around transit. There currently are not enough inter-county trips to warrant a large effort and expenditure on BRT between counties.
- Promotion of services must be considered, especially promotions that explain benefits to the public.
- Palm Tran should market more toward businesses. Palm Tran has a marketing weakness that reduces its visibility to the public. It is desired to have more frequent stops and faster service. Real-time bus information would be helpful to supplement general schedules. The air conditioning is appreciated but the bus service is a backup of last resort when other travel methods are not available. In order to market to businesses, geographic business hubs such as PGA, Okeechobee, and Lake Worth should be targeted with bus services.
- It is viewed that a Tri-Rail shuttle service expansion project would be beneficial. Higher priority given to buses, shorter headways, and rail expansion are all things that would improve transit system ridership. Palm Tran staff usually do not accept recommendations from the Service Board on financial allocation, but it is viewed that the Service Board should have more scope to talk about funding.
- Efficiency and flexibility are needed to make the cost of transit via taxes or fares palatable and to serve customers' differing needs. Multimodal options may help improve the transportation network. Bus bays are thought to improve traffic flow in the roadway

network because some bus stops in front of high-volume right turns are obstructive to other traffic.

- In order to improve ridership, better routing and scheduling should be considered, along with park-and-rides, which could be constructed on county-owned land. Parking should also be considered along main thoroughfares next to bus stops, which could be allocated in shopping centers. Most riders currently walk to the bus stops.
- The hours of operation go to 9:00-10:00 p.m., which is believed to be a contributing factor to low ridership because people are not certain that the service will still be running for their return trip. Ridership is relatively large to the flea market on Sundays.

What do you think Palm Tran's highest priorities should be for both the near term and the long term?

- Stop locations are currently working well and buses are clean but some stops, such as Wal-Mart stops, are littered with shopping carts and need to be cleaned up. Some stops are not pleasant, on busy roads, and are not in safe locations. Rides must be clean and pleasant for the customer.
- Some areas such as Jupiter Farms, the Acreage, and West Southern are not served because they are not transit-supportive. The Acreage is not financially feasible to serve. Martin County bus services are considered to be an inefficient use of resources. Express routes should be considered, such as a Wellington in-town express. The north Wellington stop is extremely busy. Shelters are great but may not have an impact on ridership. Neighbors along some roadways such as Atlantic Avenue do not want shelters for fear that they might not be visually appealing.

Do you believe that Palm Beach County residents would be willing to pay more for a higher-quality transit system?

- A local gas tax exists, which was split 75% to roadways and 25% to transit. In 2006, the ratio began to shift and now provides transit with the greater share of gas tax funds. The budget crunch has led to creative approaches to funding. Palm Tran CONNECTION has aided in the change in distribution of the budget; there is now 33% roadway and 67% transit budget breakdown.
- It is unlikely that the Board will cut Palm Tran and CONNECTION. Palm Tran advocates are very vocal during the budgeting process. The Board is especially sensitive to constituents that come to the meetings. It is noted that the Commission giving the Palm Tran Service Board the responsibility to change routes, etc. has led to less politics in Palm Tran decision-making. Palm Tran is embedded in the budget. There is a projected large increase in ridership, as there is an aging population in the area. Palm Tran needs to plan for this increase to ensure that all of those who need the service will be able to access it.
- The Commission cannot increase the proportion of funds to transit without compromising other priorities, but would like to see a general fund increase that would allow improvements to all county services.
- Currently, 60% of taxes are appropriated to the sheriff's department and 40% is allocated to other departments. Palm Tran has been focusing on allocating resources well to maximize efficiency.

- Differential fares for costumers with greater means were addressed as a consideration.
- Better transit is worth paying more for and could reduce other costs with gas prices rising. It is believed that more routes should be offered, with an emphasis on east-west routes, which are needed more since I-95 is a good commuter road.

STAKEHOLDER E-MAILS

Stakeholders from the cities and towns in Palm Beach County were given the chance to e-mail their responses to the stakeholder discussion questions. The stakeholders who e-mailed responses are the following:

- Carol Lux, Senior Planner, Planning and Zoning Department, Town of Jupiter
- Scott Thatcher, Principal Planner, Planning and Zoning Department, Town of Jupiter
- Thomas Lanahan, Planning and Engineering Director, City of Greenacres
- Alex Hansen, Senior Planner, City of West Palm Beach
- Village of Wellington
- John Lindgren, Planning Administrator, Town of Palm Beach

The following summary includes suggestions and information received from the stakeholders who e-mailed responses.

How is Palm Tran viewed by the public in your area? What do people appreciate the most about Palm Tran?

- It is viewed as an affordable alternative mode of transportation. Palm Tran is encouraged through the Objectives and Policies of the Town's Comprehensive Plan and through the actions of the Town Council. Specifically it is appreciated since it improves transit services to major destinations, major residential developments, and major employment centers.
- Generally positively. People who have limited other options appreciate being able to get around using Palm Tran. People who are environmentally conscious also appreciate the fuel savings.
- The public sees Palm Tran as providing a valuable service to the County's transportation disadvantaged population. At the same time, the public believes that Palm Tran's service could be improved as indicated in the responses below.
- Public transportation use is not commonplace by residents. This is at least partly due to the lack of service in the core areas of the city. However, it is utilized by much of the workforce from outside the area. Seniors and people with disabilities are becoming more dependent on public transportation. In South Florida, it will be many years before it is considered an acceptable option. Not enough service; only one bus route in Wellington.

What are the most common concerns that are brought to your attention?

- Waiting too long for the bus and potentially being late for appointments or work, as well as the amount of time it takes to get to their destination. To address concerns of riders waiting for buses, the Town continually supports encouraging major employers and commercial

centers to assist public transportation though the addition of items that would support bus service (e.g., benches, shelters, and bicycle racks)

- Bus routes intended to feed commuters to Tri Rail are not coordinated with the train. The bus must arrive on time for the train and must not leave the station until the train has arrived, especially given the long headway at some locations and times of day. A missed connection can make someone late for work or very late getting home.
- Some important routes have infrequent headways and circuitous routes that reduce their appeal and usage. In addition, the lack of bus shelters at several important bus stops poses a problem considering Florida's sun and inclement weather. Further, some of the existing bus shelters are not always maintained adequately and are full of debris. Finally, at bus stops where a trash can is provided, it is often chained to the stop sign, furthering the negative image of public transit.
- The reliability of schedules, transfers/connections, and lack of shelter or furniture at many of the designated stops. Traffic congestion. Public transportation has rarely, if ever, been seriously discussed by the public in my experience. One notable exception is in the case of senior residents and the provision of semi-public transportation such as private cabs. Connection to Tri-Rail.
- There is currently one bus line (#41) that runs within the municipal boundaries of the Town of Palm Beach. There is very little demand for bus service from Town residents, so we believe the one service line that currently operates in the Town is sufficient to meet the needs of the residents and for those visiting the Town for work or other activities. My office has never received any negative comments regarding the current service provided.

Do you believe that Palm Tran's Fixed Service today adequately meets the needs of County residents? What would you recommend be done to improve service?

- It depends on whether you are asking if it meets the needs of those using it, or why in our area, especially, it has low ridership. The low ridership would indicate that it does not meet our local needs adequately. More stops in the eastern and northern sections of Jupiter. Ensuring that there are enough buses at quick enough intervals to ensure that riders can make appointments and work on time. Additionally, coordinating with the Toney Penna TOD area the Town is developing.
- Generally yes. Improve commuter connections.
- The headways of some routes could be reduced, bus shelters should be built whenever feasible, especially at heavy usage stops, and more direct east/west routes should be provided, including possible BRT routes connecting to Downtown West Palm Beach.
- No and is almost non-existent in Wellington. Identify major employment centers for expanded service and add express travel lanes for buses' east/west service connections. The needs of Wellington have been evolving; we have more bus stops specifically at the commercial centers which are adjacent to multi-family areas. I am a resident of the unincorporated portion of the county. Based on my experience, I do not. This is because of frequency of routes and the extra time factor due to traffic. Bus Transit Rapid (BTR) lanes for east/west corridors, the SR 7 Corridor, and other major arteries would constitute the most pragmatic solution, I believe. In my opinion, it is simply not realistic to even consider additional rail as an option. Buses are very possible.

What is your vision for Palm Tran in the future? How would you like to see Palm Tran evolve over the next ten years so that it can take on the role in your vision? What would you see happening in the next five years?

- The Town would like to coordinate with our major employers in the Abacoa/Scripps area and the Jupiter Medical Center/Toney Penna TOD areas to ensure adequate coverage.
- Palm Tran needs to link homes with employment within and outside of Palm Beach County.
- In the five-year horizon, Palm Tran should strive to improve the quality and expand the number of bus shelters, especially on the most heavily used routes and stops. Also, the transit agencies in the region should work on providing one transit pass that can be used for all transit services. In the ten-year horizon, emphasis should be placed on increasing the number of express routes, including the possibility of providing BRT services along selected north/south and east/west routes.
- No need to add internal loop into Wellington. Because of the de-evolutionary political and economic climate, I see minimal change in the next five years (perhaps a reduction of services even) although I see demand increasing drastically.

What role do you see Palm Tran playing in regional transit connectivity? Should Palm Tran take a greater/lesser role in connecting across county lines? How would you want to facilitate that role?

- Palm Tran should evolve to become the main form of transportation to and from the trains and Turnpike vehicle transportation as well as better inter-Town transport. The Town has an express bus that runs south from Martin County. Any further connection from the north may help ridership.
- Need to connect with systems in the adjacent counties. A route from western Palm Beach County to western Broward County would be helpful since these two areas have as much or more interconnections with each other then they do with each county's center city.
- Palm Tran should play a larger role in connecting across County lines. The new I-95 commuter express connecting Martin County with Downtown West Palm Beach and Tri-Rail is a good example of a cross-county connection. Also any cross-county transit connections should be coordinated with transit providers in the other counties.
- Need direct route to all airports and ports. We have three major airports here and three major ports. None have passenger rail service. Traveling for business or with family does not allow for any delays or missed connections. A complete metropolitan governing role—without such a role extended across county lines, I do not feel it will not be practical as a regional component.

Do you believe that the SFRTA (Tri-Rail) should take on an increased role in transit operations, including providing bus services from train stations?

- Yes, the Town is invested in TOD in the Toney Penna redevelopment area, and the SFRTA should support these efforts.
- If Palm Tran can't make the connections with the trains work, then SFRTA should take over.

- Bus operations to and from train stations should be enhanced, and the service should be better synchronized with the Tri-Rail schedules so that more people utilize the service. This should include better connections from Tri-Rail to the Palm Beach International Airport (PBIA). Whether this service should be provided by SFRTA or by Palm Tran should be further studied.
- Yes. Frequency and speed of any improvements is crucial.

What role do you see the Cities and other municipalities playing in improving transit services within the County?

- Ensuring a welcoming environment (bus shelters and surrounding vegetation, maintenance of shelters, etc.) to the riders so that if the buses are running late they will feel comfortable.
- Bus shelters, transit-supportive development patterns.
- Coordinating with Palm Tran on requirements for transit facilities (shelters or easements for future shelters) as part of development approvals. Incentivizing and/or requiring the placement of transit-friendly development patterns in close proximity to the main transit routes. Providing municipal trolleys that serve transit-deficient areas and/or connect with Palm Tran or Tri Rail routes.
- Increasing need for paratransit/on-demand service for elderly and disabled. Direct rail access to airports before anything else is crucial. Coordinating with the commercial centers to provide parking areas at the bus stops.

Do you believe that the County is adequately providing for the transportation needs of the elderly, disabled, and transportation disadvantaged? If not, what would you do to improve these services?

- The Town's comprehensive plan officially endorses the transit efforts of the Palm Beach County Council and Florida Department of Transportation support to the transportation-disadvantaged. However, it appears that the call-up services are not as widely available or advertised in such a way that that sector knows about them and can use them easily. Provide better education and advertising to those sectors of the public so that they can more easily use the services.
- Yes.
- See answers to Questions 2 and 3.
- No, and such groups will be continue to be causalities of the political and economic climate unless they are better represented. See Question 3 responses. Keep ridership costs at a minimum for this group.

Is Palm Tran doing enough to support economic development by connecting people and businesses?

- Taking into consideration the lack of funding, yes. Is there considerably more that could be done to improve the situation, yes.
- Yes, with the exception of issues noted above.

- More direct routes from the western areas of Palm Beach County to Downtown West Palm Beach are needed in order to provide convenient access to businesses and services. In addition, the service needs to be more convenient, and timed connections with other routes and with Tri-Rail should be provided.
- No. We are behind most metropolitan areas that are trying to develop similar economies. Not in our municipality and no evidence in the unincorporated areas either. No, not enough bus service.

How can Palm Tran make itself more attractive to riders with other means of transportation?

- Concentrating on ensuring that the bus lines currently running are on time and ensure that the current riders are satisfied and that they are serviced properly (e.g., no waiting for buses).
- On time, short headway, quick routes. Reliability is key. People with jobs can't be arriving to work "sometime between 8 a.m. and 9 a.m." As fuel prices rise, the bus becomes a viable alternative whereby people trade convenience for cost.
- By reducing the time of travel of key routes so that there is minimal difference between the commute time for those using Palm Tran versus those using a car. Also, by providing more amenities at the bus stops, such as the construction of comfortable shelters and provision of real time bus data at the shelters, and by increasing amenities in the buses, such as the provision of Wi-Fi.
- Bike racks on buses and consider routes to beaches, greenways, parks, and recreational areas. Dependability and frequency. Provide real-time route information regarding arrivals, departures, etc.

What do you think Palm Tran's highest priorities should be for both the near term and the long term?

- See answers to Question 4.
- Establishment of quicker and more frequent routes. Particularly the use of "smart lanes" or exclusive bus lanes that allow buses to trigger traffic signals for fewer stops. Increase ridership of all demographics. Include express bus routes at peak morning and afternoon travel times from business hubs, etc. Comfort and convenience, etc. Safety and reliability.

Do you believe that Palm Beach County residents would be willing to pay more (higher fares or a local sales tax) for a higher quality system (more service or more comfort and convenience)? And, if so, what would you recommend be done?

- Jupiter's demographics may change over time as the Toney Penna TOD begins development as well as having more highly concentrated employment bases (G4S, Max Plank, FAU, Jupiter Medical Center, and Scripps) so potentially higher fares could be supported. Local sales tax increase would be more difficult to support as the majority of Jupiter residents have cars and may not support a sales tax that would help non-residents (i.e., those employees coming from outside Town to work within the Town.) But, if it were presented properly, a sales tax may work.

- Taxes are a tough sell, especially on a countywide basis where there are areas without much service. A premium quality service with high speed and high reliability should be able to command a higher fare.
- Some residents (mostly choice riders) could be willing to pay more for a higher-quality system that includes express or BRT routes, comfortable shelters, and bus amenities.
- Need to coordinate with local governments for park-and-ride locations and routes to major employment centers. Fares need to be kept reasonable, with a sliding scale for those that need subsidies. Sales tax increase would be unpopular, but gas tax might provide rational nexus. No, because I believe the climate of taxes has been politically stoked to the point of where no one wants to pay for anything and yet still demands service. In cases of infrastructure, it will take bold leadership but, if possible, I would move forward with creating transportation alternatives regardless of public input. Much the same way a road is widened or a government office is sited.

COMMENTS RECEIVED FROM THE PUBLIC

Open Houses

Three public open houses provided the opportunity for the public to learn about the Palm Tran TDP update and give their input on existing service. The open houses were from 6:00 p.m. to 8:00 p.m. at the Belle Glade Branch, Lantana Branch, and Jupiter Branch of the Palm Beach County library system. Members of the public who attended were encouraged to fill out a comment form. They could either submit the comment form at the open house or mail the comment form to the consultant team. The comments that were received are summarized below.

Belle Glade Open House (Two Respondents)

- Provide service by 6:00 a.m. from Pahokee (Bacon Point Road) to Gove Elementary.
- Schedule a bus that leaves Gove Elementary at 5:00 p.m. for Pahokee (on Bacon Point Road).
- Provide one bus for teachers from the coast to Belle Glade for all public schools.
- Place a bus stop at Gove Elementary (900 SE Avenue G, Belle Glade).

Lantana Open House (Five Respondents)

- Improve customer service.
- Provide more information on stops within two miles of any area in Palm Beach County. Palm Tran customer service often responds that Palm Tran does not serve a particular area (e.g., Island Beach), but riders would like to be given information on the closest stops available.
- Increase service frequency. With one-hour headways, riders often have long wait times after they complete their errands.
- Provide a shopping bus on the weekends (Saturdays and Sundays).
- The four-shopping-bag limit on the CONNECTION buses is too low.

- Air conditioning makes many of the buses too cold at night. The rider dresses for 90° weather during the day, but at night, she sits for an hour on a bus that is 68°. While the drivers are wearing long sleeves and pants, many of the riders are wearing shorts because they have to walk in the heat when they get off the bus. The rider would like drivers to turn off the air conditioning and open the windows when it gets cool.
- Provide later Sunday service on Route 1.
- During the peak hour, the rider would like buses to have three bicycle spaces (instead of two) on the busy routes. Sometimes riders have a hard time finding a bus with space for their bicycles on Route 1.
- The Royal Palm Beach route was suspended, so the rider must walk to Military Trail to travel to 45th Street. Now none of the buses go to 45th Street on Sundays, making the rider late to work.
- Service span and service days are issues.
- Smaller buses might be adequate on weekends.
- Route 3 starts too late on weekends. It could start earlier or at a different location.
- Route 71 no longer goes up Lawrence Road, just down.
- Drivers sometimes complete their routes too quickly and transfers are missed. Drivers should wait for arriving riders to walk across the street to the bus stop. Driving too fast at the bus stops is dangerous for the pedestrians.
- Sometimes buses are overcrowded (especially Route 3) and dangerous.
- Being a pedestrian can be dangerous at intersections because cars fail to yield.
- Later service hours are needed. Hours of service prevented rider from accepting a job.
- Research funding opportunities with Job Access Reverse Commute (JARC) or taxis.
- An institution of higher learning should be served with later hours. There are people who are unable to take classes because no late service is available.
- Transportation Disadvantaged service should be based on need, not proximity to a route. Some areas are not prioritized.
- Bus frequency should increase.
- More cross-county connections are needed (Broward, Martin, and Hendry).
- Holiday service is needed.
- Shelters and benches are needed.
- Accessible pathways are needed. In particular, there are ramp and island issues at JFK Hospital and at Lake Worth and Congress.
- Good Samaritan Hospital does not have an area for CONNECTION.
- Consistent infrastructure should be a priority in order to accommodate the blind.

Jupiter Open House (Seven Respondents)

- Buses take too long to get to their destinations.

- Buses are seen as lower class by most people.
- Instead of only using rail for long distances, there should be rail provided along the coast with buses running short distances between the rail stations.
- There should be park-and-ride locations for those that are not near current bus routes.
- There are no convenient ways for students living in Jupiter to reach the FAU Boca Raton campus. While there is a commuter express route, it is not convenient for students in North County because it requires them to stay at school all day.
- There should be more buses provided at different times throughout the day between the FAU Boca Raton campus and Jupiter.
- Another option would be an express bus route to the Tri-Rail station on 45th Street, which could benefit many people.
- The County should work with the Cities to acquire land (through purchase and/or eminent domain) for shelters and benches.
- Bus route #10 should be extended west to Jupiter Farms Plaza so that residents from the western parts of Jupiter can have access to the malls, college, and hospitals in town.
- Bus route #73 should be extended from Boynton Beach to Caridad Center so that the underserved community could connect from other bus routes.
- Connect TOD to express bus #95.
- The western population needs connections to jobs, shopping, etc.
- There are four universities along I-95 (FAU, FAU (south), PBSC, and PBSC (north)). There are students who are dual-enrolled and teachers who work on multiple campuses that need a shuttle connection between the universities. This is not a service provided by Tri-Rail, and the universities have shared-ride only. In order to travel between the universities, there are transfers required. The trip between campuses needs to be faster.
- There should be a park-and-ride.
- The 45th Street Tri-Rail Station should be redeveloped. There are security issues that dissuade ridership.
- Bus route #11 is good because it serves good destinations (FP&L HQ), but Martin County residents may not know about it.
- Money should not be diverted from paratransit. There should be a five cents gas tax used for paratransit purposes.
- Crossing the corridors: Make riding Palm Tran convenient to use anytime. Focus on connecting core parts of the county and people to their community.
  - Proposed secondary corridors are just a start. For now, Mid Town is covered with route 61, 62, 46 providing several options to get around the area. Intermodal/trolley/shuttle handles downtown. Delray has Atlantic Avenue shuttle.
    - Route 91 – Glades Road
      - Numbers approximately 20,000 on weekdays
      - FAU
      - PBCC

        - Contact Plaza Real for Museum of Modern Art
        - Student population
    - Route 31 – 45th Street
        - Numbers approximately 30,000 on weekdays
        - Medical Centers
        - Veteran Hospital
        - Hotels, schools
    - Route 42 – Okeechobee Blvd
        - Numbers approximately 40,000 on weekdays
        - Social security office
        - Connects to downtown shuttle, trolley
        - Adult Education Center on Military is high traffic during peak times
- Proposed Tertiary Corridor Links
    - Shuttle/Trolley from Federal to Lake Worth Beach
    - Shuttle/Trolley from Federal to Singer Island
    - Extension to Route 73 to La Caridad
    - Route 61 change to every half hour
- Increased ridership hours
    - Peak Time increase in buses
        - 15 Minute Headways – Route 3 and Route 2
        - Better Peak Hour Headways – Route 91, Route 31
        - Route 43
- Final initiatives
    - Shelter at key locations
        - Libraries
        - Grocery Stores
        - Social Security Office
        - DMV
    - Trash cans
    - Ad campaign for monthly passes
        - Do the numbers
        - Palm Tran is efficient. Crossing the corridors would open the county up for its residents. For work or for play, Palm Tran can get you there.

- A new route should connect the Jupiter campus of FAU with the Boca Raton FAU campus. Palm Beach State College's north campus in Palm Beach Gardens could also be connected

from the Palm Beach Gardens campus to their Lake Worth and Boca Raton campuses. The five campuses are all located close to I-95, making this a feasible route. A bus that runs several times a day would definitely get ridership. Both FAU and Palm Beach State College do not have all the classes available at the northern campuses needed to get most degrees. Also, often there are students that are dual-enrolled.

Other Input

Palm Tran staff and the consultant team were invited to meet with the El Sol neighborhood resource center in Jupiter on July 19, 2011. El Sol staff indicated that their clients would benefit from higher-frequency transit service (which would allow clients to better access clinics, the courthouse, and other facilities), transit service that runs earlier in the morning and later in the evening, and more Palm Tran travel training. El Sol staff also indicated that the Palm Tran bus stop provided at El Sol is excellent.

1.5 Conclusions

Palm Tran is a very successful transit agency given its resources and the area that it has to serve. Palm Beach County is very large and does not have a clearly dominant central business district. Challenges for Palm Tran are compounded by the fact that bicycle and pedestrian access to its routes are impeded in many areas by canals, extensive gated communities, and disconnected local street networks. Palm Tran fixed-route service covers most of the urbanized portion of the county with the exception of the SR 7 corridor and the some of the mid-western communities.

The current land use pattern in most of Palm Beach County's communities is very segregated and lower density. There is discussion of TOD and how it can be built in Palm Beach County; Tri-Rail stations are the most obvious choice. The Treasure Coast Regional Planning Council and FDOT have partnered to prepare a document with TOD guidelines that are relevant to Palm Beach County. This document is available at http:\\fltod.com. Palm Tran can use this document to support some of the strategies identified in Chapter 2.

The City of Wellington, The Acreage, West Boca Raton (unincorporated), and West Riviera Beach (unincorporated) are the areas within Palm Beach County that have the highest unserved population densities. Service along Jog Road, SR 7, Pratt-Whitney Road, and Okeechobee Boulevard would fill many of the existing gaps. South Wellington, Loxahatchee Groves, and West Riviera Beach have a great deal of population growth and may now be more transit-supportive than they were when the last TDP update was conducted. These areas are discussed in Section 4.5.

Some segments of the population are more likely to be transit-dependent than others. People under the age of 18 and over the age of 65 often cannot drive or do not have access to vehicles. Underserved youth (under 18) populations are highest in Wellington, The Acreage, and West Riviera Beach. Elderly populations that are not served are concentrated west of Boynton Beach. Another transportation-disadvantaged group is low-income households. Many of the highest concentrations of low-income households in Palm Beach County are served by transit. West Riviera Beach and West Boynton Beach have the highest unserved densities of low-income households.

Commonalities regarding needed improvements are evident in the rider, operator, and employee surveys and the input received from the stakeholder interviews, stakeholder e-mails, and the open houses. These commonalities are the following:

- Bus service frequency improvements are needed.
- Service span extensions are needed.
- Some areas/populations in the county are underserved.

The rider, operator, and employee survey results and the input received from the stakeholder interviews, stakeholder e-mails, and the open houses also span a wide range, which is to be expected given the different perspectives of the participants and the different focus of each outreach effort. Feedback touches on bus stop infrastructure, TOD, agency administrative matters, funding, bus features, park-and-ride lots, the behavior of captive and choice riders, paratransit scheduling and routing procedures, and fare collection methods.

2.0 TDP GOALS AND OBJECTIVES

Palm Tran's 10-year Transit Development Plan (TDP) has been formed around a set of goals and objectives that have been crafted to match the desires of Palm Beach County residents and that will be complementary to the Palm Beach County LRTP, the Regional Long Range Transportation Plan (RLRTP), the Palm Beach County comprehensive plan, and the plans of other local transit agencies. The TDP will further recognize the growing ridership and improved service performance of Palm Tran.

The goals and objectives were derived through a review of previous Palm Tran TDPs and other transit system TDPs, the needs of Palm Tran and Palm Beach County, and coordination with SFRTA, FDOT, Broward County Transit, and the Treasure Coast Regional Planning Council.

2.1 Federal Transit Administration Requirements

The Federal Transit Administration (FTA) expects that regional and metropolitan transportation planning will be done with consideration of economic vitality, safety improvements, security improvements, increased mobility for people and freight, environmental protection, energy conservation, quality of life improvements, enhanced system connectivity, efficient management and operation, and preservation of existing system elements. These elements are part of the metropolitan planning process defined in Section 134(h)(1) of the United States Code. All of these elements must be represented in the TDP goals and objectives.

2.2 Goals and Objectives from Reviewed Plans

The priorities identified in the plans listed below have been considered in the development of recommended goals and objectives for Palm Tran.

REGIONAL LONG-RANGE TRANSPORTATION PLAN

The adopted goals for the RLRTP closely mirror those outlined by the FTA: mobility, accessibility, connectivity, environment, safety and security, and quality of life.

MPO LONG-RANGE TRANSPORTATION PLAN

The first goal of the Palm Beach County LRTP is to increase integration between transportation modes, for which a measure of effectiveness is increased transit occupancy. The second goal is to develop transportation mode alternatives, which include an increased emphasis on transit. This goal also includes an objective to reduce travel demand through land use planning.

COUNTY COMPREHENSIVE PLAN

The Palm Beach County comprehensive plan contains future land use and transportation goals that are relevant to the TDP update. These goals require the following:

- Implementation of strategies to create, protect, and maintain quality livable communities in the county
- Provision of services cost-effectively and efficiently
- Provision of an interconnected multimodal transportation system that moves people, goods, and services safely, efficiently, conveniently, economically, and with minimal adverse environmental impact

It should be noted that some of the comprehensive plan objectives related to the above goals are obsolete. Objectives that are *not* obsolete include encouraging the coordination of bus routes and the location of new major developments, requiring amenities and sidewalk connections at transit stops, coordinating with Tri-Rail, promoting transit-supportive densities, reducing headways, exploring routing options between residential neighborhoods and employment centers, providing incentives for the use of alternative transportation modes, continuing marketing initiatives, developing new transportation facilities with consideration of environmental impacts, maintaining the farebox recovery rate, monitoring compliance with the Americans with Disabilities Act (ADA), and continuing to seek federal grants.

SFRTA STRATEGIC REGIONAL TRANSIT PLAN

SFRTA desires to expand its feeder bus service, which should be focused on increasing service to areas not served by Palm Tran in order to better integrate with the Palm Tran fixed-route system at Palm Beach County Tri-Rail stations. SFRTA is interested in improving its coordination with Palm Tran and the other transit agencies in both planning and operations. SFRTA plans to continue supporting TOD in areas around Tri-Rail stations.

FLORIDA TRANSPORTATION PLAN

The goals of the 2060 Florida Transportation Plan are investing in transportation systems to support a prosperous and competitive economy, making transportation decisions that support and enhance livable communities, making transportation decisions that promote environmental stewardship, providing a safe and secure transportation system, proactively maintaining and operating Florida's transportation system, and improving mobility and connectivity for people and freight.

2.3 Palm Tran Mission Statement

Palm Tran's mission is to provide safe, efficient, affordable, and reliable public transportation for the people of Palm Beach County. This mission is customer-focused in two senses. First, it seeks to provide quality transit service to users and potential users. Second, it seeks to make cost-effective use of the resources that it receives from users and potential users (e.g., taxpayers).

2.4 Existing Palm Tran Goals and Objectives

Goal 1 of the existing TDP serves to establish service performance measures for Palm Tran. This goal was achieved. The updated TDP proposes to enhance these goals with more specific measures of effectiveness (MOEs) for each objective that will be included in the TDP.

Goal 2 of the existing TDP is to improve the quality of fixed-route service through a number of means. Many of the objectives in this goal relate to improving service along routes that have high ridership. This objective is proposed to be carried forward with added detail. A new emphasis on coordination with land use is proposed in order to prioritize service improvements that will also encourage higher-density development in Palm Beach County. Additionally, an objective is proposed to be added to develop a higher classification of service than is currently offered on the highest-performing corridors. System safety is proposed to be separated into a unique goal.

The third goal in the existing TDP is focused on increasing and managing Palm Tran's resources. This goal is proposed to be carried forward with a focus on funding. Some of the detailed strategies will be combined into a generalized objective, and several new objectives will be added. A new goal will focus on improving operational efficiency.

Goals 4 and 9 in the existing TDP are proposed to be combined into one that supports improving Palm Tran's image through marketing and a better customer experience.

Goals 5 and 6 in the existing TDP, which are focused on intergovernmental coordination, are proposed to be dissolved into objectives for several other goals, such as supporting economic development and improving mobility.

Goal 7 in the existing TDP is aimed at Palm Tran's very high proportion of paratransit users compared with fixed-route users. The objectives in this goal are proposed to be carried forward and incorporated into recommended mobility and quality of life goals.

Goal 8 in the existing TDP, which relates to technological improvements for Palm Tran, is proposed to be updated and moved under the recommended mobility and customer service goals.

2.5 Recommended Palm Tran Goals and Objectives

The tables below outline the goals, objectives, strategies, and potential MOEs that are proposed for the updated Palm Tran TDP. Many of the goals, objectives, and strategies in the previous TDP have been revised and incorporated into these recommendations. It is intended that MOEs will be evaluated annually to measure progress. The proposed goals, objectives, and strategies will further align Palm Tran's planning priorities with its mission and the priorities of the FTA.

2.6 Vision

Moving forward, Palm Tran's vision will focus on continued improved performance, efficient spending, coordination of transit service and land use, and provision of high-quality service and better mobility for Palm Beach County residents. As Palm Tran continues to serve those who rely on transit for their transportation needs, it will also seek opportunities to serve a greater number of people who do have other transportation options (i.e., driving, bicycling, and walking). By improving transit services, Palm Tran can improve conditions for all other transportation modes that interface with transit.

GOAL 1	**IMPROVE SERVICE QUALITY**	
Objective 1-1	**Improve fixed-route service quality.**	
Strategy 1-1a	When loading guidelines are regularly exceeded at peak periods, explore reduced headways or addition of higher-capacity vehicles such as articulated buses.	Potential MOE: Peak period directional load factor for each route, based on automated passenger counter (APC) data Potential MOE: Peak period directional travel time for each route, based on automatic vehicle location (AVL) data Potential MOE: Number of routes with service spans of at least 14 hours
Strategy 1-1b	Continue exploring improvements that reduce travel time, such as transit preferential treatments, stop consolidation, and limited-stop service.	
Strategy 1-1c	Increase service span of routes with significant early morning ridership and/or significant evening ridership.	
Objective 1-2	**Improve paratransit service quality.**	
Strategy 1-2	Improve paratransit on-time performance.	Potential MOE: Percent of pick-ups and deliveries occurring on time.
Objective 1-3	**Improve the quality of customer information.**	
Strategy 1-3a	Provide posted schedule information at all bus stops.	Potential MOE: Percent of bus stops with posted schedule information Potential MOE: Number of key bus stops for which real-time arrival information is available
Strategy 1-3b	Provide real-time arrival information on key routes.	
Strategy 1-3c	Explore implementation of on-line trip planning.	

GOAL 2	**IMPROVE OPERATIONAL EFFICIENCY**	
Objective 2-1	**Fill funding gaps through more efficient operation.**	
Strategy 2-1a	Improve running time/recovery time accuracy.	Potential MOE: On-time performance by time point by direction and time of day, based on AVL data Potential MOE: Passenger trips per revenue hour Potential MOE: Farebox recovery ratio
Strategy 2-1b	Continue exploring improvements that improve reliability, such as transit preferential treatments.	
Strategy 2-1c	Continue exploring improvements that reduce the level of resources needed to handle fare revenue, such as expanded pass options and electronic payment systems.	
Objective 2-2	**Encourage paratransit customers to use fixed-route services when possible.**	
Strategy 2-2	Continue to provide education and support services to paratransit customers who may not know how to use fixed-route services but would otherwise be able to use fixed-route services.	Potential MOE: Number of annual registered paratransit customer contacts relating to fixed-route service training and support Potential MOE: Annual paratransit boardings per registered paratransit customer
Objective 2-3	**Explore opportunities for public/private partnerships.**	
Strategy 2-3a	Work with municipalities to provide transit services that cannot be provided under Palm Tran's operating budget.	Potential MOE: Number of transit services in the Palm Tran service area operated by municipalities Potential MOE: Annual value of transit capital improvements and transit operations contributions paid by developers to mitigate transportation impacts
Strategy 2-3b	Continue seeking developer contributions toward capital improvements and operating costs.	
Objective 2-4	**Implement Intelligent Transportation Systems (ITS) technologies that improve data collection and operations analysis.**	
Strategy 2-4a	Continue deployment of automated passenger counters (APCs) on Palm Tran's bus fleet.	Potential MOE: Percent of buses equipped with APCs Potential MOE: Percent of paratransit vehicles equipped with AVL
Strategy 2-4b	Equip paratransit vehicles with automatic vehicle location (AVL).	

GOAL 3	**IMPROVE MOBILITY FOR RESIDENTS IN PALM BEACH COUNTY AND SOUTHEAST FLORIDA**	
Objective 3-1	**Increase transit mode share in Palm Beach County**	
Strategy 3-1a	Improve Palm Tran's image through marketing and service improvements.	Potential MOE: Annual boardings Potential MOE: On-time performance by time point by direction and time of day, based on AVL data
Strategy 3-1b	Ensure that existing service is competitive with private vehicle travel.	
Objective 3-2	**Provide better intermodal connectivity.**	
Strategy 3-2a	Ensure that population living in transit-supportive areas has access to transit service.	Potential MOE: Percent of transit-supportive areas with bus service within ¼ mile Potential MOE: Park-and-ride demand-to-capacity ratio Potential MOE: Average scheduled transfer time between Palm Tran buses and Tri-Rail, where 25% or more of boarding activity at Tri-Rail stations is transfers to or from Palm Tran Potential MOE: Average scheduled transfer time between Palm Tran buses and BCT buses, where 25% or more of boarding activity at common stops is transfers to or from Palm Tran Potential MOE: Annual review of SFRTA and BCT service plans Potential MOE: Annual review of county and city comprehensive plans
Strategy 3-2b	Provide adequate park-and-ride capacity where appropriate.	
Strategy 3-2c	Coordinate service connecting with Tri-Rail to the extent possible.	
Strategy 3-2d	Coordinate Palm Tran service plans with SFRTA and BCT service plans to the extent possible.	
Strategy 3-2e	Coordinate Palm Tran service plans with county and city comprehensive plans to the extent possible.	

GOAL 4	**SUPPORT DEVELOPMENT AND ECONOMIC GROWTH IN PALM BEACH COUNTY AND SOUTHEAST FLORIDA**	
Objective 4-1	**Enhance transit service in transit-supportive areas.**	
Strategy 4-1	Explore opportunities for service upgrades in areas where transit-supportive densities and intensities exist or are planned.	Potential MOE: Transit route miles in designated transit-supportive areas
Objective 4-2	**Coordinate transportation services and land use planning.**	
Strategy 4-2a	Review existing transit stops and transit corridors to identify those with potential for transit-oriented development (TOD).	Potential MOE: Development of criteria for identifying transit stops and transit corridors with TOD potential Potential MOE: Development of standards for service and amenities at transit stops with TOD potential and along transit corridors with TOD potential Potential MOE: Coordination with local governments to encourage transit-supportive infill development and redevelopment within ¼ mile of transit stops *Note: http:\\fltod.com is a resource for implementing these MOEs.*
Strategy 4-2b	Enhance service and amenities at transit stops with TOD potential and along transit corridors with TOD potential.	
Strategy 4-2c	Encourage transit-supportive infill development and redevelopment near Palm Tran stops.	
Strategy 4-2d	Participate in regional initiatives to promote mixed-use development and TOD.	
Objective 4-3	**Provide transit service to major activity centers and high-density residential areas.**	
Strategy 4-3	Ensure that Palm Beach County residents have transit access to major activity centers.	Potential MOE: Transit route miles within ¼ mile of major activity centers and high-density residential areas
Objective 4-4	**Improve transit access to major tourist destinations.**	
Strategy 4-4	Improve connectivity between major tourist destinations such as Palm Beach International Airport (PBIA) and the Port of Palm Beach.	Potential MOE: Revenue hours of service to designated major tourist destinations such as PBIA and the Port of Palm Beach

GOAL 5	**IMPROVE QUALITY OF LIFE FOR PALM BEACH COUNTY RESIDENTS**	
Objective 5-1	**Improve transit access to recreational facilities.**	
Strategy 5-1	Identify important recreational facilities on or near Palm Tran routes and ensure that schedules and service spans are adequate to serve them.	Potential MOE: Number of designated recreational facilities within ¼ mile of a transit stop
Objective 5-2	**Ensure that low-income residential areas are adequately connected to major employment centers.**	
Strategy 5-2	Identify low-income neighborhoods and ensure that transit routes serving them provide access to employment opportunities.	Potential MOE: Percentage of low-income households that are located within ¼ mile of a transit stop
Objective 5-3	**Provide services that optimize independence for the elderly and disabled.**	
Strategy 5-3a	Identify important senior and medical services within the Palm Tran service area and ensure that schedules are adequate to serve them.	Potential MOE: Number of senior centers and medical facilities directly served by fixed-route transit Potential MOE: Percent of buses with advanced technology features that enhance transit service for the elderly and disabled (e.g., next-stop annunciation) Potential MOE: Number of accessible bus stops
Strategy 5-3b	Explore applications of advanced technology that will enhance transit service for the elderly and disabled.	
Strategy 5-3c	Require that bus stops be made accessible when county and city roads are reconstructed.	

GOAL 6	**DEMONSTRATE EXEMPLARY ENVIRONMENTAL STEWARDSHIP AND REDUCE RELIANCE ON NON-RENEWABLE ENERGY**	
Objective 6-1	**Minimize vehicle emissions.**	
Strategy 6-1a	Maintain vehicle fuel systems to ensure maximum efficiency.	Potential MOE: Tons of CO_2 and other greenhouse gases emitted per year Potential MOE: Average vehicle miles per gallon Potential MOE: Number of hybrid buses in the fleet
Strategy 6-1b	Encourage operators to avoid rapid acceleration and other inefficient driving practices.	
Strategy 6-1c	Continue adding hybrid buses to the fleet.	
Objective 6-2	**Continue to explore alternative energy sources.**	
Strategy 6-2	Conduct periodic feasibility studies on alternative fuel sources and alternative propulsion systems as they become available.	Potential MOE: Annual review of new fuel sources and propulsion systems
Objective 6-3	**Support land use that will reduce trip lengths.**	
Strategy 6-3a	Provide high-quality connectivity between major short-haul destinations.	Potential MOE: Revenue hours of service between designated major short-haul destinations Potential MOE: Coordination activities with local governments to encourage mixed-use development within the Palm Tran service area
Strategy 6-3b	Continue supporting mixed-use development within the Palm Tran service area.	

GOAL 7	**ENHANCE SAFETY AND SECURITY FOR PALM TRAN CUSTOMERS AND EMPLOYEES**	
Objective 7-1	**Continue to provide safety and security training for Palm Tran operators.**	
Strategy 7-1	Provide printed materials and supervised training that ensure all operators and staff are familiar with Palm Tran safety and security procedures.	Potential MOE: Percentage of staff receiving safety and security training annually
Objective 7-2	**Maintain a system-wide safety, security, and emergency service plan.**	
Strategy 7-2a	Review existing safety and security features and procedures.	Potential MOE: Adoption of the safety, security, and emergency service plan Potential MOE: Percentage of safety and security improvements identified in the plan that have been implemented
Strategy 7-2b	Implement additional safety and security features and procedures where appropriate.	
Objective 7-3	**Ensure that all Palm Tran vehicles and facilities undergo routine safety inspections.**	
Strategy 7-3a	Review vehicle maintenance schedules.	Potential MOE: Number of vehicle and facility safety inspections performed annually
Strategy 7-3b	Ensure that observed safety deficiencies are corrected as soon as possible.	
Objective 7-4	**Locate transit stops to optimize safety and security.**	
Strategy 7-4a	Review existing stop locations for safe crossing opportunities, high visibility, and adequate lighting.	Potential MOE: Number of stops that have been inspected for street crossing, visibility, and lighting issues Potential MOE: Review of August 2007 *Transit Design Manual*
Strategy 7-4b	Where possible, position new stops near safe crossing locations and in areas with high visibility and adequate lighting.	
Objective 7-5	**Design transit stops for use by the disabled and elderly.**	
Strategy 7-5	Continue removing barriers to transit access.	Potential MOE: Number of accessible bus stops

GOAL 8	**IMPROVE THE PUBLIC IMAGE OF EXISTING PALM TRAN SERVICES**	
Objective 8-1	**Upgrade and maintain existing infrastructure where appropriate.**	
Strategy 8-1a	Install or upgrade customer amenities at high-volume bus stops and along key routes.	Potential MOE: Annual number of infrastructure improvements by type Potential MOE: Annual infrastructure maintenance expense
Strategy 8-1b	Maintain existing infrastructure to support customer comfort and a positive public image.	
Objective 8-2	**Improve customer service.**	
Strategy 8-2a	Provide seven days of customer support per week.	Potential MOE: Number of days of customer support provided per week Potential MOE: Annual calls to the Fixed-Route Information Line Potential MOE: Annual visits to the Palm Tran web site
Strategy 8-2b	Continue to improve on-line, phone, and static information.	
Strategy 8-2c	Provide consistency in door-to-door paratransit delivery.	
Objective 8-3	**Evaluate potential for high-capacity premium transit service.**	
Strategy 8-3	Provide high-capacity premium transit service on key corridors throughout the county as demand warrants and as funding opportunities are available.	Potential MOE: Number of routes with 15-minute headways or better for at least 14 hours per weekday
Objective 8-4	**Revisit the Palm Tran brand and marketing plan.**	
Strategy 8-4a	Improve transit's image to make it more attractive to choice riders.	Potential MOE: Perform market research to assess the current Palm Tran image with respect to riders and non-riders
Strategy 8-4b	Increase marketing efforts to employers and populations that are not transit-dependent.	

GOAL 9	**IDENTIFY AVAILABLE FUNDING SOURCES TO HELP PALM TRAN GROW**	
Objective 9-1	**Ensure that all planning and operational practices are consistent with state and federal funding requirements.**	
Strategy 9-1	Observe all state and federal requirements and, additionally, follow state and federal guidelines wherever possible so as not to preclude eligibility for grants and other project-based funding.	Potential MOE: Annual success rate on state and federal grant applications
Objective 9-2	**Identify transit projects eligible for state and federal grants and funding programs.**	
Strategy 9-2	Review projects on both the needs and cost-feasible lists for opportunities to leverage funding sources such as New Starts.	Potential MOE: Number of grant submissions per year
Objective 9-3	**Promote consideration of transit needs in transportation impact fees.**	
Strategy 9-3a	Work with Palm Beach County planning staff to ensure that transit is considered as a potential transportation mitigation measure.	Potential MOE: Inclusion of transit in Palm Beach County concurrency procedures
Strategy 9-3b	Work with Palm Beach County planning staff to ensure that transit is represented in any mobility fee that may be developed in the future.	
Objective 9-4	**Promote consideration of transit-supportive infrastructure in planned and programmed roadway improvement projects.**	
Strategy 9-4	Look for opportunities to include transit-supportive improvements (such as sidewalk connections to bus stops) in planned and programmed roadway improvement projects.	Potential MOE: Coordination activities with other agencies and local governments to incorporate transit-supportive infrastructure in planned and programmed roadway improvement projects
Objective 9-5	**Establish a dedicated transit funding source.**	
Strategy 9-5	Develop a plan to establish a dedicated transit funding source.	Potential MOE: Completion of a plan to establish a dedicated transit funding source

3.0 IDENTIFICATION AND EVALUATION OF EXISTING TRANSIT SERVICES

3.1 Introduction

Chapter 3 for the 2011–2021 Palm Beach County Transit Development Plan provides a performance review of Palm Tran service through performance measures targeted at historical Palm Tran trends and comparisons to transit agency peers. As documented in TCRP Report 88, *A Guidebook for Developing a Transit Performance-Measurement System*, performance measures are used by transit agencies for three main reasons:

1. They are required to do so.
2. It is useful to the agency to do so.
3. Others outside the agency need to know what is going on.

Performance measurement provides agencies with objective-based interpretation of existing conditions, historical trends, ongoing concerns, and unmet needs. It can also be used to direct decision-makers to more informed decisions regarding service deficiencies and improved service.

3.2 Description of Existing Transit Services

Existing transit services in Palm Beach County include Palm Tran fixed-route bus service, Palm Tran CONNECTION paratransit service, Tri-Rail commuter rail and shuttle service, Amtrak rail service, Broward County Transit (BCT) fixed-route bus service, and numerous local municipality shuttle services.

PALM TRAN

Fixed-Route Service

Palm Tran currently operates 36 fixed bus routes in Palm Beach County, with service to neighboring Martin and Broward Counties. On the weekend, 31 of these routes operate on Saturday and 24 operate on Sunday. Weekday routes generally begin between 5:00 and 6:30 a.m. and generally end between 5:30 and 10:15 p.m. Saturday service typically begins and ends operation one to two hours later and earlier during the mornings and evenings, respectively. Sunday routes generally operate eight to nine hours a day and conclude by 6:00 p.m. Two routes, the Route 95 I-95 Commuter Express and the Route 11 Commuter Express, provide peak hour express service to/from Martin County.

For local service, the standard one-way fare is $1.50 and the reduced one-way fare is $0.75. For express service, the standard one-way fare is $2.00 except for trips originating at Halpatiokee Park, where riders must purchase a $5.00 day pass. Daily unlimited and 31-day unlimited passes are available for $4.00 ($2.75 reduce price) and $60 ($45 reduced price), respectively. Bus-to-bus and bus-to-train transfers are $0.50, and train-to-bus transfers are free.

Figure 1-2 highlights all fixed-route routes that operate in Palm Beach County. Appendix E provides a detailed breakdown of each fixed bus route operated by Palm Tran, including span of service, frequency, ridership, riders per revenue hour, and major destinations served by each route.

Demand-Response Service

Palm Tran's paratransit service, Palm Tran CONNECTION, provides door-to-door service to members of the ADA Program, the Division of Senior Services (DOSS) Program, and the Transportation Disadvantaged (TD) Program. The service coverage area of Palm Tran CONNECTION are the areas east of Florida's Turnpike, north of the south county line, and south of Donald Road. ADA service is also provided within a ¾-mile vicinity of fixed bus routes. Service is provided Monday through Saturday from 7:00 a.m. to 5:00 p.m. and Sunday from 8:00 a.m. to 5:00 p.m. The one-way fare is $3.00.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY

The South Florida Regional Transportation Authority (SFRTA) operates Tri-Rail, a three-county commuter rail service that extends from the Miami Airport station in the south to the Mangonia Park station in the north. Six of the 18 total stations are located in Palm Beach County. Tri-Rail operates seven days a week with 20- to 45-minute headways during weekday peaks, 30- to 60-minute off-peak weekday headways, and 120-minute headways on the weekend. Fares range from $2.50 to $6.90, based on the distance of the trip. SFRTA also provides shuttle bus service to the Lake Worth and Boca Raton train stations in Palm Beach County. Palm Tran provides at least two bus routes to all Tri-Rail stations in Palm Beach County, totaling 18 separate bus routes. Appendix F provides a detailed summary of Tri-Rail stations and shuttle bus services by days of service, span of service, and connecting bus routes.

BROWARD COUNTY TRANSIT

BCT primarily operates public transportation in Broward County, just south of Palm Beach County. Like Palm Tran, BCT is a county department. BCT's service area population is considerably larger than Palm Tran's (1,751,234 versus 982,900); thus, the former also maintains a larger fleet of fixed-route buses (291 versus 154). BCT has slightly more fixed-route vehicles per capita than does Palm Tran. The difference in available vehicles is less substantial when comparing demand-response vehicles (312 versus 257). Palm Beach County and Broward County share a county border; therefore, they each have bus routes that cover areas in the other county. BCT's Routes 10 and 18 connect to Palm Tran's Routes 1 and 92 and Routes 91 and 92 to the east and west, respectively. Palm Tran's Route 92 serves Broward County in the northeast portion of the county, specifically along US 1 and Ocean Boulevard. Appendix G provides a detailed summary of BCT routes that serve Palm Beach County by days of service, span of service, frequency, and connecting bus routes.

LOCAL SERVICES

A total of 14 shuttle/trolley service routes are operated in Palm Beach County. Two of these local shuttle routes operate in the City of Delray Beach, five shuttle routes operate in the City of Boca Raton, one trolley route operates in the City of West Palm Beach, one shuttle route operates in the City of Boynton Beach (through September 30, 2011), and five operate in Belle Glade. Appendix H

provides a detailed summary of local shuttle and trolley routes that serve cities in Palm Beach County by days of service, span of service, and frequency.

AMTRAK

Amtrak's Silver Service (Star and Meteor) stops at the West Palm Beach Transit Center. Both Amtrak routes make one stop per day in each direction at this station. Fiscal Year 2010 boardings and alightings at the station was 62,333 passengers.

GREYHOUND

Palm Beach County has two Greyhound Bus stations, one in West Palm Beach at the Transit Center/Tri-Rail/Amtrak station and one in Belle Glade.

3.3 Performance Measurement Overview

NATIONAL TRANSIT DATABASE (NTD)

The Federal Transit Administration (FTA) requires agencies who receive funding through the Urbanized Area Formula Program (Section 5307) to report annual operating data and measures. This information is maintained in the National Transit Database (NTD), a service available to anyone interested in the data for over 600 transit agencies in the United States. The NTD represents the most comprehensive and consistent level of data available for transit agencies and organizations nationally. The data are available through the NTD website as extractable data sets or through one-page annual summaries. The Lehman Center for Transportation Research at Florida International University (FIU) developed software, available on-line, that assists in analyzing the data and also allows for selection and comparison of transit agency peers. At the time of this report, NTD data was available through 2009. The unaudited 2010 NTD submittal from Palm Tran was used to provide more current local performance data.

While data from the NTD is the predominant source of data used in performance measurement for this TDP, other data gathered from on-board surveys and Palm Tran will be used and analyzed.

TRANSIT PERFORMANCE EVALUATION

There are two key documents to consider when beginning performance evaluation of a Florida transit agency: the Florida Department of Transportation (FDOT) *Guidance for Producing a Transit Development Plan* document and TCRP Report 88, *A Guidebook for Developing a Transit Performance-Measurement System*. The FDOT document provides sample performance measures for a peer and trend analysis. A majority of these measures have been considered for this evaluation. However, TCRP Report 88 provides additional guidance on potential measures to be considered for this analysis and provides steps for providing new measures in future performance evaluations.

TCRP Report 88 categorizes performance measures into eight categories:

1. Economic—transit performance evaluated from a business perspective, including utilization, efficiency, effectiveness, and administrative measures (agency and community points of view)
2. Service delivery—including reliability, customer service, passenger loading, and agency goal accomplishment (customer point of view)
3. Availability—where and when service is provided, and having sufficient capacity available for passengers to take trips at their desired time (customer point of view)
4. Community—measures of transit's impact on individuals and on the community as a whole (community, agency, and driver/vehicle points of view)
5. Maintenance and construction—evaluating the effectiveness of an agency's maintenance program and the impacts of construction projects on customers (customer and agency points of view)
6. Travel time—how long it takes to make a trip by transit: by itself, in comparison to another mode, or in comparison to an ideal value (driver/vehicle and customer points of view)
7. Safety and security—reflecting the likelihood that one will be involved in an accident (safety) or become the victim of a crime (security) while using transit (customer point of view)
8. Capacity—the ability of transit facilities to move both vehicles and people (community and driver/vehicle points of view)

The measures selected for evaluation balance two factors: performance measures where data are readily available and performance measures that help round out the eight measurement categories and are linked to Palm Tran's goals and objectives. A performance evaluation has been completed for both fixed-route service and demand-response service. Many of the performance measures considered herein are used for both types of services, but there are some measures that are not appropriate for both types of services.

Trend Analysis

Trend analysis looks at the past performance for Palm Tran services for each of the performance measures. NTD data have been used wherever possible to provide consistent reporting and to allow comparisons with other transit agencies. (See Peer Comparison.) The trend analysis uses up to six years of data, from 2005 through 2009, as well as the 2010 unaudited NTD data submittal.

Peer Comparison

A list of peer agencies was developed using the methodology outlined in TCRP Report 141: *A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry* (March 2010). The methodology is described in detail in the TCRP report; in summary, the methodology identifies potential peer agencies that operate a similar mix of modes as Palm Tran and have similar operating characteristics and environments. The report emphasizes that one should not expect to find perfect matches when performing a peer comparison; rather, the methodology finds agencies that have similar-enough characteristics that reasonable conclusions can be drawn from the comparison. TCRP Report 141 also emphasizes that peer comparisons should not be approached in a report-card, judgmental way; instead, they are best applied from the

perspective of wanting to better understand one's strengths and weaknesses and to find areas where one can improve. In other words, peer comparisons are illustrative.

Table 3-1 lists the factors used by the peer-grouping methodology. Five factors relate to Palm Tran's operating characteristics, while nine factors relate to the characteristics of Palm Tran's urbanized area, in this case the Miami urbanized area. (Urbanized areas are used as the basis of comparison because the National Transit Database (NTD) collects information about the urbanized areas served by transit agencies and because the Census Bureau provides consistently defined demographic data for urbanized areas.) As Palm Tran serves one of the Miami urbanized area's central cities (West Palm Beach), but not the entire Miami urbanized area, the peer-grouping methodology seeks to identify other agencies with a similar type of service area (service to a main city, but not the entire urbanized area). The methodology also seeks to identify agencies with a similar size (in terms of budget and vehicle miles operated) and similar urbanized area demographics. Finally, the methodology favors agencies that are closer to Palm Tran; the more distant a potential peer is, the more similar it needs to be to Palm Tran in other respects.

Table 3-1 Peer-Grouping Factors

Factor	Source	Comments
Service Characteristics		
Service area type	TCRP Report 141	Assesses where service is provided (for example, to the entire urban area or just a portion)
Percent service purchased	NTD	Assesses contracted vs. directly operated service
Percent service demand-response	NTD	Assesses how service is operated
Vehicle-miles operated	NTD	Assesses how much service is operated
Annual operating budget	NTD	Assesses resources available to agency
Urban Area Characteristics		
Urban area population	U.S. Census Bureau	Assesses regional size
Population growth	U.S. Census Bureau	Fast-growing areas or shrinking areas face difference service challenges
Population density	U.S. Census Bureau	Denser areas are easier to serve with transit
State capital	TCRP Report 141	Capitals often have a higher proportion of office employment than other similar-sized cities
Percent college students	U.S. Census Bureau	College towns often have higher ridership per capita than similar-sized cities
Percent low-income	U.S. Census Bureau	Assesses transit-dependency
Roadway Delay	Urban Mobility Report	Assesses competitive position of transit relative to auto, used only for large urban areas
Freeway lane-miles	Urban Mobility Report	Assesses competitive position of transit relative to auto, used only for large urban areas
Distance	TCRP Report 141	Proxy for factors such as climate and age not captured elsewhere; closer agencies will be more familiar to stakeholders in a performance evaluation process

Similarity is determined from a "likeness score" that is calculated for every NTD reporting agency based on its similarity (or lack of similarity) to Palm Tran. A likeness score is determined for each of the 14 factors for each NTD agency relative to Palm Tran and an average likeness score is then calculated from the individual scores. Smaller likeness scores indicate a greater degree of similarity with Palm Tran, with zero indicating a perfect match (something that can be achieved with individual peer-grouping factors, but not for all 14 factors as a whole). TCRP Report 141 recommends interpreting the average likeness score as follows:

- Less than 0.50: good match, can be included as a peer
- 0.50–0.74: satisfactory match, can be included as a peer but is more dissimilar in some respects
- 0.75–0.99: consider with caution, may be included as a peer after further review
- 1.00 or higher: unlikely to be a usable peer due to many dissimilarities

The peer-grouping methodology has been incorporated into the Florida Transit Information System (FTIS) software maintained by Florida International University for the Florida DOT. FTIS was used to identify potential peer groups for both the fixed-route bus and demand-response modes. A final set of peers was then recommended after a manual review of the agencies with scores in the 0.75–0.99 range.

3.4 Fixed-Route Transit Performance

SELECTION OF PERFORMANCE MEASURES

Selection of fixed-route performance measures for Palm Tran included a thorough review of FDOT's *Guidance for Producing a Transit Development Plan* and TCRP Report 88, *A Guidebook for Developing a Transit Performance-Measurement System*. Additionally, detailed discussions were held with Palm Tran, FDOT, and Palm Beach County MPO staff to determine additional measures for this evaluation and measures to be considered for future monitoring. The final list of fixed-route performance measures is in Table 3-2.

Table 3-2 Performance Measures – Fixed-Route

Economic
Ridership
Passenger Trips per Capita
Passenger Trips per Vehicle Hour
Passenger Trips per VOMS
Passenger Trips per Revenue Mile
Passenger Trips per Revenue Hour
Passenger Trips per Employee Full Time Equivalent (FTE)
Passenger Miles Traveled
Total Employee FTEs
Operating Expenses
Operating Expense per Capita
Operating Expense per Passenger Trip
Operating Expense per Passenger Mile
Operating Expense per Revenue Mile
Operating Expense per Revenue Hour
Maintenance Expenses
Maintenance Expense per Revenue Hour
Maintenance Expense per Vehicle
Local Revenue: Local Contribution
Local Revenue: Passenger Fare Revenue
Local Revenue: Other Non-Fare Revenue
Average Fare
Energy Consumption
Vehicle Miles per Gallon
Farebox Recovery (%)

Community
Demographics
Service Equity (% Transportation Disadvantaged (TD) within ¼ mile of a route)
Accessibility (% population within ¼ mile of a route)

Service Delivery
Average Passenger Trip Length
Revenue Miles
Revenue Miles per Vehicles in Maximum Service
Revenue Miles per Vehicle Mile
Revenue Hours per Employee FTE
Vehicle Hours
Vehicle Miles
Vehicle Miles per Capita
Vehicles Available in Maximum Service
Vehicles Operated in Maximum Service
Route Miles
Percent of Stops with Shelters and Benches
Customer Satisfaction
On-Time Performance

Availability
Service Coverage
Service Hours
Service Density
Stop Accessibility
Frequency
Hours (Span) of Service
Revenue Hours

Safety and Security
Accident Rate (if available)

Maintenance and Construction
Mean Vehicle Age
Distance between Breakdowns (Service Interruptions)
Spare Ratio

Travel Time
Travel Speed

SELECTION OF PEER TRANSIT AGENCIES

A group of seven fixed-route agency peers was chosen after utilizing the methodology from TCRP Report 141 and completing a thorough review of the individual selected agencies. Four of the agencies selected were Florida peers, while the remaining three agencies reflect a representation of the country including the West Coast, East Coast, and Midwest. The selected fixed-route peers can be seen in Table 3-3.

Table 3-3 Palm Tran Peer Transit Agencies – Fixed-Route

Likeness Score	Agencies
Florida Peers	
0.19	Broward County Transit (BCT, Pompano Beach)
0.42	Pinellas Suncoast Transit Authority (PSTA, St. Petersburg)
0.64	Hillsborough Area Regional Transit (HART, Tampa)
0.88	LYNX (Orlando)
Non-Florida Peers	
0.75	Valley Metro (Phoenix, AZ)
0.82	Transportation District Commission of Hampton Roads (Hampton Roads, VA)
0.93	Southwest Ohio Regional Transit Authority (Cincinnati, OH)

TREND AND PEER ANALYSIS

Although numerous measures have been identified and calculated for this Plan, many are "explanatory" measures and not "outcome"-based measures. When reviewed singularly and/or compared to other agencies, these explanatory measures (e.g., passenger miles, vehicles, and route miles) are not particularly useful and can be falsely interpreted without context. However, these explanatory measures can become useful methods of evaluation when used in ratios to calculate new outcome-based measures (e.g., passenger trips per capita, maintenance expense per vehicle, and service coverage). Therefore, the focus of this evaluation is on outcome-based measures, but the explanatory measures are available in Appendix I when further clarification is needed or a general review is warranted.

Fixed-Route Performance Summary

A short summary of the fixed-route performance measures and peer review is provided here in order to clarify, and to provide guidance and a general understanding of, the detailed results presented later in this chapter. *As noted earlier, the peer review is an illustrative comparison intended to generate insights; it is not a ranking or a report card.*

As Palm Tran provides both fixed-route and demand-response service, it is important to note how these modes, although reviewed separately, have a significant impact on how Palm Tran operates and how these two modes are tied to one another. For instance, Palm Tran's transit investment per capita (the sum of fixed-route and demand-response) of approximately $73 generally places it in

the middle of the selected peers for the total of both modes. However, among all peers, Palm Tran devotes the largest percentage of its operating resources to demand-response service (approximately 34%). This higher-than-average funding commitment to demand-response is logical, as Palm Beach County also has the largest population of senior citizens of all peers (approximately 275,000). By comparison, in order to accommodate Broward County's 247,000 senior citizens, BCT devotes approximately 24% of its total operating budget to demand-response service. This ultimately allows BCT to provide more revenue hours at less cost, while Palm Tran's decision to place a higher priority on demand-response service means there is less money to operate fixed-route service when compared to other peers.

Although Palm Tran devotes a smaller percentage of total operating costs to fixed-route service when compared to agency peers, it does provide significant fixed-route coverage. It provides nearly as many route miles as BCT (1,020 versus 1,030) and more than PSTA and HART. However, with reduced fixed-route operating funds available, the available service on existing routes is the lowest among peer groups. For example, the average street served by buses gets 18 trips per day (9 in each direction) as measured by revenue miles per route mile per day. This is lower than all fixed-route peers and half of what BCT provides. The relatively infrequent service is likely the biggest contributor to Palm Tran's low ridership relative to its peers. This is particularly true in that Palm Tran's fare average ($0.68) is second-lowest among peers (only BCT's is lower)—a measure that typically attracts ridership. In short, Palm Tran's effort to focus on transit coverage occurs in two ways: an extensive demand-response service and fixed-route service coverage. This, however, results in few remaining resources left to operate the higher-frequency service that would attract more choice riders.

While fixed-route funding may be less than other peer agencies, there are available measures that outline areas Palm Tran is doing quite well in or even leading the peer group. This generally allows a more focused approach in moving forward with recommendations and/or improvements. For instance, the average speed of fixed-route service is the highest among all peers, which would suggest that congestion does not appear to be an issue on performance. Bus productivity (boardings per revenue hour) is near the peer average, and vehicle utilization (revenue miles per vehicles in maximum service) is above the peer average. Both of these peer comparisons suggest that, although service may be limited in some scenarios, the service that is provided does get used at a rate near the peer average.

