
City of
Bradenton
Transportation
Element
Data and
Analysis

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Transportation Map Series

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Introduction

A number of major roadways traverse the City of Bradenton, but the City does not control many of the transportation decisions that impact those roadways within its borders. Being State or County-maintained roadways, the City must oftentimes defer to those entities and their transportation plans. Additionally, as further complication to the City's roadway situation, a majority of traffic does not originate in the City of Bradenton, but instead passes through along these roadways.

The City relies on coordination, and managing its relationships with the Florida Department of Transportation (FDOT), Manatee County, Manatee County Area Transit (MCAT), the Sarasota/Manatee Metropolitan Planning Organization (MPO), and other transportation planning entities, to provide an effective and efficient transportation network. This network encompasses not only roadways, but also the transit routes and facilities many residents and local employees rely

on, as well as bicycle and pedestrian facilities. As the City's population grows, a greater focus must be placed on the provision of multiple modes of transportation, and the encouragement of these transportation choices. In Bradenton, this will require continued commitment to coordination with all transportation entities operating within the City.

Existing Roadway Transportation (2008)

The City's existing roadway transportation network consists of principal arterial, minor arterial, collector, and local roads. The functional classifications of roadways within the City are shown on the *Existing Roadway System (2008)* map, as part of the Transportation Element map series in Appendix A. The *Number of Directional Through Lanes (2008)* map indicates that a majority of the City's collector roadways and non-local roads contain one travel lane in each direction. The arterials in the City's roadway network generally consist of two travel lanes in each direction, and portions of Manatee Avenue east of the

downtown and US 41 consist of three travel lanes in each direction. Most of these major roadways are not maintained by the City, but are instead either maintained by the FDOT or Manatee County, as shown in the *Roadway Maintenance Responsibility* map in Appendix A.

Existing Levels of Service

The City has an adopted level of service (LOS) standard of "D" at peak hour times, for all roadways in the City. This includes portions of SR 64, US 41, US 301, and SR 684, which are maintained by the FDOT. According to the *Existing Level of Service* map in Appendix A, several of the City's arterial and collector roadway segments have levels of service below the adopted standard of "D". The *Existing Roadway System* map indicates the functional classifications of the City's roadways. The following table indicates which roadway segments in the City have existing LOSs of "E" or "F".

Table TRAN-1: Roadway Segments not Meeting LOS Standards, 2007

Street	From	To	Adopted LOS	Existing (2007) PM LOS
75th St W	Manatee Ave	18th Ave W	D	F
59th St W	Manatee Ave	17th Ave W	D	F
59th St W	17th Ave	21st Ave W	D	F
59th St W	21st Ave W	Cortez Rd (SR 684)	D	F
14th St W	Manatee Ave	6th Ave	D	F
14th St W	6th Ave	9th Ave	D	F
Bus 41	4th St (Palmetto)	Manatee Ave (Bradenton)	D	F
Bus 41 (9th St W)	Manatee Ave	6th Ave	D	F
Bus 41 (8th Ave)	9th St W	14th St W	D	F
Bus 41 (14th St W)	8th Ave	9th Ave	D	F
Bus 41 (14th St W)	9th Ave	13th Ave	D	E
US 41	Haben Blvd (Palmetto)	Manatee Ave	D	F
US 41	Manatee Ave	6th Ave	D	F
US 41	6th Ave	9th Ave	D	F
9th St E	Manatee Ave	6th Ave	D	F
9th St E	6th Ave	9th Ave	D	E
27th St E	Manatee Ave	13th Ave E	D	F
SR 64	59th St W	51st St W	D	F
SR 64	51st St W	43rd St W	D	F
SR 64	43rd St W	34th St W (City Limits)	D	F
SR 64/Manatee Ave	26th St W	15th St W	D	F
SR 64/Manatee Ave	15th St W	Bus 41	D	E
SR 64	Carlton Arms Blvd	43rd St E	D	F
SR 64	43rd St E	48th St Ct	D	F
SR 64	48th St Ct	Morgan Johnson Rd	D	F
6th Ave	15th St W	9th St W	D	E
30th Ave W	14th St W	301 Blvd/9th St W	D	F
SR 684	75th St W	59th St W	D	F
SR 684	59th St W	26th St W	D	F

Source: City of Bradenton, Sarasota/Manatee MPO, FDOT; 2007

These roadway segments are primarily located in the City's downtown area, and along the major roadways that lead across bridges to the barrier islands and the City of Palmetto. Both bridges that span the Manatee River from the City to Palmetto have an existing LOS of "F". These bridges, like many roadways in downtown Bradenton, are constrained facilities. The bridges are constrained because the cost to widen or replace them is cost-prohibitive. The downtown roadways are constrained, because in order to maintain existing buildings and encourage continuation of pedestrian-oriented urban form, widening is not an option and right-of-way acquisition would be cost prohibitive.

Roadway System Needs

The City of Bradenton is redeveloping and encouraging infill in its urban core through a Community Redevelopment Area (CRA) and an Enterprise Zone (EZ). Many of the roadways listed in the above table, that would typically be widened to avoid becoming significantly congested, are constrained. A policy of improving transit and alternative routes in the urban grid

must be implemented. The ongoing Downtown Mobility Study is examining such alternative routes and capacity projects that are both physically and financially feasible. To improve the current grid network, portions of 75th Street West and Whitfield Avenue are being widened to four-lane roads. Additionally, 15th Street is being improved to three lanes. Just south of the City in unincorporated Manatee County, Cortez Road (44th Avenue) will be widened to six lanes from 14th Street West to 15th Street East. This will help relieve some of the traffic in the southern portion of the City, and along Cortez Road. In the absence of alternative routes, only transit and other multimodal options can be implemented.

Creative solutions are needed to respond to these challenges, and that balance additional capacity for mobility with the community livability issues important for downtown redevelopment. Candidate projects may include additional street connections and realignments, traffic operations or intersection modifications, improved bus capacity and operations, and initiation of water-borne transportation service. The combination

of appropriate strategies will be determined through more detailed analysis involving the MPO, the City, adjacent local governments, transit providers and the FDOT.

The City's estimates for average daily and peak hour vehicle trips can be found in Table B.1 in Appendix B. The figures provide numeric indicators of the levels of service on the City's roadways.

Existing Modal Split and Vehicle Occupancy Rates

Journey-to-work data was last updated with the 2000 Census, and provides the best information to gauge modal split and vehicle occupancy rates within the City and the County. Table TRAN-2 below provides the means of transportation to work for workers age 16 and over. This data serves as the proxy for City-wide modal split. The total number of commuters in the City is approximately 18 percent of the number of commuters in the County, and the majority of commuters at both geographies drove alone.

Table TRAN-2: Comparison of Means of Transportation to Work

Means of Transportation to Work	City of Bradenton	Proportion of City Total	Manatee County	Proportion of County Total
Car, truck, or van:	18,979	93.1%	103,148	92.9%
<i>Drove alone</i>	15,859	77.8%	88,443	79.7%
<i>Carpooled:</i>	3,120	15.3%	14,705	13.2%
2-person carpool	2,338	11.5%	11,293	10.2%
3-person carpool	374	1.8%	1,976	1.8%
4-person carpool	237	1.2%	641	0.6%
5- or 6-person carpool	90	0.4%	517	0.5%
7-or-more-person carpool	81	0.4%	278	0.3%
Public transportation:	202	1.0%	546	0.5%
<i>Bus or trolley bus</i>	116	0.6%	313	0.3%
<i>Streetcar or trolley</i>	0	0.0%	8	0.0%
<i>Ferryboat</i>	0	0.0%	20	0.0%
<i>Taxicab</i>	86	0.4%	205	0.2%
Motorcycle	49	0.2%	280	0.3%
Bicycle	189	0.9%	604	0.5%
Walked	293	1.4%	1,633	1.5%
Other means	207	1.0%	1,017	0.9%
Worked at home	466	2.3%	3,774	3.4%
TOTAL	20,385	100%	111,002	100%

Source: Census 2000

Of the City's workers, 93.1 percent of them drove a car, truck or van, slightly more than the 92.9 percent of the County. A greater proportion of City workers (15.3%) utilized carpools than those of the County in general (13.2%), however, and the vast majority of carpools for both geographies were composed of two passengers. The proportion of public transportation users in the City (1.0%) was also higher than for the County (0.5%). In the City of Bradenton, only slightly more people utilized public transportation (202) than bicycled (189) to their place of employment in 2000.

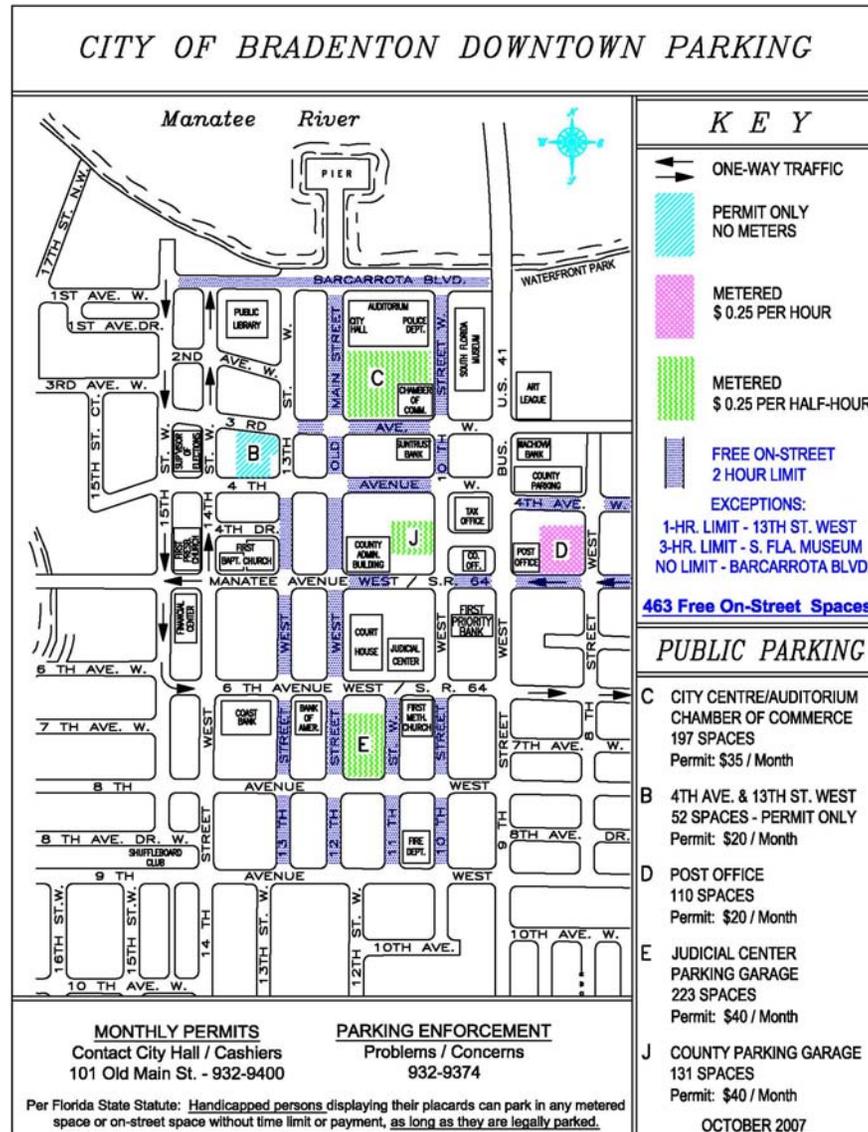
For those who utilized bicycles or walked to their destinations, the *Existing and*

