

Hillsborough County **City-County Planning Commission**

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Melissa E Zornitta, AICP **Executive Director**



Plan Hillsborough planhillsborough.org planner@plancom.org 813-272-5940 601 E Kennedy Blvd 18th Floor Tampa, FL, 33602

January 3, 2018

Mr. Mike Merrill, County Administrator Hillsborough County 601 East Kennedy Boulevard Tampa, FL 33602

Dear Mr. Merrill:

Thank you to your department and staff for being a part of the *Brandon Corridors and* Mixed Use Centers Pilot Project. This letter serves to transmit the completed project. This joint pilot project by the Metropolitan Planning Organization and The Planning Commission in partnership with Hillsborough County's Development Services and Public Works, Hillsborough Area Regional Transit Authority and Florida Department of Transportation, has explored ways in which land use and transportation improvements might complement each other through new development and redevelopment and/or capital and transit improvement projects. This letter briefly describes the pilot project recommendations and provides a summary of the public's comment to those recommendations and other aspects of the pilot project. The project summary report is attached and all related materials including the technical memoranda can be found on the project website by accessing the link below.

http://www.planhillsborough.org/brandon-corridor-mixed-use-centers/

The Brandon area has untapped potential with certain constraints. Ten areas throughout the community were identified to be considered incentivized mixed use centers with varying degrees of future development planned in each. The major change in these centers will be: connectivity and mix of uses. The centers must be better connected internally and to each other. They also must encourage a mix of land uses that reduce the need for vehicle trips and instead support other types of mobility. The second phase of this pilot project will work to further the draft land use policies developed within phase one. For further information please refer to technical memorandum #5.

The pilot project considered three specific corridors in which questions and assumptions about land use and transportation were considered. Mobility can be improved in a variety of ways with each potential improvement providing its own special set of circumstances as outlined in these three examples.

The Brandon Boulevard (State Road 60) corridor is a major commercial corridor that serves not only the people living and working within the study area but much of Hillsborough County. Anchored by a mall and major hospital, the centers along that area of the corridor may be suitable to change into a form more compact and urban, in character. A variety of uses and higher density residential development could be encouraged along the corridor; this area could also support improved transit such as bus rapid transit, perhaps in dedicated lanes along Brandon Boulevard and/or Oakfield Drive. A transit circulator or on-demand service for this area may also be feasible. For further information please refer to technical memorandum #7.

The Lumsden Road corridor, from Interstate-75 traveling eastward is an area of heavy retail presence that quickly transitions to stable residential with scattered commercial concentrations around major intersections. It, like much of the Brandon community,

Page 2 of 2 Brandon Corridors and Mixed Use Centers Pilot Project January 3, 2018

could benefit from greater connectivity. The study evaluated the feasibility of widening Lumsden Road between Lithia-Pinecrest Road and Kings Avenue. This widening may improve traffic flow, but would have significant costs due to the need to purchase property for the widening, as such the widening of this segment may work best in conjunction with the widening of Lithia Pinecrest Road. It is recommended that a joint PD&E be undertaken for the widening of Lumsden and Lithia Pinecrest Roads. For further information please see technical memorandum #8.

The feasibility of a reversible lane by repurposing the center turn lane was studied along Bloomingdale Avenue. While it may be a way to increase rush hour capacity, it may cause problems for other traffic operations and leave businesses with decreased accessibility. These challenges would result in impacts to the north-south corridors in the area. There would be the need to rework numerous intersections to accommodate turning movements. Staff heard from hundreds of concerned citizens and business owners who are opposed to the reversible lane concept based in part on safety concerns and the limiting or removal of left hand turning movements along Bloomingdale Avenue. The Planning Commission action during their regular meeting on December 11, 2017 included a unanimous motion to not further study the reversible lane concept. The study instead recommends intersection and pedestrian safety improvements for Bloomingdale Avenue and making better connections between commercial properties fronting Bloomingdale Avenue. These recommendations are supported by the public who again oppose the further study of a reversible lane along Bloomingdale Avenue for the stated reasons above. For further information please see technical memorandum #8.

These options are not exhaustive but part of a bigger solution to improving mobility and development not just for those who find themselves in the study area but for all who find themselves in Hillsborough County. The goal is to encourage the right mix of land uses, in the right areas of the County to reduce the need for vehicle trips and instead support other types of mobility improvements.

Staff has presented the pilot project in its entirety at five Metropolitan Planning Organization Committee Meetings and at two Hillsborough County City-County Planning Commission meetings. The members of these committees and the Planning Commission have taken positive action to support the pilot project. The attached report is a summary of the findings from the Brandon Corridors and Mixed Use Centers Pilot Project. The technical memorandums associated with the study can be viewed at http://www.planhillsborough.org/brandon-corridor-mixed-use-centers/

If you have any questions related to the study or wish to schedule a presentation please contact Jay Collins (collinj@plancom.org) or Sarah McKinley (mckinleys@plancom.org).

Sincerely,

Melissa E. Zornitta, AICP

Executive Director

Attachments: TPC Resolution

MelisivEZnutri

Summary Report



Resolution

Item: Brandon Corridors and Mixed Use Centers Pilot Project

	AYE	NAY	ABSENT	DATE: December 11, 2017	
Derek Doughty, PE, Chair	Х				
Jacqueline Wilds, Vice-Chair	Х				
Matthew Buzza, Member-at-Large	Х			HA I DAD	
John Dicks	X			. 0	
Theodore Trent Green, RA	Х			Derek Doughty	
Nigel M Joseph			X	Chair	
Karen Kress, AICP	Х				
Michael Maurino	X Meling & Zmuch		MelisivEznurtar		
Mitch Thrower	Х				
Melissa E Zornitta, AICP Executive Director				Melissa E. Zornitta, AICP Executive Director	
	On motion of Commissioner Green Seconded by Commissioner Wilds				
	The following resolution was adopted:				



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WHEREAS, the Hillsborough County City-County Planning Commission and Metropolitan Planning Organization in partnership with Hillsborough County's Development Services and Public Works, Hillsborough Regional Transit Authority and Florida Department of Transportation has completed a study titled *Brandon Corridors and Mixed Use Centers Pilot Project*; and

WHEREAS, the study has explored ways in which land use and transportation improvements might complement each other through redevelopment and/or capital and transit improvement projects in the study area; and

WHEREAS, the completed *Brandon Corridors and Mixed Use Centers Pilot Project* has done the following;

- Conduct a land use assessment of the Existing and Future Land Use, Form and Character;
- Review market trends and redevelopment potential;
- Develop a preliminary and final vision map and pattern/character type definitions;

Resolution

Brandon Corridors and Mixed Use Centers Pilot Project December 11, 2017

- Conduct a mobility assessment, including evaluation of the existing transportation system, baseline modeling, and modeling incorporating planned improvement;
- Conduct a transit service evaluation;
- Develop mobility improvement scenarios to support the envisioned land use pattern and test those scenarios through one of macro and micro simulation models;
- Develop policy and regulatory strategies; and

WHEREAS, the completed *Brandon Corridors and Mixed Use Centers Pilot Project* has found the market conditions in Brandon are ever changing; development outside Brandon affects internal mobility; connectivity and accessibility is challenged; lack of a secondary network prohibits connectivity; redevelopment potential is limited; and existing infrastructure could be better leveraged; and

WHEREAS, the completed *Brandon Corridors and Mixed Use Centers Pilot Project* has identified a number of next steps outlined in the summary report dated November 22, 2017; and

WHEREAS, the Hillsborough County City-County Planning Commission has considered the *Pilot Project* to be complete.

