

System Redesign 2015-2017

Phase 1 Analysis

Prepared by Pinellas Suncoast Transit Authority

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BACKGROUND

PSTA Today

PSTA provides multi-faceted transportation service throughout Pinellas County as well as regional service to Tampa and Hillsborough County. The PSTA system consists of the following transit services:

- 43 bus routes including 33 Local routes, 2 directly-operated Trolley routes, 3 contracted Trolley routes, 3 North County Connector routes, and 2 Regional Express routes serving approximately 5,100 stops across a 243 square mile service area.
- Contracted DART paratransit service.

PSTA utilizes 204 fixed-route vehicles (171 peak vehicles) and operates about 612,000 annual revenue vehicle hours, supporting approximately 14.5 million annual passenger boardings.

2013 Community Bus Plan

Overview

In August 2012, PSTA commissioned the *2013 Community Bus Plan (Bus Plan)* to identify the public transportation needs of Pinellas County. The *Bus Plan* included the following objectives:

- Evaluate PSTA's current bus transit system;
- Complete a detailed market, ridership, and operational review;
- Solicit feedback from elected officials, community stakeholders, the general public, PSTA bus riders, and PSTA Board and staff;
- Develop a scalable plan that can be implemented based on available resources in a financially sustainable manner; and
- Provide the basis for the bus element of the larger long range transit plan.

The *Bus Plan* team engaged the PSTA board as well as a wide variety of stakeholders to develop three goals for PSTA:

- **Build Transit Constituency** – Broaden PSTA's market penetration to attract more choice riders, increase the use of transit for more trip purposes, and support overall community mobility.
- **Improve Transit Competitiveness** – Create a transit network that is competitive with personal vehicle travel for the trip purpose needs of Pinellas County residents and visitors.

- **Build Financial Sustainability** – Use resources effectively and increase ridership by building efficiency into an integrated transit network, focusing resources where transit is most competitive and can create the greatest return, and maintaining performance and productivity standards.

As a result, the *Bus Plan* was developed to be dynamic and scalable with three primary scenarios:

- **Optimal** – A network designed to provide highly-performing and cost-effective transit service in an unconstrained financial scenario.
- **New Revenue** – A network designed to carry forward the design and service levels of the Optimal Scenario within the financial constraints of a potential countywide one-percent sales tax as the local funding source for transit.
- **No New Revenue** – A pair of network design alternatives that explore how to best create a streamlined transit system with the stricter financial constraints of PSTA's existing property tax-based local revenue stream.
 - *Core Preservation Alternative* – A network featuring reduced coverage with stronger investment in a core network of PSTA's highest-performing routes serving the greatest number of passengers.
 - *Coverage Preservation Alternative* – A network that distributes service investment more evenly across the service area with reduced focus on the core network.

Approach and Methodology

The *2013 Community Bus Plan* is the result of collaboration between PSTA and the community. The combination of the collaborative creation of goals and guiding principles, data-driven market assessment, service evaluation, and extensive public outreach drove the development of a comprehensive plan including network and route design recommendations, and a corresponding financial plan.

Data Driven Plan

To assess and evaluate current market conditions and PSTA's existing services, a wide variety of data was collected about the Tampa Bay Region, Pinellas County, and the PSTA system. Data and reports reviewed included the 2010 census, population and employment projections from the Pinellas County Metropolitan Planning Organization (MPO), travel demand data from the Florida Department of Transportation (FDOT), system-wide ridership counts, 2012 on-board survey results, and previous studies provided by PSTA.

Service

The service evaluation provided comprehensive analysis of the PSTA network in order to identify opportunities to efficiently serve travel to, from, and within Pinellas County increase

ridership, while maximizing revenue for PSTA and preparing for opportunities to expand service. As with any system of its size, PSTA has a number of routes that perform very well and a number that perform less well. By increasing investment in its best-performing routes while examining alternative means of providing mobility along its poorer performing routes, PSTA can move into the future with continued increases in ridership and increased operational efficiencies while remaining a responsible steward of taxpayer resources.

Key service analysis findings include:

The majority of system ridership continues to be generated by PSTA's local routes, carrying 86 percent of weekday ridership. Trolley services are responsible for 13 percent of weekday ridership while express services make up only one percent.

- PSTA's "core network" of just seven routes (Routes 4, 18, 19, 52, 60, and the Central Avenue and Suncoast Beach Trolleys) is responsible for 71 percent of the system's ridership.
- 48 percent of PSTA trips start in St. Petersburg, while 19 percent of trips start in Clearwater.
- Midday ridership is nearly equal to the total ridership for the morning and evening peak periods, suggesting demand for all-day service. It is likely that increased midday frequencies along higher-performing routes would increase ridership.
- Average trip length is over five miles on weekdays, indicating potential appeal for limited-stop service along major corridors. Increased frequencies will lead to more short distance transit travel with higher cost effective seat turnover.
- A wide variety of fare types are received regularly, with cash fares and 31-day passes being the most frequent methods of payment. The high proportion of cash fares may indicate a greater market for daily passes given their smaller relative share.
- Transfer activity is very well-distributed thanks to the large geographical size of the service area. Grand Central Station and Park Street Terminal lead the system in passenger boarding activity.
- Very few routes operate with frequencies conducive to spontaneous use. Increasing frequencies along strong transit corridors is a reliable way to increase ridership and customer satisfaction.

Outreach

Public outreach played a key role in the development and review of the *2013 2013 Community Bus Plan*. The outreach efforts were successful in revealing opinions on the current state of transit service in Pinellas County as well as collecting a number of suggestions for improvement from people familiar with the system and its impact on the community. Overall, PSTA participated in 65 meetings and events and reached more than 3,300 residents, students, and business and community leaders. PSTA continued to solicit comments on bus improvements after the Spring 2013 as part of the comprehensive *Greenlight Pinellas Plan* development, of which the bus plan was a component.

Specific highlights include the following:

- New partnerships and services with specific market and geographic focuses like the Jolley Trolley and North County Connector have been successful, and there is a desire to see tailored services like these expanded upon, particularly in North County.
- PSTA is seen as providing quality amenities; however, stakeholders would like to see more signage and bus shelters to enhance the customer experience.
- More “premium transit” featuring fast, direct service is desired.
- Frequency and span of service are the most desired improvements for PSTA transit service, followed by speed.
- Bundling frequency and speed improvements alongside improvements to infrastructure and passenger amenities as part of a premium BRT or rapid transit service is strongly supported by the community.

SYSTEM REDESIGN

Approach

PSTA is moving forward with implementation of the 2013 Community Bus Plan and will use the “No New Revenue” scenario recommendations as the framework for redesigning the PSTA system.

The System Redesign Work Plan will guide implementation of the 2013 Community Bus Plan in the context of current fiscal constraints. The work plan will occur in 10 phases, as shown below, organized based on a comprehensive performance evaluation analysis conducted in early 2015 and grouped by geography/interconnected routes.