Planned Bicycle Routes map illustrates the locations of existing bicycle facilities in the City. Sidewalks were not included, as the City has near-universal sidewalks on at least one side of the roadway, and the roadway network itself may stand as the location of sidewalks within the City. The existing bicycle routes, noted by the green lines on the map, extend from approximately 27th Street E to 75th Street W. The routes tend to be located along collector roadways, and along the riverfront. At least one route is not on the roadway network, and extends in a generally southeastern direction between 75th Street W and 59th Street W, and picks back up in the City from 43rd Street W to Southern Parkway.

Parking Facilities

The City of Bradenton maintains several public parking facilities in the downtown area for residents and visitors. The City has 2,701 public spaces in the downtown. Of these, 463 are free on-street parking spaces. The remaining spaces are located within the Downtown parking garage, the City Centre surface lot, the Post Office surface lot, or the 4th Avenue/13th Street W. lot. The figure below shows the locations of the parking areas in downtown Bradenton, and whether they are metered, or free spaces.

Figure TRAN-1: City of Bradenton Downtown Parking



Source: City of Bradenton, 2007.

Trip Generators and Attractors

The principal generators and attractors within the City include major employment areas, as well as shopping and recreation destinations. The downtown area is a major center of employment in

Bradenton, the seat of government in Manatee County, and the site of the County Administration building, and the County Courthouse. Just east of the core downtown area is one of two hospitals in Bradenton, Manatee Memorial Hospital, as well as the School District of Manatee

County. Other employment-related attractors in the City include the Tropicana juice production plant to the southeast of downtown, and Blake Medical Center west of downtown. Table TRAN-3 displays the major employers in Manatee County.

Table TRAN-3: Manatee County Major Employers

Employer Name	Total Employees	Industry
Manatee County School Board	7,000	Public Education
Beall's Inc.	2,100	Retail
Manatee County Government	1,730	Government
Tropicana Products, Inc.	1,600	Orange Juice and Juice Beverages
Manatee Memorial Hospital	1,500	Health Care
Manatee County Sheriff's Department	1,146	Law Enforcement
Blake Medical Center	1,100	Health Care
SYSCO Food Services	695	Food Distribution
Hoveround Corporation	637	Power Wheelchairs and Scooter
City of Bradenton	588	Government
Wellcraft Marine	500	Boat Manufacturer
Gevity HR	500	Employee Leasing

Source: Manatee County Transit Development Plan, 2008.

Table TRAN-4 below identifies the major trip generators in Manatee County. The transportation networks serving the areas around these destinations must be sufficient to handle the capacity of trips to

and from these locations. The principal generators within the City include Manatee Memorial Hospital, Blake Medical Center, the Manatee County Complex and the Downtown Bradenton

Business District. Also in the City are the Bradenton Central Business District, Tropicana Products, and Manatee High School. The other locations draw traffic through and from Bradenton.

Table TRAN-4: Major Trip Generators in Manatee County

<i>Medical Facilities</i>	<i>Governmental Centers</i>
Manatee Memorial Hospital	Manatee County Complex
Blake Medical Center	Downtown Bradenton Business District
Lakewood Ranch Medical Center	
Manatee Glens	
<i>Shopping/Industrial/Business Centers</i>	
Cortez Plaza	Lakewood Ranch Commerce Park
Prime Outlets Ellenton	Lakewood Ranch Town Center
DeSoto Square Mall	Centre Park
Main Street at Lakewood Ranch	Parkland Center
Bradenton Central Business District	Sarasota-Bradenton International Airport
301 Park of Commerce North	Port Manatee
Airport Business Park	Tropicana Products
Creekwood East Corporate Park	Beaches
Gulfcoast Corporate Park	Whitfield Industrial Park
<i>Schools</i>	
Manatee Community College	University of South Florida Sarasota
Manatee Technical Institute Bradenton	Lakewood Ranch High School
Manatee Technical Institute Lakewood Ranch	Manatee High School
Bayshore High School	Palmetto High School
Braden River High School	Southeast High School
	Horizons Academy

Source: Manatee County Transit Development Plan, 2008.

Recreational destinations not included in Table TRAN-4 are the downtown museums, GT Bray Park, and McKechine Field.

Public Transit

The City of Bradenton is served by Manatee County Area Transit (MCAT). Operated by Manatee County, the system

consists of 10 fixed-routes, including one inter-county route with Sarasota County Area Transit (SCAT). Eight of these routes are within the City, including a special free Beach Express service on Sundays and Holidays. All fixed-route transit routes operate at 60-minute frequencies except the Beach Express and the inter-county service to Sarasota (Route 99), and all vehicles are equipped with wheelchair lifts. MCAT provides paratransit services

for persons unable to use the fixed-route services. Called Handy Buses, these vehicles operate door-to-door for origins and destinations within ¼ miles from a fixed-route service line. Only individuals who are eligible through the Americans with Disabilities Act (ADA) are permitted to use the ADA Handy Bus, a complementary paratransit service similar to the Handy Bus but specifically for individuals with disabilities. MCAT also

provides several localized trolley circulators; none of these operate within the City.

The *Public Transit Routes (2008)* map, in Appendix A, identifies the routes within

the City, as well as the location of the new Desoto Transfer Station. Although this station is not within the City limits, it serves five routes that operate within or pass through the City, and is an important component of the MCAT transit system.

Another major transfer center is the Downtown Station Transfer Center, which is the transfer point for routes 2, 3, 9, and 99. The table below provides general information regarding the bus routes operating in Bradenton.

Table TRAN-5: City of Bradenton MCAT Bus Routes

Route #	Route Name	Days of Operation	# of Stops	Hours of Operation
2s	East Bradenton	Monday-Saturday	4	5:50a-7:25p
2n	East Bradenton	Monday-Saturday	10	6:05a-7:10p
3e	Manatee Avenue	Monday-Saturday	8	5:50a-7:40p
3w	Manatee Avenue	Monday-Saturday	10	5:50a-7:35p
4e	Wal-Mart at US 301	Monday-Saturday	10	5:50a-7:20p
4w	Blake Hospital	Monday-Saturday	10	5:50a-7:20p
6e	Cortez Road	Monday-Saturday	10	6:05a-7:50p
6w	Cortez Road	Monday-Saturday	10	5:45a-7:25p
9s	26th Street West	Monday-Saturday	4	6:20a-6:50p
9n	27th Street West	Monday-Saturday	4	6:00a-7:20p
99s	Palmetto/Sarasota	Monday-Saturday	9	5:30a-7:35p
99n	Palmetto/Sarasota	Monday-Saturday	9	5:15a-7:55p
BEw	Beach Express	Sunday/Holidays	4	9:00a-5:15p
BEe	Beach Express	Sunday/Holidays	4	9:45a-6:00p

Source: Manatee County Area Transit, 2009

The *Manatee County Transit Development Plan - 2008-2017* (TDP) was recently completed for Manatee County and MCAT. The intent of the TDP is to encourage the consideration of strategic

issues, mobility needs within the context of overall planning and development efforts, and prioritization of needs in the form of a staged implementation plan. This TDP update constituted a “major

update”, and examines a ten-year planning time frame addressing transit and mobility needs, cost and revenue projections, and community transit goals, objectives and policies.

The City of Bradenton is both the County seat and the largest city in Manatee County. Though the information presented in the TDP is intended to apply to the entire County, and population estimates and projections may not exactly match those throughout the rest of this Comprehensive Plan, the data in the TDP constitutes the best available data, and is used as a proxy for the City.

MCAT Demographics and Ridership

Based on surveys conducted as part of the TDP, typical rider profiles exist for both regular, fixed-route service, as well as for typical riders of MCAT’s Handy Bus, on-demand service. The tables below present the characteristics of typical riders of these two transit types.

Table TRAN-6: Typical MCAT Transit Rider Profile, 2008

Characteristic	Typical Rider Profile
Race/Gender	White/female
Age	45 to 54
Annual household income	< \$10,000
Vehicle ownership	No/limited
Visitor/resident	Resident
Trip purpose	Work/shopping
Frequency of Use	4 or more days

Source: Manatee County Transit Development Plan, 2008.

The MCAT general ridership survey indicated that the typical rider is a late-middle aged woman without a vehicle who earns less than \$10,000 per year, and uses transit four or more days per week for work or shopping trips. See the **Transportation Disadvantaged** section below for additional discussion of income-based transportation hardships.

Table TRAN-7: Typical MCAT Handy Bus Rider Profile, 2008

Characteristics	MCAT Handy Bus Paratransit System
Gender	Female
Age	75 to 84
Ethnic Heritage	Caucasian
Annual Household Income	\$10,000 to \$19,999
Auto Availability	None
Main Trip Purpose	Doctor & Dentist
Frequency of Use	A few times per week & A few times per month
Duration of Use	More Than 2 Years
Alternative Transportation	Wouldn't Make Trip

Source: Manatee County Transit Development Plan, 2008.

The MCAT Handy Bus is an on-demand service for Transportation Disadvantaged riders. Complementary service is provided for individuals who meet ADA criteria. The typical user of the Handy Bus paratransit service, as noted above in Table TRAN-7, is an elderly woman without an automobile who earns between \$10,000 and \$19,999 per year. She uses the service either a few times per week or a few times per month to visit a doctor or dentist, and would not make the trip without the Handy Bus.