NOW, THEREFORE, BE IT RESOLVED, that the Hillsborough County City-County Planning Commission accepts the *Brandon Corridors and Mixed Use Centers Pilot Project* and forwards it to the Hillsborough County, Florida Department of Transportation and the Hillsborough Area Regional Transit for further consideration.



Summary Report

Prepared by:

HDR

On behalf of:



Hillsborough MPO Metropolitan Planning for Transportation





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1. EXECUTIVE SUMMARY

1.1 Project Overview

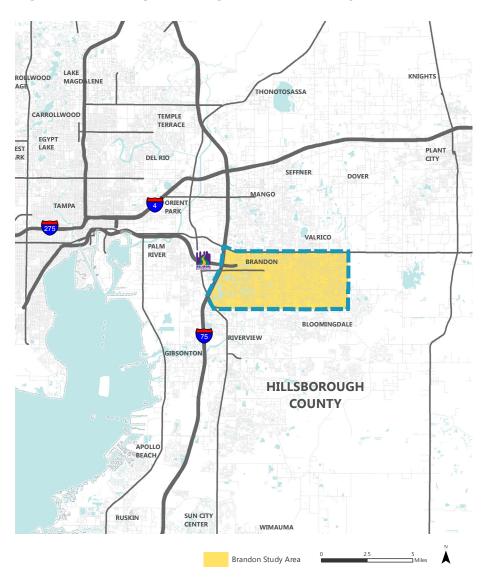
The Brandon Corridors and Mixed-Use Centers Pilot Project is a joint effort of the Hillsborough County Metropolitan Planning Organization (MPO) and the Hillsborough County City-County Planning Commission (Planning Commission). The project was undertaken to develop strategies to better coordinate land use and transportation planning along major corridors within the Brandon Study Area, as well as to serve as a test case for application in other areas of the County.

This Executive Summary provides an overview of findings from the project. Included in this report is information on market conditions, land use, and redevelopment potential in the study area; summaries of assessments of transportation and transit service; a vision for land use and development within designated mixed-use activity centers and corridor segments; and recommendations for improving mobility and guiding future land use. The report also includes an overview of the public participation efforts undertaken throughout the study.

As shown in Figure 1, the pilot project focuses on Brandon and surrounding areas in eastern Hillsborough County. The study area is a three-mile by six-mile area 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.

Eight technical memorandums included as appendices to this report provide the entire analysis and evaluation completed as part of the project.

Figure 1. Study Area Regional Context Map



1.2 Key Findings

As documented in the technical memorandum included as appendices to this summary report, the project addressed a wide range of issues and opportunities related to land use, market and development potential, transit, transportation, and mobility. Key findings from include the following:

- Changing conditions—demographics, travel patterns, market forces, regional development patterns, and consumer behavior are influencing Brandon's attractiveness as a place to live, visit, and do business.
- A significant number of trips along east-west roadways originate in communities to the south or east of the study area and are destined for one of four regional employment destinations in Hillsborough County. Over fifty percent of the morning commute trips passing through the study area are destined for Downtown Tampa or Westshore.
- The study area has a number of mobility challenges, including significant capacity issues on the three major east-west corridors (SR 60/Brandon Boulevard, Lumsden Road, and Bloomingdale Avenue), vehicular and pedestrian safety concerns, inadequate bicycle and pedestrian connectivity, and a limited and inadequate secondary roadway network.
- The pattern of disconnected, single use, auto-oriented strip commercial development creates significant challenges. The absence of connections between parcels forces auto trips onto the arterial network, there is little potential for internal trip capture or vehicle mile travel reduction, pedestrian and transit accessibility to and between destinations is especially poor, and such forms of development are difficult to serve by transit.
- Opportunities for transformational change in the pattern and character of development are restricted due to the lack of large tracts of land available for development or redevelopment.

Only a few pockets within the study area have activity densities (residential population and employment) high enough to be considered transit supportive, although projections show that additional areas in the western portion of the study area will achieve transit-supportive activity densities by 2040.

1.3 Summary of Policies & Strategies

The project team's assessment of existing land uses; the form, character, and pattern of development; market potentials for housing and commercial development; and the performance of transportation and transit networks revealed significant challenges facing the community. To address these challenges and take full advantage of the area's powerful locational advantages and unique character, a series of interrelated land use, transportation, and transit concepts were defined and tested. These concepts, designed to promote investment and reinvestment, ease congestion, improve access and mobility, and provide safer, more convenient connections between destinations, are described below:

- Based on an evaluation of existing plans, land use and market conditions, and stakeholder and public input, a vision map was created identifying areas with the potential to evolve into more connected, pedestrian-friendly, mixed use destinations.
- To achieve this vision for a development pattern organized around accessible mixed-use activity centers, modifications will be required to the Comprehensive Plan and future land use to achieve the vision desired development pattern. Based on the 2014 Strip Commercial and Mixed-Use Development in Hillsborough County report, a typology of mixed-use activity center and corridor segments should be established and applied to the identified centers in the study area. Preliminary Comprehensive Plan language and development standards have been developed and could be adopted to establish objectives and policies to guide in the planning and regulation of development in areas designated as mixed-use activity centers and corridor

segments.

- To support the desired development pattern, mobility challenges in the study area should be addressed through a series of interrelated improvements and initiatives, as follows:
 - Capacity improvements along Lumsden Road can improve peak period travel through the study area but will require significant right-of-way to accommodate additional lanes, a landscape median, and improved bicycle and pedestrian accommodations. Further evaluation of the capacity of connecting roadways will also be required.
 - Implementing reversible-lane operations on all or portions of Bloomingdale Avenue is technically feasible and could improve peak period travel but such an improvement would also result in longer travel times for local trips, restrictions on left turns to access businesses and neighborhoods, and the loss of potential for pedestrian refuges at key cross roads. Alternative treatments may offer benefits but with substantially less impact. Strategic operational and intersection improvements along with improved cross parcel connectivity could help relieve peak period congestion.
 - Concepts for the introduction of a roundabout at Lithia Pinecrest Road/Bryan Road appear to be unjustified based on a traffic analysis completed for the project. The introduction of a one-way pair for Lithia Pinecrest Road and Bryan Road south of SR 60 also appears unwarranted as it would not relieve congestion at SR 60 intersections.
 - Rights-of-way should continue to be reserved for the completion of new and expanded secondary roadway connections and intersection improvements throughout the study area. As a complementary strategy, cross-parcel connections to link private development should be a nonnegotiable requirement for both new development and redevelopment. Unless parallel roadway improvements and

- cross-parcel connections are constructed, local, short distance trips will continue to be pushed to congested arterials and intersections.
- The results of a preliminary assessment of potential regional express bus or BRT service connecting Brandon to regional employment destinations were positive. Based on the number and type of trips that currently occur from and through the study area, a hybrid form of bus service connecting Brandon to Downtown Tampa and Westshore appears supportable. Such a service has the potential to support long distance trips for commuters during peak periods and provide better short distance connections between existing activity centers along the SR 60 and Oakfield Drive corridors. HART's current efforts to realign local and express bus service in Brandon should provide test cases for implementation of enhanced transit service between the study area and regional destinations.
- The results of an evaluation of circulator service connecting destinations in the west end of the study area were less conclusive. The generally auto-oriented pattern of development and low densities and intensities present challenges for the introduction of a fixed-route, fixed schedule circulator service. In addition, the success of HART's recently initiated HyperLINK service suggests a more flexible type of on demand, first-mile/last-mile service may provide the best option for serving short distance trips in the area.

