CONTENTS

1. Introduction .................................................... 1
2. Transit Service ................................................. 2
  2.1 Existing Transit Service ......................................... 2
  2.2 Transit Supportive Populations .......................... 6
  2.3 Planned Service .................................................. 7
  2.4 Preliminary Observations ................................ 19
3. Brandon Boulevard Compatibility Study ........... 19
4. Origin-Destination Analysis ............................ 20
  4.1 Regional Trip Analysis ...................................... 20
  4.2 Internal Trip Analysis ....................................... 27
5. Transit Options .............................................. 30
  5.1 Bus Rapid Transit/Express Bus Service ............... 30
  5.2 Brandon Circulator Service ............................... 35
6. Recommendations ......................................... 38
7. Sources ........................................................ 40
8. Attachments .................................................. 40
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1. INTRODUCTION

The Brandon Corridors and Mixed-Use Centers Study is a joint pilot project from the Hillsborough County Metropolitan Planning Organization (MPO) and the Hillsborough County City-County Planning Commission (Planning Commission). The purpose of the study is to better coordinate the envisioned land use pattern with planned transportation improvements along major corridors within the Brandon Study Area. As shown in Figure 1, the study area is located at a key location within eastern Hillsborough County. The study area is a three-mile by six-mile area located east of Interstate 75 (I-75) between State Road 60 (SR 60)/Brandon Boulevard and Bloomingdale Avenue. The eastern limit of the study area is Dover Road/Little Road.

Building on Technical Memo 3: Network Evaluation & Planned Improvements prepared earlier in the study, the study team reviewed the analysis of the transit service existing conditions and planned improvements within the study area and adjacent areas as part of this memo. The analysis of trip patterns using StreetLight Data is documented in the StreetLight Data Origin-Destination Analysis methodology memo (October 12, 2016). This analysis was performed to understand the existing travel patterns within Brandon; from Brandon to four major employment centers in Tampa; and the patterns through Brandon to and from adjacent areas to the south and east.

This memo documents the study team’s efforts to identify the need for improvements to the existing transit service within the study area.
2. TRANSIT SERVICE

2.1 Existing Transit Service

Hillsborough Area Regional Transit (HART) provides transit service in the study area. The following existing local and express routes shown in Figure 2 and Figure 3 serve the Brandon Study Area.

- **Route 8 Progress Village/Brandon.** Local bus service between Downtown Tampa, Progress Village, and Westfield Brandon Mall. Operates on 30-minute headways during weekdays and 60-minute headways on Saturday and Sunday.

- **Route 31 South Hillsborough County.** Local bus service between Westfield Brandon Mall, Riverview Oaks Park-n-Ride, Gibsonton, the Winn Dixie Park-n-Ride at Apollo Beach, and the South Shore Regional Service Center Park-n-Ride. Operates on 70- to 80-minute headways during weekdays.

- **Route 37 Brandon/netp@rk.** Local bus service between Westfield Brandon Mall, Brandon Hospital, and netp@rk Transfer Center. Operates on 30-minute headways during weekdays and 60-minute headways on Saturday.

- **Route 46 Downtown Tampa/Brandon.** Local bus service between Dover Park-n-Ride and Downtown Tampa via Causeway Boulevard. Operates on 60-minute headways during weekdays and on Saturday.

- **Route 22X Dover/Downtown Tampa.** Express bus service between Dover Park-n-Ride and Downtown Tampa via SR 60 and the Selmon Expressway. This express commuter route has two westbound buses from Dover to downtown Tampa in the morning peak hour period and two eastbound buses during the evening rush hour.

- **Route 24LX FishHawk/Riverview/South Tampa Express.** Express bus service between FishHawk Sports Complex, Riverview Oaks Park-n-Ride and MacDill AFB via FishHawk Boulevard/Boyette Road, I-75, the Selmon Expressway, and Dale Mabry Highway. This commuter route has six westbound buses from FishHawk to South Tampa in the am peak hour period and six return trips in the pm rush hour.

- **Route 25LX South Brandon/South Tampa Limited Express.** Express bus service between Culbreath at Bloomingdale Park-n-Ride, J.C. Handley Park Park-n-Ride, and MacDill AFB via the Selmon Expressway. This express commuter route has five westbound buses from South Brandon to South Tampa in the am peak hour period and five return trips in the pm rush hour.

- **Route 27LX Riverview/FishHawk/South Brandon Limited Express.** Express bus service between Riverview Oaks Park-n-Ride, FishHawk Sports Complex Park-n-Ride, Culbreath at Bloomingdale Park-n-Ride, J.C. Handley Park Park-n-Ride, and Marion Transit Center in downtown Tampa. This express commuter route has three westbound buses from Riverview/FishHawk to downtown in the morning peak hour period and two eastbound buses in the evening rush hour.

- **Route 47LX South County Limited Express.** Express bus service between South 301 Park-n-Ride in Sun City Center, SouthShore Regional Service Center in Ruskin, the Winn Dixie Park-n-Ride in Apollo Beach, Gibsonton, and Downtown Tampa via I-75 and the Selmon Expressway. This route does not make any stops in the study area.

- **Route 53LX South County/Brandon via US 301.** Express bus service between Westfield Brandon Mall, St. Joseph’s Hospital South, South 301 Park-n-Ride, Sun City Center, and Kings Point. Operates on 60-minute headways during the weekday.
Figure 2. Existing Express Bus Service
Figure 3. Existing Transit Service

- Brandon Study Area
- Water
- CSX-Railroad

Local Routes
- 8 Progress Village/Brandon
- 31 South Hillsborough County
- 37 Brandon/netp@rk
- 46 Downtown Tampa/Brandon

Express Routes
- 22X Dover/Downtown Tampa
- 24LX Fishhawk-Riverview-South Tampa
- 25LX S. Brandon-S. Tampa
- 27LX Riverview-Fishhawk-Brandon
- 47LX Southshore
- 53LX South County-Brandon via US 301

- HART Flex
- Park-and-Ride
- HART HyperLINK
The HARTFlex Brandon community shuttle service operates between Bloomingdale Avenue, Parsons Avenue, SR 60, and Providence Lake Road on 60-minute headways during weekdays.

In late 2016, HART implemented the HyperLINK pilot program in the Brandon area to support first-mile/last-mile connections between the Westfield Brandon Mall and Brandon Hospital. This transit-operated rideshare service allows residents to book a low-cost ride to a HART designated bus station within a three-mile radius. HyperLINK matches available riders with on-demand ride requests. Each trip booked through HyperLINK has a flat fare of $3 per passenger regardless of mileage or time. The HyperLINK service area is shown in Figure 3.

The Westfield Brandon Mall has an existing transfer center that provides connections to a majority of the routes within the study area. Additionally, four park-and-ride facilities are located within or immediately adjacent to the study area:

- Dover Park-n-Ride (Dover Road and SR 60) – Route 22X;
- J.C. Handley Park-n-Ride (Kings Avenue) – Route 25LX and 27LX;
- Culbreath at Bloomingdale Park-n-Ride (Culbreath Road at Bloomingdale Avenue) - Route 25LX and 27LX; and
- Rogers Field Park-n-Ride (Sadie Street and Parsons Avenue north of SR 60) – Route 22X.