The most recent ridership figures available are from 2007. Table TRAN-8 below identifies a total of 4,000 daily riders. Route 99 is the most popular route, with 774 daily riders. This is the inter-county route between Manatee and Sarasota counties. Route 3 has a daily total of 465 riders, and is the second-most popular route, serving origins and destinations along Manatee Avenue. The total below does not represent the maximum available capacity of each route on the system.

Table TRAN-8: MCAT Daily Ridership, by Route, 2007

Route #	2007 Daily Ridership
1	183
2	230
3	465
4	248
6	426
8	205
9	187
16	168
99	774
Trolley	1,112
TOTAL	4,000

Source: Manatee County Transit Development Plan, 2008.

Trip Generators and Attractors

The major trip generators and attractors for transit are generally the same as for trips of other transportation modes. Facilities that generate many trips, such as major medical, educational, governmental, and retail locations are important components in the layout of a transit system. These primary origins and destinations are discussed in the **Existing Roadway Transportation (2008)** section above, and displayed in Table TRAN-4.

Transportation Disadvantaged Population and Ridership

Chapter 427 of the Florida Statutes (F.S.) defines transportation disadvantaged (TD) persons as:

“...those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education ,shopping, social activities, or children who are handicapped or high-risk or at-risk as defined in §411.202, F.S.”

There are two categories of TD populations in Florida. Category I is called the “potential TD population,” and includes disabled, elderly, low-income persons, and children who are “high-risk” or “at-risk”. Category II includes persons unable to transport themselves or to purchase transportation. Table TRAN-9 below identifies projections for each category in Manatee County.

Table TRAN-9: Forecasts of TD Populations in Manatee County

TD Population	Year				
	2007	2008	2009	2010	2011
Category I	131,999	134,992	138,059	141,202	144,425
Category II	26,594	27,182	27,786	28,405	29,039

Source: Manatee County Transit Development Plan, 2008.

Table TRAN-10: Population Age Distribution in Manatee County, 2006

Area	0-17	18-24	25-44	45-64	65 and over
Manatee County	20.9%	7.2%	24.9%	24.8%	22.2%
Florida	22.2%	8.8%	26.9%	25.3%	16.8%

Source: U.S. Census Bureau, July 2007 Estimates

Source: Manatee County Transit Development Plan, 2008.

Category I riders outnumber Category II riders by over four-to-one. This is likely due in part to Manatee County having a higher percentage of residents over age 65 than the State of Florida as a whole. This age group falls into Category I TD persons. The County’s population age distribution is displayed in Table TRAN-10 below. However, Figure TRAN-2 shows that the City of Bradenton has a comparatively

youthful population, based on the Census Tract data.

Category II persons, on the other hand, are transportation dependent due to financial circumstance. Unlike age statistics, the City of Bradenton contains a number of Census Tracts with at least 25 percent of the population’s households earning less than \$15,000 per year. The

two block groups with the highest percentage of this very low wage rate are in the City. Table TRAN-11 below identifies the County’s Census Tract and Block Groups with the highest percentage of incomes less than \$15,000 per year, and Figure TRAN-2 provides the illustration. The areas in red and orange are those most likely to need public transportation, based on income statistics.

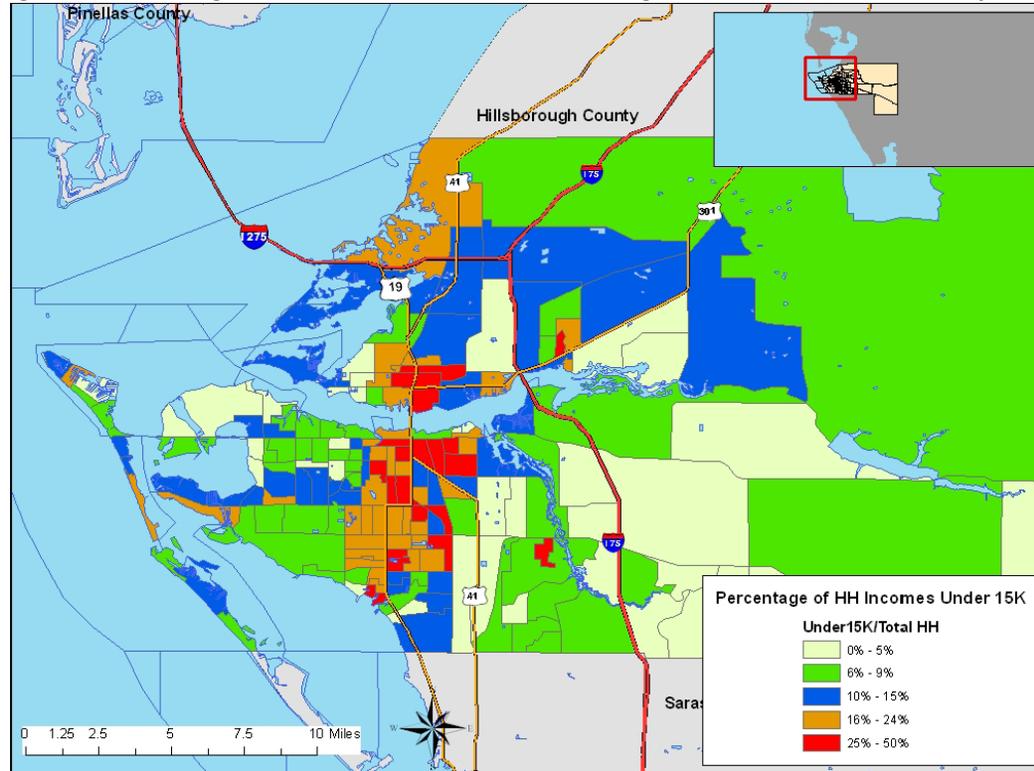
Table TRAN-11: Income Characteristics for Manatee County, 2006

Tract and Block Group	Area	Percent of Households with Income Under \$15,000
1.03 BG 1	Bradenton	49.9%
1.01 BG 2	Bradenton	42.9%
3.05 BG 1	Bayshore Gardens	33.2%
15.02 BG 1	Memphis	31.3%
2.00 BG 6	Bradenton	31.1%
7.03 BG 3	Bradenton	31.1%
3.06 BG 1	Bayshore Gardens	30.7%

Source: ESRI 2006/2011 Demographic Data Update

Source: Manatee County Transit Development Plan, 2008

Figure TRAN-2: Highest Percent of Households Earning Less than \$15,000 Annually, 2006



Source: Manatee County Transit Development Plan, 2008.

Trip demand for the TD population in Manatee County was determined, by Category, for general trips. As indicated in the table below, the demand for general trips is forecast to increase from 353,583 in 2008 to 431,670 in 2017. A gap exists between the demand for general trips and the supply of these trips. This unmet

demand is a result of factors including price, convenience, comfort, eligibility, and the availability of other transportation modes. Table TRAN-12 below show that the unmet demand for TD transportation services by Category II individuals is projected at 306,845 trips in FY 2008, and increases to 377,755 by FY 2017.

Table TRAN-13 below identifies the demand and supply of on-demand services for the Category I Handy Bus riders. The demand for trips is met, but is higher than the actual and projected populations. This is likely due to the need for multiple trips by the same individuals.

Table TRAN-12: Forecasts of Manatee County TD Population and General Trip Demand and Supply

Year	TD Population (Category II)	Demand for General Trips	Supply of General Trips	Unmet Demand for General Trips
2008	27,182	353,583	46,738	306,845
2009	27,786	361,440	47,485	313,955
2010	28,405	369,492	48,245	321,247
2011	29,039	377,739	49,017	328,722
2012	29,687	386,168	49,801	336,367
2013	30,353	394,832	50,598	344,234
2014	31,036	403,716	51,408	352,308
2015	31,735	412,809	52,230	360,579
2016	32,451	422,123	53,066	369,057
2017	33,185	431,670	53,915	377,755

Note: Estimates prepared by CUTR using the methodology described in the 1993 CUTR report Methodology Guidelines for Forecasting TD Transportation Demand at the County Level, 1993. Source: Manatee County Transit Development Plan, 2008.

Table TRAN-13: Forecasts of Potential TD Population and Program Trip Demand and Supply

Year	Potential TD Population (Category I)	Demand for Program Trips	Supply of Program Trips
2008	134,992	273,581	273,581
2009	138,059	277,958	277,958
2010	141,202	282,405	282,405
2011	144,425	286,924	286,924
2012	147,729	291,514	291,514
2013	151,116	296,179	296,179
2014	154,588	300,918	300,918
2015	158,148	305,732	305,732
2016	161,798	310,624	310,624
2017	165,540	315,594	315,594
2018	169,375	320,643	320,643

Note: Estimates prepared by CUTR using the methodology described in the 1993 CUTR report Methodology Guidelines for Forecasting TD Transportation Demand at the County Level, 1993. Source: Manatee County Transit Development Plan, 2008.

Transportation and Existing Land Uses

The City’s transportation network, which includes roadway facilities, transit facilities, sidewalks, and bicycle lanes, provide adequate service to the City’s existing land uses. Although many roadway segments in the downtown area

are operating below their adopted LOS standards, the system of MCAT routes operating within the City provides an alternative method of transportation to a number of important destinations. Additionally, bicycle lanes and a near universality of sidewalks also provide options for mobility. Regardless of travel

modes, the gridded street network present throughout the densest portions of the City allows residents and local employees a myriad of pathways from their origins to their destinations.

Growth Trends and Compatibility of Future Land Uses and Transportation

The City of Bradenton is an employment center in Manatee County. People commute to the downtown area from throughout the County, and from areas outside the County, principally the Sarasota area. The reverse is also true, as residents of Bradenton and Manatee County travel to Sarasota. This cross-county travel pattern has led to a growing need for better transportation system connectivity between the City and Sarasota. Additionally, as the downtown area has increased in density and redevelopment has filled once vacant parcels near the core of the City, residential areas have developed on the eastern outskirts of the City and into unincorporated Manatee County.

The anticipated growth trends in the City are commensurate with those of the County, and amounts to about 19 percent over the long-term planning horizon. The City would prefer this growth occur in already developed areas. The City's determination to create additional opportunities for downtown infill and to attract more residents nearer the City's employment centers is displayed in the updated Future Land Use Map and Future Land Use Element. The new residents and

jobs that are anticipated will generally be added to the area under study as the Mobility District. These new individuals will require increased capacity on the transportation network, or the majority of roads will operate well above their intended capacity.