2. CONDITIONS & CHALLENGES

2.1 Market Conditions

Understanding current and future market conditions is an important factor in assessing the potential for development or redevelopment in the Brandon Study Area. To evaluate development potential, a market

analysis was undertaken for the project (see *Technical Memo 2: Market Analysis*). This analysis includes preparation of a demographic and economic profile of the area, an analysis of market drivers for new investment; and an estimate of the market potential for commercial 'workplace' uses (e.g., general and medical office), supporting retail and services, lodging/hospitality, and residential uses. Some key findings include:

- Housing. In 2015, the study area and adjacent area had 77,340 residents in 30,700 households, which represents about 6 percent of Hillsborough County residents. Half of the 33,300 housing units are owner-occupied, 42 percent are renter occupied and 8 percent are vacant. Housing types are typical of suburban areas: 51 percent are single-family detached homes, 33 percent are multi-family units, and 8 percent are townhomes. Demand for housing is anticipated to be driven by fast growing cohorts, including households with children, first time home buyers (persons aged 25-34) and empty nesters (persons aged 55+). An anticipated 2,400 units would be required through 2025 to meet the demand. The analysis reveals continued demand for multi-family, townhomes, and smaller footprint detached units.
- Office. The office market in Brandon is generally healthy, with approximately 2.5 Million square feet of general and medical office space in 414 buildings. One-fifth of this space has been delivered since 2006 and one-third is medical office. The majority of office space is in small, multi-tenant buildings. The larger footprint corporate offices are located west of I-75 near Falkenburg Road and US 301. The demand for additional office to 2025 will be constrained by the availability of sites. The area east of I-75 study area has few sites available for large floor plate office. Based on current vacancy and employment forecasts from the Florida Department of Economic Opportunity for 2015-2023, the net demand for new medical and professional office space in greater Brandon is estimated to be approximately 300,000 square feet by 2023 in mix of smaller buildings under

- development and new office on infill sites.
- Retail. Brandon is a regional retail destination, in large part due to the location of Westfield Brandon Town Center Mall and the significant amount of additional surrounding retail, food service. and consumer service businesses. The study area and adjacent area has approximately 9.3 million square feet of retail uses in 450 centers and buildings. About one million of this space was developed in the past 10 years. With only three percent that is vacant, it is considered full occupancy. While the study area only has about 6 percent of the county's population, it has about 16 percent of the retail square footage. The average annual absorption of 80,000 square feet is likely to decline due to lack of available sites. The area has limited opportunities for new grocery anchored strip centers. Recent and near-term activity will likely focus on the reuse and repositioning of vacant space (i.e., Walmart, Albertsons, Kash & Karry, etc.) The longer term potential for retail uses lies primarily in the redevelopment of larger underutilized centers.
- Lodging. The study area and adjacent area, including the area west of I-75, currently has 2,100 lodging units in 20 properties. The area's lodging units have experienced a significant improvement in performance since 2010, with high occupancy rates (78.2% in 2015). This indicates good potential for new investment. Demand within the next 10 years, indicates the potential for one new limited service or boutique hotel along I-75 or within mixed use concept. Additionally, there is potential demand for extended stay concept near Brandon Regional Hospital.

2.2 Land Use & Redevelopment

As described in Technical Memo 1: Land Use Pattern Maps and Summary, the majority of the study area is developed, with only 7.5 percent of the study area currently classified as vacant. Residential land uses, primarily single-family residences, make up over half of

the study area. Several areas of multi-family residential are located throughout the western portion of the study area. Commercial land uses are concentrated along the SR 60/Brandon Boulevard, Causeway Boulevard/Lumsden Road, and Bloomingdale Avenue corridors. Westfield Brandon Town Center Mall, Brandon Main Street, and Brandon Regional Hospital Area and other existing centers are located at key intersections along these primary corridors.

The form of development within the study area is reflective of a low intensity, auto-oriented area with low average floor area ratios (FARs) and low residential densities. The eastern half of the study area has lower development intensity and is characterized by older, larger lot single-family residences interspersed with single-family residential subdivisions built in the 1990s and 2000s. The western half of the study area is more commercial in nature with several big-box and auto-oriented developments and multi-family residential developments built in the last 30 years.

Several community plans and the future land use designations for the study area indicate the desire for higher density/intensity and mixeduse land use categories in the western half of the study area and lower density residential land use categories in the eastern half. The Hillsborough County Areawide Vision Map calls for more intensive development in the western half of the study area. The area between I-75 and Parsons Avenue along SR 60 is envisioned for High Intensity Urban uses. Further east along SR 60, south of Brandon Parkway, and sections of Bloomingdale Avenue area categorized as Urban or High Intensity Suburban. The remaining area within the study area is classified as Established.

An analysis of the development and redevelopment potential was conducted (see *Technical Memo 4: Development and Redevelopment Potential Assessment*). As described in that memo, the study area is approaching build out, with a limited number of unconstrained vacant sites available for development. Using Hillsborough County

Property Appraiser data regarding land use, recent construction, development intensity, value, and environmental constraints, the study team assessed development and redevelopment potential for 26,728 parcels (14,069 acres) within the study area and parcels immediately adjacent on the north side of SR 60/Brandon Boulevard and south side of Bloomingdale Avenue. The assessment revealed that unconstrained land with development or redevelopment potential within the evaluation area includes 1,355 parcels (2,629 acres). The majority of these identified parcels are less than five acres in size. The vast majority of these smaller parcels are not located along arterials or within or adjacent to existing commercial centers or corridors. A few existing larger scale commercial buildings that are currently vacant and potentially available for reuse or redevelopment are located within the study area.

2.3 Transportation & Transit

The Brandon Study Area is well connected to key destinations within Hillsborough County and the larger Tampa Bay region. The study area is also located just a few miles south of the I-75 and I-4 interchange and has the eastern entry/exit point to the Selmon Expressway express lanes off Brandon Parkway near the Westfield Brandon Town Center Mall. The study area itself has several regional destinations that attract visitors from other areas within Hillsborough County. The study area's primary east-west major corridors provide access from greater Brandon to regional destinations to the north, west, and south.

An evaluation of the study area transportation network's existing conditions and planned improvements within the study area and adjacent areas identified several key mobility challenges affecting the future of the Brandon Area. The complete analysis of the transportation network is provided in *Technical Memo 3: Network Evaluation and Planned Improvements*. The existing transit network and potential improvements are discussed in *Technical Memo 7: Transit Service*

Evaluation. Other mobility improvements can be found in Technical Memo 8: Mobility Option Improvements Evaluation. Key findings include the following:

- Major Corridor Capacity. Major arterial corridors in the study area are operating below acceptable levels of service, with future Levels of Service projected to be F for Lumsden Road, Lithia Pinecrest Road, Durant Road, and sections of SR 60 and Bloomingdale Ave. These corridors carry significant peak hour commute trips with origins and destinations both within and outside the study area. Although traffic operations, access management, and transit service improvements have been completed in recent years, the potential to drastically increase arterial capacity to serve peak hour travel demand is limited due partly to right-of-way and development-related constraints. Issues with congestion and capacity constraints are highlighted in several studies, including the Imagine 2040 LRTP and the SR 60 Compatibility Study.
- Travel Safety. Travel safety has been identified as a significant problem in the study area, with specific road segments defined as top severe injury or high frequency crash intersections and corridors by the Hillsborough MPO. Most of SR 60 and a significant segment of Bloomingdale Avenue have been identified as high frequency crash corridors. Addressing corridor safety was a specific focus of the SR 60 Compatibility Study. The study offered a range of recommendations to address safety, including recommendations for travel speed reduction, lane width reduction, intersection improvement, sign and signal enhancements, pedestrian and bicycle facility improvement, and parallel road network development.
- Secondary Network Connectivity. The absence of a secondary network of interconnected collector streets contributes to congestion on the arterial network. Virtually all east-west trips are forced onto three arterials, thus contributing to arterial segment and intersection congestion. Although capacity improvements are proposed on east-west arterials, no major

- projects are programmed to increase east-west capacity off the arterial network.
- Pedestrian and Bicyclist Facilities. Although the study area includes bicycle and pedestrian facilities, including a fairly continuous sidewalk network along the arterial road network, the predominant development pattern is auto-oriented with limited pedestrian and bicycle connections among destinations and across private properties. In addition, many of the pedestrian and bicycle accommodations in the study area were designed to meet outdated or minimum standards, and therefore do not always provide for high levels of user comfort.
- Transit Service. The western half of the study area is fairly well served by transit, including service by local and express bus routes, HARTFlex service, HyperLINK service, and a bus transfer facility on the Westfield Brandon Town Center 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. HART's Mission MAX 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.