Palm Tran's average fleet age is approximately the same as the peer mean. Palm Tran's fixed-route fuel economy, although below the peer average, was in a group of five agencies with very similar results. Similar to the fleet age, two agencies skewed the average with considerably higher fuel economy than the remaining peers (Phoenix and Cincinnati).

When reviewing peer grouping measures, it is important to identify broad measures where the subject agency is an outlier among the group (the best or worst), and then review that measure more closely to determine potential trends and conclusions. For instance, Palm Tran has the highest fixed-route expense per revenue hour among its peers. Agency expenses comprise a number of cost types (e.g., labor, maintenance, operations, administration, and fuel), so further review was conducted of these individual expense components. In turn, Palm Tran has the highest or next-highest expense per revenue hour in every expense category except non-vehicle maintenance. Labor and maintenance expenses are the largest component of those overall expenses. Overall, the following key indicators reflect the agency expenses relative to the peer agencies:

- Palm Tran's total operating expense per revenue hour ($118) is $16 higher than the next highest agency (Cincinnati).
- Administrative labor expenses (e.g., wages, fringe benefits, and outside services) per full-time employee are by far the highest of the group at $206,000, 42% higher than the second highest agency (Cincinnati).
- The high administrative labor expense is partially offset by the ratio of administrative staff to bus operators, which is the best of the peer group with 8.9 operators per administrative FTE compared to a peer average of 6.4.
- Maintenance costs are likely driven by higher labor costs and maintenance employees being a greater proportion of the workforce than at the peer agencies.

A peer comparison of operational expenses should not be completed without also considering the effects of inflation and the differences in labor costs between regions. As documented in TCRP Report 141, "Adjusting for inflation allows a trend analysis to clearly show whether an agency's costs are changing at a rate faster or slower than inflation. Adjusting for labor costs differences makes it easier to draw conclusions that differences in costs between agencies are due to internal agency efficiency differences rather than external cost differences." Palm Tran is about 4% higher than the peer average when it comes to cost of living. While cost of living differences is a contributor to Palm Tran's higher costs, it is not the primary cause.

Economic Performance Measures

Economic performance measures, also referred to as operator-based measures, provide an evaluation from a business perspective. Economic performance measures are often broken into four categories:

- **Utilization**: how well agency resources are being used
- **Efficiency**: the ability to provide service to users, while being constrained by other factors
- **Effectiveness**: the ability to meet transit service demand given existing resources
- **Administration**: management performance

For this evaluation, economic measures are considered that balance the four economic categories.

Utilization

Economic utilization is a measurement of how well agency resources are being utilized. Examples include monitoring the use of buses by ridership, average fare paid per customer, the percentage of operations costs that are offset by fares, and the fuel efficiency of vehicles. Figure 3-1 through Figure 3-5 provide an overview of Palm Tran's utilization trends from 2005 to 2010 and also a utilization comparison to seven other peer agencies for 2009. The supporting data are summarized in Table 3-4.

Passenger trips (i.e., ridership) are a measure of the number of passengers being transported, either at individual stops or routes or for an entire transit system. Ridership is a key performance measure, as many other economic performance measures are based on it, and it is one of the most intuitive of all measures. Except for a small decrease in 2008, Palm Tran's annual ridership has increased each year since 2005, representing a 5-year increase of over 24%. Increases in fixed-route transit ridership are generally seen as positive, as it means there is growing support of the

service among the community and more people are benefiting from its presence. Growing ridership also equates to a reduced cost per passenger, when the added demand can be accommodated by existing service.

Passenger trips per capita measures the number of transit trips provided in relation to the service area population. Assuming the service area population stays relatively equal across the measurement years, this measure's increases and/or decreases should mirror the annual ridership. The benefit of this measure, when compared to passenger trips, is that it provides a more tangible reflection of the use of public transportation by the total population, as service area population will vary among Palm Tran's peers.

Farebox recovery demonstrates how cost-effectively an agency transports its passengers. Specifically, it measures how much of an agency's operating costs are covered by fares (fare revenue divided by total operating expenses). It should be noted that agencies with high average fares and high farebox recovery may not necessarily be providing high levels of service; they may have high enough fares to cover more operation costs. Palm Tran's farebox recovery has generally been declining since 2005 due to increasing use of passes and increasing fuel and labor costs.

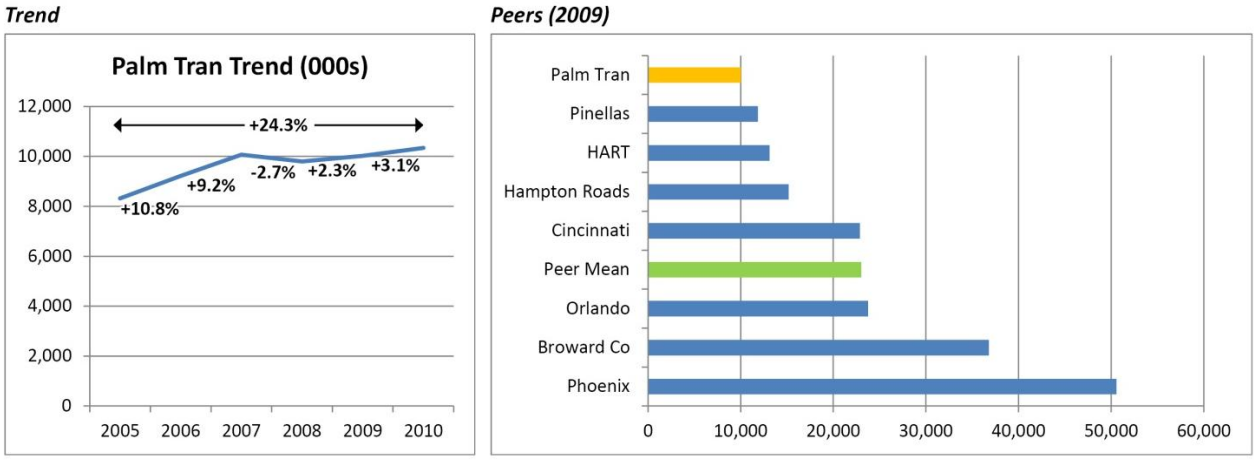


Figure 3-1 Thousands of Annual Passenger Trips – Fixed-Route

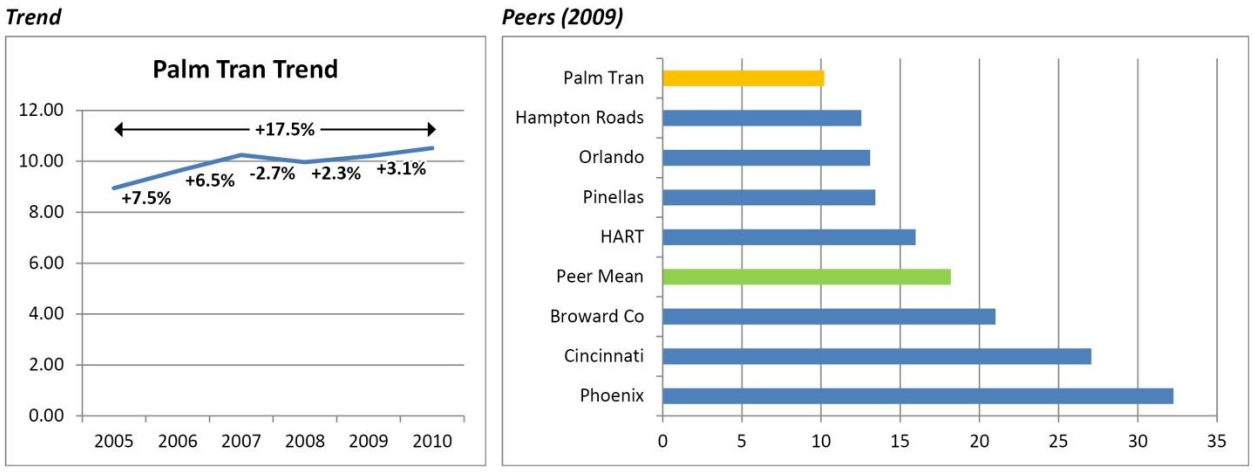


Figure 3-2 Annual Passenger Trips per Capita – Fixed-Route

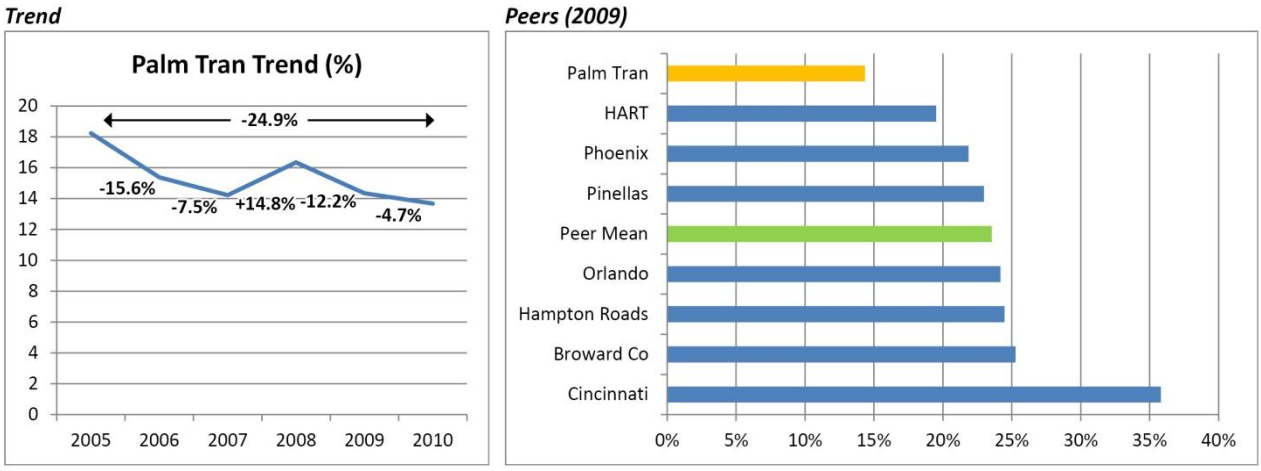


Figure 3-3 Farebox Recovery (%) – Fixed-Route

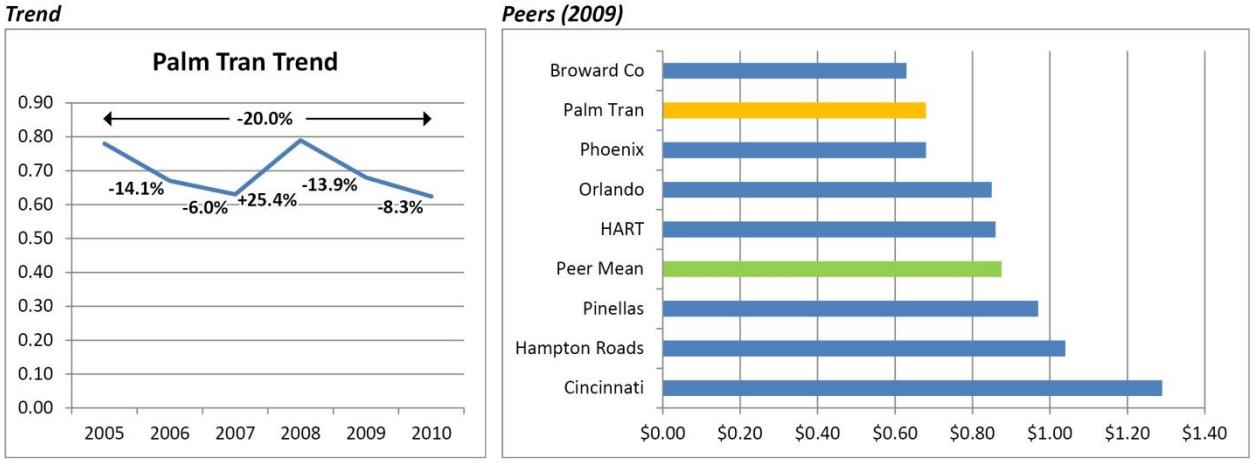
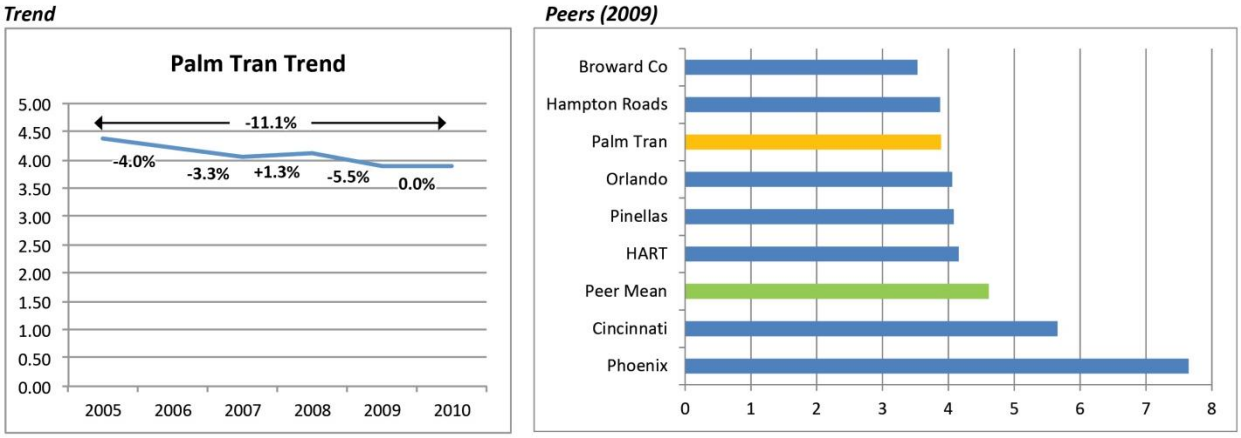


Figure 3-4 Average Fare ($) – Fixed-Route



NOTE: Cincinnati and Phoenix use a significant volume of alternative fuels not accounted for in the data above.

Figure 3-5 Fuel Efficiency (miles per gallon) – Fixed-Route

Table 3-4 Economic Utilization Measures – Fixed-Route

Measure	2005	2006	2007	2008	2009	2010
Passenger Trips	8,320,201	9,220,237	10,072,291	9,799,941	10,026,046	10,339,283
Passenger Trips per Capita	8.95	9.62	10.25	9.97	10.20	10.52
Passenger Miles	50,503,620	52,739,756	59,426,517	55,859,664	50,594,533	56,713,012
Revenue Miles	6,551,520	6,648,476	6,947,581	7,031,543	6,798,404	6,931,802
Vehicle Hours	452,136	469,703	477,945	479,304	462,886	466,563
Vehicle Miles	7,181,777	7,313,733	7,674,961	7,777,799	7,535,471	7,727,767
Operating Expenses	$35,774,539	$40,264,483	$44,739,558	$47,585,153	$47,479,224	$47,145,805
Passenger Fare Revenue	$6,554,395	$6,225,737	$6,399,544	$7,799,783	$6,822,925	$6,450,595
Average Fare	$0.78	$0.67	$0.63	$0.79	$0.68	$0.62
Fuel Consumption (gal)	1,642,075	1,741,774	1,889,373	1,889,373	1,938,040	1,986,706
Vehicle Miles per Gallon	4.37	4.20	4.06	4.12	3.89	3.89
Farebox Recovery (%)	18.23	15.38	14.23	16.34	14.35	13.68
Vehicles Available in Max Service	136	148	138	154	154	156
Vehicles Operated in Max Service (VOMS)	105	108	117	117	122	122

Efficiency

Economic efficiency is a measure of the ability to provide service to users while being constrained by other factors (e.g., number of buses and funding). Some of the best measures in understanding the economic efficiency of Palm Tran include passenger trips per vehicle, operating expense per capita, operating expense per passenger trip, maintenance expense per vehicle, and revenue miles per vehicle. The data for each of these measures are summarized in Table 3-5. Figure 3-6 through Figure 3-10 show Palm Tran's efficiency trends from 2005 to 2010 as well as comparisons to peer agencies for 2009.

Passenger trips per vehicles operated in maximum service (VOMS) is one of several available measures that represent how efficiently capital resources are being utilized. Resource utilization measures can be deceptive if taken out of context, however, particularly if the agency operating goals and service environment are not considered. Although Palm Tran has seen a seven percent increase over the past five years, the last four years changed little. Passenger trips per vehicle is generally a more effective measure than passenger trips, as it offers context with a controlling factor such as the number of buses available. Figure 3-6 shows that Palm Tran is just below the peer mean, with BCT likely skewing the average with a particularly high number of trips per VOMS. This measure depicts a scenario where Palm Tran is performing adequately in terms of ridership considering the limited resources in 2009: Palm Tran operates fewer buses than all other agencies.

The *operating expense per capita*, or Palm Tran's operating expenses compared to the total service population, is the second lowest of all peer agencies, behind Orlando's LYNX. This measure offers a reassuring view that Palm Tran is operating an economically efficient agency when compared to

agency peers. Reviewing *operating expense per passenger trip* offers a different portrayal of Palm Tran's operating expenses: While the expense may be low in terms of the total service population, it is the highest when considering the number of passenger trips ($4.74 per passenger trip in 2009). These operating expense measures are found in Figure 3-7 and Figure 3-8.

Palm Tran's *maintenance expense per vehicle* has increased over 10% from 2005 to 2010. The expense is approximately 18% higher than the peer mean. This shows that improvements should likely be made to improve the bus fleet maintenance costs. This operating measure is found in Figure 3-9.

Palm Tran's *revenue miles per vehicles in maximum service* is better than the peer mean. This measure reflects efficiency in the number of buses running; however, it does not consider the number of passengers on board during the revenue hours. In other words, Palm Tran is running a high number of available buses and the buses are performing more work than an agency with lower revenue miles per vehicle. This is likely one of the reasons for the high maintenance costs associated with each vehicle. These operating measures are found in Figure 3-10.

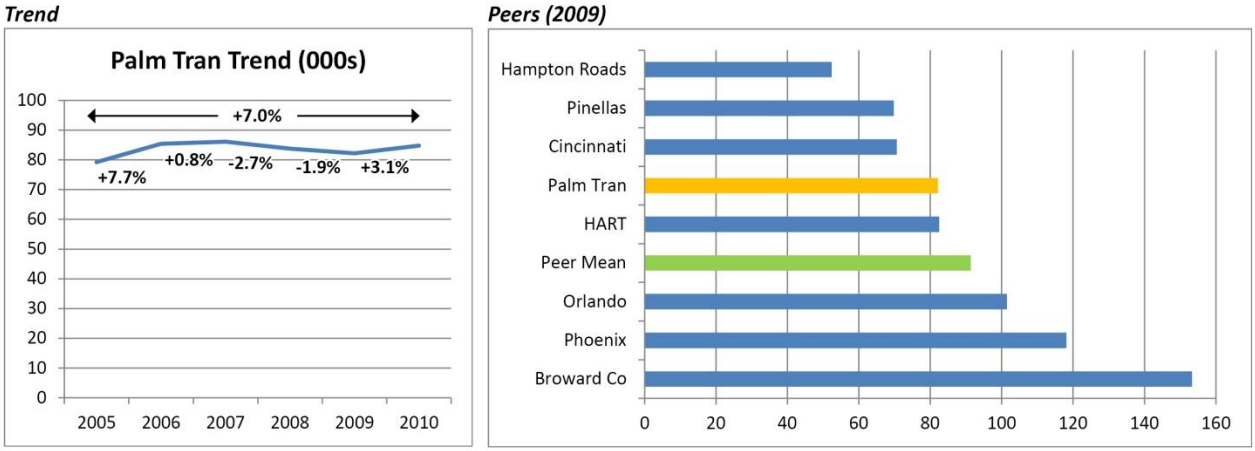


Figure 3-6 Thousands of Annual Passenger Trips per Vehicles Operated in Maximum Service – Fixed-Route

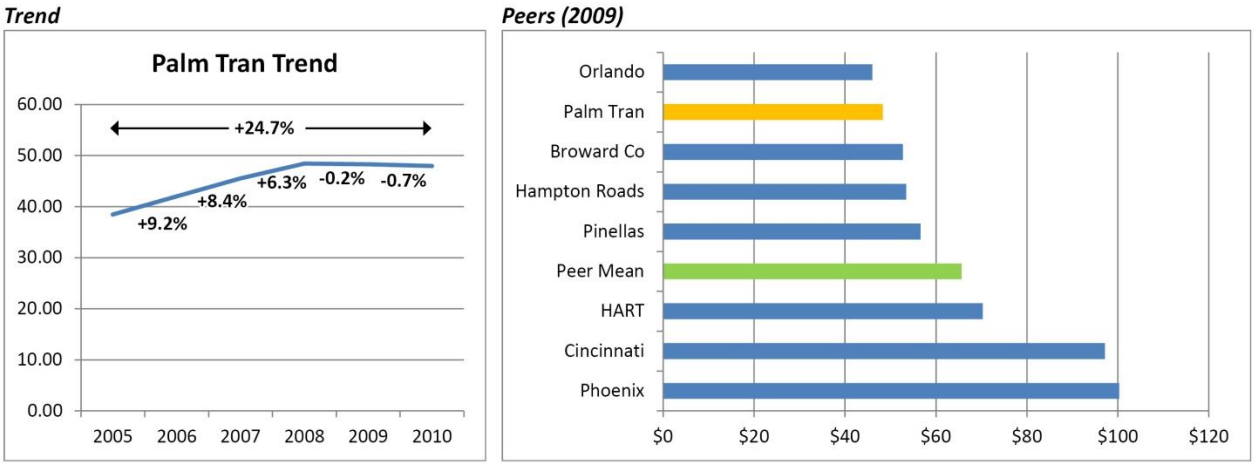


Figure 3-7 Annual Operating Expense per Capita – Fixed-Route

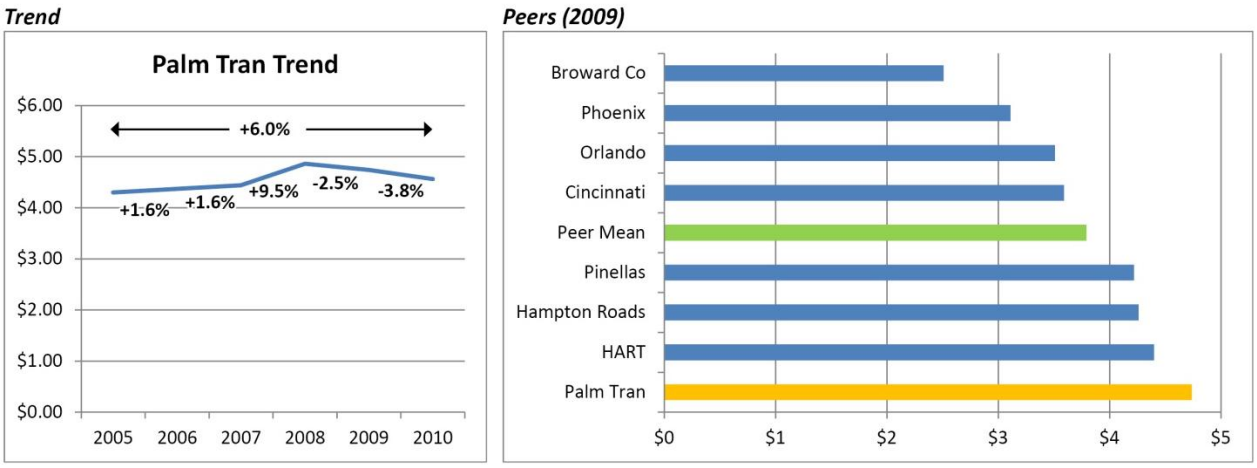


Figure 3-8 Operating Expense per Passenger Trip – Fixed-Route

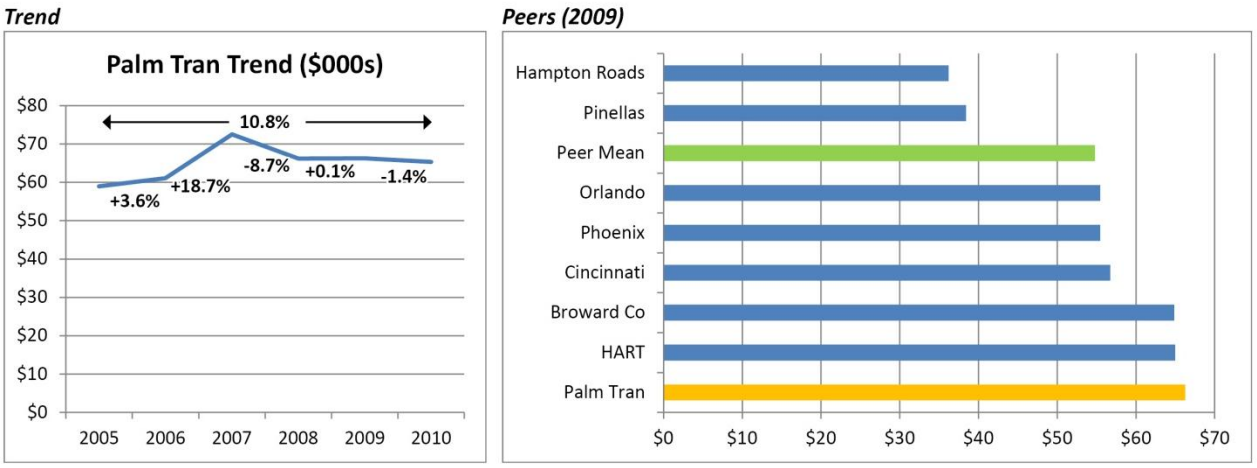


Figure 3-9 Maintenance Expense per Vehicle ($000) – Fixed-Route

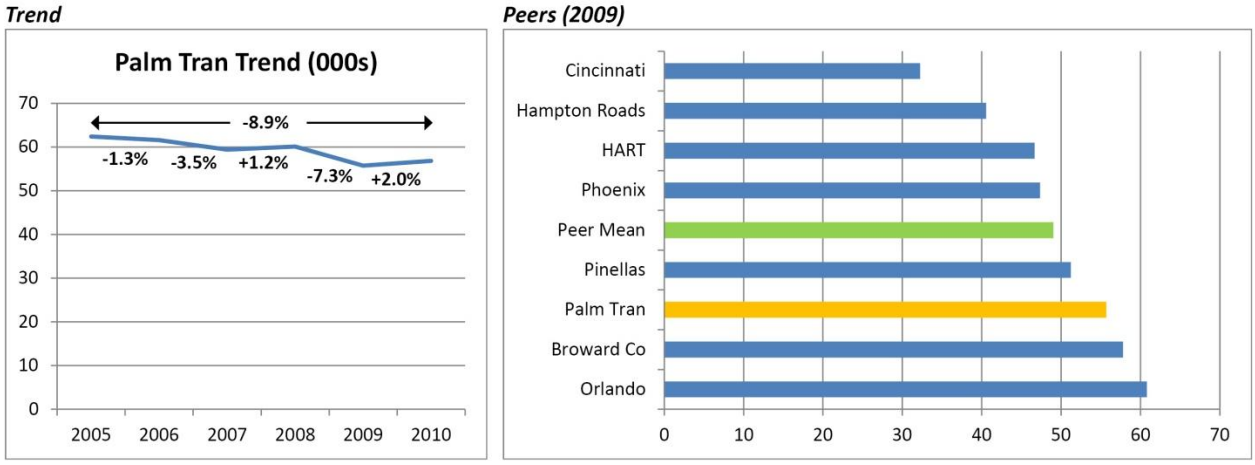


Figure 3-10 Revenue Miles per Vehicles in Maximum Service (000s)– Fixed-Route

Table 3-5 Economic Efficiency Measures – Fixed-Route

Year	2005	2006	2007	2008	2009	2010
Passenger Trips per VOMS	79,240	85,373	86,088	83,760	82,181	84,748
Operating Expense per Capita	$38.46	$42.00	$45.52	$48.41	$48.31	$47.97
Operating Expense per Passenger Trip	$4.30	$4.37	$4.44	$4.86	$4.74	$4.56
Maintenance Expense per Vehicle	$58,959	$61,076	$72,474	$66,183	$66,268	$65,341
Revenue Miles per Vehicle in Max Service	62,395	61,560	59,381	60,099	55,725	56,818

Effectiveness

Economic effectiveness is a measurement of the ability to meet transit service demand given existing resources, or, put simply, a measurement of a transit agency's ability to move people in a cost-effective manner. Some of the best measures in understanding the economic effectiveness of Palm Tran include passenger trips per vehicle hour, operating expense per revenue hour, and passenger trips per revenue hour. Data for these measures are summarized in Table 3-6. Figure 3-11 through Figure 3-18 show Palm Tran's effectiveness trends from 2005 to 2010 as well as comparisons to peer agencies for 2009.

Passenger trips per vehicle hour (Figure 3-11) measures ridership per total vehicle hours. Vehicle hours represents the total time a vehicle is operating, including revenue and non-revenue time. Palm Tran experienced an increase of over 20 percent in this measure from 2005 to 2010. A very similar measure is *passenger trips per revenue hour* (Figure 3-14), which includes only revenue time the bus is running. As expected, Palm Tran performs similarly for both measures. A third economic effectiveness measure related to passenger trips is *passenger trips per revenue mile* (Figure 3-13). Palm Tran has seen an increase of approximately 17 percent over the past five years, and an even larger increase of more than 50 percent since 2000.

Palm Tran's *operating expense per passenger mile* (Figure 3-15) has increased from $0.71 to $0.83, for an increase of over 17 percent, from 2005 to 2010. Palm Tran's *operating expense per revenue mile* (Figure 3-16) has increased from $5.46 to $6.80, for an increase of nearly 25 percent, from 2005 to 2010. Palm Tran's operating expense per revenue mile is nearly equivalent to the peer agency mean. The operating expense per passenger mile is more a reflection on the number of passengers using the service and the length of their trips; higher ridership or longer trips would result in lower operating expenses per passenger mile.

Palm Tran's *operating expense per revenue hour* (Figure 3-17) has increased by nearly 30 percent from 2005 to 2010. Palm Tran's average operating speed (discussed later) is the highest of its peers, meaning that its buses can travel more revenue miles during a revenue hour than its peers, producing an average operating expense per revenue mile that is close to the peer mean.

Palm Tran's *revenue miles per vehicle mile* (Figure 3-12) has remained relatively constant over the past five years. This measure is a reflection of the revenue miles and how it compares to the total mileage that buses operate. The closer the measure is to one, the less distance a fleet of buses spends operating in non-revenue service.

Palm Tran's *vehicle miles per capita* (Figure 3-18) changed little from 2005 to 2010. In other words, service has changed little in the past five years.

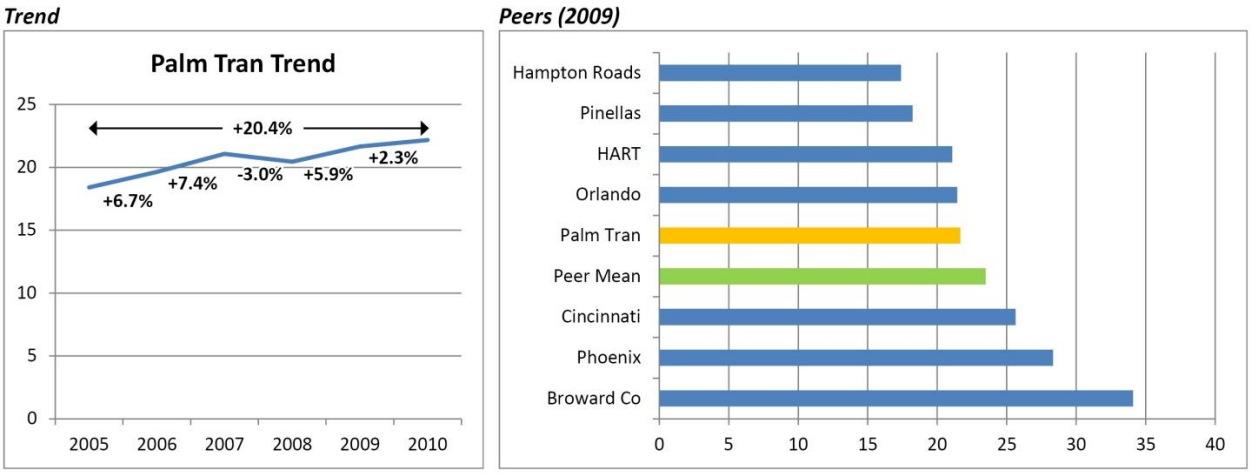


Figure 3-11 Passenger Trips per Vehicle Hour – Fixed-Route

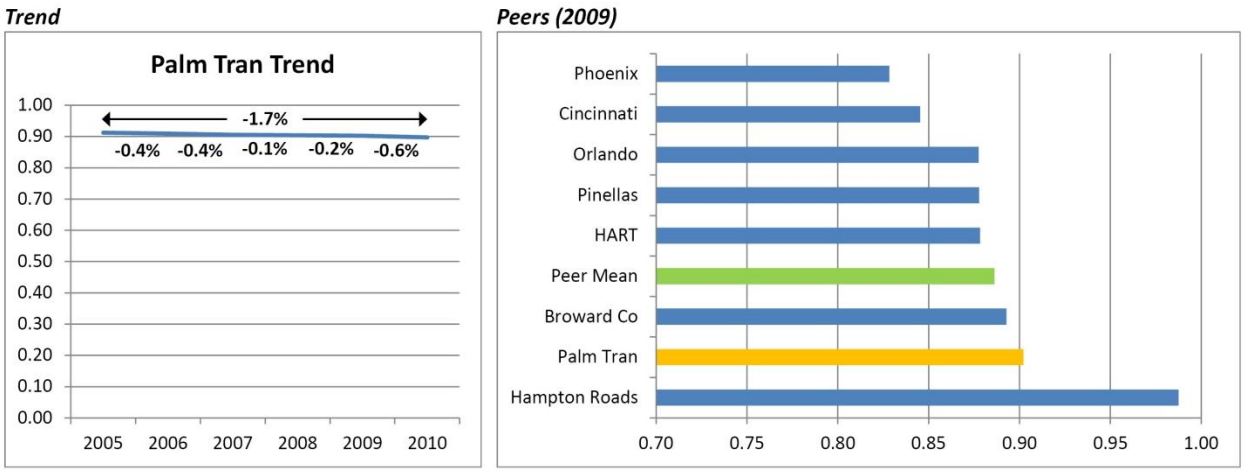


Figure 3-12 Revenue Miles per Vehicle Mile – Fixed-Route

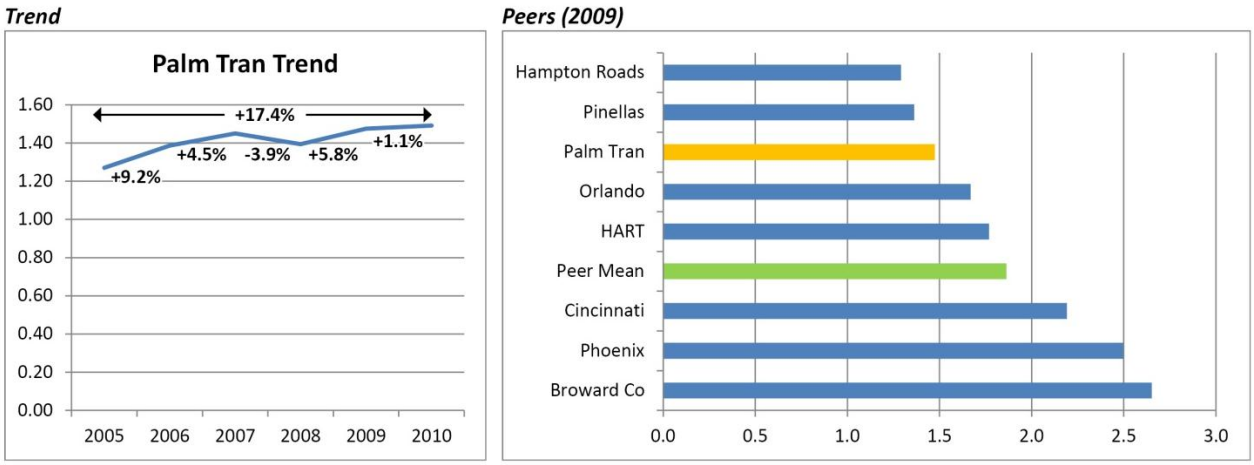


Figure 3-13 Passenger Trips per Revenue Mile – Fixed-Route

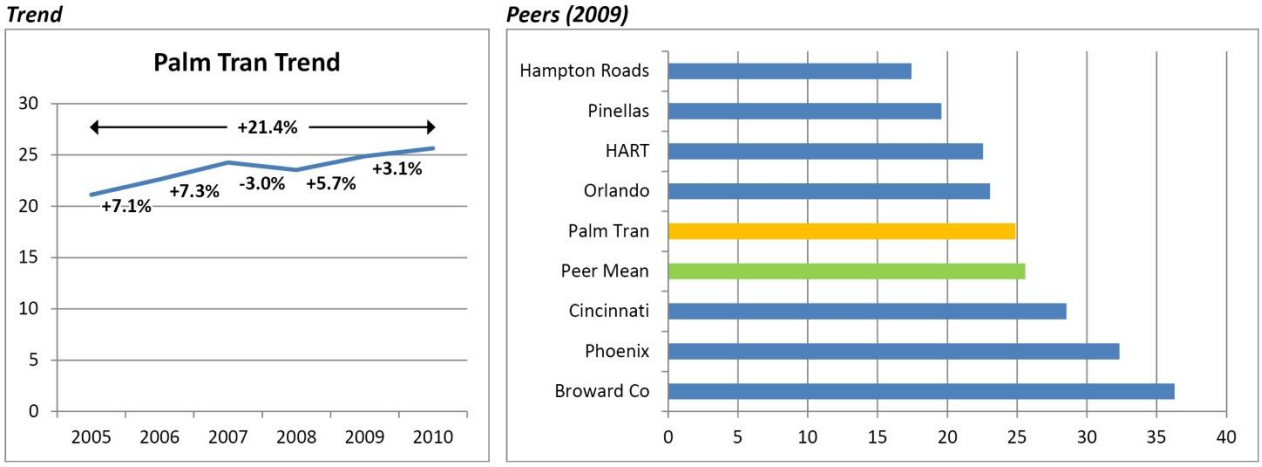


Figure 3-14 Passenger Trips per Revenue Hour – Fixed-Route

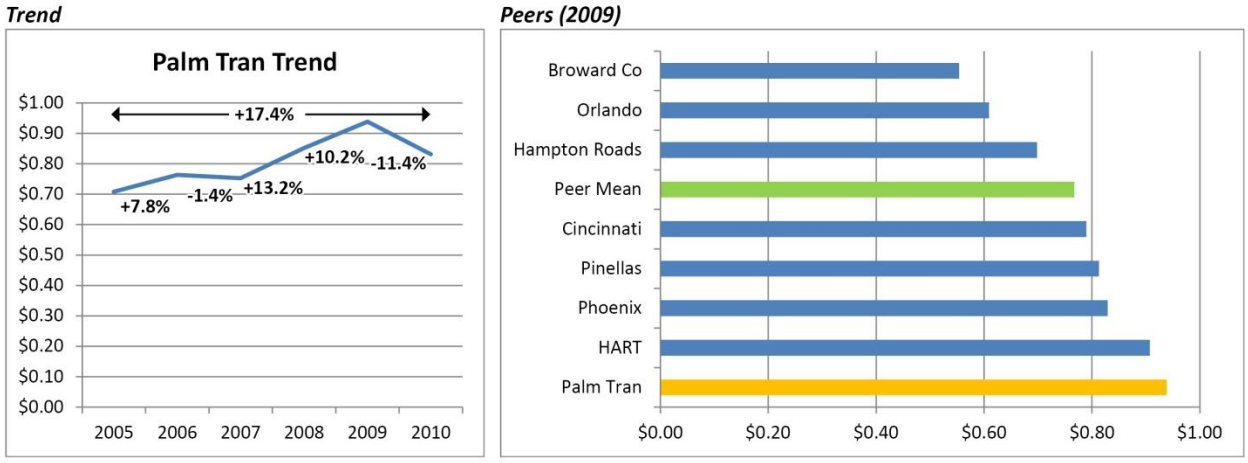


Figure 3-15 Operating Expense per Passenger Mile – Fixed-Route

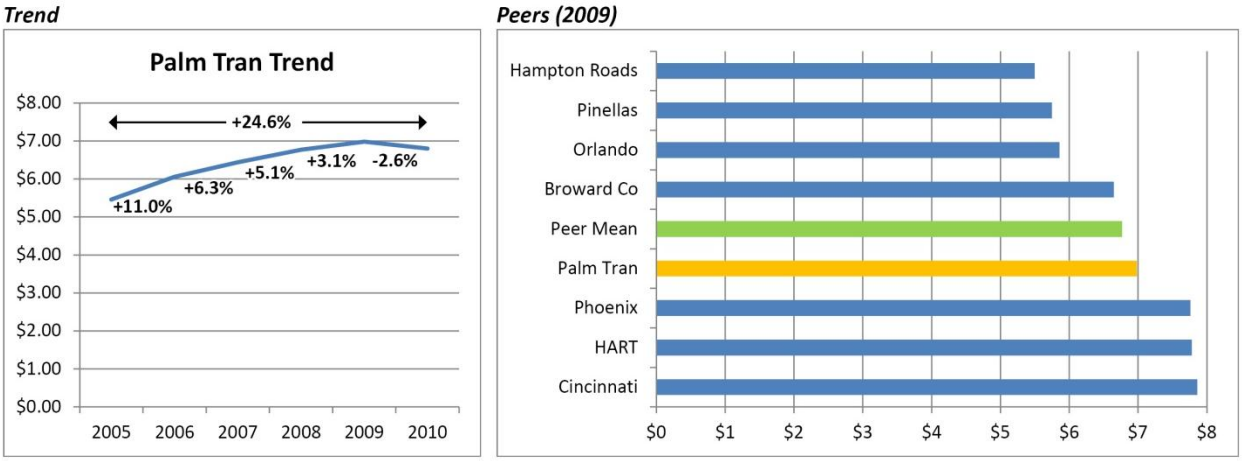


Figure 3-16 Operating Expense per Revenue Mile – Fixed-Route

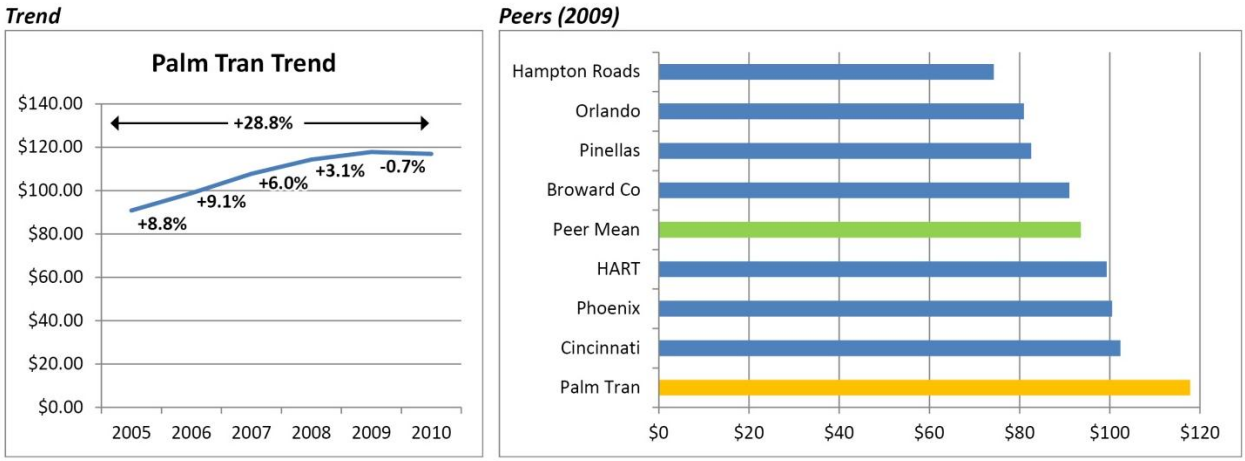


Figure 3-17 Operating Expense per Revenue Hour – Fixed-Route

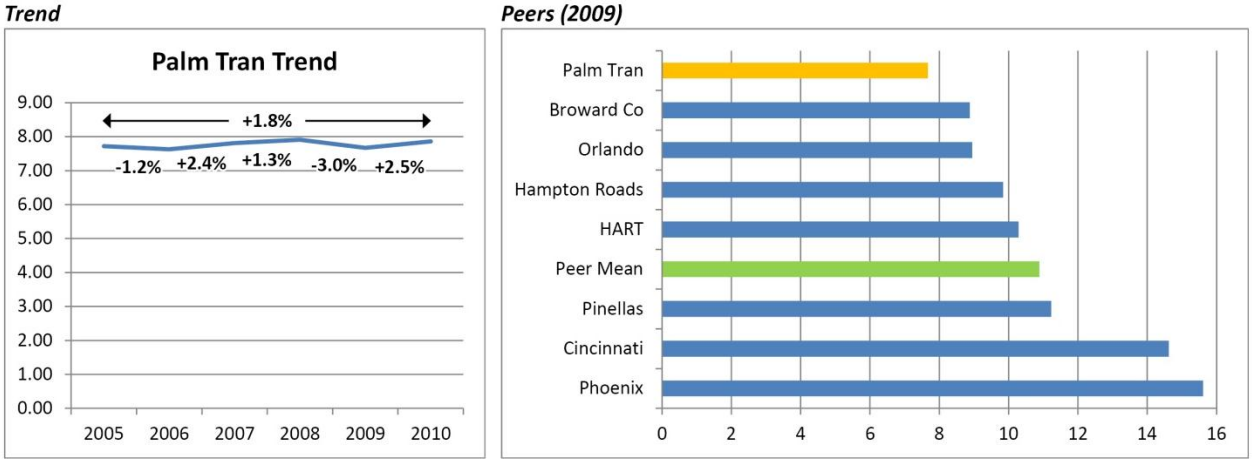


Figure 3-18 Vehicle Miles per Capita – Fixed-Route

Table 3-6 Economic Effectiveness Measures – Fixed-Route

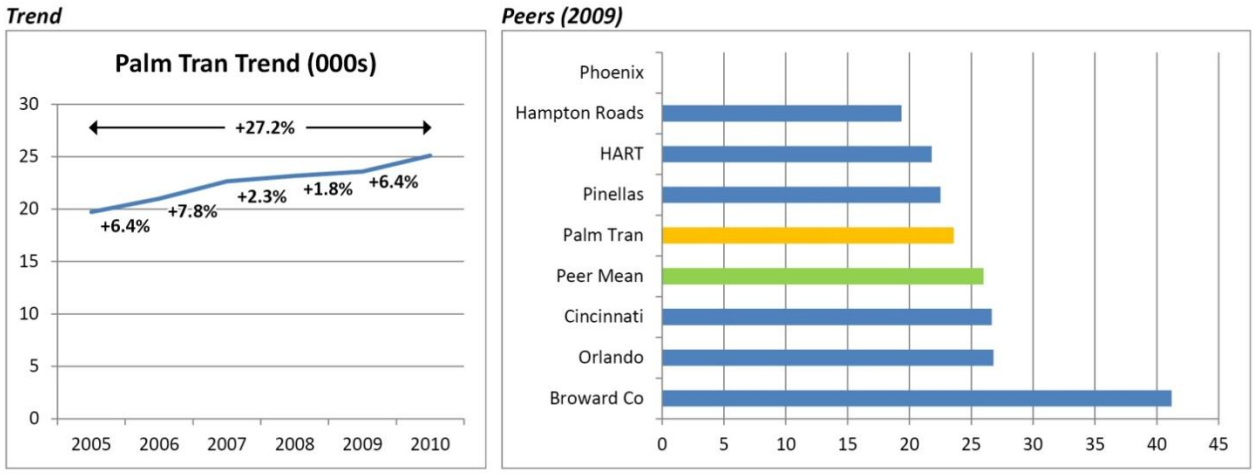
Year	2005	2006	2007	2008	2009	2010
Passenger Trips per Vehicle Hour	18.40	19.63	21.07	20.45	21.66	22.16
Revenue Miles per Vehicle Mile	0.91	0.91	0.91	0.90	0.90	0.90
Passenger Trips per Revenue Mile	1.27	1.39	1.45	1.39	1.47	1.49
Passenger Trips per Revenue Hour	21.12	22.62	24.27	23.54	24.88	25.65
Operating Expense per Passenger Mile	$0.71	$0.76	$0.75	$0.85	$0.94	$0.83
Operating Expense per Revenue Mile	$5.46	$6.06	$6.44	$6.77	$6.98	$6.80
Operating Expense per Revenue Hour	$90.81	$98.77	$107.79	$114.29	$117.81	$116.94
Vehicle Miles Per Capita	7.72	7.63	7.81	7.91	7.67	7.86

Administration

Administration measures address how much of an agency's resources are devoted to "behind-the-scenes" activities (e.g., scheduling, service planning, customer relations, management, and administration). The number of full-time agency employees is typically compared to common measures (e.g., passenger trips and revenue hours) to gain a better understanding of administration performance. Figure 3-19 through Figure 3-22 depict Palm Tran's administrative trends from 2005 to 2010 as well as comparisons to peer agencies for 2009. Data for these measures are summarized in Table 3-7.

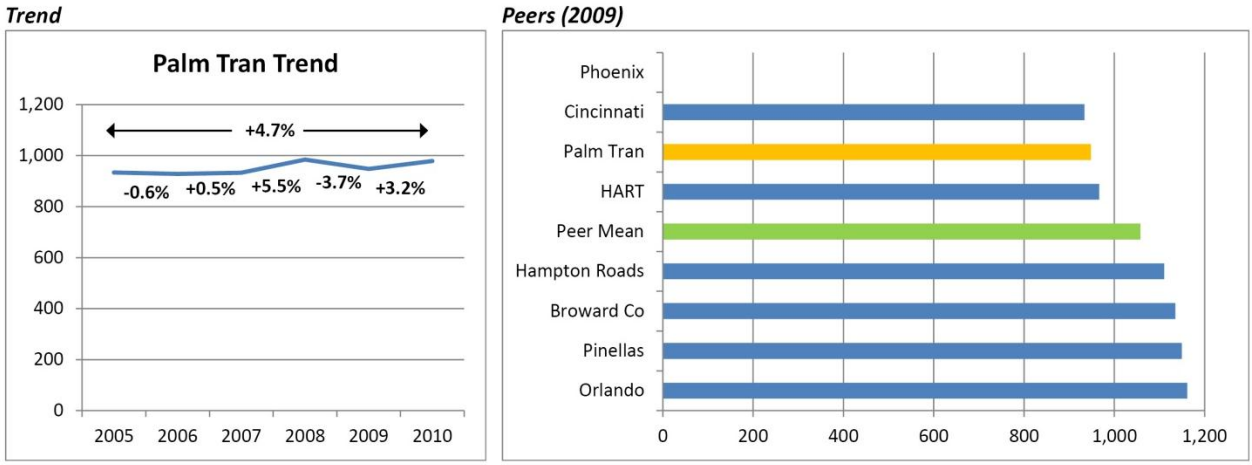
Palm Tran has experienced a slight decrease (-2.3%) in total employees from 2005 to 2010, yet *passenger trips per employee full-time equivalent (FTE)* (Figure 3-19) has increased over 27% in the same time frame. Palm Tran's *total employee full-time equivalents (FTE)* (Figure 3-22) fluctuates annually but has remained at over 410 employees each of the past five years.

Revenue hours per employee FTE (Figure 3-20) has increased 4.7 percent from 2005 to 2010. Palm Tran's *maintenance expense per revenue hour* (Figure 3-21) has increased over 24% from 2005 to 2010.



NOTE: Phoenix contracts out its labor.

Figure 3-19 Passenger Trips per Employee FTE (000s) – Fixed-Route



NOTE: Phoenix contracts out its labor.

Figure 3-20 Revenue Hours per Employee FTE – Fixed-Route

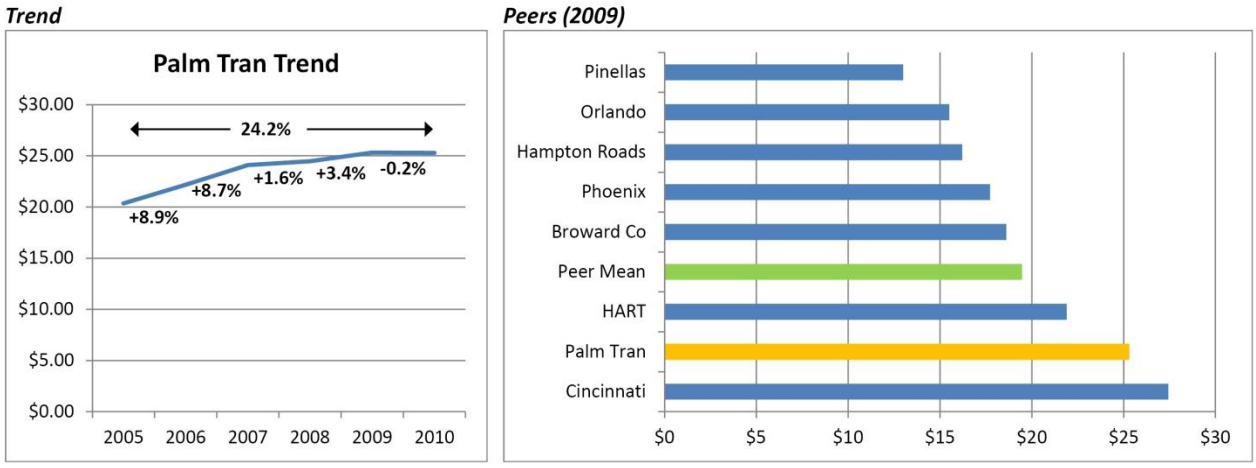
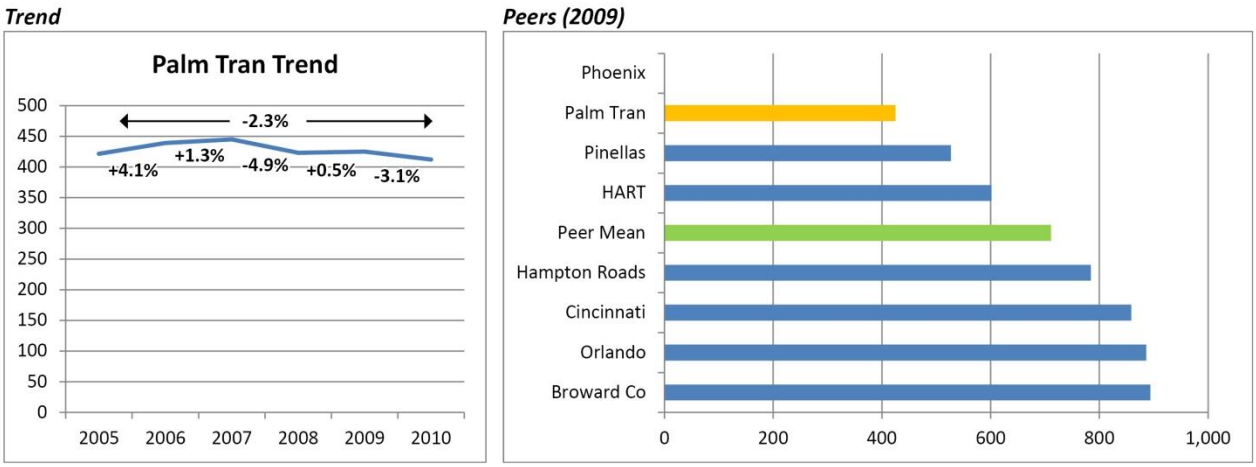


Figure 3-21 Maintenance Expense per Revenue Hour – Fixed-Route



NOTE: Phoenix contracts out its labor.

Figure 3-22 Total Employee FTEs – Fixed-Route

Table 3-7 Economic Administration Measures – Fixed-Route

Year	2005	2006	2007	2008	2009	2010
Total Employee FTEs	421.71	439.05	444.78	422.92	425.06	412
Passenger Trips per Employee FTE	19,730	21,000	22,646	23,172	23,587	25,095
Revenue Hours per Employee FTE	934.21	928.51	933.17	984.48	948.15	978.54
Maintenance Expenses	$8,018,393	$9,039,311	$10,001,415	$10,192,234	$10,205,309	$10,193,153
Maintenance Expense per Revenue Hour	$20.35	$22.17	$24.10	$24.48	$25.32	$25.28

Service Delivery Performance Measures

Service delivery is a measurement of the daily experiences by transit riders. As stated in TCRP 88, "Even when transit service is available to someone, if a trip by transit is inconvenient or uncomfortable, a person with a choice will likely choose another mode." Service delivery performance measures can be categorized as follows:

- **Reliability**: how often service is provided when promised
- **Customer Service**: measures service quality and the quality of contact between transit passengers and agency staff
- **Passenger Loading**: measures the level of crowding on transit vehicles
- **Goal Accomplishment**: how well an agency achieves short-term project goals

Service delivery performance measures are quite beneficial as they speak directly to the users of the service; however, the data are commonly more difficult to obtain. Measures related to customer service are often dependent upon customer survey data, while passenger loading measures often require advanced on-board data collection equipment. NTD data are not available for Passenger Loading and Goal Accomplishment, so these categories of measures are not included in the analysis.

Reliability

On-time performance (Figure 3-23) is the percentage of transit vehicles departing or arriving at a location on time. "On-time" is defined by Palm Tran as a span of seven minutes of scheduled time, or, more specifically, two minutes early to five minutes late. Anything outside of that window is considered not on time. Many agencies, including Palm Tran, discourage early departures as an early departure requires a passenger arriving too close to the scheduled time to wait a full headway for the next bus. Palm Tran's on-time performance between 2009 and 2010 improved 1.45% and 3.63% for peak and off-peak hours, respectively. In fiscal year 2010, Palm Tran buses were on-time 87.39% and 89.5% of the time for peak and off-peak hours, respectively. The *Transit Capacity and Quality of Service Manual* (TCQSM), 2nd Edition, provides level of service (LOS) equivalents for on-time performance that can be applied to routes with a published timetable, headways greater than 10 minutes, and where "on-time" is defined as 0 to 5 minutes late. On-time performance between 85.0% and 89.9% warrants a LOS C; from a passenger perspective, this means that a passenger making a round trip every day experiences an early or late bus once per week on average.

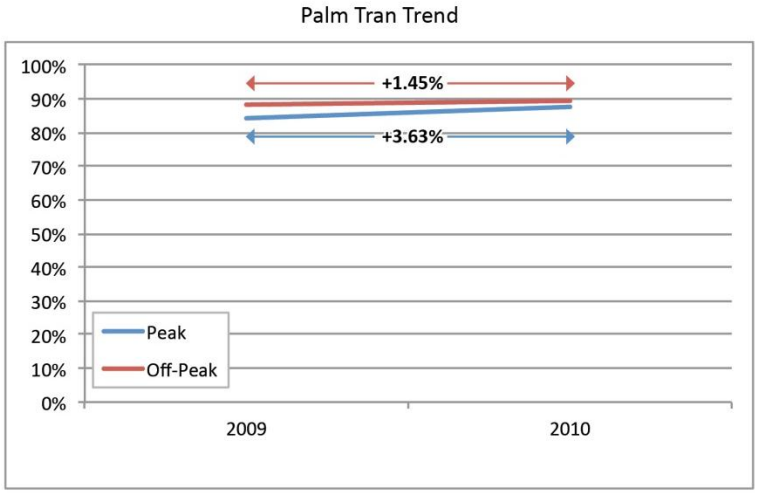


Figure 3-23 On-Time Performance – Fixed-Route

Customer Service

Percent of stops with shelters and benches is a measure of transit comfort for those waiting for a bus. A higher number of benches and shelters results in a higher level of comfort at a greater number of locations. When stop-level ridership data are available, a better measure is *percent of riders boarding at stops with shelters and benches,* as many low-volume stops may not have the passenger volume to warrant a shelter*. Percent of stops with shelters and benches* is an easy measure for setting annual targets (e.g., every bus stop with X amount of riders warrants a bench or shelter). Measures of passenger comfort are often difficult to measure because comfort is a subjective measure and requires regular customer satisfaction surveys to monitor. Measures of "presence" are generally easier to monitor and calculate. An inventory in December 2010 of Palm Tran bus stops revealed that, of the 3,978 bus stops in Palm Beach County, approximately 1,020 had a bench and 529 had a shelter, or 25.6% and 13.2%, respectively.

Customer satisfaction has been assessed through surveys conducted through the TDP process and is discussed in Chapter 1.

Availability Performance Measures

Availability is a measurement of the ease with which potential transit passengers can use transit for different types of trips. As described in TCRP Report 88, "If transit service is not available to a passenger for a particular trip, other aspects of transit service will not matter to that passenger, as the trip will be made by some other mode or not made at all." Availability performance measures for fixed-route service are often broken into the following categories:

- **Spatial Availability**: where service is provided and whether a potential user can access the transit service
- **Temporal Availability**: the frequency and length of time transit service is provided
- **Capacity Availability**: the ability of provided service to allow for additional passengers

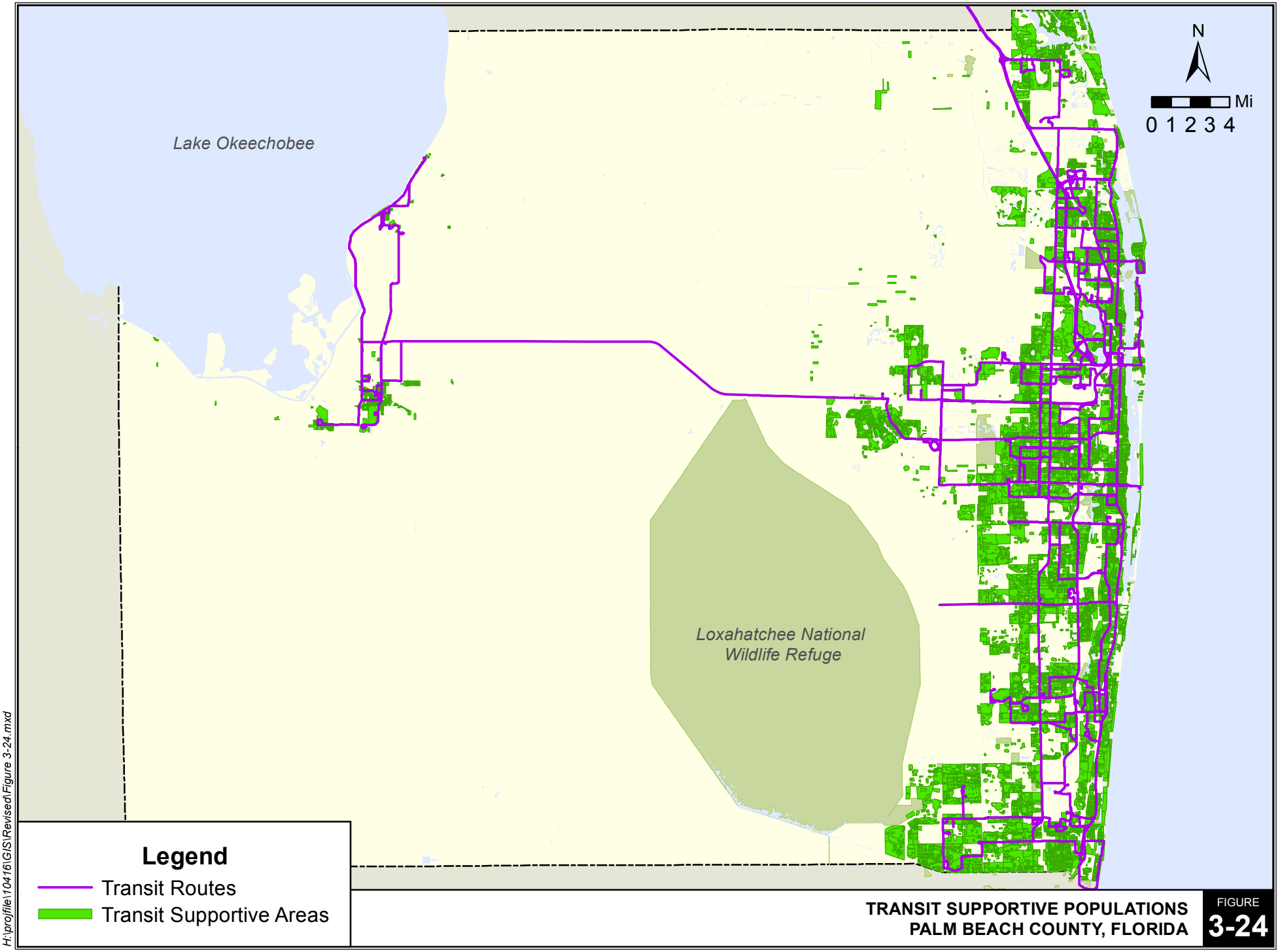
NTD data are not available for Capacity Availability, so this category of measures is not included in the analysis.