A new focus on design, pedestrian-oriented development, and mixed uses will help draw residents to the downtown area, which will increase proximity of formerly disparate land uses, in turn leading to the possibility of greater walking, cycling, and transit use for local trips. The result would be a decrease in automobile use, and the resulting congestion on City roadways. The Transportation Element echoes the intent of the Future Land Use Map and Future Land Use Element through its incorporation of pedestrian-scaled elements of urban design associated with the transportation network. These include street connectivity, accessibility, transit support, sidewalks, and multiuse trails. Areas proximal to high-speed arterials will continue to have a more automobile-oriented set of land uses, and existing single-family neighborhoods will not lose their lower density character.

The Sarasota/Bradenton International Airport, though in Manatee County, is not

within the City limits of Bradenton. Additionally, there are no sea ports located within the City; Port Manatee is located north of the City of Palmetto in unincorporated Manatee County. Therefore, there are no land use compatibility issues associated with the airport or with the seaport.

Projected Transportation System (2030)

The starting point for determining the future roadway conditions in the City of Bradenton is the MPO's transportation model for 2030. Further discussion of the MPO's Long Range Transportation Plan is in section **Consistency With Other Transportation Plans** at the end of this chapter. The results are displayed for both the five-year (2014) and long-term (2030) in Appendix A: *Future Level of Service (2014)* and *Future Level of Service (2030)* maps.

Level of Service and Roadway System Needs

Table B.1 in Appendix B contains the underlying LOS data for both the short and long-term planning horizons. The information is presented as both PM peak hour trips and as the equivalent LOS "grade". The 2014 short-term horizon is

largely the same as the existing LOS for roadways, with two additional segments of SR 64 dropping from the LOS standard of “D” to a failing LOS “F”. Additionally, it is projected that by 2030, the City’s adopted LOS standard of “D” will not be met on the majority of major roadways within the City. Table B.1 also indicates that by 2030, and for those roadway segments for which data is available, all but three roadways will have at least one segment (and most have more than one) with an LOS of “F”.

Public transit from MCAT is anticipated to provide increased frequency on its more heavily traveled routes, and the network of bicycle routes will be expanded to encompass the arterials within the City. Bicycle routes are anticipated along Manatee Avenue and Cortez Road, as indicated on the Existing and Future Bicycle Routes map.

The projected transportation system in 2030 will incorporate the roadway network and additional multimodal transportation opportunities. The City has three principal options to improve the transportation network:

- Improve the existing network of gridded streets through roadway improvements, where possible;

- Provide options for multiple modes and mobility strategies; and
- Change the roadway LOS standards.

LOS Maintenance

The MPO’s 2030 LRTP identified two committed roadway projects within the City, a widening of 75th Street West from Manatee Avenue to Cortez Road to four lanes, and a widening of Manatee Avenue from 39th Street East to I-75 to six lanes. It also identified the Mobility Study for the areas of downtown Bradenton and Palmetto. Regarding public transportation, the LRTP identified park-and-ride lots at Manatee Avenue and 59th Street, and 59th Street and Cortez Road, as well as a new transfer stations in downtown Bradenton. Other improvements in the City include several route changes to MCAT systems, and increased frequency along the inter-county Route 99.

The TIP for FY 2008/09 through 2012/13 primarily identifies non-capacity improvements within the City, including intersection improvements, new pedestrian signals, new sidewalks, new traffic signals, lighting improvements, and rail safety improvements. The Downtown

Mobility Study, however, will determine the types of improvements that could improve mobility within the downtown areas of Bradenton and Palmetto, and provide recommendations for project or program improvements.

Also identified in the MPO’s 2030 LRTP, and shown on the *Future Number of Through Lanes (2030)* map in Appendix A, 17th Avenue West has been identified for widening to two travel lanes in each direction. Other improvements from the 2030 LRTP mapped as road widenings include Manatee Avenue from 75th Street W to 43rd Street W, which will increase from two to three directional through lanes, and US 41 from the City of Palmetto to 13th Avenue. The latter includes bridge reconstruction as part of the widening from two to three through lanes.

Those segments not meeting the adopted LOS standard, and which are not considered constrained roadways, will be examined for potential projects or programs to improve the LOS to an adequate level. Table TRAN-14 below outlines the capacity-enhancing projects, programs, or studies anticipated during the five-year planning horizon (2014). These projects include those funded locally, by the County, and by the FDOT.

Table TRAN-14: Short-Term (2013) Transportation Projects

Source	Project	Committed Funds			Planned Funds		Total
		2008/09	2009/10	2010/11	2011/12	2012/13	
<i>City of Bradenton CIP</i>							
	Downtown Mobility Study	\$303,991	\$0	\$0	\$0	\$0	\$303,991
	Urban Corridor Improvements: Manatee Avenue from 1st Street to 15th Street W	\$0	\$6,745,656	\$0	\$0	\$0	\$6,745,656
	14th Street West Improvements	\$78,043	\$0	\$0	\$0	\$0	\$78,043
	Causeway Improvements	\$193,092	\$0	\$0	\$0	\$0	\$193,092
<i>Sarasota/Manatee MPO TIP</i>							
	SR 64 @ 67th Street intersection improvements	\$633,345	\$0	\$0	\$0	\$0	\$633,345
	Downtown Mobility Study	\$0	\$303,991	\$0	\$0	\$0	\$303,991
	Bradenton Sidewalks to schools	\$30,000	\$521,900	\$0	\$0	\$0	\$551,900
	MCAT Capital for fixed route	\$125,000	\$125,000	\$125,000	\$125,000	\$0	\$500,000
	MCAT Capital for fixed route	\$1,300,000	\$1,375,000	\$1,500,000	\$1,500,000	\$0	\$5,675,000
	Transportation Disadvantaged trip and equipment	\$504,779	\$504,201	\$503,165	\$509,524	\$515,665	\$2,537,334
	Transportation Disadvantaged planning	\$23,428	\$23,897	\$24,375	\$24,862	\$25,359	\$121,921

Source: City of Bradenton CIP; Sarasota/Manatee MPO TIP, 2008.

The 2030 LRTP did not identify any financially feasible projects in the City that did not already have funds committed. It did, however, identify the Downtown Mobility Study area and the possibility that the study could identify projects or

programs that could be used to increase and maintain the actual LOS on roadways within the City. Table TRAN-15 below provides cost estimates for projects identified for both the short-term and long-term planning horizons. The table

below is a list of proposed projects. A financially feasible list of projects in the downtown area has not yet been determined. Only projects for the City of Bradenton have been identified.

Table TRAN-15: Bradenton/Palmetto Downtown Mobility Study Project Cost Estimates, City of Bradenton Only, 2009

	Location	From	To	Description	Maintenance	Cost
Short-Term (2014)	2nd Street East	Riverfront Blvd	Manatee Ave	Enhance pedestrian facilities	Bradenton	\$170,000
	9th (MLK Jr) Avenue	9th St W	9th St E	Reduce outside lane widths, add on-street parking, and enhance pedestrian facilities	Bradenton	\$1,240,000
	6th St Ct E	11th Ave E	13th Ave E	Construct 2 lane undivided	Bradenton	\$810,000
	Manatee Avenue	26th St W	15th St W	Add bicycle lane signage and pavement markings	FDOT	\$10,000
	Manatee Avenue and 9th Street E			Add left turn lane westbound	FDOT	\$330,000
	9th St E	Manatee Ave	US Hwy 301	Add bicycle lane signage and pavement markings	FDOT/Bradenton	\$10,000
	River Ride	9th St W	1st St (US 41)	Add multi-use trail adjacent to Riverwalk	Bradenton	\$100,000
	9th St W and 3rd Ave			Enhance pedestrian facilities	Bradenton	\$30,000
	Green Bridge Trail	Bradenton	Palmetto	Add multi-use trail	FDOT	\$550,000
	13th Street Transit Station	6th Ave	8th Ave	Transit station	MCAT	\$2,040,000
	Manatee Avenue and 15th St W			Intersection improvements	FDOT	\$170,000
	<i>Short-Term (2014) Total</i>					<i>\$11,120,000</i>
Long-Term (2030)	Manatee Avenue	15th St W	9th St W	Reduce from 3 lane to 2 lane and enhance pedestrian facilities	FDOT	\$2,320,000
	6th Avenue	15th St W	9th St W	Reduce from 3 lane to 2 lane, enhance pedestrian facilities, and add multi-use path	FDOT	\$2,350,000
	14th Street West	8th Ave	26th Ave	Reduce from 4 lane undivided to 3 lane with center turn lane, enhance pedestrian facilities, and	FDOT	\$8,100,000

Location	From	To	Description	Maintenance	Cost
			add multi-use path		
9th (MLK Jr) Avenue	15th St W	9th St W	Widen from 3 lane undivided to 4 lane divided with enhance pedestrian facilities	Bradenton	\$2,110,000
15th Street West	Manatee Ave	9th Ave	Widen from 2 lane undivided to 4 lane divided with enhance pedestrian facilities	Bradenton	\$2,610,000
Manatee Avenue	15th St E	27th St E	Reduce outside lane widths and add bicycle lanes	FDOT	\$880,000
Rails with Trails	Riverwalk	13th Ave	Add multi-use trail within the railroad ROW	Bradenton	\$990,000
Manatee Ave Roundabout	Manatee Ave	15th St W	Roundabout	FDOT	\$1,190,000
9th Ave Roundabout	15th St W	9th Ave	Roundabout	FDOT	\$570,000
Bradenton Circulator			Capital cost and 5 year operating cost to provided downtown transit circulator	MCAT	\$6,640,000
<i>Long-Term (2030) Total</i>					<i>\$53,130,000</i>
GRAND TOTAL					\$64,250,000

Source: *Mobility Study, 2009*

The above table contains projects of every mode and type, from roadway projects to multiuse trails. The implementation and use of these multimodal facilities will contribute to the offset of automobile trips. The City will need to continue to engage in close cooperation with the MPO, the County, MCAT, and the FDOT to

ensure funding for these projects becomes available and is set aside for their implementation. Coordination with the County and the MPO are especially important, because so many of the major roadways in the City are State roads and County roads.

Another option the City may pursue to maintain LOS standards is to implement additional regulations within the Land Development Regulations that would require developers to provide multimodal facilities in conjunction with their development proposals. The City already requires the provision of transit facilities

on development plans. This could be expanded to include bicycle facilities, or even in-lieu fees into a multimodal trust fund. These options are discussed further below.

