TRANSIT
LATENT
DEMAND
STUDY

South Sarasota
County/ Charlotte
County

SARASOTA/MANATEE METROPOLITAN
PLANNING ORGANIZATION &
CHARLOTTE COUNTY–PUNTA GORDA
METROPOLITAN PLANNING
ORGANIZATION

April 24, 2013
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INTRODUCTION AND BACKGROUND

The Sarasota/Manatee Metropolitan Planning Organization (MPO) and the Charlotte County – Punta Gorda MPO have been discussing additional transit service connecting the North Port/South Sarasota County area and northern Charlotte County over the last decade. The City of North Port’s population has grown to over 55,000 as of the 2010 Census, and is currently the largest municipality in the two county areas. With this continued population and commercial growth in southern Sarasota County and Charlotte County, there have been increasing requests for improved inter-county service connectivity in the area. Considerations for this service include potential connections to Venice, Englewood, North Port and Port Charlotte. The Charlotte County and Sarasota County Boards of County Commissioners suggested the Sarasota/Manatee and Charlotte County–Punta Gorda MPOs work together to examine the feasibility of such service.

The purpose of this study is to develop the data and analysis to determine if there is enough latent demand to justify fixed-route transit service in the study area and to determine whether it would be cost-feasible. The study area is southern Sarasota County, including Venice and North Port, to northern Charlotte County, including Port Charlotte. The study area for the Transit Latent Demand Study, is illustrated in Figure 1.

An analysis was done to identify potential project corridors by measuring interactions between potential service market areas within the study area. Figure 2 shows the current travel demand between the municipalities within the study area. Based on this analysis, the corridor between North Port and Port Charlotte showed the most potential for transit service.

The cost estimates for the potential routing options used $55 per revenue hour which is consistent with SCAT and other transit service providers in the State. Of particular interest is the degree to which proposed service is able to meet the needs of the transit dependent and potential choice riders to reach key destinations. This Transit Latent Demand Study is designed to answer those questions and provide guidance for funding of the service, including a potential grant application based on the warranted service.
FIGURE 1: STUDY AREA

FIGURE 2: CURRENT TRAVEL DEMAND & INTERACTIONS
CORRIDOR PROFILE

CURRENT TRANSIT SERVICE

Fixed-route transit service is currently provided by Sarasota County Area Transit (SCAT) in Sarasota County, including the areas of Venice, Englewood and North Port. SCAT additionally provides express bus service between downtown Sarasota and North Port. SCAT provides fixed-route service Monday-Saturday, and limited service on Sunday. The individual SCAT routes and the areas that they serve within the study area are as follows:

- Route 9 – North Port via Jacaranda Boulevard Venice Train Depot to Shoppes at North Port
- Route 13 – Venice Train Depot to Jacaranda Plaza
- Route 16 – Venice Train Depot to Englewood
- Route 20 – Toledo Blade Riley Chase to Shoppes of North Port
- Route 29 – Glenallen/North Port City Hall to Shoppes of North Port

Routes 9, 13 and 16 are operated with 60-minute headways, while Routes 20 and 29 are operated with 120-minute headways.

SCAT Plus paratransit service provides trips to people who are unable to use the fixed-route service due to health or income. SCAT Plus operates Monday through Thursday from 7 a.m. to 5 p.m., and Fridays from 7 a.m. to 4:45 p.m. SCAT currently operates a total of 64 vehicles on 31 bus routes. The transit agency recorded over two million unlinked passenger trips in FY 2010.

Charlotte County currently does not provide fixed-route transit service; however, the County does provide curb to curb bus service under its Dial-a-Ride program. The Dial-a-Ride service area includes all of Charlotte County. The Dial-a-Ride service operates Monday through Friday from 6:30 a.m. to 6 p.m., and Saturdays from 9 a.m. to 6 p.m. Charlotte County also provides contracted service to the transportation disadvantaged under its Sunshine Ride program. Sunshine Ride provides service on weekdays between 7 a.m. and 6 p.m. Service is available 24 hours per day, 7 days per week with reservations.
TRANSIT SUPPORTIVE AREAS