Spatial Availability

Service coverage, or the area served by transit, is a measure of how much of a service area has access to transit. Service coverage area is typically calculated as the percentage of a population that is within ¼ mile of bus stops and ½ mile of rail stations.

Alternatively, the TCQSM defines a "transit supportive area" as an area capable of supporting hourly transit service (i.e., household density of at least 3 households per gross acre) and provides LOS thresholds for percent of transit-supportive area served. The following are the LOS thresholds: A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, E = 50-59% and F = <50%. Transit-supportive Census blocks are depicted in Figure 3-24. For Palm Tran, 62 percent of transit-supportive Census blocks are within ¼ mile of transit service and 75 percent of transit-supportive Census blocks are within ½ mile of transit service.

Average passenger trip length (Figure 3-25) measures the average distance passengers spend on single transit trip. Palm Tran's average passenger trip length of 5.05 miles per trip is just above the peer mean of 4.76 miles per trip. Longer average passenger trip length can often be related to minimal connecting service and/or land use patterns. Palm Tran's average passenger trip length has decreased nearly 10 percent since 2005.



TRANSIT SUPPORTIVE POPULATIONS
PALM BEACH COUNTY, FLORIDA

FIGURE
3-24

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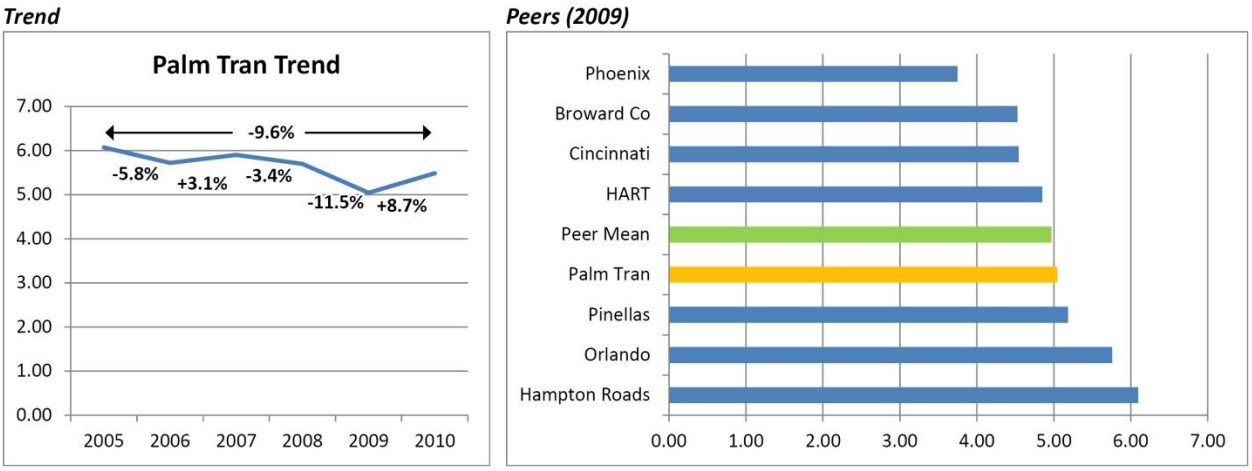


Figure 3-25 Average Passenger Trip Length (miles) – Fixed-Route

Temporal Availability

Frequency measures how often scheduled transit is provided and is often used with measures of how long and where service is provided (e.g., span of service and coverage area). The TCQSM, 2nd Edition defines the following level of service ranges for urban fixed-route service: A = < 10 minutes; B = 10-14 minutes; C = 15-20 minutes; D = 21-30 minutes; E = 31-60 minutes; and F = > 60 minutes. Only one Palm Tran route has headways better than 30 minutes: Route 1 has 15-and 20-minute headways during peak and off-peak times, respectively. The remaining routes' headways are generally 30 to 60 minutes. Although this LOS calculation is typically made on a per-route basis, we can safely assign a LOS D/E to a majority of Palm Tran routes on weekdays.

Hours (span of service) is a measure of how long service operates during the day. Similar to frequency, the TCQSM provides LOS thresholds based on hours per day: A = 19-24; B = 17-18; C = 14-16; D = 12-13; E = 4-11; and F = 0-3. These measures are best for evaluating overall service instead of on an individual route basis.

Data for these measures are summarized in Table 3-8. Frequencies and span of service for individual routes can be found in Appendix E.

Table 3-8 Availability Measures – Fixed-Route

Year	2005	2006	2007	2008	2009	2010
Service Area Population	930,100	958,582	982,900	982,900	982,900	982,900
Service Area Density	2,598	2,396	2,693	2,693	2,693	2,693
Route Miles	995	1,018	1,042	985	1,020	1,182
Average Passenger Trip Length (miles)	6.07	5.72	5.90	5.70	5.05	5.49
Revenue Hours	393,961	407,664	415,059	416,354	403,023	403,157

Community Performance Measures

Community performance measures identify the role of transit in meeting community/regional/ agency objectives. Community performance measures are often broken into the following three categories:

- **Mobility**: the ease of traveling between locations in a community
- **Outcomes**: transit service impacts on different aspects of a community
- **Environment**: relationship between transit and the environment

NTD data are not available for Outcomes and Environment, so these categories of measures are not explicitly included in the analysis.

Mobility

Service area *demographics* are a measure of the number of people for whom transit could be a significant travel mode. Demographics are useful for determining potential ridership locations in the service area. Demographics are summarized in Chapter 1.

Transit *accessibility* is the ease and convenience with which riders can access places of interest (e.g., home, retail, jobs, and recreational opportunities).

Outcomes

Service equity is the distribution of transit benefits and impacts on various communities and population groups within a service area. A key factor in understanding how costs and benefits from transit services can be measured is to understand the locations of transportation-disadvantaged populations. Transportation-disadvantaged populations indicators include households with no automobile, population with physical disabilities, low-income single parents, people too young or too old to drive, unemployed adults, and recent immigrants.

Maintenance and Construction Performance Measures

Maintenance performance measures assess the effectiveness of the agency's maintenance program, which can ultimately impact other performance measures. Figure 3-26 through Figure 3-28 depict Palm Tran's maintenance and construction trends from 2005 to 2010 as well as comparisons to peer agencies for 2009. Data for these measures are summarized in Table 3-9.

One of the most widely used maintenance performance measures is the *spare ratio* (Figure 3-26). The spare ratio is the percentage of the bus fleet that is available to substitute for other vehicles (number of spare vehicles divided by the fleet size). A large spare ratio may indicate an inefficient use of resources, as perhaps too many buses were purchased and are not being used. Conversely, a small spare ratio may indicate the potential for service reliability problems as a minimal amount of substitute buses is available to allow preventative maintenance to occur and to substitute for buses that break down while in service. The spare ratio can fluctuate from year to year as bus fleets are brought into or retired from service, so a review of longer-term trends can provide more insights.

Revenue miles between failures (Figure 3-27) is related to service reliability. A failure is any kind of mechanical problem—major or minor—that requires a bus to be removed from service. It can reflect the age of the fleet, the ability or inability to perform regular preventative maintenance, and the quality of the maintenance performed. Palm Tran reported only major failures in 2007, 2008, and 2009. BCT reported only major failures in 2009.

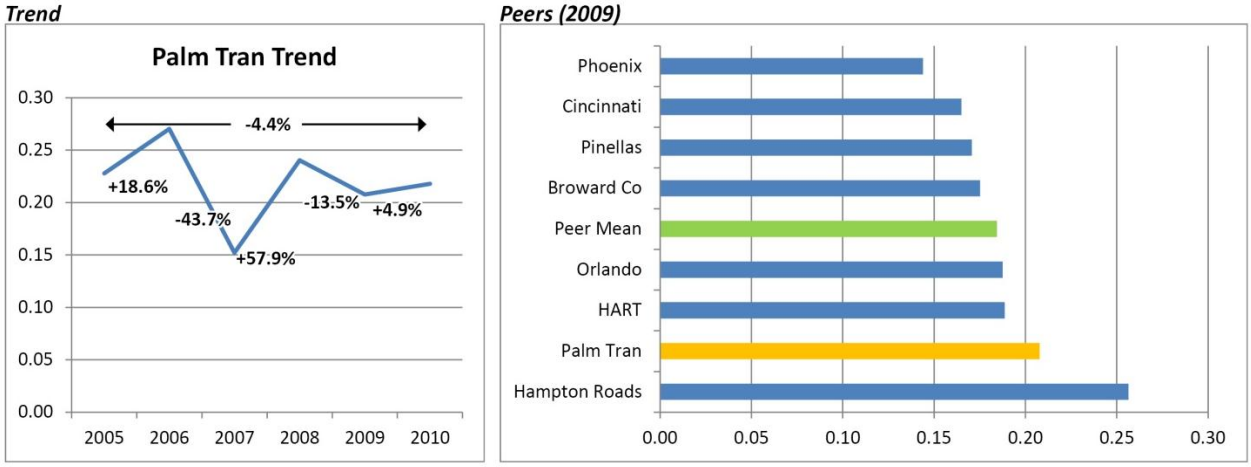
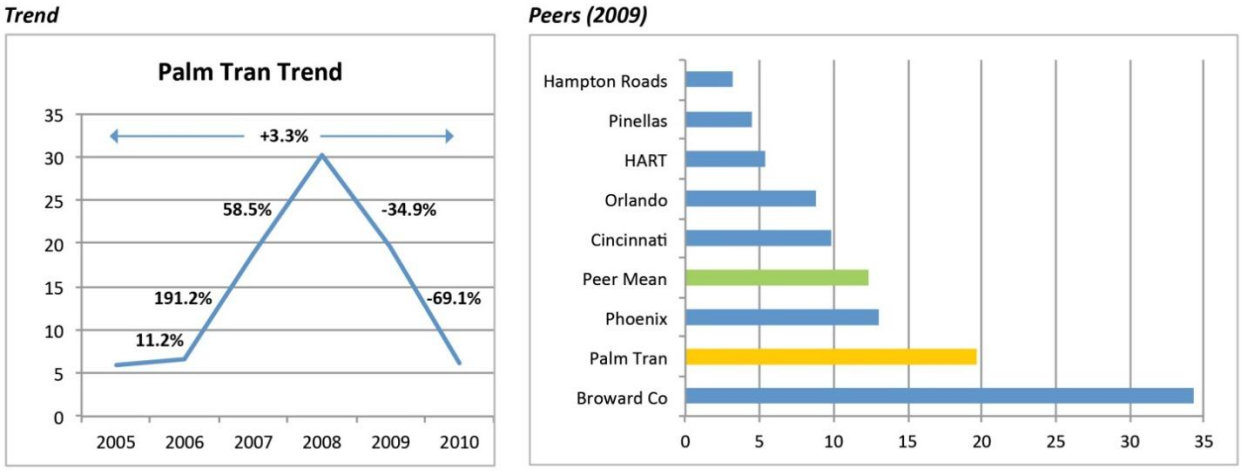


Figure 3-26 Spare Ratio – Fixed-Route



NOTE: BCT did not report minor failures in 2009. Palm Tran did not report minor failures in 2007, 2008, and 2009.

Figure 3-27 Revenue Miles between Failures (miles) – Fixed-Route

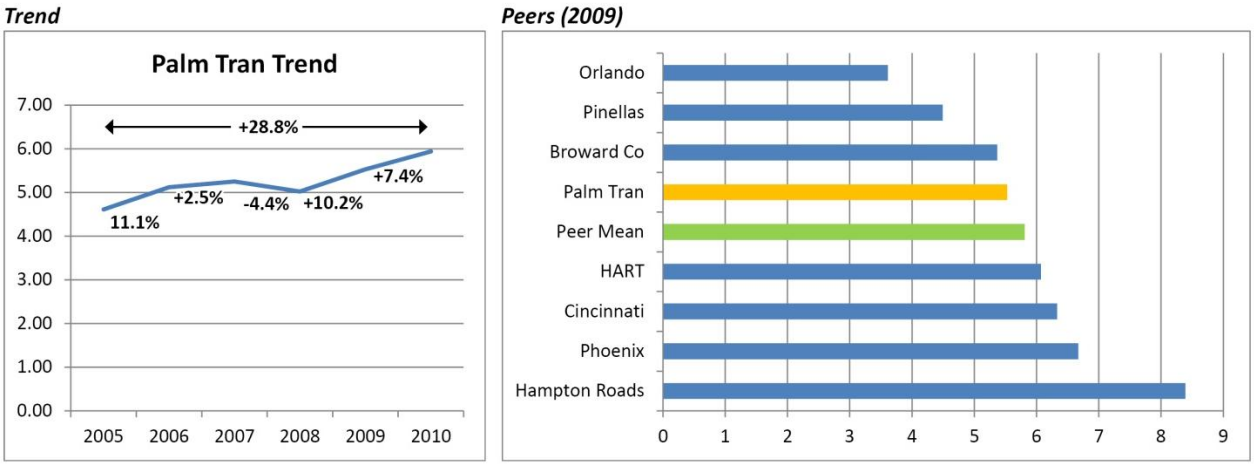


Figure 3-28 Average Age of Fleet (years) – Fixed-Route

Table 3-9 Maintenance and Construction Measures – Fixed-Route

Year	2005	2006	2007	2008	2009	2010
Average Age of Fleet (years)	4.61	5.12	5.25	5.02	5.53	5.94
Revenue Miles between Failures	5,881	6,537	19,034	30,178	19,649	6,075
Spare Ratio	0.23	0.27	0.15	0.24	0.21	0.22

Travel Time Performance Measures

Travel time measures determine the length of transit trips when compared to transit, compared to other modes of transportation, or to an ideal value. The measure used in this report is *speed* (Figure 3-29).

The average speed for Palm Tran service is the highest of its peers, indicating service operating on higher speed roadways and with less traffic congestion. As was seen previously when examining the constrained roadway network, Palm Tran does not operate service on the most constrained roadways, a fact that leads to higher travel speeds overall.

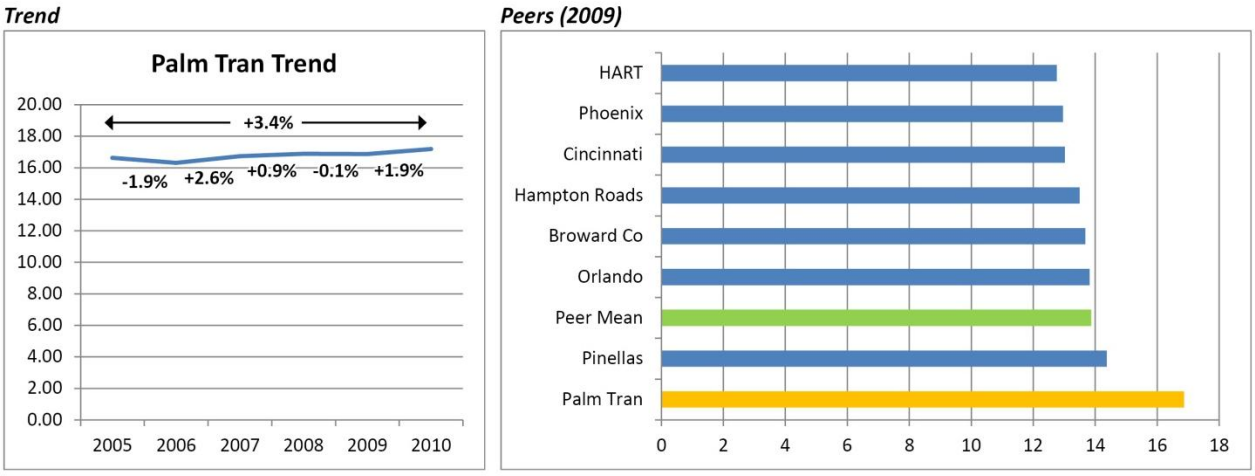


Figure 3-29 Average Speed (miles per hour)– Fixed-Route

Safety and Security Performance Measures

Safety and security performance measures relate to the potential for being involved in an accident (safety) or the victim of a crime (security). Accident and safety data are reported to NTD, but not published due to the sensitive nature of the data and due to inconsistencies in reporting between agencies. It is suggested that tracking the presence of lighting at bus stops and shelters is a first step to tracking perceptions of safety at the stop.

Capacity Performance Measures

Capacity performance measures determine the ability of transit facilities/services to move vehicles and people. This is typically reported as a load factor, or the average number persons per vehicle divided by the capacity of that vehicle. Because of the dynamic nature of bus loading, this measure has traditionally been calculated as a manual count at a peak load point during the peak hour. With the implementation of ITS, automated vehicle location (AVL) combined with automatic passenger counters (APCs) has provided new tools for tracking passenger loads. This technology is in the early stages of implementation at Palm Tran. After full implementation and testing of the system, tracking passenger loads should be made an important data collection and reporting effort.

3.5 Demand-Response Transit Performance

SELECTION OF PERFORMANCE MEASURES

Selection of demand-response performance measures for Palm Tran CONNECTION included a thorough review of FDOT's *Guidance for Producing a Transit Development Plan* and TCRP Report 88, *A Guidebook for Developing a Transit Performance-Measurement System*. Additionally, detailed discussions were held with Palm Tran, FDOT, and Palm Beach County MPO staff to determine additional measures for this evaluation and measures to be considered for future monitoring. The final list of demand-response performance measures is in Table 3-10.

Table 3-10 Performance Measures – Demand-Response

Economic	Service Delivery
Ridership	Average Passenger Trip Length
Passenger Trips per Capita	Revenue Miles
Passenger Trips per Vehicle Hour	Revenue Miles per Vehicles in Maximum Service
Passenger Trips per VOMS	Revenue Miles per Vehicle Mile
Passenger Trips per Revenue Mile	Revenue Hours per Employee FTE
Passenger Trips per Revenue Hour	Vehicle Hours
Passenger Trips per Employee FTE	Vehicle Miles
Passenger Miles Traveled	Vehicle Miles per Capita
Operating Expenses	Vehicles Available in Maximum Service
Operating Expense per Capita	Vehicles Operated in Maximum Service
Operating Expense per Passenger Trip	Customer Satisfaction
Operating Expense per Passenger Mile	**Availability**
Operating Expense per Revenue Mile	**Service Coverage**
Operating Expense per Revenue Hour	Service Hours
Maintenance Expenses	Service Density
Local Revenue: Local Contribution	Hours (Span) of Service
Passenger Fare Revenue	Revenue Hours
Average Fare	Service Denials
Energy Consumption	Response (Access) Time
Vehicle Miles per Gallon	**Safety and Security**
Farebox Recovery	Accident Rate (if available)
Community	**Maintenance and Construction**
Demographics	Spare Ratio
Service Equity (% TD Population in Service Area)	**Travel Time**
	Travel Speed

SELECTION OF PEER TRANSIT AGENCIES

A group of eight demand-response agency peers were chosen after utilizing the methodology from TCRP Report 141 and completing a thorough review of the individual selected agencies. Four of the agencies selected were Florida peers, while the remaining four agencies reflect a representation of the country with southwest, east coast, and Texas agencies. The selected demand-response peers can be seen in Table 3-11.

Table 3-11 Palm Tran Peer Transit Agencies – Demand-Response

Likeness Score	Agencies
Florida Peers	
0.14	Broward County Transportation Department
0.26	Miami-Dade Transit
0.65	LYNX (Orlando)
0.76	Pinellas Suncoast Transit Authority (St Petersburg)
Non-Florida Peers	
0.68	Dallas Area Rapid Transit (Dallas, TX)
0.77	Delaware Transit Corporation (Dover, DE)
0.78	Valley Metro (Phoenix, AZ)
0.80	VIA Metropolitan Transit (San Antonio, TX)

TREND AND PEER ANALYSIS

Although numerous measures have been identified and calculated for this Plan, many are "explanatory" measures and not "outcome"-based measures. When reviewed singularly and/or compared to other agencies, these explanatory measures (e.g., passenger miles, vehicles, and route miles) are not particularly useful and can be falsely interpreted without context. However, these explanatory measures can become useful methods of evaluation when used in ratios to calculate new outcome-based measures (e.g., passenger trips per capita, maintenance expense per vehicle, and service coverage). Therefore, the focus of this evaluation is on outcome-based measures, but the explanatory measures are available in Appendix I when further clarification is needed or a general review is warranted.

Demand-Response Performance Summary

A short summary of the demand-response performance measures and peer review has been provided in order to clarify, and to provide guidance and a general understanding of the detailed results later in the document. *As noted earlier, the peer review is an illustrative comparison intended to generate insights; it is not a ranking or a report card.*

As discussed in the fixed-route performance summary, Palm Tran provides the largest percentage of total operating budget (demand-response plus fixed-route) to demand-response service (34%), when compared to other peer agencies. The commitment of such a high percentage is tied directly to Palm Beach County's large senior citizen population, the highest of all peers at 275,000. For comparison, BCT has a senior citizen population of 247,000 and devotes 24% to demand-response service. Unsurprisingly, Palm Tran's demand-response service is generally performing as well as or better than its peers. The operating expense per passenger trip is below the peer average ($27.72 versus $32.75) and the average fare paid is above the peer average ($2.15 versus $1.92). Likewise, Palm Tran ridership is higher than the peer average and its ridership per capita is the second highest of all peers (over 50% higher than the peer average). In summary, Palm Tran devotes an above-average amount of funding and resources to demand-response service to serve an above-

average number of users, and, in turn, provides a service that is one of the best performing of the selected peers.

Economic Performance Measures

Economic performance measures, often referred to as operator-based measures, provide an evaluation from a business perspective. Economic performance measures are often broken into four categories:

- **Utilization**: how well agency resources are being used
- **Efficiency**: the ability to provide service to users, while being constrained by other factors
- **Effectiveness**: the ability to meet transit service demand given existing resources
- **Administration**: management performance

For this evaluation, economic measures are being considered that represent the first three economic categories. NTD data for Administration are not available; therefore, this category of measures is not included in the analysis.

Utilization

Economic utilization is a measurement of how well agency resources are being utilized. The measures included in this analysis are shown in Figure 3-30 through Figure 3-34. Data for these measures are summarized in Figure 3-12.

Passenger trips (i.e., ridership) (Figure 3-30) are a measure of the number of passengers being transported, either at individual stops, on individual routes, or for an entire transit system. Ridership is a key performance measure, as many other economic performance measures are based on it. The conclusions drawn from demand-response passenger trips are generally not the same as fixed-route passenger trips. For instance, an increase in fixed-route passenger trips is considered a positive attribute, while an increase in demand-response passenger trips results in greatly increased service costs. These increased service costs will reduce resources in other areas, particularly because demand-response service is considerably more expensive to provide than fixed-route service. While Palm Tran's demand-response ridership has increased by approximately 20 percent since 2005, it has decreased from a high seen in 2008. Palm Tran's demand-response ridership is just above the peer agency mean. This is likely due to a combination of factors, including the number of Palm Beach County residents who qualify for CONNECTION service, the provision of higher-quality door-to-door service rather than the ADA requirement of curb-to-curb service, and a strong outreach program to ensure residents are receiving the transportation services they need.

While the total number of trips provided by Palm Tran CONNECTION is similar to the peer average, the *passenger trips per capita* (Figure 3-31) is much higher, indicating regular usage of the service by the residents of Palm Beach County. This points to the success of the service in reaching out to residents to provide their transportation needs. Passenger trips per capita has declined slightly over the last two years but is still up 13% since 2005, demonstrating solid growth in the system.

FTA recognizes that demand-response service is much more expensive to provide than regular fixed-route service and allows the fare for ADA service to be up to twice the fixed-route fare. Palm

Tran CONNECTION charges the full allowable fare of $3.00 per trip. The *farebox recovery ratio* (Figure 3-32) is above the peer mean and has increased over 120% since 2005.

As can been seen from the average fare, Figure 3-33, increases in the average fare have fueled the increase in the farebox recovery ratio. This results in a significant fare increase since 2005 and brings both measures above the peer average.

Only two years of data are available from NTD: 2009 and 2010. Palm Tran CONNECTION was slightly above the peer mean in 2009, showing fairly strong *fuel efficiency* (Figure 3-34). The unaudited results from 2010 for the service show a decline to below the peer mean, if the peers were to maintain their fuel efficiency. This warrants further investigation by Palm Tran to ascertain what could have caused a 15% decrease in fuel efficiency over the past year.

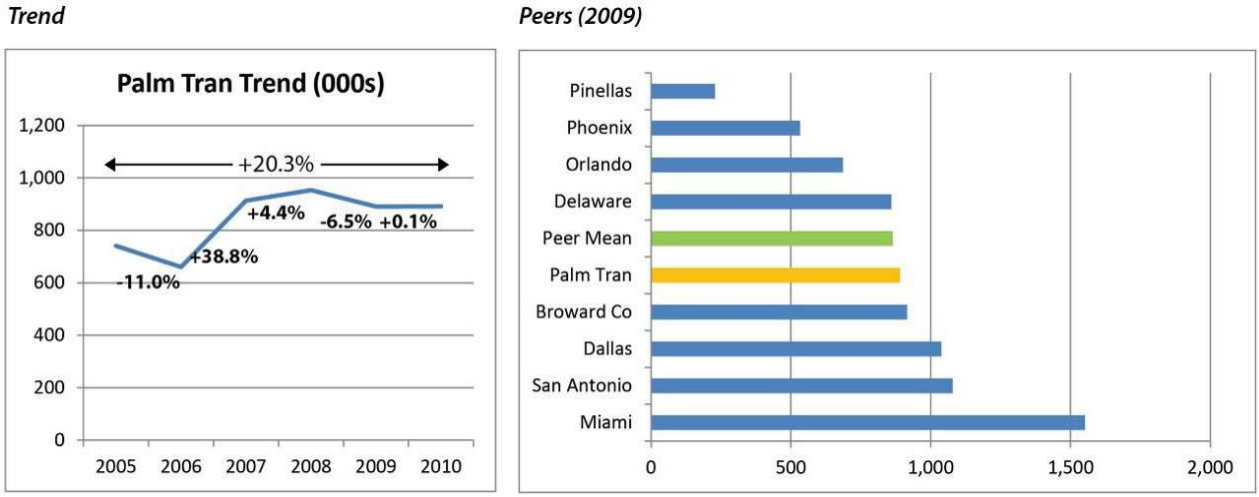


Figure 3-30 Thousands of Annual Passenger Trips – Demand-Response

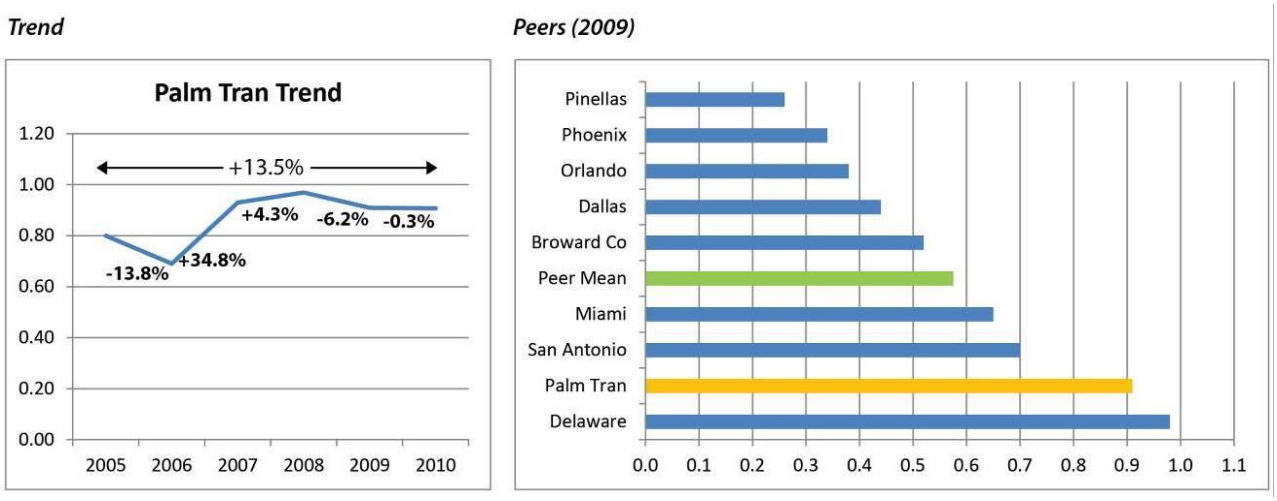


Figure 3-31 Annual Passenger Trips per Capita – Demand-Response

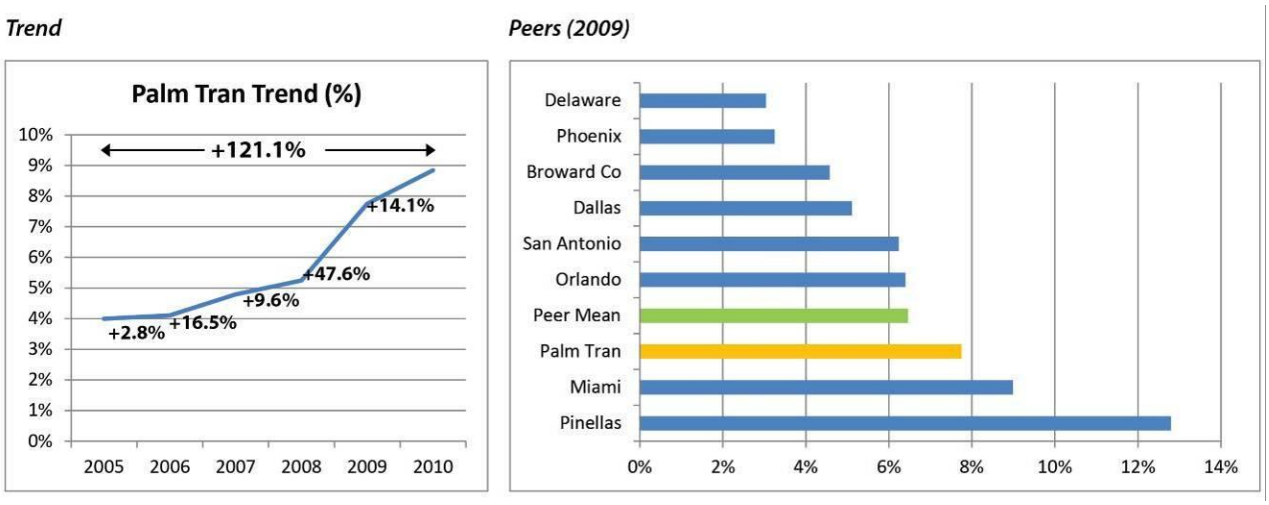


Figure 3-32 Farebox Recovery (%) – Demand-Response

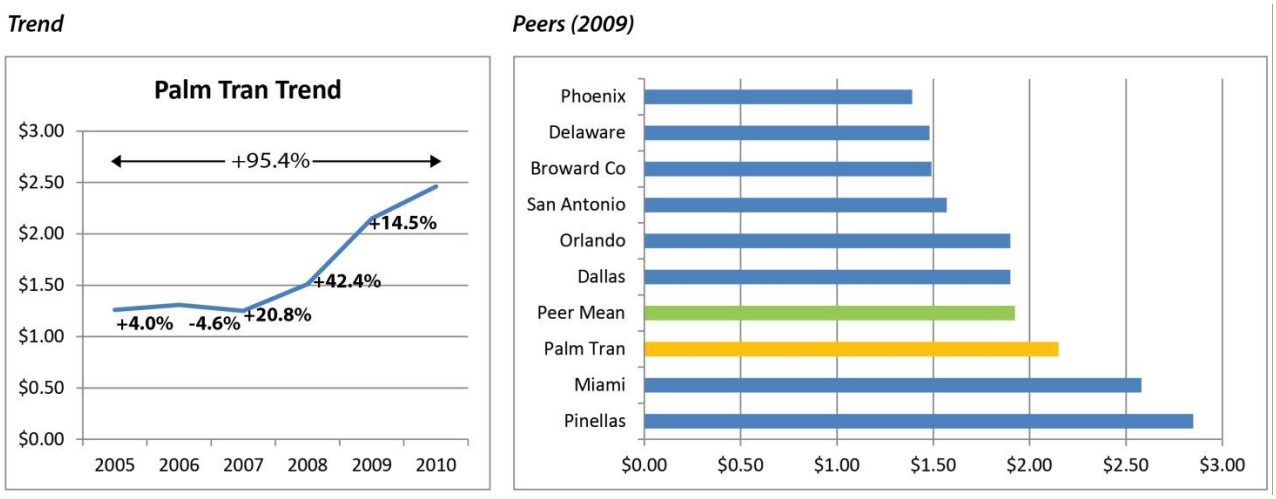


Figure 3-33 Average Fare ($) – Demand-Response

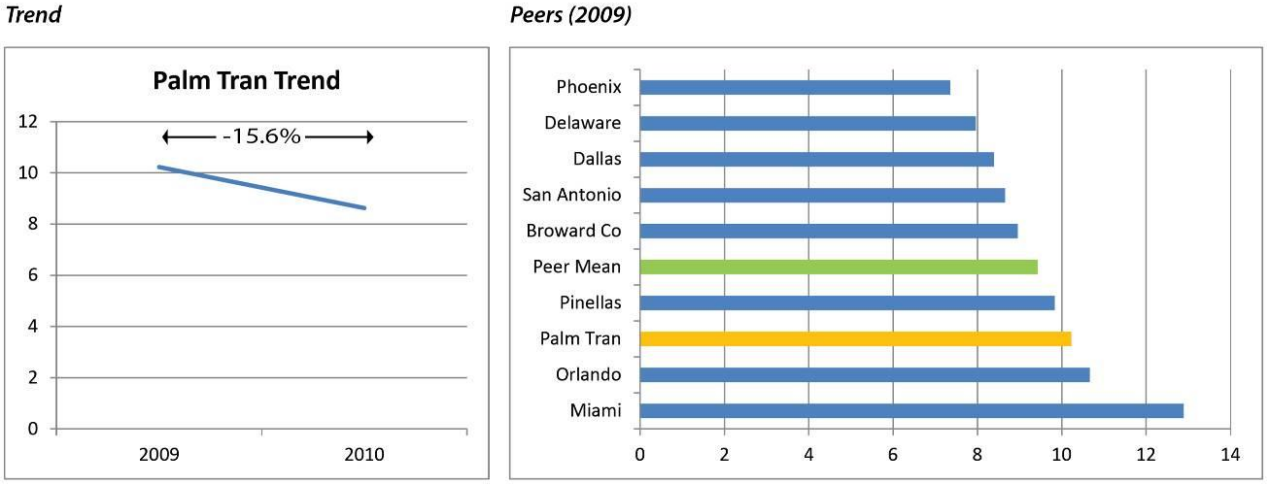


Figure 3-34 Fuel Efficiency (miles per gallon) – Demand-Response

Table 3-12 Economic Utilization Measures – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Passenger Trips	546,842	741,430	660,150	913,254	953,236	891,001
Passenger Trips per Capita	0.6	0.8	0.69	0.93	0.97	0.91
Passenger Miles	5,240,670	7,181,770	7,518,614	9,647,006	11,363,945	10,550,733
Revenue Miles	5,142,384	8,738,510	9,158,580	9,685,046	9,321,541	8,599,976
Vehicle Hours	485,272	697,306	680,584	720,323	675,121	599,894
Vehicle Miles	6,001,596	10,234,672	11,079,087	11,474,618	10,689,258	9,957,279
Operating Expenses	$13,352,987	$23,372,116	$21,111,973	$23,845,165	$27,407,771	$24,699,241
Passenger Fare Revenue	$902,645	$935,804	$867,689	$1,141,693	$1,440,022	$1,913,649
Average Fare	$1.65	$1.26	$1.31	$1.25	$1.51	$2.15
Fuel Consumption (gal)	n/a	n/a	n/a	n/a	n/a	973,787
Vehicle Miles per Gallon	n/a	n/a	n/a	n/a	n/a	10.23
Farebox Recovery (%)	6.76	4.00	4.11	4.79	5.25	7.75
Vehicles Available in Maximum Service	335	314	314	285	330	257
Vehicles Operated in Maximum Service (VOMS)	271	278	256	272	253	223

NOTE: Fares increased in October 2009.

Efficiency

Economic efficiency is a measure of the ability to provide service to users while being constrained by other factors (e.g., number of buses and funding). Some of the best measures in understanding the economic efficiency of Palm Tran include passenger trips per vehicles operated, operating expense per capita, operating expense per passenger trip, maintenance expense per vehicle, and revenue miles per vehicle. These measures are shown in Figure 3-35 through Figure 3-38. Data for these measures are summarized in Table 3-13.

Serving the 25% increase in ridership since 2005, Palm Tran CONNECTION has experienced a 45% increase in *passenger trips per vehicles operated in maximum service* (Figure 3-35) since 2005 and is even with the peer mean. The increase in trips in maximum service is paralleled by an increase in *revenue miles per vehicles in maximum service* (Figure 3-38). The revenue miles have not increased as quickly as the total passenger trips, indicating higher efficiency in scheduling trips and possibly an increase in the number of short trips being accommodated.

Even with the increase in number of vehicles operated, the *operating expense per capita* (Figure 3-36) has remained flat since 2005. However, the *operating expense per passenger trip* (Figure 3-37) has actually declined and is below the peer mean. Taken together, these two measures show that

Palm Tran CONNECTION is providing more service and is carrying more trips more efficiently that its peers.

Trend *Peers (2009)*

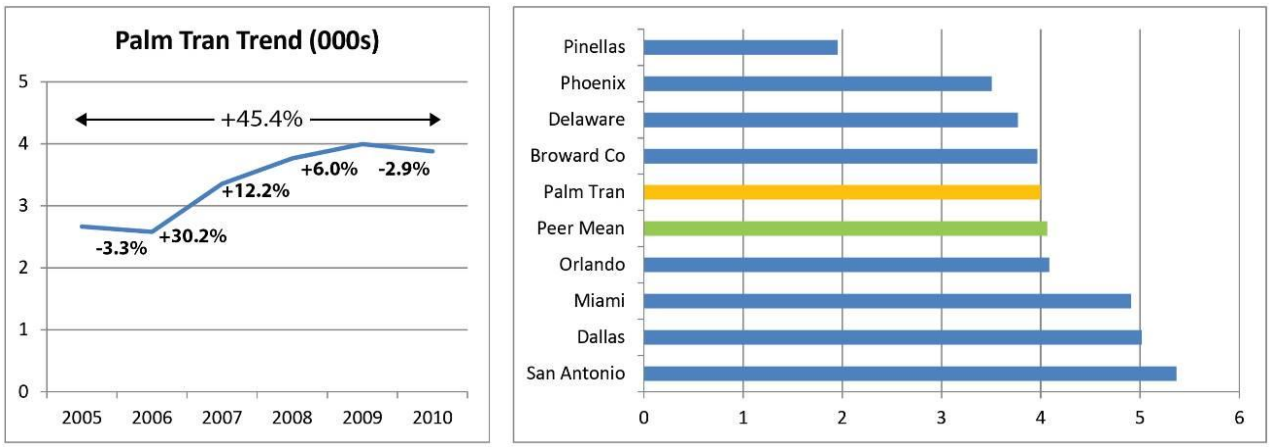


Figure 3-35 Annual Passenger Trips per Vehicles Operated in Maximum Service (000s) – Demand-Response

Trend *Peers (2009)*

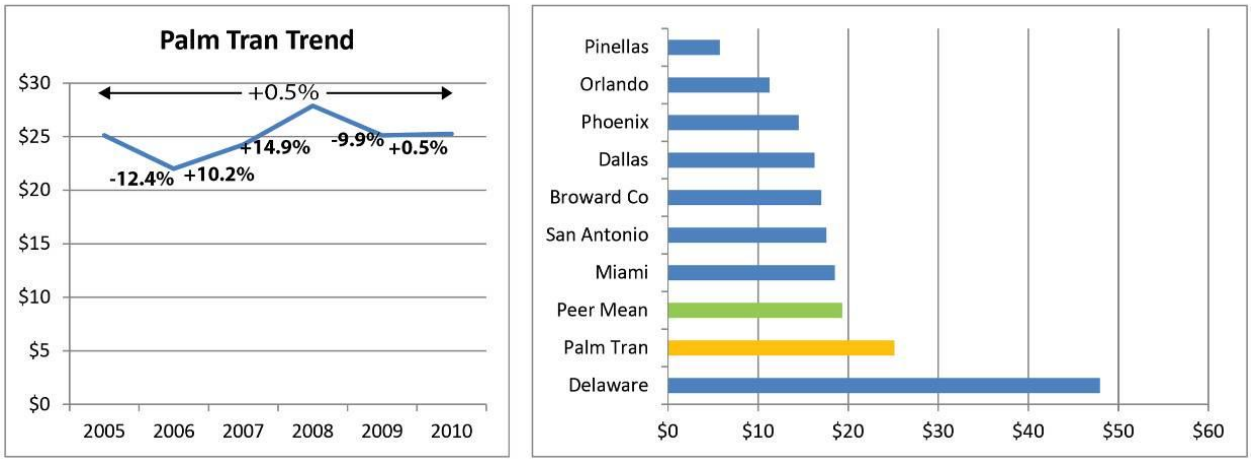


Figure 3-36 Operating Expense per Capita – Demand-Response

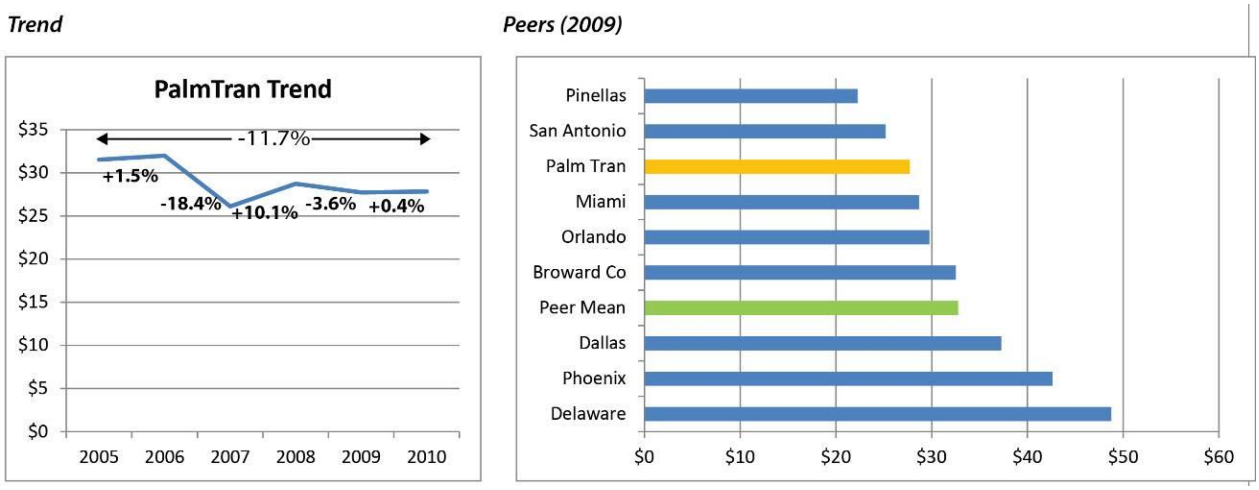


Figure 3-37 Operating Expense per Passenger Trip – Demand-Response

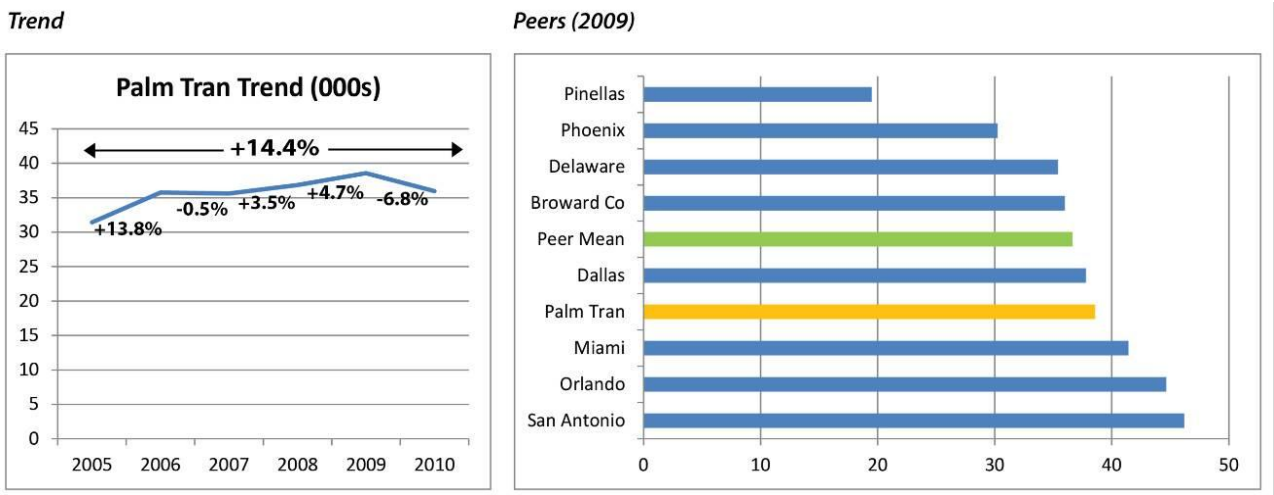


Figure 3-38 Revenue Miles per Vehicles in Maximum Service (000s) – Demand-Response

Table 3-13 Economic Efficiency Measures – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Passenger Trips per VOMS	2,018	2,667	2,579	3,358	3,768	3,996
Operating Expense per Capita	$14.59	$25.13	$22.02	$24.26	$27.88	$25.13
Operating Expense per Passenger Trip	$24.42	$31.52	$31.98	$26.11	$28.75	$27.72
Revenue Miles per VOMS	18,976	31,433	35,776	35,607	36,844	38,565

Effectiveness

Economic effectiveness is a measure of the ability to meet transit service demand given existing resources, or put simply, a measurement of a transit agency's ability to move people in a cost-effective manner. Some of the best measures in understanding the economic effectiveness of Palm Tran include passenger trips per vehicle hour, operating expense per revenue hour, and passenger

trips per revenue hour. Several measures are provided in Figure 3-39 through Figure 3-46. The supporting data are provided in Table 3-14.

Revenue miles per vehicle mile (Figure 3-40) is a measure of how much time a bus spends carrying passengers rather than traveling from the garage to start its service day. Palm Tran CONNECTION is above the peer mean, indicating that it performs slightly better than its peers.

Passenger trips per revenue mile (Figure 3-41) is lower than the peer average, indicating that Palm Tran CONNECTION is able to schedule shorter trips with its vehicles. Because the *average passenger trip length* (Figure 3-47) is somewhat longer than the peer average, as a result of Palm Tran's service area being large and dispersed, the *passengers trips per revenue mile* finding indicates that Palm Tran is scheduling its paratransit vehicles more efficiently.

Palm Tran CONNECTION's *passenger trips per vehicle hour* (Figure 3-39) and *passenger trips per revenue hour* (Figure 3-42) are slightly below the peer mean but have seen significant gains, increasing 35% and 44%, respectively, since 2005. CONNECTION has been able to achieve this increase in effectiveness while decreasing the *operating expense per revenue hour* (Figure 3-45). This trend is mirrored in *operating expense per passenger mile* (Figure 3-43) and *operating expense per revenue mile* (Figure 3-44), both of which are significantly below the peer mean.

Although the trend in *vehicle miles per capita* (Figure 3-46) has been declining since 2005, it is still significantly higher than the peer mean. This is due to a higher number of passenger trips per capita relative to the peer group, and it demonstrates that CONNECTION provides more service and has higher utilization of its services than its peers.

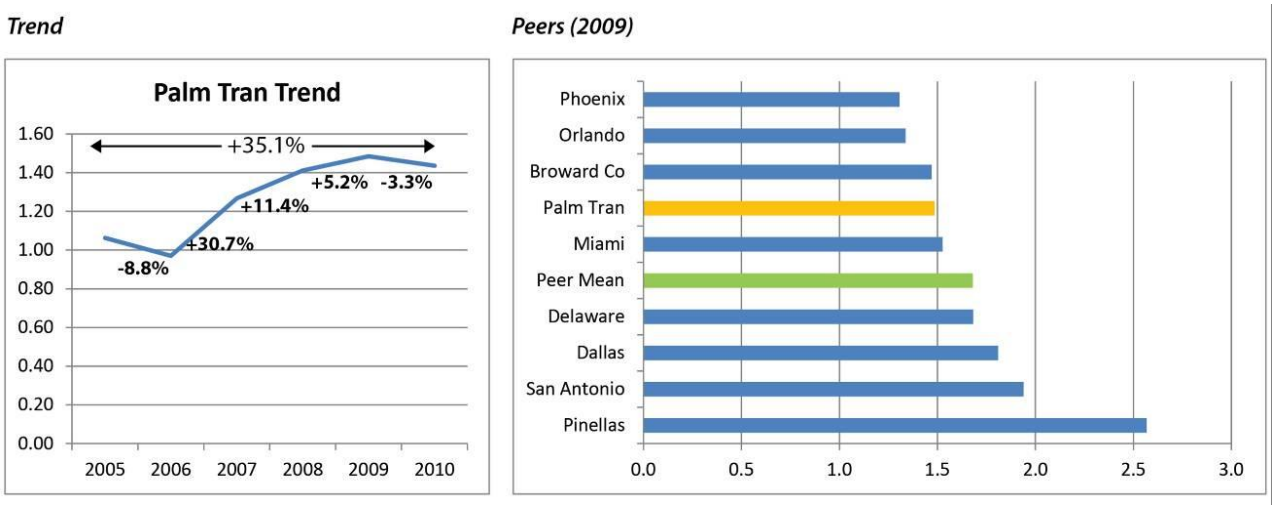


Figure 3-39 Passenger Trips per Vehicle Hour – Demand-Response

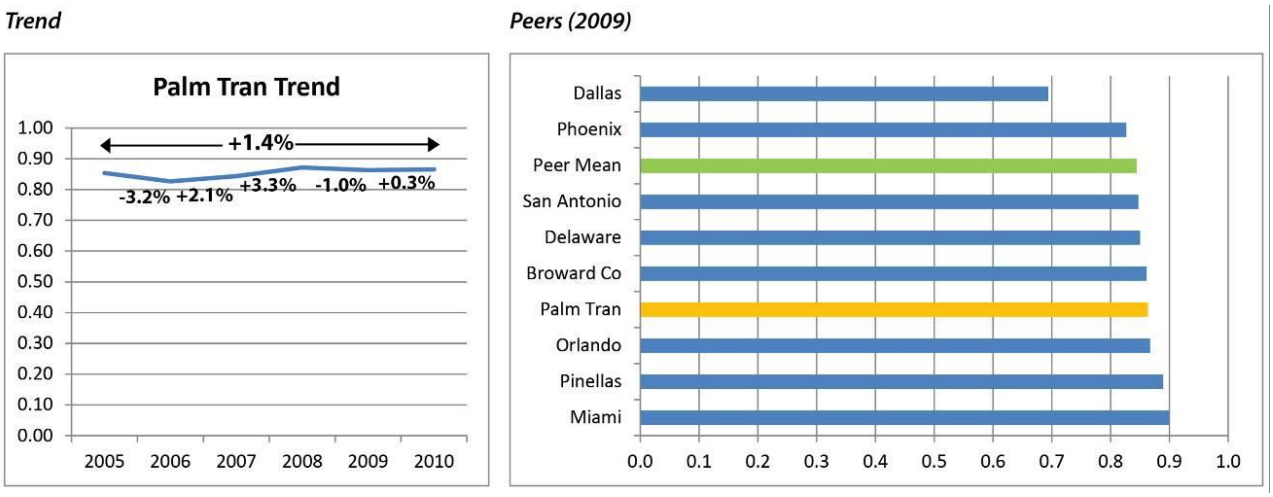


Figure 3-40 Revenue Miles per Vehicle Mile – Demand-Response

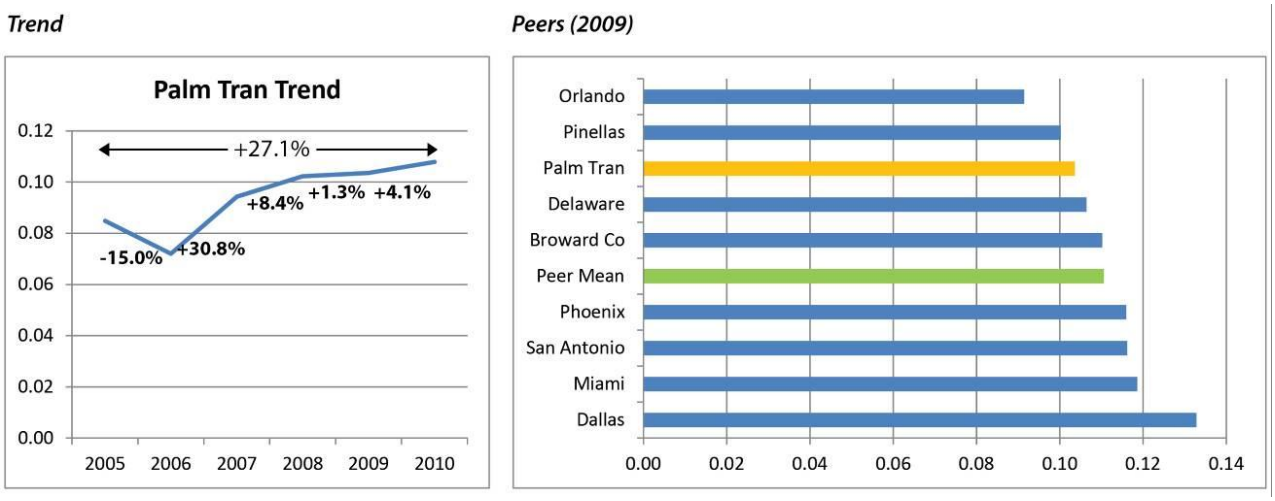


Figure 3-41 Passenger Trips per Revenue Mile – Demand-Response

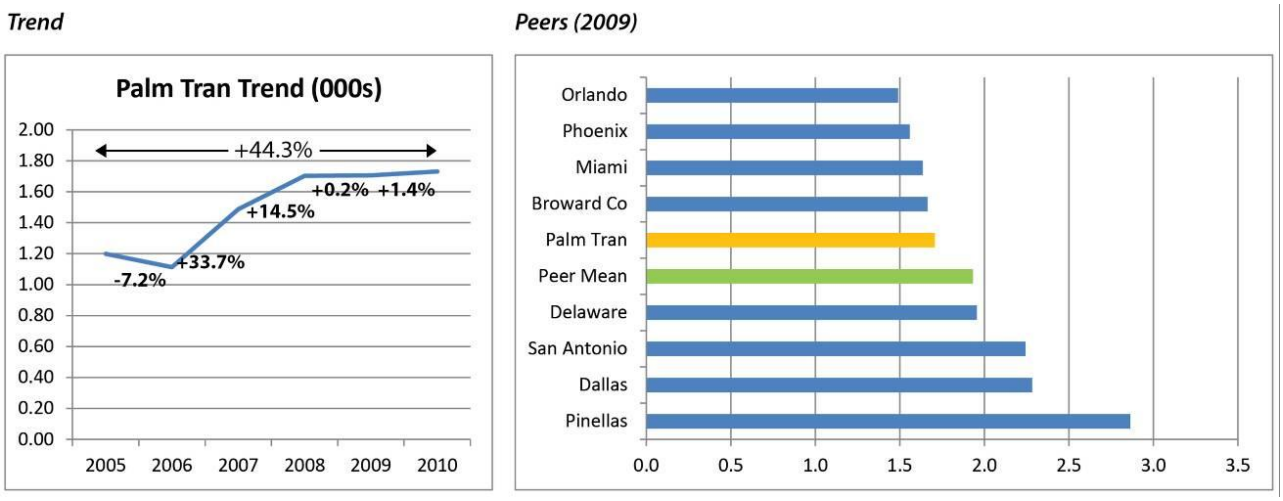


Figure 3-42 Passenger Trips per Revenue Hour (000s) – Demand-Response

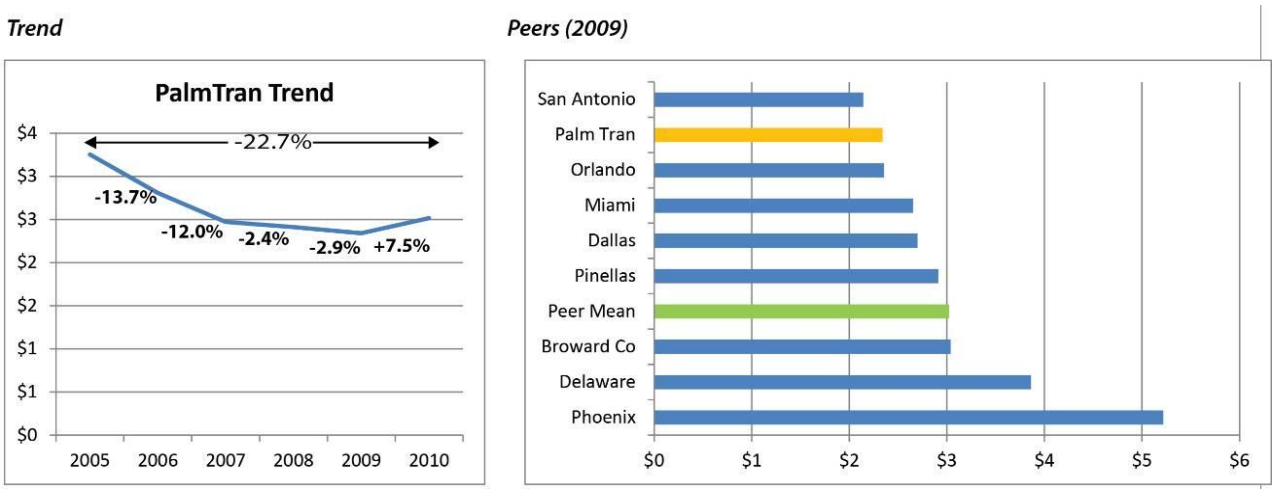


Figure 3-43 Operating Expense per Passenger Mile – Demand-Response

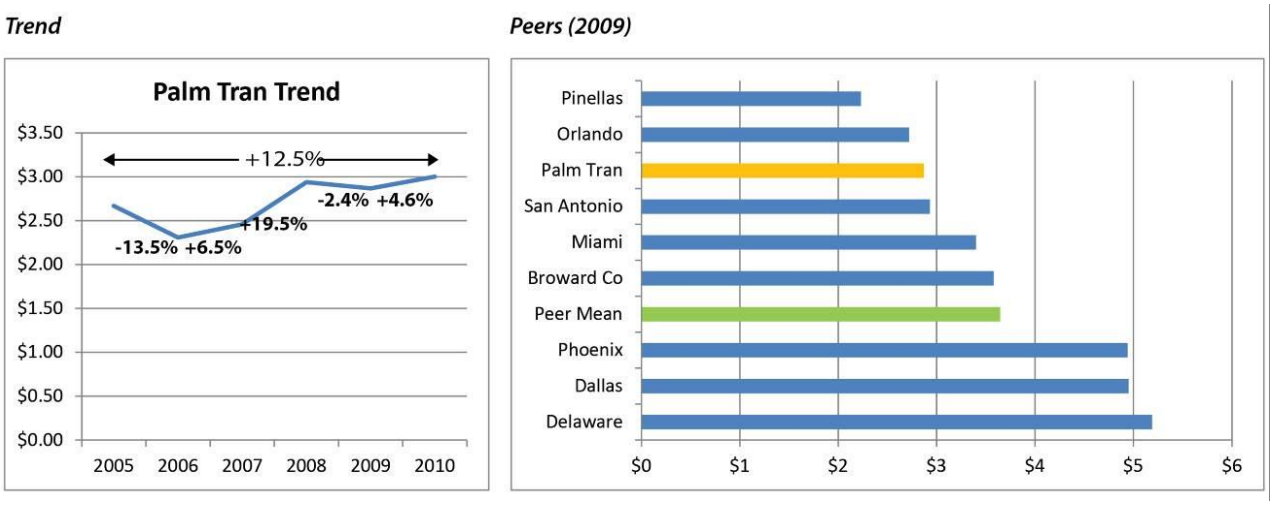


Figure 3-44 Operating Expense per Revenue Mile – Demand-Response

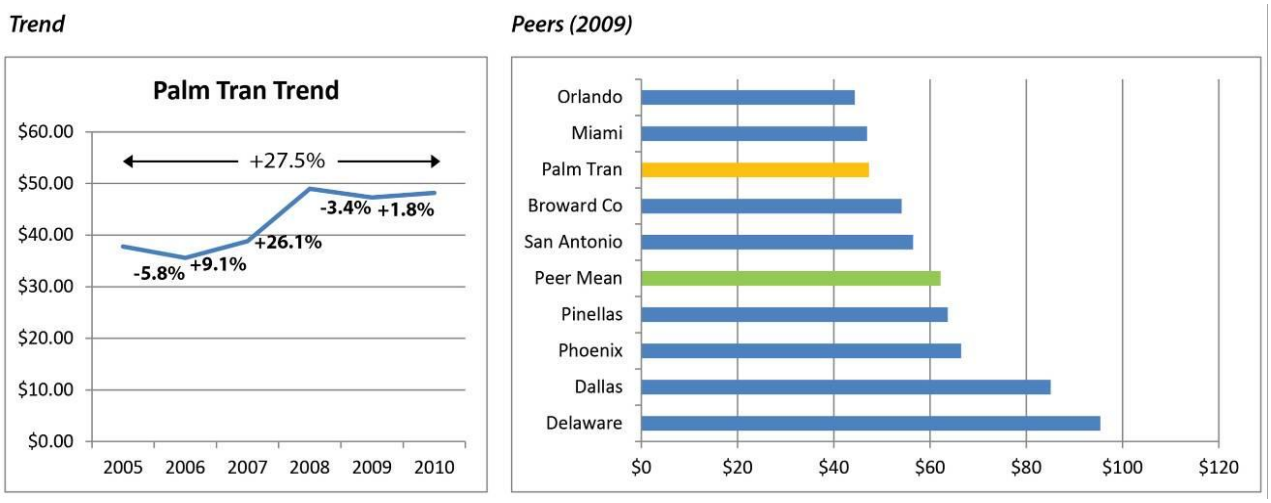


Figure 3-45 Operating Expense per Revenue Hour – Demand-Response

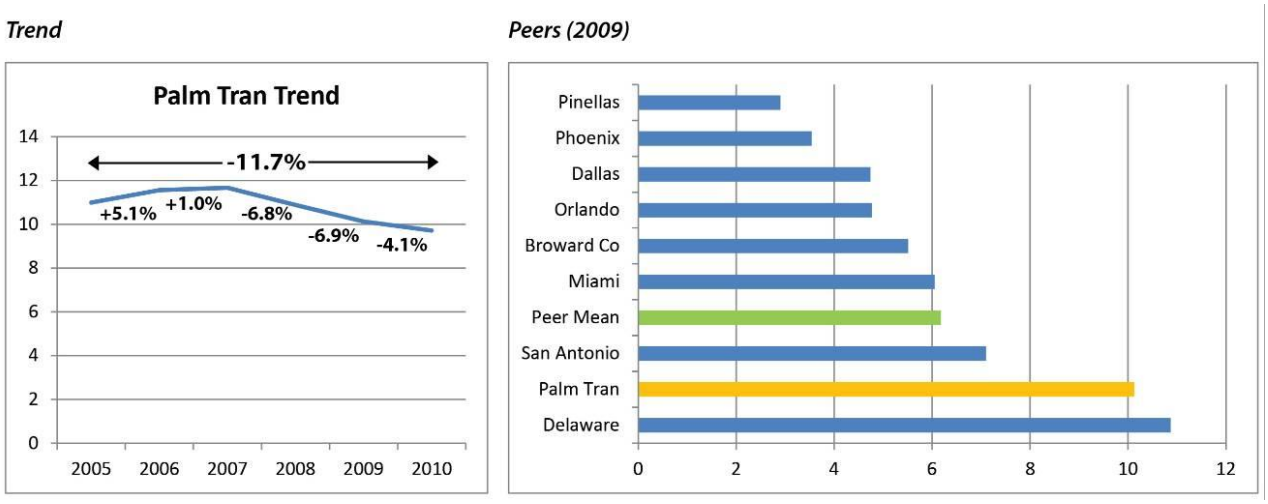


Figure 3-46 Vehicle Miles per Capita – Demand-Response

Table 3-14 Economic Effectiveness Measures – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Passenger Trips per Vehicle Hour	1.13	1.06	0.97	1.27	1.41	1.49
Revenue Miles per Vehicle Mile	0.86	0.85	0.83	0.84	0.87	0.86
Passenger Trips per Revenue Mile	0.11	0.08	0.07	0.09	0.10	0.10
Passenger Trips per Revenue Hour	1.27	1.20	1.11	1.49	1.70	1.71
Operating Expense per Passenger Mile	$2.55	$3.25	$2.81	$2.47	$2.41	$2.34
Operating Expense per Revenue Mile	$2.60	$2.67	$2.31	$2.46	$2.94	$2.87
Operating Expense per Revenue Hour	$30.94	$37.79	$35.59	$38.84	$48.99	$47.31
Vehicle Miles Per Capita	6.56	11	11.56	11.67	10.88	10.13

Service Delivery Performance Measures

Service delivery is a measurement of the daily experiences by transit riders. As documented in TCRP Report 88, "Even when transit service is available to someone, if a trip by transit is inconvenient or uncomfortable, a person with a choice will likely choose another mode." The service delivery performance measures relate to customer satisfaction, which has been assessed through a CONNECTION rider survey and documented in Chapter 1. Customer satisfaction assesses overall service quality and the quality of contact between transit passengers and agency staff.