When the actual LOSs decline, drivers may begin to change their behaviors in order to remove themselves from roadway traffic. Such changes in behavior include the use alternate routes or other modes of transportation (if available), which the City's grid network is able to support, because of the existence of parallel routes. Drivers may also choose to drive at non-peak hours of the day, or will shorten their trip distances by moving closer to their destinations.

Integration and Promotion of Public Transportation and Multimodal Options

The traditional solution to congested roadways has been to widen the roads. Though an acceptable option in many places, the City of Bradenton has many constrained roadways, and such physical alterations are generally not an option. The City recognizes this problem, and is choosing to pursue land use patterns and multimodal options that will encourage residents and visitors to change their travel behaviors. The City will also take into consideration the possibility of

adopting concurrency-related mechanisms such as a Transportation Concurrency Exception Area (TCEA), a Transportation Concurrency Management Area (TCMA), Multimodal Transportation District (MMTD), or long-term concurrency management system (CMS)

The promotion of public transportation and multimodal transportation options is directly related to the land uses planned for the City. The changes to the Future Land Use Map (FLUM) occurring with this EAR-based amendment cycle introduce several new mixed use future land use categories into the central portion of the City. These include the Urban Core, Urban Village, and the Urban Commercial Corridor designations. The Urban Central Business District and Suburban Commercial Corridor designations were already identified on the FLUM. These additional mixed use designations will provide opportunities to live, work, and shop in close proximity, thereby reducing the need for automobiles and providing more incentive to walk or bicycle between origins and destinations, and utilize public transportation for longer journeys. These new future land use designations, and their subsequent implementation through the Land Development Code, will provide the City with the additional density

needed to provide additional and more frequent transit opportunities.

Another potential solution to reduce the City's roadway transportation deficiencies include the implementation of recommendations described in the City's ongoing Mobility Study. Planned as a joint project with the City of Palmetto, the study will identify and evaluate transportation projects that improve circulation, access and mobility in the downtown areas. The study is intended to identify the feasibility of alternative traffic circulation and mobility strategies. The City will work closely with Manatee County and MCAT to develop the necessary Land Development Regulations that would accompany any initiative to facilitate additional public transit opportunities.

The City may also consider the creation of a Transportation Concurrency Exception Area (TCEA) or Multimodal Transportation District (MMTD). A TCEA allows concurrency exceptions in designated areas, which due to LOS deficiencies, hinders planned or anticipated redevelopment activities. A MMTD changes the basis for LOS determinations from roadway LOS standards, to pedestrian, cycling, and transit quality of service standards. Though each has a

different means through which to achieve its purpose, the goals and ultimate outcome – an increase in multimodalism and transportation demand management, and decrease in automobile trips – is similar for both designations. Both help relieve automobile congestion on roadways by providing alternative transportation options.

Existing and Projected Intermodal Needs

The TDP utilized the transit model TBEST for its comprehensive transit analysis and ridership-forecasting, which simulates travel demand at the individual stop-level while accounting for network connectivity, spatial and temporal accessibility, time-of-day variations, and route competition and complementarities. The model is not interactive with the roadway network, however, so long-range forecasts will not show sensitivity to changes in the competitive situations between transit and roadways over time.

Both 5-year (2012) and 10-year (2017) projections were conducted for the TDP. Table TRAN-16 below provides these ridership projections. Each set of projections identifies an increase in overall ridership. Only Route 1 is projected to experience a decline in daily ridership.

Table TRAN-16: MCAT Weekday Projected Daily Riders, 2012 and 2017

Route #	2007 Ridership	2012 Ridership	% Change from 2007	2017 Ridership	% Change from 2007
1	183	161	-12.1%	183	-0.1%
2	230	259	12.5%	316	37.2%
3	465	527	13.3%	623	33.9%
4	248	276	11.2%	328	32.1%
6	426	481	13.0%	568	33.4%
8	205	231	12.7%	278	35.6%
9	187	204	8.9%	230	22.8%
13	n/a	121	n/a	139	n/a
16	168	187	11.1%	215	27.7%
99	774	876	13.2%	1,033	33.5%
Trolley	1,112	1,203	8.2%	1,318	18.5%
TOTAL	4,000	4,526	13.2%	5,231	30.8%

Source: Manatee County Transit Development Plan, 2008

The 2012 time horizon indicates an anticipated change from 2007 ridership numbers, by route, with a total change of increase of 13.2 percent. The 2017 time horizon below indicates an increase of 30.7 percent over 2007 ridership figures.

The TDP identified a number of service and capital/infrastructural needs, based on the updated system goals, objectives, and demand estimation. The following provides a brief description of the identified needs and recommendations, particularly those that could affect the City.

- Extend Service Hours – MCAT should extend service hours to 10:00pm on routes with high ridership or that serve major attractors and generators (Routes 1, 3, 6, and 99).
- Implement Additional Sunday Service – Implement additional Sunday service on Routes 1, 3, 6, and 99 for eight hours.
- Improve Service Frequency on All Routes – Frequency is currently no more than once per hour at any stop. Service should be increased to 30 minute headways in the

downtown business district and along Manatee Avenue.

- Provide Complementary Paratransit ADA on all New and Expanded Routes.
- Improve Inter-County Transportation – Between Manatee and Sarasota counties.
- Implement Inter-County Commuter Express Bus Service – Would provide express service between Hillsborough, Pinellas, and Manatee counties.
- Relocate or Improve the Downtown Station Transfer Center – Improve safety, focus on intermodalism, better integrate facility into the redeveloping downtown.
- Continue to Establish Park-and-Ride Lots and Remote Transfer Centers
- Coordinate with the Newly Established Commuter Services Program – a FDOT District One program to establish vanpools and other applicable transportation demand options.

The Future Public Transit Routes map, in Appendix A, highlights the possibility of higher frequency service along the inter-county Route 99, and an improved Downtown Station Transfer Center. Funding sources for these improvements will include at least Federal Section 5307 funds, FDOT funding and grants, local Manatee County funds, and farebox revenues. Additional recommendations may arise during the MPO's 2035 Long Range Transportation Plan and the Bradenton/Palmetto Downtown Mobility Study.

Greenhouse Gas Reductions and Energy Efficiency

As more people are provided, and choose, alternate modes of transportation, the efficiency of the entire system improves. This efficiency includes a reduction in energy use, and will be achieved by decreasing the emphasis on the automobile and placing more emphasis on pedestrian, bicycle, and public transit transportation modes. An additional benefit to decreased reliance on the automobile, and an increase in these modes, is a reduction in greenhouse gas emissions throughout the City. Mixed uses (which increase proximity) within the

Urban Core, Urban Central Business District, and Urban Village future land use designations will support reductions in vehicle miles traveled (VMT). These land use patterns will provide not only a better and more efficient land use and transportation connection, it will also provide benefits for the natural environment and resource conservation for future generations.

Transportation Demand Management (TDM) strategies have been pursued in the downtown area of the City. Such initiatives include City offices moving to a four-day work week, with longer hours Monday-Thursday. This change removes some vehicles from the roadways during peak hours four days a week, and changes the travel pattern for City employees entirely on Fridays. Such changes impact mobility, but also influence the level of greenhouse gas emissions as fewer cars idle in traffic, and potentially VMT if other modes are used on Fridays. Other measures the City is in the process of implementing include the creation of task forces and additional coordination with the State and County agencies to address regional VMT, and the installation of solar panels on City parking garages.

Recent changes to MCAT routes have increased their efficiency along the

roadway network. In addition to the standard diesel-operated vehicles currently in operation, MCAT received grants to purchase three new hybrid-diesel electric buses. The new buses, in addition to savings on fuel and maintenance costs, will reduce the output of greenhouse gas emissions on the routes served by these new “green” buses.

The MPO Congestion Management Process Update (2009) (CMP) outlines the process by which the MPO provides for multimodal transportation facilities through demand reduction and operational management strategies. The goals of the updated CMP are consistent with the MPO’s adopted 2030 LRTP, and are also consistent with the statutory mission to reduce greenhouse gas emissions. The goals include expanding transit services, providing adequate pedestrian and bicycle facilities, improving safety, and helping to guide changes to land use planning activities.

Internal Consistency

The Transportation Element provides support for the Future Land Use Element, as well as the new Design Element. The creation of a closer connection between land use and urban design, and the

transportation network will enhance the character and livability of the City. The recognition that further expansion of the roadway network, which is largely constrained by existing development in the densest portions of the City and environmental factors associated with the river, provides the impetus for expanding multimodal options and facilities within the City. The desire to provide a more pedestrian-friendly urban atmosphere and the mixed use land use designations on the FLUM in the downtown area will provide the proximity and comfort needed to encourage residents and visitors to utilize non-automobile modes of transportation.

The application of mixed use land use categories and utilization of alternative modes promotes more compact development. The creation of additional housing units in proximity to major employers, including affordable housing, will be of great benefit to residents, particularly TD individuals. Compact development also reduces the costs of other public facilities, such as the provision of potable water and wastewater infrastructure, and the need for stormwater management facilities. It also means more land will be available to remain as open space, or for recreational purposes. This is especially important in

the near-bay environment, since wetland areas provide important ecosystem functions and may act as storm-surge dampeners during hurricanes.

The implementation of increased multimodal options and alternative transportation facilities will require close coordination with State, regional, and other local governmental agencies and entities. Funding sources will need to be identified and secured, and alternative methods for revenue production will need to be analyzed for their possible application within the City of Bradenton.

Coastal Evacuation and the Transportation System

In 2006, the Tampa Bay Regional Planning Council updated the Tampa Bay Regional Hurricane Evacuation Study. The study used population and demographic data,

and roadway capacity information, to determine the evacuation times for the existing and anticipated road network. The *Evacuation Routes (2008)* map in Appendix A indicates that the evacuation routes coincide with the major State roadways in the City (US 41, US 41B, SR 64, SR 55, SR 684).

In Manatee County, hurricane evacuation times range according to the magnitude of the anticipated hurricane (on the Saffir-Simpson scale), whether the time of year is during low or high season for visitors, and the extent of the geographic area subject to evacuation. The study indicated that the hurricane evacuation time for out-of-region traffic movements from the Tampa Bay region is the highest in Florida and the coastal United States.

Tables TRAN-17 and TRAN-18 present the existing (2006) hurricane evacuation

times, and Tables TRAN-19 and TRAN-20 present the future (2011) hurricane evacuation times, from varying scenarios.