As shown in Figure 4, the Brandon Westfield Mall transfer station has the highest number of average weekday boardings or alightings of all bus stops within the study area. On average, this bus stop has an average of 1,125 daily weekday boardings or alightings.

Most of the other stops had much lower average weekday boardings or alightings. The stops that had comparatively higher levels of boardings and alightings are located in close proximity to the transfer station. Stops along Lumsden Road just south of the transfer station, Brandon Town Center Drive, and Lakewood Drive also see higher levels of weekday boardings or alightings. Boardings and alightings were also higher at stops near the Bloomingdale Avenue and Providence Road intersection.

Ridership at the park-and-ride facilities within the study area was comparable to other stops. The Dover Park-n-Ride sees 55 boardings or alightings each weekday, compared to 52 at the J.C. Handley Park-n-Ride, 27 at the Culbreath at Bloomingdale Park-n-Ride, and 18 at the Rogers Field Park-n-Ride.

2.2 Transit Supportive Populations

The existing and projected demographics of the area were reviewed to identify if the existing and projected activity densities in the study area could support additional transit service. The existing and projected activity densities were calculated using 2010 estimates, 2025 projections, and 2040 projections of population and employment available from the Hillsborough County MPO. These estimates and projections were used as the basis for the MPO’s Imagine 2040 Long Range Transportation Plan (Imagine 2040 LRTP).

To calculate activity densities by traffic analysis zone (TAZ), total population and employment was divided by the area of the TAZ. A TAZ is the smallest geographic area for which population and employment projections are available.

The Activity Density Matrix, shown in Table 1, provides information relating land use densities and intensities to both activity center densities (population and employment per acre) and general place types. The activity densities are presented in ranges to reflect the variety of findings regarding the relationship between development intensities and the provision of sustainable, cost-effective transit service. Higher densities relate to higher levels of transit service that could be supported.
In 2010, the majority of the study area had low activity density, with less than 10 persons or jobs per acre. Several TAZs located around the Brandon Westfield Mall, the Brandon Regional Hospital, and along SR 60 and Lumsden Road had higher densities with between 10 to 20 persons or jobs per acre (Figure 5).

As shown in Figure 6, population and employment estimates indicate that activity density is anticipated to increase on the western side of the study area by 2025. Four additional TAZs will see increased densities. Outside the study area, the area west of I-75 along Falkenburg Road is also anticipated to have higher activity density by 2025.

By 2040, the activity density in these areas is anticipated to increase even more. Three additional TAZs within the study area are projected to have 10 to 20 persons per acre. The Brandon Westfield Mall area is anticipated to increase to 20 to 40 persons per acre. The area west of I-75 is also projected to intensify, with one TAZ estimated to have over 40 persons or jobs per acre (Figure 7).

### Table 1. Activity Density Matrix

<table>
<thead>
<tr>
<th>Activity Density (population &amp; employment per acre)</th>
<th>Development Density/Intensity</th>
<th>Place Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>40+</td>
<td>30+ du/acre 1.00 FAR</td>
<td>Regional Center</td>
</tr>
<tr>
<td>20-40</td>
<td>15-30 du/acre 0.25-1.00 FAR</td>
<td>Mixed Use Activity Center</td>
</tr>
<tr>
<td>10-20</td>
<td>7-15 du/acre Less than 0.25 FAR</td>
<td>Community Center</td>
</tr>
<tr>
<td>0-10</td>
<td>0-7 du/acre Neighborhood</td>
<td>Neighborhood</td>
</tr>
</tbody>
</table>

2.3 Planned Service

HART’s FY2016-FY2025 Transit Development Plan (TDP) was last updated in September 2015. The TDP is HART’s multi-year financial and operating plan. HART is currently preparing an updated FY2018-2027 TDP. Recognizing the need to identify transportation options that are more cost effective and better meet the needs of Hillsborough County residents, HART is proposing a significant redesign of the transit network as part of the update to the TDP.

The proposed changes to the network include adjustments to service corridor alignments, frequency of service, or both. Within the Brandon Study Area, some local or express routes are proposed for elimination. Two new express routes are proposed to provide improved service to regional employment destinations. The proposed transit system map for service within the Brandon Study Area is provided in Figure 8. Proposed changes are described below. Implementation of the revised system is anticipated for October 2017.

- **Adjusted Routes**
  - **Route 8 Progress Village/Brandon.** Adjust local bus service route from Providence Road to Gornto Lake Road. Maintain 30-minute headways during weekdays.
  - **Route 31LX South Hillsborough County LX.** Change local bus service to limited express service with 30-minute headways on weekdays and 60-minute headways on weekends.
  - **Route 37 Brandon/netp@rk.** Adjust local bus service route between Westfield Brandon Mall and netp@rk Transfer Center. Increase frequency to 15-minute headways during weekdays and 30-minute headways on Saturday. Add service on Sundays with 60-minute headways.
  - **Route 46 Brandon Mall-Dover Road.** Adjust local bus service route between Westfield Brandon Mall and Dover
BRANDON CORRIDORS & MIXED-USE CENTERS PILOT PROJECT

Brandon Mall - Transfer Center

Brandon Study Area

Water

Bus Stop - Boardings & Alightings (2015)

Major Corridors

Local Roadway

CSX-Railroad

match line
Figure 4. Transit Ridership, 2015
Figure 5. Transit Supportive Activity Density, 2010

- Brandon Study Area
- Water

Activity Density (Population & Employment/Acre)
- 0-10
- 10-20
- 20-40
- 40+
Figure 6. Transit Supportive Activity Density, 2025
Figure 7. Transit Supportive Activity Density, 2040

- Brandon Study Area
- Water

Activity Density (Population & Employment/Acre):

- 0-10
- 10-20
- 20-40
- 40+

Legend:

- Brandon Study Area
- Water

Activity Density (Population & Employment/Acre):

- 0-10
- 10-20
- 20-40
- 40+

Legend:
Eliminate express bus service between Riverview and Downtown Tampa.

- **Route 25LX South Brandon/South Tampa Limited Express.** Increased frequency for express bus service with 20-minute headways during am and pm peak hour periods during weekdays.

### Service Additions

- **Route 60 LX NWTC-TIA-Downtown-Brandon Express.** Proposed all-day express service with 60-minute headways between the Northwest Transfer Center in Town-n-Country, Tampa International Airport, Downtown Tampa, and Westfield Brandon Mall via the Selmon Expressway, I-275, the Veteran’s Expressway and Waters Avenue.

- **Route 360X MacDill AFB-Downtown-Brandon Express.** Proposed all-day express service with 60-minute headways between MacDill Air Force Base, Downtown Tampa, and Westfield Brandon Mall via the Selmon Expressway and Dale Mabry Highway. Combined with Route 60LX service, 30-minute headways would be provided between Westfield Brandon Mall and Downtown Service due to alternating schedules.