Availability Performance Measures

Availability is a measurement of the ease with which potential transit passengers can use transit for different types of trips. As described in TCRP Report 88, "If transit service is not available to a passenger for a particular trip, other aspects of transit service will not matter to that passenger, as the trip will be made by some other mode or not made at all." Availability performance measures

for demand-response service differ from those for fixed-route service due to the nature of scheduling demand-response rides in advance. In addition, many of the service parameters for demand-response are set by the ADA. The measures being used in this analysis are therefore limited to temporal availability: the frequency and length of time transit service is provided.

The *average passenger trip length* for Palm Tran CONNECTION passengers (shown in Figure 3-47 and Table 3-15) is slightly above the peer mean, at 11.92 miles in 2009. In 2010, the average passenger trip length decreased slightly to 11.84 miles. ADA service is provided within ¾ mile of fixed-route bus service. The *hours of service (span of service)* are ten hours, Monday through Saturday (7:00 a.m. to 5:00 p.m.) and nine hours on Sunday (8:00 a.m. to 5:00 p.m.).

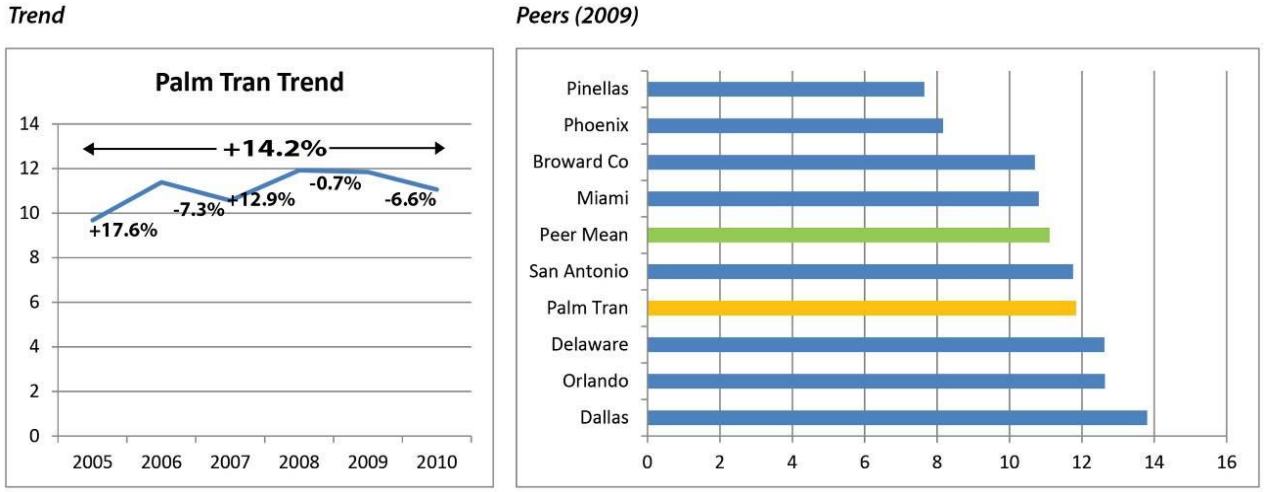


Figure 3-47 Average Passenger Trip Length (miles) – Demand-Response

Table 3-15 Availability Measures – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Average Passenger Trip Length	9.58	9.69	11.39	10.56	11.92	11.84
Revenue Hours	431,522	618,401	593,177	613,856	559,455	522,121

Community Performance Measures

Community performance measures identify the role of transit in meeting community/regional/ agency objectives. The demographics of passengers who would qualify for CONNECTION services are provided in Chapter 1.

Maintenance Performance Measures

Maintenance performance measures assess the effectiveness of the agency's maintenance program, which can ultimately impact other performance measures. The industry standard is the *spare ratio* (i.e., how many vehicles are in reserve to cover for vehicles in the garage for routine maintenance or to fill in for a vehicle with incidents on the road). A standard spare ratio is approximately 20%. Palm Tran CONNECTION's spare ratio has fluctuated between approximately 5% and 25% since 2005 and was slightly below 15% in 2010. For 2009, Palm Tran CONNECTION was right at the peer mean, as shown in Figure 3-48. Table 3-16 provides additional data.

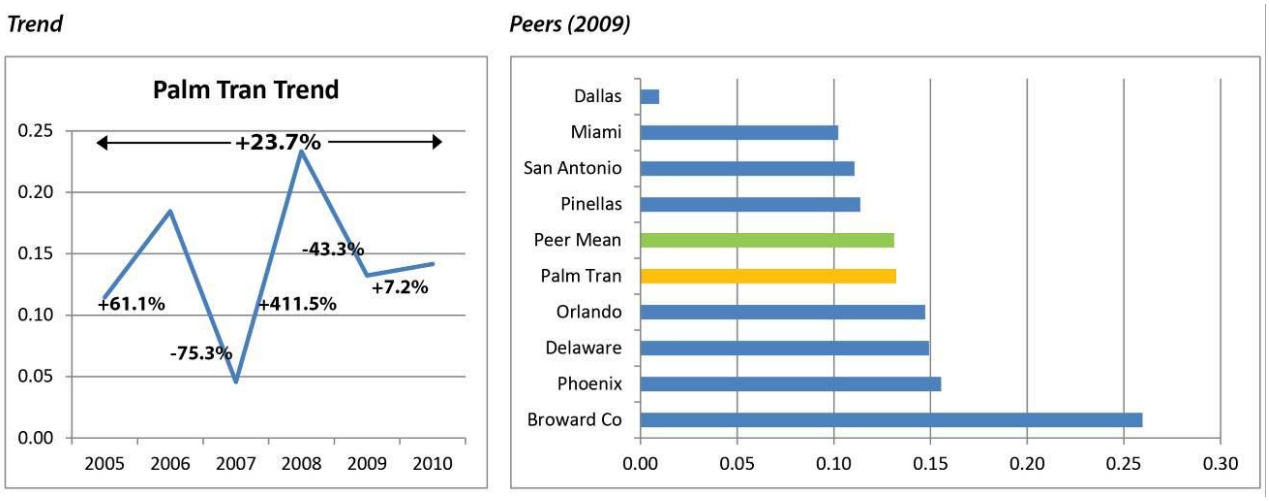


Figure 3-48 Spare Ratio – Demand-Response

Table 3-16 Maintenance – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Average Age of Fleet (years)	5.03	0.34	1.33	n/a	n/a	3.77
Spare Ratio	0.19	0.11	0.18	0.05	0.23	0.13

Travel Time Performance Measures

Travel time measures determine the length of transit trips when compared to transit, compared to other modes of transportation, or to an ideal value. The measure used is *average travel speed.* Palm Tran CONNECTION has seen a significant increase in travel speed (as shown in Figure 3-49 and Table 3-17) since 2005, even with the increase in passenger trips per hour. This indicates an increase in scheduling efficiency and vehicle routing to ensure faster trips.

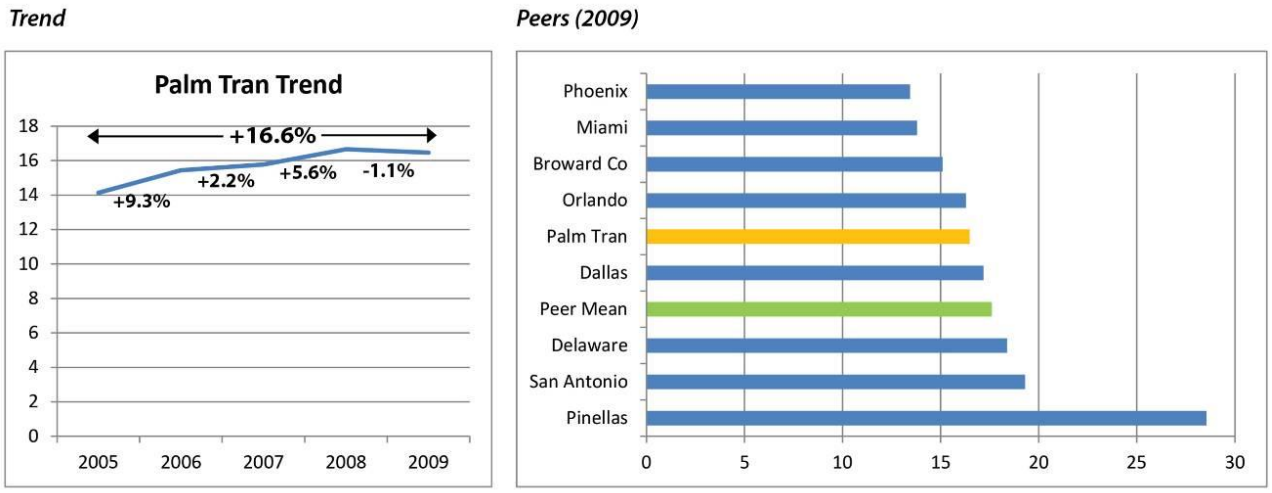


Figure 3-49 Average Travel Speed (miles per hour) – Demand-Response

Table 3-17 Travel Time – Demand-Response

Year	2005	2006	2007	2008	2009	2010
Travel Speed	14.13	15.44	15.78	16.66	16.47	n/a

Safety and Security Performance Measures

Safety and security performance measures relate to the potential for being involved in an accident (safety) or the victim of a crime (security). Accident and safety data are reported to NTD, but not published due to the sensitive nature of the data and due to inconsistencies in reporting between agencies.

4.0 TRANSIT SERVICE PLAN

4.1 Introduction

The purpose of Chapter 4 is to summarize Palm Tran improvements identified through stakeholder input and quantitative analysis, prioritize the improvements, and lead to development of a financial plan that accounts for the improvements anticipated to be needed over the 10-year span of the TDP.

This chapter is structured as follows:

- Summary of the overall approach used to identify needs
- Discussion of quantitative criteria used to identify needs and provision of background data to support subsequent evaluation of needs based upon the criteria
- Summary of a route-by-route assessment that takes into consideration the quantitative criteria and stakeholder input
- Assessment of potential new services
- Presentation of recommended improvements for the 10-year span of the TDP and for the longer term (the latter of which is for use in future TDP updates and for seeking future funding availability and opportunities that may arise)
- Discussion of demand estimates for fixed-route service and paratransit service

Fixed-route service improvements are the primary focus of the detailed analysis contained in this chapter. This is because (1) the surveys described in Chapter 1 indicated a high level of satisfaction with existing CONNECTION paratransit service, (2) the peer assessment described in Chapter 3 indicated that CONNECTION is currently one of the best performers in its peer group, and (3) requirements of the Americans with Disabilities Act (ADA) tie levels of paratransit service to levels of fixed-route service.

Guidelines used to prioritize improvement projects are presented in this chapter as well. The guidelines embody multiple purposes for the 10-year plan. Among these purposes are increasing ridership, improving service quality, improving efficiency, improving connectivity, improving access to jobs and other destinations, and addressing overcrowding.

4.2 Overall Approach

This TDP's overall approach to identifying improvements is based on (1) simultaneously balancing multiple goals and objectives and (2) being sensitive to existing limits on available funding. Traditional TDPs routinely contain ridership forecasts associated with implementation of several potential packages of improvements and use those forecasts as the basis for recommending a 10-year plan of projects. The approach used in this TDP, however, does not consider projects for inclusion in the 10-year plan *solely* on the basis of ridership potential. This approach results in part because TBEST-based ridership forecasts are not sensitive to significant existing land use constraints such as gated communities, but it is primarily shaped by the findings described in Chapter 1 (e.g., rider feedback on service quality issues) and a desire to support the diverse goals

and strategic initiatives described in Chapter 2 (e.g., investing in advanced technologies to improve service efficiency).

4.3 Criteria

The criteria assessed in order to identify needs are functional classification, existing ridership, ridership growth, productivity (riders per revenue hour), service frequency, span of service, transit-supportiveness, transit-dependency, relationship to planned and programmed improvements and the County's comprehensive plan, stakeholder input, and relationship to strategic initiatives. The following sub-sections describe the criteria and summarize the background data used to support evaluation of needs in Sections 4.4, 4.5, and 4.6.

FUNCTIONAL CLASSIFICATION

Table 4-1 shows the functional classification (i.e., service type) for each fixed route as defined in Palm Tran's *Transit Design Manual. (*Routes 45 and 49 were defined by Palm Tran staff.) The *Transit Design Manual* also defines a Core Service Area bounded by Military Trail, PGA Boulevard, the Intracoastal Waterway, and Palmetto Park Road. Major East-West Routes are Routes 31, 40, 43, 46, 62, 63, 73, 81, and 91.

Table 4-1 Fixed-Route Classification

Route	Functional Classification	In Core Service Area?
1	Trunk	Yes
2	Trunk	Yes
3	Trunk	Yes
4	Cross-Town	No
10	Cross-Town	No
11	Express	Partial
20	Cross-Town	Yes
21	Cross-Town	Yes
30	Cross-Town	Yes
31	Cross-Town	Partial
33	Cross-Town	Yes
40	Limited	Partial
41	Cross-Town	Yes
43	Cross-Town	Partial
44	Cross-Town	Partial
45	Circulator	Yes
46	Cross-Town	Partial
47	Circulator	No

Route	Functional Classification	In Core Service Area?
48	Circulator	No
49	Circulator	Yes
52	Circulator	No
60	Cross-Town	Partial
61	Cross-Town	Partial
62	Cross-Town	Partial
63	Cross-Town	Yes
64	Cross-Town	Partial
70	Cross-Town	Partial
71	Cross-Town	Yes
73	Cross-Town	Partial
80	Cross-Town	Yes
81	Cross-Town	Partial
91	Cross-Town	Partial
92	Cross-Town	Partial
94	Shuttle	Yes
95	Express	Partial

EXISTING RIDERSHIP

Table 4-2 shows annual ridership (FY 2010) for all Palm Tran fixed routes. A "moderate" level of ridership with respect to Palm Tran's fixed-route network is considered to be 50,000 annual riders.

Table 4-2 Current Ridership (Fixed Routes)

Route	Annual Ridership
1	2,373,554
2	1,140,159
3	1,272,597
4	66,676
10	76,254
11	2,041
20	83,576
21	90,796
30	99,657
31	399,633
33	192,946
40	189,750
41	21,460
43	531,086
44	137,403
45	45,443
46	238,609
47	175,021

Route	Annual Ridership
48	135,280
49	26,855
52	50,500
60	35,591
61	170,837
62	556,203
63	127,647
64	73,312
70	240,576
71	64,025
73	75,279
80	129,248
81	119,004
91	220,074
92	89,858
94	112,098
95	4,249

RIDERSHIP GROWTH

Table 4-3 shows growth in annual ridership since the last major update of the TDP. Several routes have seen positive ridership growth since the last major update. A number of routes were initiated after the last major update.

PRODUCTIVITY

Table 4-4, Table 4-5, and Table 4-6 show six recent months of productivity (riders per revenue hour) data for all Palm Tran fixed routes. The data span November 2010 through April 2011. Palm Tran considers routes with a productivity of at least 20 riders per revenue hour to be performing well.

SERVICE FREQUENCY

Table 4-7 shows the existing frequencies of service for all Palm Tran fixed routes. "Peak" service is service during the traditional a.m. and p.m. rush hour periods. "Evening" service occurs after 7:00 p.m. Frequencies of 30 minutes or better equate to LOS D per the *Transit Capacity & Quality of Service Manual* (TCQSM). According to the TCQSM, choice riders may opt to not use transit if the

frequency exceeds 20-30 minutes. The *Transit Design Manual* indicates that 30-minute peak period frequencies and 60-minute frequencies at other times are goals for the Core Service Area.

Table 4-3 Ridership Growth (Fixed Routes)

Route	2004 Annual Ridership*	2010 Annual Ridership	Ridership Growth	
			Total	Annual**
1	2,204,597	2,373,554	8%	1%
2	964,864	1,140,159	18%	3%
3	855,269	1,272,597	49%	7%
4	44,016	66,676	51%	7%
10	N/A	76,254	N/A	N/A
11	N/A	2,041	N/A	N/A
20	88,444	83,576	-6%	-1%
21	91,758	90,796	-1%	0%
30	113,514	99,657	-12%	-2%
31	297,719	399,633	34%	5%
33	170,942	192,946	13%	2%
40	240,108	189,750	-21%	-4%
41	39,832	21,460	-46%	-10%
43	515,070	531,086	3%	1%
44	115,119	137,403	19%	3%
45	48,175	45,443	-6%	-1%
46	192,563	238,609	24%	4%
47	200,477	175,021	-13%	-2%
48	165,417	135,280	-18%	-3%
49	N/A	26,855	N/A	N/A
52	42,033	50,500	20%	3%
60	35,931	35,591	-1%	0%
61	125,189	170,837	36%	5%
62	333,245	556,203	67%	9%
63	82,570	127,647	55%	8%
64	54,793	73,312	34%	5%
70	269,174	240,576	-11%	-2%
71	175,164	64,025	-63%	-15%
73	N/A	75,279	N/A	N/A
80	112,498	129,248	15%	2%
81	108,024	119,004	10%	2%
91	27,550	220,074	699%	41%
92	102,705	89,858	-13%	-2%
94	51,955	112,098	116%	14%
95	N/A	4,249	N/A	N/A

*from the 2006-2016 TDP

** exponential

Table 4-4 Existing Weekday Productivity* (Fixed Routes)

Route	November 2010	December 2010	January 2011	February 2011	March 2011	April 2011	Average
1	34.41	32.47	34.40	36.32	34.42	34.20	34.37
2	30.26	25.58	30.63	32.58	30.13	31.14	30.05
3	40.01	35.59	39.21	41.10	39.37	40.38	39.28
4	30.70	25.23	31.03	35.04	32.72	34.71	31.57
10	13.29	12.40	13.40	13.45	14.21	13.17	13.32
11	8.78	6.37	7.99	8.67	14.94	9.60	9.39
20	14.00	12.85	14.12	15.26	14.27	14.51	14.17
21	16.79	14.21	15.85	16.54	15.65	15.93	15.83
30	26.91	23.27	26.20	27.95	28.16	28.50	26.83
31	36.85	31.23	34.68	35.19	32.71	34.99	34.28
33	21.41	19.19	21.18	21.73	20.20	20.89	20.77
40	13.34	12.59	14.39	14.12	14.39	13.5	13.72
41	23.64	22.75	26.17	24.87	25.55	23.75	24.46
43	47.24	42.74	47.90	49.76	47.03	47.98	47.11
44	18.03	16.34	18.11	17.87	17.14	16.4	17.32
45	20.45	16.07	18.43	18	17.99	18.73	18.28
46	32.74	29.54	32.37	34.4	33.17	34.24	32.74
47	22.03	20.16	21.18	22.4	20.73	21.3	21.30
48	17.22	15.98	15.63	17.04	15.99	16.42	16.38
49	23.88	22.53	26.02	26.48	25.37	24.77	24.84
52	23.89	17.34	21.18	22.35	21.16	22.11	21.34
60	17.00	13.26	15.64	18.64	17.67	17.88	16.68
61	30.31	24.81	29.13	29.43	29.96	31.34	29.16
62	50.15	44.15	49.66	52.25	48.42	49.96	49.10
63	53.93	47.12	54.62	57.23	53.48	51.83	53.04
64	32.88	28.73	32.98	33.04	32.05	34.38	32.34
70	19.87	17.58	20.32	21.44	19.70	20.13	19.84
71	35.38	29.54	36.56	39.53	34.75	36.63	35.40
73	22.83	22.46	24.25	24.74	24.39	23.74	23.74
80	20.95	18.89	19.78	21.28	20.23	19.88	20.17
81	23.82	20.90	23.27	24.31	23.77	22.05	23.02
91	15.55	13.33	15.84	16.85	16.70	16.41	15.78
92	17.37	15.3	17.02	17.31	16.71	16.57	16.71
94	43.29	16.19	25.86	31.58	25.65	19.37	26.99
95	5.17	6.99	5.08	5.41	5.98	6.01	5.77

*Riders per revenue hour

Table 4-5 Existing Saturday Productivity (Fixed Routes)*

Route	November 2010	December 2010	January 2011	February 2011	March 2011	April 2011	Average
1	39.41	38.60	39.31	37.54	39.42	40.33	39.10
2	29.95	29.98	29.97	32.04	29.77	28.70	30.07
3	27.54	27.68	26.92	27.1	27.78	27.07	27.35
4	17.20	12.85	14.79	16.31	16.98	23.44	16.93
10	9.78	10.33	10.56	10.59	10.85	10.88	10.50
11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	11.08	10.05	9.74	10.7	9.86	9.10	10.09
21	10.19	10.82	10.5	10.78	11.44	10.11	10.64
30	26.04	29.73	27.20	28.41	27.00	27.52	27.65
31	25.58	26.11	27.47	28.50	26.14	30.65	27.41
33	18.76	20.87	19.44	19.95	18.5	19.03	19.43
40	15.19	16.39	18.28	18.23	16.66	17.12	16.98
41	10.89	11.89	12.87	10.38	8.55	14.33	11.49
43	54.75	57.79	56.42	55.94	51.26	53.64	54.97
44	19.76	17.22	19.29	17.85	19.49	16.84	18.41
45	11.35	11.83	8.45	10.40	12.18	13.66	11.31
46	27.58	28.36	30.94	30.33	28.78	28.44	29.07
47	16.50	18.63	16.93	18.56	18.59	18.64	17.98
48	14.59	13.94	14.23	14.52	14.77	13.23	14.21
49	22.67	22.29	22.38	25.62	21.19	22.95	22.85
52	14.94	16.85	15.56	17.38	15.8	16.91	16.24
60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
61	18.54	18.72	19.86	19.87	23.52	20.64	20.19
62	61.92	62.11	63.82	62.23	58.53	59.36	61.33
63	32.31	33.08	32.50	35.71	31.92	32.68	33.03
64	17.64	16.86	20.50	19.95	19.45	17.87	18.71
70	12.58	12.78	13.42	12.56	11.78	12.29	12.57
71	19.89	17.69	21.46	19.53	16.21	15.54	18.39
73	21.24	22.44	23.69	23.67	23.17	22.72	22.82
80	17.45	17.21	15.95	16.95	16.33	16.69	16.76
81	13.80	15.33	13.18	15.16	15.68	14.59	14.62
91	15.02	14.05	16.29	16.80	15.88	16.34	15.73
92	12.10	13.80	13.21	14.23	14.56	12.81	13.45
94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Riders per revenue hour

Table 4-6 Existing Sunday Productivity (Fixed Routes)*

Route	November 2010	December 2010	January 2011	February 2011	March 2011	April 2011	Average
1	31.20	31.73	32.95	34.20	32.51	33.13	32.62
2	21.60	22.38	21.81	22.64	22.54	22.05	22.17
3	30.67	30.78	31.09	31.41	30.16	31.68	30.97
4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
30	19.37	19.31	18.45	20.07	16.61	15.81	18.27
31	16.59	14.37	16.71	17.08	13.58	14.96	15.55
33	12.98	13.61	13.86	14.98	13.82	13.29	13.76
40	15.74	17.78	15.73	17.71	15.82	17.09	16.65
41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
43	33.76	10.99	11.39	33.24	30.71	34.02	25.69
44	13.98	N/A	N/A	13.37	14.52	11.97	13.46
45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46	19.43	21.89	20.72	21.14	17.6	18.7	19.91
47	11.41	9.76	11.19	12.31	11.11	11.68	11.24
48	8.63	10.56	10.54	10.99	9.99	11.06	10.30
49	18.67	16.68	17.19	19.26	20.20	19.48	18.58
52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
61	17.77	16.44	18.48	21.57	20.04	20.83	19.19
62	47.14	49.40	50.58	52.71	51.41	54.86	51.02
63	16.82	17.73	26.15	27.45	27.64	24.97	23.46
64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
70	8.33	8.75	9.14	9.75	8.4	7.11	8.58
71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
80	13.44	14.42	12.52	12.27	12.53	13.14	13.05
81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
91	13.76	14.27	12.03	13.49	16.92	13.18	13.94
92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Riders per revenue hour

Table 4-7 Existing Scheduled Frequencies (Fixed Routes)

Route	Weekday Frequency (minutes)			Saturday Frequency (minutes)		Sunday Frequency (minutes)	
	Peak	Midday	Evening	Midday	Evening	Midday	Evening
1	15-20	20	20	30	30	30	30
2	30	30	30	60	60	60	N/A
3	20-30	30	30	30	30	60	N/A
4	60	60	N/A	60	N/A	N/A	N/A
10	60	60	60	60	60	N/A	N/A
11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	60	60	N/A	60	N/A	N/A	N/A
21	60	60	N/A	60	N/A	N/A	N/A
30	30	60	N/A	60	N/A	60	N/A
31	30	30	30	60	N/A	60	N/A
33	30	60	30	60	N/A	60	N/A
40	30-60	60	60	30-60	60	60	N/A
41	60	32-60	N/A	32-60	N/A	N/A	N/A
43	30	30	30	60	60	60	N/A
44	30	60	30	60	N/A	60	N/A
45	60	60	N/A	60	N/A	N/A	N/A
46	30	60	N/A	60	N/A	60	N/A
47	60	60	60	60	60	60	60
48	60	60	60	60	60	60	60
49	60	60	60	60	60	60	N/A
52	60	60	N/A	60	N/A	N/A	N/A
60	60	60	N/A	N/A	N/A	N/A	N/A
61	60	60	N/A	60	N/A	60	N/A
62	30	30	30	60	N/A	60	N/A
63	60	60	60	60	N/A	60	N/A
64	60	60	N/A	60	N/A	N/A	N/A
70	30	60	30	60	N/A	90	N/A
71	60	60	60	60	N/A	N/A	N/A
73	60	60	60	60	N/A	N/A	N/A
80	60	60	60	60	N/A	60	N/A
81	60	60	60	60	N/A	N/A	N/A
91	30	30	30	60	60	60	N/A
92	60	60	N/A	60	N/A	N/A	N/A
94	20	20-40	20	N/A	N/A	N/A	N/A
95	30-60	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: "N/A" denotes no service provided.

SPAN OF SERVICE

Table 4-8 describes the existing span of service for all Palm Tran fixed routes. The spans are rounded to the nearest half hour for ease of comparison. Spans of 14 hours or more are considered to be desirable from a rider perspective (and is LOS C according to the TCQSM).

Table 4-8 Existing Span of Service (Fixed Routes)

Route	Weekday Span of Service (minutes)		Saturday Frequency (minutes)		Sunday Frequency (minutes)	
	Description	Hours	Description	Hours	Description	Hours
1	5:30 a.m. to 10:30 p.m.	17	6:30 a.m. to 10:00 p.m.	15.5	8:30 a.m. to 6:30 p.m.	10
2	5:30 a.m. to 10:00 p.m.	16.5	7:00 a.m. to 10:00 p.m.	15	8:00 a.m. to 6:00 p.m.	10
3	5:00 a.m. to 10:00 p.m.	17	6:00 a.m. to 10:00 p.m.	16	8:30 a.m. to 6:00 p.m.	9.5
4	6:30 a.m. to 6:00 p.m.	11.5	7:30 a.m. to 5:00 p.m.	9.5	N/A	N/A
10	6:00 a.m. to 8:00 p.m.	14	6:00 a.m. to 8:00 p.m.	14	N/A	N/A
11	1 trip a.m. and p.m.	2.5	N/A	N/A	N/A	N/A
20	5:30 a.m. to 7:00 p.m.	13.5	7:00 a.m. to 6:00 p.m.	11	N/A	N/A
21	6:30 a.m. to 7:00 p.m.	12.5	8:00 a.m. to 6:00 p.m.	10	N/A	N/A
30	6:00 a.m. to 6:30 p.m.	12.5	7:30 a.m. to 5:00 p.m.	9	9:00 a.m. to 4:00 p.m.	7
31	6:00 a.m. to 7:30 p.m.	13.5	7:30 a.m. to 6:30 p.m.	11	9:30 a.m. to 5:30 p.m.	8
33	5:30 a.m. to 7:30 p.m.	14	8:00 a.m. to 7:00 p.m.	11	9:00 a.m. to 5:30 p.m.	8.5
40	5:00 a.m. to 10:00 p.m.	17	7:00 a.m. to 10:00 p.m.	15	10:00 a.m. to 7:00 p.m.	9
41	6:30 a.m. to 5:30 p.m.	11	7:30 a.m. to 4:30 p.m.	9	N/A	N/A
43	6:00 a.m. to 10:00 p.m.	16	8:00 a.m. to 9:00 p.m.	13	9:00 a.m. to 6:00 p.m.	9
44	6:00 a.m. to 7:30 p.m.	13.5	7:00 a.m. to 7:00 p.m.	12	9:00 a.m. to 5:00 p.m.	8
45	6:00 a.m. to 7:00 p.m.	13	7:00 a.m. to 7:00 p.m.	12	N/A	N/A
46	6:00 a.m. to 7:00 p.m.	13	7:00 a.m. to 7:00 p.m.	12	9:00 a.m. to 5:00 p.m.	8
47	5:30 a.m. to 9:30 p.m.	16	8:30 a.m. to 9:30 p.m.	13	9:30 a.m. to 7:30 p.m.	10
48	5:30 a.m. to 9:30 p.m.	16	6:30 a.m. to 9:00 p.m.	14.5	9:30 a.m. to 7:30 p.m.	10
49	6:30 a.m. to 8:00 p.m.	13.5	7:00 a.m. to 8:00 p.m.	13	9:00 a.m. to 5:00 p.m.	8
52	6:30 a.m. to 6:30 p.m.	12	7:30 a.m. to 6:30 p.m.	11	N/A	N/A
60	5:30 a.m. to 7:00 p.m.	13.5	N/A	N/A	N/A	N/A
61	6:30 a.m. to 7:00 p.m.	12.5	6:30 a.m. to 7:00 p.m.	12.5	8:30 a.m. to 4:00 p.m.	7.5
62	5:30 a.m. to 8:00 p.m.	14.5	7:00 a.m. to 6:00 p.m.	11	10:00 a.m. to 5:00 p.m.	7
63	6:30 a.m. to 7:30 p.m.	13	7:30 a.m. to 6:30 p.m.	11	10:30 a.m. to 5:30 p.m.	7
64	6:00 a.m. to 7:00 p.m.	13	6:00 a.m. to 7:00 p.m.	13	N/A	N/A
70	5:00 a.m. to 7:30 p.m.	14.5	7:30 a.m. to 6:30 p.m.	11	9:30 a.m. to 6:00 p.m.	8.5
71	6:30 a.m. to 7:30 p.m.	13	7:30 a.m. to 6:30 p.m.	11	N/A	N/A
73	6:00 a.m. to 7:30 p.m.	13.5	7:30 a.m. to 6:30 p.m.	11	N/A	N/A
80	6:30 a.m. to 7:30 p.m.	13	7:30 a.m. to 6:30 p.m.	11	9:00 a.m. to 4:30 p.m.	7.5
81	7:00 a.m. to 7:30 p.m.	12.5	7:00 a.m. to 7:00 p.m.	12	N/A	N/A
91	6:00 a.m. to 8:00 p.m.	14	8:00 a.m. to 7:30 p.m.	11.5	9:30 a.m. to 5:00 p.m.	7.5
92	6:00 a.m. to 6:00 p.m.	12	7:00 a.m. to 6:00 p.m.	11	N/A	N/A
94	7:00 a.m. to 9:00 p.m.	14	N/A	N/A	N/A	N/A
95	2 trips a.m. and p.m.	5	N/A	N/A	N/A	N/A

NOTE: "N/A" denotes no service provided.

TRANSIT-SUPPORTIVENESS

In Chapter 1, Figure 1-13 depicts the distribution of households in the county. Figure 3-24 depicts transit-supportive Census blocks in the county, defined by a density of at least 3 households per acre. As discussed in Section 3.4, the TCQSM states that a density of 3 households per acre is capable of supporting hourly transit service (i.e., "minimal" transit service).

Three households per acre is not a density that supports TOD, however. TOD is a tool that can be used to generate new ridership and increase the livability of communities. Information about TOD-supportive densities for Florida application is available at http:\\fltod.com; TOD-supportive densities should be provided within walking distance of transit stops and stations. TOD projects should also be supported by site characteristics such as a grid street network (i.e., a well-connected street network), a high level of walkability, a high level of bicycle-friendliness, a mix of complementary uses, and appropriate parking management.

TRANSIT-DEPENDENT TRACTS

In Chapter 1, Figures 1-11, 1-15, and 1-16 depict the distribution of residents less than 18 years old and greater than 65 years old, the distribution of households with annual incomes of less than $35,000 (the Census threshold closest to the poverty line), and the distribution of households without automobiles, respectively. These three categories are indicative of populations that are likely to be transit-dependent.

RELATIONSHIP TO PROGRAMMED AND PLANNED IMPROVEMENTS

The following sub-sections describe planned and programmed transit improvements in Palm Beach County. The improvements recommended in the TDP should not conflict with planned and programmed projects.

County Budget

The current budget includes the following items as unfunded priorities:

- Transit signal priority implementation in Wellington area ($500,000 in FY 2014)
- Smart card implementation ($5,000,000 in FY 2014)
- Two to three new park-and-ride lots ($2,000,000 in FY 2015)
- Purchase of 5-10 articulated buses ($8,000,000 in FY 2015)

Palm Beach County's FY 2012 budget was finalized in September 2011. Fare increases had been considered as part of the 2012 budget, but did not pass for 2012. Fare increases may be considered in future years. No transit service cuts are proposed.

2006-2016 TDP

The previous TDP identified the improvements shown in Figure 4-1 for FY 2011 through FY 2016.

Year	Route	Criteria	Improvement
2011	4	Growth in Passengers/Revenue Hour = 107% 2006 Passengers/Revenue Hour = 20.1	Weekday Frequency
	46	Growth in Passengers/Revenue Hour = 12.4% 2006 Passengers/Revenue Hour = 23.2	Weekday Frequency
2012	20	Growth in Passengers/Revenue Hour = 48% 2006 Passengers/Revenue Hour = 14.4	Weekday Span
	50	Growth in Passengers/Revenue Hour = -4.3% 2006 Passengers/Revenue Hour = 16.5	Weekday Span
2013	70	Growth in Passengers/Revenue Hour = 42% 2006 Passengers/Revenue Hour = 17.6	Weekday Span
	81	Growth in Passengers/Revenue Hour = 46% 2006 Passengers/Revenue Hour = 19.8	Weekday Span
2014	To be identified	Frequency and/or span improvements that cross threshold of greater than 20 passengers per revenue hour	Weekday Frequency or Span
2015	To be identified	Frequency and/or span improvements that cross threshold of greater than 20 passengers per revenue hour	Weekday Frequency or Span
2016	To be identified	Frequency and/or span improvements that cross threshold of greater than 20 passengers per revenue hour	Weekday Frequency or Span

Figure 4-1 Recommended Improvements from 2006-2016 TDP

The 2009 update of the previous TDP identified frequency and service span improvements in 2017 for routes that carry more than 20 passengers per revenue hour. No specific routes were identified at the time of the 2009 update. Other improvements identified in the 2009 update for 2017 are as follows:

- Increased community flex service/paratransit service
- Transit shelters/amenities
- Hybrid bus acquisition
- BRT planning/implementation studies

FDOT Five-Year Work Program

FDOT's "Adopted with Amended" Five-Year Work Program for 2012-2016 (dated December 20, 2011) includes the following transit projects:

- Belle Glade Express Enhancements/Extension ($600,000 for operations in 2012 and $215,000 for capital in 2014)
- City of Delray Beach Downtown Circulator Enhancements/Extension ($200,000 for operations and $100,000 for capital in 2012)
- City of Delray Beach Old Germantown Road Transit Infrastructure ($181,000 for operations in 2012)

- City of Pahokee Community Route Bus Purchase ($90,000 for capital in 2012)
- Pahokee Transit Study Technical Assistance ($20,000 in 2012)
- Palm Beach County Vanpool Van Lease Subsidy ($150,000 per year in 2012, 2014, 2015, and 2016)
- Palm Beach County Block Grant (approximately $9 million in 2012, approximately $9.5 million per year in 2013-2015, and approximately $9.8 million in 2016 for fixed-route operations)
- Palm Beach County Section 5307 Federal Transit Capital Assistance (approximately $15,000,000 per year in 2012 through 2016)
- Palm Beach County Section 5311 Small Urban/Rural Operating Assistance ($503,000 for operations in 2012, $585,000 for operations in 2013, $614,000 for operations in 2014, $645,000 for operations in 2015 and $677,000 for operations in 2016)
- Palm Beach MPO Section 5303 Transit Planning ($520,000 in 2012, $465,000 in 2013, $465,000 in 2014, $465,000 in 2015, and $415,000 in 2016)
- Palm Tran Transit Corridor Operations ($863,000 per year for 2012 through 2014)
- SFRTA Layover Maintenance Facility ($1,500,000 for capital in 2012)
- SFRTA Section 5309 West Palm Beach Improvements ($4,114,000 for capital in 2012)
- West Palm Beach Section 5309 Trolley Buses ($2,030,000 for capital in 2012)
- West Palm Beach Section 5309 Trolley Shelter ($248,000 for capital in 2012)

MPO Transportation Improvement Program

The MPO's systemwide priorities for FY 2013-2017 (adopted July 21, 2011) include the following:

- Project Development & Environmental (PD&E) studies for special use lanes on SR 7 and Glades Road (underway)
- Transit signal priority implementation along Okeechobee Boulevard (in Palm Tran budget) and SR 7
- Implementation of a smart card and/or regional fare card (in Palm Tran budget)
- Extension of Tri-Rail to Jupiter (partially funded)
- Purchase of five to 10 articulated buses to address overcrowding (some buses purchased in 2011)
- Construction of park-and-ride lots, particularly in the west part of the county, to grow ridership (in Palm Tran budget)
- Ongoing funding of a vanpool program and bus shelter construction

The MPOs five-year Transportation Improvement Program (TIP) for FY 2012-2016 (amended August 15, 2011) includes the following transit-related items:

- SFRTA PD&E study for the FEC corridor ($55 million for three segments through 2013)
- SFRTA capital funds for Tri-Rail extension to Jupiter ($10,500,000 for FY 2014 to 2016)

- SFRTA maintenance funding for Tri-Rail (five-year total funding is $90.7 million)
- SFRTA layover maintenance facility for Tri-Rail ($3,000,000 for capital in 2012)
- SFRTA Tri-Rail operating assistance during I-95 construction ($4,000,000 per year from FY 2012 to 2016)
- SFRTA Tri-Rail station operations ($966,000 for capital in FY 2012)
- City of Belle Glade transit stop improvements ($815,000 for capital in FY 2012 and FY 2014)
- City of Delray Beach Old Germantown Road transit infrastructure ($181,000 for operations in FY 2012)
- Palm Tran federal capital assistance under Section 5307 (average of approximately $15 million per year through FY 2016 for capital funding)
- Palm Tran operating and administrative assistance under Section 5311 and via block grant ($48.5 million through FY 2016)
- Palm Beach MPO transit planning support (approximately $2 million total through FY 2016)
- Palm Tran corridor operating assistance ($2.6 million total through FY 2014)
- South Florida Vanpool vehicle lease subsidy ($150,000 per year through FY 2016)
- Transportation Disadvantaged operations and planning ($13.1 million total through FY 2016)

MPO Long Range Transportation Plan

The Palm Beach County 2035 Long Range Transportation Plan includes a transit Cost-Feasible Plan map and a transit Needs Plan map for the 2035 horizon. These maps are included as Figure 4-2 and Figure 4-3. The Cost-Feasible Plan includes a new Tri-Rail station at Glades Road, improved headways on Routes 2 and 3, a new Circulator route in Belle Glade, three new park-and-ride lots, and a new BRT service along Glades Road and SR 7 with connections to BCT at US 1 and SR 7. The Needs Plan shows a more extensive systemwide overhaul to establish a grid of north-south and east-west routes, extension of Tri-Rail to Jupiter, 16 new park-and-ride lots, and two additional BRT routes (one of which runs on Military Trail and the other of which connects West Palm Beach and SR 7).

County Comprehensive Plan

Transportation Policy 1.1-p directs the County to support widening SR 7 between Broward County and Glades Road to an eight-lane section with two dedicated transit/special use lanes. Transportation Policy 1.1-p also requires the following:

- Establishment of multimodal standards for the SR 7 Transit-Oriented Corridor after completion of the SR 7 Transit-Supportive Land Use Planning and Urban Design Study
- Funding of capital and operating costs for provision of bus service along SR 7 between Broward County and Glades Road

Under Transportation Policy 1.2-f, a required mitigation measure for the CRALLS facility that consists of Old Boynton Road from spine road to Boynton Beach Boulevard as well as the intersections of Congress Avenue/Gateway Boulevard and Congress Avenue Old Boynton Road is implementation of a transit route (Palm Tran or city trolley) serving Boynton Town Center, Boynton Village, and the Congress/Old Boynton area. Route 73 appears to satisfy this requirement.

Under Transportation Policy 1.2-f, required mitigation measures for the build-out of the Florida Research Park Development of Regional Impact (DRI), located at SR 710 and Pratt Whitney Road, include provision of bus service to and from the site by 2015 or before development of 3 million square feet as well as provision of an intermodal facility within one year of establishment of bus service.

Under Transportation Policy 1.2-f, required mitigation measures for the Wellington Medical Arts District include formation of a development district to provide shuttle bus service running throughout the District and connecting to Palm Tran at Wellington Mall. The shuttle service must be provided for at least two years and must have stops located within 1/4-mile of buildings that house more than 100 employees. Real-time passenger information signs are to be installed. The shuttle service can be discontinued if Palm Tran provides equivalent service within the Medical Arts District. Currently, Palm Tran provides service on the major roadways near the Medical Arts District and at the Mall at Wellington Green; no shuttle bus service appears to be in operation.

Other development conditions included in Policy 1.2-f require connectivity improvements, transit improvements (e.g., easements for bus shelters, showers for employees who use alternative modes of transportation, and transit passes for employees), and pedestrian system improvements. Policy 1.2-f requires, in some cases, developer contributions in excess of impact fees to cover funding shortfalls for transportation-related improvements.

Transportation Policy 1.2-p lists conditions under which a development can be exempted from transportation concurrency. These criteria include location of the site along Tri-Rail or a Palm Tran bus route, developer provision of land for a Tri-Rail station or bus stop, and employer provision of discounted transit passes.

Transportation Policy 1.2-r requires the Westgate-Belvedere Homes Community Redevelopment Area (CRA), bounded by Okeechobee Boulevard, Florida Mango Road, Belvedere Road, and Military Trail, to establish a transit circulator and a downtown West Palm Beach transit connector.

Transportation Policy 1.2-t requires the City of Riviera Beach CRA to establish a transit circulator, to provide a site for a new Tri-Rail station, and to connect the circulator to the station (or implement a new circulator). Currently, Palm Tran provides service on the major roadways near and through the CRA; no circulator appears to be in operation.

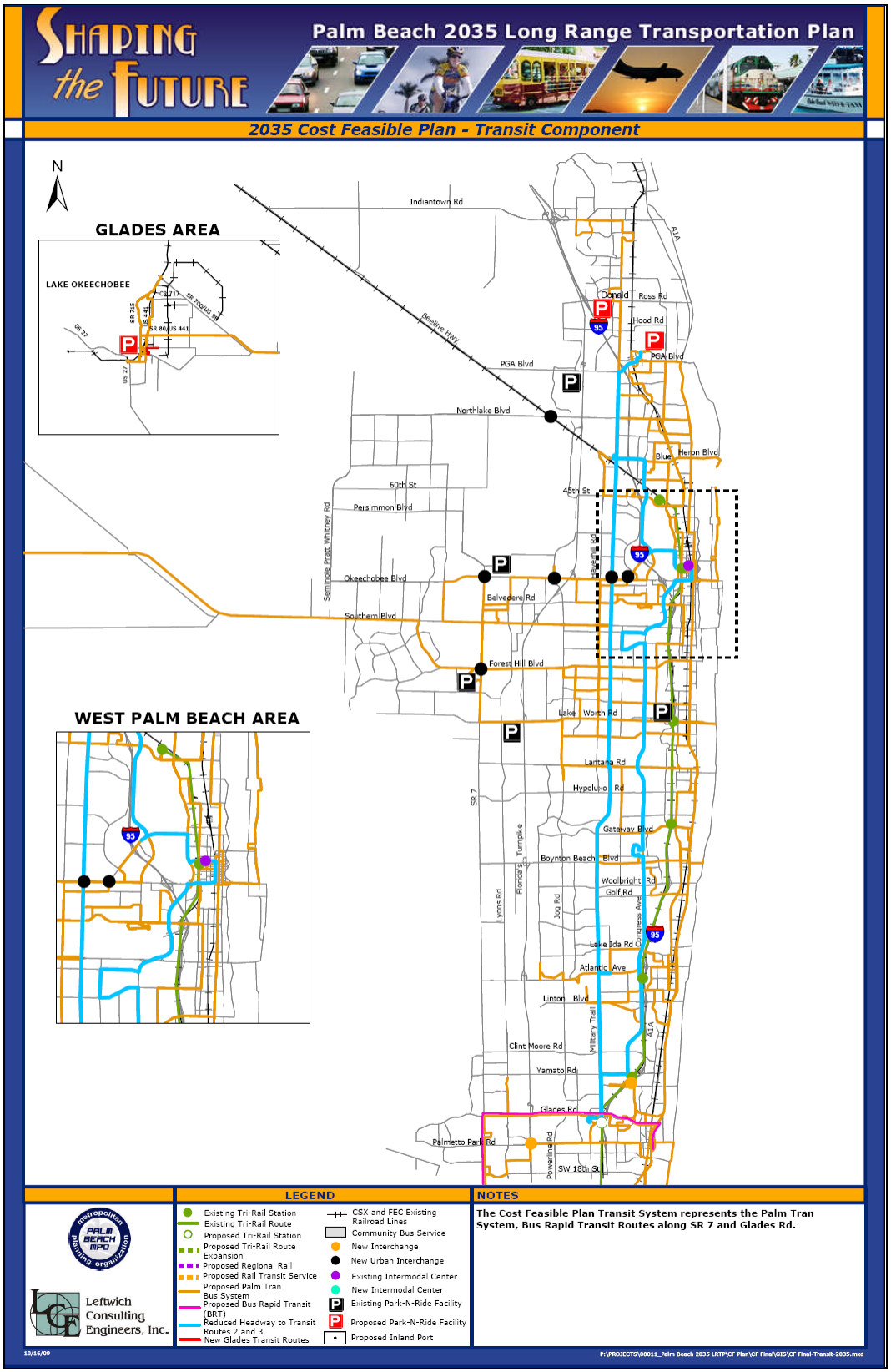


Figure 4-2 2035 LRTP Transit Cost Feasible Plan

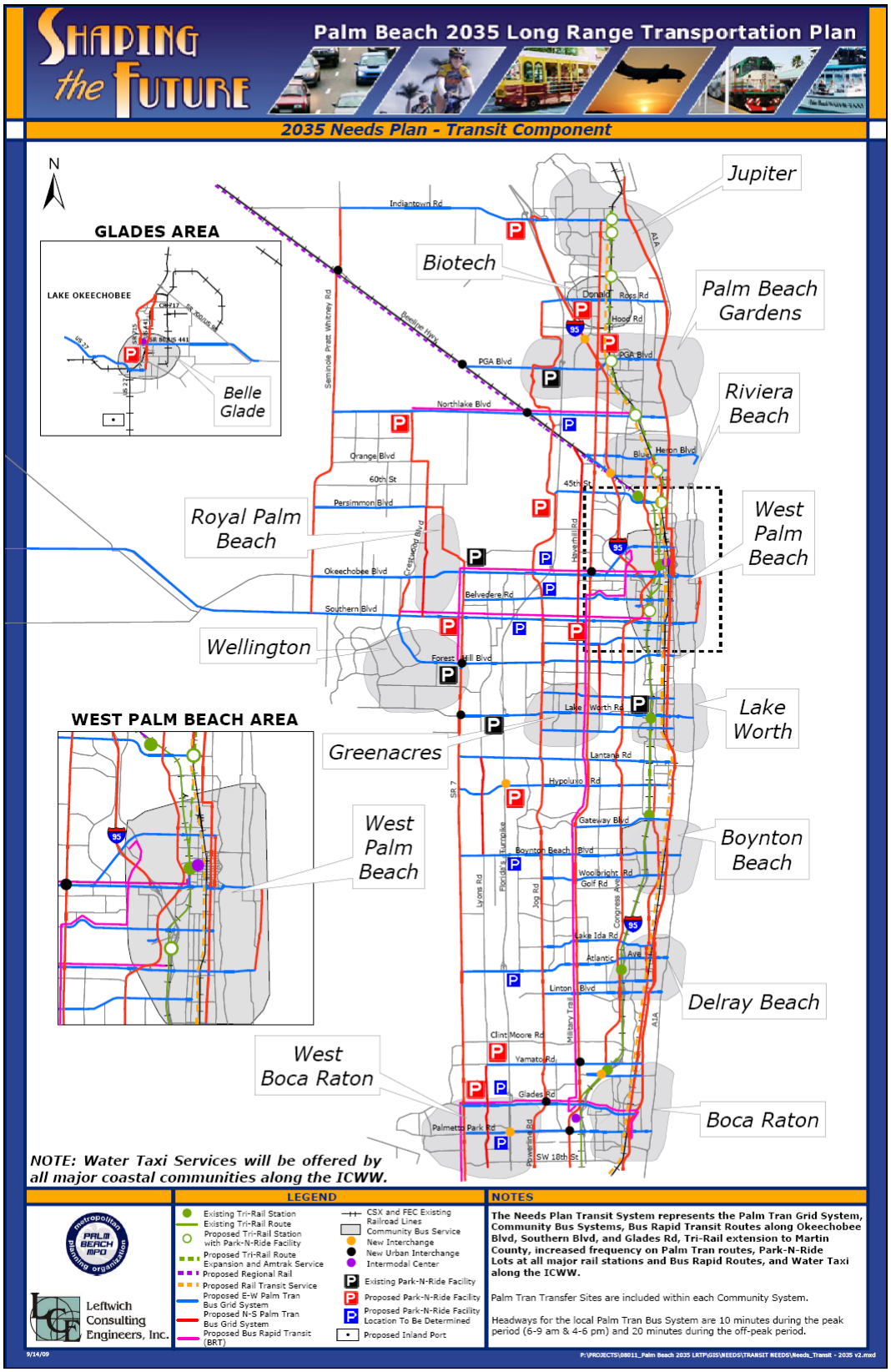


Figure 4-3 2035 LRTP Transit Needs Plan

Transportation Policy 1.2-v requires the County to study expanded transit service in the Urban Redevelopment Area Transportation Concurrency Exception Area (TCEA), which spans Congress Avenue and Military Trail south of Southern Boulevard. The policy also requires construction of four transit stations.

"SR 7 shall be designated a Transit-Oriented Corridor from the Broward County Line to Glades Road." This is a condition of a stipulated settlement agreement resulting from removal of University Drive from the Palm Beach County Thoroughfare Right of Way Identification Map in 2007.

The Five-Year Capital Improvement Schedule dated October 2010 in the Capital Improvements Element does not include specific transit improvements.

Other Planned and Programmed Improvements

In October 2011, Route 47 began operating at a 30-minute headway all day and Route 48 began operating at a 30-minute headway during peak periods. These improvements are funded with a three-year grant.

The City of Belle Glade implemented its fifth local shuttle route on September 14, 2011. This route, the Purple route, operates as an express feeder to Palm Tran.

STAKEHOLDER INPUT

Stakeholder outreach efforts conducted expressly for this TDP update are described in Chapter 1.

Additional stakeholder input regarding needed improvements is documented in the 2011-2012 *Transportation Disadvantaged Service Plan* (TDSP) and *Human Service Transportation Coordinated Plan* (HSTCP). Appendix L of the TDSP and HSTCP document reports transit improvements identified during the March 2009 Human Services Transportation Summit in Palm Beach County. The prioritized improvements identified at the Summit include the following:

- Sustain current levels of service and funding
- Expand city, community, and county partnerships
- Implement smart card technology
- Better utilize volunteers
- Improve transit in Belle Glade, Pahokee, South Bay, and Canal Point
- Provide worker-oriented service 24 hours a day and seven days a week
- Appoint a mobility manager to provide travel training and outreach, to work to reduce barriers to transit, and to develop public/private partnerships
- Implement city and community transit shuttles to connect to fixed-route transit and serve gated communities
- Provide taxi vouchers for late evening and weekend travel
- Implement an Emergency Ride Home program
- Introduce accessible vehicles into taxi fleets

- Introduce express services to major origins and destinations
- Provide fixed-route service to The Acreage and Loxahatchee
- Increase frequencies for fixed routes serving Tri-Rail stations to 20 minutes
- Provide subsidized taxi service
- Purchase a variety of vehicles to meet a range of service needs
- Purchase accessible vans to service the airport
- Conduct more travel training

STRATEGIC INITIATIVES

Achieving the TDP goals and objectives proposed in Chapter 2 imposes a need for improvements.

Strategy 1-1a discusses monitoring of passenger loads, and a potential measure of effectiveness (MOE) for accomplishing relies on automated passenger counter (APC) data. Approximately 50% of fixed-route buses currently have APCs. Strategy 2-4a discusses the continued deployment of APCs on vehicles.

Strategies 1-1b and 2-1b discuss implementation of transit preferential treatments. Transit preferential treatments include transit signal priority (TSP), queue jumps, bypass lanes, exclusive lanes, and curb extensions and may be warranted in corridors or at intersections where buses experience undue delay or where a target level of reliability (on-time performance) is difficult to achieve. Palm Tran is currently coordinating with the County regarding implementation of TSP. Automatic vehicle location (AVL) technology on Palm Tran buses helps to make TSP possible. AVL can also enable Palm Tran to improve running time and recovering time accuracy per Strategy 2-1a.

AVL technology on Palm Tran buses helps to make the dissemination of real-time passenger information possible. Strategy 1-3b discusses provision of real-time arrival information displays at bus stops for key routes. AVL is currently implemented on 100% of fixed-route vehicles but not on CONNECTION vehicles. Strategy 2-4b discusses equipping paratransit vehicles with AVL.

Strategy 1-3a discusses provision of posted schedule information at all stops. Strategy 1-2c discusses implementation of on-line trip planning tools.

Strategy 2-1c discusses use of expanded pass options and electronic payment systems as means to reduce the cost of handling fare revenue.

Strategy 4-1 discusses exploring opportunities to upgrade service in areas with transit-supportive densities. Strategy 4-2b indicates that Palm Tran should invest in additional service and amenities at stops with transit-oriented development (TOD) potential. Strategy 4-3 discusses provision of transit service to major activity centers and high-density residential areas. Strategy 4-4 indicates that transit connectivity between major tourist destinations should be improved.

Strategy 5-1 discusses provision of transit service to important recreational facilities. Only four fixed routes take riders within 1/4 mile of Palm Beach County beaches, and none of these routes provide beach access between Okeechobee Boulevard and Palmetto Park Road.

Strategies 5-2 and 5-3a discuss provision of transit service to low-income neighborhoods and to senior and medical services, respectively. Strategy 5-3b discusses implementation of advanced technologies that will assist the elderly and disabled in using transit. Palm Tran has explored use of next-stop annunciation in the past.

Strategy 8-1a discusses investments in bus stop amenities. Strategy 8-2a discusses providing an additional day of customer support each week.

Strategy 8-4 discusses implementation of high-capacity premium transit service and associates it with a minimum 14-hour service span and maximum 15-minute headways. No Palm Tran routes currently meet both criteria.

4.4 Route-by-Route Assessment

POTENTIAL IMPROVEMENTS TO EXISTING SERVICE

This section contains a route-by-route assessment that considers all of the criteria above plus feedback from earlier analyses and public outreach activities.

General

As discussed in Chapter 1, stakeholders have reported a need to extend service spans to provide more evening service. Extension of service spans is consistent with TDP Goal 1, which focuses on improving the quality of service provided to riders; Strategy 1-1c is particularly applicable. Extension of service spans is also consistent with TDP Goal 5, which addresses provision of service to recreational destinations, medical services, and senior services when those destinations are in operation.

Stakeholders have reported overcrowding on some routes. TDP Objective 1-1 addresses overcrowding.

Stakeholders have reported a need for more frequent service and for improved on-time performance. Increasing frequencies and on-time performance are consistent with TDP Goal 1 (i.e., improving service quality). Improving on-time performance is consistent with TDP Goal 2 (i.e., improving operational efficiency).

Ridership-increasing improvements would benefit nearly all fixed routes in the system. Such improvements might include higher-frequency service (as discussed in Chapter 3), longer service spans, lower fares, shorter travel times, and service quality improvements (e.g., additional bus stop amenities and improved reliability). Palm Tran already intends to streamline schedules using AVL data. AVL data can also be used to collect on-time performance data for each bus stop.

Stakeholders have expressed a need to ensure that shelters are provided at key bus stop locations such as libraries, grocery stores, the Social Security office, and the Department of Motor Vehicles office. This is consistent with TDP Objective 8-1 (i.e., upgrading bus stop infrastructure). Stakeholders have also stated that trash cans should be provided at all stops, an advertising campaign should be launched to promote sales of monthly passes, and smart card technology should be implemented. Providing trash cans is consistent with TDP Objective 8-1. Promoting

monthly pass sales is consistent and implementing smart cards are consistent with TDP Goal 2 (i.e., improving operational efficiency) in the sense of expediting fare handling and reducing dwell times.

Route 1

Route 1 is a Trunk route with very high annual ridership and high productivity. Route 1 currently operates seven days a week at frequencies of 15-30 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided in daytime hours only. Stakeholders have reported crowding on Route 1 buses. Route 1 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the Sunday service span (depending on productivity of first and last trips)
- Addition of new capacity (which may take the form of higher-frequency service, larger buses, or reliability improvements)
- Deployment of APC-equipped buses to track load factors

Route 2

Route 2 is a Trunk route with very high annual ridership, high weekday and Saturday productivity, and moderately high Sunday productivity. Route 2 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided in daytime hours only. Stakeholders have expressed a need for more frequent service. Route 2 serves the Downtown West Palm Beach, Delray Beach, and Boca Raton Tri-Rail stations.

Potential improvements are the following:

- Extension of the Sunday service span (depending on productivity of first and last trips)
- More frequent service
- Deployment of APC-equipped buses to track load factors

Route 3

Route 3 is a Trunk route with very high annual ridership, high weekday and Sunday productivity, and moderately high Saturday productivity. Route 3 currently operates at frequencies of 20-60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided in daytime hours only. Stakeholders have reported crowding on Route 3 buses and have expressed a need for more frequent service.

Potential improvements are the following:

- Extension of the Sunday service span (depending on productivity of first and last trips)
- More frequent service
- Deployment of APC-equipped buses to track load factors

Route 4

Route 4 is a Cross-Town route with moderate annual ridership, high weekday productivity, and moderately low Saturday productivity. Route 4 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided during daytime hours only. No Sunday service is provided. The 2006-2016 TDP recommended frequency improvements for this route in 2011.

Potential improvements are the following:

- Extension of the weekday and Saturday service spans (depending on productivity of last trips)
- Productivity improvement on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Increased frequency during weekday peak and off-peak periods
- Provision of Sunday service

Route 10

Route 10 is a Cross-Town route with moderate annual ridership and moderately low productivity. Route 10 currently operates six days a week at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided. Stakeholders have expressed a need to extend service west to Jupiter Farms Plaza and to provide more frequent service. Stakeholders have also indicated that communities served by Route 10 in Jupiter would benefit from a connection to Indiantown (in Martin County).

Potential improvements are the following:

- Extension of service west of I-95, possibly operated in conjunction with Martin County to serve Indiantown
- Productivity improvement on weekdays and Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 11

Route 11 is an Express route with low annual ridership and low productivity. Route 11 currently operates only on weekdays and provides one trip during the a.m. and p.m. peak periods. Stakeholders have expressed concerns about the low level of ridership on the route. Route 11 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the service span (depending on productivity of existing trips)
- Ridership improvements (which may follow from extension of the service span)
- Productivity improvement on weekdays (which may follow from extension of the service span, depending on how much new ridership is generated)

Route 20

Route 20 is a Cross-Town route with moderate annual ridership and moderately low productivity. Route 20 currently operates six days a week at a frequency of 60 minutes. Weekday service is provided from the early morning to the early evening. Saturday service is provided during daytime hours only. No Sunday service is provided. Stakeholders have expressed concerns about the level of security at the Mangonia Park Tri-Rail station, which is served by Route 20. The 2006-2016 TDP recommended service span improvements for this route in 2012.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of the service span (depending on productivity of last trips)
- Productivity improvement on weekdays and Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 21

Route 21 is a Cross-Town route with moderate annual ridership and moderately low productivity. Route 21 currently operates six days a week at a frequency of 60 minutes. Weekday service is provided from the early morning to the early evening. Saturday service is provided during daytime hours only. No Sunday service is provided.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of the service span (depending on productivity of first and last trips)
- Productivity improvement on weekdays and Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 30

Route 30 is a Cross-Town route with moderate annual ridership, moderately high weekday and Saturday productivity, and moderately low Sunday productivity. Route 30 currently operates at frequencies of 30-60 minutes. Weekday service is provided from the early morning to the early evening. Saturday and Sunday service is provided during daytime hours only.

Potential improvements are the following:

- Extension of the service span (depending on productivity of first and last trips)
- Productivity improvement on Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 31

Route 31 is a Cross-Town route with high annual ridership, high weekday productivity, moderately high Saturday productivity, and moderately low Sunday productivity. Route 31 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only. Stakeholders have expressed concerns about the level of security at the Mangonia Park Tri-Rail station, which is served by Route 31; Route 31 serves the Downtown West Palm Beach Tri-Rail station as well. Stakeholders have indicated that Route 31 should be considered as a "secondary" corridor (where Routes 1, 2, and 3 are considered as "primary" corridors) due to the number of institutions it serves and, therefore, should have higher-frequency peak period service.

Potential improvements are the following:

- Extension of the service span (depending on productivity of first and last trips)
- Productivity improvement on Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 33

Route 33 is a Cross-Town route with moderately high annual ridership, moderately high weekday productivity, and moderately low Saturday and Sunday productivity. Route 33 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only. Stakeholders have expressed concerns about the level of security at the Mangonia Park Tri-Rail station, which is served by Route 33.

Potential improvements are the following:

- Extension of the weekend service span (depending on productivity of first and last trips)
- Productivity improvement on Saturdays and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 40

Route 40 is a Limited route with moderately high annual ridership and moderately low productivity. Route 40 currently operates seven days a week at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided from the late morning to the early evening. Stakeholders have expressed a need to relocate stops to better serve area schools. Route 40 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the Sunday service span (depending on productivity of first and last trips)
- Productivity improvement on weekdays, Saturdays, and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 41

Route 41 is a Cross-Town route with moderately low annual ridership, moderately high weekday productivity, and moderately low Saturday productivity. Route 41 currently operates at a frequency of 32-60 minutes. Weekday and Saturday service is provided during daytime hours only. No Sunday service is provided. Route 41 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the service span (depending on productivity of last trips)
- Ridership improvement (which may follow from extension of the service span or other projects)
- Productivity improvement on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 43

Route 43 is a Cross-Town route with high annual ridership, very high weekday and Saturday productivity, and moderately high Sunday productivity. Route 43 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided during daytime hours only. Stakeholders have indicated that Route 43 should be considered as a "secondary" corridor due to the service it provides to downtown West Palm Beach and uses such as the Social Security office and the Adult Education Center and, therefore, should have higher-frequency peak period service. Route 43 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the weekend service span (depending on productivity of first and last trips)

Route 44

Route 44 is a Cross-Town route with moderately high annual ridership and moderately low productivity. Route 44 currently operates seven days a week at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only. Route 44 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the weekend service span (depending on productivity of first and last trips)
- Productivity improvement on weekdays, Saturdays, and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 45

Route 45 is a Circulator route with moderately low annual ridership and moderately low productivity. Route 45 currently operates six days a week at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided. Route 45 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of the service span (depending on productivity of existing trips)
- Ridership improvement (which may follow from higher frequencies, extension of the service span, or other projects)
- Productivity improvement on weekdays and Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 46

Route 46 is a Cross-Town route with high annual ridership, high weekday productivity, moderately high Saturday productivity, and moderately low Sunday productivity. Route 46 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only. The 2006-2016 TDP recommended frequency improvements for this route in 2011.