System Redesign Work Plan

2015

Group 1 – Lowest Performing Route Adjustments

2016

Group 2 – Relocation of St. Petersburg Transfer Activity from Williams Park

Group 3 – Countryside/Safety Harbor/Oldsmar

Group 4 – Gateway Area

Group 5 – St. Petersburg/Pinellas Park/Largo

2017

Group 6 – Clearwater/Palm Harbor/Dunedin

Group 7 – Gulfport/Pinellas Point/South St. Petersburg

Group 8 – Regional Express

Group 9 – Bus Rapid Transit and Beach Trolley Services

Group 10 – Route 52 and Carillon

System Redesign Process

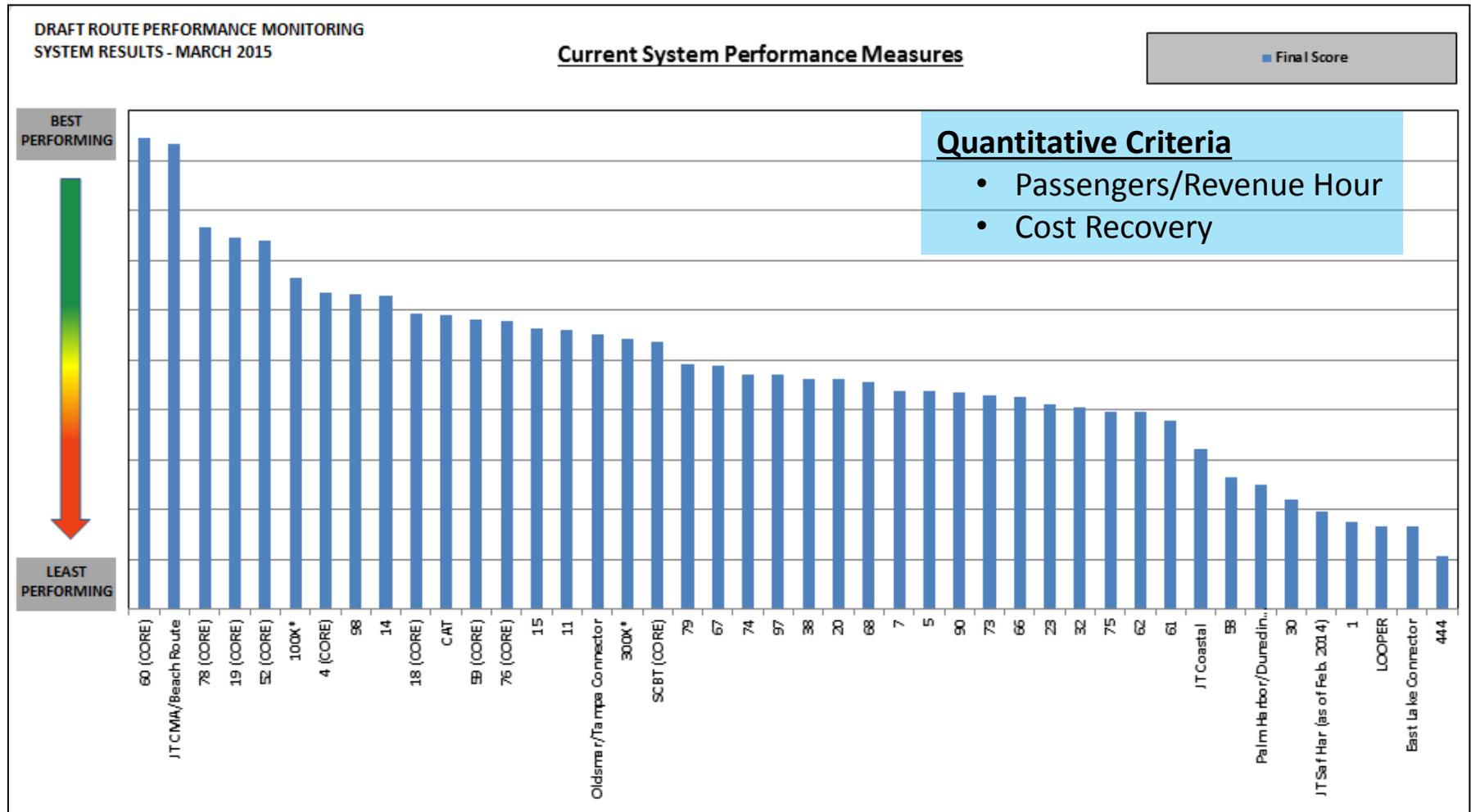
For each group/phase of the system redesign, PSTA will follow the following six step process:

1. Utilize the 2015 Route Performance Evaluation to identify performance of routes included in the phase.
2. Consult the 2013 Community Bus Plan recommendations.
3. Conduct a targeted technical analysis involving review of current demographic and ridership data and rider surveys.
4. Review financial implications of any proposed route modifications.
5. Identify transportation alternatives for any riders affected by route modifications.
6. Engage the public and present final recommendations for PSTA board action.

System Performance Evaluation

Step 1 of the system redesign process is to review the results of the System Performance Evaluation process. This process was designed by PSTA to evaluate individual route performance relative to its service category and the overall system. Routes are scored based on productivity (passengers/revenue hour) and cost recovery (revenue/cost) and ranked from best performing to least performing as shown in Figure 1.

Figure 1: System Performance Evaluation



Targeted Analysis

Step 3 of the system redesign process is to conduct a targeted analysis of the routes in each group/phase. This targeted analysis uses current data including demographics, ridership, major trip attractors, transfer data, on-time performance, rider surveys, and public comments. New data will be collected during each phase as needed.

Transportation Alternatives

In Step 4 of the system redesign process, PSTA will identify and communicate to the riding public other routes or services that could be used instead of a discontinued route or segment. In areas where routes are realigned, PSTA will communicate to the riding public how to use the modified service to continue to make their trips.

Public Engagement

For each phase of the system redesign, PSTA will engage the public through a three part public outreach process (Step 6). During the planning phase, PSTA will engage major stakeholders, local government staff, and riders to obtain information on usage and desired improvements. Comments received will inform the route redesign recommendations. Once recommendations have been developed, PSTA will engage the public through a public workshop phase, including at least one public workshop, and/or at least one public hearing as required by PSTA policy for major service changes. In the implementation phase, PSTA will inform riders and the public of upcoming service modifications through numerous channels including but not limited to ambassadors on buses; notifications signs at stops, transfer areas, and key locations along routes; notices in buses; and traditional and social media.

Recommendations

For each phase, a set of recommendations will be developed based on the system redesign process. PSTA will follow its public engagement plan to communicate with the public on the recommendations and final service modifications.

PROPOSED SERVICE MODIFICATIONS – PHASE I

Route	Proposed Service Change
1 & 30	Discontinue 30 and Redesign 1 (New Route 22)
58 & 18	Discontinue 58 and Redesign Segment of 18 to Serve SPC
444	Discontinue
East Lake Connector (811)	Discontinue

PHASE I ROUTE ANALYSIS

Phase I of the system redesign includes discontinuation of low performing Routes 30, 58, 444 and the East Lake Connector (811), redesign of low performing Route 1, and redesign of Route 18 to serve St. Petersburg College following the discontinuation of Route 58. The following analysis was conducted to inform development of these recommendations and to identify transportation alternatives for riders who will lose service from the discontinued routes.

Routes 1 & 30

As shown in Figure 2, Route 1 runs Monday through Saturday from approximately 7:15 am to 6:30 pm. As shown in Figure 3, Route 30 runs Monday through Saturday from approximately 6:30 am to 7:00 pm. During midday, Route 1 provides 90 minute service between Tyrone Square Mall and Gateway Mall via 22nd Ave N and 1st St N. It serves 1 major mall and 3 large shopping centers adjacent to primarily single-family residences. Route 30 provides 60 minute service between Tyrone Square Mall and Northeast Shopping Center via 30th Ave N/4th St N. Route 30 serves 1 major mall and 2 large shopping centers adjacent to primarily single-family residences along the 30th Avenue Corridor.