3. PUBLIC PARTICIPATION

Several hundred residents, business owners and other interested persons have lent their time, energy and thoughts in shaping this study. The public provided their collective voice by attending public meetings, answering surveys, and engaging staff and each other through social media and the Plan Hillsborough website.

Five public meetings were held: two focused on the business community and three focused on the community at-large. These meetings included a presentation and question and answer session and were concluded in an open house setting that allowed attendees to discuss concerns or ask questions of the project team in one-on-one settings.

Two meetings held on December 5, 2016 introduced the study and its overarching concepts while providing the initial findings from the land use and marketing analysis. Two meetings held on May 17, 2017 presented the study findings to date, reviewed the survey findings, and sought input on the transportation and land use issues that affect the study area. A final community engagement meeting was held October 30, 2017. The study in its entirety was presented to a large group of 125 residents, business owners and other interested parties.

In addition to these meetings held in the Brandon community the public might also have attended any of the seven presentations before various Hillsborough County committees and commisions located at County Center in downtown Tampa. The cumulative calendar of these meetings saw most days of the week and all hours of the day and evening.

An electronic survey was developed early in the process and distributed to community stakeholders and posted on the Plan Hillsborough website. The survey results helped the study team to identify appropriate development patterns and rank mobility concerns in the study area as seen by the public. This survey was distributed to dozens of neighborhood and business organizations and mentioned by local media outlets. The survey included several hundred respondents.

The Plan Hillsborough website has hosted all documents produced during the projects time, listed all opportunities for the public to attend meetings and has served as a way for the public to contact staff through a comment form or directly emailing the project managers. This online comment form was submitted by dozens of interested residents and business owners.

The presumtive consensus from this public participation process was that Brandon does need a more thoughtful redevelopment strategy paired with mobility improvements. The resident and business community do see some value in better more frequent bus service, road widenings that enhance a community, intersection and pedestrian safety improvements and making better or new connections. The residents and business community do not believe a reversible lane concept would benefit Bloomingdale Avenue and to this end would do more harm than good to the community of Brandon. A number of concerns were raised but the two most common involved safety of both motorists and pedestrians as well as the limiting or loss of the ability to make left hand turns during peak hour times. This opinion was voiced throughout the public participation process through hundreds of submitted comments in person and online.

4. PROJECT RECOMMENDATIONS

4.1 Vision & Policy Framework

A preliminary vision for the Brandon Study Area was created, including the identification of future mixed-use activity centers, policy framework for centers and corridor segments, and recommendations for implementation. Complete details on the mixed-use activity centers and policy recommendations is provided in *Technical Memo 5: Mixed-Use Activity Center Designation & Policy Framework*.

VISION MAPPING & CENTER DEFINITION

A preliminary vision map was created to illustrate the preferred pattern of development for Greater Brandon's commercial districts and corridors. The vision map, defining the location and extent of potential mixed-use activity centers, was prepared based on an assessment of land use patterns and development forms, an evaluation of development and redevelopment potential, and a review of policies and strategies in the Hillsborough County Comprehensive Plan, Brandon Community Plan, Brandon Main Street Community Plan, Brandon Boulevard (SR 60) Compatibility Study, and Hillsborough County's Land Development Code (LDC) SR 60 Brandon Boulevard Overlay and Restricted Business Professional Office (R-BPO) overlay districts.

The preliminary vision map defines ten areas with the greatest potential to develop or redevelop as mixed-use activity centers. These centers, located at major crossroads, serve as regional or community destinations for retail, professional service, personal service, office, and medical uses. Several also have higher intensity multi-family uses.

As shown in Figure 2, the places defined as potential mixed-use activity centers are as follows:

- Westfield Brandon Town Center Mall/Regency Park;
- Brandon Main Street/Oakfield Drive Corridor;
- Brandon Hospital District;
- Valrico Center;
- Causeway Boulevard/Lumsden Road;
- Lumsden Road & Kings Avenue;
- Bloomingdale Avenue West End;
- Bloomingdale Avenue & Providence Avenue (Winthrop);
- Bloomingdale Avenue & Bell Shoals Road; and
- Bloomingdale Avenue & Lithia Pinecrest Road.

The mixed-use activity centers shown on the preliminary vision map were identified as places with the potential to address challenges associated with conventional forms of auto-oriented development, including traffic congestion, poor pedestrian safety and circulation, lack of street and drive connectivity, and long-term competitiveness in the face of changing demographics, travel patterns, market forces, and consumer behavior. More urban, mixed-use centers can be designed to increase internal trip capture, create "park-once" environments and reduced parking demand and allow for cross-parcel circulation off the arterial and collector network. Benefits of such patterns and forms of development include reductions in vehicle miles traveled, lower greenhouse gas emissions, increased support for enhanced transit service, and expanded opportunities for active transportation and safer pedestrian travel.

The preliminary vision map was reviewed with staff, key stakeholders, and the general public through an online survey conducted in early 2017 and a series of workshops held in March 2017.

CENTER TYPOLOGIES & POLICY FRAMEWORK

To characterize the preferred intensity, form, and character of development for the mixed-use activity centers, the study team established center typologies that build on the place types presented in the 2014 Strip Commercial and Mixed-use Development in Hillsborough County report.

A preliminary goal, objective, and policies were developed to provide guidance in the planning and regulation of development and redevelopment in the designated mixed-use activity centers and corridor segments. In these areas, projects could follow an optional development approval process to achieve higher intensities, a broader range of uses, and gain access to other incentives.

A summary of the mixed-use activity center designations is shown in

Figure 2. Preliminary Vision Map - Future Mixed-use Activity Centers

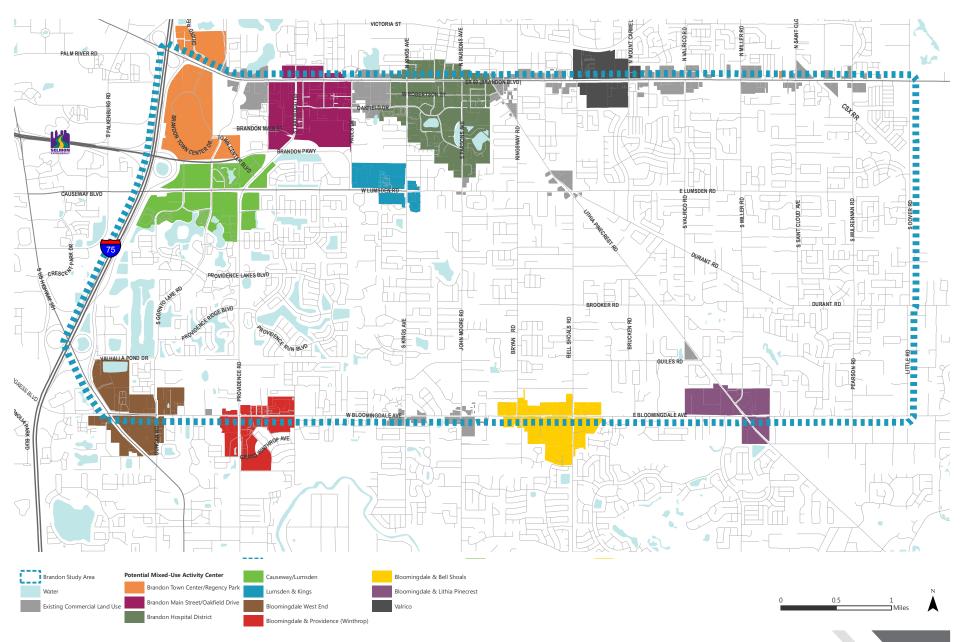


Figure 3. Mixed-use Activity Center Designations



COMPACT URBAN CENTERS

More like a Traditional Downtown or Main Street. High development intensity. Connected, mixed-use, walkable, and transit supportive.