Potential improvements are the following:

- Extension of the service span (depending on productivity of first and last trips)
- Increased frequency during weekday peak and off-peak periods

Route 47

Route 47 is a Circulator route with moderately high annual ridership, moderately high weekday productivity, and moderately low Saturday and Sunday productivity. Route 47 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided from mid-morning to the early evening.

Potential improvements are the following:

- Extension of the weekend service span (depending on productivity of first and last trips)
- Productivity improvement on Saturdays and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 48

Route 48 is a Circulator route with moderately high annual ridership and moderately low productivity. Route 48 currently operates seven days a week at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided from mid-morning to the early evening.

Potential improvements are the following:

- Extension of the Sunday service span (depending on productivity of first and last trips)
- Productivity improvement on weekdays, Saturdays, and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 49

Route 49 is a Circulator route with moderately low annual ridership, moderately high weekday and Saturday productivity, and moderately low Sunday productivity. Route 49 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to mid-evening. Sunday service is provided during daytime hours only. Route 49 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of the Sunday service span (depending on productivity of first and last trips)
- Ridership improvement (which may follow from higher frequencies, extension of the service span, or other projects)
- Productivity improvement on Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 52

Route 52 is a Circulator route with moderate annual ridership, moderately high weekday productivity, and moderately low Saturday productivity. Route 52 currently at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided.

Potential improvements are the following:

- Extension of the service span (depending on productivity of last trips)
- Productivity improvement on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 60

Route 60 is a Cross-Town route with moderately low annual ridership and moderately low productivity. Route 60 currently operates on weekdays only at a frequency of 60 minutes. Service is provided from the early morning to the late evening.

Potential improvements are the following:

- Increased frequency during peak periods (which may be appropriate for a route that is partially within the Core Service Area and which may generate new ridership)
- Extension of the service span (depending on productivity of last trips)
- Ridership improvement (which may follow from higher frequencies, extension of the service span, or other projects)
- Productivity improvement (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Saturday and Sunday service

Route 61

Route 61 is a Cross-Town route with moderately high annual ridership, moderately high weekday and Saturday productivity, and moderately low Sunday productivity. Route 61 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided in the from the early morning to the late evening. Sunday service is provided during daytime hours only. Stakeholders have expressed a need for 30-minute service on Route 61. Route 61 serves the Lake Worth Tri-Rail station.

Potential improvements are the following:

- Increased frequency during peak periods (which may be appropriate for a route that is partially within the Core Service Area route and which may generate new ridership)
- Extension of the Sunday service span (depending on productivity of first and last trips)
- Productivity improvement on Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 62

Route 62 is a Cross-Town route with high annual ridership and very high productivity. Route 62 currently operates seven days a week at frequencies of 30-60 minutes. Weekday service is provided from the early morning to the late evening. Saturday service is provided during daytime hours only. Sunday service is provided from mid-morning to the late afternoon. Stakeholders have reported crowding on Route 62 buses. Route 62 serves the Lake Worth Tri-Rail station.

Potential improvements are the following:

- Extension of the Saturday and Sunday service spans (depending on productivity of first and last trips)

Route 63

Route 63 is a Cross-Town route with moderately high annual ridership, very high weekday productivity, high Saturday productivity, and moderately high Sunday productivity. Route 63 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the late evening. Sunday service is provided from mid-morning to the late afternoon.

Potential improvements are the following:

- Extension of the service span (depending on productivity of first and last trips)

Route 64

Route 64 is a Cross-Town route with moderate annual ridership, high weekday productivity, and moderately low Saturday productivity. Route 64 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided.

Potential improvements are the following:

- Increased frequency during peak periods (which may be appropriate for a route that is partially within the Core Service Area route and which may generate new ridership)
- Extension of the weekday and Saturday service span (depending on productivity of last trips)
- Productivity improvement on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 70

Route 70 is a Cross-Town route with high annual ridership, moderately low weekday and Saturday productivity, and low Sunday productivity. Route 70 currently operates at frequencies of 30-60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided from mid-morning to the early evening. Route 70 serves the Boynton Beach and Delray Beach Tri-Rail stations. The 2006-2016 TDP recommended service span improvements for this route in 2013.

Potential improvements are the following:

- Extension of service spans (depending on productivity of first and last trips)
- Productivity improvements (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 71

Route 71 is a Cross-Town route with moderate annual ridership, high weekday productivity, and moderately low Saturday productivity. Route 71 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided. Route 71 serves the Boynton Beach Tri-Rail station.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of service spans (depending on productivity of first and last trips)
- Productivity improvement on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 73

Route 73 is a Cross-Town route with moderate annual ridership and moderately high productivity. Route 73 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided. Stakeholders have expressed a need to extend service west to Caridad Center.

Potential improvements are the following:

- Extension of service spans (depending on productivity of first and last trips)
- Provision of Sunday service

Route 80

Route 80 is a Cross-Town route with moderately high annual ridership, moderately high weekday productivity, and moderately low Saturday and Sunday productivity. Route 80 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only.

Potential improvements are the following:

- Increased frequency during peak periods (which is appropriate for a Core Service Area route and which may generate new ridership)
- Extension of service spans (depending on productivity of first and last trips)
- Productivity improvements on Saturdays and Sundays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Re-routing to serve transit-supportive residential area along Ocean Boulevard (SR A1A) south of Lindell Boulevard (unless a new Ocean Boulevard route is created)

Route 81

Route 81 is a Cross-Town route with moderately high annual ridership, moderately high weekday productivity, and moderately low Saturday productivity. Route 81 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided. Route 81 serves the Delray Beach Tri-Rail station. The 2006-2016 TDP recommended service span improvements for this route in 2013.

Potential improvements are the following:

- Increased frequency during peak periods (which may be appropriate for a route that is partially within the Core Service Area route and which may generate new ridership)
- Extension of service spans (depending on productivity of first and last trips)
- Productivity improvements on Saturdays (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 91

Route 91 is a Cross-Town route with high annual ridership and moderately low high productivity. Route 91 currently operates at frequencies of 30-60 minutes. Weekday service is provided from the early morning to mid-evening. Saturday service is provided from the early morning to the early evening. Sunday service is provided during daytime hours only. Stakeholders have indicated that Route 91 should be considered as a "secondary" corridor because it serves two universities and the Museum of Modern Art and, therefore, should have higher-frequency peak period service.

Potential improvements are the following:

- Extension of Saturday and Sunday service spans (depending on productivity of first and last trips)
- Productivity improvements (which may take the form of ridership-increasing improvements or streamlined schedules)

Route 92

Route 92 is a Cross-Town route with moderate annual ridership and moderately low productivity. Route 92 currently operates at a frequency of 60 minutes. Weekday and Saturday service is provided from the early morning to the early evening. No Sunday service is provided.

Potential improvements are the following:

- Extension of service spans (depending on productivity of first and last trips)
- Productivity improvements (which may take the form of ridership-increasing improvements or streamlined schedules)
- Provision of Sunday service

Route 94

Route 94 is a Shuttle route with moderately high annual ridership and moderately high productivity. Route 94 currently operates at frequencies of 20-40 minutes. Weekday service is provided from the early morning to the late evening. No Saturday or Sunday service is provided. Route 94 serves the Boca Raton Tri-Rail station.

Potential improvements are the following:

- Provision of Saturday and Sunday service

Route 95

Route 95 is an Express route with low annual ridership and low productivity. Route 95 currently operates only on weekdays and provides two trips during the a.m. and p.m. peak periods at frequencies of 30-60 minutes. Stakeholders have expressed a need to extend Route 95 south to serve destinations such as the FAU campus in Boca Raton and a need to provide faster off-peak service on I-95 to connect the universities in the corridor. The Town of Jupiter's Citizens' Master Plan indicates strong local interest in transit-oriented development (TOD) and enhanced transit service. Stakeholders have expressed concerns about the low level of ridership on the route. Route 95 serves the Downtown West Palm Beach Tri-Rail station.

Potential improvements are the following:

- Extension of the service span (depending on productivity of first and last trips)
- Ridership improvements (which may follow from extension of the service span)
- Productivity improvements (which may follow from extension of the service span, depending on how much new ridership is generated)

4.5 Potential New Services

This section considers new routes based on all of the criteria above plus feedback from earlier analyses and public outreach activities.

Figures 1-9, 1-13, and 3-24 show a significant density of residents in the Jog Road corridor between Lake Worth Road and Linton Boulevard. Figure 1-11 shows a significant density of residents less than 18 years old or greater than 65 years old in the corridor. All of figures suggest that new service should be considered in the Jog Road corridor. However, the existing land uses in the corridor are predominantly large single-family subdivisions and/or gated communities, and these land uses are not supportive of fixed-route transit. Any new service in the corridor should therefore be considered as a long-term need; this is consistent with the LRTP Needs Plan, which shows a new route on Jog Road and westward extensions of service on Lantana Road, Hypoluxo Road, Boynton Beach Boulevard, Lake Ida Road, Atlantic Avenue, and Linton Boulevard. These improvements in the Needs Plan are accompanied by recommended new park-and-ride lots in the area.

Figures 1-9, 1-13, and 3-24 show a significant density of residents in the Wellington area between Southern Boulevard and Pierson Road. The existing land uses in the area are primarily single-family subdivisions, which are not supportive of fixed-route transit. Any new service in the area should be considered as a long-term need; this is consistent with the LRTP Needs Plan, which shows community bus service (i.e., a shuttle) and a new park-and-ride lot in the area in the long term. Community bus service is typically provided by municipalities.

The density patterns in Figures 1-9, 1-11, and 1-13 also suggest a potential need for new service in the Royal Palm Beach Boulevard and Seminole-Pratt-Whitney Road corridors. The existing land uses in these corridors are lower-density single-family subdivisions, which are not supportive of fixed-route transit. New service in the area should be considered as a long-term need, which is consistent with the LRTP Needs Plan's identification of multiple new routes and a park-and-ride lot in the area. The Needs Plan also shows community bus service in the Royal Palm Beach portion of the area.

Stakeholders have expressed a need to provide faster midday service along I-95 to connect the universities. A combination of local bus service and Tri-Rail partially serves this need; to travel from Jupiter to Tri-Rail outside of peak periods, one could take Route 10 to Route 20 to Tri-Rail (and to Route 94 to get to the FAU campus in Boca Raton). This would not be a fast trip. One could also take Route 10 to Route 3 to Route 91 to get to the FAU campus in Boca Raton, but it also would not be a fast trip. Improvements to Routes 3 and 91 shown in the LRTP Cost-Feasible Plan would help to address the need, as would the Glades Road BRT service shown in the Cost-Feasible Plan. Extension of Tri-Rail to Jupiter, shown in the LRTP Needs Plan would also help to address the need. Another improvement alternative is for the universities (which allow dual enrollment) to develop an intercampus shuttle service.

Stakeholders have expressed a need for a shuttle or trolley service from Federal Highway to Lake Worth Beach and Singer Island. The LRTP Needs Plan includes community bus services (i.e., shuttles) in Lake Worth and Riviera Beach.

Stakeholders have expressed a need for more transit service in Jupiter. The LRTP Needs Plan includes community bus service in Jupiter, extension of Tri-Rail to Jupiter, and extended bus service on Indiantown Road. Two new park-and-ride lots are shown just south of Jupiter in the LRTP Cost-Feasible Plan.

Stakeholders have expressed a need for additional park-and-ride lots. Several proposed park-and-ride lots have been discussed above.

New service on SR 7 would fulfill a stipulated settlement agreement condition and build toward the grid network shown in the LRTP Needs Plan. The new service could also tie into planned BRT on Glades Road (shown in Figure 4-2), which would help build future BRT ridership in the SR 7 corridor.

4.6 Recommended Service Plan

RECOMMENDED 10-YEAR PLAN

The recommended 10-year plan is shown in Table 4-9 and Figure 4-4. The following guidelines were used to identify projects for the 10-year plan:

- Focus on improving existing service to better serve existing riders and to attract choice riders.
- Focus on implementing advanced technology to improve data collection and operations analysis so that service can be provided more efficiently.
- Focus on Major North-South Routes and Major East-West Routes.
  - Major North-South Routes are Routes 1, 2, and 3. (These routes are also Trunk Routes according to the nomenclature in the *Transit Design Manual*.) For these, a minimum 20-minute peak service frequency and a minimum 30-minute off-peak service frequency are recommended standards. A 20-minute headway corresponds to LOS C in the TCQSM. A 30-minute headway corresponds to LOS D in the TCQSM.
  - Major East-West Routes are Routes 31, 40, 43, 46, 62, 63, 73, 81, and 91. For these, a minimum 30-minute peak service frequency and a minimum 60-minute off-peak service frequency are recommended standards. A 30-minute headway corresponds to LOS D in the TCQSM. A 60-minute headway corresponds to LOS E in the TCQSM.
- Routes with high ridership, positive ridership growth since 2006, and productivity greater than 20 riders/hour should be considered for improvement.
- Service span increases are recommended to build ridership on the Express routes. A longer service span (i.e., more trips) is expected to give riders more flexibility in their travel schedules and greater assurance that they will not be stranded if they miss a bus.
- Assume that enhanced beach access will be provided by municipal shuttle services (which are indicated in the 2035 Needs Plan).

Where a strategic initiative provides justification for a given project in Table 4-9, the most relevant TDP goal is noted. Other goals may also be relevant.

Table 4-9 Recommended 10-Year Improvements for Palm Tran

Funding Status	Year	Route	Recommended Improvement(s)	Justification	Cost
Cost-feasible	2012	N/A	▪ Install APCs on remainder of fixed-route fleet	Data collection Efficiency Strategic initiative (Goal 2)	$360,000
Cost-feasible	2012	N/A	▪ Develop a program for use of AVL and APC data	Data collection Efficiency Strategic initiative (Goal 2)	$50,000
Unfunded	2017	73	▪ Extend service west to SR 7	Major East-West Route Productivity Ridership potential Strategic initiative (Goal 5)	$613,952
Unfunded	2017	N/A	▪ Install AVL on CONNECTION fleet	Data collection Efficiency Strategic initiative (Goal 2)	$1,200,000
Unfunded	2017	11	▪ Add one a.m. peak trip and one p.m. peak trip (span and frequency improvement)	Express route Ridership potential Strategic initiative (Goal 3)	$69,165
Unfunded	2017	95	▪ Add one a.m. peak trip and one p.m. peak trip (span improvement)	Express route Ridership potential Strategic initiative (Goal 3)	$63,632
Unfunded	2018	2	▪ Increase weekday peak frequency to 20 minutes ▪ Increase weekend frequency to 30 minutes	Major North-South Route Ridership growth Productivity Strategic initiative (Goal 1)	$1,518,980
Unfunded	2019	3	▪ Increase Sunday frequency to 30 minutes	Major North-South Route Ridership growth Productivity Strategic initiative (Goal 1)	$157,092
Unfunded	2020	73	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Productivity Ridership potential Strategic initiative (Goal 1)	$179,829
Unfunded	2020	63	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity	$193,662
Unfunded	2020	81	▪ Increase weekday peak frequency to 30 minutes ▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$414,990
Unfunded	2021	46	▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$110,664
Unfunded	2021	31	▪ Increase weekday service span to 14 hours	Major East-West Route Ridership growth Productivity Strategic initiative (Goal 1)	$55,332

NOTE: Additional, programmed capital improvements exist. See Chapter 5.



10 YEAR RECOMMENDED IMPROVEMENTS
PALM BEACH COUNTY, FLORIDA

FIGURE **4-4**

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LONG-TERM IMPROVEMENTS

Long-term improvements are projects outside the 10-year time frame of the TDP. Tier One improvements are expected to be just outside the 10-year time frame of the TDP and should be considered for addition to the TDP with each annual update or when new funding sources become available. Tier Two improvements are projects that are expected to be farther outside the 10-year time frame of the TDP but within the 2035 horizon of the LRTP.

Tier One

The Tier One projects are shown in Table 4-10. The following guidelines were used to identify projects for Tier One:

- Focus on the Core Service Area and corridors with existing transit service to better serve existing riders and to attract choice riders.
- The *Transit Design Manual* indicates that routes in the Core Service Area should have 30-minute peak service and 60-minute off-peak service. Being *partially* in the Core Service Area is assumed to be insufficient *on its own* to justify a frequency improvement.
- In determining the need to provide a minimum service span of 14 hours (LOS C according to the *Transit Capacity & Quality of Service Manual*) and/or increased frequencies, the following standards should be taken into consideration:
  - Positive ridership growth since 2006
  - Productivity greater than 20 riders/hour
  - Location within the Core Service Area
- Appropriate projects from the 2035 Cost-Feasible and Needs Plans should be included.

Tier Two

The Tier Two projects are shown in Table 4-11. The following guidelines were used to identify projects for Tier Two:

- Focus on the Core Service Area and areas where new service can be introduced.
- For Trunk and Cross-Town routes in the Core Service Area, the goal is providing seven days of service per week and at least 14 hours of service per day. If a route is not in the Core Service Area, existing productivity numbers should be reviewed before recommending a service span increase.
- Being in the LRTP 2035 Needs Plan is not considered to be sufficient justification *on its own* to include a project in Table 4-11.

Table 4-10 Long-Term Improvements for Palm Tran - Tier One

Route	Recommended Improvement(s)	Justification
4	Increase weekday service span to 14 hours	Ridership growth Productivity
20	Increase weekday peak frequency to 30 minutes	Core Service Area route
21	Increase weekday peak frequency to 30 minutes	Core Service Area route
30	Increase weekday service span to 14 hours	Productivity
41	Increase weekday peak frequency to 30 minutes	Core Service Area route
45	Increase weekday peak frequency to 30 minutes	Core Service Area route
49	Increase weekday peak frequency to 30 minutes Increase weekday service span to 14 hours	Core Service Area route Productivity
52	Increase weekday service span to 14 hours	Ridership growth Productivity
61	Increase weekday peak frequency to 30 minutes Increase weekday service span to 14 hours	Partial Core Service Area route Ridership growth Productivity
62	Increase Saturday and Sunday service span to 14 hours	Major East-West Route Partial Core Service Area route Ridership growth Productivity
63	Increase Saturday and Sunday service span to 14 hours	Major East-West Route Core Service Area route Ridership growth Productivity
64	Increase weekday peak frequency to 30 minutes Increase weekday service span to 14 hours	Partial Core Service Area route Ridership growth Productivity
71	Increase weekday peak frequency to 30 minutes Increase weekday service span to 14 hours	Core Service Area route Productivity
73	Increase Saturday service span to 14 hours	Major East-West Route Partial Core Service Area route Productivity
80	Increase weekday peak frequency to 30 minutes Increase weekday service span to 14 hours	Core Service Area route Productivity Ridership growth
New	Introduce limited-stop service on SR 7, in concert with BCT	Ridership potential LRTP 2035 Needs Plan SR 7 stipulated settlement agreement
New	Introduce BRT service on Glades Road	LRTP 2035 Cost-Feasible Plan
New	Introduce holiday service on major holidays	Ridership potential
New	Introduce on-line trip planning tool	Customer service improvement

Table 4-11 Long-Term Improvements for Palm Tran - Tier Two

Route	Recommended Improvement(s)	Justification
1	Increase Sunday service span to 14 hours	Minimum service span Core Service Area route
2	Increase Sunday service span to 14 hours	Minimum service span Core Service Area route
3	Increase Sunday service span to 14 hours	Minimum service span Core Service Area route
4	Increase Saturday service span to 14 hours	Minimum service span
10	Extend service west of I-95 to Jupiter Farms	Ridership potential
20	Increase weekday and Saturday service span to 14 hours Provide Sunday service	Minimum service span Core Service Area route
21	Increase weekday and Saturday service span to 14 hours Provide Sunday service	Minimum service span Core Service Area route
30	Increase Saturday and Sunday service span to 14 hours	Minimum service span Core Service Area route
31	Increase Saturday and Sunday service span to 14 hours	Minimum service span Major East-West Route Partial Core Service Area route
33	Increase Saturday and Sunday service span to 14 hours	Minimum service span Core Service Area route Ridership growth
40	Increase Sunday service span to 14 hours	Minimum service span Partial Core Service Area route
41	Increase weekday and Saturday service span to 14 hours Provide Sunday service	Minimum service span Core Service Area route
43	Increase Saturday and Sunday service span to 14 hours	Minimum service span Major East-West Route Partial Core Service Area route Ridership growth
44	Increase weekday, Saturday, and Sunday service span to 14 hours	Minimum service span Partial Core Service Area route Ridership growth
45	Increase weekday and Saturday service span to 14 hours Provide Sunday service	Minimum service span Core Service Area route
46	Increase Saturday and Sunday service span to 14 hours	Minimum service span Major East-West Route Partial Core Service Area route Ridership growth
49	Increase Saturday and Sunday service span to 14 hours	Minimum service span Core Service Area route
52	Increase Saturday service span to 14 hours Provide Sunday service	Minimum service span Partial Core Service Area route Ridership growth
60	Increase weekday peak frequency to 30 minutes Increase weekday service span Provide Saturday and Sunday service	Minimum service span Partial Core Service Area route
61	Increase Saturday and Sunday service span	Minimum service span Partial Core Service Area route Ridership growth

(continued)

Route	Recommended Improvement(s)	Justification
63	Extend service westward to SR 7	Ridership potential LRTP Needs Plan
64	Increase Saturday service span to 14 hours Provide Sunday service	Minimum service span Partial Core Service Area route Ridership growth
70	Increase Saturday and Sunday service span	Minimum service span Partial Core Service Area route
71	Increase Saturday service span to 14 hours Provide Sunday service	Minimum service span Core Service Area route
73	Provide Sunday service	Major East-West Route Partial Core Service Area route LRTP Needs Plan
80	Increase Saturday and Sunday service span to 14 hours	Minimum service span Core Service Area route Ridership growth
81	Increase Saturday service span to 14 hours Provide Sunday service Extend service westward to SR 7	Minimum service span Major East-West Route Partial Core Service Area route Ridership growth Ridership potential LRTP Needs Plan
91	Increase Saturday and Sunday service span to 14 hours	Minimum service span Major East-West Route Partial Core Service Area route Ridership growth
92	Increase weekday and Saturday service span to 14 hours Provide Sunday service	Minimum service span Partial Core Service Area route
94	Provide Saturday service	Core Service Area route Ridership growth
NEW	Provide service in the Jog Road corridor	Ridership potential LRTP Needs Plan
NEW	Provide service in the Seminole-Pratt-Whitney Road corridor	Ridership potential LRTP Needs Plan

4.7 Fixed-Route Demand Estimates

Palm Tran ridership forecasts were prepared using the FDOT-approved transit demand forecasting tool, Transit Boardings Estimation and Simulation Tool (TBEST). 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 LRTPs. TBEST is a comprehensive transit analysis and ridership-forecasting model capable of simulating 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, TBEST also considers the following factors:

- Transit network connectivity – the level of connectivity between routes within the bus network; the greater the connectivity between bus routes, the more efficient the bus service becomes.
- Spatial and temporal accessibility – service frequency and the 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 being less reliable and utilization decreases.
- Time-of-day variations – accommodates peak period travel patterns by rewarding peak service periods with greater service utilization forecasts.
- Route competition and route complementarities – accounts for competition between routes; 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 schedule and service to major destinations or transfer locations benefit from that complementary relationship.

The first task in updating the Palm Tran network in TBEST involved collecting service data from Palm Tran staff. Data required to update the Palm Tran network included the following:

- Bus schedules with time points and route map;
- Operating characteristics for Palm Tran bus transit routes, including route type, headways, route length, days of service, service span, and fares;
- Observed average daily ridership by route divided into weekday, Saturday, and Sunday;
- Socioeconomic data in GIS and tabular formats; and
- GIS bus stop and route layers.

For TBEST modeling as part of the Palm Tran TDP, the most recent version of the modeling software, TBEST Version 4.0.5, was used.

Palm Tran Network Update

TBEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling the updated Palm Tran network in TBEST are presented below. 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 the roadway traffic conditions or speeds.

Transit Network

The transit route network for all Palm Tran routes was updated to reflect conditions in 2011, the validation year for the model. The transit network in TBEST required various steps to reflect the current route alignments and service characteristics in Palm Beach County, including the following:

- Downloading the Palm Tran transit system distribution file and loading it into the TBEST software.
- Creating the Palm Tran validation scenario;
- Updating InfoUSA data to 2010;

- Verifying and updating the correct location of bus stops and route alignments to match Palm Tran service in 2011;
- Matching service span to existing service spans;
- Modifying headways, i.e., the frequency with which a bus will arrive at a stop (e.g., one bus every 60 minutes or one bus every 30 minutes);
- Establishing passenger travel times on board a bus; and
- Entering observed average daily ridership for weekday, Saturday, and Sunday service.

Demographic Data

The demographics, including population and employment, used as the base input for the TBEST model are derived from the 2000 Census and 2010 InfoUSA spatial and tabular databases. The model uses a Census Block-level personal geodatabase as the format for spatial distribution of population data. Varying data sets were used for TBEST because demographic data in TBEST is hard-coded and cannot be modified by end-users.

Population and Employment Growth Rates

TBEST uses a socioeconomic data growth function to project population and employment data. A population growth rate and an employment growth rate were calculated using American Community Survey data from the U.S. Census Bureau. As indicated previously, 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 and transfer points in Palm Beach County were determined in order to evaluate locations with opportunities for high ridership. Palm Tran special generators include the following:

- Boynton Beach Mall
- Gardens Mall
- Mall at Wellington Green
- Palm Beach Mall
- Town Center Mall
- Palm Beach Community College
- Palm Beach International Airport
- Florida Atlantic University
- Delray Square
- Halpatiokee Regional Park

Palm Tran transfer points include the following:

- Intermodal Transit Center
- Boynton Beach Mall

- Gardens Mall
- Mall at Wellington Green
- Palm Beach Mall
- Town Center Mall
- Boca Raton Tri-Rail
- Boynton Beach Tri-Rail
- Delray Beach Tri-Rail
- Lake Worth Tri-Rail
- Mangonia Tri-Rail
- Palm Beach Community College

Ridership Forecasting Using the TBEST Model

This section includes a description of the TBEST model run and summarizes the ridership forecasts produced by TBEST. It is important to keep in mind that while TBEST 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, and, correspondingly, model outputs may overestimate demand in isolated cases. In addition, TBEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in pricing service for customers, and other local conditions. Furthermore, although TBEST 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 provide comparative evaluations for actual service implementation decisions.

Using the inputs and assumptions described in this document, the model was successfully validated. The validation process used observed ridership data and socioeconomic data to check for reasonableness and sensitivity within the model. Using the validated model, the 2012 Base, 2021 Status Quo, and 2021 Alternatives scenarios were created. The 2012 Base and 2021 Status Quo scenarios represent the 2011 fixed-route system without any modifications. The 2021 Alternatives scenario contains Palm Tran's plan for an expanded future network. Table 4-12 lists the enhancements proposed in the Palm Tran 2021 Alternatives scenario. This scenario includes increased frequencies, expanded hours of service, and modified routes. A model run was performed for each scenario.

Table 4-12 Palm Tran Proposed Service Enhancements from Recommended 10-Year Plan

Route	Proposed Enhancements
2	Increased frequency (peak, Saturday, Sunday)
3	Increased frequency (Sunday)
11	Expanded hours of service
31	Expanded hours of service
46	Expanded hours of service
63	Expanded hours of service; increased frequency (peak)
73	Expanded hours of service; increased frequency (peak, off-peak, Saturday, Sunday); route modification
81	Expanded hours of service; increased frequency (peak)
95	Expanded hours of service

The results of the 2012 Base and 2021 Status Quo scenarios are described in Table 4-13. Table 4-13 shows the projected number of average daily riders by route and ridership growth rates from 2012 to 2021 derived from TBEST. According to TBEST, average daily weekday ridership is expected to increase 4.2 percent (from 38,438 to 40,001 average daily riders) by 2021. Ridership on four routes (Route 44, 30, 49, and 81) is forecast to grow by more than 8.0 percent.

Table 4-14 shows the comparison between the 2021 Status Quo and 2021 Alternatives scenarios. According to TBEST, the service enhancements proposed in the 2021 Alternatives scenario will cause weekday ridership to increase by an additional 2.8 percent (1,101 daily riders) over the 2021 Status Quo scenario. TBEST forecasts show that service enhancements to selected routes will have a significant impact on ridership change – Routes 11, 63, 73, and 81 are forecast to grow by 24 percent or more than the projected ridership in the 2021 Status Quo scenario. Ridership on Route 11 is expected to more than double. Table 4-15 and Table 4-16 summarize Saturday and Sunday ridership in each of the 2021 scenarios. On Saturdays, Routes 73, 2, and 41 are predicted to grow by more than 10 percent in the 2021 Alternatives scenario. Route 73 is expected to grow more than 30 percent. On Sundays, Routes 2, 3, 91, 92, and 64 are forecast to grow by more than 15 percent, and Routes 2 and 3 are expected to grow by more than half of the ridership predicted in the 2021 Alternatives scenario. Total Sunday ridership in the 2021 Alternatives scenario is expected to grow by about 15 percent.

Implications

Based on the TBEST results shown, maintaining the status quo will result in some increases in ridership. In order to increase the market share for transit, service expansion will need to occur. As shown in the 2021 Alternatives scenario, service enhancements will have the greatest impacts on ridership growth. Palm Tran should continue to focus its efforts on creating a transit network that emphasizes improved travel times, connections to regional employment and activity centers, and enhancing the overall efficiency of Palm Beach County's transportation system.

Table 4-13 Average Weekday Ridership and Growth Rates

Route	Average Daily Ridership (2012 Base)	Average Daily Ridership (2021 Status Quo)	Total Ridership Growth (2012 to 2021)
1	8,714	8,955	2.8%
2	4,999	5,225	4.5%
3	5,190	5,339	2.9%
4	296	306	3.5%
10	311	323	3.9%
11	22	23	5.9%
20	340	349	2.8%
21	366	378	3.2%
30	374	410	9.7%
31	1,609	1,678	4.3%
33	767	823	7.3%
40	793	833	5.0%
41	111	116	4.5%
43	2,323	2,487	7.0%
44	569	628	10.4%
45	194	202	4.3%
46	987	1,044	5.8%
47	618	641	3.7%
48	490	506	3.2%
49	290	318	9.6%
52	216	229	6.0%
60	173	179	3.4%
61	670	706	5.3%
62	2,260	2,331	3.1%
63	573	609	6.2%
64	346	360	4.0%
70	1,120	1,159	3.5%
71	384	404	5.1%
73	320	332	3.7%
80	462	486	5.3%
81	489	531	8.5%
91	956	990	3.6%
92	397	405	2.1%
94	648	673	3.9%
95	23	23	0.9%
Total	**38,400**	**40,001**	**4.2%**

Table 4-14 Status Quo and Alternatives Average Daily Weekday Ridership

Route	Average Daily Ridership* (2021 Status Quo)	Average Daily Ridership* (2021 Alternatives)	Percent Difference
1	8,955	8,972	0.2%
2	5,225	5,583	6.8%
3	5,339	5,361	0.4%
4	306	306	0.0%
10	323	323	0.0%
11	23	58	148.9%
20	349	351	0.3%
21	378	378	0.0%
30	410	421	2.5%
31	1,678	1,803	7.4%
33	823	831	1.0%
40	833	834	0.2%
41	116	117	0.9%
43	2,487	2,488	0.0%
44	628	660	5.1%
45	202	203	0.2%
46	1,044	1,066	2.1%
47	641	641	0.0%
48	506	506	0.0%
49	318	325	2.4%
52	229	229	0.0%
60	179	181	1.5%
61	706	707	0.2%
62	2,331	2,341	0.4%
63	609	776	27.4%
64	360	362	0.6%
70	1,159	1,167	0.7%
71	404	414	2.5%
73	332	460	38.7%
80	486	488	0.3%
81	531	659	24.1%
91	990	991	0.1%
92	405	406	0.1%
94	673	673	0.0%
95	23	24	2.6%
Total	**40,001**	**41,102**	**2.8%**

*Projections are based on 2010 ridership.

Table 4-15 Status Quo and Alternatives Average Daily Saturday Ridership

Route	Average Daily Ridership (2021 Status Quo)	Average Daily Ridership (2021 Alternatives)	Percent Difference
1	6,111	6,092	-0.3%
2	1,956	2,359	20.6%
3	3,047	3,071	0.8%
4	121	121	0.0%
10	245	245	0.0%
20	205	205	0.0%
21	198	198	0.0%
30	164	164	-0.2%
31	536	536	0.0%
33	461	492	6.7%
40	548	547	-0.2%
41	50	57	13.6%
43	1,159	1,159	0.1%
44	373	372	-0.4%
45	85	85	0.0%
46	590	590	-0.1%
47	454	454	0.0%
48	440	440	0.0%
49	254	262	3.1%
52	145	145	0.0%
61	462	461	-0.1%
62	1,242	1,241	0.0%
63	295	295	-0.1%
64	248	248	0.0%
70	419	437	4.1%
71	195	194	-0.4%
73	256	335	30.8%
80	361	361	-0.1%
81	299	325	9.0%
91	493	490	-0.6%
92	265	264	-0.3%
Total	**21,675**	**22,243**	**2.6%**

Table 4-16 Status Quo and Alternatives Average Daily Sunday Ridership

Route	Average Daily Ridership (2021 Status Quo)	Average Daily Ridership (2021 Alternatives)	Percent Difference
1	3,161	3,160	0.0%
2	1,075	1,722	60.2%
3	1,002	1,574	57.1%
21	61	61	0.0%
30	79	79	-0.4%
31	233	233	0.0%
33	210	209	-0.6%
40	222	222	-0.3%
41	498	518	4.0%
43	161	161	0.0%
44	151	150	-0.8%
45	28	28	0.0%
46	256	255	-0.3%
47	197	197	0.0%
48	205	205	0.0%
49	110	111	1.3%
61	246	245	-0.4%
62	617	616	-0.1%
63	144	144	-0.4%
64	76	88	16.2%
70	131	130	-0.2%
80	169	168	-0.4%
91	232	342	47.4%
92	105	134	27.4%
Total	9,366	10,750	14.8%

4.8 Paratransit Demand Estimates

One approach to forecasting paratransit passenger trips relies on the relationship between the population of riders eligible to use CONNECTION and the amount of paratransit trips that they have booked in the past. The TDSP and HSTCP provide forecasts of the County's Transportation Disadvantaged (TD) population for 2011 through 2014 as shown in Table 4-17. Table 4-18 includes interpolation of the TD population forecasts back to 2009 and through to 2021. The table reflects a uniform 2% annual growth rate, so the TD population is forecasted to increase by almost 27% between 2009 and 2021.

Table 4-17 Forecast TD Population

Year	TD Population	% Increase from 2009
2009	114,318	N/A
2010	116,604	2.0%
2011	118,936*	4.0%
2012	121,314*	6.1%
2013	123,740*	8.2%
2014	126,215*	10.4%
2015	128,739	12.6%
2016	131,314	14.9%
2017	133,939	17.2%
2018	136,618	19.5%
2019	139,350	21.9%
2020	142,137	24.3%
2021	144,979	26.8%

*from the 2011-2012 TDSP and HSTCP

The NTD reports 891,001 passenger trips for CONNECTION in 2009. The ratio of 2009 CONNECTION passenger trips to 2009 TD population is 7.79. If this ratio is applied to all of the years in Table 4-17, the forecast passenger trips shown in Table 4-18 (rounded) result. It should be noted that the forecasts in Table 4-18 assume that the proportion of ADA, Division of Senior Services (DOSS), and TD riders in the CONNECTION user pool remains constant between 2009 and 2021.

Table 4-18 Forecast Passenger Trips (CONNECTION)

Year	Passenger Trips	% Increase from 2009
2009	891,000	N/A
2010	908,000	1.9%
2011	927,000	4.0%
2012	945,000	6.1%
2013	964,000	8.2%
2014	983,000	10.3%
2015	1,003,000	12.6%
2016	1,023,000	14.8%
2017	1,043,000	17.1%
2018	1,064,000	19.4%
2019	1,086,000	21.9%
2020	1,107,000	24.2%
2021	1,129,000	26.7%

The implication of Table 4-18 is that the volume of passengers using CONNECTION is anticipated to increase significantly over the time frame of this TDP. Because providing a paratransit trip costs more than providing a fixed-route bus trip, it will be increasingly important to look for ways to transition paratransit users to the fixed-route system (which is consistent with TDP Objectives 2-2 and 5-3).

5.0 FINANCIAL PLAN

5.1 Existing Palm Tran Funding Sources

As part of the Palm Tran TDP development process, a review of existing current funding sources for transit in Palm Beach County was conducted. A review of existing funding will provide information on the types of various transit funding mechanisms that are available in Palm Beach County at this time. The existing public transportation funds available to Palm Beach County include the following funds from federal, state, and local sources. A detailed description of each major source is also provided.

- Local Sources
  - Ad valorem/general fund revenues for operating costs associated with fixed-route and TD services
  - Gasoline Taxes
  - Fare Revenues
  - Advertising Revenues
  - Development Order Conditions
- State Sources
  - State Block Grant assistance for fixed-route operating costs
  - Transit Corridor Grant Program
  - Service Development Grant Program
- Federal Sources
  - Section 5307 for fixed-route capital and operating assistance
  - Section 5309 for fixed-route capital assistance
  - Job Access and Reverse Commute (JARC) Program (Section 5316) for operating assistance associated with fixed-route and TD services
  - New Freedom Program (Section 5317) for operating assistance associated with fixed-route and TD services

Table 5-1 provides an overview of Palm Tran funding sources and amounts, including federal, state, and local sources based on Palm Tran's 2010 NTD report.

Table 5-1 Palm Tran Funding Summary (2010)

2010 FUNDING SUMMARY	
Funds Directly Generated by Transit Agency	
Passenger Fares	$6,450,595
Passenger Fares for Purchased Transportation Service	$2,124
Total	*$6,452,719*
Auxiliary Transportation Funds	
Special Services Revenues	$300,264
Advertising Revenues	$411,893
Miscellaneous Revenues	$280,747
Sale of Surplus	$75,996
Total	*$1,068,900*
Local Government Sources of Funds	
General Revenues	$24,113,096
Gasoline Taxes	$25,737,292
Transfer from MPO	$43,411
Total	*$49,893,799*
State Government Sources of Funds	
State Block Grant	*$8,366,212*
Funds Received from FTA	
FTA Urbanized Area Formula Program (5307)	$6,286,294
ARRA Urbanized Area Program (5307)	$4,956,369
FTA Capital Program (5309)	$1,936,791
FTA Other Than Urbanized Area	$252,687
FTA FL-90-X627 HOV Buses	$79,406
Total	*$13,511,547*
TOTAL FUNDS	$79,293,177

SOURCE: 2010 Palm Tran NTD Report

NOTE: Not all existing funding sources were available/used in 2010.

5.2 Existing Local Funding Sources

GENERAL REVENUES

General Revenues are often used to expand and increase services in local areas. General Revenues are a significant existing funding source for Palm Tran.

Palm Tran currently receives general revenues from the Palm Beach County government through annual ad valorem tax proceeds.

FUEL TAXES

Taxes imposed on motor and diesel fuel vary between counties in Florida. There are three separate fuel taxes that counties have the option to levy. These taxes total up to 12 cents on every net gallon of motor and diesel fuel sold within the county.

Palm Beach County has adopted the maximum 12 cents per gallon fuel tax option. Descriptions of the component fuel taxes, including the One-Six Cents Local Option Fuel Tax, One-Five Cents Local Option Fuel Tax, and the Ninth-Cent Fuel Tax, are as follows:

- *One-Six Cents Local Option Fuel Tax*. Originally called the Local Option Gas Tax until 1996, the 1-6 Cents Local Option Fuel Tax, or First Local Option, is a tax of 1 to 6 cents on every net gallon of motor and diesel fuel sold within a county. Counties and cities are authorized to use the proceeds to fund numerous projects, including public transportation capital and/or operating costs.
- *One-Five Cents Local Option Fuel Tax.* The 1-5 Cents Local Option Fuel Tax, or Second Local Option, is in addition to the previously described 1-6 Cents Local Option and for which the Legislature authorized an additional tax of 1 to 5 cents on every net gallon of motor fuel sold within a county. Only capital improvements on public transportation are eligible for funding using the 1-5 Cents Local Option Fuel Tax.
- *Ninth-Cent Fuel Tax*. The Ninth-Cent Fuel Tax is a tax of 1 cent on every net gallon of motor and diesel fuel sold within a county. Among other authorized uses, the proceeds can go towards public transportation operations and maintenance.

FARE REVENUES

Fare revenues provide a relatively stable source of funding, but the proceeds depend on the size and frequency of the service provided. Existing Palm Tran fare revenues generate more than $6.4 million annually to fund the operations and maintenance of the system.

ADVERTISING REVENUES

Revenues from advertising typically are modest but can range from thousands to millions of dollars per year, depending on the size of the system and the advertising programs in place. Existing revenues from advertising generates more than $400,000 annually for Palm Tran.

DEVELOPMENT ORDER CONDITIONS

Development approvals can be conditioned on the construction of transit infrastructure or contributions toward transit investments, which reduces the amount of funding that Palm Tran would need to obtain to implement the same improvement. Examples of this are described in Section 4.3. It should be noted that a comprehensive plan amendment is not always required; placing the conditions in a development order is generally adequate.

5.3 Existing State Funding Sources

STATE BLOCK GRANT PROGRAM

The State Block Grant Program was established by the Florida Legislature to provide a stable source of funding for public transit. The specific program authority is provided in Section 341.052, FS. Specific program guidelines are provided in FDOT Procedure Topic Number 725-030-030. Funds are awarded by FDOT to those public transit providers eligible to receive funding from FTA's Sections 5307 and 5311 programs and to Community Transportation Coordinators.

Public Transit Block Grant funds may be used for eligible capital and operating costs of providing public transit service. Program funds also may be used for transit service development and transit corridor projects.

Palm Tran currently receives over $8 million annually from state block grant funds.

TRANSIT CORRIDOR GRANT PROGRAM

The Transit Corridor Program provides funding to Community Transportation Coordinators or transit agencies to support new services within specific corridors when the services are designed and expected to reduce or alleviate congestion or remedy other mobility issues within the corridor. Transit Corridor funds are discretionary and are distributed based on documented need. Transit Corridor Program funds may be used for capital or operating expenses.

Palm Tran has received funds from this program for various capital and operating projects.

SERVICE DEVELOPMENT GRANT PROGRAM

The Public Transit Service Development Program was enacted by the Florida Legislature to provide initial funding for special projects. Service Development Projects specifically include projects involving the use of new technologies; services, routes, or vehicle frequencies; the purchase of special transportation services; and other such techniques for increasing service to the riding public. Service Development Projects are subject to specified times of duration but are funded for no more than three years.

Palm Tran received Service Development Grant funds to improve Route 47 and Route 48 frequencies in October 2011. When the grant expires in three years, Palm Tran will have to identify additional funding to support operation of these routes at the increased frequencies.

5.4 Federal Sources

SECTION 5307

One of the major sources of existing transit funding for Palm Tran, this federal formula grant program for urbanized areas provides capital, operating, and planning assistance for mass transportation. The program was initiated by the Surface Transportation Act of 1982 and became FTA's primary transit assistance program in FY 1984. Funds are apportioned to urbanized areas using a formula based on population, population density, and other factors associated with transit service and ridership.

For urbanized areas with a population of 200,000 or more, Section 5307 funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive federal funds. For urbanized areas under 200,000 in population, the funds are apportioned to the governor for distribution.

For urbanized areas with a population of 200,000 persons or more, operating assistance is not an eligible expense. The federal share may not exceed 50 percent of the net project cost of operating assistance for urbanized areas with a population less than 200,000. However, funding for capital projects is available for urbanized areas with population over 200,000 at up to 80 percent of the net project cost. It may be 90 percent for the cost of vehicle-related equipment attributable to compliance with the ADA and the Clean Air Act.

Preventive maintenance, defined as all maintenance costs, is eligible for FTA capital assistance at an 80 percent federal share.

SECTION 5309

The transit capital investment program provides capital assistance for new and replacement buses, related equipment, and facilities. It is a discretionary program to supplement formula funding in both urbanized and rural areas.

JOB ACCESS AND REVERSE COMMUTE PROGRAM (SECTION 5316)

The goals of the JARC program are to improve access to transportation services for employment and employment-related activities for welfare recipients and eligible low-income individuals as well as to transport residents of urbanized and non-urbanized areas to suburban employment opportunities.

The JARC funds allocations for the greater Miami urbanized area are sub-allocated to the transit agencies within the region, including Palm Tran, Miami-Dade Transit, Broward County Transit, and the South Florida Regional Transportation Authority. In 2010, Palm Tran submitted an application for funding the extension of morning service hours for Palm Tran Route 94.

NEW FREEDOM PROGRAM (SECTION 5317)

The New Freedom grant program is intended to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the workforce and reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act of 1990.

Palm Tran submitted two projects for New Freedom funding in 2010. These submittals sought funding for demand-response transportation services in Palm Beach County.

5.5 Potential Public Transportation Funding Sources

While increasing and/or maintaining the existing funding sources are important, the ability to fund future transit improvements relies heavily on identification of new funding sources not traditionally used by Palm Tran.

To address this need, a review of potential new federal funding sources has been conducted and is summarized in this section. This is followed by an analysis and a summary of potential new or existing local and state funding sources that can potentially be used to leverage the federal funding sources.

The following federal, state, and local sources are summarized in this section:

- Federal Sources
  - Transit Investments in Greenhouse Gas and Energy Reduction (TIGGER)
  - Energy Efficiency and Conservation Block Grant Program (EECBG)
  - FHWA Transportation, Community, and System Preservation Program (TCSP)
  - FTA New Starts Program
  - FTA Small Starts Program
  - FTA Very Small Starts Program
  - Urban Circulator Program
  - Congestion Mitigation and Air Quality (CMAQ) Program
  - Federal Environmental and Energy Funding
  - FTA Transit Clean Fuels
- State Sources
  - Florida New Starts Program (NSTP)
  - Transportation Regional Incentive Program (TRIP)
  - County Incentive Grants Program (CIGP)
  - Strategic Intermodal System (SIS) Funds

  - State Infrastructure Bank (SIB)
  - Intermodal Development Program
  - Park-and-Ride Lot Program
- Local Sources
  - Local Option Sales Tax
    - Charter County Transit System Surtax
    - Local Government Infrastructure Surtax
  - Impact Fees
  - Special Assessment Districts (e.g., districts subject to a Municipal Service Taxing Unit)
  - Transit-Oriented Development/Joint Development
  - Contract or Purchase-of-Service Revenues
  - Lease Revenues
  - Concessions Revenues
  - Parking Fees
  - Private Contributions/Donations
  - Fare Revenues
  - Advertising Revenues
  - Vehicle Fees

POTENTIAL FEDERAL FUNDING SOURCES

Transit Investments in Greenhouse Gas and Energy Reduction (TIGGER)

Initiated within the American Recovery and Reinvestment Act (ARRA) of 2009, TIGGER program grants are available from FTA and provide funding for public transit agencies to implement new strategies for reducing greenhouse gas emissions or reduce energy usage from their operations. Strategies can be implemented through operational or technological enhancements or innovations, and grants are 100 percent funded with no local match required.

The TIGGER Program has been continued in 2011 through the Department of Defense and Full-Year Continuing Appropriations Act, 2011 (Pub. L. 112-10). A total of $49.9 million was appropriated in 2009 for grants to public transit agencies for capital investments. Under the program, each submitted proposal must request a minimum of $2 million, and the maximum grant amount is $25 million. Multiple agencies may apply together to reach the $2 million threshold. It is not known at this time if TIGGER will continue past 2011.

Energy Efficiency and Conservation Block Grant Program (EECBG)

The EECBG Program is a newly-created funding program to help deploy the cheapest, cleanest, and most reliable energy technologies across the U.S. It is funded under the ARRA and modeled after the Community Development Block Grant program administered by the Department of Housing and

Urban Development (HUD). It is intended to assist cities, counties, and other eligible areas in developing, promoting, implementing, and managing energy efficiency and conservation projects and programs.

Funding for EECBG under the ARRA included $3.2 billion in FY 2009. Of this amount, about $2.7 billion will be awarded through formula grants. Cities and counties are eligible for $1.8 billion, states are eligible for $767 million, and $453 million is available in the form of competitive grants.

Federal Highway Administration's Transportation, Community, and System Preservation Program (TCSP)

Authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation, TCSP is intended to provide funding through planning grants, implementation grants, and research grants to investigate and address the relationships between transportation, community, and system preservation. States, metropolitan planning organizations, local governments, and tribal governments, including towns, cities, public transit agencies, air resources boards, and school boards are eligible for TCSP Program discretionary grants to plan and implement strategies.

Section 1117 of SAFETEA-LU extended TCSP program funds through 2011. The estimated amount available for grants in 2011 is $61 million.

FTA New Starts Program

The New Starts program is the federal government's primary financial resource for supporting locally planned, implemented, and operated major transit capital investments. The Federal Transit Administration (FTA) funds new and extensions to existing fixed-guideway transit systems including projects such as commuter rail, light rail, heavy rail, bus rapid transit, streetcars, and ferries. Palm Tran does not operate any fixed-guideway transit services.

SAFETEA-LU authorized $6.6 billion in total funding for this program for fiscal years 2006, 2007, 2008, and 2009. This included funding for more than 330 projects for proposed, pending, and existing Full Funding Grant Agreements (FFGAs). The average proposed federal FY 2012 allocation is $135.5 million, and the average New Starts share of total capital costs is 49 percent.

Appendix J summarizes the phases of New Starts project development and the project evaluation criteria, as well as the general principles that apply when determining annual funding allocations.

FTA Small Starts Program

The FTA Small Starts program includes lower-cost projects that qualify for a highly simplified project evaluation and rating process by FTA. The total project cost must be less than $250 million, with no greater than $75 million in requested Section 5309 Capital Investment Grant funding. The average proposed federal FY 2012 allocation is $20.1 million, and the average Small Starts share of total capital costs is 57 percent. Palm Tran could seek Small Starts funding for future projects that have a fixed guideway component or are BRT services.

Appendix J summarizes the minimum criteria for qualifying as a Small Starts project, the Small Starts project evaluation process, the project development process, and the conditions for funding.

Very Small Starts Program

The FTA Very Small Starts projects include simple, low-risk projects that qualify for a highly simplified project evaluation and rating process by FTA. The total project cost must be less than $50 million. Palm Tran could seek Very Small Starts funding for future projects that are BRT or enhanced bus services.

Appendix J summarizes the minimum criteria for qualifying projects for this program, the Very Small Starts project evaluation process, the project development process, and the conditions for funding.

Urban Circulator Program

Urban Circulator Program grants, created as part of the United States Department of Transportation's (USDOT) Livability Initiative to help American families in all communities gain better access to affordable housing, more transportation options, and lower transportation costs, provide funding for projects that meet livability principles. The program funds urban circulator systems such as streetcars and rubber-tire trolley lines that provide a transportation option that connects urban destinations. Palm Tran could seek Urban Circulator funding for future projects that provide streetcar-like service on rail or rubber tires.

The Urban Circulator Program will be funded using $130 million under SAFETEA-LU. The maximum amount of funds available per project is $25 million.

Congestion Mitigation and Air Quality (CMAQ) Program

The CMAQ program, which is jointly administered by Federal Highway Administration (FHWA) and FTA, was conceived to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief. The CMAQ program was reauthorized under the Transportation Equity Act for the 21st Century (TEA-21) in 1998, and most recently in 2005 under SAFETEA-LU. Under SAFETEA-LU, the program has provided just under $9 billion in authorizations to state DOTs, metropolitan planning organizations, and their project sponsors for a growing variety of transportation-environmental projects.

Each year, CMAQ funding is distributed to the states via a statutory formula based on population and air quality classification as designated by the Environmental Protection Agency (EPA). Because Palm Beach County is an air quality attainment area, funding opportunities through the CMAQ program will be limited.

Federal Environmental and Energy Funding

Another emerging potential federal funding resource for technology and programs for transit is through either or both EPA and the Federal Energy Regulatory Commission (FERC). Both agencies implement programs that potentially could be a resource for transit clean fuels and other strategies

to improve energy conservation or fuel emissions. Palm Tran currently operates both hybrid and diesel buses.

FTA Transit Clean Fuels

FTA places some of its annual appropriations into a Transit Clean Fuels program and accepts applications for these funds. With attempts to move into cleaner-burning fuels, all transit systems should consider the potential to apply for and use funds from this source. While these funds are for capital purchases and facility infrastructure, with the capital cost of leasing allowances, some level of benefit to operational expenses could be realized. This is a program that should be assessed on a case-by-case basis. Palm Tran currently operates both hybrid and diesel buses.

The amount appropriated in 2011 for Section 5308 Clean Fuels Grant program was $51.4 million.

POTENTIAL NEW/ADDITIONAL STATE AND LOCAL FUNDING SOURCES

Funding any potential premium transit improvements such as BRT or rail transit requires significant local matching funds, as does maintaining existing services levels and implementing any planned bus improvements. Local and/or state sources have to be identified for funding transit capital/infrastructure and also to provide a stable funding source for operating the services.

Table 5-2 presents an assessment of funding sources/mechanisms in Florida that may be applicable to Palm Tran. The table is accompanied by a summary of a broad spectrum of potential transit funding sources and mechanisms.

Florida New Starts Program (NSTP)

The NSTP was established by the 2005 Florida Legislature to assist local governments in developing and constructing fixed guideway and BRT projects to accommodate and manage urban growth and development. A secondary purpose of the program is to leverage State of Florida funds to generate local transportation revenues and secure FTA New Starts or Small Starts Program funding for Florida projects. Eligible projects include those capital projects that support the Strategic Intermodal System (SIS) and are deemed to be a worthwhile investment of State dollars.

Transportation Regional Incentive Program (TRIP)

TRIP was created by the 2005 Legislature to improve regionally-significant transportation facilities in "regional transportation areas." State funds are available throughout Florida to provide incentives for local governments and the private sector to help pay for critically needed projects that benefit regional travel and commerce. FDOT will pay for 50 percent of project costs, or up to 50 percent of the non-federal share of project costs for public transportation facility projects. This program can be used to leverage investments in regionally significant transportation facilities and must be linked to growth management objectives.

Table 5-2 Potential New/Additional State and Local Funding Sources

Funding Source	Decision Maker	Capital or Operating Cost
Florida NSTP	FDOT-CO	Capital
TRIP	FDOT-CO	Capital
CIGP	FDOT-DO	Capital
SIS Funds	FDOT-CO	Capital
SIB	FDOT-CO	Capital
Intermodal Development Program	FDOT-CO and/or DO	Capital
Transit Corridor Program	FDOT-CO and/or DO	Both
Public Transit Service Development Program	FDOT-CO	Both
Park and Ride Lot Program	FDOT-CO	Capital
1-6 Cents Local Option Fuel Tax	BCC or Referendum	Both
1-5 Cents Local Option Fuel Tax	BCC or Referendum	Capital
Ninth-Cent Fuel Tax	BCC	Operating
Ad Valorem Taxes	BCC	Operating
Charter County Trans. System Surtax	BCC or Referendum	Both
Local Govt. Infrastructure Surtax	BCC or Referendum	Capital
Impact Fee	BCC	Capital
Special Assessment Districts	BCC	Both

NOTES:
1. Decision Maker: Identifies which agency or office makes the decision for awarding the funding.
2. DO = District Office, CO = Central Office, and BCC = Board of County Commissioners.

SOURCES:
Federal Transit Administration grant and program guidance fact sheets.
Center for Urban Transportation Research (CUTR) at the University of South Florida, "Resource Guide for Transit and Transit-Related Programs," November 2005.
FDOT's Florida New Starts Transit Program: A Decision-Support Contextual Framework, June 2006.
FDOT District 1 Grant Program fact sheets.
"FDOT's Florida's Transportation Tax Sources: A Primer," January 2008.
Florida Legislative Committee on Intergovernmental Relations, "2009 Local Government Financial Information Handbook," August 2009.

County Incentive Grants Program (CIGP)

The CIGP was created by the 2000 Legislature and is codified in Section 339.2817, FS. The purpose of the program is to provide grants to counties to improve a transportation facility (including transit) that is located on the State Highway System (SHS) or that relieves traffic congestion on the SHS. Municipalities are eligible to apply and can do so by submitting their application through the county. CIGP funds are distributed to each FDOT District office by statutory formula. FDOT will cover 50 percent of eligible project costs.

Strategic Intermodal System (SIS) Funds

Florida's SIS was established in 2003 to enhance Florida's economic competitiveness by focusing limited state resources on those transportation facilities that are critical to Florida's economy and quality of life. The SIS is a statewide network of high-priority transportation facilities, including the state's largest and most significant commercial service airports, spaceport, deep water seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and highways. About one-third of all funds available to FDOT is for SIS capacity projects, and all SIS funding is from State-managed sources. The SIS funding strategy for FY 2011/2012 through FY 2015/2016 (adopted July 2011) includes $208.4 million in projects in or partially in Palm Beach County.

SIS projects are identified as part of the development of a 20-year Multimodal Needs Plan. The projects that are considered for inclusion in the Multimodal Needs Plan come from statewide transportation plans for transit, rail, aviation, seaports, and space and from the plans of FDOT's partners (e.g., LRTPs). Projects are prioritized based on the degree to which they improve interregional connectivity, improve intermodal connectivity, and enhance economic competitiveness. Also considered in project prioritization are the extent to which projects further other statewide goals, support partners' plans, maximize existing infrastructure, are supported by appropriate land use and access strategies, leverage non-State funding sources, and provide a high return on investment.

State Infrastructure Bank (SIB)

The SIB is a revolving loan and credit enhancement program consisting of two separate accounts. The federally-funded SIB account is capitalized by federal money matched with state money as required by law; the state-funded SIB account is capitalized by bond proceeds and state money only. Highway and transit projects are eligible for SIB participation.

Intermodal Development Program

The Intermodal Development Program was established to provide funding for major capital investments in fixed-guideway transportation systems; provide access to seaports, airports, and other transportation terminals; and provide for the construction of intermodal or multimodal terminals. Eligible projects include major capital investments in public rail and fixed-guideway transportation facilities and systems that provide intermodal access; road, rail, intercity bus service, or fixed-guideway access to, from, or between seaports, airports, and other transportation terminals; construction of intermodal or multimodal terminals; development and construction of dedicated bus lanes; and projects that otherwise facilitate the intermodal or multimodal movement

of people and goods. According to FDOT Work Program data from 2008 through 2011, Palm Beach County received approximately $100,000 per year for intermodal hub capacity improvements.

Park-and-Ride Lot Program

The statewide Park-and-Ride Lot Program was initiated in 1982 to provide organized, safe parking for vehicles constantly congregating on roadsides. The program provides for the purchase and/or leasing of private land for the construction of park-and-ride lots, the promotion of these lots, and the monitoring of their use.

FDOT funds up to one-half of the non-federal share of park-and-ride lot capital projects. If a local project is in the best interest of FDOT, then the local share may be provided in cash, donated land value, or in-kind services. If federal funds are involved, federal match guidelines shall be used. According to FDOT Work Program data for 2010, Palm Beach County received approximately $1.3 million for Palm Tran park-and-ride facilities.

Local Option Sales Tax

There are two types of sales taxes that can be used to fund transit:

- *Charter County Transit System Surtax*. The sales surtax may be levied at a rate of up to one percent by charter counties that adopted a charter, as well as by a county government that consolidates with one or more municipalities. Generally, the proceeds may be used for the planning, development, construction, operation, and maintenance of fixed guideway rapid transit systems, bus systems, roads, and bridges. The eligible counties include Alachua, Brevard, Broward, Charlotte, Clay, Columbia, Duval, Hillsborough, Lee, Leon, Miami-Dade, Orange, Osceola, Palm Beach, Pinellas, Polk, Sarasota, Seminole, Volusia, and Wakulla.
- *Local Government Infrastructure Surtax*. A Local Government Infrastructure Surtax may be levied at the rate of 0.5 or 1 percent pursuant to an ordinance enacted by a majority vote of the County's governing body or approved by voters in a countywide referendum. Generally, the proceeds must be used to finance, plan, and construct infrastructure; acquire land for public recreation or conservation or natural resources; or finance the closure of local government-owned solid waste landfills that are already closed or are required to close.

Impact Fees

An impact fee is a one-time fee assessed against new development that covers capital expansion consumed by the new development. The fee is not a tax, as it is a condition for improving a property. A typical impact fee is for the purpose of providing increased capacity on the major road network, which includes arterial and collector roads as well as the SIS within the county. In Florida, Broward County has adopted a transit impact fee, which is assessed and paid during the review of construction plans submitted for County Environmental Review Approval.

Impact fee programs can allow developers to receive impact fee credits for implementation of specific improvements (e.g., construction of a bus bay).

Special Assessment Districts

Special assessments are charges assessed against the property of some particular locality or district because that property derives some special benefit from the expenditure of the money. There are two types of special assessments: Municipal Service Taxing Units (MSTUs) and Municipal Service Benefit Units (MSBUs). MSTU assessments are levied on an ad valorem basis, while MSBU assessments are levied on a per-unit basis. Because MSBUs are not taxes, a benefit to the property bearing the assessment must be proven.

Transit-Oriented Development/Joint Development

Transit-oriented development (TOD) and joint development (JD) represent some of the best emerging sources of funding for transit through public-private partnerships. Both TODs and JDs offer compact, mixed-use developments that are within walking distance of transit services. While TOD refers to neighborhood-type, compact, mixed-use development within walking distance of transit, JD refers to the development of real property that is owned by a public entity (such as a transit agency) that receives lease or other revenue from the development.

Well-planned TODs have been shown to lead to increased property values. Such increases in value can be captured via taxes or assessments and directed to transit investments. (More information about this is available at http://reconnectingamerica.org/resource-center/value-capture/.) TOD can also increase ridership, which in turn increases farebox revenue.

With JD, lands owned by the transit agency are leased out and the rent paid by tenants is used to fund transit investments.

Contract or Purchase-of-Service Revenues

Contract or purchase-of-service revenues are a result of public-private or public-public partnerships and typically include revenues generated by transit systems by providing transportation services in addition to their regularly scheduled services. The revenues are received based on agreed-upon levels of service and rates. For the most part, this type of service is purchased by municipal governments, individual businesses and industries, health and social service agencies, and educational institutions.

Lease Revenues

This includes revenues generated from the leasing of physical transit facilities such as terminals, stations, or parking facilities. Agencies use current market rates to lease the facilities through annual or multi-year agreements.

Concessions Revenues

As an income-generating strategy similar to leasing, transit agencies with appropriate space available in terminal and station facilities may enter into concession agreements with a variety of commercial and retail ventures. These typically include newsstands, food stands, ATMs, gift shops, vending machines, music stores, florists, photo-processing stores, shoe repair and sales shops, and any other suitable ventures.

Parking Fees

Parking fees could provide a source of revenue for transit operations for the following key reasons:

- They potentially provide a relatively stable revenue stream for Palm Tran.
- They could increase ridership on Palm Tran bus routes, as some commuters, visitors, or shoppers may choose to take transit instead of paying for parking.

Private Contributions/Donations

Private contributions and donations are considered an innovative mechanism for funding transit services. Some of these strategies do so by eliciting private contributions to transit infrastructure and service improvements with the expectation that net benefits will accrue over time as ridership grows and property values increase. In addition, support for transit can come through donations from various types of philanthropic, charitable, and service organization businesses. Private contributions and donations may be another small but stable source for funding trolley services as such funding typically is directed toward a particular service, subarea, or client group.