During morning and afternoon peak hours, Routes 1 & 30 are interlined, with Route 1 providing 60 minute service between Tyrone Square Mall and Northeast Shopping Center via 22nd Ave N and then converting to Route 30 for 60 minute service between Northeast Shopping Center and Tyrone Square Mall via 30th Ave N. During the morning and afternoon peak hours, there is no service to Gateway Mall via Route 1.

**Figure 2: Route 1
(Recommended for Redesign)**

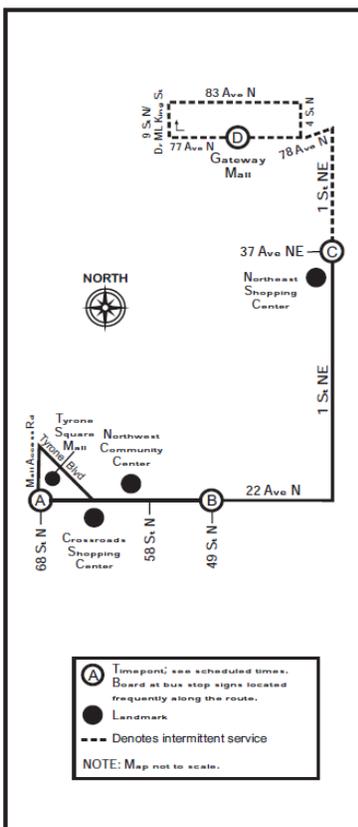


Figure 3: Route 30 (Recommend to Discontinue)

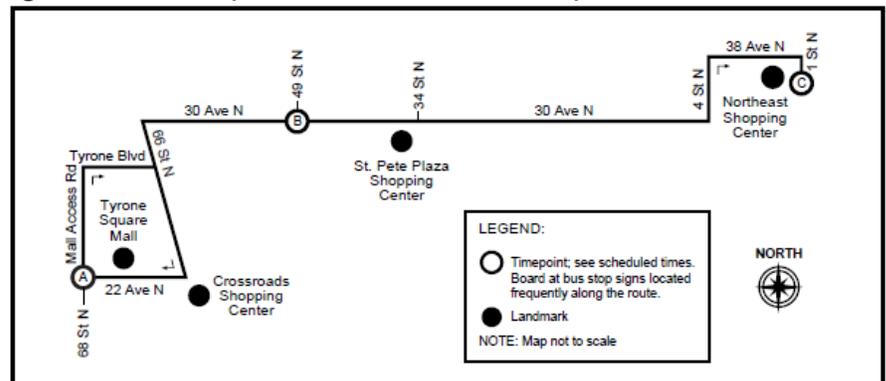
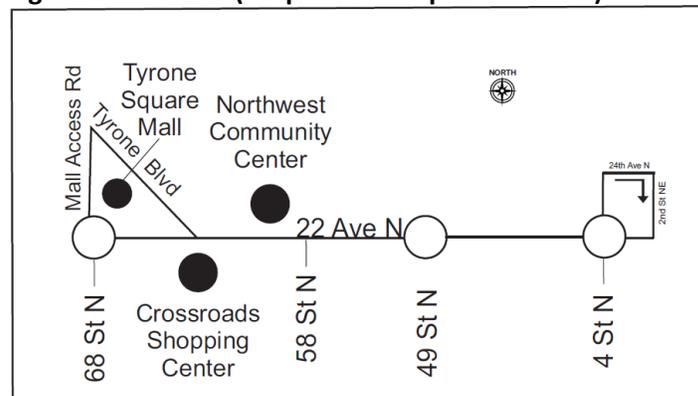


Figure 2: Route 22 (Proposed to Replace Route 1)



System Performance Evaluation

Routes 1 and 30 are the 4th and 6th lowest performing routes in PSTA's system.

2013 Community Bus Plan

The Bus Plan recommended that Route 30 be discontinued and Route 1 realigned to remove service on 1st St N north of 22nd Ave.

Targeted Analysis

Table 1 includes a comparison of demographic data associated with people who are more likely to be transit dependent that live within ¾ mile of a route, the entire PSTA network, and Pinellas County. Maps included in Appendix A show locations along the route that have larger populations of people and households that meet the criteria included in Table 1. Routes 1 and 30 have minority populations below the county average; however, larger concentrations of minority populations occur between 37th St N and 16th Street N, as shown in the maps included in Appendix A. The routes have a lower than average population of people over age 65, with a couple of areas of higher concentrations along 1st St N. Similarly, the routes have a slightly lower than average number of households within ¾ miles with zero vehicles. The largest concentration of households without a vehicle is between I-275 and 9th St N. Poverty levels are below average along the Route 1 and slightly above average for the Route 30. The largest concentrations of people with incomes below poverty are between 34th St N and 9th St N.

Table 1: Demographic Analysis For Routes 1 and 30

Geographic Area	% Pop Age 65 and Older	% Pop Below Poverty	% HH with Zero Vehicle Access	% Minority Population
Pinellas County	21.70%	12.94%	8.76%	23.58%
3/4 Mile PSTA System	21.71%	13.02%	8.83%	23.73%
3/4 Mile Route 1	15.99%	12.44%	8.76%	21.45%
3/4 Mile Route 30	16.10%	13.53%	7.92%	22.50%

Source: US Census Bureau 5-year 2013 American Community Survey

An on-board survey of riders on Routes 1 and 30 was conducted in June 2015. The report is included in Appendix B. Data from this survey, as well as the on-board survey conducted in 2012, was reviewed to identify origins and destinations, travel patterns, transfer activity, and preferred route modifications. Bus stop ridership data was also reviewed to identify specific locations with high usage. Key findings from this analysis include:

- Riders are using Routes 1 and 30 primarily for work and shopping trips. Top destinations include Tyrone Mall, Gateway Mall, and Publix.
- More than 75% of riders are using the routes to transfer to other routes to get to their final destination.
- The top preferred modifications were expanded service hours and frequency improvements.
- Over 75% of riders said they would still make their trip if Routes 1 and 30 weren't available, by another route, walking, biking, riding with someone, or taxi.
- Bus stops on 1st St N each have between 0-1 average daily boardings. With the proximity to better service on Route 4 on 4th St N, it is already likely residents are walking to that route.
- The majority of bus stops serving the neighborhoods along 22nd Ave N and 30th Ave N. have between 0 and 2 average daily boardings and alightings. A few stops at major intersections along 22nd Ave N have between 3 and 8 average daily boardings and alightings. These locations are where the Route 1 intersects with North-South routes including Routes 52, 19, 11, 74, 59, and 4. Ridership at bus stops serving these North-South routes is also much higher, indicating that people living in the neighborhoods served by Routes 1 and 30 are either walking or transferring to routes with greater frequency and longer hours of service.

Public Engagement

PSTA staff met with City of St. Petersburg staff in June to discuss proposed modifications to Routes 1 and 30. City staff indicated that if a reduction were to occur, it would be better to maintain service on 22nd Ave N than on 30th Ave N due to higher travel speeds and a greater mix of land uses on 22nd Ave N. City staff requested that communication with the neighborhood associations along the corridor be initiated by the City. Following final recommendations, various destinations along the corridor will be contacted and information will be disseminated to riders and the larger community.