The feasibility of fixed-route service in the study area depends on several factors that help determine whether sufficient demand exists to justify funding the service. The transit supportive analysis seeks to identify areas within the study area that are conducive and supportive to fixed-route transit service. Transit supportive areas typically are areas that have a good combination of land use density, land use diversity (mix of uses) and demographics. A series of socioeconomic and land use variables that were analyzed to highlight the degree of transit supportiveness in the study area included:

- Land Use Diversity - Five or more land use types within ¼ mile
- Land Use Density/Intensity – Greater than 0.25 Average Floor Area Ratio
- Low-Income Population – Areas with household income less than $25,000
- Age – Areas with highest concentration of elderly population
- Institutions – Government, cultural and civic destinations

Those variables were then layered to develop a composite map identifying the highest concentrations of transit supportiveness. Figure 3 shows the results of this layered approach, where the highest concentration of these transit supportive indicators is shown within the study area. This map shows that the areas of Venice, Murdock Circle and Parkside Medical Arts and Cultural Center have the greatest concentration of transit supportive variables, indicating that these are highly transit supportive areas. There are also moderately transit supportive areas found on US 41 in North Port and the Loveland/Kings Highway areas.
FIGURE 3: TRANSIT SUPPORTIVE AREAS
Another factor in determining potential transit service areas is to identify major destinations and connections within the study area. This determination entailed analyzing the 2010 Census journey to work data. As shown in Figure 4, Murdock Circle is a major destination. A majority of the trips with destinations in Murdock Circle originate from North Port and adjacent neighborhoods within the study area.

As part of the analysis to determine major destinations, the current 2012 Charlotte County Dial-a-Ride and Sunshine Ride trips were analyzed. Table 1 shows these current Dial-a-Ride and Sunshine Ride trips summarized by destination within the study area. The table shows that the primary destination for the majority of all Dial-a-Ride and Sunshine Ride trips is Port Charlotte, which indicates a strong demand for potential fixed-route service in this area.
TABLE 1: CHARLOTTE COUNTY DIAL-A-RIDE / SUNSHINE RIDE ANNUAL RIDERSHIP

<table>
<thead>
<tr>
<th>ORIGIN</th>
<th>TRIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Charlotte</td>
<td>26,000</td>
</tr>
<tr>
<td>Deep Creek/ Harbor Heights</td>
<td>5,240</td>
</tr>
<tr>
<td>Punta Gorda</td>
<td>4,850</td>
</tr>
<tr>
<td>Englewood</td>
<td>3,000</td>
</tr>
<tr>
<td>North Port</td>
<td>520</td>
</tr>
</tbody>
</table>

By layering the results of the transit supportive area analysis, the 2010 Census journey to work data and the existing Charlotte County Dial-a-Ride data, distinct transit supportive destinations and corridors became apparent. These transit supportive destinations and corridors are shown below in Figure 5.

FIGURE 5: TRANSIT SUPPORTIVE DESTINATIONS/CORRIDORS
EVALUATION AND ESTIMATES

PHYSICAL CHARACTERISTICS

The US 41 and Midway Boulevard corridors that connect Port Charlotte, Murdock Circle and North Port are essential to the economic and civic vitality of the study area. The corridor is primarily single-story commercial along US 41, with mostly single and some multi-family residential pockets along US 41 and Midway Boulevard. Traffic volumes are projected to increase on roads in this corridor. Current Average Annual Daily Traffic (AADT) volumes are between 50,000 and 54,000 on US 41 between Murdock Circle and Midway Boulevard and 11,200 on Midway Boulevard. According to the 2035 Long Range Plan, volumes are projected to increase by over 20 percent to 60,500 on US 41 and to nearly double to 22,000 on Midway Boulevard. With US 41 designated as a constrained corridor between Port Charlotte and North Port, roadway capacity-adding projects to relieve the increasing congestion are neither feasible nor desired.

The project corridor contains a clustering of different land uses, such as retail, health care, apartments and offices around intersections. As a result of looking at the trip characteristics and socioeconomic data of this area, fixed-route transit could be a viable alternative in the study area.