The Evacuation Levels A-E corresponds to the magnitude of the hurricane Category 1-5. The regional study notes that most hurricane threats to the Tampa Bay area will allow, at most, 36 hours of evacuation to take place. The evacuation clearance times calculated for the Tampa Bay Region, and the municipalities within the region are generally quite large (greater than 36 hours), which means that typical hurricane watch and warning time frames will not allow all desired evacuation movements to take place. This means that some evacuees who want to leave the region will have to take refuge locally. The City of Bradenton lies within the noted evacuation area, and the City's evacuation time is within the 36 hour threshold.

Table TRAN-17: Clearance Times (in hours) for In-County Movements, 2006

County	Evacuation Level A		Evacuation Level B		Evacuation Level C		Evacuation Level D		Evacuation Level E	
	Light	Heavy								
Hillsborough										
Low Seasonal	16 ½	19 ¼	18 ½	21 ¾	19 ¼	21 ¾	20 ½	23	23	25 ¾
High Seasonal	18 ½	21 ½	20 ½	24	21	24	22 ¼	25 ¼	25	28
Manatee										
Low Seasonal	11	14 ¾	13	16 ¾	17 ½	20 ¾	23 ½	26 ½	26	28 ¾
High Seasonal	16 ¼	19 ½	17 ¾	21	22 ¼	25 ½	28 ¼	31 ¼	30 ½	33 ¾
Pasco										
Low Seasonal	7 ¼	9 ¼	9	10 ¾	13 ¼	14 ¾	20 ¾	22	23	24 ½
High Seasonal	10	11 ¾	11 ½	13 ¼	15 ¾	17 ½	23 ½	24 ¾	25 ¾	27
Pinellas										
Low Seasonal	16 ½	19 ¼	18 ½	21 ¾	19 ¼	21 ¾	20 ½	23	23	25 ¾
High Seasonal	18 ½	21 ½	20 ½	24	21	24	22 ¼	25 ¼	25	28

Source: Tampa Bay Region Hurricane Evacuation Study Update, 2006

Table TRAN-18: Clearance Times (in hours) for Out-of-County/Intra-State Movements, 2006

	Evacuation Level A		Evacuation Level B		Evacuation Level C		Evacuation Level D		Evacuation Level E	
	Low	High								
No Reverse Lanes ¹	16 ½	23	18 ½	26	28 ¼	36 ¼	42 ½	50 ½	46 ½	54 ½
With Reverse Lanes on I-75 North of I-275 NB					18 ¼	23 ½	27 ½	32 ¾	30	35 ¼

¹ FDOT is currently only considering this segment for contra-flow operations; no formal plans have been finalized or approved for implementation.

Source: Tampa Bay Region Hurricane Evacuation Study Update, 2006

Table TRAN-19: Clearance Times (in hours) for In-County Movements, 2011

County	Evacuation Level A		Evacuation Level B		Evacuation Level C		Evacuation Level D		Evacuation Level E	
	Light	Heavy								
Background Traffic										
Hillsborough										
Low Seasonal	16 ½	19 ¼	18 ¾	22	19 ¼	22	20 ½	23	23 ¼	25 ¾
High Seasonal	19	21 ½	21	24	21 ¾	24	22 ¾	25 ¼	25 ¾	28
Manatee										
Low Seasonal	11 ¾	15	13 ¼	16 ½	18	20 ¼	24 ¼	27 ¼	27	29 ¾
High Seasonal	16 ¾	20	18 ¼	21 ½	20 ¼	26 ¼	29 ½	32 ¼	32	34 ¾
Pasco										
Low Seasonal	7 ¾	9 ½	9 ¼	11	13 ½	15 ¼	21 ½	22 ¾	23 ¾	25
High Seasonal	10 ½	12 ¼	12	13 ¾	16 ½	17 ¾	24 ¼	25 ½	26 ¾	27 ¾
Pinellas										
Low Seasonal	16 ½	19 ¼	18 ¾	22	19 ¼	22	20 ½	23	23 ¼	25 ¾
High Seasonal	19	21 ½	21	24	21 ¾	24	22 ¾	25 ¼	25 ¾	28

Source: Tampa Bay Region Hurricane Evacuation Study Update, 2006

Table TRAN-20: Clearance Times (in hours) for Out-of-County/Intra-State Movements, 2011

	Evacuation Level A		Evacuation Level B		Evacuation Level C		Evacuation Level D		Evacuation Level E	
	Low	High								
Seasonal Occupancy										
No Reverse Laning	16	24	19	27	30	38	45	53	49	58
With Reverse Laning on I-75 N of I-275 NB ³					19	25	29	35	32	37

³ FDOT is currently only considering this segment for contra-flow operations; no formal plans have been finalized or approved for implementation.

Source: Tampa Bay Region Hurricane Evacuation Study Update, 2006

In addition to the above evacuation time data, the Florida Legislature passed legislation in 2006 that redefined the extent of the coastal high hazard area (CHHA). Formerly the evacuation zone for a Category 1 hurricane, it is now the “area defined by the SLOSH model to be inundated from a category 1 hurricane”. This change more directly tied land use regulations and constraints to a scientific model, rather than the old system delineated by roadways and landmarks. The City’s goals, objectives, and policies address this new definition.

Consistency with Other Transportation Plans

The Sarasota/Manatee Metropolitan Planning Organization (MPO) publishes two documents that identify transportation planning projects, programs and strategies. The Long Range Transportation Plan (LRTP) has a current long-range horizon of year 2030, and is updated every five years. The Transportation Improvement Program (TIP) presents project data culled from the annually produced FDOT Adopted Work Program, as well as all other transportation entities within the MPO’s jurisdiction. The TIP is updated annually, and presents a five-year horizon of

projects with committed (first three years) and planned funding (years four and five).

The LRTP identifies where deficiencies in the transportation network exist, and what improvements would be needed to mitigate those deficiencies. It also presents the projects that are financially feasible, and for which funding is available. The LRTP identified two committed roadway projects within the City, a widening of 75th Street West from Manatee Avenue to Cortez Road to four lanes, and a widening of Manatee Avenue from 39th Street East to I-75 to six lanes. It also identified the Mobility Study for the areas of downtown Bradenton and Palmetto. Regarding public transportation, the LRTP identified park-and-ride lots at Manatee Avenue and 59th Street, and 59th Street and Cortez Road, as well as a new transfer stations in downtown Bradenton. Other improvements in the City include several route changes to MCAT systems, and increased frequency along the inter-county Route 99.

The TIP for FY 2008/09 through 2012/13 primarily identifies non-capacity improvements within the City, including intersection improvements, new pedestrian signals, new sidewalks, new traffic signals, lighting improvements, and

rail safety improvements. The Downtown Mobility Study, however, will determine the types of improvements that could improve mobility within the downtown areas of Bradenton and Palmetto, and provide recommendations for project or program improvements.

The objectives and policies of the LRTP are generally reflected within the City’s Transportation Element. Included in the LRTP are the following objectives:

- Provide mobility on area roadways and enhance intermodal connectivity
- Strengthen the multimodal transportation system
- Coordinate land use and protect the environment
- Enhance system management and operations
- Ensure financial feasibility of the transportation system
- Involve the public in transportation decision-making

The focus on multimodal transportation options and alternatives reflects the acknowledgement that single-passenger automobiles are not sustainable, particularly in the downtown area of Bradenton where the compact urban form has constrained many of the major thoroughfares.

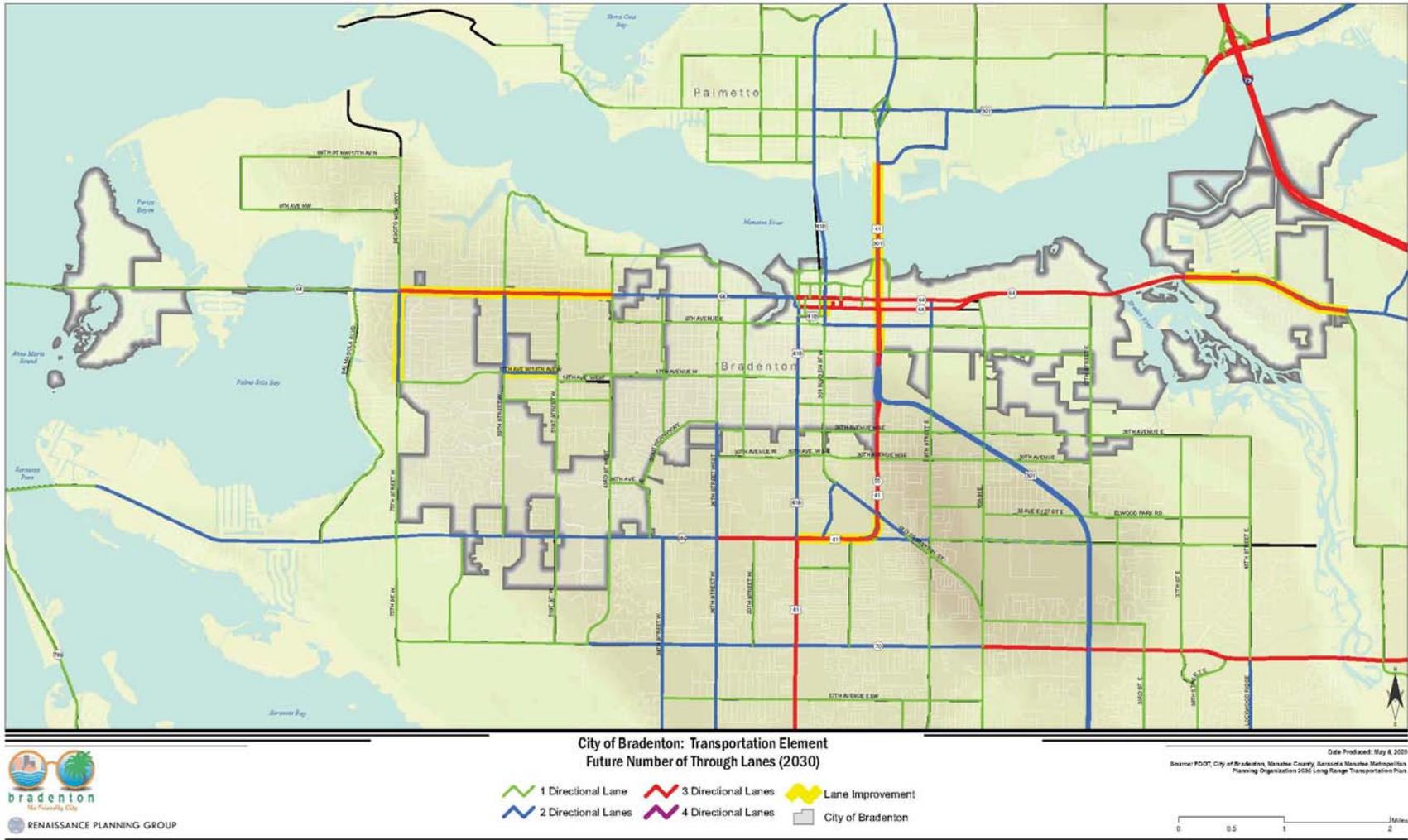
The MPO Congestion Management Process Update (2009) (CMP) outlines the process by which the MPO provides for multimodal transportation facilities through demand reduction and operational management strategies. The goals of the updated CMP are consistent with the MPO's adopted 2030 LRTP. They include expanding transit services, providing adequate pedestrian and bicycle facilities, improving safety, helping to guide changes to land use planning activities, and evaluating the effectiveness of implemented concurrency management strategies (CMS) of local governments in the MPO.