CONNECTED SUBURBAN CENTERS

Places with a mix of walkable and auto-oriented destinations. Good connections between destinations.

Transit friendly.

Intensity & Mix Of Use
Urban Forms & Patterns of Development
Pedestrian Access & Circulation
Interconnected Streets & Drives
Enhanced Transit Service



MODERN SUBURBAN CENTERS

Primarily auto-oriented, planned shopping areas, residential complexes, and office parks.

MORE

LESS

CORRIDOR SEGMENTS

Primarily auto-oriented, but with good pedestrian and vehicular connections between destinations.

Figure 4. Mixed-use Activity Centers & Corridor Segments

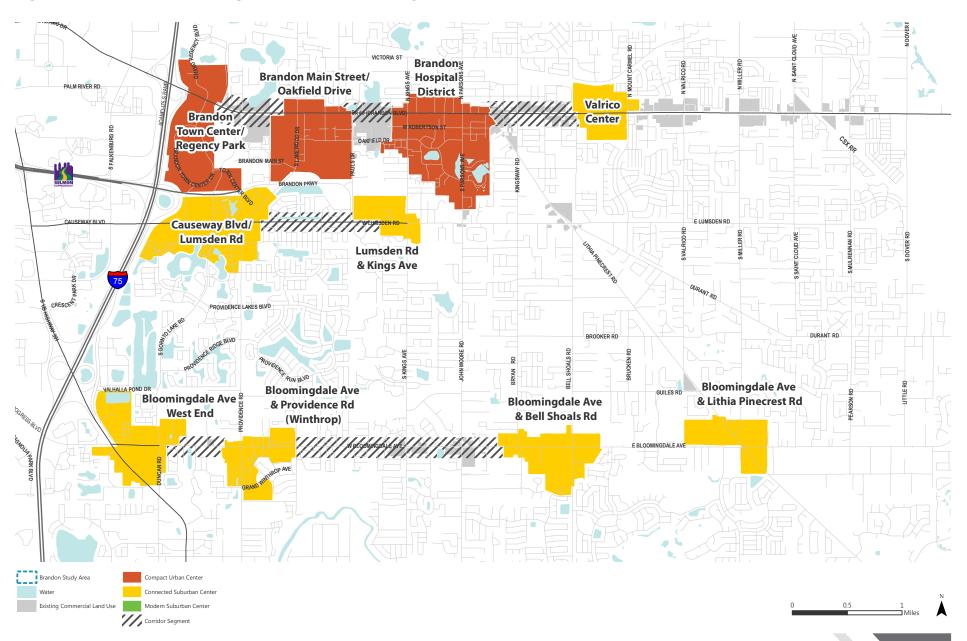


Table 1. Mixed-use Activity Centers & Corridor Segments Development Objective Matrix

Center/ Corridor	Development Intensity*	Land Uses**	Urban Form	Connectivity	Incentives***
Compact Urban Centers	Potential for intensities above adopted plan category.	Employment, housing, shopping, civic, and entertainment uses.	Buildings oriented to streets and public spaces. Parking located to rear or side of buildings.	Interconnected network of multi-modal streets. Provisions for enhanced transit service.	Potential for higher development intensity, parking reductions, and enhanced economic development assistance (e.g., tax incentives, redevelopment grants and loans, fee reduction, and off-site infrastructure improvements).
Connected Suburban Centers	Potential for modest intensity increases above adopted plan category.	Employment, housing, shopping, civic, and entertainment uses.	Buildings oriented to streets and drives. Limited front parking permitted.	Enhanced cross-parcel connectivity with improved pedestrian and transit accommodations.	Potential for higher development intensity, parking reductions, and limited economic development assistance.
Modern Suburban Centers	As permitted by adopted plan category.	As permitted by adopted plan category.	Buildings oriented to drives and front parking.	Improved pedestrian accommodations and vehicular cross-parcel access.	Potential for limited economic development assistance.
Corridor Segments	As permitted by adopted plan category.	As permitted by adopted plan category with allowances for residential.	Buildings oriented to streets and drives. Limited front parking permitted.	Cross-parcel, multi-modal connections to adjacent sites.	Potential for increased residential density for projects with enhanced connectivity and pedestrian accommodations.

Notes:

^(*) For development intensity in Compact Urban Centers and Connected Suburban Centers, residential density should be guided by FAR. Development of lower intensity should be permitted so long as development plans indicate phasing to achieve intensity within the target ranges.

^(**) A broader range of uses may be permitted under adopted plan category for Compact Urban Centers and Connected Suburban Centers.

^(***) Receiving incentives is contingent upon meeting development design standards. The Comprehensive Plan may provide for other incentives not shown in this table.

Figure 3. The mapped centers and corridor segment designation for each of the ten mixed-use activity centers within the study area is shown in Figure 4. The policy framework is described below and summarized in Table 1.

GOALS & OBJECTIVES

The following land use and development goal, objective, and policies provide guidance for new Comprehensive Plan provisions for development within designated centers and corridor segments.

Goal. Develop a safe, sustainable, connected, and competitive destinations along arterial corridors and mixed-use activity centers.

Objective. Mixed-use activity centers and corridor segments are to be developed and redeveloped as one of the following:

- Compact Urban Centers: Areas designated for commercial and mixed-use development and organized in a traditional urban pattern with building fronts aligned along streets and public spaces and private parking and service areas located mid-block and to the rear of buildings. These are areas with existing or future potential to support enhanced transit service, and therefore should be planned and designed for higher densities and intensities of development and more pedestrian-friendly streets and streetscapes.
- Connected Suburban Centers: Areas designated for commercial and mixed-use development at or near arterial intersections organized around an interconnected network of streets and drives with provisions for cross parcel circulation, connections to streets and drives on surrounding properties, and accommodations for safe, convenient pedestrian travel.
- Modern Suburban Centers: Areas designated as appropriate for relatively isolated single use planned developments, including regional office parks, shopping malls, and planned residential neighborhoods. Travel within these centers is accommodated

- by auto-oriented streets with sparse connections to surrounding street networks and limited access to surrounding arterials and collectors.
- Corridor Segments: Areas located between centers on arterial roadways with uses including commercial office, multi-family, and residential support uses. Building within these areas are generally served by side and rear yard parking areas accessed from side streets with shared access drives providing for internal connections among adjacent uses.