TRANSIT RIDERSHIP FORECAST (TBEST MODEL)

For this latent demand analysis the Transit Boardings Estimation and Simulation Tool 4 (TBEST) version 4.0 was utilized. The TBEST model was used for its ability as a short term transit operations planning tool to develop ridership estimates based on a series of transit service variables, such as the span of service (hours of operation), and service frequency. The TBEST model used for the Sarasota County Area Transit (SCAT) Transit Development Plan (TDP) Major Update (FY 2010-2019) was used as the base model for this analysis. Each scenario was tested with the same amenities, which included benches, shelters and transit route signage, including stop locations which were assumed to be every 1,000 feet along each respective alternative. Each alternative was tested with the same service frequency, where headways were assumed to be 60 minutes for each scenario. As a goal in determining potential routing options, alternative scenarios were configured to have a total travel time of 60 minutes from origin to destination. The 60 minute travel time was a goal expressed by the stakeholders of Sarasota and Charlotte County to develop a competitive transit service that met the needs of the residents and compares with the Dial-a-Ride services.
TRANSIT SERVICE ALTERNATIVES

A total of six transit service alternatives were tested in TBEST. These alternatives were developed with an objective of connecting the major destinations and maximizing ridership potential by serving neighborhoods. These six alternatives tested in were:

- Parkside – Murdock – North Port Alternative
- Loveland – Murdock – North Port Alternative
- Alternative 1
- Alternative 2
- Alternative 3
- Alternative 4

The Parkside-Murdock-North Port and Loveland-Murdock-North Port Alternatives were tested to determine ridership if the shortest path was chosen to service the four previously identified transit supportive areas directly. The alignments of these two alternatives are shown below in Figures 6 and 7 respectively.

To better serve the four previously identified transit supportive areas, an additional four alternative scenarios were developed to capture more potential riders by serving more of the commercial, service and residential areas along these routes including the Cultural Center at Parkside. These four additional alternatives are shown below in Figures 8 through 11.
FIGURE 6: PARKSIDE – MURDOCK – NORTH PORT ALTERNATIVE

FIGURE 7: LOVELAND – MURDOCK – NORTH PORT ALTERNATIVE
FIGURE 8: ALTERNATIVE 1

FIGURE 9: ALTERNATIVE 2
FIGURE 10: ALTERNATIVE 3

FIGURE 11: ALTERNATIVE 4
TRANSIT SCENARIO PERFORMANCE

The performance of each scenario was analyzed for both weekday and annual ridership. A detailed analysis was completed to determine the number of boardings, the number of potential population and employment that would be served for each, as well as the total route costs for each scenario. Operating costs were assumed to be $55 per revenue hour of service, which is typical for new service. Tables 2 and 3 show a side-by-side comparison of each alternative tested both for the weekday and service year periods respectively. Also presented in these tables is the cost per passenger trip and cost per revenue mile for each scenario based on the ridership estimates. These performance measures are used to evaluate the efficiency of the service provided for each scenario.

TABLE 2: WEEKDAY ROUTE PERFORMANCE COMPARISON

<table>
<thead>
<tr>
<th>PERFORMANCE MEASURE</th>
<th>PARKSIDE-MURDOCK-NORTH PORT</th>
<th>LOVELAND-MURDOCK-NORTH PORT</th>
<th>ALT 1</th>
<th>ALT 2</th>
<th>ALT 3</th>
<th>ALT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Boardings</td>
<td>355</td>
<td>390</td>
<td>576</td>
<td>589</td>
<td>344</td>
<td>401</td>
</tr>
<tr>
<td>Total Population</td>
<td>3,152</td>
<td>7,432</td>
<td>9,539</td>
<td>10,147</td>
<td>9,143</td>
<td>10,245</td>
</tr>
<tr>
<td>Total Employment</td>
<td>7,594</td>
<td>5,812</td>
<td>9,493</td>
<td>9,743</td>
<td>6,154</td>
<td>8,011</td>
</tr>
<tr>
<td>Route Revenue Service Miles</td>
<td>431.8</td>
<td>597.1</td>
<td>670.3</td>
<td>707.6</td>
<td>667</td>
<td>697.9</td>
</tr>
<tr>
<td>Route Revenue Service Hours</td>
<td>32.8</td>
<td>45.6</td>
<td>51.2</td>
<td>54.4</td>
<td>51.2</td>
<td>53.6</td>
</tr>
<tr>
<td>Route Cost</td>
<td>$1,804</td>
<td>$2,508</td>
<td>$2,816</td>
<td>$2,992</td>
<td>$2,816</td>
<td>$2,948</td>
</tr>
<tr>
<td>Cost Per Passenger Trip</td>
<td>$5.10</td>
<td>$6.40</td>
<td>$4.90</td>
<td>$5.10</td>
<td>$8.20</td>
<td>$7.30</td>
</tr>
<tr>
<td>Cost Per Revenue Mile</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
</tr>
<tr>
<td>Route Length (Mi)</td>
<td>8.99</td>
<td>12.44</td>
<td>13.97</td>
<td>14.74</td>
<td>13.90</td>
<td>14.54</td>
</tr>
<tr>
<td>Travel Time (Min)</td>
<td>41</td>
<td>57</td>
<td>64</td>
<td>68</td>
<td>64</td>
<td>67</td>
</tr>
</tbody>
</table>
### TABLE 3: ANNUAL ROUTE PERFORMANCE COMPARISON