Recommendation and Financial Implication

Discontinue Route 30 and Redesign Route 1. Utilize revenue hours from Route 1 to implement improved service on 22nd Ave N running every 45-50 minutes between Tyrone Square Mall and 4th St N. via 22nd Ave N from 7:15 am to 6:45 pm (New Route 22), as shown in Figure 4. Route 22 would also continue to provide connections for transfers to high frequency north-south routes that run along intersecting roadways and at Tyrone Square Mall. Access to demand response DART service will not be affected. Implementation of the recommendations will save approximately \$500,000 in bus capital (1 bus) and \$120,000 in net annual operating costs.

Transportation Alternatives

All bus stops along Route 30 are within 3/4 mile of better service, with most being within 1/2 mile or less as indicated in Figures 5. Core/frequent routes include Routes 4, 19, 52, and 75. These routes operate seven days a week and feature longer service hours and headways of 15-30 minutes on weekdays. Supporting local routes within walking distance include Routes 11, parallel Route 38, 59, and the new Route 22. As shown in Figure 6, all bus stops on Route 1 that are along 1st St N are approximately 1/4 miles from the Route 4, which operates 7 days/week with 15-20 minute service on weekdays from approximately 6 am to 11 pm.

By retaining service on 22nd Ave N, the areas with higher concentrations of low-income and minority populations as well as households without vehicles will continue to receive east-west service. Riders of Route 1 along 1st St N have access to much better service on Route 4 a few blocks away.

As indicated by the on-board survey, other viable transportation alternatives include walking, biking, driving, taxi, and carpooling. Use of a golf cart for shorter distance trips is also an option for some communities along 1st St N where residents already use them.

Figure 3: Route 30 Alternatives

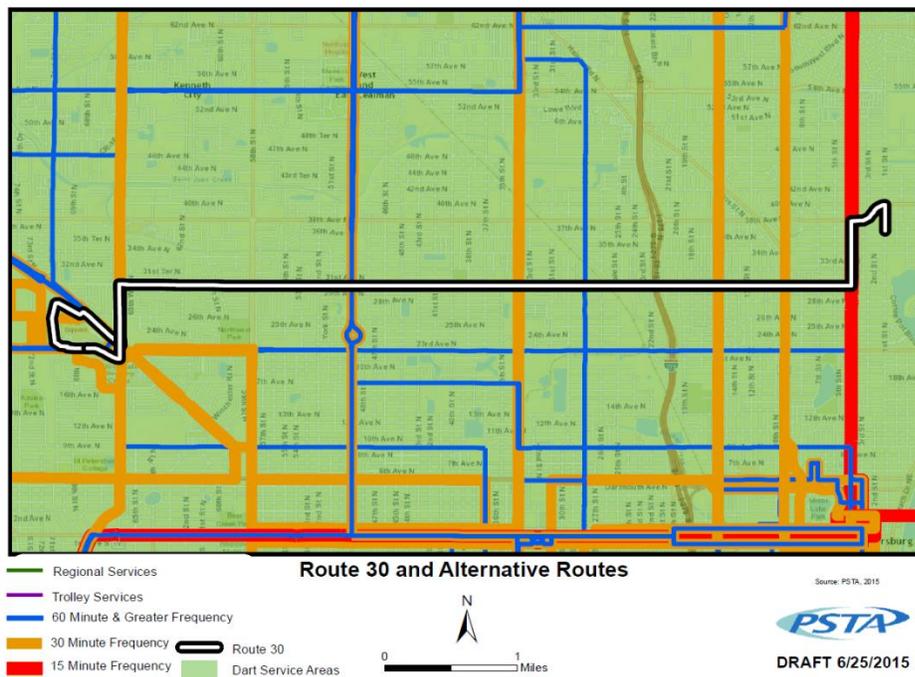
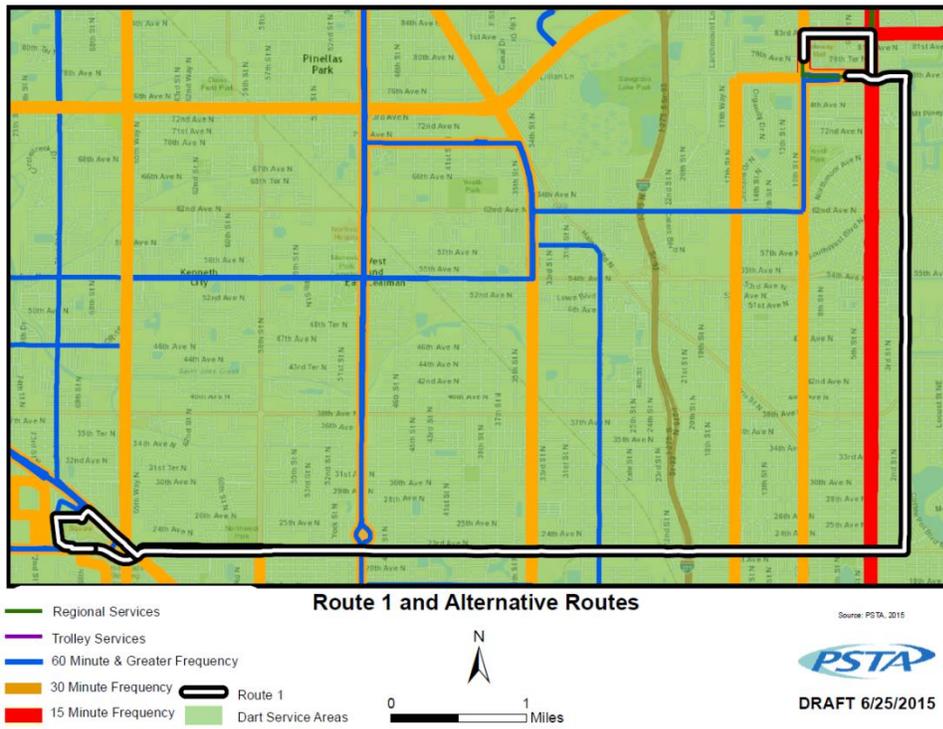


Figure 4: Route 1 Alternatives



Route 58

Route 58, shown in Figure 7, runs Monday through Friday from 5:35 am to 7:00 pm. In the morning and afternoon peak hours there is approximately 60 minute service. Between 9:35 am and 12:40 pm there is no service. Route 58 travels between Seminole and Gateway Malls, and also serves St. Petersburg College, and an employment center on Carillon Parkway between Roosevelt Blvd and Ulmerton Rd.