Policy and Design Guidance for Centers & Corridor Segments. Compact Urban Centers:

- Development Intensity. The target development intensity, while not limited to, is between 1.0 and 2.5 FAR. Residential density may be guided by the underlying Future Land Use Category or the Center FAR. Development of lower intensity may be permitted so long as the potential development meets the general form and character of the Compact Urban Center designation.
- Land Use Mix. A variety of employment, housing, shopping, civic, and entertainment uses are permitted consistent with use allowances under the RMU and UMU categories. Conventional single use auto-oriented development types, including office parks, campuses, apartment complexes, and shopping centers are generally not permitted unless configured in a way that meets the general form and character of the Compact Urban Center designation.
- Street Network and Block Structure. Streets and drives are to be arranged in a connected network and provide for multi-modal travel, enhancing neighborhood character, safety, walkability, and transit potential. Streets and drives are to be connected to the existing and future street network in adjoining areas except where blocked by physical constraints such as canals, expressways, railroads, wetlands, etc. Streets and drives are configured to form a continuous block structure with individual development blocks generally rectilinear in shape with small block sizes typically

ranging 1/4 to 1/2 mile to enhance pedestrian environments.

- Pedestrian Accommodation. Walking and bicycling along arterial frontages may be accommodated on a network of sidewalks and paths separated from arterial traffic by landscape areas or other forms of physical separation. Protected and well-marked pedestrian pathways are provided to allow safe access across parking areas and between public sidewalks, existing and planned transit stops, and primary building entries.
- Building Orientation. Buildings are aligned along streets, drives, and public spaces with entries directly accessible from public sidewalks or from courtyards, squares, and plazas connecting to public sidewalks.
- Public Space. Publicly-accessible outdoor spaces are configured as a series of central gathering spaces and smaller scale squares and plazas designed with a mix of hardscape and landscape areas to support public gathering, special events, and activities.
- Parking. Parking is provided on-street and in surface and structured parking areas located mid-block and to the rear of principal buildings. Public alleys and private access drives provide access to parking in mid-block locations.
- Infrastructure. Basic urban infrastructure such as parking, stormwater, and other utilities are generally fulfilled districtwide rather than on a per lot basis.
- Incentives. Create incentives to encourage retrofit, redevelopment, and intensification that furthers the objective of creating mixed-use, walkable, and transit-supportive destinations with more multi-modal, land-efficient, and fiscally-beneficial forms and patterns of development. Higher development intensities and parking reductions may be permitted for projects with enhanced transit service and use mixes and intensities resulting in the potential for internal trip capture and reduction of trips on the arterial road network.

Connected Suburban Centers:

Development Intensity. The target development intensity, while

- not limited to, is between 0.25 and 1.5 FAR. Residential density may be guided by the underlining Future Land Use Category or the Center FAR. Development of lower intensity may be permitted so long as development plans indicate the potential development meets the general form and character of the Connected Suburban Center designation.
- Land Use Mix. A variety of employment, housing, shopping, civic, and entertainment uses are permitted consistent with use allowances under the CMU category. Conventional single use development types, including office parks, campuses, shopping malls are permitted if configured in more urban than suburban formats. Auto-oriented uses, including uses with drive-through facilities, are permitted, but shall be configured to minimize the impact of vehicle use areas on pedestrian ways, open spaces, and streetscapes.
- Street Network and Block Structure. Street and drives are to be arranged in a network spaced at appropriate intervals. Most are designed as complete streets that accommodate walking, bicycling, and transit and connect to existing and future street networks. Streets and drives are configured to form a reasonably continuous block structure, although blocks may be irregular in shape and larger than traditional city blocks to accommodate mid-block surface parking.
- Pedestrian Accommodation. Walking and bicycling along arterial frontages may be accommodated on a network of sidewalks and paths separated from arterial traffic by landscape areas or other forms of physical separation. Protected and well-marked pedestrian pathways are provided to allow safe access between public sidewalks, existing and planned transit stops, and primary building entries; across parking areas; between uses on adjacent parcels.
- Building Orientation. Buildings are aligned along or perpendicular to streets, drives, and public spaces with most entries accessible from public sidewalks or from courtyards, squares, and plazas connecting to public sidewalks.

- Public Space. Publicly-accessible outdoor spaces, including parks, squares, and plazas, are larger and spaced farther apart than in compact urban centers.
- Parking. Parking may be provided on-street and in surface and structured parking areas located in side and rear yard locations.
 Front parking and vehicular circulation are discouraged, especially along primary streets and drives.
- Infrastructure. Basic urban infrastructure such as parking, stormwater, and other utilities are generally fulfilled districtwide rather than on a per lot basis, at approach scale.
- Incentives. Create incentives to encourage retrofit, redevelopment, and intensification that furthers the goals of creating employment-intensive, mixed-use, walkable, and transit-supportive destinations with more multi-modal, land-efficient, and fiscally-beneficial forms and patterns of development. Higher development intensities and parking reductions may be permitted for projects with enhanced transit service and use mixes and intensities resulting in the potential for internal trip capture and reduction of trips on the arterial road network.

Modern Suburban Centers:

Development Intensity. Development density and intensity shall be as provided in the underlying Future Land Use categories with no potential for increases, unless otherwise provided in the Comprehensive Plan.

- Land Use Mix. Uses are consistent with underlying future land use categories with the potential for the additional of housing in areas designated for conventional single use development, including office parks, campuses, and shopping centers. Autooriented uses, including uses with drive-through facilities, are permitted but are configured to minimize the impact of vehicle use areas on pedestrian ways, open spaces, and streetscapes.
- Street Network and Block Structure. Street and drives are arranged in a loose network with primary connections to the local street network designed to accommodate walking and bicycling.

Development patterns organized around a network of streets and blocks are preferred over conventional campus style patterns although blocks may be irregular in shape and larger than in other types of centers.

- Pedestrian Accommodation. Protected and well-marked pedestrian pathways are provided to allow safe access between public sidewalks, existing and planned transit stops, and primary building entries; and across parking areas.
- Parking. Parking may be provided in surface and structured parking areas located generally in side and rear yard locations.
 Front parking and vehicular circulation are discouraged, especially along surrounding arterials and along primary streets and drives connecting to surrounding arterials.
- Incentives. Create incentives for employment intensive uses meeting existing and future standards for high wage jobs.

Corridor Segments: Commercial and mixed-use areas along arterial segments not designated as one of the three mixed-use activity center types.

Development Intensity. Development density and intensity are as provided in underlying Future Land Use categories with higher density consideration for residential uses within proximity to Compact Urban Centers or Connected Suburban Centers and as otherwise provided in the Comprehensive Plan.

- Land Use Mix. Land uses are multi-family residential, civic, and professional office, personal services, and other neighborhood supportive uses with low trip generation characteristics.
- Street Network and Block Pattern. Street and drive connections are typically spaced along the corridor at standard distances of 1/4-mile to 1/2-mile intervals.
- Pedestrian Accommodation. Walking and bicycling along the arterial may be accommodated on a network of sidewalks and paths separated from arterial traffic by landscape areas or other forms of physical separation. Protected and well-marked

pedestrian pathways are provided to allow safe access between public sidewalks, existing and planned transit stops, and primary building entries; across parking areas; between uses on adjacent parcels.

- Parking. Parking may be provided in surface lots located generally in side and rear yard locations. Front parking and vehicular circulation are discouraged, especially along surrounding arterials and along primary streets and drives connecting to surrounding arterials.
- Incentives. Incentives for increased residential density may be considered for projects with enhanced connectivity and pedestrian accommodations.

4.2 Mobility Improvement Options

ROADWAY OPTIONS

As previously outlined, the Brandon Study Area has a number of mobility challenges, including significant capacity issues on the three east-west corridors (SR 60, Lumsden Road, and Bloomingdale Avenue), safety, bicycle and pedestrian connectivity, and a limited secondary roadway network. To address these deficiencies, issues and challenges, a number of roadway improvement options were evaluated to assess their feasibility for implementation within the study area. The complete analysis is provided in *Technical Memo 8: Mobility Improvement Option Evaluation*.