<table>
<thead>
<tr>
<th>PERFORMANCE MEASURE</th>
<th>PARKSIDE-MURDOCK-NORTH PORT</th>
<th>LOVELAND-MURDOCK-NORTH PORT</th>
<th>ALT 1</th>
<th>ALT 2</th>
<th>ALT 3</th>
<th>ALT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Boardings</td>
<td>95,731</td>
<td>105,002</td>
<td>153,900</td>
<td>157,681</td>
<td>91,779</td>
<td>107,078</td>
</tr>
<tr>
<td>Total Population</td>
<td>3,152</td>
<td>7,432</td>
<td>9,539</td>
<td>10,147</td>
<td>9,143</td>
<td>10,245</td>
</tr>
<tr>
<td>Total Employment</td>
<td>7,594</td>
<td>5,812</td>
<td>9,493</td>
<td>9,743</td>
<td>6,154</td>
<td>8,011</td>
</tr>
<tr>
<td>Route Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Miles</td>
<td>157,159</td>
<td>217,339</td>
<td>244,004</td>
<td>257,577</td>
<td>242,790</td>
<td>254,051</td>
</tr>
<tr>
<td>Route Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Hours</td>
<td>11,939</td>
<td>16,598</td>
<td>18,637</td>
<td>19,802</td>
<td>18,637</td>
<td>19,510</td>
</tr>
<tr>
<td>Route Cost</td>
<td>$656,656</td>
<td>$912,912</td>
<td>$1,025,024</td>
<td>$1,089,088</td>
<td>$1,025,024</td>
<td>$1,073,072</td>
</tr>
<tr>
<td>Cost Per Passenger</td>
<td>$6.90</td>
<td>$8.70</td>
<td>$6.70</td>
<td>$6.90</td>
<td>$11.20</td>
<td>$10.00</td>
</tr>
<tr>
<td>Trip</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Per Revenue</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
<td>$4.20</td>
</tr>
<tr>
<td>Mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route Length (Mile)</td>
<td>8.99</td>
<td>12.44</td>
<td>13.97</td>
<td>14.74</td>
<td>13.90</td>
<td>14.54</td>
</tr>
<tr>
<td>Travel Time (Min)</td>
<td>41</td>
<td>57</td>
<td>64</td>
<td>68</td>
<td>64</td>
<td>67</td>
</tr>
</tbody>
</table>

The ridership estimates indicate that Alternative 2 would generate the greatest ridership among the scenarios tested for both the weekday and yearly service periods. This alternative serves the greatest combination of population and employment of the tested alternatives. Alternative 3 generated the lowest ridership, which can be attributed to its lack of service to the Murdock Circle area.

Alternative 1 resulted in the lowest weekday cost per trip at $4.90, while Alternative 3 exhibited the highest cost at $8.20 per trip. Alternative 1 resulted in the lowest yearly cost per trip at $6.70 per trip, while Alternative 3 exhibited the highest cost at $11.20 per trip. The yearly cost per trip is slightly higher than the weekday cost per trip due to the cost of weekend service, which typically has less ridership than weekday service.