### Eliminated Routes

- **Route 22X Dover/Downtown Tampa.** Eliminate express bus service between Dover Park-n-Ride and Downtown Tampa.

- **Route 27LX Riverview/FishHawk/South Brandon Limited Express.** Eliminate express bus service between Riverview and FishHawk and Marion Transit Center in Downtown Tampa.

- **Route 53LX South County/Brandon via US 301.** Eliminate express bus service between Riverview and FishHawk and Marion Transit Center in downtown Tampa.
The FY2016-FY2025 TDP includes two action plans; one based on status quo funding and a second based on a potential increased funding scenario. As shown on Figure 9, the TDP includes a FY2016-FY2025 Action Plan (based on status quo funding) includes the following enhancements by FY. Based on the number of service changes that HART is proposing for implementation in October 2017, many of the following planned enhancements will change as part of the updated TDP.

- **FY2016** (enhancements included in HART 5-year strategic financial plan):
  - Route 46. Downtown to Brandon via Causeway Blvd extends to Saturday service (expanded local/flex).
  - Route 53LX. South County/Brandon via US 301 extends to weekday peak hourly service (expanded express).
  - Brandon Flex. Extends to Saturday (expanded local/flex).
  - First Mile & Last Mile County connector service. Pilot in 2-3 zones (new alternative service delivery).

- **FY2017** (enhancements included in HART 5-year strategic financial plan):
  - Route 8. Downtown to Progress Village/Brandon increases to 30 minute frequency on Saturday (expanded local/flex).
  - Route 37. Brandon to netp@rk increases to 30 minute frequency on Saturday (expanded local/flex).
  - Route 46. Downtown to Brandon via Causeway Blvd extends to 10 pm weekdays (expanded local/flex).

- **FY2018** (enhancements included in HART 5-year strategic financial plan):
  - Route 46. Downtown to Brandon via Causeway Blvd extends to Sunday (expanded local/flex).
  - Route 53LX. South County/Brandon via US 301 extends to Saturday service (expanded express).

- **FY2019** (enhancements included in HART 5-year strategic financial plan):
  - Route 53LX. South County Community Transit Plan – Enhance Route 53LX to Local Status – 30 min weekday service (expanded local/flex).

- **FY2023**:
  - Downtown to Progress Village/Brandon increases to 30 minute frequency on Sunday (expanded local/flex).
  - SR 60 MetroRapid project PD&E Study. MetroRapid route operating between Marion Transit Center and Dover Park-and-Ride on SR 60.

- **FY2025**:
  - Downtown to Brandon via Causeway Blvd extends westbound from MTC to MacDill AFB weekdays.

The TDP also included additional enhancements that are part of a Vision that is based on an additional $30 million/year. The following enhanced funding improvements for FY2017-FY2016 are shown on Figure 10:

- **FY2017**:
  - Second Brandon Flex. Falkenburg, west of I-75 (new HARTFlex).
  - First Mile & Last Mile County connector service (new alternative service delivery).

- **FY2018**:
  - New route. Lumsden-Bell Shoals (M-F 30 minute; Sat 60 minute frequency) (new local).
  - New route. FishHawk-Lithia-Bloomingdale (M-F 30 minute; Sat 60 minute frequency) (new local).
  - New route. Brandon to USF (M-F 30 minute; Sat 60 minute frequency) (new local).
**FY2021:**
- Route 25LX. Brandon Park-n-Ride to Apollo Beach Ferry dock - direct to MacDill if no ferry (new express).
- Route 22X. Brandon Park-n-Ride to Downtown Tampa to Westshore (new express).
- New Express. Brandon Park-n-Ride to USF (new express).

**FY2022:**
- First Brandon Flex Enhancement. Hourly to 30 minute frequency (expanded local/flex).

**FY2024:**
- Route 46. Downtown to Brandon via Causeway Blvd increases to 30 min weekday frequency and extends to MacDill AFB (expanded local/flex).

**FY2026**
- New MetroRapid. Brandon to Downtown MetroRapid.
2.4 Preliminary Observations

The western half of the study area is relatively well served by transit, including service by local and express bus routes, the HARTFlex service, HyperLINK service, and a bus transfer facility on the Westfield Brandon Mall property. Several express routes serve the northern and eastern extents of the study area and are supported by park-and-ride lots to intercept commuters moving to and through the area from residential areas to the east and south. The proposed 2017 service changes will reduce the number of routes within the study area and shorten many of the routes, but express service to key employment destinations including Downtown Tampa, Westshore, and MacDill AFB will increase and the HyperLINK pilot program will continue to provide the needed first mile/last mile connections within the most developed portions of the study area.

The proposed changes will address many of the existing service inefficiencies, but several challenges will remain unaddressed. These include the frequency of service, the location of park-and-ride and transfer facilities, and the high number of transfers required to connect local and express routes. In addition, existing land use densities and intensities are relatively low across the study area, which creates a challenge for the introduction of more robust transit service.

To deliver greater and more efficient levels of service in the future, planning efforts should be focused on creating more transit supportive places. Places with higher densities and intensities and more pedestrian-friendly forms and patterns of development have the greatest potential to increase market support for improved transit service.

3. BRANDON BOULEVARD COMPATIBILITY STUDY

In September 2013, the Hillsborough MPO conducted the Brandon Boulevard (SR 60) Compatibility Study for the SR 60/Brandon Boulevard Corridor between I-75 and Valrico Road. SR 60 is identified as a freight corridor within Florida’s Strategic Intermodal System (SIS), but there are also increasing needs and desires for the roadway to function as a true multimodal corridor, with facilities for transit riders, bicyclists, and pedestrians.

The SR 60 corridor through Brandon is a signalized divided arterial that is included as a freight corridor on the Florida’s statewide SIS. The roadway has eight travel lanes from I-75 to Kings Avenue and from Bryan Road/Kingsway Road to Valrico Road. The middle section, between Kings Avenue and Bryan Road/Kingsway Road has six travel lanes, which is physically constrained. There are 15 signalized intersections along the corridor, including those at the I-75 ramps, and speed limits on the corridor range from 45 mph to 50 mph.

Hillsborough County has adopted LOS D in its Comprehensive Plan as the acceptable standard for this portion of SR 60. The Level of Service (LOS) analysis showed a failing level of service for the SR 60 Corridor. An examination of the level of service of parallel and perpendicular roadways around this section of SR 60 suggests that the surrounding roadways are also strained.

The study recommended the following safety, connectivity, wayfinding, signage, and landscaping improvements along SR 60:

- **Safety Enhancements**
  - Conduct speed study to evaluate potential for reducing the speed limit to 45mph on SR 60 through entire corridor;
  - Explore narrowing all travel lanes to 11 feet, allowing for more separation between bicycle lanes and motor vehicles;
Transit Service Evaluation

4. ORIGIN-DESTINATION ANALYSIS

As documented in the StreetLight Data Origin-Destination Analysis methodology memo (Attachment 1), the study team conducted an analysis of trip patterns within the study area and for trips that pass through the study area. The analysis used StreetLight Data’s technology, which contextualizes anonymous location data from mobile devices to measure population mobility patterns.