The City of Bradenton Comprehensive Plan Transportation Element is consistent with the objectives and policies of the other transportation-related plans in effect within the City and Manatee County. Manatee County's comprehensive plan contains objectives that promote a multimodal transportation system and which is coordinated with the FLUM. The Manatee County *Capital Improvement Program, FY 2009-2013* (CIP) has identified the implementation of advanced traffic management systems, sidewalk installation, and widening 53rd Avenue West from 47th Street to 75th Street within the City to accommodate future roadway travel demand.

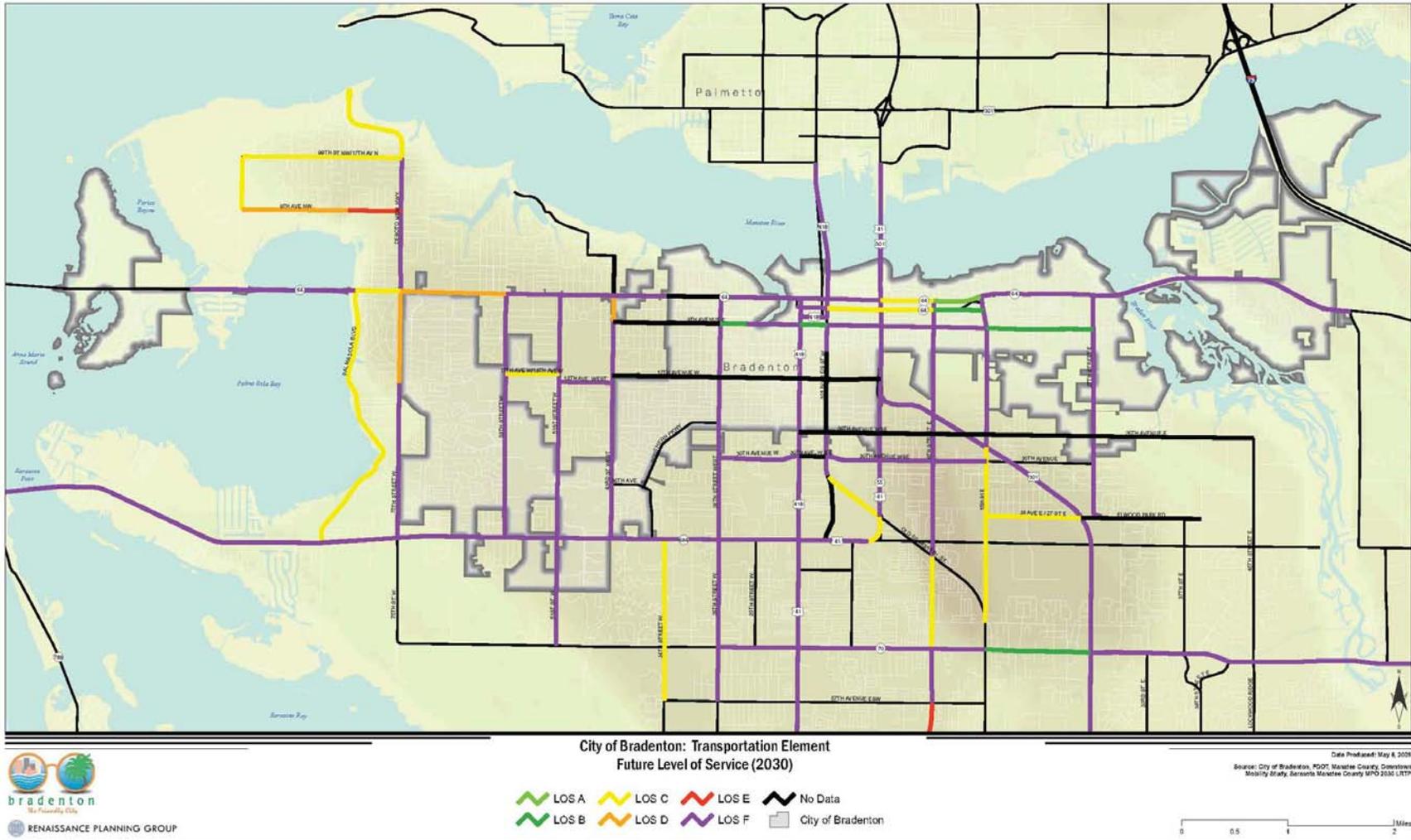
The Manatee County Transit Development Plan is consistent with the aims of increasing multimodal opportunities within the City, and projects identified and recommended within the TDP will provide City residents, employees, and visitors additional facilities and services.

Appendix A: Data and Analysis Map Series

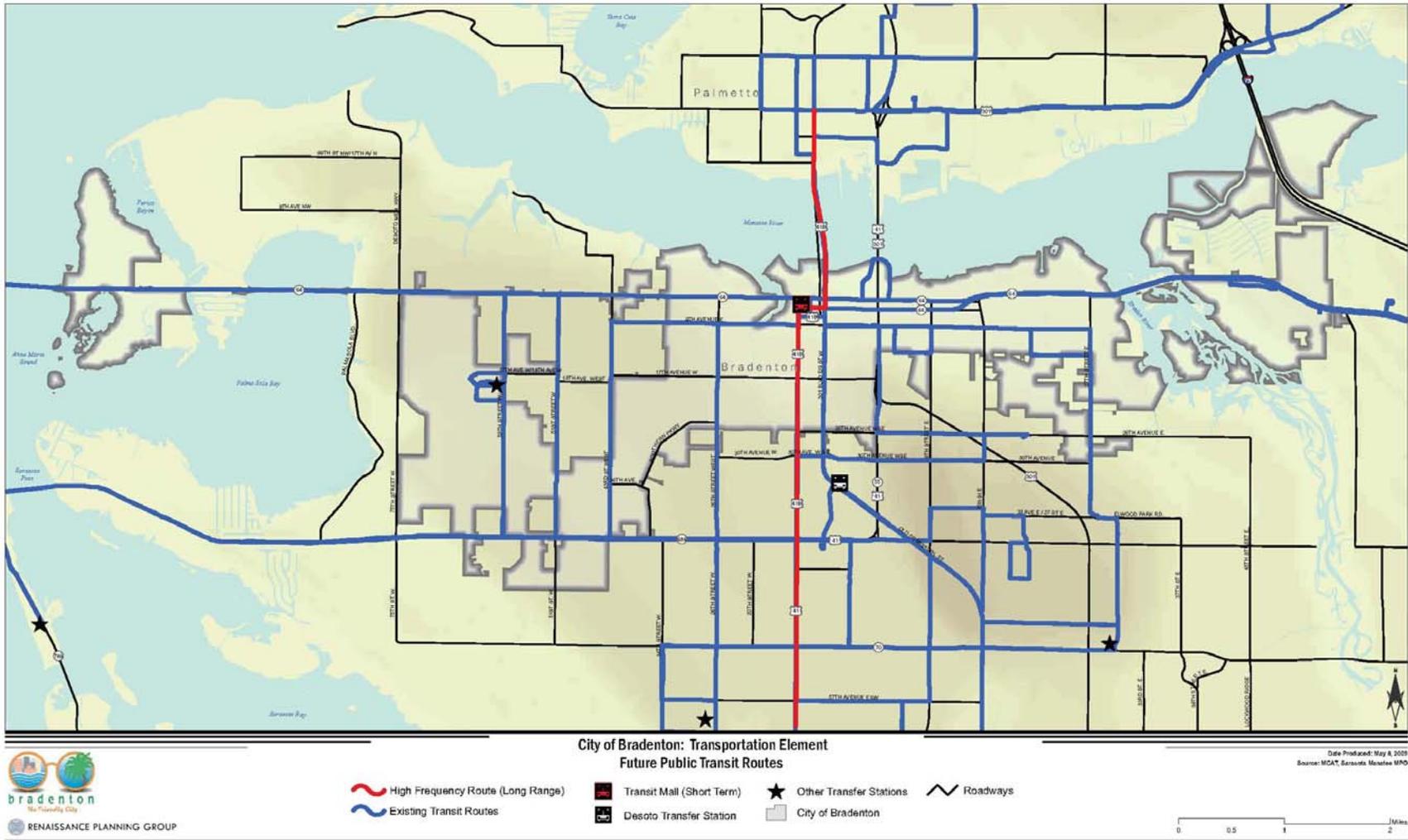
Map TRAN-1: Future Number of Through Lanes (2030)