Tables A-1 through A-6 in Appendix A show each scenario’s weekday and service year ridership and route performance based on the previously discussed performance measures.
INTERCEPT SURVEYS

SURVEY PARTICIPATION AND METHODOLOGY

The transit survey portion of the study involved soliciting feedback both in-person through the use of intercept surveys, by distributing surveys to key destinations for people to complete at their leisure, and through the use of an on-line version of the survey. A total of 344 surveys were completed, including 132 responses via the online survey and 212 through the intercept surveys and those filled out manually.

SUMMARY OF FINDINGS

This section is broken down by question to provide a summary of the responses for each question.

WHICH BEST DESCRIBES YOUR RESIDENCY IN CHARLOTTE OR SARASOTA COUNTY

About 91 percent of survey respondents are full-time residents while 6.4 percent are seasonal residents. Just 2.6 percent responded with ‘tourist’ or ‘other’.

FIGURE 12: RESIDENCY
Where do you live

There was a large distribution of location of residency among the respondents. The most common locations include:

- Parkside/Medical Arts District/Cultural Center: 22.4 percent
- Near Murdock Circle: 16.3 percent
- Elsewhere in Port Charlotte: 16.3 percent
- Punta Gorda Area: 14 percent
- Other: 10.2 percent

FIGURE 13: WHERE DO YOU LIVE

Nearly seven percent of survey respondents reported living in either North Port (five percent) or elsewhere in Sarasota County (1.7 percent). Many of the respondents who selected ‘other’ stated they live in Arcadia or Charlotte Harbor.
DO YOU WORK, GO TO SCHOOL OR ARE RETIRED IN CHARLOTTE OR SARASOTA COUNTY

There was a nearly even distribution of those who reported working and those who are retired, with 44 percent currently working and 45 percent who are retired. Five percent said they are currently in school while 12 percent reported ‘other’. Many of the ‘other’ responses specified they are currently unemployed or disabled.

FIGURE 14: WORK, SCHOOL, RETIREMENT

DO YOU HAVE ACCESS TO A PERSONAL VEHICLE

A substantial majority of respondents reported having access to a personal vehicle, 81 percent, compared to 19 percent who said they do not. There was a significant difference in response to this question among those who completed the on-line version of the survey, with 99 percent having access. Of those who filled out the survey by hand or were part of the intercept surveys, 69 percent stated they have access to a personal vehicle while 31 percent stated they did not.

FIGURE 15: PERSONAL VEHICLE ACCESS
**WHAT IS THE PRIMARY PURPOSE OF YOUR TRIP TODAY**

Since many trips contain more than one purpose, respondents were asked to select all of the primary purposes of their trip. More than 62 percent stated work, 50 percent shopping, 50 percent medical, 37 percent dining, 29 percent social/recreational, 25 percent ‘other’ and 7 percent school. Further evaluation of individual responses shows that a number of people, were combining trips, such as a medical trip and a shopping trip or school and work. This is consistent with the percentages exceeding 100 percent. Those who responded ‘other’ had trip purposes ranging from going to the gym, looking for employment, renewing a license and going boating.

**FIGURE 16: PRIMARY PURPOSE OF TRIP**

![Bar chart showing the primary purposes of trips](chart.png)
WOULD YOU BE WILLING TO USE A BUS AS YOUR METHOD OF TRANSPORTATION FOR SOME OF ALL OF YOUR TRIPS

A strong majority of respondents stated a willingness to use a bus, with 45 percent stating they would use it for some of their trips and 19 percent for all trips. An additional 17 percent stated they would maybe use a bus and only 19 percent said they would not use a bus. For those who said they would maybe use a bus, most of the comments as to whether they would consider using a bus were if they were no longer able to drive, or if costs associated with driving increased.

FIGURE 17: WILLINGNESS TO USE A BUS

Would you be willing to use a bus as your method of transportation for some or all of your trips?

- Yes, all: 19.0%
- Yes, some: 19.3%
- Maybe: 16.7%
- No: 44.9%
WHAT DAYS OF THE WEEK/TIMES OF DAY WOULD YOU BE MOST LIKELY TO USE TRANSIT

As expected, the greater majority of respondents stated weekdays as the time of week they would be most likely to use transit. However, a significant percentage also stated Saturday, 39 percent, and Sunday, 29 percent. With respect to time of day, 54 percent of respondents said the most likely time they would use transit is between 9AM and 6PM, followed by 6AM to 9AM at 27 percent, 6PM to 9PM at 22 percent and 9PM to midnight at 7 percent. Only 4 percent said between midnight and 6AM.