Figure 5: Route 58 (Recommend to Discontinue)

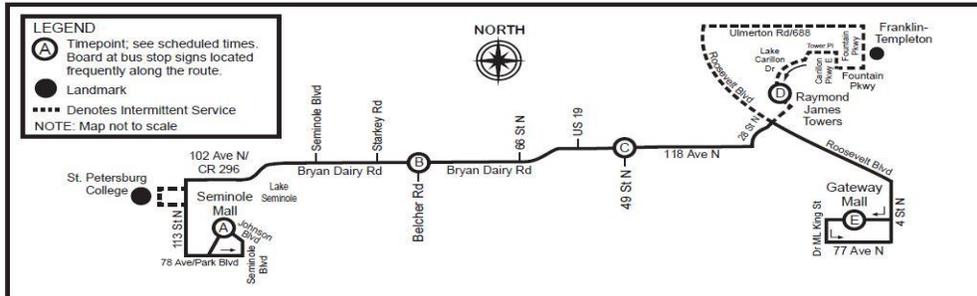
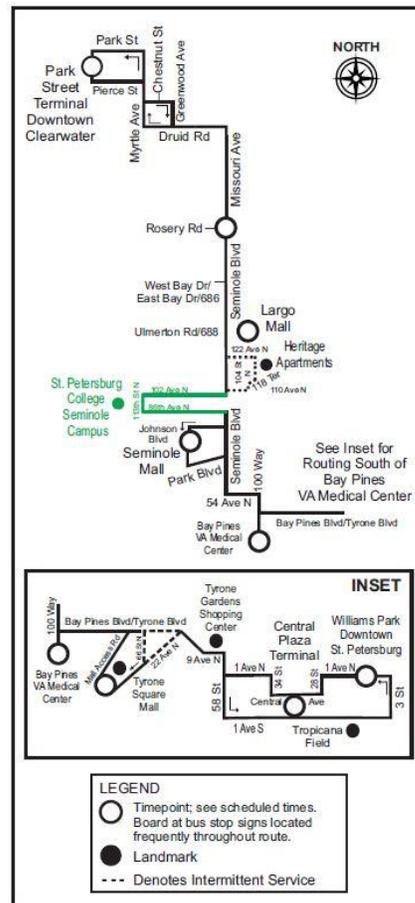


Figure 6: Proposed Route 18 (Recommended for Redesign to serve SPC Seminole Campus)



System Performance Evaluation

Route 58 is the 8th lowest performing route with the PSTA system.

2013 Community Bus Plan

Recommend Route 58 be discontinued for all scenarios.

Targeted Analysis

Table 2 includes a comparison of demographic data associated with people who are more likely to be transit dependent that live within ¾ mile of a route, the entire PSTA network, and Pinellas County. Maps included in Appendix A show locations along the route that have concentrations of people and households that meet this criteria. The minority population within ¾ mile of Route 58 is less than the county average. The largest concentrations of minority population are near Starkey Rd and Gateway Mall. The route has lower than average populations of people over age 65, however a few concentrations exist near Seminole Mall, between 113th St N and Seminole Blvd. Similarly, within ¾ mile of Route 58, there are fewer than average households without a vehicle. The largest concentrations of households without vehicles are also near Seminole Mall. Poverty levels along the route are below the average for the county. The concentrations of poverty along the route are near Gateway Mall.

Table 2: Demographic Analysis for Route 58

Geographic Areas	% Pop Age 65 and Older	% Pop Below Poverty	% HH with Zero Vehicle Access	% Minority Population
Pinellas County	21.70%	12.94%	8.76%	23.58%
3/4 Mile PSTA System	21.71%	13.02%	8.83%	23.73%
3/4 Mile Route 58	19.31%	10.70%	7.33%	18.62%

Source: US Census Bureau 5-year 2013 American Community Survey

An on-board survey of riders on Route 58 was conducted in June 2015. The results are included in Appendix A. Data from this survey, as well as the on-board survey conducted in 2012, was reviewed to identify origins and destinations, travel patterns, transfer activity and preferred route modifications. Bus stop ridership data was also reviewed to identify specific locations with high usage. Key findings from this analysis include:

- Riders are using Route 58 primarily for trips to work and shopping. The top destinations are Seminole Mall and St. Petersburg College, which can be accessed via the modified Route 18.
- Over 65% of riders are using the route to transfer to other routes to reach their final destination.
- The top preferred modifications were expanded service hours and frequency improvements.
- Over 60% of riders said they would still make their trip by bus, biking, walking, taxi, riding with someone or driving, if Route 58 was not available.
- The highest ridership is at transfer points for Routes 19 and 79. Most other stops on Bryan Dairy Rd have between 0 and 3 total boardings and alightings on an average weekday. The few bus stops with higher ridership are within $\frac{3}{4}$ mile of stops for North-South bound routes such as, core/frequent Routes 4, 18, 19, 52, 59, 79, and 98 and local Routes 11, 62, 73, and 97. These alternate routes offer more frequent and expanded weekday and weekend service hours. Therefore service will still be provided to passengers accessing certain stops along Bryan Dairy Rd.
- Average daily ridership at bus stops on the current Route 18 along Seminole Boulevard between 86th Ave N and 102nd Ave N is 7. These bus stops are within $\frac{1}{2}$ mile of a stop served that would continue to be served by the realigned Route 18.

Public Engagement

PSTA staff met with local government staffs from the cities of Seminole and Pinellas Park in June and July 2015 to discuss proposed changes to the Route 58 service area. PSTA contacted retail businesses, the St. Pete college provost, apartment complexes and employers along the route. Businesses and city staff agreed that the bus service along the Route is underutilized but also indicated interest in more details to ensure that service is still available in specific locations. Both City staff and the St. Petersburg College Seminole Provost were satisfied with the proposed modification of Route 18 to serve the Seminole campus especially since it runs more frequently and has longer hours of service than the Route 58. Think Direct Marketing management was concerned about the effect on its employees that use the route.

Recommendations and Financial Implication

Consistent with the Bus Plan, the current recommendation is to discontinue Route 58. In addition, it is recommended that one short segment of Route 18 be redesigned to serve St. Petersburg College Seminole Campus. Access to demand response DART service will not be affected. Implementation of the recommendations will save approximately \$500,000 in bus capitol and \$242,000 in net annual operating costs.

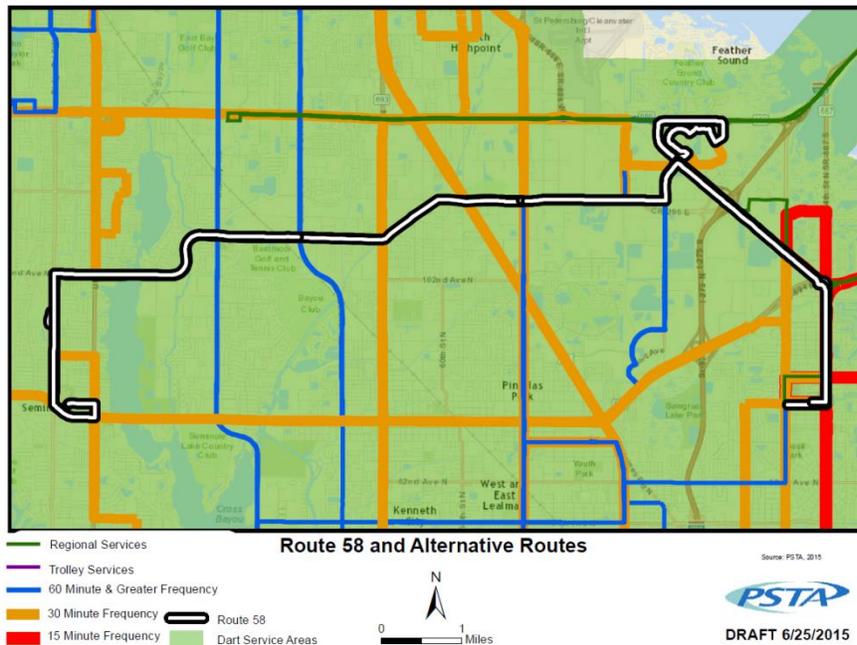
Transportation Alternatives

All stops for Route 58 are within ¾ mile of better service from seven other core or frequent routes and four local routes, as indicated in Figure 9. Core/frequent routes include the 4, 18, 19, 52, 59, 79 and 74. These routes operate seven days a week and feature longer service hours and headways of 15-35 minutes on weekdays. Supporting local routes within walking distance include Routes 11, 62, and 73. These local routes offer better hours of operation and frequencies than the Route 58.