To establish a better understanding of the origin and destination of trips along with travel patterns, a series of analysis zones and trip gates were established. The analysis was conducted to better understand trips:

- Between the Brandon area and four major employment centers in Tampa;
- Those made through the study area from adjacent areas to the south and east of Brandon; and
- Internally within the Brandon Study Area.

4.1 Regional Trip Analysis

The first part of the analysis was conducted to understand the regional trips that originate in greater Brandon area or pass through the study area and are destined for a regional employment destination. For this analysis, the greater Brandon area including the area west of I-75 was divided into nine travel zones (see Figure 11). Five external travel gates were also established at I-75, US 301, Bell Shoals Road, Lithia Pinecrest Road, and SR 60 to identify trips that pass through the study area from areas to the south and east. The four major employment center travel zones that were established include:

- **Downtown Tampa.** The 2014 Downtown Tampa Study conducted by the Tampa Downtown Partnership reported over 58,000 employees in this area, which includes the central

- Evaluate the feasibility of new traffic signals on SR 60 at Pauls Drive and Beverly Boulevard and conduct all necessary warrant studies;
- Modify the coordinated signal timing and/or explore potential for an adaptive signal system;
- Enhance traffic signal visibility; and
- Install dynamic message signs;

- **Connectivity Enhancements**
  - Extend existing parallel roads to provide alternatives to SR 60 for local trips;
  - Provide additional pedestrian connections on side roads;
  - Add bicycle and pedestrian facilities on SR 60 at the I-75 interchange;
  - Designate alternate bike corridors in the area, especially for the portion of SR 60 that doesn’t have bike lanes; and
  - Modify configuration of Lithia Pinecrest Road and Bryan Road to provide better circulation.

- **Other Enhancements**
  - Develop a unified signage/wayfinding system for users of the SR 60 corridor and area; and
  - Provide additional landscaping consistent with the adopted SR 60 Overlay District.
business district, Channel District, the University of Tampa, and portions of Harbour Island and Davis Island including Tampa General Hospital.

- **Westshore.** The Westshore area is recognized as a principal business district in the Tampa area with about 12,750,000 SF of office space and 94,000 employees. This business district includes Tampa International Airport, Rocky Point, and One Buccaneer Place.

- **USF/Innovation Place.** The University of South Florida (USF) is the fourth largest university in the state of Florida, with an enrollment of more than 48,000 students for the 2014-2015 academic year. The surrounding Tampa Innovation Place district includes anchor institutions USF, Moffitt Cancer, Busch Gardens, Florida Hospital, and the James Haley VA Hospital with approximately 18,000 employees.

- **MacDill Air Force Base.** The MacDill AFB is an active U.S. Air Force base with approximately 15,000 employees.

The origin-destination analysis showed that just over 14,000 trips originated within the Brandon travel zones during the AM peak period were destined for one of the four employment centers in Tampa. As shown in Table 2 and Figure 11, over two-thirds of these trips were destined for the Downtown Tampa or Westshore zones.

A significant number of trips destined for one of the four employment centers also pass through the study area. Trip data for the five external gate zones show that nearly 11,500 weekday AM peak trips originated in areas adjacent to Brandon, pass through the study area, and travel on to the one of the four employment zones in Tampa. As shown in Table 2 and Figure 12, almost 40 percent of these “through” trips are destined to Downtown Tampa (4,590 trips). Figure 13 shows the consolidated number of trips from the Brandon Study Area Zones and the Brandon External Gate Zones for the AM peak period.

### Table 2. Weekday AM Peak Period Trips, Brandon Travel Zones to Tampa Employment Zones

<table>
<thead>
<tr>
<th>Destination Origin</th>
<th>Downtown Tampa</th>
<th>MacDill AFB</th>
<th>USF</th>
<th>Westshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brandon Area Travel Zones</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North SR 60</td>
<td>421</td>
<td>7</td>
<td>445</td>
<td>477</td>
<td>1,350</td>
</tr>
<tr>
<td>West I-75</td>
<td>888</td>
<td>52</td>
<td>428</td>
<td>501</td>
<td>1,869</td>
</tr>
<tr>
<td>Brandon Mall Area</td>
<td>1,204</td>
<td>331</td>
<td>280</td>
<td>471</td>
<td>2,286</td>
</tr>
<tr>
<td>Central Brandon</td>
<td>581</td>
<td>50</td>
<td>142</td>
<td>142</td>
<td>915</td>
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<tr>
<td>East Brandon</td>
<td>1,019</td>
<td>617</td>
<td>518</td>
<td>772</td>
<td>2,926</td>
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<td>SW Brandon</td>
<td>224</td>
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<td>114</td>
<td>346</td>
<td>693</td>
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<tr>
<td>South Central Brandon</td>
<td>280</td>
<td>172</td>
<td>267</td>
<td>379</td>
<td>1,098</td>
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<tr>
<td>South US 301</td>
<td>856</td>
<td>13</td>
<td>181</td>
<td>305</td>
<td>1,355</td>
</tr>
<tr>
<td>South Bell Shoals</td>
<td>340</td>
<td>636</td>
<td>329</td>
<td>245</td>
<td>1,550</td>
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<tr>
<td><strong>All Zones</strong></td>
<td><strong>5,813</strong></td>
<td><strong>1,887</strong></td>
<td><strong>2,704</strong></td>
<td><strong>3,638</strong></td>
<td><strong>14,042</strong></td>
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<tr>
<td></td>
<td><strong>41%</strong></td>
<td><strong>13%</strong></td>
<td><strong>19%</strong></td>
<td><strong>26%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| External Gate Zones | | | | | |
| Bell Shoals Gate | 32 | 310 | 121 | 65 | 528 |
| I-75 S Gate | 3,521 | 1,237 | 2,407 | 2,067 | 9,232 |
| Lithia Pinecrest Gate | 671 | 58 | 71 | 65 | 865 |
| SR 60 Gate | 50 | 6 | 9 | 15 | 80 |
| US 301 Gate | 280 | 256 | 148 | 107 | 791 |
| **Total – All Gates** | **4,554** | **1,847** | **2,756** | **2,319** | **11,496** |
| | **40%** | **16%** | **24%** | **20%** | **100%** |

Source: StreetLight Data, HDR
Figure 11. Regional Commute Pattern from Brandon Area Travel Zones (AM Peak Trips)
During the PM peak period, just over 13,000 trips originated within the four employment centers in Tampa were destined for one of the nine travel zones in the Brandon area and over two-thirds of these trips originated in the Downtown Tampa zone (see Table 3). Nearly 7,500 trips in the PM peak period originated within one of the four employment centers in Tampa and were destined for an external gate zone. About 34 percent of these trips originated in the Downtown zone.