FIGURE 18: TIME OF DAY/WEek MOST LIKELY TO USE TRANSIT
FOR WHAT KINDS OF TRIPS WOULD YOU MOST LIKELY USE A BUS

This question also allowed respondents to select multiple choices. The most common choice for what kinds of trips the individual would most likely use a bus for was shopping, at 61 percent, followed by medical/personal appointments at 56 percent, work at 36 percent, dining at 34 percent, connecting to other transit at 20 percent, government services at 20 percent, ‘other’ at 14 percent and school at 12 percent. ‘Other’ responses included traveling to the beach, library, the bank as well as ‘none’, typically a response from those who stated they would not be willing to use a bus.

FIGURE 19: TRIP PURPOSES OF BUS USE
WHAT DESTINATIONS DO YOU THINK IT IS IMPORTANT TO SERVE WITH A NEW BUS ROUTE

More than half of all respondents felt that Murdock Circle (77 percent), hospitals (66 percent), the Cultural Center/library (65 percent) and the Charlotte County Health Department (53 percent) are important places to be served by a new bus route. Forty one percent felt the same about destinations in North Port, followed by 32 percent for destinations elsewhere in Sarasota County and 26 percent who stated ‘other’. There was a large range of specific destinations listed from those who selected ‘other’, but Punta Gorda, airports and the beach were listed a number of times.

FIGURE 20: DESTINATIONS TRANSIT SHOULD SERVE
COST & FUNDING OPTIONS

POTENTIAL FUNDING OPTIONS

Funding for any service recommendations is always the critical issue regardless of the level of demand. With limited funding available to operate existing service, expansion requires careful consideration of funding options and the anticipated return on that expenditure. There are a variety of potential funding sources that could be considered by either or both counties and their respective municipalities.

Another factor to be considered in any new transit service is capital costs. A major advantage for this potential project is that Charlotte County has two surplus buses available to operate and provide fixed-route transit service in the area. Another additional cost to consider is Americans with Disabilities Act (ADA) compliance. SCAT and Charlotte County would have to provide complimentary paratransit service within 3/4 mile of any fixed route.

FAREBOX RECOVERY

With an assumed fare of $2.00 per trip, the proposed alternatives would generate a range of between 29 and 18 percent of the estimated cost per rider. Alternative 2, having the highest ridership estimate would generate 29 percent of the cost per rider in farebox recovery. Charging a fee may reduce ridership somewhat, so the actual farebox recovery relative to costs could be closer to 15-20 percent, which is typical of many transit agencies throughout the State.

POTENTIAL FUNDING OPTIONS

Existing and potential funding sources that are available to the two Counties to pay for the proposed service were explored. This included a review of grant funding sources, as well as the use of impact fees, mobility fees and potential ad valorem or tax increment revenues from current or future sources. The feasibility of using value capture from future property tax revenues or a special assessment on properties within the service area was also explored. Based on this analysis, the following potential funding options are recommended and described in detail below:

- FDOT Public Transit Service Development Grant
- Municipal Services Taxing Unit (MSTU)
- Regional Transportation Authority (RTA)
The FDOT Public Transit Service Development Grant is designed to provide initial funding to public transit projects with new or innovative techniques. Eligible costs include any allowable capital, marketing or operational costs under FTA Section 5307 and State public transit block grant programs. This funding source covers up to 50 percent of capital, marketing and operating costs. The State allows in-kind services as matching contributions. It serves as a 3-year funding source for eligible public transit projects. After three years, the local agencies would be responsible for funding the service using other means or discontinuing it.

Another potential funding source is the establishment of a Municipal Services Taxing Units, defined in FS 125.01(q). An MSTU may be used to define an area with relatively high level of service, such as a regional activity center. The full cost of service can be amortized over time and levied in a relatively small amount on property taxes of only those affected over a number of years. Additionally, an MSTU is not required to follow municipal boundaries and is comparable to a “user fee.”