Transit dependent populations near Seminole Mall have access to significantly better service via other routes including core/frequent Routes 18 and 74. Minority and low income populations in the middle of Route 58 have access to better service on Route 73, which can be used to make transfers to high frequency east-west routes on Ulmerton Rd and Park Blvd. Those traveling between 34th St and the Gateway Mall can utilize Route 59 which has the same alignment in that section.

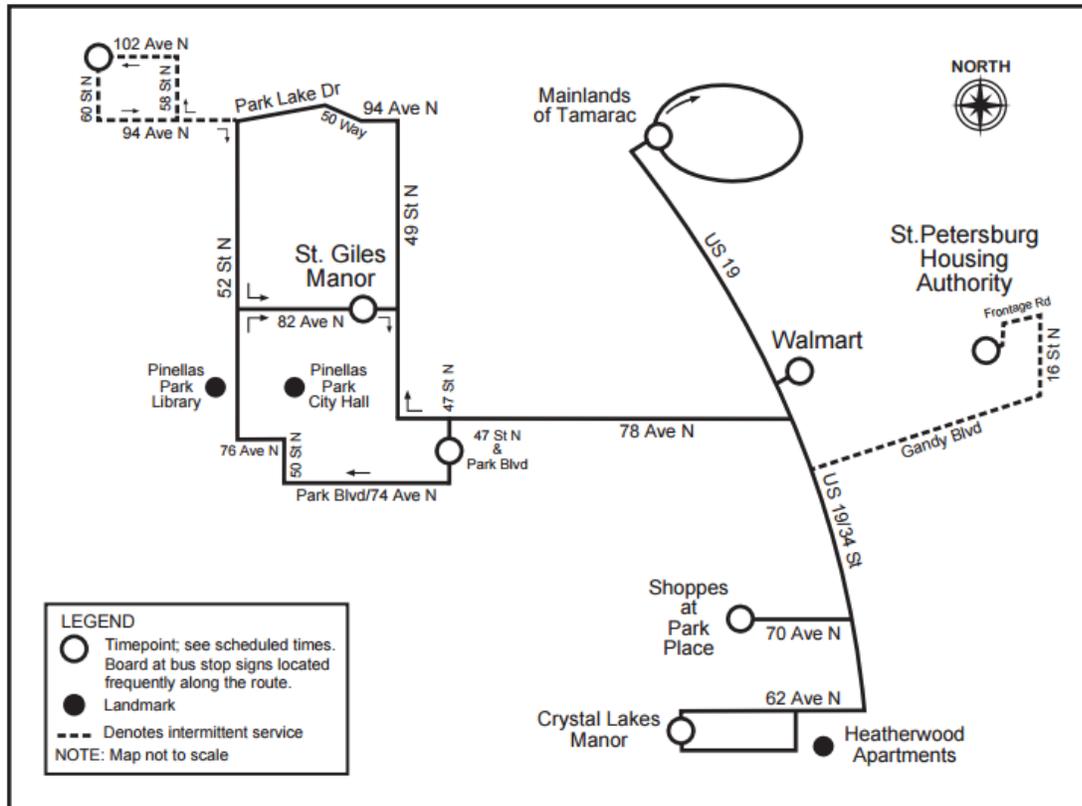
Other viable transportation, as indicated by the on-board survey includes biking, walking, taxi, carpooling, and driving. Transportation services provided through local non-profit organizations could be utilized to serve some trips, including shopping and medical.

Figure 7: Route 58 Alternatives



Route 444

Figure 8: Route 444 (Recommend to Discontinue)



Route 444, also called the Pinellas Park Shuttle, offers service Monday – Friday from 8:45 am to 5:55pm. Route 444 provides circulator service within Pinellas Park, primarily along the US 19 and 78th Avenue North Corridors, connecting riders to multiple municipal services, a Walmart Super Center, Shoppes at Park Place, and several large residential developments. Figure 10 shows Route 444.

The route makes 5 trips a day with service every 115 minutes, and intermittent service to the St. Pete Housing Authority and to 60th St & 102nd Ave. The route makes multiple backtracking loops, stopping at Walmart twice and the Shoppes at Park Place three times before completing one full route cycle. Compared to other routes, route 444 runs very infrequently and has limited hours of service.

System Performance Evaluation

Route 444 is the lowest performing route in PSTA's system.

2013 Community Bus Plan Recommendations

The Bus Plan recommends that PSTA discontinue Route 444 and replace it with an undefined new circulator to serve the general area.

Targeted Analysis

Table 3 includes a comparison of demographic data associated with people who are more likely to be transit dependent that live within ¾ mile of a route, the entire PSTA network, and Pinellas County. Maps included in Appendix A show locations along the route that have concentrations of people and households that meet this criteria. Route 444 has a population of people age 65 and older that is below the county and PSTA system averages, however, some concentrations exist along the route in 55+ communities and assisted living facilities. Poverty levels are above average along Route 444, with high concentrations along US 19 near Park Blvd N and to the south of 62nd Ave N. Route 444 also serves a higher percentage of households with zero vehicle access compared with the rest of the system and county, with high concentrations south of 62nd Ave N, similar to one of the areas of high poverty concentration. Minority populations are also higher along Route 444, with higher percentages near Park Blvd N between US 19 and 49th Street N as well as 102 Ave N and Park Lake Drive.

Table 3: Demographic Analysis for Route 444

Geographic Area	% Pop Age 65 and Older	% Pop Below Poverty	% HH with Zero Vehicle Access	% Minority Population
Pinellas County	21.70%	12.94%	8.76%	23.58%
3/4 Mile PSTA System	21.71%	13.02%	8.83%	23.73%
3/4 Mile Route 444	18.92%	15.27%	9.58%	25.38%

Source: US Census Bureau 5-year 2013 American Community Survey

An on-board survey of riders on Route 444 was conducted in June 2015. The results of this survey are included in Appendix B. Data from this and another on-board survey conducted in 2012 was reviewed to identify origins and destinations, travel patterns, transfer activity and preferred route modifications. Bus stop ridership data was also reviewed to identify specific locations with high usage. Key findings from bus stop ridership data and on board survey analysis include:

- Riders are using Route 444 mainly for shopping, with ridership highest at stops serving Crystal Lakes Manor and Walmart.
- Transfer activity is low with few riders connecting to/from other routes.

- The top preferred modifications were to provide more service on weekends (61.5%) followed by expanded service hours and improved frequency (38.5%).
- Riders on this route have other options; 100% of riders saying they would still make their trip if the route wasn't available by either walking, riding with someone, or taking a taxi.
- Stops serving Mainlands of Tamarac, 60th Street and 102 Ave, and along 52nd St N have between 0-2 average daily boardings.