As part of the origin-destination analysis, the study team was able to evaluate the routes of the trips between the greater Brandon study area and external gate zones and the regional employment centers. Using the StreetLight Data, middle gates were placed on main roadways that were identified as the most likely routes between the Brandon Area and the Tampa employment centers. These gates represent a point or location along a roadway where trips pass through. As shown in Figure 14, the middle gates were strategically selected at the following locations to help understand the primary paths that motorists use:

- US 301 (north and south of the Selmon Expressway);
- Brandon Parkway west of Gornto Lake Road;
- Causeway Boulevard west of US 301;
- I-75 at US 301;
- Falkenburg Road (north and south of Selmon Expressway); and
- SR 60.

The results of this analysis provide some insights into how individual commuters between the origin and destination zones make travel route decisions. Nearly 5,000 of the trips destined for one of the four employment centers in Tampa pass along Falkenburg Road south of the Selmon Expressway during the AM peak period. About 50 percent of these trips are destined for the Downtown zone. I-75 at US 301 is used by over 2,000 trips destined for one of the four employment centers in Tampa during the AM peak period and 37 percent of these trips are destined for the Downtown zone.

### Table 3. Weekday PM Peak Period Trips, Tampa Employment Zones to Brandon Travel Zones

<table>
<thead>
<tr>
<th>Origin Destination</th>
<th>Downtown Tampa</th>
<th>MacDill AFB</th>
<th>USF</th>
<th>Westshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brandon Area Travel Zones</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North SR 60</td>
<td>163</td>
<td>4</td>
<td>310</td>
<td>383</td>
<td>860</td>
</tr>
<tr>
<td>West I-75</td>
<td>968</td>
<td>163</td>
<td>492</td>
<td>621</td>
<td>2,244</td>
</tr>
<tr>
<td>Brandon Mall Area</td>
<td>1,656</td>
<td>581</td>
<td>783</td>
<td>860</td>
<td>3,880</td>
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<tr>
<td>Central Brandon</td>
<td>374</td>
<td>116</td>
<td>179</td>
<td>239</td>
<td>908</td>
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<tr>
<td>East Brandon</td>
<td>508</td>
<td>449</td>
<td>221</td>
<td>477</td>
<td>1,655</td>
</tr>
<tr>
<td>SW Brandon</td>
<td>234</td>
<td>24</td>
<td>71</td>
<td>213</td>
<td>542</td>
</tr>
<tr>
<td>South Central Brandon</td>
<td>224</td>
<td>112</td>
<td>161</td>
<td>150</td>
<td>647</td>
</tr>
<tr>
<td>South US 301</td>
<td>570</td>
<td>93</td>
<td>236</td>
<td>409</td>
<td>1,308</td>
</tr>
<tr>
<td>South Bell Shoals</td>
<td>187</td>
<td>484</td>
<td>290</td>
<td>273</td>
<td>1,234</td>
</tr>
<tr>
<td><strong>All Zones</strong></td>
<td><strong>4,884</strong></td>
<td><strong>2,026</strong></td>
<td><strong>2,743</strong></td>
<td><strong>3,625</strong></td>
<td><strong>13,278</strong></td>
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<tr>
<td></td>
<td><strong>37%</strong></td>
<td><strong>15%</strong></td>
<td><strong>21%</strong></td>
<td><strong>27%</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td><strong>External Gate Zones</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bell Shoals Gate</td>
<td>28</td>
<td>92</td>
<td>99</td>
<td>56</td>
<td>275</td>
</tr>
<tr>
<td>I-75 S Gate</td>
<td>1,918</td>
<td>1,215</td>
<td>1,592</td>
<td>884</td>
<td>5,609</td>
</tr>
<tr>
<td>Lithia Pinecrest Gate</td>
<td>204</td>
<td>21</td>
<td>22</td>
<td>71</td>
<td>318</td>
</tr>
<tr>
<td>SR 60 Gate</td>
<td>157</td>
<td>2</td>
<td>15</td>
<td>19</td>
<td>193</td>
</tr>
<tr>
<td>US 301 Gate</td>
<td>181</td>
<td>340</td>
<td>204</td>
<td>243</td>
<td>968</td>
</tr>
<tr>
<td><strong>Total – All Gates</strong></td>
<td><strong>2,488</strong></td>
<td><strong>1,670</strong></td>
<td><strong>1,932</strong></td>
<td><strong>1,273</strong></td>
<td><strong>7,363</strong></td>
</tr>
<tr>
<td></td>
<td><strong>34%</strong></td>
<td><strong>23%</strong></td>
<td><strong>26%</strong></td>
<td><strong>17%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: StreetLight Data, HDR
Figure 12. Regional Commute Pattern through Brandon External Gates (AM Peak Trips)
Figure 13. Regional Commute Pattern from Brandon Area Travel Zones and Brandon External Gates (AM Peak Trips)
Figure 14. Weekday AM Peak Period Trips, Brandon Area Travel Zones/Brandon External Gates to Tampa Employment Zones

- **SR 60**:
  - Destination Zone: Downtown Tampa - 57.3%
  - MacDill AFB - 21.8%
  - USF - 0.2%
  - WestShore - 20.6%
  - Total Trips: 1,082

- **US 301 / N Selmon**:
  - Destination Zone: Downtown Tampa - 44.0%
  - MacDill AFB - 4.4%
  - USF - 16.6%
  - WestShore - 35.0%
  - Total Trips: 457

- **Woodberry Rd**:
  - Destination Zone: Downtown Tampa - 57.3%
  - MacDill AFB - 21.8%
  - USF - 0.2%
  - WestShore - 20.6%
  - Total Trips: 1,037

- **Causeway Blvd**: 90.4%
  - Destination Zone: Downtown Tampa - 0.9%
  - MacDill AFB - 0.9%
  - USF - 7.8%
  - Total Trips: 219

- **Falkenburg Rd**: 49.3%
  - Destination Zone: Downtown Tampa - 21.5%
  - MacDill AFB - 3.4%
  - USF - 25.8%
  - Total Trips: 4,728

- **US 301 / S Selmon**:
  - Destination Zone: Downtown Tampa - 46.3%
  - MacDill AFB - 11.9%
  - USF - 12.8%
  - WestShore - 35.0%
  - Total Trips: 1,182

- **Brandon Pkwy**:
  - Destination Zone: Downtown Tampa - 57.3%
  - MacDill AFB - 21.8%
  - USF - 0.2%
  - WestShore - 20.6%
  - Total Trips: 865

- **SR 60**: 37.0%
  - Destination Zone: Downtown Tampa - 6.7%
  - MacDill AFB - 29.8%
  - USF - 26.4%
  - Total Trips: 2,099
4.2 Internal Trip Analysis

The second part of the StreetLight Data analysis focused on the patterns of trips within just the limits of the Brandon Study Area. For this analysis, 19 zones were developed (see Figure 15). The results of the analysis show that each day an average of over 35,000 trips are during the AM peak period internally within the study area. As shown in Table 4 and Figure 15, Most of the AM peak internal trips are destined to the Brandon Regional Hospital (Zone 5) and the zone east of I-75 surrounding Causeway Boulevard (Zone 10) with a significant presence of retail and commercial land uses.