Fare Revenues

While fare revenues are a major existing funding source for Palm Tran, a revision to Palm Tran's current fare policy with a system-wide fare increase may generate significantly higher proceeds and may assist in the potential implementation of additional services.

Advertising Revenues

Typically, transit systems use revenues from advertising on transit vehicles, stations, and shelters, as well as on tickets, schedules, and maps. Advertising not only serves as a source of income, but also provides a means to establish broader community partnerships and capture and maintain interest and support for transit. Revenues from advertising typically are modest, but can range from thousands, as it is for Palm Tran now, to millions of dollars per year, depending on the size of the system and the advertising programs in place.

Vehicle Fees

Vehicle fees are charged to vehicle owners and operators by state governments and may include fees for issuance of titles, licenses, registrations, and/or inspections. While revenues from vehicle fees are not commonly dedicated directly to public transportation, some municipalities throughout the nation use vehicle license fees for transit.

5.6 Proposed 10-Year Financial Plan

After the analysis of demographics, survey results, public and review committee input, and trend and peer reviews are used to assess the demand for transit service and to identify mobility needs in Palm Beach County, the financial plan provides the fiscal consideration of those needs for the next ten years. This section of the TDP presents capital and operating costs as well as revenues

associated with maintaining existing levels of transit service and with implementing the recommendations identified in Chapter 4.

First, this section summarizes a review of existing revenues used to fund current Palm Tran transit services. Then this section presents the operating and capital cost and revenue assumptions that were developed for the 10-year financial plan. Thereafter, the TDP financial plan for the next ten years is presented.

OVERVIEW OF CURRENT FUNDING FOR PALM TRAN

As previously indicated, a brief review of existing revenues used to fund existing Palm Tran services was conducted. The review is intended to provide a quick view of the current distribution of funding, primarily providing a snapshot of the reliance of Palm Tran currently on local versus state versus federal funding sources. The information on existing funding sources is based on Palm Tran's FY 2011 budget.

While the sources may have differences in the degree of support in FY 2011 when compared to FY 2010, Palm Tran is anticipated to continue using its current mix of federal, state, and local funding sources to fund transit service in FY 2011. Table 5-3 and Figure 5-1 present the funding capacity from known sources for FY 2011 for Palm Tran services. *It is essential to note that there is currently uncertainty associated with the level of federal funding that will be available for transit service and transit projects in the future. There is also uncertainty associated with the level of gas tax revenue that will be available in the future. If federal funding and/or gas tax funding levels change, these changes must be accounted for in annual updates of the TDP.*

Table 5-3 Existing Palm Tran Funding by Source

Source	FY 2010	FY 2011	Change FY 2010 to FY 2011
Gas Tax	$26,191,000	$26,307,000	0%
Ad Valorem Funding	$21,895,872	$15,514,940	-29%
Federal & State Grants	$57,616,928	$70,305,821	22%
Fares/User Fees/Charges	$12,003,906	$11,040,401	-8%
Interfund Transfers	$143,411	$143,336	0%
Other	$197,556	$226,630	15%
Fund Balance	$2,540,472	$7,196,766	183%
Total	**$120,589,145**	**$130,734,894**	**8%**

SOURCE: Palm Tran FY 2011 budget

NOTE: This table shows capital and operating revenues for both fixed-route and paratransit service.

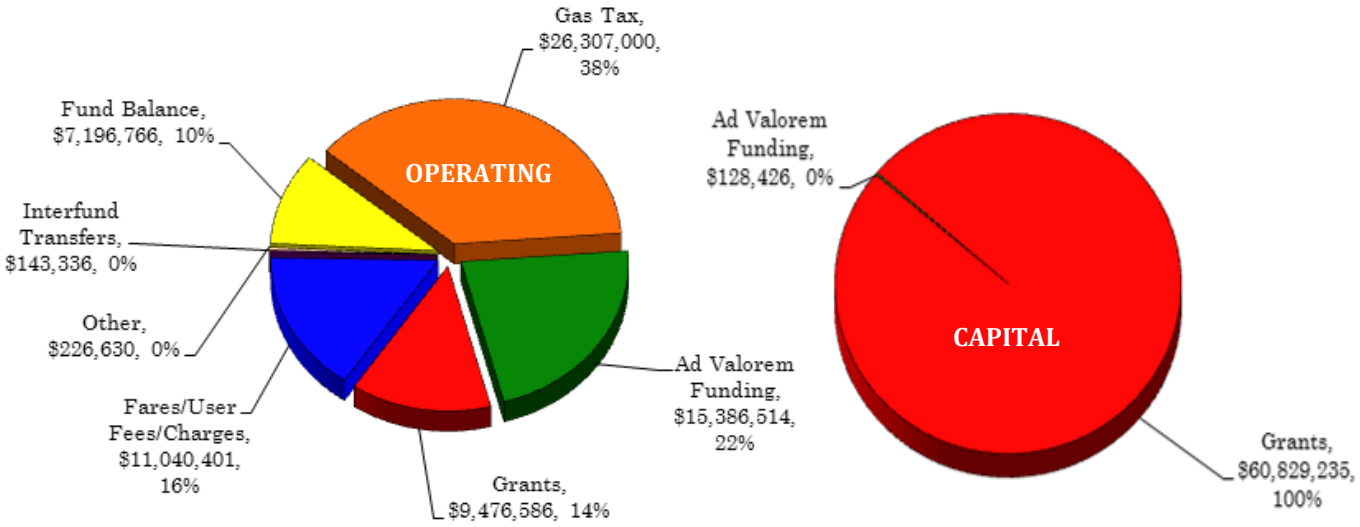


Figure 5-1 Existing Palm Tran Funding by Source (FY 2011)

TEN-YEAR PLAN ASSUMPTIONS

The 10-year improvements recommended for the Palm Tran TDP consist of two major categories, which are the following:

- Maintain existing local and express services
- Capital improvements (vehicle and non-vehicle capital)

Detailed descriptions of the funded and unfunded improvements for the next 10 years are presented in Table 4-9. Numerous assumptions were made to develop and forecast costs for the funded improvements in the 10-year plan. These assumptions, identified for operating and capital costs for fixed-route and paratransit services, are based on a variety of factors, including current Palm Tran budget data, NTD data, Palm Tran service trend data, current inflation data, and input from and discussions with Palm Tran staff.

Cost Assumptions

The cost assumptions used for developing the financial plan are summarized in Table 5-4 as well as in the remainder of this section.

Table 5-4 Operating and Capital Cost Assumptions

Assumption	Unit Cost (2011)
Operating Cost per Revenue Hour	$106
Operating Cost Inflation Rate	2.25%
Vehicle Unit Costs - Standard-length Low-floor Diesel	$400,000
Vehicle Unit Costs - Standard-length Low-floor Hybrid	$600,000
Vehicle Unit Costs - Articulated Low-floor	$656,000
Capital Cost Inflation Rate	3.0%
Automatic Vehicle Location (AVL) Program Cost	$50,000
New Park-and-Ride Facilities in Western Communities	$2,000,000
Install APCs on Remainder of Fixed-route Fleet	$360,000
Transit Bus Signal Priority (Okeechobee Boulevard)	$500,000
Smart Card/Regional Fare Card	$5,000,000
Bus Shelters & Other Transit Enhancements Program	$100,000 per Year
Intermodal Hub Capacity - Belle Glade	$814,000
Transit infrastructure Improvements - Delray Beach	$181,000

Source: Palm Tran, www.inflationdata.com, and FDOT

The unit costs and other assumptions were developed based on the following:

- *Operating Cost per Revenue Hour*. The Operating Cost per Revenue Hour data for FY 2011 were provided by Palm Tran staff. The annual operating cost inflation rate of 2.25 percent was applied to the FY 2011 value to develop cost projections from 2012 through 2021.
- *Operating Cost Inflation Rate*. The 2.25 percent rate assumed for operating cost inflation for the 10-year plan is based on average annual Consumer Price Index (CPI)—based inflation rate data for the last five years.
- *Capital Cost Inflation Rates*. Based on discussions with Palm Tran as well as a review of rates used in recent TDPs in Florida, a rate of 3.0 percent was used for inflating capital costs for the 10-year period.
- *Costs for Maintaining Existing ADA Paratransit Operating Services*. Based on Palm Tran's FY 2011 budget, $22,535,437 is budgeted for purchasing contracted ADA paratransit services to support Palm Tran's fixed-route bus services for FY 2011. This cost is inflated at 2.25 percent to project ADA paratransit costs from 2012 through 2021.

To support the development of capital costs, a vehicle replacement schedule was prepared. Vehicle replacement refers to vehicles needed to replace vehicles in the existing fleet. The costs assumed for replacement buses are summarized in Table 5-5.

Table 5-5 Vehicle Costs

Fleet Replacement	
29', 35', or 40' Bus	**Articulated Low-floor Bus**
$400,000	$656,000

SOURCE: Palm Tran

A vehicle replacement schedule was prepared using Palm Tran's existing fleet inventory, which is based on annual vehicle miles travelled. Table 5-6 summarizes Palm Trans vehicle replacement needs in each year within the 10-year planning horizon of the TDP. In summary, the plan identifies the following needed vehicles (all of low-floor design) within the next ten years:

- 106 diesel low-floor buses
- 6 articulated low-floor buses

Table 5-6 10-Year Vehicle Replacement Schedule

Bus Needs	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Replacement Schedule											
29' Bus	0	2	1	7	0	0	0	0	0	0	10
35' Bus	1	0	0	0	0	0	0	2	2	6	11
40' Bus	3	19	10	10	12	7	3	8	10	3	85
Articulated Bus*	6	0	0	0	0	0	0	0	0	0	6
Plan Total	**10**	**21**	**11**	**17**	**12**	**7**	**3**	**10**	**12**	**9**	**112**

SOURCE: Palm Tran

*Costs of the articulated buses are not included in the 10-year financial plan. Palm Tran has already purchased these buses. They will be delivered in 2012.

NOTE: The totals include spare vehicles.

Revenue Assumptions

The Palm Tran TDP financial plan revenues for the next 10 years were developed using the following key assumptions:

- **Existing Operating Revenues -** As shown in Table 5-7, the Palm Tran FY 2011 budget identifies a number of sources of revenues to fund the operating portion of the fixed-route costs for Palm Tran in FY 2011. These funds are assumed to continue through the next 10-year period. The funds are assumed to continue at the same level as existing levels. *As noted earlier, there is currently uncertainty associated with the level of federal funding that*

will be available for transit service and transit projects in the future. If federal funding levels change, these changes must be accounted for in annual updates of the TDP.

Table 5-7 Annual Operating Revenues

Source	FY 2011
Gas Tax	$26,307,000
Ad Valorem Funding	$15,386,514
Federal & State Operating Grants	$9,476,586
Fares/User Fees/Charges	$11,040,401
Interfund Transfers	$143,336
Other	$226,630
Total	**$62,580,467**

SOURCE: Palm Beach County FY 2011 Budget, Page C-186

- **Existing Fund Balance -** While the FY 2011 budget for Palm Tran shows a fund balance of $6.5 million for fixed-route operations as well as $687,000 for paratransit operations, no fund balance is assumed to carry forward from FY 2011 to FY 2012.
- **Capitalized Maintenance -** In addition to continuing the existing sources of revenues, the 10-year plan also assumes an additional funding stream from capitalized maintenance to reduce the estimated operating funding shortfall. It is assumed that approximately $84.8 million of the fixed-route operating expenses over the 10-year period may be covered by FTA capital funds for capitalized maintenance.
- **Capital Revenues -** A total of $150 million of FTA capital grants is assumed to be available for Palm Tran for the next ten years to fund capital improvements as well as capitalized maintenance costs. Of this total, approximately $84.8 million is assumed for funding capitalized maintenance while the rest will be used to purchase/replace vehicles and accomplish other non-vehicle capital improvements.

TEN-YEAR FINANCIAL PLAN

Table 5-8 summarizes the projected operating costs and revenues for Palm Tran from FY 2012 through FY 2021. The table categorizes costs by service category, including local and express bus services as well as paratransit costs. Unfunded recommended projects from Chapter 4 are not included in the table.

In addition, the table shows the funding surplus/shortfall by year from FY 2012 through FY 2021. Figure 5-2 illustrates the total cost of the plan by year as well as the annual revenues and surplus/shortfall for the 10-year plan.

Table 5-8 10-Year Cost and Revenue Summary

Cost/Revenue	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-Year Total
Operating											
Costs											
Fixed Route - Maintain Existing Local	$44,145,339	$45,137,726	$46,152,422	$47,189,928	$48,250,758	$49,335,435	$50,444,496	$51,578,488	$52,737,972	$53,923,522	**$488,896,086**
Fixed Route - Maintain Existing Express	$251,763	$257,422	$263,209	$269,126	$275,176	$281,362	$287,687	$294,154	$300,767	$307,528	**$2,788,193**
Total Fixed Route Costs	**$44,397,101**	**$45,395,148**	**$46,415,631**	**$47,459,054**	**$48,525,934**	**$49,616,797**	**$50,732,183**	**$51,872,642**	**$53,038,739**	**$54,231,050**	**$491,684,280**
Paratransit - Maintain Existing	$23,042,034	$23,560,019	$24,089,648	$24,631,183	$25,184,892	$25,751,048	$26,329,932	$26,921,829	$27,527,032	$28,145,839	$255,183,455
Total Operating Costs	**$67,439,135**	**$68,955,167**	**$70,505,279**	**$72,090,238**	**$73,710,826**	**$75,367,845**	**$77,062,115**	**$78,794,471**	**$80,565,771**	**$82,376,889**	**$746,867,735**
Revenues											
Gas Tax	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	$26,307,000	**$263,070,000**
Ad Valorem Funding	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	$15,386,514	**$153,865,140**
Grants	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	$9,476,586	**$94,765,860**
Fares/User Fees/Charges	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	$11,040,401	**$110,404,010**
Interfund Transfers	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	$143,336	**$1,433,360**
Other	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	$226,630	**$2,266,300**
Total Anticipated Operating Revenues	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$62,580,467**	**$625,804,670**
Capitalized Maintenance (Transfer from Capital)	$12,048,700	$5,988,440	$4,378,001	$5,246,540	$9,335,484	$11,556,654	$13,424,151	$9,832,920	$8,637,089	$10,061,901	$90,509,880
Total Revenues	**$74,629,167**	**$68,568,907**	**$66,958,468**	**$67,827,007**	**$71,915,951**	**$74,137,121**	**$76,004,618**	**$72,413,387**	**$71,217,556**	**$72,642,368**	**$716,314,550**
Revenues Minus Costs	**$7,190,032**	**($386,260)**	**($3,546,811)**	**($4,263,230)**	**($1,794,875)**	**($1,230,725)**	**($1,057,496)**	**($6,381,084)**	**($9,348,215)**	**($9,734,521)**	
Rollover from Prev. Year	**$0**	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	
Surplus/Shortfall	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	**($30,553,185)**	**($30,553,185)**
Capital											
Costs											
Vehicles	**$1,648,000**	**$8,911,560**	**$4,807,999**	**$7,653,460**	**$5,564,516**	**$3,343,346**	**$1,475,849**	**$5,067,080**	**$6,262,911**	**$4,838,099**	**$49,572,820**
Replace Existing Fleet	$1,648,000	$8,911,560	$4,807,999	$7,653,460	$5,564,516	$3,343,346	$1,475,849	$5,067,080	$6,262,911	$4,838,099	**$49,572,820**
Other Capital/Infrastructure	**$1,303,300**	**$100,000**	**$5,814,000**	**$2,100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$9,917,300**
Other Capital/Infrastructure	$1,303,300	$100,000	$5,814,000	$2,100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$9,917,300**
Total Costs	**$2,951,300**	**$9,011,560**	**$10,621,999**	**$9,753,460**	**$5,664,516**	**$3,443,346**	**$1,575,849**	**$5,167,080**	**$6,362,911**	**$4,938,099**	**$59,490,120**
Revenues											
Capital Grants	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000	**$150,000,000**
Transfer to Operating as Capitalized Maintenance	-$12,048,700	-$5,988,440	-$4,378,001	-$5,246,540	-$9,335,484	-$11,556,654	-$13,424,151	-$9,832,920	-$8,637,089	-$10,061,901	**-$90,509,880**
Total Revenue	**$2,951,300**	**$9,011,560**	**$10,621,999**	**$9,753,460**	**$5,664,516**	**$3,443,346**	**$1,575,849**	**$5,167,080**	**$6,362,911**	**$4,938,099**	**$59,490,120**
Revenue Minus Cost	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Rollover from Prev. Year	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Surplus/Shortfall	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Cost/Revenue Summary											
Total Costs	$70,390,435	$77,966,727	$81,127,278	$81,843,697	$79,375,342	$78,811,192	$78,637,963	$83,961,551	$86,928,682	$87,314,988	**$806,357,855**
Total Revenues	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	$77,580,467	**$775,804,670**
Surplus/Shortfall	**$7,190,032**	**$6,803,772**	**$3,256,962**	**($1,006,269)**	**($2,801,143)**	**($4,031,868)**	**($5,089,364)**	**($11,470,449)**	**($20,818,664)**	**($30,553,185)**	**($30,553,185)**

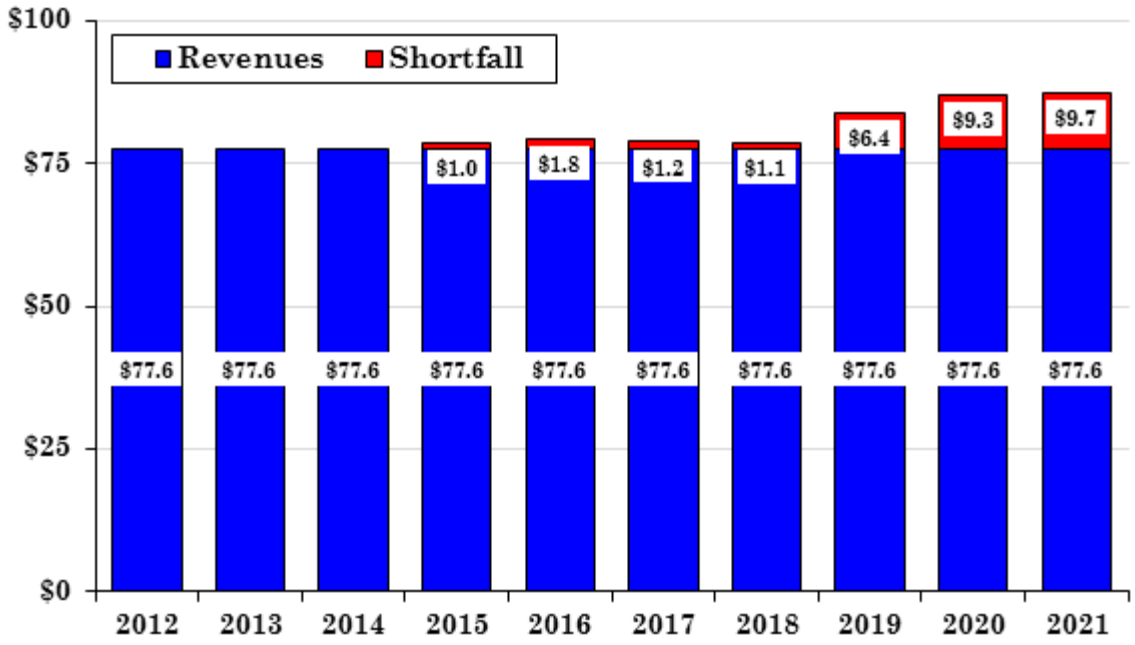


Figure 5-2 10-Year TDP Revenues ($ millions)

Based on cost and revenue assumptions developed for this TDP for the next 10-year period, the plan shows a cumulative operating revenue shortfall of $36.2 million to maintain existing Palm Tran services and implement previously identified cost-feasible capital improvements.

6.0 ORGANIZATIONAL ASSESSMENT

6.1 Introduction

As part of the TDP process, a general assessment of Palm Tran's organizational structure was completed in order to ensure that staffing levels are sufficient to support enhancements to the transit network as identified in the 10-year plan. Palm Tran's staffing levels were compared with the peer agencies identified in the TDP process. This effort included a general review of current staffing levels by major employment category as identified per NTD reporting requirements.

6.2 Organizational Structure

Palm Tran operates as a department of Palm Beach County government. According to 2009 NTD data, Palm Tran has a total of 425 employees. The agency operates 7 days per week, serves more than 3,400 bus stops, and provides more than 10 million rides per year. As a County department, Palm Tran is governed by the Palm Beach County Board of County Commissioners (BOCC), which serves as the transit agency's oversight board. The BOCC contains seven Commissioners, each of whom represents a single member district and serves a four-year term. The BOCC appoints the County's Chief Executive Officer, called the County Administrator in Palm Beach County, who implements BOCC-approved programs and manages the day-to-day operations of County government. The County's departments under the County Administrator are organized into two groups: General Operations Departments, which provide direct services to residents, and Central Services Departments. Palm Tran is a department under the General Operations Department. Figure 6-1 displays Palm Beach County's organizational structure and where Palm Tran fits into the overall structure.

6.3 Peer Analysis

A peer review of staffing levels was performed to compare Palm Tran's staffing levels with other transit agencies of similar size. The peer group used to perform the review was derived from the fixed-route peer agencies identified in Chapter 3. The peer group used in Chapter 3 was verified for appropriateness based on the most recent validated NTD information from the Federal Transit Administration. Because Valley Metro and the Regional Transportation Commission of Southern Nevada purchase transportation services from a contractor and have no administrative, operations, or vehicle maintenance staff reported to the NTD, they were not included in the organizational assessment peer group. Table 6-1 shows the final list of Florida and non-Florida peer agencies selected for the organizational assessment. The number of full-time equivalent (FTE) administrative, vehicle maintenance, and operational staff were obtained for each agency from the 2009 NTD. The 2009 NTD is the most recent validated NTD currently available.

Table 6-1 Fixed-Route Peer Agencies

2012-2021 TDP Fixed-Route Peer Agencies
Florida Peers
Broward County Transportation Department
Pinellas Suncoast Transit Authority (St. Petersburg)
HART (Tampa)
LYNX (Orlando)
Non-Florida Peers
Transportation District Commission of Hampton Roads (Hampton Roads, VA)
Southwest Ohio Regional Transit Authority (Cincinnati, OH)

Because of variability in system size, in order to more fairly compare the number of staff employed by the peer group members and Palm Tran, it was necessary to normalize the number of staff in each employee category using a related transit service performance statistic. Typical variables used to compare transit agency service performance characteristics include peak vehicles, revenue hours of service, and revenue miles of service. For the purposes of this peer review, the service performance statistics were tied to staff categories as follows:

- Peak vehicles and administrative staff
- Revenue hours and operations staff
- Revenue miles and vehicle maintenance staff

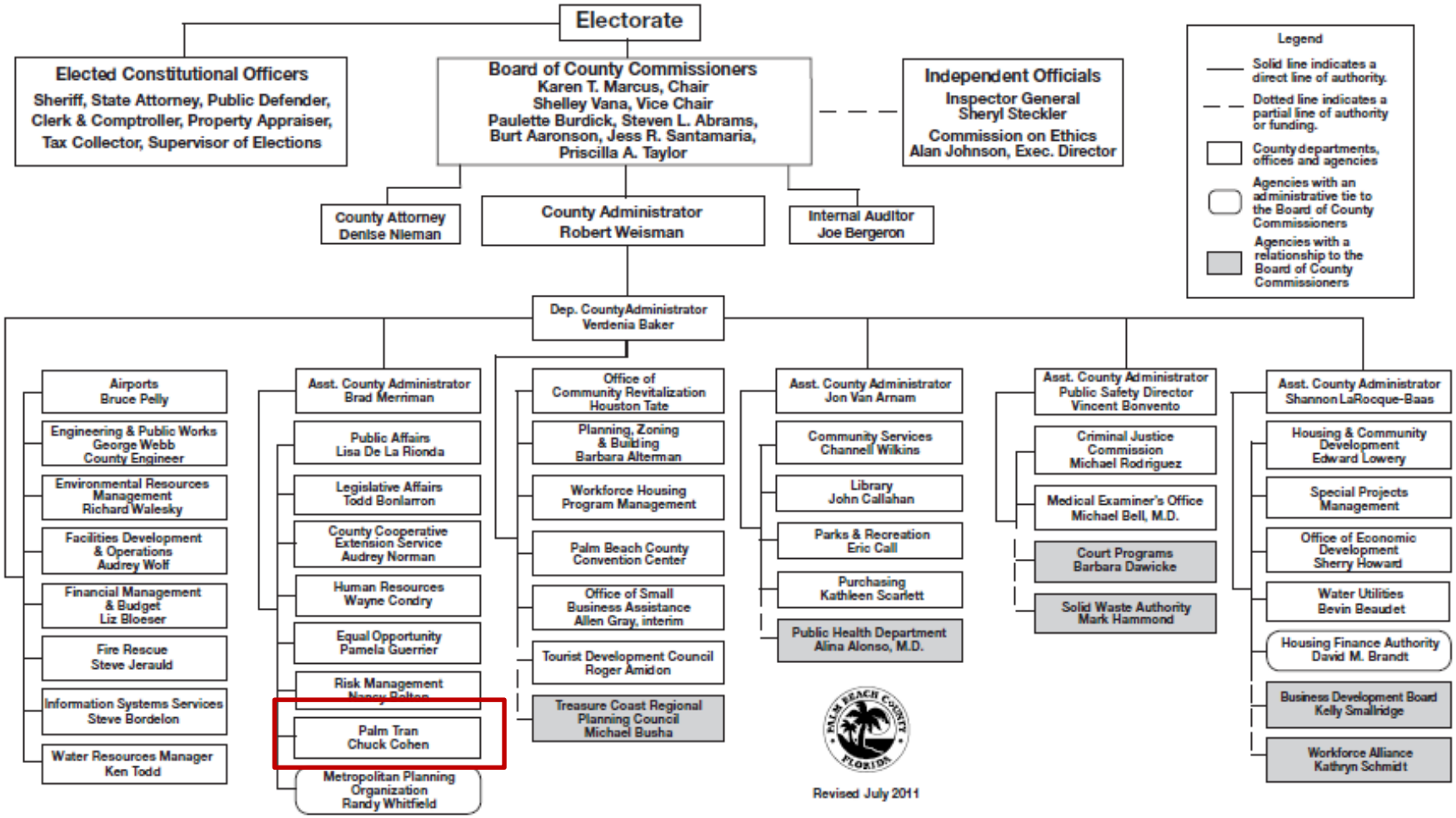


Figure 6-1 Palm Beach County Board of County Commissioners Organizational Structure

Table 6-2 through Table 6-4 present the results of the peer review. Table 6-2 shows the performance statistics and staffing levels for all six peer transit agencies and the corresponding data for Palm Tran. The performance statistics included are peak vehicles, revenue hours, and revenue miles. The table also shows administrative, maintenance, and operating employee FTEs for each transit agency. Also included in that table are the average and standard deviation for the peer group for each variable.

Table 6-3 notes the staff category criteria utilized to develop the Palm Tran staffing level equivalents shown in Table 6-4. Staff category criteria were developed by dividing the service or performance statistic peer group averages by the average number of FTE employees in each corresponding staff category for each transit agency.

Table 6-2 Staffing Level Peer Review

Company Name	Location	Peak Vehicles	Revenue Hours	Revenue Miles	Administrative Employees FTEs	Maintenance Employees FTEs (Vehicles)	Operating Employees FTEs
Palm Tran	Palm Beach County, FL	122	403,023	6,798,404	33	95	297
BCT	Broward County, FL	240	1,014,405	13,878,467	82	171	641
LYNX	Orlando, FL	234	1,029,713	14,230,128	82	158	647
HART	Tampa, FL	159	581,600	7,421,599	79	140	383
PSTA	St. Petersburg, FL	170	606,001	8,710,429	64	88	375
Southwest Ohio RTA	Cincinnati, OH	324	802,130	10,445,144	85	206	568
TDC of Hampton Roads	Hampton Roads, VA	290	871,385	11,764,916	174	122	488
Peer group average		220	758,322	10,464,155	85.7	139.9	485.5
Peer group standard deviation		73.2	236,151	2,980,572	42.9	42.2	138.7

Table 6-3 Staff Category Criteria

Staff Category	Criteria		
Operating	6.40 operating employees per	10,000	Revenue Hours
Maintenance	1.34 maintenance employees per	100,000	Revenue Miles
Administrative	3.90 administrative employees per	10	Peak Vehicles

Table 6-4 Palm Tran Staff Shortfall and Surplus

Category	Administrative Employees per 10 Peak Vehicles	Maintenance Employees per 100,000 Revenue Miles	Operating Employees per 10,000 Revenue Hours
FY 2009 Palm Tran employee category FTEs	2.70	1.40	7.37
Palm Tran employee equivalent based on staff category criteria	3.90	1.34	6.40
Staff shortfall/surplus	-1.15	+0.06	+0.96

The employee equivalents shown in Table 6-4 indicate that one of the three analyzed Palm Tran staff categories, administrative employees, is below the threshold of the staffing level equivalent for FY 2009 based on the peer review performed. In the other two categories, the peer review analysis revealed that Palm Tran has a slightly greater number of maintenance and operations employees than the amount identified in the peer group threshold. Assuming that Palm Tran has allocated FY 2009 employee hours appropriately across the three major categories presented, then the analysis suggests that, compared to its peers and their respective system sizes, the staffing levels at Palm Tran appear to be comparatively low in terms of administrative employee functions, appropriate in terms of maintenance employee functions, and slightly high in terms of operating employee functions.

6.4 Organizational Assessment Summary

Palm Tran's current governance structure as part of the Palm Beach County BOCC is appropriate to support the current organization and future growth of the agency. The nature of the county government, which includes an elected representative council that seeks to meet constituents' needs and strong leadership with centralized responsibility, suits the current structure of the transit agency.

Palm Tran should continue to monitor staffing levels as the enhancements identified as part of the 10-year TDP process are implemented. Since frequency and service span enhancements compose the majority of the TDP's proposed improvements, existing Palm Tran staff currently possess the proper skill set to support the proposed growth to the system. Because of the nature of the improvements in the 10-year plan, additional staffing needs are not expected to be high during the plan horizon. However, since existing administrative staffing levels are lower than Palm Tran's peer group threshold, current staff may be insufficient to sustain the continued growth of the transit agency beyond the TDP timeframe. Hence, it will be important for Palm Tran staff to maintain awareness that continued growth of the transit system will also require investment in sufficient staff to support the expansion appropriately.

Appendix A/Public Involvement Plan

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
110 E Broward Boulevard, Suite 2410, Fort Lauderdale, FL 33301 P 954.828.1730 F 954.828.1787

Palm Tran Transit Development Plan

Date: October 18, 2011 Project #: 10416.04

To: Larry Hymowitz
Mobility Projects Coordinator
Florida Department of Transportation – District IV
3400 W Commercial Blvd
Fort Lauderdale, FL
33309-3421

Cc:

From: Thuha Lyew; Kathryn Coffel; Darryl dePencier

Subject: Public Involvement Plan

Kittelson & Associates, Inc. (KAI) has developed this public involvement plan to be consistent with the transit development plan (TDP) scope of services and the public involvement strategy that was adopted by the Palm Beach Metropolitan Planning Organization (MPO) in 2008. This plan will ensure that the public is kept informed of project progress and that any citizen in Palm Beach County can submit their ideas and comments throughout the process. This plan is composed of eight elements.

- Open house
- Stakeholder interviews (10 selected by Palm Tran and the consultant plus the 13 members of Palm Tran's Service Board)
- On-board survey (10 % sample of weekday ridership including fixed route and paratransit)
- Service Board discussion group
- Operator and Customer Service Representative survey (written survey distributed by Palm Tran)
- Community and advisory group meetings
- Public presentations
- Project website

These elements will facilitate a two-way flow of information between the planning team and the general public.

PUBLIC INVOLVEMENT STRATEGIES

All planning meetings throughout this project will be open to the public pursuant with Florida's Sunshine Law. Comments will be captured and considered throughout the planning process. The final TDP will provide a summary of all comments received during the process, as well as copies of comments received. Following are specific strategies that will be employed.

Open House/Public Meetings

The planning effort will begin with an Open House to be held in conjunction with Palm Tran's February Service Board meeting. The public will be presented with a set of draft goals and objectives and given the opportunity to submit concerns that they would like to be considered as the TDP is developed.

A public workshop will also be held at the May Palm Tran Service Board meeting to present plan alternatives for comment and a formal public meeting will be held before the June Palm Tran Service Board meeting to present the draft TDP. In order to reach out to all areas of the County, the Palm Tran Service Board meetings will be held in different locations across the county so that everyone who would like to participate will have the opportunity to attend at least one meeting in person without having to travel very far. In addition, the content will be made available online to those who could not make it in person.

On Board Survey

A specialty data collection firm will be retained to administer the on board survey. They will be committed to collecting surveys from at least 10% of weekday riders on both fixed and paratransit services. The survey will be designed to capture rider's demographic characteristics, the reason that they use transit and future improvements that will matter most to them.

It is intended that this survey will have the data needed to support future FTA New Starts or Small Starts grant submittals and that they will also assist in the validation of regional ridership estimation models.

The on-board collection effort will be complete by the end of March 2011. The compiled results of the surveys will be presented in Technical Memorandum #1.

Operator and Customer Service Representative Surveys

A written survey will be developed for fixed route and ADA paratransit operators and customer service representatives. It is expected that all available operators and customer service representatives will have the opportunity to complete this survey. Palm Tran will be given the opportunity to review and comment on the survey developed by the consultant. Palm Tran will distribute and collect surveys.

Survey results will be incorporated into Technical Memorandum #1.

Stakeholder Interviews

These interviews will be conducted with key local officials and community stakeholders that are identified by Palm Tran staff and the planning team. A general list of questions will be developed to help guide the interview, but they will ultimately take the form of a conversation allowing the stakeholders to address the public transportation issues that are most important to them. Each interview is expected to take approximately one hour. The interviews will be completed by the first week of March 2011. Ten people including the Palm Beach County Board of Commissioners will be selected to represent the geographic, ethnic and demographic communities in Palm Beach County, with at least one person being from the Glades area.

Interviews will be summarized and presented in Technical Memorandum #1.

Service Board Group Discussion

A discussion with the Palm Tran Service Board will be organized to ensure that all known opportunities and constraints have been put forward early in the planning process. It is anticipated that most Service Board Members will be available for the discussion at the February Service Board meeting. Those that are unable to attend the formal discussion will be contact to obtain their comments and concerns.

In addition to the initial discussion, the Service Board will briefed again in late May to present deliverables to date, and solicit feedback. At the July Service Board meeting, the draft TDP will be presented to solicit feedback for the final TDP. The final TDP will be presented at the August Service Board meeting for Approval.

These meetings will be advertised and open to the public pursuant with Florida's Sunshine Law.

Agency and Advisory Group Meetings

A meeting to introduce the project and identify perceptions and issues regarding public transit will be held in February with the Palm Tran Service Board, PTAC the Palm Beach MPO Board. These same committees will be met with again in May to review project alternatives and in June to present the draft TDP and solicit feedback. A final meeting will be held with the Palm Beach MPO Board and the Palm Tran Service Board in late July and the Board of County Commissioners in August to present the final TDP.

Comments and suggestions provided during these meetings will be considered during the revision process.

Public Presentations of Draft TDP

The draft TDP will be presented in a public forum in June to:

- The Palm Beach MPO TAC

- PTAC
- Palm Tran Service Board
- A Formal Public Meeting
- Palm Beach Board of County Commissioners
- League of Cities
- FDOT Staff

Comments and suggestions received during these presentations will be considered and responded to during the revision process.

Project Website

A website will be prepared and maintained throughout the duration of the planning effort. It will have a monitored forum for the public to discuss plan details or to make comments and suggestions. All interim deliverables will be made generally available through the website. The website will include multimedia content to help educate the public on the planning process and encourage citizen involvement.

OUTCOMES

The information gained through public input will be significant portion of the base data that will be used to create the transportation development plan. It will be critical to look beyond census statistics to recognize the unique characteristics of Palm Beach County communities and to build a transit plan that is customized to fit their needs. Members of the public will be welcome and encouraged to submit comments and feedback at all times during the planning process.

Meeting Decisions

Palm Tran TDP Major Update

Kick-off Meeting

January 11, 2011

1:30 – 3:30

Palm Tran (3201 Electronics Way)

Dale R Smith Conference Room

A. Attendees:

- Palm Tran: Charles Cohen, Gerald Gawaldo, Claudia Salazar, Fred Stubbs, Lorraine Szyms
- Palm Beach MPO: Randy Whitfield
- FDOT: Larry Hymowitz
- Kittelson & Associates, Inc. (KAI): Kathryn Coffel, Thuha Lyew, Darryl dePencier
- *Absent: Jeannie Taylor, Palm Tran*
- Sub-consultants on the project team are Tindale Oliver & Associates (T-Best modeling, financial plan); and Opinion Research Corp. (on-board survey research)

B. Decisions of the Meeting

1. Project Overview and Schedule
   - **January – March**: Vision and goals, and needs analysis, including background data collection, stakeholder interviews, public input and surveys.
   - **April/May**: Modeling, alternatives analysis, and public review
   - **June**: Review and comment on draft plan
   - **July**: The Service Board, SFRTA, and MPO review
   - **August**: The Plan will need to be adopted by the Board of County Commissioners (BCC) at their August 16, 2011 meeting.
   - It was recognized that there is a significant level of cross-participation in local and regional transportation and planning organizations and that many of the same people will be at each of the meetings.

2. Members and Roles of the Review Committee & Palm Tran Service Board
   - It was clarified that the BCC is the decision-making body and that the Service Board is an advisory committee to the Board responsible for service and routing decisions.
   - The Review Committee will be a small group of primarily Palm Tran staff. Based on this discussion, the recommended membership of Review Committee is provided at the beginning of these notes under "Pending Decisions".

3. Draft Public Involvement Plan
   - The Public Involvement Plan (PIP) will follow the adopted Palm Beach MPO process.
   - Surveys
     - The on-board survey needs to test the vision/goals of Palm Tran and address the public's transit needs. Information to support Title VI reporting will be included on the on-board survey. The Spring 2010 origin-destination survey travel data will be used for analysis of existing travel patterns

  - The Operator and customer service representative surveys will be distributed with paychecks for the fixed route service. It was noted that contracted employees providing paratransit service will need to be contacted through their employer.
- Meetings/briefings
  - **Meetings** will be held with the local and regional transportation groups at three points in time: kick-off meeting to discussion vision, goals, and needs (January-March); the alternatives analysis (April-May); and the draft TDP (June/July)
  - **Groups** to be briefed include the Service Board, BCC, SFRTA, Palm Beach MPO and the general public through open houses. It was noted that there need to be open houses for the general public in all four areas of the county: North (e.g. Jupiter), Central (e.g. West Palm Beach), South (e.g. Boynton Beach) and West (Belle Glade). Libraries have been successful venues for past public meetings.
  - **Stakeholder interviews** will be held with individual county commissioners, other Palm Beach County staff, the business community, tourist industry, realtors, and others. A listing of potential stakeholders and recommendations for how to achieve the desired input is provided at the end of these notes in section C. Pending Decisions.
  - A **project website** will be established to keep the public information of the TDP process and to solicit comment. An introductory page will be created in Spanish and Creole, which will provide an overview of the project, solicit input, and provide a contact person if the reader desires translation of additional materials. Palm Tran will approve all public materials and web postings prior to public release.

4. Perspectives on the Previous and Future TDP
   - The previous TDP had a significant effort comparing Miami-Dade, Broward and Palm Beach County which was not useful.
   - The previous TDP included a comprehensive list of all transportation providers that operate in Palm Beach County (include all private providers), which is not useful to Palm Tran's planning efforts. The consultant team should focus on transit planning efforts that will benefit the Palm Tran planning process.
   - The next five years may not see a significant improvement in economic conditions. There are services that need to be improved, but funding may never materialize for those improvements.
   - This should not be a TDP just to meet FDOT requirements. This should be an implementable plan that doesn't just sit on the shelf collecting dust.
   - One idea is to develop priorities for services to add should funding become available, and also to identify the first services to cut if funding decreases. Priorities could be set up as priority levels, not a specific list of individual projects in priority order.
   - An unrealistic TDP (too optimistic) may not secure the acceptance and approval of the Board of County Commissioners.

5. Next Steps
   - Fred Stubbs will provide FDOT with the necessary formal notice that the PIP will follow the adopted Palm Tran MPO process.
   - Fred will provide KAI with the contact person for the contracted paratransit service to ensure their feedback is solicited.
   - Gerry will be attending the Operations Information Technology meeting of SFRTA on January 27. KAI will provide talking points to inform that group of the kick-off of the TDP process and how they can provide input.
   - Address issues outlined in section C. Pending Decisions.

C. Pending Decisions, Within Scope and Budget

1. Recommended members for the Review Committee:
    - Gerald Gawaldo,
    - Steven Parrish (or designee), Workforce Alliance
    - Claudia Salazar
    - Fred Stubbs (Chair)
    - Lorraine Szyms
    - Frank Stanzione (or designee), Palm Tran Service Board
    - Jeanie Taylor

    Charles Cohen (Optional)
    Randy Whitfield, Palm Beach MPO: (Optional)
    Larry Hymowitz, FDOT (Optional)

2. Recommended 10 Stakeholder Interviews
    - Karen Marcus District I Commissioner, Tourist Development Council
    - Paulette Burdick District II Commissioner
    - Shelley Vana District III Commissioner
    - Steven Abrams District IV Commissioner
    - Burt Aaronson District V Commissioner
    - Jess Santamaria District VI Commissioner
    - Priscilla Taylor District VII Commissioner
    - Vince Bonvento Assistance County Administrator, Palm Beach County
    - Kelly Smallridge Business Development Board
    - Service Board/Community Open House in West Palm Beach

D. Pending Decisions: Impacting Scope/Schedule/Budget

1. Given the short time frame and fixed deadline for completing the TDP, it is recommend adding a contingency budget of $25,000 that allows the project team to add tasks on short notice. Additional work could only be initiated upon written approval of the Palm Tran project manager.

2. Up to 10 additional stakeholder interviews. Suggestions include:

Bill Cross	Manager of Planning	SFRTA
Jonathan Roberson	Senior Planner	BCT
Jeffrey Cloninger	President	Palm Beach Board of Realtors
Michael Jones	President	Economic Council
Phil Bacon	Vice President	LORI
Palm Beach MPO Board Members		
Chambers of Commerce		

3. Additional Kick-off Meetings on Vision/Goals/Needs
    a. Decision and budget adjustment needed by:
    b. Cost per additional meeting:

    Community Open House #2 in Jupiter
    Community Open House #3 in Boynton Beach
    Community Open House #4 in Belle Glades

4. Additional public open houses for input on the alternatives

Community Open House #2 in Jupiter
Community Open House #3 in Boynton Beach
Community Open House #4 in Belle Glades

5. Additional public open houses for input on the draft plan
   Community Open House #2 in Jupiter
   Community Open House #3 in Boynton Beach
   Community Open House #4 in Belle Glades

Appendix B/Public Involvement Support Material

PALM TRAN OPEN HOUSES

2011-2021 Transit Development Plan

www.palmtrantdp.com

PALM BEACH COUNTY
Transit Development Plan

Palm Tran is currently updating its Transit Development Plan that will guide planning, development, and operations for the next 10 years. The Transit Development Plan affects funding and future changes to Palm Tran service, so your feedback is very important.

Palm Tran has many accomplishments. . .

Fixed Route Ridership Up 40% Since 2005

Fixed Route Recognized as Florida's Safest Large Bus Operation

Paratransit Productivity Up 50% in 10 Years

Awards from the Florida Transportation Disadvantaged Commission

. . . but do you have ideas to make it even better?

JOIN US AT AN OPEN HOUSE

FOR MORE INFORMATION AND TO GIVE YOUR FEEDBACK

Wednesday, May 18th

6:00pm – 8:00pm

Belle Glade Branch

Palm Beach County Library

530 South Main Street

Belle Glade, FL

On Palm Tran

Route #47

Thursday, May 19th

6:00pm – 8:00pm

Lantana Road Branch

Palm Beach County Library

4020 Lantana Road

Lake Worth, FL

On Palm Tran

Routes #63 and #71

Tuesday, May 31st

6:00pm – 8:00pm

Jupiter Branch

Palm Beach County Library

705 Military Trail

Jupiter, FL

On Palm Tran

Route #10








Public Affairs Department

P.O. Box 1989
West Palm Beach, FL
33402-1989
(561) 355-2754
FAX: (561) 355-3819
http://www.pbcgov.com

Palm Beach County Board of County Commissioners

Karen T. Marcus, Chair

Shelley Vana
Vice Chair

Paulette Burdick

Steven L. Abrams

Burt Aaronson

Jess R. Santamaria

Priscilla A. Taylor

County Administrator

Robert Weisman

"An equal opportunity Affirmative Action Employer"

Electronic Press Release

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Palm Tran to Host Open Houses on Transit Development Plan

For immediate release: May 3, 2011
Contact: Paula Girard, 561-841-4245

Agency Seeking Public's Assistance

Palm Tran, Palm Beach County's public transportation system, is currently updating its Transit Development Plan (TDP) that will guide planning, development, and operations for the next 10 years. The TDP is important for securing Palm Tran's funding and for future changes to Palm Tran service.

Public involvement is a key component in developing a TDP. Therefore, Palm Tran will host three open houses at the following Palm Beach County branch libraries:

Wednesday, May 18
Belle Glade Branch, 530 South Main Street, Belle Glade
Accessible via Palm Tran Route 47

Thursday, May 19
Lantana Road Branch, 4020 Lantana Road, Lake Worth
Accessible via Palm Tran Routes 63 and 71

Tuesday, May 31
Jupiter Branch, 705 Military Trail, Jupiter
Accessible via Palm Tran Route 10

Open houses will start at 6 p.m. and run to approximately 8 p.m. at all three locations. Riders of the transit system are encouraged to attend and offer feedback and suggestions for the Transit Development Plan. For more information, please visit www.palmtranTDP.com

# # #

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Glades Community Updates

Brought to you by **Glades Initiative, Inc**

May 16, 2011

Anyone wishing to add their local announcements or events is welcome to submit their information by Friday to be posted the following week. Please include a brief summary of the information to be posted with contact name, phone number and/or flyer.

If you want to submit a posting, or to be added or deleted from the e-blast list please contact us **updates@gladesinitiative.org** or (561) 996-3310.

Check the **Glades Community Calendar** for additional activities scheduled in the Glades area: **http://www.gladesinitiative.org/calendar/**

New Postings

Managing Life with Chronic Pain~ workshops held in Belle Glade

Fridays, May 20, 2011- on going to June 24, 2011 from 9:00 a.m.-11:30 a.m. Caridad Center P.E.T. Chronic Disease program host "Living a Healthy Life with Chronic Conditions" Classes start soon!

Six **Free** Workshops you can learn from… Classes are for anyone suffering of diseases or pain related to diseases.

Glades Initiative, Inc. 141 S.E. Ave C, Belle Glade, FL 33430

For more information contact Luz Smith, (561) 853-1633

To view event flyer visit: http://www.gladesinitiative.org/downloads/4.25.11/caridad.pdf

Haitian Heritage Celebration- This weekend!

On **Saturday, May 21, 2011** at 10:00 a.m. to 6:00 p.m. Haitian- American Solidarity Center PBC INC. (HASC) is Celebrating Life with Hope

Live Bands, Food, Parades, Free Stuff, etc… At the Lake Shore Park, 1224 Avenue E Place, Belle Glade, FL, 33430

To help pay for the expenses of the "Celebrate LIFE with HOPE -- Haitian Heritage Month" celebration, we need vendors. (Vendors applications deadline extended May 15, by 5:00 p.m.)
For more information call (561) 502-8968/ (561) 201-8009

To view Haitian Heritage Month flyer visit:
http://www.gladesinitiative.org/downloads/4.25.11/celebratelife.pdf
Click here for Vendor Application: http://www.gladesinitiative.org/downloads/5.9.11/HASC.pdf
To view brochure visit: http://www.gladesinitiative.org/downloads/5.9.11/HASCbrochure.pdf

Family and Friends Day~ Mental Health Month Celebration

May 19, 2011 from 2:00pm—6:30pm, Hotdogs, Available resource information, youth activities and prizes.
Federation of Families of Florida, Inc. is hosts the event at The Community United Methodist Church, 401 S. W. 1st Street, Belle Glade, FL 33430
For more information or registration contact Tandra Jones at (561) 993-3435

To view event flyer visit:
http://www.gladesinitiative.org/downloads/5.16.11/Familyandfriendsday.pdf

Glades Technical Advisory Committee's (GTAC) January Meeting

The GTAC January meeting will be held Thursday, **May 26, 2011** at the **Canal Point Community Center** from 9:30 am to 11am.

Attached are the meeting dates for the rest of the year:
http://www.gladesinitiative.org/downloads/1.10.11/2011GTACMeetingDates.pdf

GTAC is a program of the Palm Beach County Office of Community Revitalization (OCR). For information, visit http://www.pbcgov.com/ocr/gtac or call Duane Gainer at 561-233-5318.

Palm Tran is hosting an open house

Wednesday, May 18, 2011 from 6:00 p.m. to 8:00 p.m. You are invited to attend the open house to (1) learn more about the Transit Development Plan and (2) let us

know what you think about existing Palm Tran service and potential improvements to Palm Tran service.

1. Meeting will be held at the Belle Glade Library, 530 South Main Street, Belle Glade - (561) 996-3453

   More information about the Transit Development Plan update can be found at www.PalmTranTDP.com. You can also e-mail feedback to comments@PalmTranTDP.com

   For more information visit: http://www.gladesinitiative.org/downloads/5.16.11/PalmTran.pdf

Planning meeting for Youth Summit & Tri-city Slam Dunk

Wednesday, May 18, 2011 at 10:00 a.m. join the first planning meeting for the Youth Summit and Tri-City Slam Dunk.

Location: City of Pahokee Parks & recreations, Pahokee, FL

For more information call Vernell (561) 996-1600 ext. 1620 or send an email: vernell_williams-desrosier@doh.state.fl.us

Learn more about the "Champions for the Healthiest Community in the Nation" at www.pbchd.com

Community Baby Shower and wellness fair and other great family events…

Saturday, May 21, 2011, 10:00 a.m. -1:00 p.m. The Bridges at Pahokee and Belle Glade will be having a Community baby Shower and Wellness fair
Explore the total health of your new or expected baby and your entire family. Enter to **Win Prizes**!! Lunch Provided

Location: Pahokee Elementary Cafeteria, 170 S Barfield Hwy. Ste 102 Pahokee, FL or 816 N Canal St. Belle Glade, FL

For more information please call 561-899-1650

Bridges at Pahokee & Belle Glade full schedule:
http://www.gladesinitiative.org/downloads/5.16.11/BAP.pdf
To view "About me Collage" flyer visit:
http://www.gladesinitiative.org/downloads/5.16.11/AboutMeCollageflyerBoth.pdf
To view Community shower and wellness fair event flyer in English or Spanish visit:
http://www.gladesinitiative.org/downloads/5.16.11/CommunityBabyShowerspnen.pdf

2nd Annual Muck City Fest hosted by James Lee of the Tampa Bay Buccaneers

Saturday, June 11, 2011 8:00 a.m.-4:00 p.m. Join James lee an offensive lineman for the Tampa Baby Buccaneers and former Glades Central raider will be hosting his 2nd Annual "Muck City Fest". Over 20 children participated in the first ever NFL football camp in Belle Glade, along with Mayor Steve Wilson. A day filled with fun and activities. Objective is to use football as a mean to introduce the community children to more positive activities.

Event will take place at Lake Shore Park, 1224 SW Ave E Place, Belle Glade

For more information call Kevin (561) 215-3717 or Karin

To view full details visit: www.jtlchildrensfoundation.org

Pahokee Youth Enrichment Academy (PYEA) has a free summer camp

Free Summer Camp is available to community youth ages 5-12 years old who currently have a CTC-A or School readiness scholarship through Family /central.
Camp starts June 6, 2011- August 5, 2011 from 7:30 a.m. to 5:30 p.m.

For more information contact Erickia Abrahms (561) 924-9731

To view camp flyer visit: http://www.gladesinitiative.org/downloads/5.16.11/CampFlyer.pdf
To view full details visit: http://www.gladesinitiative.org/downloads/5.16.11/PYEA.pdf

The Leadership Beyond Sports Award

June 23, 2011, from 7:00 p.m. to 9:00 p.m. An award ceremony will be held in honor of those who have or had active involvement with sports as an opportunity to positively affect the lives of the Glades area youth beyond the basketball courts, the track and the football fields.

Honorees: Mr. Daniel S. Bythwood a devoted member of our community, Coach Louis Butts has dedicated his self in the Glades community with several sports and activities. Auquan began the "Anquan Boldin Foundation" that has also given back to the community.

Ceremony will be held at the Dolly Hand Culture Arts Center, 1977 Southwest College Drive Belle Glade, FL 33430

Sponsors needed for more information contact Jermaine Webb (321) 848-6269
To view event letter visit: http://www.gladesinitiative.org/downloads/5.16.11/Leadership.pdf

Leadership Glades is accepting applications for 2011- 2012

Orientation **September 21, 2011** A Leadership Development program is accepting applications for 2011- 2012 class year.

Applications for Leadership Glades are available at the Glades area Chamber of Commerce or online at: http://leadershipglades.com/
Deadline for submission of this application is August 12, 2011.

Belle Glade Chamber of Commerce, 540 South Main Street, Belle Glade, FL 33430
For more information call (561)996-2745

To view application visit: http://www.gladesinitiative.org/downloads/5.16.11/LGapplication.pdf
To view full details and brochure visit:
http://www.gladesinitiative.org/downloads/5.16.11/LGbrochure.pdf

Free Family Therapy and intervention for returning Veterans and their families

Free program to veterans and their families. The program provides veterans and their families with necessary skills to cope with the stressors of returning from deployment and the return to family life.

For more information call Adina Hodge (561) 383-5914

To view program details visit:http://www.gladesinitiative.org/downloads/5.16.11/Oakwood.pdf

Guardian Ad Litem needs volunteers

Guardian ad Litem is looking for a few good volunteers to SpeakUp! For Kids!

The Guardian Ad Litem program of Palm Beach County is in need of volunteers to help us meet our mission of ensuring that every abused and neglected child in Palm Beach County has a court-appointed Guardian ad Litem (GAL).

The program needs volunteers to become GALs as well as volunteers to assist with fundraising and administrative duties.

To learn more, please visit our website at **www.galpbc.org** or contact our office at 561-355-2773.

To view full details visit: http://www.gladesinitiative.org/downloads/5.16.11/GAL.pdf

Newsletter for Office of Community Revitalization's

The Office of Community Revitalization' Community Connect is an e-mail communication intended to provide Palm Beach County residents and all interested parties with information regarding grant opportunities, relevant community events, and tools or information that can be used to assist in community revitalization efforts.

If you have any questions, comments and/or suggestions about OCR's "Community Connect" publication or if there is something you would like to see, contact Audley Reid, Senior Planner, at 233-5567 or call the OCR at 233-5311.

See link for newsletter details:
http://www.gladesinitiative.org/downloads/5.16.11/CommunityConnectMay2011.pdf

Clerk and Comptroller host "Board of County Commissioners Meeting" in West Palm Beach

Tuesday, May 17, 2011, 11 a.m. As the Board prepares to work on next year's budget, this Year-End Financial Review will include an examination of how your tax dollars were managed during the previous fiscal year and recommendations for the year ahead. If you're unable to attend the presentation, which is scheduled for 11 a.m. in the Commission Chambers, please watch on Channel 20.

Governmental Center, West Palm Beach

To view event visit: http://www.gladesinitiative.org/downloads/5.16.11/clerk&comptroller.pdf

Unleashing the power of the board: Becoming more effective in challenging times

Wednesday, May 18, 2011 at 4:00 p.m. – 6:00 p.m. Be part of this free workshop!

Learn you role as a board and expectations of board members, Learn key components of effective board- CEO relationships, Signs of board member dissatisfaction and poor board performance and ways to address them, Strategies to make board meetings more effective and strategic

Workshop will be held at The Children's Service Counsel, 2300 High Ridge Road, Boynton Beach, Florida 33426

To view details visit: http://www.gladesinitiative.org/downloads/5.16.11/nonprofits.pdf

4th Annual "Splash to recovery" Free resource event

Friday, May 20th, 2011 from 4:00 p.m. to 7:00 p.m. Celebrate mental health month at the "4th Annual splash to recovery". Splash to recovery is an alcohol-free, substance abuse and mental health resource event with water activities, children's fames, food and exhibitors of services and resources to aid families. Water park admission is free!

Location: Calypso Bay Waterpark, 151 Lampstein Ln, Royal Palm Beach, FL 33411-4203
for more information call: (561) 650-6860

To view event details visit: http://www.gladesinitiative.org/downloads/5.16.11/Mentalhealthmonth.pdf

Community Developmental Screening Clinic

May 25, 2011 From 9:00 a.m. - 12:00 p.m. FAU, Center for autism and related disabilities will conduct free developmental screenings throughout our service area, which includes Palm Beach, Martin, St. Lucie, Indian River and Okeechobee counties. This service is critical for children and families experiencing developmental concerns because early screening leads to early diagnosis and early intervention.

Where: Vickers's House South, 3801 Georgia Avenue, West Palm Beach, FL 33405

For more information call (561) 804-4975 to schedule your child for a screening.

To view flyer in English or Spanish visit:
http://www.gladesinitiative.org/downloads/5.16.11/Autism.pdf

Child Protective Investigator needed in Palm Beach County

Qualifications: Successful applicants will possess a bachelor's degree and at least one year of experience in a child welfare-related field such as social work, law enforcement or education. A master's degree in social work or a related field will compensate for the one-year minimum of work experience. Individuals with law enforcement experience, including retired officers, are encouraged to apply, with strong consideration given to work experience. Applicants with 10 years of law enforcement experience with a minimum of five years in an investigative capacity, or 15 years of law enforcement experience with no investigatory experience, are not required to hold a bachelor's degree. Candidates with a two-year degree and three-plus years of child welfare-related experience are also encouraged to apply.

Annual Salary: $34,829.26

To apply for this job please go to https://peoplefirst.myflorida.com

The Taylor Communicator PBC board of County Commissioners

To view Volume 2, Issue 14 visit:
http://www.gladesinitiative.org/downloads/5.16.11/Thetayloscommunicator.pdf

2011 Annual Conference& Justice Institute in Orlando, FL

July 12-13, 2011. The Conference will include two full days of education sessions in criminal justice and behavioral health best practices. The highly successful Consumer Artist Gallery and Reception will be held on Tuesday evening, July 12.

Leading change, Inspiring Innovation. Collaboration in behavioral health and criminal justice.
Conference will be held at The Renaissance Orlando at SeaWorld, Orlando, FL.

For information contact: Florida Partners in Crisis Gail Cordialgailc@flpic.org • 321-453-8825
Florida Alcohol and Drug Abuse Association Michelle Burdickmburdick@fadaa.org • 850-878-2196

To view full details visit: http://www.gladesinitiative.org/downloads/5.16.11/2011FLPICC.pdf
To view flyer visit:http://www.gladesinitiative.org/downloads/5.16.11/FLPICsavethedate.pdf

Previous Postings

Community Worship Service at Mt. Zion AME Church

Sunday, May 29, 2011 at 7:00 p.m. Speaker will be Rev. Patti Aupperlee of First United Methodist Church

Place of Worship Mt. Zion AME Church(Multi-purpose building) 908 S.W. Ave B Place, Belle Glade, FL

To view flyer visit:http://www.gladesinitiative.org/downloads/5.9.11/worship.pdf

Planned Approach to Community Health (PATCH) Meeting

The PATCH Meeting will be held on Tuesday, **May 17, 2011** @ 9 a.m. at Glades Initiative, Inc.-141 SE Ave. C, Belle Glade, FL 33430.

Everyone is welcome to attend!

Glades Interagency Network (GIN) Meeting

The GIN Meeting will be held on Tuesday, **May 17, 2011** @ 11:00AM at LSF/PEPPI Head Start Program-301 SW 8th Street, Belle Glade, FL, 33430.

For more information contact Autrie M. Williams at (561) 996-1718; Fax: (561) 996-0287.

Lutheran Services of Florida/PEPPI Head Start Program is accepting applications for 3 & 4 year olds

Lutheran Services of Florida/PEPPI Head Start Program is conducting its 2011/2012 School Year's Mass Recruitment

The program is now accepting applications for 3 & 4 year old children to include children that meet the criteria of being classified as homeless and or living in shelters and children with disabilities.

For additional information please contact Barbara Green, Nadine Dessaint or Edith Pino at (561) 996-1718 or Fax # (561) 996-0287.

To view full details visit: http://www.gladesinitiative.org/downloads/5.9.11/PSA.pdf

A 70's Dance for a purpose

Saturday, June 10, 2011 at 8:00 p.m. An all adult affair! Come out and enjoy yourself revisiting the 70's, while helping to support the Boys & Girls Clubs of the Glades. Tickets are available now!!!!!!

70's Style dancing, food and fun!!! Win Great Prizes…….Soul Train Scrabble Board, Name that 70's Tune and more!!!! *Grand Prize 3day/2night Cruise for Two

For more information call Veronica Bettard (561) 584-2842 or (561) 992-5399

To view event flyer visit: http://www.gladesinitiative.org/downloads/5.9.11/70'sflyer.pdf

Job opportunities in The Glades area ~ From The Sun newspaper

For job posting in Glades area view:
http://www.gladesinitiative.org/downloads/5.9.11/jobposting.pdf

Palm Beach State College Foundation has scholarship funding available for Glades area students

The Summer Term Foundation Application will be available online through 4:00 PM on May 17, 2011 at: http://www.palmbeachstate.edu/x6561.xml. Interested applicants can also meet with Financial Aid representatives at the Belle Glade campus who will be available on a walk-in basis during office hours (9:00 AM – 7:00 PM) for assistance with the online scholarship application. Graduating High School Seniors can make an advisement appointment to set up their educational plan(s).

The Belle Glade campus is located at 1977 College Drive in Belle Glade.

For more information, please call Marcia E. Hardney, Ph.D. (561) 993-1133.

Reduce Your Energy Bill with help from the Weatherization Assistance Program

Weatherization Assistance Program - Geographic Area: Martin, St. Lucie, Palm Beach, Indian River

The Weatherization Assistance Program, funded through the U.S. Department of Energy, enables low-income families to permanently reduce their energy bills by making their homes more energy efficient. By reducing the energy bills of low-income families instead of offering aid, weatherization reduces dependency and liberates these funds for spending on more pressing family issues. On average, weatherization reduces heating bills by 31% and overall energy bills by $274 per year.

Indiantown Non-Profit Housing has been doing the Weatherization program for several years. In 2010, additional funds will be available under the program under the American Recovery and Reinvestment Act. This is not a home repair program. It's a program to increase your home's energy efficiency. For a list of qualifying guidelines and eligible repairs, refer to the Quick Facts link below. Call (877) 212-0309 or **email your request** to receive an application by mail.

Weatherization Quick Facts— a one page summary of the program

Download Home Repair Application

To view Vicker's House flyer visit: http://www.gladesinitiative.org/downloads/5.9.11/WAP.pdf

NewKita Group Inc. presents "1st Annual Walk for Change Festival" vendors needed

Saturday, August 20, 2011 at Lakeshore Park in the Belle Glade, FL.

Walk for Change is an event that celebrates organizations, individuals, and businesses that are working hard towards making a change in his or her community towards Better Health, Better Education, Economic Development, Job Creation, Bringing Communities Together and Crime Prevention.

For more information contact Jerkita (561) 829-6419 or via E-mail at enhancing@newkitagroup.org. Event website: www.WFCFestival.weebly.com

To view flyer visit:http://www.gladesinitiative.org/downloads/4.25.11/Newkita.pdf
Letter to vendors visit:
http://www.gladesinitiative.org/downloads/5.9.11/Walkforchangevendors.pdf

7th Annual Nonprofit Hurricane Preparedness Day

Wednesday, June 1, 2011 8:30 a.m. – 1:00 p.m.

The focus of this year's Nonprofit Hurricane Preparedness Day conference is you! As a nonprofit leader and direct service provider, recognizing and knowing how to respond to stress in yourself helps you to better serve those who need and depend on you before, during and after a disaster. An exciting line-up of speakers as well as a hands-on Disaster Recovery Stress Management Tabletop Exercise is planned.

Event will be held at Palm Beach Atlantic University, West Palm Beach

To register, click here.