Public Engagement

PSTA staff met with City of Pinellas Park planning staff in June 2015 and Pinellas County staff in July. Planning staff understand the need to cut the route and think that other routes, particularly Route 19, provide good alternatives for most people. Discussions with the bus operators confirmed that Route 19 is a good alternative for many riders. The city staff would like to be kept informed of any approved changes, public hearing schedules, and are interested in possible opportunities for alternative service for the area. In addition, both the City and County staff are interested in working with PSTA to develop and identify funding for a new circulator type service in the Pinellas Park and Lealman area.

One rider along the route contacted PSTA about the discontinuation of Route 444. Although Route 19 is nearby, the rider is concerned about crossing the intersection outside of the Mainlands. Staff has offered to provide assistance to the rider on using the Route 19.

PSTA staff discussed the discontinuation of Route 444 with the St. Petersburg Housing Authority. Although concerned about losing service to the stop adjacent to their building, staff recognized that better service is provided by the Route 74 on Gandy Boulevard, where the stop (serving 45 riders/day versus 0 at the Housing Authority stop) is located at a signalized intersection. To get from that intersection however, riders have to walk along a roadway with no sidewalks to the Housing Authority. The Housing Authority has requested a new Route 74 stop on the north side of Gandy Blvd. Staff is reviewing the request.

Recommendation and Financial Implication

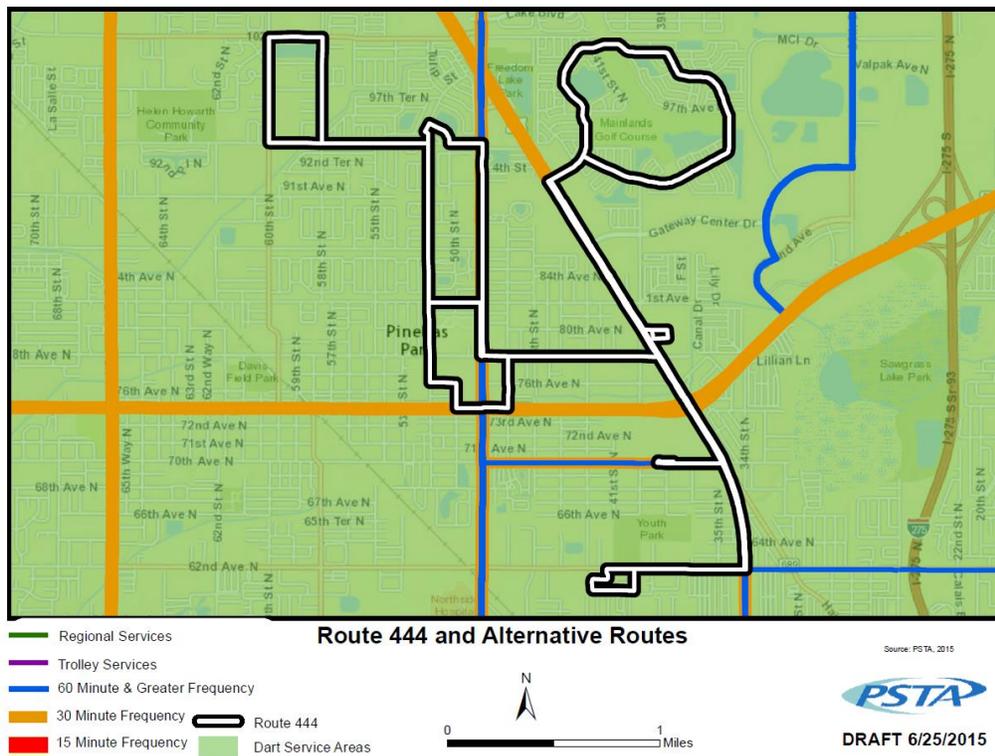
Discontinuation of Route 444 will result in approximately \$491,000 in bus capital savings and \$145,000 in net annual operating costs. PSTA-County-City partnership should be pursued to develop and fund a new service to areas in Pinellas Park/Lealman likely to use transit, including those with concentrations of zero car households, senior facilities and low income neighborhoods, and to connect people to shopping, employment, healthcare, and social services.

Transportation Alternatives

All stops along Route 444 are within 3/4 mile of more frequent service, as shown in Figure 11. Core/ frequent routes include Routes 19, 52, 74 and 79. These routes offer greatly improved frequency, with buses every 20-35 minutes, weekend and holiday service, and longer hours of service. Transit dependent populations along the route are primarily along US 19 and Park Blvd and have access to significantly better service via Routes 19 and 74. Supporting local routes within walking distance include route 75, which provides longer hours of service and a consistent schedule. Many of the stops with higher ridership are also shared with core Route 19. DART ridership will continue to be available for those who qualify.

As indicated by the on-board survey, viable transportation alternatives other than bus include walking, biking, driving, taxi, and carpooling. Transportation service provided by local non-profits could be utilized for certain trips including shopping and medical. Neighborly Care Network, for example, already offers twice monthly group shopping trips to St. Giles residents.

Figure 9: Route 444 Alternatives

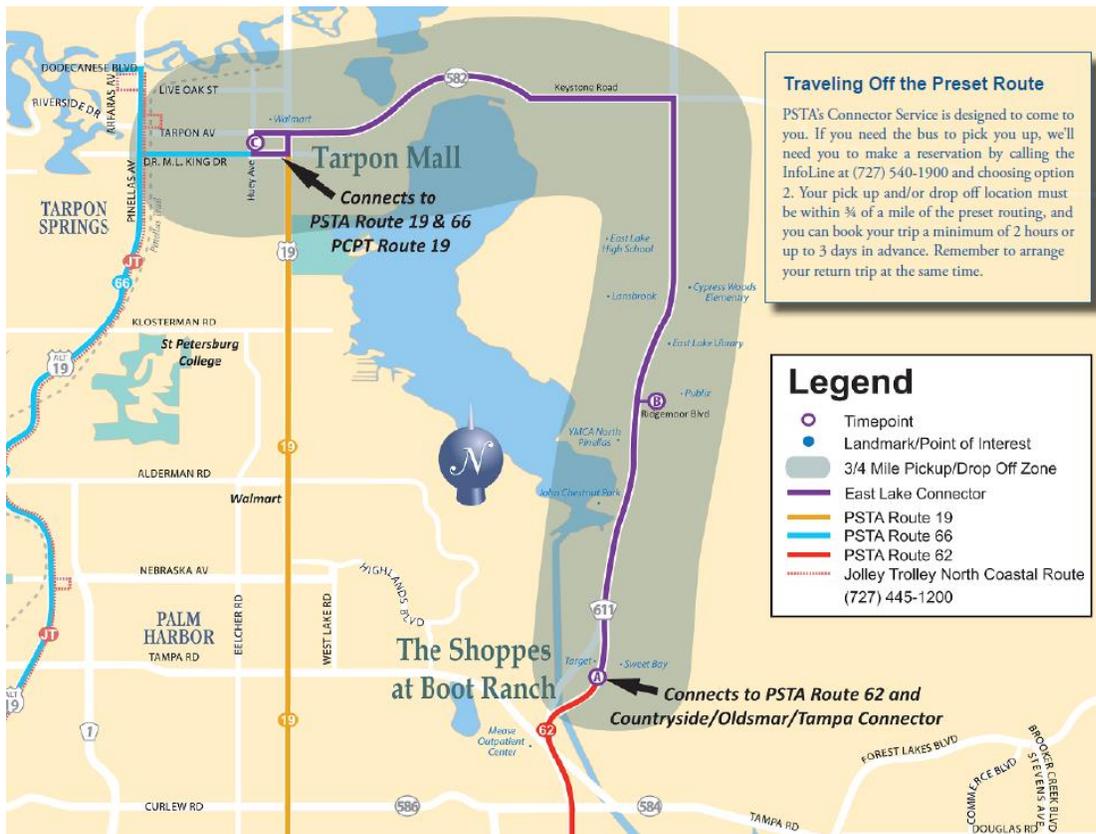


East Lake Connector (Route 811)

As shown in Figure 12, the East Lake Connector runs Monday through Friday from approximately 8:30 am to 6:35 pm with 70 minute service between the Shoppes at Boot Ranch and Tarpon Mall via East Lake Rd and Keystone Rd. It serves three major shopping centers adjacent to multifamily residences. Along the rest of the route, the main land use is single family residential.