More than 77,500 trips are made internally during the PM peak period within the study area. As shown in Table 4 and Figure 16, most of the PM peak internal trips are destined to the commercial area surrounding east of I-75 surrounding Causeway Boulevard (Zone 10) and the residential zone surrounding Bloomingdale Avenue between John Moore Road and Lithia Pinecrest Road (Zone 16).

### Table 4. Weekday Internal Trips Top Origins and Destinations

<table>
<thead>
<tr>
<th>Weekday Internal Trips (AM Peak)</th>
<th>Top Origins</th>
<th>Top Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 16</td>
<td>3,227 trips</td>
<td>9% Zone 5</td>
</tr>
<tr>
<td>Zone 10</td>
<td>3,151 trips</td>
<td>9% Zone 10</td>
</tr>
<tr>
<td>Zone 6</td>
<td>2,737 trips</td>
<td>8% Zone 14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weekday Internal Trips (PM Peak)</th>
<th>Top Origins</th>
<th>Top Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 10</td>
<td>10,725 trips</td>
<td>14% Zone 10</td>
</tr>
<tr>
<td>Zone 5</td>
<td>6,959 trips</td>
<td>9% Zone 16</td>
</tr>
<tr>
<td>Zone 7</td>
<td>6,927 trips</td>
<td>9% Zone 7</td>
</tr>
</tbody>
</table>

Source: StreetLight Data, HDR
Figure 15. Brandon Internal Travel Zones - Weekday (AM Peak) Internal Trips Top Origin and Destination Zones
Figure 16. Brandon Internal Travel Zones - Weekday (PM Peak) Internal Trips Top Origin and Destination Zones
5. TRANSIT OPTIONS

As documented in Technical Memo 3: Network Evaluation & Planned Improvements, the study team evaluated the existing transportation network and identified the major arterial corridors within Brandon that currently operating below acceptable levels of service. These roadways have limited potential to increase capacity to serve the future demand due partly to right-of-way and development-related constraints. The absence of a secondary network of interconnected collector streets contributes to congestion forcing the east-west trips onto three arterials. The traffic congestion has resulted in long travel times for local bus service between Brandon and Tampa making the bus service less competitive than the auto. Providing a more frequent, faster transit service connecting Brandon and major employment concentrations in Tampa, particularly the Downtown Tampa area should be a priority given the high number of peak hour trips to this destination.

HART has demonstrated a need for enhanced transit service in Brandon. The most recent TDP identified funding for the SR 60 MetroRapid project PD&E Study in FY 2023.

As documented in Technical Memo 2: Market Analysis, Retail Trade is the Brandon area’s largest employment sector, with over 46 percent of all jobs. The second largest sector is Services, which includes Healthcare, Professional/Business Services, Leisure & Hospitality, accounting for 37 percent of all jobs within Brandon. The origin-destination analysis showed a high demand for internal trips destined to the Brandon Regional Hospital zone and other internal zones with significant retail and commercial land uses. Providing a transit option within Brandon connecting these urban destinations should be considered to improve mobility within the study area.

Providing increased transportation choices to better serve the population in Brandon through an enhanced transit investment in the study area is needed. These transit improvements should provide better access to employment centers and other major trip attractors while helping alleviate congestion, provide transportation options, and improve safety on major local roadways, as well as serving as a stimulus for transit-oriented development.

Greater efficiencies in the existing transit service could be achieved through adjustments in both express and local service and the relocation or consolidation of park-and-ride facilities. However, the land use densities and intensities are relatively low across the study area, creating a challenge for the introduction of more robust transit service, including bus rapid transit (BRT).

Based on the findings of the origin-destination analysis and the analysis of the existing transit service and transit supportive population in the Brandon area, the study team explored two different potential services: bus rapid transit or express bus service between the study area and downtown Tampa and a circulator bus service within the study area. The route options that were evaluated are described below.

5.1 Bus Rapid Transit/Express Bus Service

Bus rapid transit (BRT) or express bus service is typically designed to be more time-competitive with automobile travel and meet the needs of daily commuters traveling long distances. These services are intended to connect commuters from suburban areas to urban employment centers or provide connections between two or more employment centers along more urbanized regional corridors. To maintain high travel speeds and level-of-service, express and BRT buses make fewer stops to pick-up and drop-off passengers than buses on local routes and, especially with express buses, usually travel non-stop through areas with low levels of transit-supportive land use to destinations in activity centers. Express bus service performs best when using highway, freeway, or expressway high occupancy vehicle (HOV) priority lane segments, which allows the bus to bypass traffic congestion and queues in mixed-flow lanes.
Building on observations regarding regional travel patterns, concepts for more robust transit service between Brandon and regional activity centers in Hillsborough County were prepared and evaluated. The concepts focus on serving the following travel needs:

- Serving commuters from the Brandon area and surrounding areas traveling to employment destinations in Downtown Tampa and Westshore;
- Serving existing transit users along the SR 60 corridor, including those accessing transit via existing park-and-ride facilities;
- Providing connections between destinations or districts along the SR 60 corridor with transit-supportive land uses or with the potential for redevelopment and intensification, including the Brandon Hospital, Brandon Main Street, and Westfield Brandon Mall areas; and
- Serving riders transferring from local or first mile/last mile transit services destined for regional activity centers.

As shown in Figure 17, a new BRT/express service could operate along SR 60 and/or Oakfield Drive. This service could provide connections in Brandon between existing and potential activity centers at Brandon Hospital, Brandon Main Street area, Brandon Westfield Mall, and continue on via the Selmon Expressway to provide service to Downtown Tampa. The route would exit the Selmon Expressway at Meridian Avenue in Downtown Tampa and continue west on Twiggs Street to access the Marion Transit Center using Marion Street. In addition to connecting to other transit routes at the Marion Transit Center, a potential future expansion for this route could be implemented to serve the Westshore area providing connections to the proposed Westshore Intermodal Center, destinations in the Westshore Business District, and Tampa International Airport. Based on StreetLight data, approximately 10,400 trips were identified from the Brandon and areas to the south and southeast to Downtown Tampa during the AM peak period. Another 5,900 trips were identified from Brandon and areas to the south and southeast to Westshore.

The BRT or express bus service could serve as a consolidated route along or parallel to SR 60, replacing HART’s current local and express routes along this corridor. The number of stops would be reduced and located at key locations along the corridor. The service could also stop at a new intermodal center potentially located on the northwest quadrant of the Brandon Parkway and Providence Road intersection near the entrance to the Selmon Expressway. Additionally, other existing bus routes serving the Brandon Westfield Mall area could be slightly modified to serve a new Intermodal Center and expand transfer opportunities at this location. Modifications to the frequency and span of service on local routes or adjustments to the HyperLINK service might be needed to establish efficient feeder services once the operating characteristics for a new BRT/express service have been defined.