To view full details visit:
http://www.gladesinitiative.org/downloads/5.9.11/HurricanePreparedness.pdf

Join the President's Fatherhood and Mentoring Initiative

Its goal: to encourage individuals, especially fathers, to be involved in the lives of their children, and to be positive role models and mentors for other children in their lives and communities. Joining the Initiative is just one way to show that you will do your part to be a positive and supportive figure in the lives of children to help them reach their full potential.

Join the Presidents' Fatherhood Initiative by signing up at: www.fatherhood.gov/initiative
En Español -www.fatherhood.gov/iniciativa

To view details visit: http://www.gladesinitiative.org/downloads/5.9.11/Fatherhood.pdf

Free PAP Days at Planned Parenthood

Someone you know might be at risk for cervical cancer. Call to schedule your free appointment

For more information or schedule an appointment call (561) 962-4700

To view dates and locations visit:
http://www.gladesinitiative.org/downloads/5.9.11/freepapsmear.pdf

Join the "SLAM DUNK" to a healthier lifestyle

Spring Explosion, **Saturday, May 21, 2011** 9:15am - 4:15pm

Slam Dunk project is established to help Palm Beach County youth develop and enhance his/her own sense of self-worth.

For more information contact: Linda Warren at 561-635-4328 or Jackie Reed-Tufts at 561-275-7001

To view event flyer visit: http://www.gladesinitiative.org/downloads/4.11.11/Springexplosion.pdf
To view the release of article visit:
http://www.gladesinitiative.org/downloads/5.9.11/Slamdunkrelease.pdf

Bank of America Charitable Foundation 2011 Neighborhood Excellence Initiative

Bank of America wants to recognize the significant efforts of the organizations and individuals making a difference in the communities they serve by providing them with grant support and leadership development opportunities.

The Neighborhood Excellence Initiative is divided into three categories of awards… Such as Neighborhood Builders, Local heroes, Student Leaders

To view information visit: http://www.gladesinitiative.org/downloads/5.9.11/BOA.pdf

Portal Project presentation ~ The importance of data

Wednesday, May 25, 2011, 3:00 p.m. to 4:00 p.m. Space is limited!
PBC Counts "Good decisions begin with good data"

Learn about how the site will keep an unprecedented number of local indicators that provide geographic comparisons (local, state, national) up to date and available for free, and how the project will begin to customize its indicator offerings and integrate community mapping and other sophisticated analysis.

West Palm Beach Public Library, Third Floor Auditorium, 411 Clematis St, West Palm Beach, FL 33401(Parking & Directions)

Call (561) 355-4705 or Greta Von Unruh at (561)366-9558 to RSVP: gvonunruh@edri-research.org)

To view full details visit: http://www.gladesinitiative.org/downloads/5.9.11/data.pdf

Palm Beach Community Services offers a Invitation for Bid

Palm Beach County Community Services, Division of Human and Veteran Services is very excited and pleased to forward to you the link (please see below) to the Request for Proposal (RFP) for the Palm Beach County Homeless Resource Center Operation.

If you have any questions contact Donna Pagel (561) 616-6821 or email address dpagel@pbcgov.org.

Please follow this link to the Invitation for Bid (IFB) or a Request for Proposal (RFP) page to RFP NO. 11-062/DP:

To view flyer visit: http://www.gladesinitiative.org/downloads/5.9.11/homeless.pdf

To access the link visit: http://www.pbcgov.com/purchasing/bus_op/IFB_RFP/

Glades Area Pantries (GAP) Christian academy is now open for enrollment for the new school year

GAP's a new, private, non-denominational, Christian school . School is opening in August 2011, in Pahokee. Christian Education with a Focus on Art, Dance, Drama, Music. Kindergarten – 12, 4 year olds are also permitted. Scholarships available but limited, must sign up by May 21, 2011.

For more information contact Barbara or Kaye (561) 924-7776

To view flyer visit: http://www.gladesinitiative.org/downloads/5.2.11/GAP.pdf

Quit smoking ongoing classes

When: Wednesdays at 1:00PM & Thursdays 6:00PM, Ongoing classes

Where: Lakeside Medical Center ,39200 Hooker Hwy, Belle Glade, FL. 33430

For more information Contact: Karen Schutzer or Takela Golson (561)996-6571 X 492
To view flyer and details visit:http://www.gladesinitiative.org/downloads/5.2.11/Quitsmoking.pdf

Glades Central Commencement Exercises 2011

Wednesday, May 25, 2011 at 7:00 p.m. Ceremony will be held at Glades Central Community High School Gymnasium,1001 South West Avenue M, Belle Glade, Florida 33430.

For more information contact Kevin Wright (561) 993-4400 ext. 44402
To view full details visit: http://www.gladesinitiative.org/downloads/5.2.11/GCCHS.pdf

Take charge of your life

Would you like to have a healthier life style? Take charge of your life…

Wednesday, May 18, 2011 at 12:00 p.m. Dennis and Karen McCarthy host a gathering. Learn ways to lose weight, have more energy, prevent a stroke and many other healthier choice will be discussed.

Belle Glade Chamber of Commerce,540 South Main Street, Belle Glade, FL 33430

For more information contact Karen McCarthy karenm@gladesgasac.com 561-996-3770

To view flyer visit:http://www.gladesinitiative.org/downloads/5.2.11/Chamberlunch.pdf

Pahokee Housing Authority

Check out the PHA Informer for the month of April events below.

Click here: http://www.gladesinitiative.org/downloads/5.2.11/PHA.pdf

Free CME/CEU event -"Using Motivational interviewing to help patients quit smoking"

Thursday, May 19, 2011, starts at 10:30 a.m. Come join a **Free** CME/CEU event…Presented by Dr. Linda Carter Sobell, Professor and associate Director of Clinical training at Nova Southeastern University's Center for Psychological studies.

Location of event will be at Lakeside Medical Center, 39200 Hooker Highway, Belle Glade, FL 33430

For more information call (877) 819-2357 or email info@eahec.org
To view full event schedule visit: http://www.gladesinitiative.org/downloads/4.25.11/CME.pdf

Children's Special Needs Equipment Fund available

Special Needs Equipment Fund

The United Way of Palm Beach County administers the Special Needs Equipment Fund, which is funded through the Children's Services Council(CSC) and provides up to $5,000 per year, per child for durable medical equipment."

*Wheelchairs *Specialized strollers *Feeding chairs *Bath and shower systems/chairs *Hearing aids

For more information please contact Linda Roman at (561) 375-6639 or via e-mail lindaroman@unitedwaypbc.org or go to www.unitedwaypbc.org

To view details visit: http://www.gladesinitiative.org/downloads/3.28.11/SNEF.pdf

Community Resources Event in West Palm Beach

Thursday, May 19, 2011 11:00 a.m. to 5:00 p.m. Attend a Free 3 in 1 life empowerments event for all ages.

Career Fair, Health Education Fair, Business fair

Event will be held at 3405 Forest Hill Blvd, West Palm Beach, FL 33406

For more information call (561) 880-7264

To view event flyer
visit:http://www.gladesinitiative.org/downloads/4.18.11/CommunityResources.pdf

Palm Tran is currently updating its Transit Development Plan, which is a document that will guide transit planning, development, and operations over the next 10 years. The Transit Development Plan affects funding and future changes to Palm Tran Service, so your feedback is very important. An open house will be held at the Belle Glade Branch of the Palm Beach County Library on Wednesday, May 18, from 6:00 p.m. to 8:00 p.m. You are invited to attend the open house to (1) learn more about the Transit Development Plan and (2) let us know what you think about existing Palm Tran service and potential improvements to Palm Tran service.

More information about the Transit Development Plan update can be found at www.PalmTranTDP.com. You can also e-mail feedback to comments@PalmTranTDP.com.

Thank you!

Kelly Blume
Senior Engineer
Kittelson & Associates, Inc.
225 East Robinson Street, Suite 450
Orlando, FL 32801
www.kittelson.com
kblume@kittelson.com
407.540.0555 (main)
407.373.1107 (direct)
407.690.6277 (cell)
407.540.0550 (fax)
Transportation Engineering / Planning
Anchorage | Baltimore | Bend | Boise | Brisbane | Fort Lauderdale | Orlando | Portland | Reston | Tucson

IMPACT EVENT

Palm Tran Open House on Transit Development Plan: Lake Worth

When:	**May 19, 6:00PM - 8:00PM -** Add to Calendar
Where:	Lantana Road Branch, 4020 Lantana Road, Lake Worth - Accessible via Palm Tran Routes 63 and 71 - View Map
Info:	Visit Website
Cost:	Free
Contact:	comments@palmtranTDP.com

Share

EMAIL

Palm Tran, Palm Beach County's public transportation system, is currently updating its Transit Development Plan (TDP) that will guide planning, development, and operations for the next 10 years. The TDP is important for securing Palm Tran's funding and for future changes to Palm Tran service. Public involvement is a key component in developing a TDP. Therefore, Palm Tran will host three open houses at Palm Beach County branch libraries. Riders of the transit system are encouraged to attend and offer feedback and suggestions for the Transit Development Plan. For more information, please visit www.palmtranTDP.com.

Posted by **Nicole Stroud** of **YourPBC.org**

Related Events

SEP 23 **9AM**, Friday, September 23, 2011
Project Homeless Connect

SEPTEMBER 2011

« ‹ TODAY › »

sun	mon	tue	wed	thu	fri	sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Submit Your Event

*Palm Beach County only

Ongoing Events

Sep 01 - Oct 20
Arabic for Beginners
Explore the world of the Arabic language; learn about important cultural topics; develop basic speaking, listening and writing skills in modern standard Arabic. This class will ...

Sep 15 - Oct 18
Auditions for Narnia the musical
Sol Children Theatre Troupe announces auditions for Narnia the musical. Thursday, September 15, 2011 ... 7:30 – 9pm; Saturday, September 17, 2011 &...

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Informed and engaged communities.

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Community Foundation for Palm Beach and Martin Counties



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IMPACT EVENT

Palm Tran Open House on Transit Development Plan: Jupiter

When:	**May 21, 6:00PM - 8:00PM -** Add to Calendar
Where:	Jupiter Branch, 705 Military Trail, Jupiter - Accessible via Palm Tran Route 10 - View Map
Info:	Visit Website
Cost:	Free
Contact:	comments@palmtranTDP.com

Share
EMAIL

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The Palm Beach Post

Palm Tran invites route ideas at forum

By **ANA M. VALDES**

Palm Beach Post Staff Writer

Updated: 9:22 p.m. Sunday, May 29, 2011
Posted: 8:59 p.m. Sunday, May 29, 2011

At a recent Palm Tran public meeting to encourage the community to make suggestions for the Palm Beach County bus service's 10-year transit development plan, West Palm Beach resident Manny Escamilla made one thing clear: He wants a bus to take passengers all the way to Caridad Center in western Boynton Beach.

Buses on Boynton Beach Boulevard currently only travel as far west as Military Trail. Escamilla, a volunteer at Caridad, sees dozens of patients having to walk from there past Florida's Turnpike to get medical care from the nonprofit health center.

"It's so far out there. It's really needed," Escamilla told Palm Tran officials. He even added a green sticker on a Palm Beach County road map to indicate where he wants that bus route to go.

That's the type of feedback that Palm Tran officials are looking for at their last public forum on the transportation plan from 6 to 8 p.m. Tuesday at the Jupiter branch of the Palm Beach County Library.

They say the information will be used to help them make decisions about adding new routes, changing existing routes and buying additional buses for the next decade.

"This is just another way of reaching out to get public input about what else Palm Tran should or should not be doing over the next 10 years," said Chuck Cohen, Palm Tran's executive director.

Cohen said that these plans, required by the Florida Department of Transportation, have been previously done every five years, with updates every two to three years, but the state department this year decided to plan 10 years ahead.

Cohen added that a crucial new factor for Palm Tran's planning is the sudden increase in bus ridership in Palm Beach County, due in large part to soaring gas prices.

"A year ago, we would have been looking at a 3 to 4 percent ridership increase, but now we are looking at a 10 to 11 percent ridership increase," he said.

In April, for example, about 3,000 more passengers rode the bus each weekday than last year, Cohen said.

Besides the public meetings, Cohen and his colleagues at Palm Tran have distributed surveys on popular bus routes, such as the U.S. 1 and Military corridors to get feedback.

Cohen says the plan must be approved by the Palm Beach County commission before it is sent to FDOT.

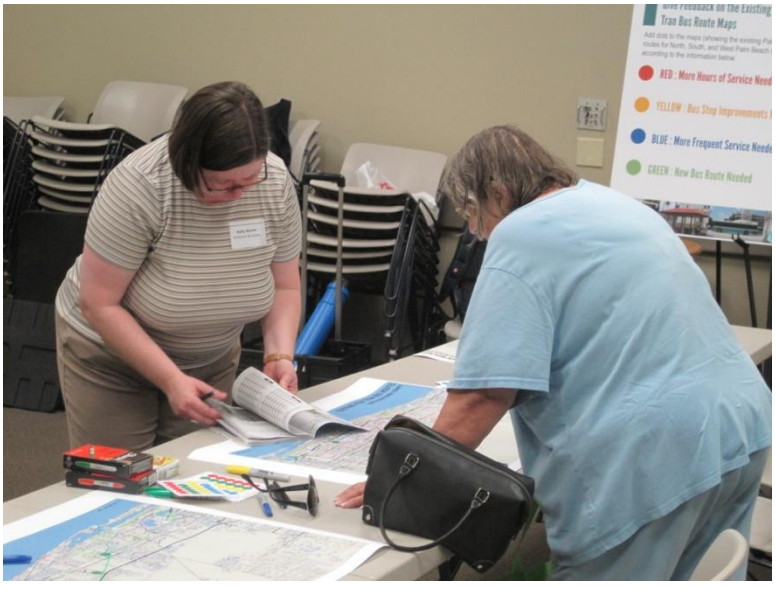
Find this article at:

http://www.palmbeachpost.com/news/state/palm-tran-invites-route-ideas-at-forum-1506635.html

Open Houses


MEMORIAL DAY
All Palm Beach County Library System locations
will be closed on Monday, May 30,
for Memorial Day.
No materials will be due on that day.
PALM TRAN TDP
OPEN HOUSE
BELLE GLADE
BRANCH
LIBRARY
HOURS
MONDAY - WEDNESDAY
10:00 AM - 8.00 P M
THURSDAY - SATURDAY
10:00 AM - 5:00 PM


EXIT
1 WHAT IS A TDP?
2 WHY IS THE CURRENT TDP
BEING UPDATED?
3 WHEN WILL THE TDP UPDATE BE FINISHED?
4 WHAT ARE THE KEY TRENDS
IN THE TDP UPDATE?
5 HOW CAN YOU ASSIST


Tran Bus Route Maps
RED : More Hours of Service Need
YELLOW : Bus Stop Improvements
BLUE : More Frequent Service Needs
GREEN : New Bus Route Needed


Palm Beach County
LIBRARY
System
www.pbclibrary.org
Dream. Discover.
PALM TRAN TDP
OPEN HOUSE
6:00PM – 8:00PM
All Palm Beach County Library System loca
will be closed on Monday, May 30,
for Memorial Day.
No materials will be due on that day.


4 WHAT ARE THE KEY THEMES
1 Improve Mobility
2 Improve Image and Usage of Transit
3 Continue Financial Stewardship
4 Support Economic Growth
5 Continue Environmental Stewardship
6 Improve Quality of Life
7 Enhance Safety & Security
3 WHEN WILL THE TDP UPDATE BE FINISHED?


PALM TRAN TDP
OPEN HOUSE
2011-2021 Transit Development Plan
www.palmtrantdp.com
WHAT IS THE PURPOSE OF THE OPEN HOUSE?
ANSWER: The purpose of the open house is to....
1 Inform the public about Transit Development Plans (TDPs).
2 Share information about the Palm Tran TDP update.
3 Detail the project schedule.
4 Explain the key themes for the goals and objectives to be included in the TDP update.
5 Receive public input about possible Palm Tran improvements.


ACCOMPLISHMENTS
PALM TRAN TDP
OPEN HOUSE


4 WHAT ARE THE KEY THEMES OF THE TDP UPDATE?
1 Improve Mobility
2 Improve Image and Usage of Transit
3 Continue Financial Stewardship
4 Support Economic Growth


4 WHAT ARE THE KEY THEMES OF THE TDP UPDATE?

PROJECT WEB SITE - HOME PAGE

Palm Beach County Transit Development Plan 2011 - 2021

Home

En Español

Palm Tran, the division of Palm Beach County government that operates the fixed-route and ADA paratransit public transportation system, is responsible for the production of a Transit Development Plan (TDP). The Florida Department of Transportation (FDOT) requirements and guidelines for Transit Development Plans call for a description of the transit agency's vision for public transportation along with an assessment of transit needs in the study area and the development of a staged implementation program to set priorities for improvements. FDOT requires a TDP in order to maintain eligibility for state Block Grant funding.

Palm Beach County is the largest geographically of the 67 counties in Florida. Land area alone is approximately 2,023 square miles. The eastern portion of the County is renowned for its beaches and its thriving urban area, while the western area of the County is more rural with wetlands covering the southwestern-most part and agriculture dominating the northwestern end. For the year 2000 census, the county's population was 1,131,184 people. Approximately 52 percent of the County's population lives in one of the 38 municipalities. West Palm Beach and Boca Raton are the largest cities in the county, while Hypoluxo and Wellington are the fastest growing.

The Transit Development Plan is also a policy document that integrates transit goals and objectives with those of adopted plans, including the MPO Long Range Transportation Plan and local government comprehensive plans. FDOT strongly encourages a strategic approach to the planning process and emphasizes the importance of public participation in the preparation of the Transit Development Plan.

The completed plan will include:

- Analysis of the effects of land use, state and local transportation plans, other governmental actions and policies, socioeconomic trends, organizational issues, and technology on the transit system
- An estimation of the community's demand for transit service
- An assessment of the extent to which the land use and urban design patterns in the provider's service area support or hinder the efficient provision of transit service
- Palm Tran's vision, mission, goals, and objectives
- Alternative courses of action
- Ten-year implementation program
- An intergovernmental coordination plan

Public engagement is key as Palm Tran and its partners work to develop your transit plan for the next 10 years. Get involved! To submit comments, ask questions or to make suggestions, email comments@palmtranTDP.com

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PalmTran es una división del gobierno del Condado de Palm Beach que opera el servicio de transporte público. Este servicio consiste en rutas fijas y servicio para discapacitados. PalmTran es responsable de producir un Plan de Desarrollo para el Servicio Público, (TDP por sus siglas en inglés). El Departamento de Transportes de Florida (FDOT por sus siglas en inglés) requiere que PalmTran desarrolle una descripción de su visión para el transporte público así como un estudio de sus necesidades y un programa para una implementación por etapas. Para que

Events

Presentation to the Palm Beach MPO Technical Advisory Committee
10/5/2011 9:00 AM - 10/5/2011 10:30 AM
(GMT-04:00) Atlantic Time (Canada)

Presentation to the Palm Beach MPO Citizens' Advisory Committee
10/5/2011 1:30 PM - 10/5/2011 3:00 PM
(GMT-04:00) Atlantic Time (Canada)

Presentation to SFRTA's Planning Techical Advisory Committee
10/19/2011 10:30 AM - 10/19/2011 12:00 PM
(GMT-04:00) Atlantic Time (Canada)

September 2011 ◄ ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

PalmTran califique al financiamiento conocido como Block Grant, FDOT requiere del desarrollo de un TDP.

El Condado de Palm Beach es el más grande geográficamente de los 67 condados de Florida. Este condado mide aproximadamente 2,023 millas cuadradas. La porción oriental del condado es reconocida por sus playas y vibrantes zonas urbanas, mientras que la porción occidental es más rural cubierta por pantanos en su parte suroeste y dominada por la agricultura en el noroeste. El censo del año 2000 revelo una población de 1,131,184 personas. Aproximadamente el 52% de la población del condado vive en una de las 38 municipalidades. West Palm Beach y Boca Ratón son las ciudades más grandes del condado, mientras Hypoluxo y Wellington son aquellas con mayor crecimiento.

El TDP es un documento legal que integra las metas y objetivos del servicio público con las metas y objetivos de los planes urbanos de gobiernos locales y el plan de transporte de la Organización Metropolitana de Planificación (MPO por sus siglas en inglés), conocido como el MPO Plan de Transporte a Largo Plazo (LRTP por sus siglas en inglés). FDOT incita al uso de métodos estratégicos durante la planificación y hace hincapié en la importancia de incluir a la comunidad durante la preparación del TDP.

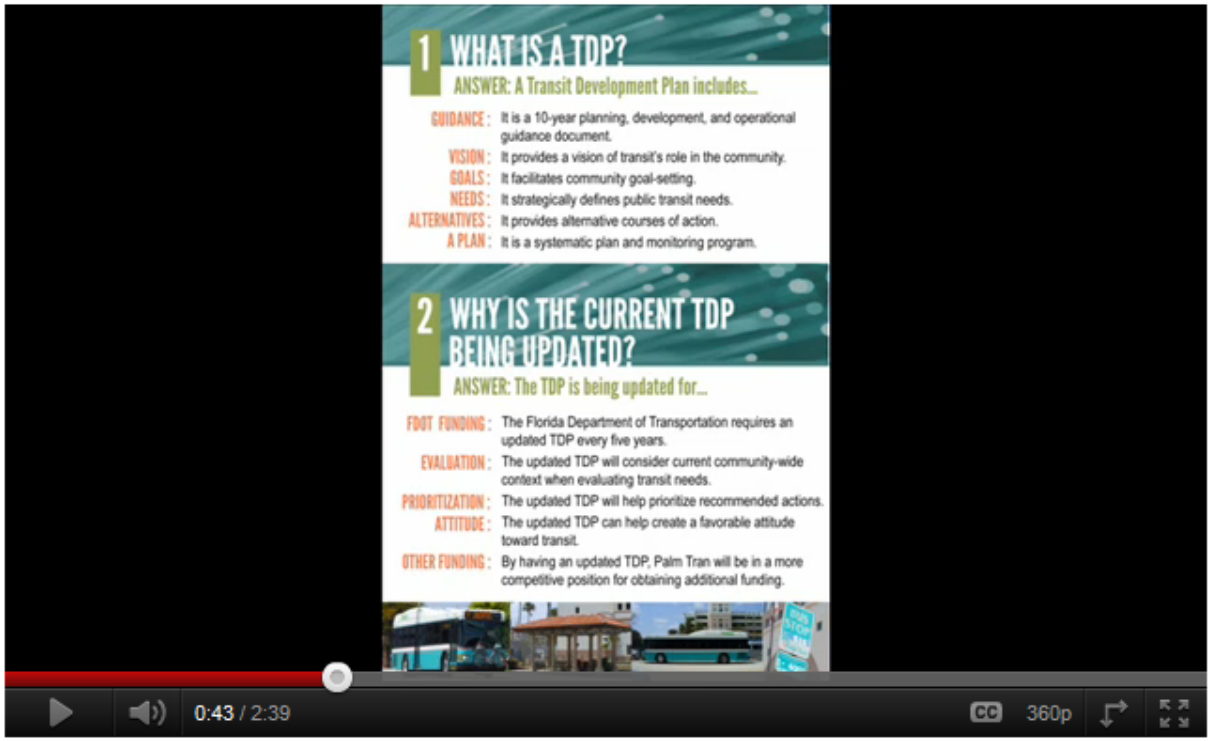
Una vez completado, el TDP incluirá:

- Análisis del impacto de zonificación, planes de transporte locales y estatales, políticas y acciones gubernamentales, tendencias socioeconómicas, problemática organizacional, y el uso de tecnología en el sistema de transporte público.
- Un estimado de la demanda existente
- Un estimado del impacto positivo o negativo del diseño urbano sobre el servicio publico
- La visión, misión, metas, y objetivos de PalmTran
- Acciones alternativas
- Programa de implementación para los próximos 10 años
- Plan de coordinación intergubernamental

La participación del público es clave durante el desarrollo del TDP para los próximos 10 años. Involúcrese! Mándenos sus opiniones, preguntas, o sugerencias al siguiente correo: comments@palmtranTDP.com

Palm Tran Transit Development Virtual Open House

PalmTranTDP | 1 video | Subscribe



Like | Add to | Share

13 views

Uploaded by PalmTranTDP on May 23, 2011

0 likes, 0 dislikes

Help us improve transit service in Palm Beach County. Visit www.palmtrantdp.com to learn more.

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People & Blogs

Tags:
Palm Tran TDP Transit Development Plan Beach County

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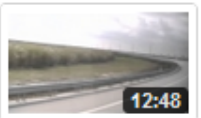
All Comments (0)

Reactions (0)

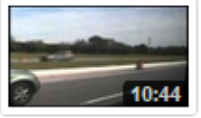
Respond to this video...

Your reaction?

Suggestions



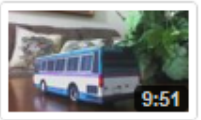
BUS RIDE ON BOARD PALM TRAN's 2006 GILLIG BRT G...
by MAR1NAB5180
230 views



BUS RIDE ON BOARD PALM TRAN's 2006 GILLIG ADV...
by MAR1NAB5180
424 views



AUDIO RECORDING OF PALM TRAN 2000 GILLIG
by MAR1NAB5180
912 views



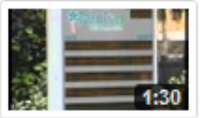
RETIRED. PALM TRAN BUS #1019 AUDIO RECORDING
by MAR1NAB5180
1,556 views



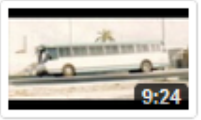
Palm Tran Gillig 30LF #0307 on the 94 in Deerfi...
by ih8thyssenkrupp
93 views



Palm Tran: Intermodal Transit Center
by pbcgov20
218 views



Palm Tran pension board to discuss funds
by WPTVnews
30 views



AUDIO RECORDING OF PALM TRAN's 1982
by MAR1NAB5180
1,086 views



Buses in Fort Lauderdale and Miami, Florida
by timosha21
998 views

PALM TRAN SERVICE BOARD

Thursday, February 17, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. *Approval of 02/17/11 Agenda **
4. *Approval of 1/20/2011 Minutes**
5. *Monthly Service Performance Reports
    A. Fixed Route Review Jan. 2010 – Sue Carames
    B. CONNECTION Review – John Coons
6. New Business
    A. TDP Review – Fred Stubbs

    B. BCT/Tri-Rail Transfer Fares – Gerry Gawaldo

7. Old Business
    A. Connection RFP Status

8. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning - Meeting Wednesday, 9 February – 1:00, Dale Smith Conference Room
    D. Alternate Funding
    E. Bus Pass
9. Comments from Members
10. Comments from Staff
11. Comments from Members of the Public
12. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

If a person decides to appeal any decision made by this Board with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, at his or her own expense, which record includes the testimony and evidence upon which the appeal is to be based. A copy of this agenda may be requested in another format.

PALM TRAN SERVICE BOARD

Thursday, March 17, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. *Approval of 03/17/11 Agenda **
4. *Approval of 2/17/2011 Minutes**
5. *Monthly Service Performance Reports
    A. Fixed Route Review Feb. 2010 – Sue Carames
    B. CONNECTION Review – John Coons
6. New Business
    A. Palm Tran Budget FY2011 and FY2012 Budget process – John Murphy

7. Old Business
    A. Connection RFP – Ron Jones
    B. Bus shelter/bench RFP – Gerry Gawaldo
    C. TDP Update – Fred Stubbs
    D. Discussion regarding public speaking at PTSB meetings – Chuck Cohen

8. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning - No meeting in March
    D. Alternate Funding
    E. Bus Pass
9. Comments from Members
10. Comments from Staff
11. Comments from Members of the Public
12. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

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PALM TRAN SERVICE BOARD

Thursday, April 21, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. *Approval of 03/17/11 and 04/21/11 Agenda **
4. *Approval of 2/17/11 Minutes and 03/17/11 Minutes**
5. *Monthly Service Performance Reports
    A. Fixed Route Review Apr 2010 – Sue Carames
    B. CONNECTION Review – John Coons
6. New Business
    A.
7. Old Business
    A. Connection RFP – Ron Jones
    B. Palm Tran Budget Update FY2011 and FY2012 Budget process – John Murphy
    C. TDP Update – Fred Stubbs
    D. Bus Shelter/Bench RFP Status update- Gerry
8. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning - No meeting in March
    D. Alternate Funding
    E. Bus Pass
9. Comments from Members
10. Comments from Staff
11. Comments from Members of the Public
12. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

If a person decides to appeal any decision made by this Board with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, at his or her own expense, which record includes the testimony and evidence upon which the appeal is to be based. A copy of this agenda may be requested in another format.

PALM TRAN SERVICE BOARD

Thursday, May 19, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. *Approval of 03/17/11, 04/21/11 and 5/19/11 Agenda **
4. *Approval of 2/17/11 Minutes, 03/17/11 Minutes, and 04/21/11 Minutes**
5. *Monthly Service Performance Reports
    A. Fixed Route Review, April 2011 – Sue Carames
    B. CONNECTION Review, April 2011 – John Coons
6. New Business
    A. Belle Glade Service, Routes 47 & 48

7. Old Business
    A. Connection RFP Update – Ron Jones
    B. Palm Tran Budget Update FY2011 and FY2012 Budget process – John Murphy
    C. TDP Update/Public Meeting Schedule and Presentation – Fred Stubbs
    D. Bus Shelter/Bench RFP , Bus Stop Contract Status update – Gerry Gawaldo
    E. TD Bus Pass
    F. Public Comment Process

8. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning - No meeting in May
    D. Alternate Funding
    E. Bus Pass
9. Comments from Members
10. Comments from Staff
11. Comments from Members of the Public
12. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

If a person decides to appeal any decision made by this Board with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, at his or her own expense, which record includes the testimony and evidence upon which the appeal is to be based. A copy of this agenda may be requested in another format.

PALM TRAN SERVICE BOARD

Thursday, June 16, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. *Approval of 6/19/11 Agenda **
4. *Approval of 2/17/11, 03/17/11, 04/21/11 and 5/19/11 Minutes**
5. *Monthly Service Performance Reports
    A. Fixed Route Review, May 2011 – Sue Carames
    B. CONNECTION Review, May 2011 – John Coons
6. Old Business
    A. Palm Tran Budget Update after 6/13/11 meeting of Board of County Commissioners
    B. Belle Glade Service, Routes 47 & 48**
    C. Public Comment Process**
    D. TDP Update – Fred Stubbs
    E. Connection RFP Update – Ron Jones
7. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning - No meeting in June
    D. Alternate Funding
    E. Bus Pass
8. Comments from Members
9. Comments from Staff
10. Comments from Members of the Public
11. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

If a person decides to appeal any decision made by this Board with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, at his or her own expense, which record includes the testimony and evidence upon which the appeal is to be based. A copy of this agenda may be requested in another format.

PALM TRAN SERVICE BOARD

Thursday, September 15, 2011
1:30 p.m. to 3:00 p.m.

AGENDA

1. Call meeting to order at 1:30 p.m.
2. Introduction of members
3. Approval of Agenda
4. Approval of Minutes
5. Monthly Service Performance Reports
    A. Fixed Route Review, August – Sue Carames
    B. CONNECTION Review, August – John Coons
6. New Business
    A. Palm Tran Roles in Tropical Storm/Hurricane –Tom Maxwell & Charlie Boettiger
7. Old Business
    A. TDP Update – Fred Stubbs & Kelly Blume
    B. Connection RFP Update – Ron Jones
    C. Budget Update
8. Committee Reports
    A. Marketing
    B. Paratransit
    C. Planning
    D. Alternate Funding
    E. Bus Pass
9. Comments from Members
10. Comments from Staff
11. Comments from Members of the Public
12. Adjournment

*BACKUP PROVIDED ** ACTION REQUIRED ***ON PLANNING SUBCOMMITTEE AGENDA ****ON PARATRANSIT SUBCOMMITTEE AGENDA

If a person decides to appeal any decision made by this Board with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, at his or her own expense, which record includes the testimony and evidence upon which the appeal is to be based. A copy of this agenda may be requested in another format.

PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

2300 North Jog Road, 4th Floor, West Palm Beach, Florida 33411-2749
Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

TECHNICAL ADVISORY COMMITTEE
WEDNESDAY, MAY 4, 2011 – 9:00 A.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

III. APPROVAL OF MARCH 2, 2011 MINUTES**

IV. NEW BUSINESS

*A. Palm Tran Transit Development Plan Major Update
*B. State Road 7 Mobility Study**

V. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions for March and April
C. Next Meeting – **June 1, 2011**
D. Other

VI. RECOMMENDATIONS/COMMENTS BY MEMBERS

VII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

In accordance with the provision of ADA, this agenda may be requested in an alternative format. Contact Randy Whitfield at 561.684.4170.

PALM BEACH METROPOLITAN PLANNING ORGANIZATION

2300 North Jog Road, 4th Floor, West Palm Beach, Florida 33411-2749
Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

TECHNICAL ADVISORY COMMITTEE
WEDNESDAY, JULY 6, 2011 – 9:00 A.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

*III. APPROVAL OF JUNE 1, 2011 MINUTES**

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update
*B. Central East Palm Beach Mobility Study

V. NEW BUSINESS

*A. FY 13-17 Transportation System Priorities**

VI. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions for June
C. Next Meeting – **September 7, 2011**
D. Other

VII. RECOMMENDATIONS/COMMENTS BY MEMBERS

VIII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

TECHNICAL ADVISORY COMMITTEE
WEDNESDAY, SEPTEMBER 7, 2011 – 9:00 A.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

*III. APPROVAL OF JULY 21, 2011 MINUTES**

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update

V. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions
C. Next Meeting – **October 5, 2011**
D. Other

VI. RECOMMENDATIONS/COMMENTS BY MEMBERS

VII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

TECHNICAL ADVISORY COMMITTEE
WEDNESDAY, OCTOBER 5, 2011 – 9:00 A.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

*III. APPROVAL OF SEPTEMBER 7, 2011 MINUTES**

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update**

V. NEW BUSINESS

*A. FDOT FY 13-17 Draft Tentative Work Program**

VI. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions for September
C. Next Meeting – **November 2, 2011**
D. Other

VII. RECOMMENDATIONS/COMMENTS BY MEMBERS

VIII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

2300 North Jog Road, 4th Floor, West Palm Beach, Florida 33411-2749
Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

CITIZENS ADVISORY COMMITTEE
WEDNESDAY, MAY 4, 2011 – 1:30 P.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

III. APPROVAL OF MARCH 2, 2011 MINUTES**

IV. NEW BUSINESS

*A. Palm Tran Transit Development Plan Major Update
*B. State Road 7 Mobility Study**

V. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions for March and April
C. Next Meeting – **June 1, 2011**
D. Other

VI. RECOMMENDATIONS/COMMENTS BY MEMBERS

VII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

CITIZENS ADVISORY COMMITTEE
TUESDAY JULY 12, 2011 – 1:30 P.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA:

I. ROLL CALL

*II. ADOPTION OF AGENDA**

*III. APPROVAL OF JUNE 1, 2011 MINUTES**

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update
*B. Central East Palm Beach Mobility Study

V. NEW BUSINESS

*A. FY 13-17 Transportation System Priorities**

VI. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions for June
C. Next Meeting – **September 7, 2011**
D. Other

VII. RECOMMENDATIONS/COMMENTS BY MEMBERS

VIII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

CITIZENS ADVISORY COMMITTEE
WEDNESDAY, SEPTEMBER 7, 2011 – 1:30 P.M.
Vista Center 4th Floor Conference Room 4E-12
2300 North Jog Road
West Palm Beach, Florida

AGENDA

I. ROLL CALL

*II. ADOPTION OF AGENDA**

*III. APPROVAL OF JULY 21, 2011 MINUTES**

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update

V. NEW BUSINESS

*A. Community Transportation Coordinator Annual Review**

VI. SECRETARY'S REPORT

A. Correspondence
*B. MPO Actions
C. Next Meeting – **October 5, 2011**
D. Other

VII. RECOMMENDATIONS/COMMENTS BY MEMBERS

VIII. ADJOURNMENT**

*Backup Provided **Action Required #Previously Transmitted

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PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

2300 N. Jog Rd., 4th. Floor, West Palm Beach, Florida 33411-2749

Phone 561.684.4170 Fax 561.233.5664 www.pbcgov.com/mpo

MEETING NOTICE
PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

DATE: **THURSDAY, MARCH 17, 2011**

TIME: **9:00 A.M.**

PLACE: **Palm Beach County Governmental Center**
301 North Olive Avenue
12th. Floor McEaddy Conference Room
West Palm Beach, Florida

AGENDA:

I. CALL TO ORDER

A. Roll Call
B. Prayer
C. Pledge of Allegiance

*II. ADOPTION OF AGENDA**

III. CONSENT AGENDA**

*A. Approval of February 17, 2011 Minutes
*B. Transportation Disadvantaged Coordinating Board Appointments

IV. OLD BUSINESS

*A. Economic Stimulus Program
*B. Safe Routes to School Overview 2011
*C. Bicycle Master Plan**

V. NEW BUSINESS

*A. Palm Tran Transit Development Plan
*B. Transportation Disadvantaged Coordinating Board Chair Appointment**

VI. SECRETARY'S REPORT

A. Correspondence
B. Next Meeting – **THURSDAY, APRIL 21, 2011**
*C. Other – 2011 Florida Metropolitan Planning Organization Advisory Council – Legislative Policy Positions

VIII. PUBLIC COMMENT

IX. RECOMMENDATION/COMMENTS BY MEMBERS

X. ADJOURNMENT**

*Backup Provided **Action Required

"If any person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings, and for such purposes he may need to ensure that a verbatim record of the proceedings is made which record includes the testimony and evidence upon which the appeal is to be based."

In accordance with the provisions of ADA, this agenda may be requested in an alternative format. Contact Randy Whitfield at 561.684.4170.

PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

2300 North Jog Road, 4th Floor, West Palm Beach, Florida 33411-2749
Phone: (561) 684-4170 Fax: (561) 233-5664 www.pbcgov.com/mpo

MEETING NOTICE
PALM BEACH
METROPOLITAN PLANNING ORGANIZATION

DATE: **THURSDAY, OCTOBER 20, 2011**

TIME: **9:00 A.M.**

PLACE: **Palm Beach County Governmental Center**
301 North Olive Avenue
12th. Floor McEaddy Conference Room
West Palm Beach, Florida

AGENDA:

I. CALL TO ORDER

A. Roll Call
B. Prayer
C. Pledge of Allegiance

*II. ADOPTION OF AGENDA**

III. CONSENT AGENDA**

*A. Approval of September 15, 2011 Minutes
*B. Economic Stimulus Program
*C. Transportation Disadvantaged Coordinating Board Appointments and 2011 Transportation Disadvantaged Coordinating Board Membership Certification
*D. Integrated Transportation Information System

IV. OLD BUSINESS

*A. Palm Tran Transit Development Plan Major Update**
*B. Port of Palm Beach Agreement – Status Report

V. NEW BUSINESS

*A. FDOT FY 13-17 Draft Tentative Work Program**
*B. East Coast Greenway
*C. South Florida Regional Transportation Authority Status Report

VI. SECRETARY'S REPORT

*A. Correspondence
B. Next Meeting – **WEDNESDAY, NOVEMBER 30, 2011**
C. Other

VII. PUBLIC COMMENT

VIII. RECOMMENDATION/COMMENTS BY MEMBERS

IX. ADJOURNMENT**

*Backup Provided **Action Required

"If any person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings, and for such purposes he may need to ensure that a verbatim record of the proceedings is made which record includes the testimony and evidence upon which the appeal is to be based."

In accordance with the provisions of ADA, this agenda may be requested in an alternative format. Contact Randy Whitfield at 561.684.4170.

Planning Technical Advisory Committee Meeting (PTAC)

REGULAR MEETING AGENDA

February 16, 2011
10:30 a.m.

South Florida Regional Transportation Authority
Boardroom
800 NW 33rd Street
Pompano Beach, Florida 33064
www.sfrta.fl.gov

FOR FURTHER INFORMATION CALL JOSEPH QUINTY AT (954) 788-7928

Members

Maria Batista, Miami-Dade Transit
Michael Busha, Treasure Coast Regional Planning Council
William Cross, South Florida Regional Transportation Authority
Barney McCoy, Broward County Transit
B. Jack Osterholt, South Florida Regional Planning Council
Irma San Roman, Miami-Dade Metropolitan Planning Organization
Gustavo Schmidt, Florida Department of Transportation, District IV
Phil Steinmiller, Florida Department of Transportation, District VI
Greg Stuart, Broward Metropolitan Planning Organization
Fred Stubbs, Palm Tran
Jeff Weidner, FDOT, District IV
Randy Whitfield, Chairman, Palm Beach Metropolitan Planning Organization

Directions to SFRTA: I-95 to Copans Road. Go west on Copans to North Andrews Avenue Ext. and turn right. Go straight to Center Port Circle, which is NW 33rd Street, and turn right. SFRTA's offices are in the building to the right. The SFRTA offices are also accessible by taking the train to the Pompano Beach Station. The SFRTA building is southeast of the station. Parking is available across the street from SFRTA's offices, at the Pompano Beach Station.

PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC)
MEETING OF FEBRUARY 16, 2011

The meeting will convene at 10:30 a.m., and will be held in the Boardroom of the South Florida Regional Transportation Authority, Administrative Offices, 800 NW 33rd Street, Suite 100, Pompano Beach, FL 33064.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

AGENDA APPROVAL – Additions, Deletions, Revisions

DISCUSSION ITEMS

MATTERS BY THE PUBLIC – Persons wishing to address the Committee are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

CONSENT AGENDA
Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any PTAC Member, however, that item may be removed from the Consent Agenda and considered separately.

C1 – MOTION TO APPROVE: Minutes of PTAC Meeting of December 15, 2010

REGULAR AGENDA
Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired.

R1 – MOTION TO DIRECT: Response to Previously Awarded Job Access Reverse Commute (JARC) and New Freedom (NF) Projects That Are No Longer Active

INFORMATION / PRESENTATION ITEMS
Action not required, provided for information purposes only.

I1 – INFORMATION: Miami River-Miami Intermodal Center Capacity Improvement (MR-MICCI)

I2 – INFORMATION: Regional Transit System Plan - Best Practices Research

I3 – INFORMATION: Palm Tran Transit Development Plan (TDP) Major Update

I4 – INFORMATION: 2011 PTAC Draft Meeting Schedule

OTHER BUSINESS:

PTAC MEMBER COMMENTS

MEETING ATTENDANCE SUMMARY – Enclosed

NEXT MEETING DATE – TBD

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this proceeding, must at least 48 hours prior to the meeting, provide a written request directed to the Executive Office at 800 NW 33rd Street, Suite 100, Pompano Beach, Florida, or telephone (954) 942-RAIL (7245) for assistance; if hearing impaired, telephone (800) 273-7545 (TTY) for assistance.

Any person who decides to appeal any decision made by the Board of Directors for the South Florida Regional Transportation with respect to any matter considered at this meeting or hearing, will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Persons wishing to address the Board are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

Planning Technical Advisory Committee Meeting (PTAC)

REGULAR MEETING AGENDA

May 25, 2011
10:30 a.m.

South Florida Regional Transportation Authority
Boardroom
800 NW 33rd Street
Pompano Beach, Florida 33064
www.sfrta.fl.gov

FOR FURTHER INFORMATION CALL JOSEPH QUINTY AT (954) 788-7928

Members

Maria Batista, Miami-Dade Transit
Michael Busha, Treasure Coast Regional Planning Council
William Cross, South Florida Regional Transportation Authority
Barney McCoy, Broward County Transit
B. Jack Osterholt, South Florida Regional Planning Council
Irma San Roman, Miami-Dade Metropolitan Planning Organization
Gustavo Schmidt, Florida Department of Transportation, District IV
Phil Steinmiller, Florida Department of Transportation, District VI
Greg Stuart, Broward Metropolitan Planning Organization
Fred Stubbs, Palm Tran
Jeff Weidner, FDOT, District IV
Randy Whitfield, Chairman, Palm Beach Metropolitan Planning Organization

Directions to SFRTA: I-95 to Copans Road. Go west on Copans to North Andrews Avenue Ext. and turn right. Go straight to Center Port Circle, which is NW 33rd Street, and turn right. SFRTA's offices are in the building to the right. The SFRTA offices are also accessible by taking the train to the Pompano Beach Station. The SFRTA building is southeast of the station. Parking is available across the street from SFRTA's offices, at the Pompano Beach Station.

PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC)
MEETING OF MAY 25, 2011

The meeting will convene at 10:30 a.m., and will be held in the Boardroom of the South Florida Regional Transportation Authority, Administrative Offices, 800 NW 33rd Street, Suite 100, Pompano Beach, FL 33064.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

AGENDA APPROVAL – Additions, Deletions, Revisions

DISCUSSION ITEMS

MATTERS BY THE PUBLIC – Persons wishing to address the Committee are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

CONSENT AGENDA
Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any PTAC Member, however, that item may be removed from the Consent Agenda and considered separately.

C1 – MOTION TO APPROVE: Minutes of PTAC Meeting of April 13, 2011

REGULAR AGENDA
Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired.

No Items

INFORMATION / PRESENTATION ITEMS
Action not required, provided for information purposes only.

I1 – INFORMATION: Palm Tran Transit Development Plan (TDP) Major Update

I2 – INFORMATION: SFRTA TDP Annual Update

I3 – INFORMATION: FDOT Park-and-Ride Inventory Report

I4 – INFORMATION: Southeast Florida Regional Climate Change Action Plan

I5 – INFORMATION: Job Access Reverse Commute (JARC) and New Freedom Programs

OTHER BUSINESS:

PTAC MEMBER COMMENTS

MEETING ATTENDANCE SUMMARY – Enclosed

NEXT MEETING DATE –

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this proceeding, must at least 48 hours prior to the meeting, provide a written request directed to the Executive Office at 800 NW 33rd Street, Suite 100, Pompano Beach, Florida, or telephone (954) 942-RAIL (7245) for assistance; if hearing impaired, telephone (800) 273-7545 (TTY) for assistance.

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Persons wishing to address the Board are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

Planning Technical Advisory Committee Meeting (PTAC)

REGULAR MEETING AGENDA

July 13, 2011
10:30 a.m.

South Florida Regional Transportation Authority
Boardroom
800 NW 33rd Street
Pompano Beach, Florida 33064
www.sfrta.fl.gov

FOR FURTHER INFORMATION CALL JOSEPH QUINTY AT (954) 788-7928

Members

Maria Batista, Miami-Dade Transit
Michael Busha, Treasure Coast Regional Planning Council
William Cross, South Florida Regional Transportation Authority
Barney McCoy, Broward County Transit
B. Jack Osterholt, South Florida Regional Planning Council
Irma San Roman, Miami-Dade Metropolitan Planning Organization
Gustavo Schmidt, Florida Department of Transportation, District IV
Phil Steinmiller, Florida Department of Transportation, District VI
Greg Stuart, Broward Metropolitan Planning Organization
Fred Stubbs, Palm Tran
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PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC)
MEETING OF JULY 13, 2011

The meeting will convene at 10:30 a.m., and will be held in the Boardroom of the South Florida Regional Transportation Authority, Administrative Offices, 800 NW 33rd Street, Suite 100, Pompano Beach, FL 33064.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

AGENDA APPROVAL – Additions, Deletions, Revisions

DISCUSSION ITEMS

MATTERS BY THE PUBLIC – Persons wishing to address the Committee are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

CONSENT AGENDA
Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any PTAC Member, however, that item may be removed from the Consent Agenda and considered separately.

C1 – MOTION TO APPROVE: Minutes of PTAC Meeting of June 15, 2011

REGULAR AGENDA
Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired.

No Items

INFORMATION / PRESENTATION ITEMS
Action not required, provided for information purposes only.

I1 – INFORMATION: Regional Express Bus Projects

I2 – INFORMATION: Palm Tran Transit Development Plan (TDP) Major Update

I3 – INFORMATION: Job Access Reverse Commute (JARC) & New Freedom (NF) Programs

I4 – INFORMATION: Tri-Rail Station Area & Connecting Transit Maps

OTHER BUSINESS:

PTAC MEMBER COMMENTS

MEETING ATTENDANCE SUMMARY – Enclosed

NEXT MEETING DATE – September 14 or 21

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this proceeding, must at least 48 hours prior to the meeting, provide a written request directed to the Executive Office at 800 NW 33rd Street, Suite 100, Pompano Beach, Florida, or telephone (954) 942-RAIL (7245) for assistance; if hearing impaired, telephone (800) 273-7545 (TTY) for assistance.

Any person who decides to appeal any decision made by the Board of Directors for the South Florida Regional Transportation with respect to any matter considered at this meeting or hearing, will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Persons wishing to address the Board are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

Planning Technical Advisory Committee Meeting (PTAC)

REGULAR MEETING AGENDA

October 19, 2011
10:00 a.m.

South Florida Regional Transportation Authority
Boardroom
800 NW 33rd Street
Pompano Beach, Florida 33064
www.sfrta.fl.gov

FOR FURTHER INFORMATION CALL JOSEPH QUINTY AT (954) 788-7928

Members

Maria Batista, Miami-Dade Transit
Michael Busha, Treasure Coast Regional Planning Council
William Cross, South Florida Regional Transportation Authority
James Murley, South Florida Regional Planning Council
Irma San Roman, Miami-Dade Metropolitan Planning Organization
Barney McCoy, Broward County Transit
Gustavo Schmidt, Florida Department of Transportation, District IV
Phil Steinmiller, Florida Department of Transportation, District VI
Greg Stuart, Broward Metropolitan Planning Organization
Fred Stubbs, Palm Tran
Jeff Weidner, FDOT, District IV
Randy Whitfield, Chairman, Palm Beach Metropolitan Planning Organization

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PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC)
MEETING OF OCTOBER 19, 2011

The meeting will convene at 10:00 a.m., and will be held in the Boardroom of the South Florida Regional Transportation Authority, Administrative Offices, 800 NW 33rd Street, Suite 100, Pompano Beach, FL 33064.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

AGENDA APPROVAL – Additions, Deletions, Revisions

DISCUSSION ITEMS

MATTERS BY THE PUBLIC – Persons wishing to address the Committee are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

CONSENT AGENDA
Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any PTAC Member, however, that item may be removed from the Consent Agenda and considered separately.

C1 – MOTION TO APPROVE: Minutes of PTAC Meeting of July 13, 2011

REGULAR AGENDA
Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired.

R1 – MOTION TO ENDORSE: Recommended Ranking and Funding Levels for JARC and NF Programs Grant Applications

R2 – MOTION TO ENDORSE: Palm Tran Transit Development Plan (TDP) Major Update

INFORMATION / PRESENTATION ITEMS
Action not required, provided for information purposes only.

I1 – INFORMATION: SFRTA Status Report

OTHER BUSINESS:

PTAC MEMBER COMMENTS

MEETING ATTENDANCE SUMMARY – Enclosed

NEXT MEETING DATE – November 9, 2011

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this proceeding, must at least 48 hours prior to the meeting, provide a written request directed to the Executive Office at 800 NW 33rd Street, Suite 100, Pompano Beach, Florida, or telephone (954) 942-RAIL (7245) for assistance; if hearing impaired, telephone (800) 273-7545 (TTY) for assistance.

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Persons wishing to address the Board are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

ORDER OF BUSINESS
BOARD OF COUNTY COMMISSIONERS
BOARD MEETING
PALM BEACH COUNTY, FLORIDA

NOVEMBER 15, 2011

TUESDAY **COMMISSION**
9:30 A.M. **CHAMBERS**

1. CALL TO ORDER

A. Roll Call
B. Invocation
C. Pledge of Allegiance
D. Election of Chair
E. Election of Vice Chair
F. Comments

2. AGENDA APPROVAL

A. Additions, Deletions, Substitutions
B. Adoption

3. CONSENT AGENDA (Pages 7 - 33)

4. PUBLIC HEARINGS - 9:30 A.M. (Pages 34 - 35)

5. REGULAR AGENDA (Pages 36 - 39)

6. BOARD APPOINTMENTS (Pages 40 - 42)

7. STAFF COMMENTS (Page 43)

8. COMMISSIONER COMMENTS (Page 44)

9. ADJOURNMENT (Page 44)

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NOVEMBER 15, 2011

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- 3A-1 Resident Education to Action Program Agreements

Page 8
- 3A-2 Memorandum of Agreement with Treasure Coast Regional Planning Council relative to the Brownfields Assessment Coalition
- 3A-3 Receive and file Agreements related to the Oxygen Development Section 108 Loan

B. CLERK & COMPTROLLER

Page 9
- 3B-1 Warrant list
- 3B-2 Minutes: None
- 3B-3 Contracts and claims settlements list

C. ENGINEERING & PUBLIC WORKS

Page 9
- 3C-1 Task Agreement with Civil Design, Inc. for engineering services related to Fargo Avenue, Pancho Way, El Paso Drive and a portion of Pinto Drive project

Page 10
- 3C-2 Change Order No. 1 with Rosso Paving & Drainage, Inc. related to Lyons Road (West Atlantic Ave to Boynton Beach Blvd) project
- 3C-3 Deleted
- 3C-4 Agreement with E.C. Driver & Associates, Inc. for professional services related to Ocean Avenue Bridge project
- 3C-5 Amendment No. 1 with FDOT related to Blue Heron Blvd at Congress Avenue project
- 3C-6 Resolution delegating signature authority for construction agreements with FDOT

D. COUNTY ATTORNEY

Page 11
- 3D-1 Agreements with JLA Geosciences, Inc. and Kimley-Horn and Associates, Inc. for consulting/professional services relating to wells and water treatment plant serving the Glades area

E. COMMUNITY SERVICES

Page 11
- 3E-1 Standard Agreement with Area Agency on Aging for the Emergency Home Energy Assistance for the Elderly Program

Page 12
- 3E-2 Amendments to agreements with the Area Agency on Aging for Community Care for the Elderly, Home Care for the Elderly, and Alzheimer's Disease Initiative programs

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- 3E-3 Grant award, amendments and contracts related to the funding and services under the Ryan White Program

Page 14
- 3E-4 Agreements with Children's Services Council for match funding related to the Early Head Start and Head Start programs
- 3E-5 Applications and contracts associated with the Supportive Housing Program

Page 15
- 3E-6 Twenty-two agreements associated with the Financially Assisted Agencies Program

F. AIRPORTS

Page 16
- 3F-1 Change Order No. 3 with David Brooks Enterprises, Inc. related to the terminal flooring improvements at PBIA

G. OFFICE OF FINANCIAL MANAGEMENT & BUDGET

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- 3G-1 Misc. Budget Amendments and Transfers related to the FY 2011 Budget

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3H-2 Deleted
3H-3 Deleted
3H-4 Deleted
3H-5 Deleted
3H-6 Deleted
3H-7 Assignment and Assumption Agreement with Intellitech Corporation for professional services related to the Inmate Management System
3H-8 Contract with Sun Art Painting Corporation for the South Region Water Reclamation Facility painting project

Page 19

3H-9 License Agreement for Use of Equipment with Kettle Comfort, Inc. for commercial kitchen equipment
3H-10 West Boynton District Park "B" Replat 1 The Springs P.U.D. plat

Page 20

3H-11 Drainage and Access easements in favor of the American Orchid Society, Inc.
3H-12 Lease Agreement with Floral Acres, LLC to lease approx. 20 acres in the Ag Reserve (nursery use)
3H-13 Utility Easement Agreement in favor of FPL relative to Central Detention Center project

Page 21

3H-14 Deleted
3H-15 Cross Access and Temporary Construction easements relative to driveway improvements at West Jupiter Community Park

I. HOUSING & COMMUNITY DEVELOPMENT

Page 22

3I-1 Amendment No. 1 with City of Pahokee regarding Pahokee High School gym renovations
3I-2 Receive and file three (3) Modifications to grant agreements for Community Development Block Grant, and the 2005 and 2008 Disaster Recovery Initiative programs

Page 23

3I-3 Receive and file agreements and amendments associated with Community Development Block, Disaster Recovery Initiative, and Neighborhood Stabilization programs
3I-4 One (1) additional position under Neighborhood Stabilization Program 2 grant

J. PLANNING, ZONING & BUILDING - None

K. WATER UTILITIES

Page 24

3K-1 Receive and file two (2) Indemnification Agreements for Water Utilities Department
3K-2 Work Authorization No. 9 with Johnson-Davis, Inc. for the Watergate Mobile Home Park water main replacement project
3K-3 Contract with Aquifer Maintenance and Performance Management, Inc. for Systemwide Wellfield Rehabilitation and Maintenance project

L. ENVIRONMENTAL RESOURCES MANAGEMENT

Page 25

3L-1 Resolutions for the Florida Department of Environmental Protection relative to funding the Petroleum Storage Tank Compliance Verification and Petroleum Contamination Cleanup programs

M. PARKS & RECREATION

Page 25

3M-1 Receive and file three (3) independent contractor agreements for Parks & Recreation Department

N. LIBRARY

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3N-1 Cooperative Agreement with Literacy*AmeriCorps for full-time Literacy*AmeriCorps member

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CONSENT AGENDA CONTINUED

P. COOPERATIVE EXTENSION SERVICE - None

Q. CRIMINAL JUSTICE COMMISSION

Page 26

3Q-1 Second Chance Act Grant award from Department of Justice regarding plan to reduce juvenile recidivism

3Q-2 Ratify signature on Department of Justice Contract Amendment related to juvenile home detention monitoring services

Page 27

3Q-3 Second Amendment with Florida Atlantic University relative to Restorative Justice project

R. HUMAN RESOURCES

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3R-1 2011-2012 Affirmation Action Plan

S. FIRE RESCUE - None

T. HEALTH DEPARTMENT - None

U. INFORMATION SYSTEMS SERVICES

Page 27

3U-1 First Amendment with Jewish Federation of Palm Beach County, Inc. regarding connection to County's regional network

Page 28

3U-2 Supplemental agreements with Florida LambdaRail for additional FLRNet capacity

V. METROPOLITAN PLANNING ORGANIZATION - None

W. PUBLIC AFFAIRS - None

X. PUBLIC SAFETY

Page 28

3X-1 Emergency Medical Services Grant Second Award Letter from Florida Department of Health, Bureau of Emergency Medical Services to improve and expand EMS system

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3X-2 Fourth Amendment with City of Miramar for Urban Area Security Initiative funding for terrorism planning activities

3X-3 Fourth Amendment with City of Miramar for Urban Area Security Initiative supplemental funding for terrorism planning activities

3X-4 Standard Agreements and delegation of signature authority related to distribution of Emergency Medical Services equipment

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3X-5 Receive and file amendments with City of Miramar for Urban Area Security Initiative for terrorism planning activities

Y. PURCHASING - None

Z. RISK MANAGEMENT - None

AA. PALM TRAN

Page 30

3AA-1 Budget amendments and transfer related to Transportation Disadvantaged Grant award

BB. SHERIFF'S OFFICE

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3BB-1 Agreement with City of Miramar for Urban Area Security Initiative funding for Regional Virtual Fusion Center

3BB-2 Agreement with City of Miramar for Urban Area Security Initiative funding for domestic security activities

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3BB-3 Budget Transfer in Law Enforcement Trust Fund to various drug and crime prevention and education programs

CC. OFFICE OF THE INSPECTOR GENERAL

Page 32

3CC-1 Interlocal Agreement with Health Care District for Inspector General services

Page 33

3CC-2 Interlocal Agreement with Children's Services Council for Inspector General services

DD. WESTGATE/BELVEDERE HOMES COMMUNITY REDEVELPMENT AGENCY

Page 33

3DD-1 Federally Funded Subgrant Agreement with Florida Division of Emergency Management for canal improvements

EE. TOURIST DEVELOPMENT COUNCIL

Page 33

3EE-1 Agreement with Palm Beach County Cultural Council for administration of cultural grant program

PUBLIC HEARINGS – 9:30 A.M.

Page 34

4A Resolution to abandon 30' right-of-way in Palm Beach Farms Co. Plat No. 3

4B Five Year Road Program

4C Waive annual renewal application requirement (restricted use property classification)

Page 35

4D Vehicle for Hire (Moratorium) Ordinance

4E Uniform method of collecting non-ad valorem assessments relative to lot clearing and abating nuisances

4F Sexual Offenders and Sexual Predator Residence Prohibition Ordinance

4G Public Service Tax Ordinance

REGULAR AGENDA

ADMINISTRATION

Page 36

5A-1 Offer of Commitment from U.S. Department of Housing and Urban Development for Section 108 Loan

COUNTY ATTORNEY

Page 36

5B-1 Bond Resolution for Industrial Development Revenue Bonds (Classical South Florida, Inc. project)

FIRE RESCUE

Page 37

5C-1 Second Amendment for Fire Protection and Emergency Medical Services with City of Lake Worth

PALM TRAN

Page 37

5D-1 Palm Tran Ten-Year Transit Development Plan

Appendix C/Rider Survey Forms

2011 Rider Survey

Palm Tran is conducting a survey of passengers to help serve you better. Please take a few minutes to complete this important survey during your trip. Only one survey per customer should be completed. Thank you!!!

Instructions: Fill bubbles completely, like this ●.Do not mark answers with ✗'s or ✓.

Your Riding Habits

1: How long have you been riding Palm Tran bus service (*select only one*)?

❍ First time rider ❍ Less than 3 months ❍ 4 to 6 months ❍ 7 to 11 months
❍ 1 to 2 years ❍ 3 to 5 years ❍ More than 5 years

2: How often do you ride Palm Tran buses (*select only one*)?

❍ Less than Once a Month ❍ Once or twice a month ❍ 1 Day per week
❍ 2 to 3 days per week ❍ 4 to 5 days per week ❍ 6 to 7 days per week

3: What fare category applies to you (*select only one*)?

❍ Adult ❍ Student ❍ Senior (65 years or over) ❍ Reduced / Disabled Fare

4: Why do you ride Palm Tran *(check all that apply)*?

❍ I do not know how to drive ❍ I do not have a car available ❍ To save money
❍ Good for the environment ❍ Bus is more convenient ❍ Bus is safer / less stressful
❍ I prefer to ride the bus so I can do other things during my commute

About this trip

5: What fare did you pay for this trip (*select only one*)?

❍ Regular cash fare $1.50 ❍ Daily Quik Pass $4.00 ❍ 31-Day Quik Pass $60
❍ Reduced cash fare $0.75 ❍ Reduced Daily Quik Pass $2.75 ❍ Reduced 31-Day Quik Pass $45
❍ Transfer from Tri-Rail ❍ $10/$15 TD 31-day Quik Pass ❍ Other _____

6: How did you get to the bus stop (*check all that apply*)?

❍ Walked for less than 5 minutes ❍ Walked 5 to 10 minutes ❍ Walked 11 to 15 minutes
❍ Walked for over 15 minutes ❍ Dropped off by auto ❍ Bicycle
❍ Drove and parked near bus stop ❍ Used Palm Tran CONNECTION ❍ Other _____

7: Did the bus you are on now arrive on-time? ❍ Yes ❍ No

8: How will you get to your destination once you get off the bus (*check all that apply*)?

❍ Walk for less than 5 minutes ❍ Walk 5 to 10 minutes ❍ Walk 11 to 15 minutes
❍ Walk for over 15 minutes ❍ Get a ride in a car ❍ Bicycle
❍ Drive yourself ❍ Use Palm Tran CONNECTION ❍ Other _____

9: What is the primary purpose of this trip (*select only one*)?

❍ Commute to / from work ❍ Business related trip ❍ Volunteer work
❍ School (K-12) ❍ School (college/university) ❍ Library
❍ Shopping / errands ❍ Visit friends ❍ Medical
❍ Go to church / religious event ❍ Other _____

10: Did this trip require more than one bus (*check all that apply*)?

❍ No
❍ Yes, transfer to / from Palm Tran: Route # _____ ❍ Yes, transfer to / from BCT: Route # _____
❍ Yes, transfer to / from Tri-Rail ❍ Yes, transfer to / from Palm Tran CONNECTION
❍ Yes, transfer to / from Community Shuttle _____ ❍ Yes, transfer to / from Other: _____

11: How would you make this trip if this bus did not exist (*check all that apply*)?

❍ Walk ❍ Bicycle ❍ Drive ❍ Taxi
❍ Ride with someone ❍ Get dropped off ❍ I would not make this trip

(continued on other side)

Your Thoughts About Palm Tran

12: Overall, how satisfied are you with Palm Tran?

❍ Very Dissatisfied ❍ Somewhat Dissatisfied ❍ Neutral ❍ Somewhat Satisfied ❍ Very Satisfied

13: How satisfied are you with each of the following?