The East Lake Connector utilizes smaller buses to provided scheduled deviations within ¼ mile of the preset route.

Figure 10: East Lake Connector (Recommended Discontinuation)



System Performance Evaluation

The East Lake Connector is the second lowest performing route in PSTA's system.

2013 Community Bus Plan Recommendation

The Bus Plan did not include any recommendations for the East Lake Connector, as it had only been operating for a few months at that time.

Targeted Analysis

Table 4 includes a comparison of demographic data associated with people who are more likely to be transit dependent that live within $\frac{3}{4}$ mile of a route, the entire PSTA network, and Pinellas County. Maps included in Appendix A show locations along the route that have concentrations of people and households that meet this criteria. The East Lake Connector has minority populations below the county average, however there is a concentration of minority populations by the Tarpon Mall between S Pinellas Ave and S Disston Ave. The route has a higher than average population of people over age 65, with concentrations in the area between Disston Ave and US 19, the Ridgemoor Area and East Lake Woodlands. The number of households without a vehicle is well below the county average. In fact, for most of the route, only 0-4% of households do not have a vehicle. Minority populations and poverty levels are also well below average in the $\frac{3}{4}$ mile area surrounding the East Lake Connector.

Table 4: Demographic Analysis for the East Lake Connector

Geographic Areas	% Pop Age 65 and Older	% Pop Below Poverty	% HH with Zero Vehicle Access	% Minority Population
Pinellas County	21.70%	12.94%	8.76%	23.58%
3/4 Mile PSTA System	21.71%	13.02%	8.83%	23.73%
3/4 Mile East Lake Connector	22.75%	9.82%	5.43%	14.74%

Source: US Census Bureau 5-year 2013 American Community Survey

An on-board survey for the East Lake Connector was conducted in June. The survey results are included in Appendix B. The origins, destinations, travel patterns, transfer activity and preferred route modifications were reviewed. Bus stop ridership data was also reviewed to identify specific locations with high usage. Key findings from the results of the June 2015 and 2012 on-board survey include:

- Riders are using the East Lake Connector for primarily shopping, recreational (North Pinellas YMCA) and work related trips.
- Over half of the riders are using the route to transfer to another route to reach their final destination.
- The top preferred modifications were expanding service hours and providing more service on weekend days.
- Over 75% of riders said they would still make their trip if the East Lake Connector was not available, by riding with someone, taking a taxi, walking, driving, or biking.

- Bus stops for Route 811 have an average of 0-3 daily boardings, with the exception of a stop in the middle of the route near the a commercial and business center at Ridgemoor Blvd, which has 13 average daily boardings.
- Bus stops serving multiple routes have the highest average daily boardings. Those bus stops are located near the Shoppes at Boot Ranch and Tarpon Mall. Those stops connect to the Oldsmar/Tampa connector, and Routes 19 and 66.

Public Engagement

Staff at PSTA met with several Tarpon Springs and northern Pinellas County community groups to discuss the proposed discontinuation of the East Lake Connector. Most indicated that they would like to be kept informed and were willing to display information about the changes. Following final recommendations, various destinations along the route will be contacted and information will be disseminated to riders and the larger community.

Recommendation and Financial Implication

Discontinue the East Lake Connector. Discontinuation of the East Lake Connector will result in approximately \$360,000 in bus capitol savings (2 cutaway buses) and \$422,000 in net annual operating costs.

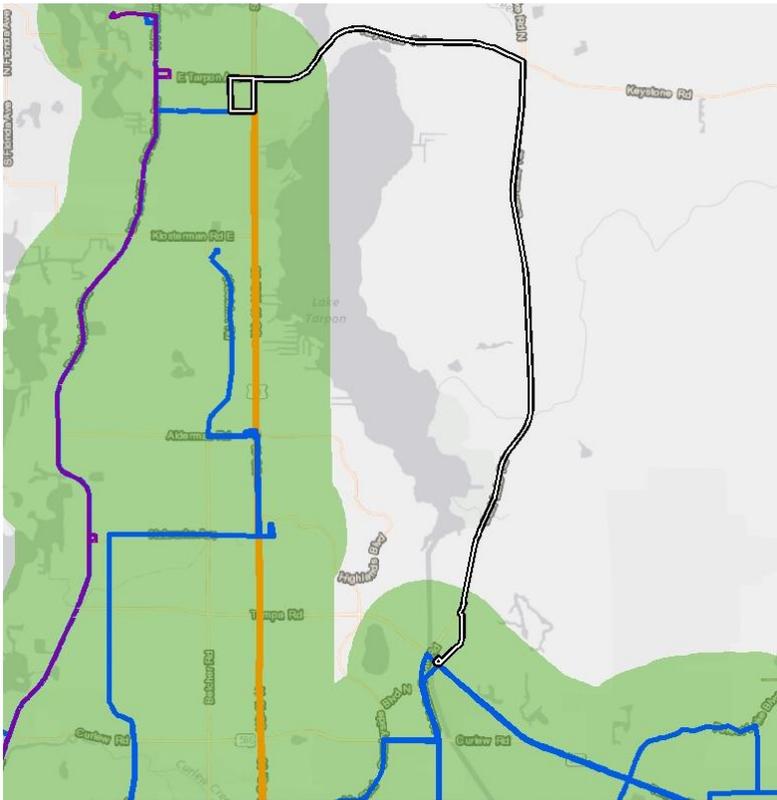
Transportation Alternatives

The East Lake Shuttle utilizes contracted taxis and wheelchair vans to transport people from their place of residence within the East Lake area to the Shoppes at Boot Ranch where they can shop or transfer to Routes 62 and 67 and the Oldsmar Connector, shown in Figure 13. DART service will still be available to those who qualify. With the East Lake Shuttle, riders currently using the East Lake Connector to travel to the to the shopping plaza at Ridgemoor Blvd will have access to similar businesses at the Shoppes at Boot Ranch.

The East Lake Connector does not generate much ridership from the low income and minority population on the eastern end of the route. It is likely people from this area are primarily using core Route 19 or supporting local Route 66 for most of their trips.

The on-board survey indicated that other viable alternatives include carpooling, taxi, biking, driving, and walking. Various nonprofit organizations are also available to provide specific trips for medical and shopping purposes.

Figure 11: East Lake Connector Alternatives



East Lake Connector and Alternative Routes