To accommodate a new BRT/express service in Brandon, concepts for exclusive and shared guideway operations were explored. Exclusive or shared guideway operations, intended to allow buses to bypass roadway and intersection congestion, could be accommodated in the following ways:

- Center Transitway operations along SR 60 with guideways and stations located in the center of the roadway;
- Right-side Transitway operations along SR 60 with dedicated transit lanes that also accommodates moderate volume right-turn vehicle movements; and
- Shared Transitway along Oakfield Drive with the potential for dedicated queue jumps and exclusive transit lane segments.

As shown in Figure 18, a Center Transitway concept was prepared for SR 60 assuming a typical design section within approximately 150 feet of right-of-way. This concept includes central bus-only lanes with side platform stations, six travel lanes, landscaping, separated bikeways, and pedestrian sidewalks. Accommodation of Center Transitway operations would likely require additional right-of-way at high volume
Figure 17. Proposed Express Bus Service
intersections to accommodate single or dual left turns and right turn lanes. Center Transitway operations combined with implementation of Transit Signal Priority traffic control typically provides for high speed service and significant travel time savings over operations in mixed traffic or shared guideways.

A Right-side Transitway configuration could be accommodated along SR 60 in similar rights-of-way as a Center Transitway with space savings through shared use of right turn lanes and use of side landscape areas for stations. As shown in Figure 19, a Right-side Transitway concept would allow transit vehicles to bypass congested corridor segments but travel speed would also be limited along segments with high frequencies of right turn movements at driveways and intersections. Such a service is likely less costly to implement due to the reduced right-of-way requirements and need for reconstruction of medians and center turn and travel lanes.

A Shared Transitway configuration could also be considered for Oakfield Drive, a corridor that primarily serves local travel and provides a direct connection between existing and future mixed-use activity centers and the eastern entry to the Selmon Expressway. As shown in Figure 20, 85 feet of right-of-way could accommodate two bus lanes on the outsides of the roadway, two center travel lanes, and bus stops, separated bikeways, and sidewalks on either side of the roadway. Although such a configuration along the full extent of Oakfield Drive may be problematic due to right-of-way constraints, (existing right-of-way along the eastern end of the corridor near the hospital is as narrow as 60 feet), the benefit of more direct connections between existing and future mixed-use activity centers could provide significant benefits for both local travelers and commuters.

Due to the scale and auto-oriented nature of SR 60, the feasibility of transit service on this corridor must be further evaluated. SR 60 is high volume, high speed roadway that is identified as a High Frequency

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**Figure 18.** SR 60 Concept with Center Transitway, 6 Travel Lanes, and Improved Sidewalks/Bikeways (150 ft ROW)
Figure 19. SR 60 Concept with Right-side Transitway, 6 Travel Lanes, and Improved Sidewalks/Bikeways (140 ft ROW)

Figure 20. Oakfield Drive Concept with 2 Transit Lanes, 2 Travel Lanes, and Improved Sidewalks/Bikeways (85 ft ROW)
Crash Corridor. The frequency of curb cuts, lengthy crossing distance, and poor pedestrian connectivity between sidewalks and building entries results in a hostile environment for pedestrians on SR 60. Given the existing environment, transit station accessibility is a significant concern.

Enhanced transit service along Oakfield Drive presents a possible alternative. Oakfield Drive is a lower-speed and less traveled corridor that may be better suited to increased transit service given the more pedestrian-oriented environment and ability to provide a more direct connection between key destinations, such as Westfield Brandon Mall and Brandon Hospital.

HART’s proposed service changes would provide improved transit service to support trips between the study area and regional destinations. The introduction of the two new express bus routes, the 60LX service between Westfield Brandon Mall, Downtown Tampa, and Tampa International Airport and the 360LX service between Westfield Brandon Mall, Downtown Tampa, and MacDill AFB, and adjustments to the Route 46 local service along SR 60 could provide a good test case for the implementation of express/BRT service in the Brandon Study Area. These routes could be extended along the SR 60 or Oakfield Drive corridor or they could be linked to an enhanced Route 46 service that serves the study area.

5.2 Brandon Circulator Service

The high number of internal trips within Brandon, over 35,000 trips during the AM peak period and more than 77,500 during the PM peak period, suggests demand for transit service improvements in the study area. Most of the AM peak internal trips are destined to the Brandon Regional Hospital zone and the zone east of I-75 surrounding Causeway Boulevard. Most of the PM peak internal trips are destined to the commercial area surrounding Brandon Boulevard, east of Brandon Mall to Kings Avenue.

The newly implemented HyperLINK service is a door-to-door service supporting first-mile/last-mile connections within the western half of the study area. A circulator system could provide an additional connection among activity centers within Brandon. The HyperLINK service could also be configured to supplement circulator operations in the Brandon area as the circulator is envisioned to operate as a fixed route service with pre-established headways and station locations while the HyperLINK service operates on-demand from a designated HART bus station and service is contingent on available drivers in the area.

In addition to the HyperLINK service, a circulator system could provide a fixed-route option that connects places with more transit-supportive characteristics and could foster their development as more walkable mixed-use environments. A new circulator service could also provide transfer opportunities to existing bus routes and to a potential new BRT/express service between Brandon and Downtown Tampa. Four different circulator options were developed and evaluated:

- **Brandon Circulator Option 1.** The Option 1 route would operate from a new Intermodal Center potentially located on the northwest quadrant of the Brandon Parkway and Providence Road intersection. This 12-mile-long circulator service would operate westbound along Brandon Parkway to serve Westfield Brandon Mall and then continue south along Brandon Town Center Drive to serve the commercial land uses located along Causeway Boulevard. This route option would continue westbound on Causeway Boulevard and across I-75 to Falkenburg Road to serve the Florida Career College area and then head north to Delaney Lake Drive. From Delaney Creek Boulevard, the route connects to US 301 and SR 60 to serve the commercial/industrial land uses in this area to then continue eastbound on SR 60 and across I-75 to Lakewood Drive. The circulator would then serve the Brandon Hospital area using Oakfield Drive and loop around Moon Avenue, Robertson Street, and Parsons Avenue to then head south along Lakewood Drive.
Brandon Circulator Option 2. Option 2 focuses on servicing the area east of the Westfield Brandon Mall with a 7-mile-long circulator. It would operate southbound along Providence Road from the new Intermodal Center and then westbound on Causeway Boulevard to serve the commercial land uses in this area. The circulator would continue northbound along Brandon Town Center Drive to serve Westfield Brandon Mall and then continue east on SR 60. This option also serves the Brandon Hospital area using Oakfield Drive and loops around Moon Avenue, Robertson Street, and Parsons Avenue to then head south along Lakewood Drive.

Brandon Circulator Option 3. The Option 3 route is similar to Option 1 route, but includes service to the Lake Brandon Village area located south of Causeway Boulevard. This option is a 13-mile-long circulator service that operates south along Providence Road from a new Intermodal Center to serve the residential areas south of Causeway Boulevard. The circulator would loop around using Middleton Groove Drive to then continue westbound on Causeway Boulevard and serve the Florida Career College area. This route option would then continue the same route as Option 1 serving the commercial/industrial land uses along US 301 and SR 60. The circulator would also serve the Brandon Hospital area using Oakfield Drive and Lakewood Drive.