	Very Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Very Satisfied
a. How often buses run on Weekdays	❍	❍	❍	❍	❍
b. Buses that go where I want to go	❍	❍	❍	❍	❍
c. Number of buses required to make my trip	❍	❍	❍	❍	❍
d. On-time performance of buses	❍	❍	❍	❍	❍
e. Value of bus fare	❍	❍	❍	❍	❍
f. How early in the morning/late in evening buses run	❍	❍	❍	❍	❍
g. How often buses run on Saturday	❍	❍	❍	❍	❍
h. How often buses run on Sunday	❍	❍	❍	❍	❍
i. Availability of route and schedule information	❍	❍	❍	❍	❍
j. Palm Tran customer service hotline	❍	❍	❍	❍	❍
k. Helpfulness of the bus driver	❍	❍	❍	❍	❍
l. Cleanliness of buses	❍	❍	❍	❍	❍
m. Personal safety while riding the bus	❍	❍	❍	❍	❍
n. Bus driver's ability to drive	❍	❍	❍	❍	❍
o. Availability of seat on my trip	❍	❍	❍	❍	❍

14: Using the letters "a" through "o" in question 13 above, list the three areas that <u>YOU</u> would most like to see Palm Tran improve…

*1.*_____ *2.*_____ *3.*_____

15: Do any of the following affect your ability to get to the bus stop (*check all that apply*)?

❍ Lack of sidewalks ❍ Lack of crosswalks ❍ High curbs ❍ Lack of pedestrian crossing symbols ❍ None

16: Which of the following do you use to get information about Palm Tran (*check all that apply*)?

❍ Customer service hotline ❍ Rider's Digest ❍ Palm Tran website ❍ Bus drivers ❍ Other _____

About You

17: How old are you? ❍ Under 18 ❍ 18 to 24 ❍ 25 to 34 ❍ 35 to 44 ❍ 45 to 54 ❍ 55 to 64 ❍ 65 or older

18: Are you ... ? ❍ Male ❍ Female

19: Do you have a driver's license? ❍ Yes ❍ No

20: How many working vehicles are available in your household? ❍ None ❍ One ❍ Two ❍ Three or more

21: Are you of Spanish, Hispanic, or Latino origin? ❍ Yes ❍ No

22: Which of the following best describes your race (*check all that apply*)?

❍ Caucasian ❍ Asian / Pacific Islander ❍ African American
❍ Native American or Alaskan Native ❍ Other _____

23: Were you born in the United States or another U.S. Territory? ❍ Yes ❍ No

24: Which of the following best describes you?

❍ English is my first language ❍ English my second language, but I am fluent ❍ I find it difficult to speak / understand English

25: What was your total household income for 2010?

❍ Less than $10,000 ❍ $10,000 to $19,999 ❍ $20,000 to $29,999
❍ $30,000 to $39,999 ❍ $40,000 to $49,999 ❍ $50,000 and over

THANK YOU!!! PLEASE RETURN YOUR SURVEY TO THE INTERVIEWER.

2011 Palm Tran CONNECTION Rider Survey

Palm Tran is conducting a survey of passengers to help serve you better. Please take a few minutes to complete this important survey and mail back in the enclosed envelop.

Instructions: Fill bubbles completely, like this ●. Do not mark answers with ✗'s or ✓.

Your Riding Habits

1. How long have you been riding Palm Tran CONNECTION service?

❍ First time rider ❍ Less than 3 months ❍ 4 to 6 months
❍ 7 to 11 months ❍ 1 to 2 years ❍ 3 to 5 years ❍ More than 5 years

2. How often do you ride Palm Tran CONNECTION?

❍ Less than Once a Month ❍ Once or twice a month ❍ 1 Day per week
❍ 2 to 3 days per week ❍ 4 to 5 days per week ❍ 6 to 7 days per week

About Your Usual Trip

3. What fare do you usually pay (*select only one*)?

❍ Cash Fare $3.00 ❍ Pre-Paid "Ticket to Ride" ❍ Other _____

4. How do you usually get to the bus?

❍ Palm Tran Connection picked me up from home ❍ Transfer from a shuttle bus
❍ Palm Tran regular bus service ❍ Taxi ❍ Other _____

5. How do you usually get to your destination once you get off the bus?

❍ Palm CONNECTION will take me to my destination ❍ Transfer to a shuttle bus
❍ Use Palm Tran regular bus service ❍ Taxi ❍ Other _____

6. What is the primary purpose of the trip?

❍ Commute to / from work ❍ Volunteer work ❍ Library ❍ Medical
❍ School (K-12) ❍ School (College/University) ❍ Shopping / Errands
❍ Visit Friends/Family ❍ Go to church / religious event ❍ Other _____

7. How would you make this trip if Palm Tran CONNECTION did not exist?

❍ Ride with someone ❍ Taxi ❍ Walk ❍ Palm Tran fixed route service
❍ Other _____ ❍ I would not make this trip

8. Do any of the following affect your ability to use regular fixed route service?

❍ Lack of sidewalks ❍ Lack of crosswalks ❍ Utility poles in sidewalk ❍ High curbs

9. Which of the following do you use to get information about Palm Tran?

❍ Call Center ❍ Palm Tran Website ❍ Bus drivers ❍ Friends/Co-workers
❍ Other _____

10. Overall, how satisfied are you with Palm Tran CONNECTION?

❍ Very Dissatisfied ❍ Somewhat Dissatisfied ❍ Neutral
❍ Somewhat Satisfied ❍ Very Satisfied

About You

11. How old are you? ❍ Under 18 ❍ 18 to 24 ❍ 25 to 34
❍ 35 to 44 ❍ 45 to 54 ❍ 55 to 64 ❍ 65 or older

12. Are you…? ❍ Male ❍ Female

13. Are you of Spanish, Hispanic, or Latino origin? ❍ Yes ❍ No

14. Which of the following best describes your race (*check all that apply*)?

❍ Caucasian ❍ Asian / Pacific Islander ❍ African American
❍ Native American or Alaskan Native ❍ Other _____

15. Were you born in the United States or another U.S. Territory?
❍ Yes ❍ No

16. Which of the following best describes you?
❍ English is my first language ❍ English my second language, but I am fluent
❍ I find it difficult to speak / understand English

17. What was your total household income for 2010?
❍ Less than $10,000 ❍ $10,000 to $19,999 ❍ $20,000 to $29,999
❍ $30,000 to $39,999 ❍ $40,000 to $49,999 ❍ $50,000 and over

Your Thoughts About Palm Tran CONNECTION

17. How satisfied are you with each of the following?

	Very Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Very Satisfied
a. Ability to get where I want to go	❍	❍	❍	❍	❍
b. Ability to travel when I want to	❍	❍	❍	❍	❍
c. Total travel time on bus	❍	❍	❍	❍	❍
d. Being picked up on time	❍	❍	❍	❍	❍
e. Arriving on time	❍	❍	❍	❍	❍
f. Cleanliness of buses	❍	❍	❍	❍	❍
g. Value of bus fare	❍	❍	❍	❍	❍
h. Courtesy of the call center staff	❍	❍	❍	❍	❍
i. Call center hours	❍	❍	❍	❍	❍
j. Personal safety riding the bus	❍	❍	❍	❍	❍
k. Bus driver's ability to drive	❍	❍	❍	❍	❍
l. Helpfulness of the bus driver	❍	❍	❍	❍	❍

18. Using the letters "a" through "l" in question 11 above, identify the three characteristics that <u>YOU</u> would most like to see Palm Tran CONNECTION improve. . .
1._____ ***2.***_____ ***3.***_____

THANK YOU!!! PLEASE FOLD THIS SO THAT THE RETURN ADDRESS BELOW IS ON THE OUTSIDE THEN DROP IN ANY MAILBOX TO SEND IT BACK. PLEASE DO NOT USE STAPLES TO HOLD THIS SURVEY TOGETHER AS THEY CAN INTERFERE WITH POSTAL EQUIPMENT.

(PLEASE FOLD HERE)

ORC International
600 University Street, Suite 2704
Seattle, WA 98101-4151

ORC International
600 University Street, Suite 2704
Seattle, WA 98101-4151

Appendix D/Employee Survey Forms

Palm Tran Fixed-Route Operator and Customer Service Employee Survey

Kittelson & Associates, Inc. is assisting Palm Tran with the update to their 10-Year Transit Development Plan (TDP). As a Palm Tran Bus Operator or Customer Service Representative, you have valuable insight into how to improve service for Palm Tran customers

Please help us out by completing this survey and returning it to the box in the dispatch area by __*To Be Determined*_____. Your responses will remain anonymous.

1) Overall, how would you rate the public transportation services provided by Palm Tran?
___ Very Good ___ Good ___ Average ___ Poor ___ Very Poor

2) From the list below, please identify the most common complaints you hear from passengers. Please mark the three (3) highest with a check or an x.

___Service hours are not late enough
___Service is too limited on weekends
___Service is not frequent enough
___Bus is too crowded
___Transfers are not convenient
___Bus is not on time
___Bus does not go where I want
___No route and schedule information
___Bus is not clean
___Lack of connections to SFRTA / BCT
___Bus stops are hard to access
___No bus shelters / benches
___Bus is not safe
___Bus is too slow
___Inconsiderate behavior by other riders
___Other: _____

3) From the list below, please identify what you feel are the top 5 improvements Palm Tran should make for its customers. Please rank on a scale from 1 to 5, with 1 being the highest priority, 2 being the second highest priority, down to 5 as the fifth highest priority.

___More frequent buses on existing routes
___Service that starts earlier/runs later
___Improved schedule and route information
___Add/improve bus stop amenities
___New routes in areas without service today
___Express service
___Better scheduled running time
___Cleaner, better maintained buses
___More routes operating on Saturday
___More routes operating on Sunday
___Improved connections to other transit systems
___Real-time bus arrival information at the stop
___Park and ride lots
___Special treatment to allow buses to get through traffic more quickly

4) What current routes do you think should be changed, if any, and what changes would you propose?

_____

_____

_____

5) What areas of the County are not currently served by Palm Tran that you feel should have fixed route service? On which streets would you run that service?

The 10-year Transit Development Plan (TDP) provides direction for the agency to improve its services to the residents of Palm Beach County. It prioritizes projects so that Palm Tran can plan for service improvements and provides the basis for seeking new funding sources through the state and federal governments. While all improvements cannot be funded within a 10-year horizon, establishing the list of needs makes it more likely that funding can be secured in the future. We are looking for your thoughts on what you want Palm Tran to be in 10 years, so we can begin planning for that future.

6) If money were no object what would be your top priority improvement in each of these areas?

Service on the street	
Technology	
Stops and shelters	
Vehicles	
Maintenance	
Customer Information	
Facilities (parking/garages)	

7) Please describe your idea of a successful Palm Tran?

8) What previous changes have had positive results that should be explored further?

9) Please share any additional comments that will help us build a successful transit system over the next 10 years.

PLEASE RETURN THIS SURVEY TO THE BOX LOCATED IN THE DISPATCH AREA NO LATER THAN_____

THANK YOU!

Paratransit Operator Survey

Kittelson & Associates, Inc. is assisting Palm Tran with the update to their 10-Year Transit Development Plan (TDP). As a Paratransit Bus Operator providing Palm Tran CONNECTION service or as a Customer Service Representative, you have a valuable insight into how to improve service for Palm Tran customers.

Your responses will remain anonymous.

1) Overall, how would you rate the paratransit services provided by Palm Tran?

___Very Good ___Good ___Average ___Poor ___Very Poor

2) From the list below, please identify the most common complaints you hear from customers. Please mark the <u>three (3)</u> highest with a check or an X.

___Service hours are not early/late enough
___The window for pick-up is too long
___Bus is not clean
___Turned-down/refused a ride
___Have to schedule too far in advance
___Inability to go to destinations outside of Palm Beach County
___It takes too long to get to my destination
___Inconsiderate behavior by other riders
___Other:_____

3) What do you feel are the top 5 improvements Palm Tran CONNECTION should make to improve the customer experience for their riders?

1._____
2._____
3._____
4._____
5._____

4) Are there particular trips or specific areas of the County where you feel there is enough paratransit demand to warrant new fixed route bus service? Please provide the areas, routes and times when it would be most used.

_____
_____
_____
_____

(See next page)

5) What, if any, improvement in each of these areas would you like to see implemented?

Service on the street	
Technology	
Stops and shelters	
Vehicles	
Maintenance	
Customer information	
Facilities (parking/garages)	

6) What do you think can be done to improve the customer's experience with Palm Tran CONNECTION?

_____
_____
_____
_____
_____

7) Please share any additional comments that will help us build a successful transit system over the next 10 years.

_____
_____
_____
_____
_____

THANK YOU!

Appendix E/Existing Palm Tran Services

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
1	Palm Beach Gardens to Boca Raton (via US 1)	Weekday Saturday Sunday	5:35 AM 6:20 AM 8:20 AM	10:15 PM 9:55 PM 6:25 PM	15 (20) 30 30	8,714 5,869 3,037	34.4 39.3 33.0	Gardens Mall; North County Courthouse; Governmental Center; West Palm Beach Intermodal Transit Center; Palm Beach Atlantic University; Camino Square; Royal Palm Plaza; Gardens Medical Mall; West Palm Beach City Hall; Judicial Center; City Place; Plaza at Delray; Mercado Real; Mizner Park; Good Samaritan / St. Mary's Medical Center
2	Palm Beach Gardens to Boca Raton (via Congress)	Weekday Saturday Sunday	5:15 AM 7:10 AM 8:05 AM	10:00 PM 9:55 PM 5:40 PM	30 (30) 60 60	4,999 1,958 1,040	30.6 30.0 21.8	VA Medical Center; Palm Beach Mall; West Palm Beach Intermodal Transit Center; Airport Center; PBC Main Library; Palm Beach State College; JFK Hospital; Boynton Beach Mall; Palm Tran S. County Facility; Delray Tri-Rail; Lynn University; Columbia Hospital; City Place; PBC Convention Center; PBC Jail; Summit Post Office; PB Hab Center; Lantana Airport; Barry University; S. County Courthouse; Boca Raton Tri-Rail; Glades Plaza; Town Center Mall
3	Palm Beach Gardens to Boca Raton (via Military Trail)	Weekday Saturday Sunday	5:05 AM 6:05 AM 8:40 AM	10:10 PM 9:55 PM 5:20 PM	30 (30)* 30 60	5,190 2,939 n/a	39.2 26.9 31.1	Gardens Mall; North County Courthouse; VA Medical Center; Northwood University; Mounts Botanical Garden; Palm tran CONNECTION; Delray Square; Glades Plaza; Gardens Medical Mall; Barry University NPB Campus; Adult Education Center; Cross County Plaza; Tax Collector; St. Vincent Seminary; Lynn University; Town Center Mall
4	West Palm Beach to Greenacres (via Haverhill)	Weekday Saturday Sunday	6:22 AM 7:15 AM n/a	6:05 PM 4:40 PM n/a	60 (60) 60 n/a	296 121 n/a	31.0 14.8 n/a	Cross County Plaza; Summit Pines; Military Shopping Center
10	North County Cross-town (via Military Trail)	Weekday Saturday Sunday	6:10 AM 6:10 AM n/a	8:00 PM 8:00 PM n/a	60 (60) 60 n/a	311 245 n/a	13.4 10.6 n/a	W. Jupiter Commerce Park; W. Jupiter Comm.; Jupiter Town Hall; Jupiter High School; Jupiter Branch Library; Center Abacoa Plaza; Dwyer High School; Gardens Mall
11	North County Commuter Express (via I-95)	Weekday Saturday Sunday	7:00 AM n/a n/a	5:55 PM n/a n/a	2 trips / weekday (AM/PM)	22 n/a n/a	8.0 n/a n/a	Martin County - Halpatiokee Regional Park; Florida Power & Light - Juno Campus; Northcorp Parkway; West Palm Beach - Intermodal Transit Center

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
20	Palm Beach Gardens Cross-town (to St. Mary's Hospital)	Weekday Saturday Sunday	5:20 AM 7:05 AM n/a	6:55 PM 6:05 PM n/a	60 (60) 60 n/a	340 195 n/a	14.1 9.7 n/a	Gardens Mall; North County Courthouse; Palm Beach State College; Barry University; Gardens Medical Center; North County Regional Library; Gardens Hospital; St. Mary's Hospital
21	Palm Beach Gardens Cross-town (via US 1)	Weekday Saturday Sunday	6:20 AM 8:10 AM 9:00 AM	6:55 PM 5:35 PM 4:55 PM	60 (60) 60 n/a	366 190 n/a	15.9 10.5 n/a	Gardens Mall; North County Courthouse; North County Regional; H.R.S.; Gardens Medical Center; Palm Beach State College; Library; St. Mary's Hospital
30	Riviera Beach Cross-town (via Blue Heron)	Weekday Saturday Sunday	6:14 AM 7:44 AM 9:44 AM	6:22 PM 4:52 PM 3:52 PM	30 (60) 60 60	374 164 79	26.2 27.2 18.5	VA Medical Center; Central Industrial Park; Riviera Beach Post Office; Riviera Beach City Hall & Library; Singer Island; Seagull Industries; Inlet Grove Tech Center; UPS Distribution Center; Phil Foster Park; Ocean Mall
31	Riviera Beach to West Palm Beach (via 45th Street)	Weekday Saturday Sunday	6:13 AM 7:45 AM 9:45 AM	7:30 PM 5:55 PM 4:50 PM	30 (30) 60 60	1,609 530 226	34.7 27.5 16.7	VA Medical Center; Dyer Park; Northpoint Center; New England Tech / Culinary Institute; Columbia Hospital; Goodwill; Mangonia Park Tri-Rail; PBC Health Department; Blood Bank; St. Mary's Hospital; Palm Tran Administrative Office; West Palm Beach Intermodal Transit Center; Judicial Center; Governmental Center
33	Lake Park to West Palm Beach (via Australian & Palm Beach Lakes)	Weekday Saturday Sunday	5:44 AM 7:47 AM 9:47 AM	7:19 PM 6:44 PM 5:44 PM	30 (60) 60 60	767 399 210	21.2 19.4 13.9	Northlake Blvd. K-Mart; Mangonia Residences; Palm Beach Mall; Mangonia Tri-Rail; Bethune-Cookman College; Cross County Plaza
40	West Palm Beach to Belle Glade (via SR-80 with Limited Stops)	Weekday Saturday Sunday	5:02 AM 7:08 AM 10:10 AM	10:04 PM 9:00 PM 6:00 PM	30 (60)* 60 60	793 549 222	14.4 18.3 15.7	Governmental Center; West Palm Beach Intermodal Transit Center; Western Plaza; Wellington Medical Center; Palms West; Judicial Center; Wellington Park & Ride Facility; Mall at Wellington Green; Wellington Library; Belle Glade HRS / Courthouse; Belle Glade Library; Pahokee Airport; West Tech.; Loula V. York Library
41	West Palm Beach to Palm Beach Inlet (via Royal Palm Way, N. County Road)	Weekday Saturday Sunday	6:35 AM 8:00 AM 9:00 AM	5:25 PM 4:25 PM 4:25 PM	60 (60) 90 60	111 44 498	26.2 12.9 n/a	Palm Beach Publix; Palm Beach Town Hall; Palm Beach Atlantic University; Governmental Center; Post Office; Palm Beach Library; West Palm Beach Library; West Palm Beach City Hall; Judicial Center; West Palm Beach Intermodal Transit Center

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
43	West Palm Beach to Wellington (via Okeechobee Blvd)	Weekday Saturday Sunday	6:05 AM 8:05 AM 8:55 AM	9:45 PM 8:45 PM 5:45 PM	30 (30) 60 60	2,323 1,151 161	47.9 56.4 11.4	Mall at Wellington Green; Wellington Regional Medical Center; PBC Fairgrounds; Sound Advice Amphitheatre; Royal Palm Beach Super Wal-Mart; Lake Point Center; Governmental Center; PBC Library; Uptown Downtown Mall; Cross County Plaza; Executive Center; Palm Beach Mall; Judicial Center; West Palm Beach Intermodal Transit Center; Southern Palm s Park & Ride Lot
44	West Palm Beach Cross-town (via Belvedere Road)	Weekday Saturday Sunday	5:45 AM 6:45 AM 9:45 AM	7:25 PM 7:03 PM 5:03 PM	30 (60) 60 60	569 374 n/a	18.1 19.3 8.3	Lake Point Center; Drexel Plaza; PBC Library; Super Wal-Mart; Palm Beach Kennel Club; Palm Beach International Airport; Centre Park; West Palm Beach Intermodal Transit Center; Judicial Center; Governmental Center; Kravis Center; PBC Convention Center; Howard Park
45	West Palm Beach to Lake Clark Shores (via Parker, Lake and Fla. Mango Road)	Weekday Saturday Sunday	6:00 AM 7:25 AM 9:25 AM	6:50 PM 6:50 PM 3:50 PM	60 (60) 60 60	194 85 n/a	18.4 8.5 n/a	Governmental Center; Kravis Center; Howard Park; Science Museum; Lake Clarke Shores Town Hall; Judicial Center; PBC Convention Center; Armory Arts Center; Palm Beach Zoo at Dreher Park; Waterslide Plaza; West Palm Beach Intermodal Transit Center
46	West Palm Beach to Wellington (via Forest Hill Blvd)	Weekday Saturday Sunday	6:05 AM 7:35 AM 9:10 AM	7:05 PM 7:00 PM 5:00 PM	30 (60) 60 60	987 591 255	32.4 30.9 20.7	Palm Coast Plaza; PBC School Board; Okeeheelee Park; Lake Clark Shores Town Hall; River Bridge Center; Mall at Wellington Green; Wellington Regional Medical Center
47	Pahokee to Belle Glade (via S.R. 15)	Weekday Saturday Sunday	5:30 AM 8:30 AM 9:30 AM	9:30 PM 8:55 PM 7:30 PM	60 (60) 60 60	618 392 196	21.2 16.9 11.2	Pahokee City Hall; Eisenhower Circle; Padgett Circle; Fremd Village; HRS & Courthouse; Belle Glade City Hall; Palm Beach County Library; Glades Diamond; Glades Hospital; Okeechobee Center; Belle Glade Airport
48	South Bay to Canal Point (via S.R. 715)	Weekday Saturday Sunday	5:20 AM 7:30 AM 9:30 AM	9:15 PM 8:45 PM 7:20 PM	60 (60) 60 60	490 392 204	15.6 14.2 10.5	Canal Point; Loula V. York Library; Pahokee City Hall; West Tech.; Belle Glade Post Office; PBCC; Okeechobee Center; Citizens Village; Pahokee City Hall; Pahokee Airport; Osceola Center; Belle Glade Library; Glades Central High School; Clarence E. Anthony Library

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
49	West Palm Beach Downtown and Executive Center	Weekday Saturday Sunday	6:30 AM 7:30 AM 9:30 AM	7:55 PM 7:55 PM 4:55 PM	60 (60) 60 60	290 235 110	26.0 22.4 17.2	Westgate; Palm Beach Mall; Executive Center; West Palm Beach Intermodal Transit Center
52	Royal Palm Beach Cross-town	Weekday Saturday Sunday	6:20 AM 7:30 AM n/a	6:42 PM 6:42 PM n/a	60 (60) 60 n/a	216 145 n/a	21.2 15.6 n/a	Veterans Park; Palm Beach County Library; RPB High School; Counterpoint Estates; PBC Fairgrounds; Target; Mall at Wellington Green; Wellington Regional Medical Center; Village Hall; Willows Park; Regal 18 Movie Theater; RPB Super Wal-Mart; K-Mart; Western Plaza; Calypso Bay Waterpark; Wellington Park & Ride Facility
60	Greenacres to Palm Springs (via Purdy Ln & 10th Ave North)	Weekday Saturday Sunday	5:30 AM n/a n/a	6:47 PM n/a n/a	60 (60)	173 n/a n/a	15.6 n/a n/a	Village of Palm Springs Municipal Complex; YMCA; Lakeside Village; Waterside Center
61	Greenacres to Lake Worth (via Cresthaven & 10th Ave North)	Weekday Saturday Sunday	6:30 AM 6:30 AM 9:05 AM	7:05 PM 7:05 PM 4:05 PM	60 (60) 60 60	670 425 244	29.1 19.9 18.5	River Bridge Center; Lake Worth City Hall; Waterside Plaza; Lake Worth Tri-Rail; Palm Beach State College
62	Lake Worth to Wellington (via Lake Worth Road)	Weekday Saturday Sunday	5:30 AM 7:00 AM 10:00 AM	7:50 PM 5:50 PM 4:50 PM	30 (30) 60 60	2,260 1,162 611	49.7 63.8 50.6	Lake Worth Tri-Rail; Lake Worth City Hall; Lake Worth Beach; Palm Beach State College; Greenacres Post Office; Greenacres Library; Wellington Regional Medical Center; Nassau Square; The Mall at Wellington Green
63	Lantana Cross-town)	Weekday Saturday Sunday	6:15 AM 7:15 AM 10:15 AM	7:15 AM 5:40 PM 4:40 PM	60 (60) 60 60	573 296 144	54.6 32.5 26.6	A.G. Holley Hospital; Lantana / Lake Worth PHU; Lantana Shopping Mall; Santaluces High School; Barry University; Boynton Beach Mall
64	Greenacres to Lake Worth (via Melaleuca/6th Ave South)	Weekday Saturday Sunday	6:00 AM 6:35 AM 9:35 AM	7:00 PM 7:00 PM 4:00 PM	60 (60) 60 60	346 215 n/a	33.0 20.5 n/a	Greenacres Plaza; Palm Beach State College; Greenacres Post Office; John Prince Park

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
70	Lantana to Delray Beach (via Seacrest Blvd)	Weekday Saturday Sunday	5:10 AM 7:35 AM 10:20 AM	7:15 PM 6:25 PM 4:55 PM	30 (60) 60 80	1,120 395 130	20.3 13.4 9.1	Lantana / Lake Worth Public Health Unit; A.G. Holley Hospital; Lantana City Hall; Boynton Beach Tri-Rail; Boynton Beach Post Office; Delray Tri-Rail; Delray Medical Center; Lantana Shopping Center; Boynton Beach City Hall; Bethesda Hall; Atlantic High School; Publix; Plaza of Delray; Lakes of Delray
71	Boynton Beach Cross-town (via Lawrence Road)	Weekday Saturday Sunday	6:25 AM 8:00 AM n/a	7:25 PM 6:25 PM n/a	60 (60) 60 n/a	384 195 n/a	36.6 21.5 n/a	Boynton Beach Mall; Boynton Beach Super Wal-Mart; Boynton Beach Tri-Rail; Boynton Beach Post Office; Boynton Beach City Hall
73	Boynton Beach Cross-town (via Boynton Beach Blvd)	Weekday Saturday Sunday	6:05 AM 7:35 AM n/a	7:25 PM 6:05 PM n/a	60 (60) 60 n/a	320 249 n/a	24.3 23.7 n/a	Boynton Beach Mall; Boynton Beach City Hall; Super Wal-Mart; Boynton Beach
80	Delray Beach Cross-town (via Lake Ida & Linton Blvd)	Weekday Saturday Sunday	6:30 AM 7:30 AM 9:00 AM	7:20 PM 6:25 PM 4:20 PM	60 (60) 60 60	462 321 168	19.8 16.0 12.5	Delray Square; Lake Ida Plaza; Delray Beach Public Works Complex; Delray Plaza; Delray Crossing Shopping Center; The Groves Shopping Center; Sable Pines; Palm Court Plaza; Kings Point; High Point of Delray; Delray Beach City Hall; Plaza of Delray; Delray Shopping Center; Lake Delray Apartments; Delray Oaks; Spanish Wells; Delray Medical Plaza; Delray Town Center
81	Delray Beach Cross-town (via Atlantic Ave)	Weekday Saturday Sunday	7:05 AM 7:30 AM n/a	7:30 PM 6:45 PM n/a	60 (60) 60 n/a	489 251 n/a	23.3 13.2 n/a	Oriole Plaza; PBC Library; Lakes of Delray; Delray Square; Congress Square; Palm Tran South County Facility; Delray Health Department; Delray Tri-Rail; Auburn Terrace; South County Courthouse
91	Boca Raton Cross-town (via Glades Rd)	Weekday Saturday Sunday	5:55 AM 7:55 AM 9:50 AM	8:02 PM 7:10 PM 4:17 PM	30 (30)* 60 60	956 493 223	15.8 16.3 12.0	Sandalfoot Square; West Boca Medical Center; Westwinds Shoppes; Weinberg House / JCC; SW County Regional Library; Century Village; FAU; Dixie Manor; Camino Square; Somerset Shopping Center; Town Center Mall; Glades Plaza; Boca High School; Boca Middle School; Boca Community Hospital; Palm Beach State College; Mizner Park; Mercado Real; Royal Palm Plaza
92	Boca Raton Cross-town (via Palmetto Park)	Weekday Saturday Sunday	6:00 AM 7:25 AM 8:25 AM	6:05 PM 6:05 PM 4:20 PM	60 (60) 60 60	397 266 n/a	17.0 13.2 n/a	Sandalfoot Plaza; Garden Shops at Boca; Boca Middle School; Camino Square; Mizner Park; Palm Aire Shopping Center; Boca Hab Center; Town Center Mall; Boca Raton City Hall; Addison / El Mercado; Hillsboro Beach; Cove Shopping Center

Route No.	Route Name	Days of Service	Span of Service		Frequency	Average Daily Ridership	Riders per Revenue Hour	Major Destinations / Communities Served
			Start Time	End Time	Peak (off-peak)			
94	FAU-Boca Raton Tri-Rail Shuttle	Weekday Saturday Sunday	6:45 AM n/a n/a	9:00 PM n/a n/a	20 (40)	648 n/a n/a	25.9 n/a n/a	Boca Raton Tri-Rail; University Heights; University Gardens; Winfield Park; 5th Ave Shops; Boca Verde; Caldwell Heights; FAU / Palm Beach State College
95	Palm Beach County to Martin County (via I-95)	Weekday Saturday Sunday	5:10 AM n/a n/a	7:30 PM n/a n/a	2 routes / day (AM/PM)	23 n/a n/a	5.1 n/a n/a	Martin County - Halpatiokee Regional Park; Palm Beach Gardens - The Gardens Mall; Jupiter - West Jupiter Recreation Center; West Palm Beach - Intermodal Transit Center
-	Lake Region Commuter Route ("The Clewiston Shuttle")	Weekday Saturday Sunday	7:00 AM n/a n/a	7:00 PM n/a n/a	-			Clewiston Loop; Clewiston Wal-Mart; PBCC - Belle Glade Campus

Appendix F/Tri-Rail Stations in Palm Beach County

Station Name	Address	Days of Service	Span of Service		Frequency	Palm Tran Routes Served
			Start Time	End Time	Peak (Weekend Peak)	
Mangonia Park Station	1415 45th Street West, Palm Beach	Mon-Sun	4:00 AM	11:35 PM	20-45 (60)	20, 31, 33
West Palm Beach Station	203 South Tamarind Avenue, West Palm Beach	Mon-Sun	4:06 AM	11:25 PM	20-45 (60)	1, 2, 11, 31, 40, 41, 43, 44, 45, 49, 95
Lake Worth Station	1703 Lake Worth Road, Lake Worth	Mon-Sun	4:15 AM	11:14 PM	20-45 (60)	61, 62
Boynton Beach Station	2800 High Ridge Road, Boynton Beach	Mon-Sun	4:20 AM	11:08 PM	20-45 (60)	70, 71
Delray Beach Station	345 South Congress Avenue, Delray Beach	Mon-Sun	4:29 AM	10:59 PM	20-45 (60)	2, 70, 81
Boca Raton Station	680 Yamato Road, Boca Raton	Mon-Sun	4:35 AM	10:54 PM	20-45 (60)	2, 94

Appendix F/Tri-Rail Shuttles in Palm Beach County

Shuttle Name	Provider	Days of Service	Span of Service		Frequency	Major Destinations / Communities Served
			Start Time	End Time	Peak (Weekend Peak)	
Lake Worth Station Shuttle (LK1)	Tri-Rail	Mon-Fri	5:00 AM	6:54 PM	30 (60)	PBC School District; PBCSD Plant & Maint.; Central Post Office; S FL Water Mgmt. District; PBC Sheriff's Office
Boca Center Shuttle	Tri-Rail	Mon-Fri	6:02 AM	7:05 PM	30 (40)	NW 19th Street; Commercial Trail; Boca Center

Appendix G/Broward County Transit in Palm Beach County

Route No.	Route Name	Days of Service	Span of Service		Frequency	Major Destinations / Communities Served
			Start Time	End Time	Peak (Weekend Peak)	
10	Broward Central Terminal to Camino Real and Dixie Highway	Weekday Saturday Sunday	5:20 AM	11:20 PM	30 (40)	Connection to Palm Tran Routes 1 & 92 (via US 1)
18	Golden Glades Park & Ride to Sandlefoot Cove Boulevard and Highway 441 via Highway 441	Weekday Saturday Sunday	4:50 AM	12:38 AM	15 (15)	Connection to Palm Tran Routes 91 & 92 (via SR 7)

Appendix H/Palm Beach County Shuttles

Shuttle Name	Provider	Days of Service	Span of Service		Frequency	Major Destinations / Communities Served
			Start Time	End Time	Peak (Weekend Peak)	
Downtown Roundabout Route 1	City of Delray Beach	Mon-Fri Sat Sun	7:00 AM 10:00 AM 12:00 PM	8:00 PM 8:00 PM 8:00 PM	30	Tri-Rail to the Beach
Downtown Roundabout Route 2	City of Delray Beach	Mon-Sat Sun	10:00 AM 12:00 PM	9:00 PM 8:00 PM	20	Delray Beach Public Library to the Beach
APOC East Shuttle Route A	City of Boca Raton	Mon-Fri	6:40 AM	7:32 PM	20 (40)	Arvida Park of Commerce (APOC) Office; Boca Colonnade; GE; POC; Congress; Tyco; Clint Moore Road; Doubletree; One Park Place
APOC East Shuttle Route B	City of Boca Raton	Mon-Fri	6:40 AM	7:29 PM	20 (40)	Arvida Park of Commerce (APOC) Office; Guest Suites; One Park Place; POC; Congress Corp Plaza; AMTEC CTR; Broken Sound
APOC West Shuttle	City of Boca Raton	Mon-Fri	6:30 AM	7:29 PM	20 (30)	Arvida Park of Commerce (APOC) Office; Yamato; Mobil Mart; Office Depot; Clint Moore; The Atrium; Sabre Center; Mutual of America; OCE; Seimens; VPC
T-Rex Shuttle Route A	City of Boca Raton	Mon-Fri	6:32 AM	7:53 PM	20 (20)	T-Rex Corporate Center; Office Condo; Shoppes Blue Lake; Silver Company; Nation Safe Driver; Bank / McDonalds; Boca Village
T-Rex Shuttle Route B	City of Boca Raton	Mon-Fri	7:10 AM	10:56 AM	20 (20)	T-Rex Corporate Center; Boca Village; McDonalds; National Safe Driver; Silver Company; Shoppes Blue Lake; Condo Office
Trolley Service	City of West Palm Beach	Sun-Wed Thurs-Sat	11:00 AM 11:00 AM	9:00 PM 11:00 PM		Connects CityPlace to the Clematis Street District
Shopper Hopper (through Sept. 2011)	City of Boynton Beach	Mon-Sat	9:00 AM	12:45 PM		Library / Oceanfront Park; Publix; Winn Dixie; Wal-Mart; Boynton Beach Mall / Target / Wal-Mart / Shoppes of Boynton & Kohl's
Belle Glade Express Blue Route	City of Belle Glade	Mon-Fri Sat Sun	5:00 AM 7:45 AM 3:15 PM 9:45 AM	8:00 PM 10:15 AM 6:30 PM 4:00 PM	35	Southwestern neighborhoods; Winn Dixie; McDonald Park; Lakeside Academy; Dolly Hand Cultural Arts Center; Palm Tran transfer points
Belle Glade Express Pink Route	City of Belle Glade	Mon-Fri Sat Sun	5:00 AM 7:45 AM 3:15 PM 9:45 AM	8:00 PM 10:15 AM 6:30 PM 4:00 PM	35	Southwestern and northwestern neighborhoods; Winn Dixie; McDonald Park; Lakeside Academy; Palm Tran transfer points

Shuttle Name	Provider	Days of Service	Span of Service		Frequency	Major Destinations / Communities Served
			Start Time	End Time	Peak (Weekend Peak)	
Belle Glade Express Green Route	City of Belle Glade	Mon-Fri Sat Sun	5:00 AM 7:45 AM 3:15 PM 9:45 AM	8:00 PM 10:15 AM 6:30 PM 4:00 PM	35	Southeastern neighborhoods; Winn Dixie; Glades Pioneer Terrace Senior Center; McDonald Park; Lakeside Academy; Carter Shopping Center; Palm Tran transfer points
Belle Glade Express Orange Route	City of Belle Glade	Mon-Fri Sat Sun	5:00 AM 7:45 AM 3:15 PM 9:45 AM	8:00 PM 10:15 AM 6:30 PM 4:00 PM	35	Northeastern neighborhoods; Winn Dixie; Pruitt Village; McDonald Park; Belle Glade State Municipal Airport; Palm Tran transfer points
Belle Glade Express Purple Route	City of Belle Glade	Mon-Fri	5:00 AM	8:00 PM	60	Citywide neighborhoods; Winn Dixie; Palm Beach County Health Center; Social Security Office; Lakeside Hospital; Palm Tran transfer points

Appendix I/Peer Agency Performance Measures – Fixed-Route

Year	Palm Tran	BCT	Pinellas	HART	Phoenix	Hampton Roads	Orlando	Cincinnati	Peer Mean
Economic - Utilization									
Passenger Trips	10,026,046	36,804,682	11,865,520	13,125,468	50,570,664	15,194,997	23,747,795	22,886,445	27,813,540
Passenger Trips per Capita	10.20	21.02	13.43	15.98	32.26	12.55	13.11	27.07	19.88
Passenger Miles	50,594,533	166,671,841	61,548,553	63,651,970	189,594,703	92,658,651	136,787,299	103,965,183	118,554,236
Revenue Miles	6,798,404	13,878,467	8,710,429	7,421,599	20,269,740	11,764,916	14,230,128	10,445,144	12,291,724
Vehicle Hours	462,886	1,079,595	650,622	622,365	1,784,083	873,046	1,107,263	892,296	1,005,598
Vehicle Miles	7,535,471	15,544,431	9,922,956	8,449,218	24,468,162	11,912,277	16,215,911	12,355,966	13,939,341
Operating Expenses	$47,479,224	$92,319,684	$50,049,702	$57,746,132	$157,237,130	$64,719,030	$83,363,344	$82,118,571	$86,036,406
Local Revenue: Passenger Fare Revenue	$6,822,925	$23,340,298	$11,517,978	$11,269,784	$34,384,290	$15,838,517	$20,147,358	$29,411,355	$22,947,466
Average Fare	$0.68	$0.63	$0.97	$0.86	$0.68	$1.04	$0.85	$1.29	$0.87
Fuel Consumption (gal)	1,938,040	4,405,555	2,430,921	2,032,759	3,200,095	3,075,107	3,998,153	2,183,884	3,173,680
Vehicle Miles per Gallon	3.89	3.53	4.08	4.16	7.65	3.87	4.06	5.66	4.50
Farebox Recovery (%)	14	25	23	20	22	24	24	36	25
Vehicles Available in Maximum Service	154	291	205	196	500	390	288	388	311
Vehicles Operated in Maximum Service (VOMS)	122	240	170	159	428	290	234	324	249
Economic - Efficiency									
Passenger Trips per VOMS	82,181	153,353	69,797	82,550	118,156	52,397	101,486	70,637	107,978
Operating Expense per Capita	$48.31	$52.72	$56.64	$70.31	$100.31	$53.46	$46.02	$97.15	$66.12
Operating Expense per Passenger Trip	$4.74	$2.51	$4.22	$4.40	$3.11	$4.26	$3.51	$3.59	$3.61
Maintenance Expense per Vehicle	$66,268	$64,873	$38,418	$64,970	$55,465	$36,225	$55,458	$56,724	$54,403
Revenue Miles per Vehicles in Max Service	55,725	57,827	51,238	46,677	47,359	40,569	60,813	32,238	50,542
Economic - Effectiveness									
Passenger Trips per Vehicle Hour	21.66	34.09	18.24	21.09	28.35	17.40	21.45	25.65	25.53

Year	Palm Tran	BCT	Pinellas	HART	Phoenix	Hampton Roads	Orlando	Cincinnati	Peer Mean
Revenue Miles per Vehicle Mile	0.90	0.89	0.88	0.88	0.83	0.99	0.88	0.85	0.89
Passenger Trips per Revenue Mile	1.47	2.65	1.36	1.77	2.49	1.29	1.67	2.19	2.09
Passenger Trips per Revenue Hour	24.88	36.28	19.58	22.57	32.33	17.44	23.06	28.53	27.61
Operating Expense per Passenger Mile	$0.94	$0.55	$0.81	$0.91	$0.83	$0.70	$0.61	$0.79	$0.76
Operating Expense per Revenue Mile	$6.98	$6.65	$5.75	$7.78	$7.76	$5.50	$5.86	$7.86	$6.92
Operating Expense per Revenue Hour	$117.81	$91.01	$82.59	$99.29	$100.51	$74.27	$80.96	$102.38	$93.46
Vehicle Miles Per Capita	7.67	8.88	11.23	10.29	15.61	9.84	8.95	14.62	10.74
Economic - Administration									
Total Employee FTEs	425.06	893.60	527.15	602	n/a	784.59	886.49	858.72	711.06
Passenger Trips per Employee FTE	23,587	41,187	22,509	21,809	n/a	19,367	26,789	26,652	25,986
Revenue Hours per Employee FTE	948.15	1,135.19	1,149.59	966	n/a	1,110.63	1,161.56	934.10	1,057.94
Maintenance Expenses	$10,205,309	$18,878,131	$7,875,767	$12,734,026	$27,732,523	$14,127,604	$15,971,812	$22,009,043	$16,595,220
Maintenance Expense per Revenue Hour	$25.32	$18.61	$13.00	$21.89	$17.73	$16.21	$15.51	$27.44	$18.76

Appendix I/Peer Agency Performance Measures – Fixed-Route

Year	Palm Tran	BCT	Pinellas	HART	Phoenix	Hampton Roads	Orlando	Cincinnati	Peer Mean
Availability - Spatial									
Service Area Population	982,900	1,751,234	883,631	821,306	1,567,453	1,210,588	1,811,366	845,303	1,317,770
Service Area Density	2,693	4,271	3,682	3,380	3,026	3,281	714	3,226	3,485
Route Miles	1,020	1,030	913	973	2,216	1,511	1,296	1,238	1,287
Average Passenger Trip Length	5.05	4.53	5.19	4.85	3.75	6.10	5.76	4.54	4.76
Availability - Temporal									
Revenue Hours	403,023	1,014,405	606,001	581,600	1,564,436	871,385	1,029,713	802,130	931,303
Maintenance and Construction									
Average Age of Fleet (years)	5.53	5.37	4.49	6.07	6.67	8.39	3.61	6.33	5.66
Revenue Miles between Failures	19,649	34,353	4,532	5,378	13,044	3,215	8,806	9,835	11,244
Spare Ratio	0.21	0.18	0.17	0.19	0.14	0.26	0.19	0.16	0.20
Travel Time									
Travel Speed	16.87	13.68	14.37	12.76	12.96	13.50	13.82	13.02	13.59

Appendix I/Peer Agency Performance Measures – Demand-Response

Year	Palm Tran	BCT	Miami	Orlando	Dallas	Pinellas	Delaware	Phoenix	San Antonio	Peer Mean
Economic - Utilization										
Passenger Trips	891,001	916,009	1,551,970	686,258	1,038,686	228,463	859,109	533,008	1,078,658	864,796
Passenger Trips per Capita	0.91	0.52	0.65	0.38	0.44	0.26	0.98	0.34	0.70	0.58
Passenger Miles	10,550,733	9,800,825	16,778,379	8,670,973	14,338,057	1,746,172	10,844,204	4,353,746	12,679,528	9,973,624
Revenue Miles	8,599,976	8,310,956	13,084,419	7,501,304	7,818,699	2,279,048	8,070,339	4,595,783	9,282,071	7,726,955
Vehicle Hours	599,894	622,848	1,016,846	512,757	574,060	88,974	510,698	407,787	556,283	543,350
Vehicle Miles	9,957,279	9,649,073	14,539,470	8,647,078	11,271,213	2,562,340	9,494,516	5,556,608	10,952,500	9,181,120
Operating Expenses	$24,699,241	$29,787,765	$44,522,040	$20,427,202	$38,693,610	$5,082,200	$41,882,984	$22,720,933	$27,163,087	$28,331,007
Local Revenue: Passenger Fare Revenue	$1,913,649	$1,362,687	$4,004,568	$1,307,186	$1,976,131	$650,693	$1,282,730	$738,476	$1,694,391	$1,658,946
Average Fare	$2.15	$1.49	$2.58	$1.90	$1.90	$2.85	$1.48	$1.39	$1.57	$1.92
Fuel Consumption (gal)	973,787	1,077,158	1,127,524	811,087	1,344,172	260,608	1,193,019	755,740	1,265,482	978,731
Vehicle Miles per Gallon	10.23	8.96	12.90	10.66	8.39	9.83	7.96	7.35	8.65	9.44
Farebox Recovery (%)	8	5	9	6	5	13	3	3	6	6
Vehicles Available in Maximum Service	257	312	352	197	209	132	268	180	226	237
Vehicles Operated in Maximum Service (VOMS)	223	231	316	168	207	117	228	152	201	205
Economic - Efficiency										
Passenger Trips per VOMS	3,996	3,965	4,911	4,085	5,018	1,953	3,768	3,507	5,366	4,063
Operating Expense per Capita	$25.13	$17.01	$18.53	$11.28	$16.27	$5.75	$47.97	$14.50	$17.61	$19.34
Operating Expense per Passenger Trip	$27.72	$32.52	$28.69	$29.77	$37.25	$22.25	$48.75	$42.63	$25.18	$32.75
Revenue Miles per Vehicles in Max Service	38,565	35,978	41,406	44,651	37,771	19,479	35,396	30,235	46,179	36,629

Year	Palm Tran	BCT	Miami	Orlando	Dallas	Pinellas	Delaware	Phoenix	San Antonio	Peer Mean
Economic - Effectiveness										
Passenger Trips per Vehicle Hour	1.49	1.47	1.53	1.34	1.81	2.57	1.68	1.31	1.94	1.68
Revenue Miles per Vehicle Mile	0.86	0.86	0.90	0.87	0.69	0.89	0.85	0.83	0.85	0.84
Passenger Trips per Revenue Mile	0.10	0.11	0.12	0.09	0.13	0.10	0.11	0.12	0.12	0.11
Passenger Trips per Revenue Hour	1.71	1.66	1.64	1.49	2.28	2.86	1.96	1.56	2.24	1.93
Operating Expense per Passenger Mile	$2.34	$3.04	$2.65	$2.36	$2.70	$2.91	$3.86	$5.22	$2.14	$3.02
Operating Expense per Revenue Mile	$2.87	$3.58	$3.40	$2.72	$4.95	$2.23	$5.19	$4.94	$2.93	$3.65
Operating Expense per Revenue Hour	$47.31	$54.10	$46.91	$44.35	$85.04	$63.68	$95.36	$66.46	$56.48	$62.19
Vehicle Miles Per Capita	10.13	5.51	6.05	4.77	4.74	2.90	10.87	3.54	7.10	6.18
Economic - Administration										
Maintenance Expenses	$2,476,918	$4,893,268	$6,250,499	$1,697,796	$9,242,419	$717,488	$5,245,345	$2,040,402	$4,642,975	$4,134,123

Appendix I/Peer Agency Performance Measures – Demand-Response

Year	Palm Tran	BCT	Miami	Orlando	Dallas	Pinellas	Delaware	Phoenix	San Antonio	Peer Mean
Availability - Spatial										
Service Area Population	982,900	1,751,234	2,402,208	1,811,366	2,378,700	883,631	873,092	1,567,453	1,542,136	1,576,969
Service Area Density	2,693	4,271	7,850	714	3,452	3,682	447	3,026	1,271	3,045
Average Passenger Trip Length	11.84	10.70	10.81	12.64	13.80	7.64	12.62	8.17	11.75	11.11
Revenue Hours	522,121	550,601	949,173	460,548	455,030	79,804	439,200	341,858	480,960	475,477
Maintenance and Construction										
Average Age of Fleet (years)	3.77	3.80	3.28	3.56	2.00	n/a	2.60	2.23	3.40	3.08
Spare Ratio	0.13	0.26	0.10	0.15	0.01	0.11	0.15	0.16	0.11	0.13
Travel Time										
Travel Speed	16.47	15.09	13.79	16.29	17.18	28.56	18.38	13.44	19.30	17.61

Appendix J/New Starts, Small Starts, and Very Small Starts

SOURCE: FTA

New Starts Program

OVERVIEW

The Federal Transit Administration's discretionary New Starts program is the federal government's primary financial resource for supporting locally planned, implemented, and operated major transit capital investments.

The New Starts program funds new fixed guideway transit systems and extensions to existing fixed guideway transit systems in every area of the country. These projects include commuter rail, light rail, heavy rail, bus rapid transit, streetcars, and ferries.

The Federal Transit Administration is preparing rulemaking, per SAFETEA-LU.

FUNDING

SAFETEA-LU authorized $6.6 billion in total funding for fiscal years 2006, 2007, 2008, and 2009. This included funding for more than 330 projects for proposed, pending, and existing Full Funding Grant Agreements (FFGA). FFGAs are multi-year contractual agreements between the FTA and project sponsors that formally define the project scope, cost, and schedule. They also establish the maximum level of federal financial assistance and outline the terms and conditions of federal financial participation.

PROJECT DEVELOPMENT

New Starts projects, like all transportation investments in metropolitan areas, must emerge from a regional, multi-modal transportation planning process. The process is based upon rational decision-making that benefits from the information developed during the following three phases of New Starts project development:

- **Phase I – Alternatives Analysis**
  Local project sponsors are required to perform an alternatives analysis (AA) that evaluates the mode and alignment options for a particular corridor in the community. This analysis informs local officials and community members on the benefits, costs, and impacts of transportation options so that the community can identify a preference. This phase is complete when local and regional decision makers select a locally preferred alternative and it is adopted by the metropolitan planning organization (MPO) into the region's long-range transportation plan.
- **Phase II – Preliminary Engineering**
  During the preliminary engineering (PE) phase of project development for New Starts investments, local project sponsors consider their design options to refine the locally preferred alternative and complete the *National Environmental Policy Act* (NEPA) process. Preliminary engineering hones the estimates of project costs, benefits, and impacts. In addition, during the PE phase of project development, local sponsors finalize management plans, demonstrate their technical capabilities to develop the project, and commit local funding sources.

- **Phase III – Final Design**
  Final design is the last phase of project development and includes the preparation of final construction plans, detailed specifications, and bid documents.

PROJECT EVALUATION

New Starts projects must undergo evaluation by the FTA throughout the entire project development process. Projects are evaluated according to a variety of criteria. As required by SAFETEA-LU, which amends 49 USC §5309(d)(5)(B), the FTA assigns ratings of "high," "medium-high," "medium," "medium-low," or "low" throughout the project development process as information concerning costs, benefits, and impacts is refined.

Based on these evaluations, the FTA makes decisions about moving projects forward from preliminary engineering to final design, to annual funding recommendations to Congress, and to the execution of an FFGA. In the *Annual Report on New Starts*, FTA applies these evaluations to recommend funding for projects anticipated to be ready for an FFGA before the end of the budget fiscal year and to recommend funding for other meritorious projects.

CRITERIA

49 USC §5309(d) establishes the criteria under which proposed New Starts projects are evaluated. The FTA evaluates the project justification and the local financial commitment according to the following measures.

Project Justification

- **Mobility Improvements**
  - measured by travel time benefits per project passenger mile, low-income households served, and employment near stations
- **Environmental Benefits**
  - measured by change in regional pollutant emissions, change in regional energy consumption, and EPA air quality designation
- **Cost-Effectiveness**
  - measured as the cost per hour of travel time saved
- **Operating Efficiencies**
  - measured by system operating cost per passenger mile
- **Transit-Supportive Land Use & Future Patterns**
  - measured by existing land use, transit-supportive plans and policies and performance, and impacts of policies
- **Other**
  - includes a number of optional factors, including the projected economic impact of project

SAFETEA-LU adds two criteria: Economic Development and the Reliability of Forecasts.

Local Financial Commitment

- The proposed share of total project costs from sources other than 49 USC §5309 New Starts, including federal formula and flexible funds, the local match required by federal law, and any additional capital funding
- The stability and reliability of the proposed capital financing plan
- The ability of the sponsoring agency to fund operations and maintenance of the entire transit system (including existing service) as planned, once the project is built

Overall Evaluation

To assign overall project ratings to each proposed New Starts project, FTA considers the individual ratings for each of the project justification and local financial commitment measures. FTA combines this information into summary "finance" and "project justification" ratings for each prospective New Starts project. Individual measures, summary criteria ratings, and overall project ratings are designated as "high," "medium-high," "medium," "medium-low" or "low."

GENERAL PRINCIPLES THAT APPLY WHEN DETERMINING ANNUAL FUNDING ALLOCATIONS

The following general principles are applied when determining annual funding allocations among proposed New Starts projects:

- Any project recommended for new funding commitments should meet the project justification, local financial commitment, and process criteria established by Sections 5309(d) and 5309(e) and be consistent with Executive Order 12893, Principles for Federal Infrastructure Investments, issued January 26, 1994.
- Existing FFGA commitments should be honored before any additional funding recommendations are made, to the extent that funds can be obligated for these projects in the coming fiscal year.
- The FFGA and Project Construction Grant Agreement (PCGA) define the terms of the federal commitment to a specific project, including funding. Upon completion of an FFGA or PCGA, the federal funding commitment has been fulfilled. Additional project funding will not be recommended. Any additional costs beyond the scope of the federal commitment are the responsibility of the grantee, although FTA works closely with grantees to identify and implement strategies for containing capital costs at the level included in the FFGA or PCGA at the time it was executed.
- Funding for initial planning efforts such as AA is no longer eligible for Section 5309 funding under SAFETEA-LU but may be provided through grants under the Section 5303 Metropolitan Planning or Section 5307 Urbanized Area Formula programs; from Title 23 "flexible funding" sources; or from the Section 5339 AA program.
- Firm funding commitments, embodied in FFGAs or PCGAs, will not be made until projects demonstrate that they are ready for such an agreement (i.e., the project's development and

design has progressed to the point where its scope, costs, benefits, and impacts are considered firm and final).

- Funding should be provided to the most worthy investments to allow them to proceed through the process on a reasonable schedule, to the extent that funds can be obligated to such projects in the upcoming fiscal year. Funding decisions will be based on the results of the project evaluation process and resulting project justification, local financial commitment, and overall project ratings.

Small Starts Program

The FTA administers the Section 5309 Capital Investment Grant program, which provides capital funds for major transit investment projects. The Section 5309 Capital Investment Grants program includes a project category called "Small Starts." Small Starts projects are low-cost projects that qualify for a highly simplified project evaluation and rating process by FTA.

Does your project qualify as a Small Start?

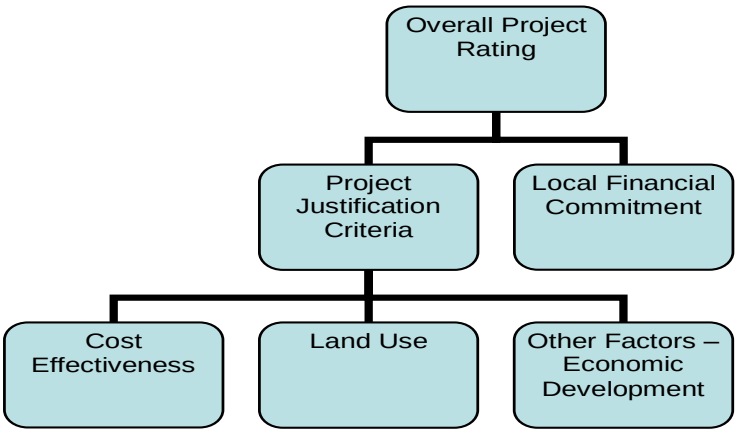
In order to qualify as a Small Start, the total project cost must be less than $250 million, with no greater than $75 million in requested Section 5309 Capital Investment Grant funding. In addition, a project must meet one of the following criteria:

1. Be a fixed guideway for at least 50% of the project length in the peak period
2. Be a corridor-based bus project with the following minimum elements:

    - Substantial transit stations
    - Signal priority/pre-emption (for bus/LRT)
    - Low-floor/level boarding vehicles
    - Special branding of service
    - Frequent service (10-minute peak/15-minute off-peak)
    - Service offered at least 14 hours per day

How are Small Starts projects evaluated?

The following graphic illustrates the project rating process and evaluation criteria for Small Starts projects.



Project Justification Criteria

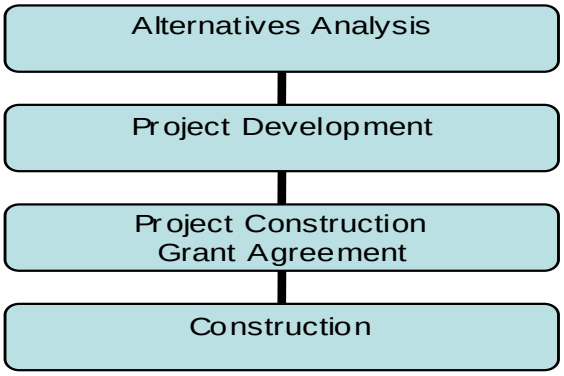
- Cost Effectiveness – This is the incremental cost per hour of transportation system user benefits compared to the baseline alternative, using the opening year forecast.
- Land Use - Three categories are evaluated for this criterion: (1) existing land use patterns, (2) transit-supportive plans and policies, and (3) the performance and impact of these policies.
- Other Factors - Economic development benefits and congestion pricing will be considered in this category. Applicants are encouraged to provide information on the economic development impacts of the proposed project.

Local Financial Commitment – A project will receive a "medium" rating if project sponsors are able to demonstrate:

- a reasonable plan to secure funding for the local share of capital costs or sufficient available funds for the local (non-federal) share,
- the additional operating and maintenance costs of the project are less than 5% of the agency's operating budget, and
- the agency is in reasonably good financial condition.

What is the project development process for Small Starts?

During the planning and project development process, illustrated in the graphic below, FTA evaluates the project's justification and local financial commitment, and the sponsor addresses any remaining planning, environmental, engineering, and design issues and requirements. FTA is required by law to approve the initiation of project development and to make funding recommendations after project development is complete.



Alternatives Analysis

By law, FTA must consider the results of planning and AA when evaluating proposed projects. Small Starts may utilize a very simple AA process, commensurate with the local decision at hand.

Project Development

For Small Starts projects, preliminary engineering and final design work are combined into one phase referred to as Project Development. Below are the criteria that must be met for approval to proceed into Project Development:

- Complete AA.
- Adopt the Locally Preferred Alternative (LPA).
- Include the LPA within the MPO's long-range plan.
- Complete NEPA scoping.
- Receive a "medium" rating or better from FTA.

In addition, a project sponsor must develop an acceptable Project Management Plan, including a fair and reasonable project budget and schedule.

Project Construction Grant Agreement

Financial assistance under Section 5309 for construction of a Small Starts project is provided through a Project Construction Grant Agreement (PCGA) that is negotiated during project development.

How is a Small Starts project recommended for funding?

Small Starts projects that meet the following conditions may be recommended for funding in the President's budget, subject to funding availability:

- The project must have been approved to enter into project development;
- The project must be "ready" to be implemented within the fiscal year the project is proposed for funding; and
- The project must be rated at least "medium."

As with all Section 5309 Capital Investment Grants, the rating process is separate from the budget decisions. Projects that achieve a "medium" or better rating will be eligible to receive Section 5309 Capital Investment Grant funds but are not guaranteed to receive any funding in the President's Budget.

Very Small Starts Program

The FTA administers the Section 5309 Capital Investment Grant program, which provides capital funds for major transit investment projects. The Section 5309 Capital Investment Grants program includes a project category called "Very Small Starts." These projects are simple, low-risk projects that qualify for a highly simplified project evaluation and rating process by FTA.

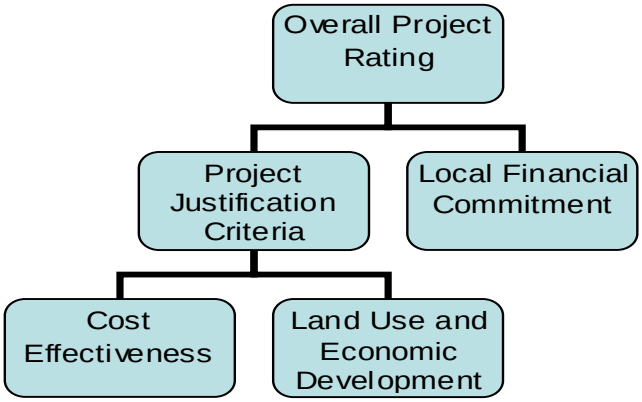
Does your project qualify as a Very Small Start?

In order to qualify for the streamlined Very Small Starts evaluation and rating process, a project must be a bus, rail, or ferry project and must contain the following features:

- Transit stations
- Signal priority/pre-emption (for bus/LRT)
- Low-floor/level boarding vehicles
- Special branding of service
- Frequent service (10-minute peak/15-minute off-peak)
- Service offered at least 14 hours per day
- Existing corridor ridership exceeding 3,000/day
- Less than $50 million total cost
- Less than $3 million cost per mile (excluding vehicles)

How are Very Small Starts projects evaluated?

The following graphic illustrates the project rating process and evaluation criteria for Very Small Starts projects.



Project Justification Criteria – Automatically receives a "medium" rating.

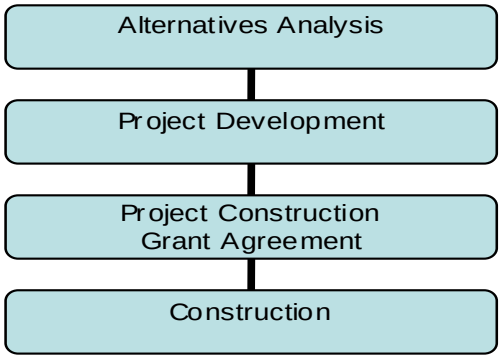
- Cost Effectiveness – By their nature, Very Small Starts projects are cost-effective and therefore receive a “medium” rating.
- Land Use and Economic Development - Also due to the scale of Very Small Starts projects, this criterion automatically receives a "medium" rating.

Local Financial Commitment – A project will receive a "medium" rating if it can demonstrate:

- funds are available for the local share,
- the additional operating and maintenance costs of the project are less than 5% of the agency’s operating budget, and
- the agency is in reasonably good financial condition.

What is the project development process for Small Starts?

During the planning and project development process, illustrated in the graphic below, FTA evaluates the project’s justification and local financial commitment, and the sponsor addresses any remaining planning, environmental, engineering, and design issues and requirements. FTA is required by law to approve the initiation of project development and to make funding recommendations after project development is complete.



Alternatives Analysis

By law, FTA must consider the results of planning and AA when evaluating proposed projects. Very Small Starts may utilize a very simple AA process.

Project Development

For Very Small Starts projects, preliminary engineering and final design work are combined into one phase referred to as Project Development. Below are the criteria that must be met for approval to proceed into Project Development:

- Complete Alternatives Analysis.
- Adopt the LPA.
- Include the LPA within the MPO’s long-range plan.

- Complete NEPA scoping
- Receive a "medium" rating or better from FTA

In addition, a project sponsor must develop an acceptable Project Management Plan, including a fair and reasonable project budget and schedule.

Project Construction Grant Agreement

Financial assistance under Section 5309 for construction of a Very Small Starts project is provided through a Project Construction Grant Agreement (PCGA) that is negotiated during project development.

How is a Very Small Starts project recommended for funding?

Very Small Starts projects that meet the following conditions may be recommended for funding in the President's budget, subject to funding availability:

- The project must have been approved to enter into project development;
- The project must be "ready" to be implemented; and
- The project must be rated at least "medium."

As with all Section 5309 Capital Investment Grants, the rating process is separate from the budget decisions. Projects that achieve a "medium" or better rating will be eligible to receive Section 5309 Capital Investment Grant funds but are not guaranteed to receive any funding in the President's Budget.