A Regional Transportation Authority can be created between any two or more counties or municipalities, as defined in Florida Statute (FS) 163.567. An RTA may institute Special Regional Taxation under FS 163.570, which may levy an ad valorem assessment not to exceed 3 mills on taxable real property. This funding option provides a stable funding source with increased visibility and consistent policy direction.
SUMMARY AND RECOMMENDATIONS

The Sarasota/Manatee and Charlotte County – Punta Gorda MPOs have conducted this Latent Demand Study to evaluate the need for possible fixed-route transit service in the study area. The data and analysis showed that of the six alternative scenarios tested there is sufficient latent demand to support fixed route transit in South Sarasota County and North Charlotte County. The daily ridership projections for all six scenarios, shown in Figure 12, produced ridership near or greater than the average ridership for three regional public transportation providers including LeeTran from Lee County. Alternative 2 produced daily ridership higher than the average route ridership on SCAT, MCAT and LeeTran. As previously identified, with an assumed fare of $2.00 per trip, the proposed alternatives would generate a range of between 30 and 18 percent in farebox recovery, with Alternative 2 generating 29 percent of the cost per rider.

The study used a survey designed to gain the input of potential users of the system and a transit demand model that forecasted expected levels of demand based on socioeconomic input factors and the level of service provided.

FIGURE 21: COMPARISON OF DAILY RIDERSHIP
To better understand community sentiment for transit, non-rider surveys were conducted among major employers and shopping and social destinations within the study area. Overall, respondents showed a strong willingness to use a new bus service serving Charlotte County and linking with Sarasota County Area Transit (SCAT). Of those who stated that they would not be willing to use a new bus service, 19 percent, few were particularly negative about a new service based on their additional comments. There were more comments in support of new service and those saying it is needed in this area than those who opposed a new service by saying it isn’t feasible or would be too costly. Below are some key highlights from the survey:

- 80 percent said they would either use a bus for some or all trips or would maybe use it. Of those who responded maybe, the comment associated with this response was generally that they would use it if they were no longer able to drive, showing a recognition that even if today they aren’t considering using a bus, in the future it could be useful to them.
- Locations along US 41, Harbor Boulevard and Midway Boulevard are particularly strong trip generators among survey respondents.
- Locations along US 41, Murdock Circle and Harbor Boulevard are particularly strong trip attractors among survey respondents.
- Murdock Circle was cited as the most important destination to serve with a new bus service.

Using information from the surveys reflects local willingness to use transit, and the analysis indicated that there is sufficient latent demand for transit ridership in South Sarasota County and Charlotte County to support a fixed transit route on the US 41 corridor.

Operating costs and performance measures for all alternatives will yield an average cost per trip at the low of $6.70 and high of over $11.00. Forecasts indicate the routes would have higher boardings than current fixed transit routes in the Southwest Florida region.

The data and its analysis recommends that there is sufficient latent demand to support a fixed route transit service in South Sarasota County and North Charlotte County.
### TABLE A-1: PARKSIDE-MURDOCK-NORTH PORT ROUTE PERFORMANCE

<table>
<thead>
<tr>
<th>PERFORMANCE MEASURE</th>
<th>WEEKDAY</th>
<th>SERVICE YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Boardings</td>
<td>355</td>
<td>95,731</td>
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<tr>
<td>Total Population</td>
<td>3,152</td>
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<tr>
<td>Total Employment</td>
<td>7,594</td>
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<tr>
<td>Route Revenue Service Miles</td>
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<td>Route Revenue Service Hours</td>
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<td>Route Cost</td>
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<td>Cost Per Passenger Trip</td>
<td>$5.10</td>
<td>$6.90</td>
</tr>
<tr>
<td>Cost Per Revenue Mile</td>
<td>$4.20</td>
<td>$4.20</td>
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<tr>
<td>Travel Time (Min)</td>
<td>41</td>
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### TABLE A-2: LOVELAND-MURDOCK-NORTH PORT ROUTE PERFORMANCE.