Bloomingdale Avenue Reversible Lane Concept

Following a preliminary screening, two reversible lane configurations were developed for Bloomingdale Avenue between US 301 and Bell Shoals Road (see Figure 5).

 A 3/2 configuration (3 lanes in peak direction, 2 lanes in off-peak direction) that would eliminate the left turns from Bloomingdale Avenue and require median u-turns (MUTs) on

- intersecting roadways, and
- A 3/1 two-way left turn lane (TWLTL)/1 configuration (3 lanes in peak direction, a two-way left-turn lane, and 1 lane in off-peak direction) that would reduce the off peak directional traffic to a single lane, but maintain the TWLTL on Bloomingdale Avenue.

The evaluation revealed that while both options improve travel time or capacity for peak hour directional traffic, each have significant impacts on the network. While there would be travel time savings for westbound traffic on Bloomingdale Avenue in the AM peak hour in the 3/2 configuration, the overall network-wide travel times would increase. This configuration would require MUT intersections, or a similar treatment, to facilitate the prohibited left turn movements. The loss of the TWLTL would impact the ability of traffic to safely turn onto Bloomingdale Avenue from mid-block locations.

For the 3/1 TWLTL/1 configuration, the analysis shows that the v/c ratio for eastbound traffic on Bloomingdale in the AM peak hour would increase to nearly 60 percent over capacity due to the loss of one travel lane. Dual left turns from cross streets would need to be eliminated onto Bloomingdale Avenue and many mid-block locations or unsignalized intersections may need to be evaluated for right-in/right-out configurations.

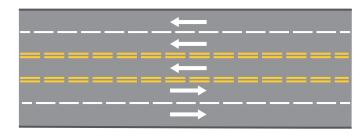
In addition to the two reversible lanes configurations that were considered, other improvement options including innovative intersection concept and minor timing and turn bay improvements at signalized intersections, were evaluated for implementation. Given the significant access impacts that would be required for implementation of a reversible lane configuration, this improvement option may not be the most effective or feasible option. Based on the qualitative and quantitative analysis, Bloomingdale Avenue may be a good candidate as a MUT corridor. Intersections could be analyzed on a case by case basis for MUTs and other innovative treatments as funding becomes available.

Figure 5. Bloomingdale Avenue Reversible Lane Configuration Concepts

3/2 Reversible Lane Configuration

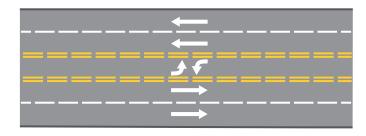
AM Peak Period

3 westbound lanes, 2 eastbound lanes, no left turn lane



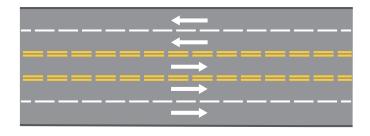
Off Peak Period

2 westbound lanes, 2 eastbound lanes, two-way left turn lane



PM Peak Period

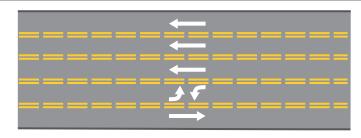
2 westbound lanes, 3 eastbound lanes, no left turn lane



3/1 TWLTL/1 Reversible Lane Configuration

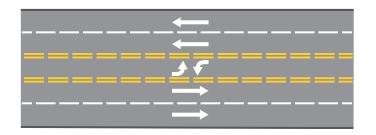
AM Peak Period

3 westbound lanes, 1 eastbound lane, two-way left turn lane



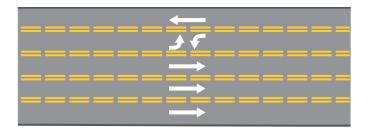
Off Peak Period

2 westbound lanes, 2 eastbound lanes, two-way left turn lane



PM Peak Period

1 westbound lane, 3 eastbound lanes, two-way left turn lane



FDOT District Seven has a project planned to widen the northbound on ramp at US 301 provding access to I-75 and the Selmon Expressway. The ramp is set to be widened from 1 to 2 lanes, with design set for fiscal year FY2021 and construction in FY2025. This project will help relieve the bottleneck at Bloomingdale Ave and US 301, allowing direct access to I-75 from the right two turn lanes on Bloomingdale Ave. There are also some additional cost effective improvements that can be done, including new markings on the right-turn lanes to indicate access to I-75 and the Selmon Expressway. As the reevaluation of the I-75 Interchange Study continues, there will be opportunities to look at more long-term improvements for the intersection.

Lithia Pinecrest Road/Bryan Road Roundabout Concept

The Lithia Pinecrest Road/Bryan Road intersection was analyzed under its existing configuration and as a roundabout intersection. Several roundabout configurations were considered. While the two-lane roundabouts operated acceptably, they showed geometric complications due to the skew angle of the intersection. Since this intersection is currently not showing safety concerns or major operational deficiencies, it is recommended that congestion continue to be monitored before improvements are further considered. The most beneficial improvement options appear to include widening through the intersection with a zipper-style merge or a split tee configuration.

Lithia Pinecrest Road-Bryan Road One-Way Pair at SR 60

In addition to the roundabout analysis at the Lithia Pinecrest Road/Bryan Road intersection, the study team evaluated an option to convert segments of Lithia Pinecrest Road (northwest leg of the Lithia Pinecrest Road/Bryan Road intersection) and Bryan Road (north leg of the Lithia Pinecrest Road/Bryan Road intersection) to a one-way pair in order to mitigate the existing congestion.

The two-way pair analysis for the SR 60 intersections with Bryan Road and Lithia Pinecrest Road revealed that no clear pattern of

improvement was identified. A roundabout at the Lithia Pinecrest Road/Bryan Road intersection does not show acceptable operations in conjunction with the more viable one-way pair option, Option 2 with Lithia Pinecrest Road in the northwestbound direction and Bryan Road in the southbound direction. Other improvement options may include implementing innovative intersection concepts by reducing signals to two- or three-phase timing schemes, widening SR 60 in the bottleneck area from Kings Avenue to Bryan Road-Kingsway Road, a reversible lane in the SR 60 bottleneck area, and/or extending S Montclair Avenue south to connect with Lithia Pinecrest Road.

Lumsden Road Widening Concept

The feasibility of widening and completing multimodal improvements along the 1.5-mile segment of Lumsden Road between Kings Avenue and Lithia Pinecrest Road was also evaluated as part of the study. To address capacity issues along this segment, the project explored the impacts of expanding the roadway from a four-lane divided roadway with a median to a six-lane divided roadway with a center median and turn lanes and a 12-foot-wide multi-use path on the north side. Accommodating the improvements requires significant right-of-way acquisition, resulting in right-of-way acquisition costs of almost \$25 million, nearly double the estimated cost of construction of \$13.5 million.

To maximize the benefits of adding capacity on this segment of Lumsden Road, further evaluation of traffic capacity and intersection operations to the west, east, and south of corridor should be completed. Even with existing planned improvements to the Lithia Pinecrest Road/Lumsden Road intersection and planned capacity improvements along Lithia Pinecrest to the south, roadways feeding into Lumsden Road may draw higher volumes and experience higher levels of congestion than are currently projected.