Brandon Circulator Option 4. Route Option 4 would serve the Brandon Hospital, and operate westbound along Oakfield Drive to Lakewood Drive and serve the new Intermodal Center. This 7-mile-long route would head south to serve the residential area along Lakewood Drive/Providence Road and continue westbound on Bloomingdale Avenue serving the commercial land uses in this area. This route option would loop around using Gornto Lake Road and Providence Ridge Boulevard to head north along Providence Road.

Table 5. Brandon Circulator Options Comparison

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
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<tbody>
<tr>
<td>Serves high density activity areas</td>
<td>Better</td>
<td>Best</td>
<td>Best</td>
<td>Worse</td>
</tr>
<tr>
<td>Serves major destinations</td>
<td>Best</td>
<td>Better</td>
<td>Best</td>
<td>Best</td>
</tr>
<tr>
<td>Operates on non-highly congested roadways</td>
<td>Best</td>
<td>Best</td>
<td>Best</td>
<td>Best</td>
</tr>
<tr>
<td>Potential shorter travel time (length of route)</td>
<td>Better</td>
<td>Best</td>
<td>Best</td>
<td>Better</td>
</tr>
</tbody>
</table>

The routes of all four options are shown on Figure 21. The results of a qualitative analysis based on different characteristics of each option is shown in Table 5.

Circulator Option 1 serves high density activity areas and major destinations within Brandon. This option serves a larger area and provides connections to the Brandon Regional Hospital, the Westfield Brandon Mall, and the industrial/commercial zone west of I-75, which is a high employment density area. As revealed in the origin-destination analysis, most of the AM peak internal trips are destined to the Brandon Regional Hospital zone and the zone east of I-75 surrounding Causeway Boulevard. Option 1 also stops at the Brandon Westfield Mall, which is a connecting point to several other routes and services, including the HART HyperLINK rideshare service.

It should be noted that all of these route options are conceptual and more detail analyses will be necessary to compare the performance of these routes once operating characteristics are defined.
Figure 21. Proposed Circulator Options
6. RECOMMENDATIONS

Based on the evaluation of existing transit service, analysis of travel patterns within and passing through the study area, the review of BRT/express service accommodation along the SR 60, and the potential for a fixed route, fixed schedule circulator, the following general recommendations for further study and evaluation are offered for consideration:

- **BRT/Express Bus Service Potential.** Based on the high number of trips between Brandon and Downtown Tampa and between Brandon and Westshore during peak periods, some enhanced transit serving Brandon and Brandon area commuters warrants further study. The implementation of BRT/express bus service between Brandon and Marion Transit Center appears to have the potential to provide a time-competitive service meeting the needs of both daily commuters traveling to Downtown Tampa and Brandon travelers moving between areas with existing and planned transit-supportive densities and intensities. Such a service could maintain relatively high average travel speeds and levels-of-service by operating with limited stops and running in exclusive or shared guideways in Brandon, along the Selmon Expressway between Brandon and Downtown Tampa, and potentially along I-275 in express lanes between Downtown Tampa and Westshore.

  A potential express bus service could operate during peak AM and PM periods between the study area and Downtown and/or Westshore, and connect to an all-day BRT service that operates within the study area. Implementation of the proposed HART 60LX and 360LX express bus routes would provide the first step in providing this type of service to the study area. Future enhancements or extensions to these routes, or the enhancement of local routes, such as Route 46, could provide the next steps.

- **BRT/Express Bus Accommodation along SR 60/Oakfield Drive Corridor.** Based on the findings detailed in Section 5.1 of this document, implementation of BRT/express service along SR 60 presents several challenges. Given existing and projected levels of congestion, the current pedestrian condition, and safety concerns, operations in mixed traffic along SR 60 presents a significant constraint for BRT/express bus operations, impacting route performance in terms of travel time, level of service, and pedestrian safety and accessibility. For these reasons, Oakfield Drive would appear to be a more appropriate roadway to introduce enhanced service.

  Should further evaluation of BRT/express bus service along the SR 60 corridor be undertaken, the following strategies should be carefully evaluated to determine their effectiveness in delivering an attractive alternative to single-occupancy vehicle travel for both commuter and activity center to activity center travel:

  - Provision of exclusive guideway and shared guideway operations along SR 60;
  - Consolidation of existing bus service in the corridor and the reduction in number of stops;
  - Use of parallel corridors such as Oakfield Drive;
  - Use of innovative strategies to mitigate the effects of corridor congestion, including implementation of transit signal priority operations at key intersections and the use of queue jumps at intersections; and
  - Improvement of pedestrian accommodations, including sidewalks, crosswalks, and cross-parcel pedestrian ways, linking potential station and stops to nearby destinations.

  Over time, policy implementation and investments should be aligned to transform SR 60, Oakfield Drive, and the local street network into a multimodal network providing more safe and direct connections between local destinations and improved...
facilities for transit patrons, bicyclists, and pedestrians. Potential new BRT/express service as well as supportive circulator and on-demand services should be designed to foster the redevelopment of places into more walkable, mixed-use environments and better serve both local and regional travel demand.

- **Brandon Circulator Service.** Based on the initial evaluation described in Section 5.2, Brandon Circulator Option 1 route appears to have the most promise for advancement into a second phase of evaluation. This route serves key destinations in the study area including Brandon Regional Hospital, Westfield Brandon Mall, and other destinations located west of I-75 including the Florida Career College and commercial/industrial land uses along SR. This circulator service could provide needed access to major destinations in the area while fostering redevelopment. The route option also provides connectivity opportunities with multiple existing bus service routes as well as an opportunity to connect to a potential new BRT/express service while serving residential and high employment density areas.

All of the circulator options presented in this memorandum including Option 1 are conceptual in nature and intended to provide the basis for decisions regarding future phases of analysis and concept development. Additional, more detailed analyses will be necessary to define operating characteristics (i.e., span of service, frequency, stop locations, etc.) and evaluate cost-effectiveness. It is not anticipated that there will be significant right-of-way impacts and the need for a PD&E study will be determined based on a more detailed assessment of these options.

The cost-effectiveness and performance of a circulator service should be further evaluated against the performance and cost-effectiveness of the newly implemented HART HyperLINK pilot program. Information on ridership and performance for the HyperLINK service is still unknown, and how this type of first-mile/last-mile service fills the gap in service for areas that lack access to existing bus routes should be compared to how a fixed-route service could benefit the study area once more information becomes available. Operating concepts for a fixed route, fixed schedule circulator service should be developed and evaluated to ensure the highest levels of cost effectiveness and mobility improvement are achieved. Additionally, changes to the HyperLINK service that could support a fixed-route circulator service could also be evaluated.
7. SOURCES

- Hillsborough County Board of County Commissioners, Community Transportation Plan planned project list (April 20, 2016 Agenda Item): http://agenda.hillsboroughcounty.org/cache/00003/686/C-1.PDF

8. ATTACHMENTS

- StreetLight Data Origin-Destination Analysis Memorandum