<table>
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<td>Cost Per Passenger Trip</td>
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<tr>
<td>Travel Time (Min)</td>
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### TABLE A-3: ALTERNATIVE 1 ROUTE PERFORMANCE

<table>
<thead>
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<tbody>
<tr>
<td>Total Boardings</td>
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<tr>
<td>Total Employment</td>
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<td>Route Revenue Service Hours</td>
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<tr>
<td>Route Cost</td>
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<tr>
<td>Cost Per Passenger Trip</td>
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### TABLE A-4: ALTERNATIVE 2 ROUTE PERFORMANCE

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<td>Cost Per Revenue Mile</td>
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### TABLE A-5: ALTERNATIVE 3 ROUTE PERFORMANCE

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<td>Total Employment</td>
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<td>6,154</td>
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<tr>
<td>Route Revenue Service Miles</td>
<td>667</td>
<td>242,790</td>
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<tr>
<td>Route Cost</td>
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<td>$1,025,024</td>
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<tr>
<td>Cost Per Passenger Trip</td>
<td>$8.20</td>
<td>$11.20</td>
</tr>
<tr>
<td>Cost Per Revenue Mile</td>
<td>$4.20</td>
<td>$4.20</td>
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<td>Route Length (Mi)</td>
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### TABLE A-6: ALTERNATIVE 4 ROUTE PERFORMANCE

<table>
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<td>Total Employment</td>
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<td>8,011</td>
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<td>Route Cost</td>
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<td>Cost Per Passenger Trip</td>
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<td>Cost Per Revenue Mile</td>
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<td>Route Length (Mi)</td>
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<tr>
<td>Travel Time (Min)</td>
<td>67</td>
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APPENDIX B – SURVEY
Charlotte/Sarasota Counties Transit Latent Demand Survey

Please share your thoughts about local and regional transit issues and the potential of fixed-route bus service between Charlotte County and southern Sarasota County, specifically North Port. The Charlotte and Sarasota/Manatee MPOs are soliciting community feedback on transit issues to best determine public transportation needs and the feasibility of new services. We need your help and your response is important! Thank you.

Is the individual using the dial-a-ride service? □ Yes □ No

1) Which best describes your residency in Charlotte or Sarasota County?
   □ Full-time Resident □ Seasonal Resident
   □ Tourist □ Other (please specify) _________________________

2) Do you have access to personal vehicle?
   □ Yes □ No

3) Where do you live?
   □ Near Murdock Circle
   □ Parkside/Medical Arts District area/Cultural Center area
   □ Punta Gorda Area
   □ Englewood/ Rotonda West Area
   □ Elsewhere in Port Charlotte
   □ Near I-75, north of Charlotte Harbor
   □ Near I-75, south of Charlotte Harbor
   □ North Port
   □ Elsewhere in Sarasota County
   □ Other _________________________

4) Do you work, go to school or are retired in Charlotte or Sarasota County?
   □ Work □ School □ Retired □ Other (please specify) _________________________

5) Which intersection (or specific location) is closest to where your trip began today?
   ___________________________________________

6) Which intersection (or specific location) is closest to the destination of your trip today?
   ___________________________________________
7) What is the primary purpose of your trip today? (select all that apply)
- Shopping
- Dining (i.e. restaurant, coffee shop)
- Medical
- Social/Recreational
- Work
- School
Other (please specify) ____________________________________________________

8) Would you be willing to use a bus as your method of transportation for some or all of your trips?
- □ Yes, all
- □ Yes, some
- □ No
- □ Maybe

8a) If you answered ‘maybe’ to the previous question, under what circumstances would you be willing to consider using a bus?
________________________________________________________________________
________________________________________________________________________

9) What days of the week/times of day would you be most likely to use transit? (select all that apply)
- □ Weekdays
- □ Midnight to 6AM
- □ 6PM to 9PM
- □ Saturday
- □ 6AM to 9AM
- □ 9PM to Midnight
- □ Sunday
- □ 9AM to 6PM

10) For what kinds of trips would you most likely use a bus? (select all that apply)
- □ Work
- □ Connect to other transit
- □ School
- □ Medical/Personal appointments
- □ Dining
- □ Shopping
- □ Government Services
- □ Other (please specify) ____________________________

11) What destinations do you think it is important to serve with a new bus route? (select all that apply)
- □ Murdock Circle
- □ Charlotte County Health Department
- □ Hospitals
- □ Destinations in North Port
- □ Cultural Center/Library
- □ Destinations Elsewhere in Sarasota County
- □ Others (please specify)_______________________________________________