In assessing overall network capacity, the Lumsden improvements, in combination with the 4-laning of Lithia Pinecrest to the south, would

result in improved projected volume-to-capacity ratios for Lumsden Road and Lithia Pinecrest Road as well the improved projected volume-to-capacity ratios for the segments of Kings Avenue and Providence Road north of Bloomingdale and Bell Shoals Road to South of Bloomingdale Avenue. However, other alternatives that would provide similar benefits to widening Lithia Pinecrest concurrent with Lumsden Road widening, such as, a series of intersection improvements along Lithia Pinecrest should be explored as part of the detailed traffic analysis during the Project Development and Environmental (PD&E) phase of the project.

TRANSIT OPTIONS

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 presented *Technical Memo 7: Transit Service Evaluation*, 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 3 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

The cost-effectiveness and performance of circulator services evaluated as part of the project 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, and one option was identified as a feasible alignment, which could 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.

MOBILITY SCENARIO TESTING

In addition to the mobility improvement options described above, a number of other improvements were considered and evaluated as part of the mobility scenario development and testing that was conducted as part of this study. The mobility scenario traffic modeling evaluated the performance of these improvements.

Seven different scenarios were developed to evaluate the potential of different mobility improvement options. In addition to a No Build option that included just the improvements proposed as part of the LRTP, the scenarios include different combinations of improvements including the introduction of a reversible lane on Bloomingdale Avenue, widening of Lumsden Road, Lithia Pinecrest Road, and John Moore Road, addition of a BRT dedicated guideway on SR 60/Oakfield Road, and construction of a new 2-lane east-west roadway between Providence Lakes Road and Brooker Road.

The analysis of each scenario included an evaluation of the anticipated 2040 traffic volumes and roadway capacity for the roadway network in the Brandon Study Area and adjacent areas. The results of the scenario testing, including a summary table and graphics showing the volume to capacity performance for major roadways in the study area during the AM and PM peak period is provided in *Technical Memo 8: Mobility Improvement Option Evaluation*.

Based on the results of the analysis, each scenario delivers at least modest improvements in peak period travel over the baseline No Build (2040) scenario. Based on a system-wide comparison, Scenario 7, which offers the greatest increases in capacity, sees highest improvements in v/c ratios on the network roadways. Scenario 5, which only provides a new east-west connection through the central portion of the study area, also offers high levels of improvement on other east-

west corridors. However, this scenario does result in an increase along Gornto Lake Road south of Lumsden Road.

5. RECOMMENDED NEXT STEPS

A number of projects and initiatives could be undertaken to advance some or all of the recommendations developed through this project. In future phases of work, efforts could focus on assessing redevelopment and infill opportunities, preparing fiscally sustainable development scenario(s), evaluating of economic benefits and fiscal impacts of potential investments, changing to incentives and regulations, and identifying infrastructure and development financing partnerships. Table 2 offers a list of potential projects and initiatives.

These projects and initiatives should be evaluated for incorporation in the work programs of the Hillsborough County MPO and the Planning Commission, as well as the work programs of partner agencies including Hillsborough County, HART, and FDOT District 7.

Table 2. Brandon Corridors & Mixed-use Centers Recommended Next Steps

Land Use & Development		
Designation of Mixed Use Activity Centers and Corridor Segments	 Comprehensive Plan amendments to incorporate goals, policies, and strategies for the definition of Mixed Use Activity Centers and Corridor Segments. 	
Development Standards for Centers & Corridor Segments	 Development standards applicable to projects seeking approval under the optional center and corridor segment provisions of the amended Comprehensive Plan. 	
Context Classification Mapping	 In partnership with FDOT District 7, prepare maps indicating the limits of context classifications for areas along SR 60. The context classifications should be address planning recommendations in the Pilot Project and subsequently reflected in amendments to the land use element of the Comprehensive Plan and County land development code. 	
Center Reinvestment Incentives	 Incentives to promote redevelopment and reinvestment that meets intensity, use mix, form, mobility, and other objectives for areas designated as Compact Urban and Connected Suburban Centers. 	
Cross-Parcel Connection Standards Review	 Land Development Code requirements for cross parcel connections and ensure such requirements are enforced through relevant processes. 	
Roadway Capacity & Multimodal Im	provements	
Center Mobility Strategies and Funding	 Development of conceptual plans, models or cross sections, as applicable, for mobility enhancements in areas designated as Compact Urban and Connected Suburban centers. 	
Bloomingdale Intersection Improvement Study	 Evaluation of traffic operations at key intersections to address capacity and operational issues. Completion of performance and cost assessments of innovative alternatives identified in the project, including displaced lefts and signalized u-turns. Identification of pedestrian safety and transit accommodation improvements. 	
East-West Corridor Evaluation	Evaluation to identify potential corridors for the construction of a 2-lane roadway or roadway segments between a parallel to east-west corridors.	

US 301/I-75 Interchange Assessment	Traffic evaluation and design concepts for safety and capacity improvements at the US 301, Bloomingdale Avenue, and I-75 interchange area in partnership with FDOT District 7. FDOT had funded projects to relieve the bottleneck at US 301 and Bloomingdale Ave.
SR 60 Pedestrian Safety Study	 Safety Assessment Reports for SR 60 from I-75 to Valrico Road focused on improving safety for pedestrian moving along and crossing the corridor n partnership with FDOT District 7.
Lumsden Road/Lithia Pinecrest Road Widening & Bicycle and	■ PD&E study to assess the benefits and costs of widening Lumsden Road from Kings Avenue to Lithia Pinecrest Road, and revisit the Lithia Pinecrest Road segment B PD&E at the same time.
Pedestrian Accommodations	Study should include development of concepts to improve pedestrian and bicycle travel along and across the corridor.
Roadway Capacity Evaluation & Improvement Planning for Areas to the South and South East of the Study Area	 Roadway capacity evaluations for major roadways to the south and south east of the study area. Assessment of capacity needs based on project build-out of future land uses with a focus on defining long term needs and protecting rights-of-way for future roadway corridor and intersection capacity improvements. Definition and programming of interim and ultimate improvements to I-75 interchanges serving rapidly growing communities to the south and southeast of the study area in partnership with FDOT District 7.
Transit Improvements	
Brandon-Downtown-Westshore Enhanced Transit/BRT	Preparation of concepts for the implementation of enhanced transit or BRT service connecting Brandon to Downtown Tampa and potentially to Westshore in partnership with HART. Ensure such service extends eastward to Parsons Avenue and includes an evaluation of service along Oakfield Drive.
Brandon Intermodal Center Evaluation	■ Work with FDOT District 7 to assess the potential for locating a new Intermodal Center in the proximity of the intersection of Lakewood Drive and Brandon Parkway in partnership with HART and FDOT D7. The assessment could possibly be completed as an addendum to the Intermodal Center assessment currently underway for the Gateway area in Pinellas County and the Westshore and Downtown areas in the City of Tampa.
Transit Accessibility Assessment	Assessment of pedestrian and bicycle accommodations in proximity to existing transit stops in the study area with priorities for improvement based on pedestrian and bicycle safety, planned transit levels of service, center definition, and destination densities and intensities. Complete in partnership with HART and FDOT District 7.
HyperLINK Ongoing Evaluation	Monitor and report on the effectiveness of HyperLINK in meeting the community's need for first mile/last mile mobility services. In partnership with HART, compare the cost and effectiveness of HyperLINK against potential fixed route, fixed schedule circulator service.

APPENDICES

- Technical Memo 1: Land Use Pattern Maps & Summary
- Technical Memo 2: Market Analysis
- Technical Memo 3: Network Evaluation & Planned Improvements
- Technical Memo 4: Development and Redevelopment Potential Assessment.
- Technical Memo 5: Mixed-use Activity Center Designation & Policy Framework
- Technical Memo 6: Socio-economic Data Modification Recommendations
- Technical Memo 7: Transit Service Evaluation
- Technical Memo 8: Mobility Improvement Option Evaluation