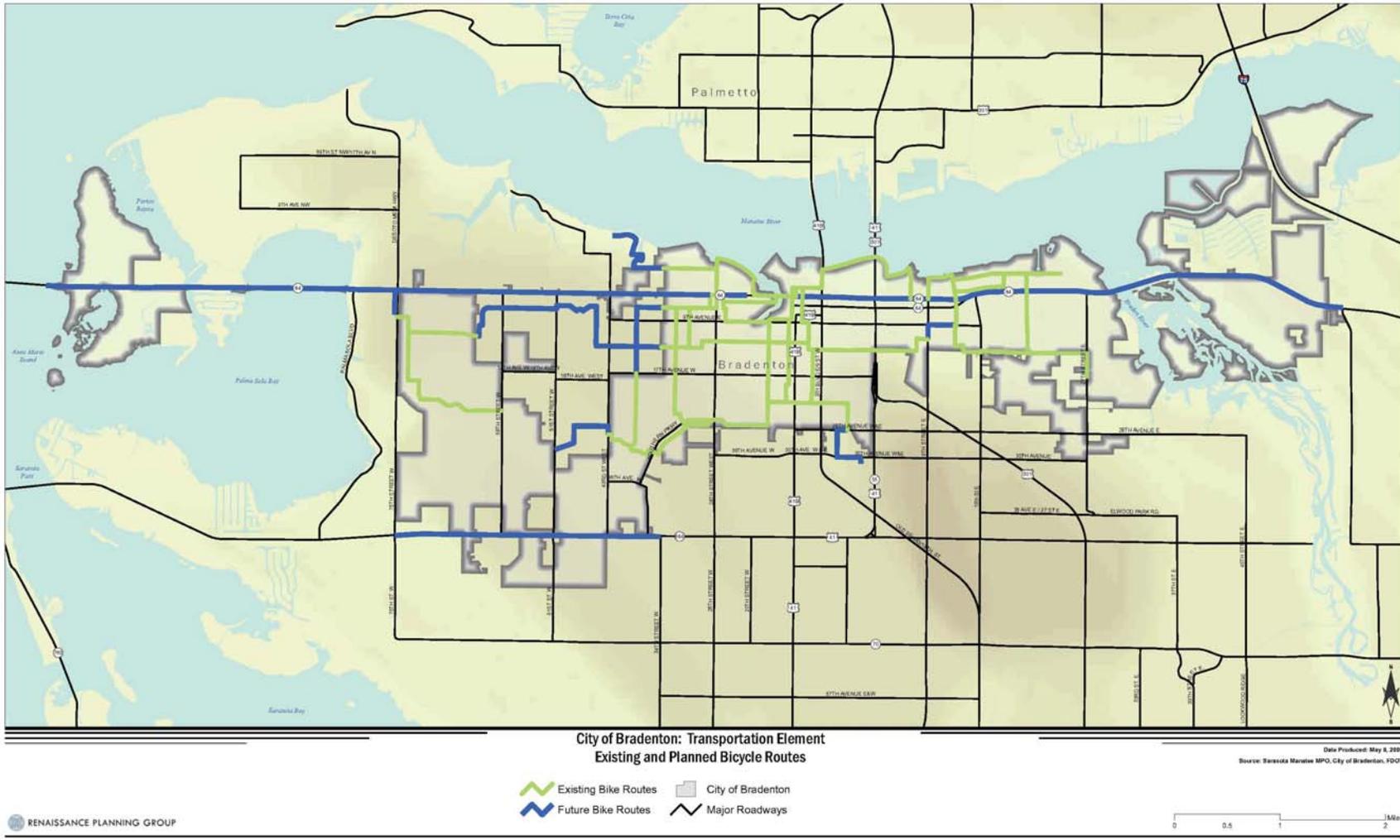
Map TRAN-2: Future Level of Service (2030)



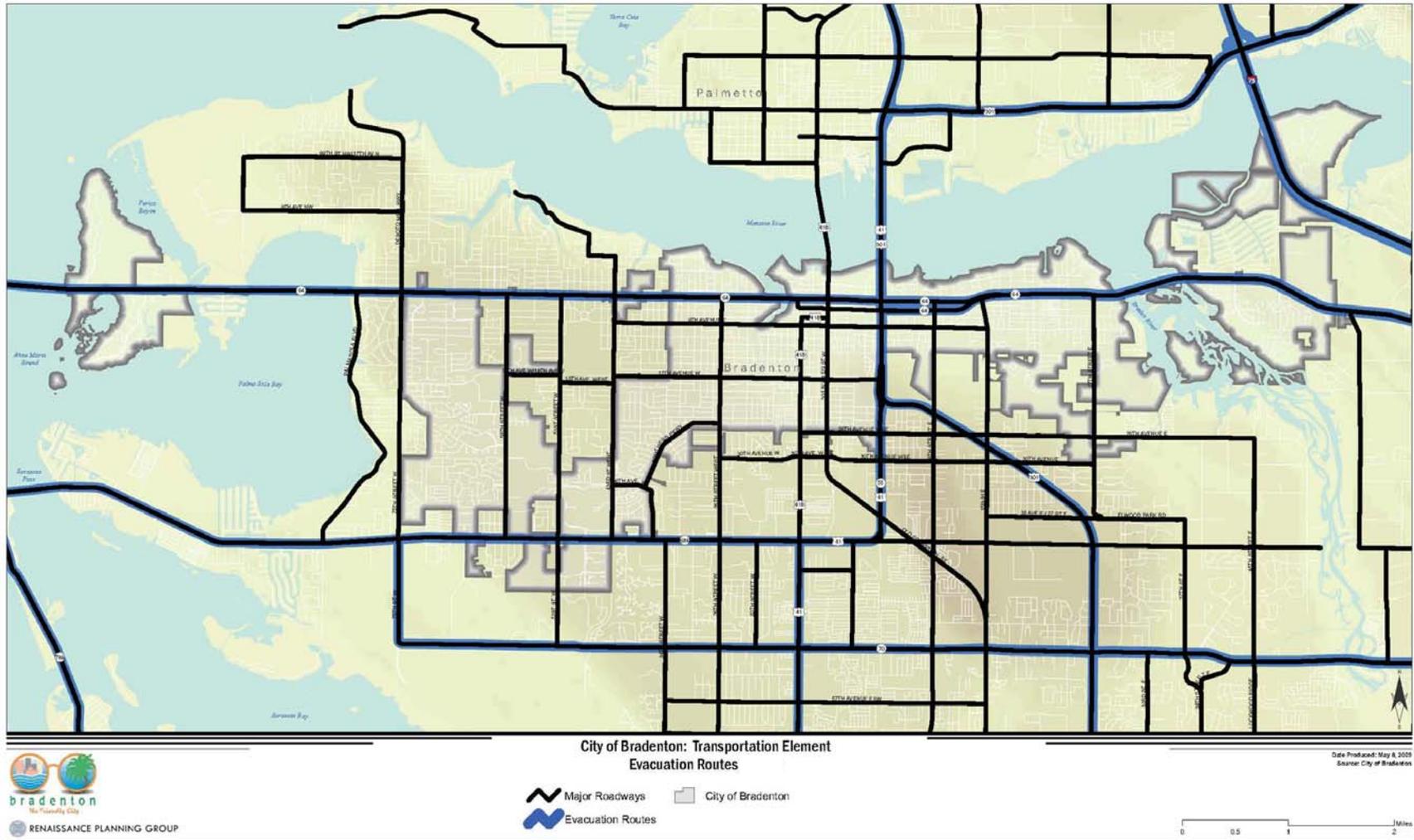
Map TRAN-3: Future Public Transit Routes



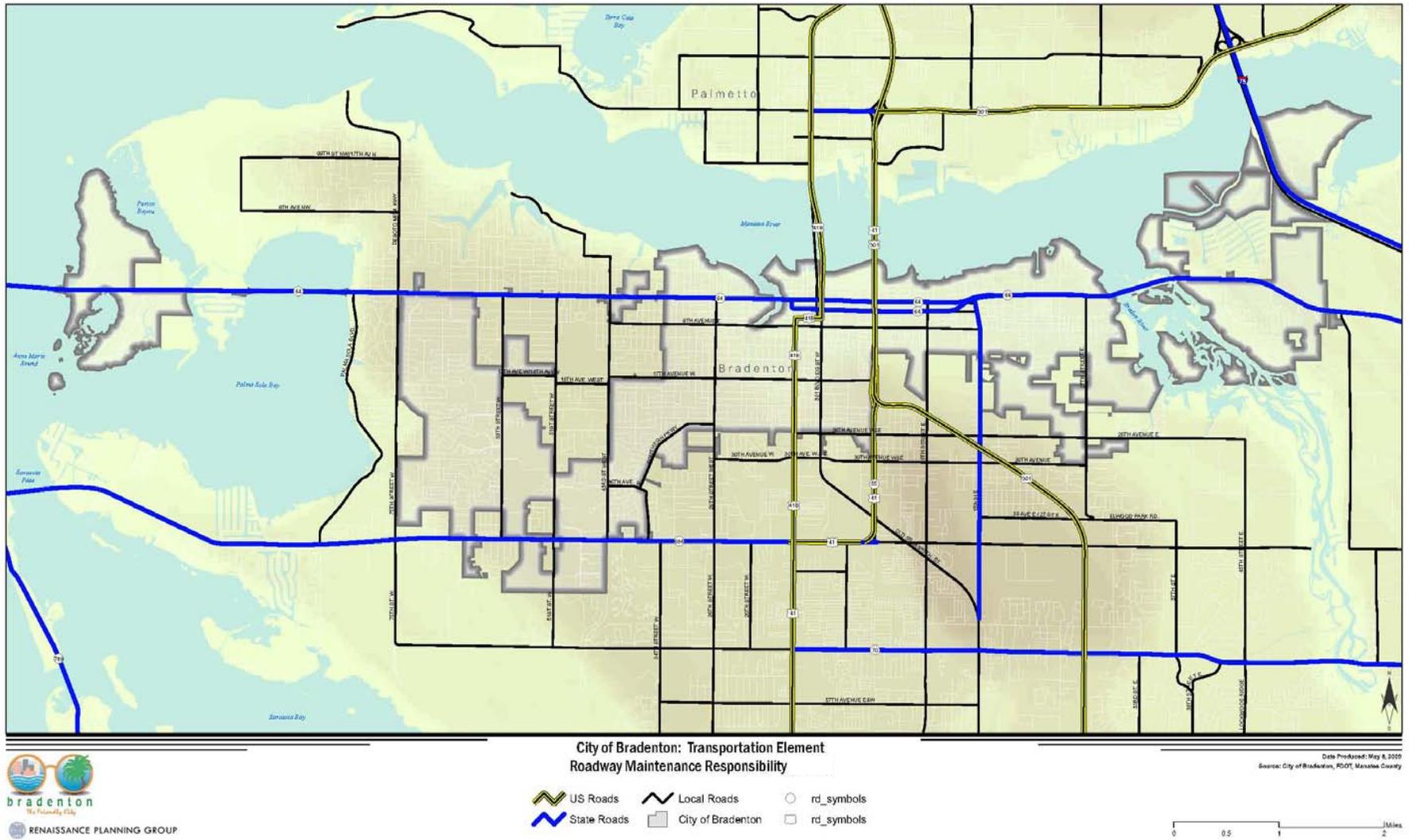
Map TRAN-4: Existing and Planned Bicycle Routes



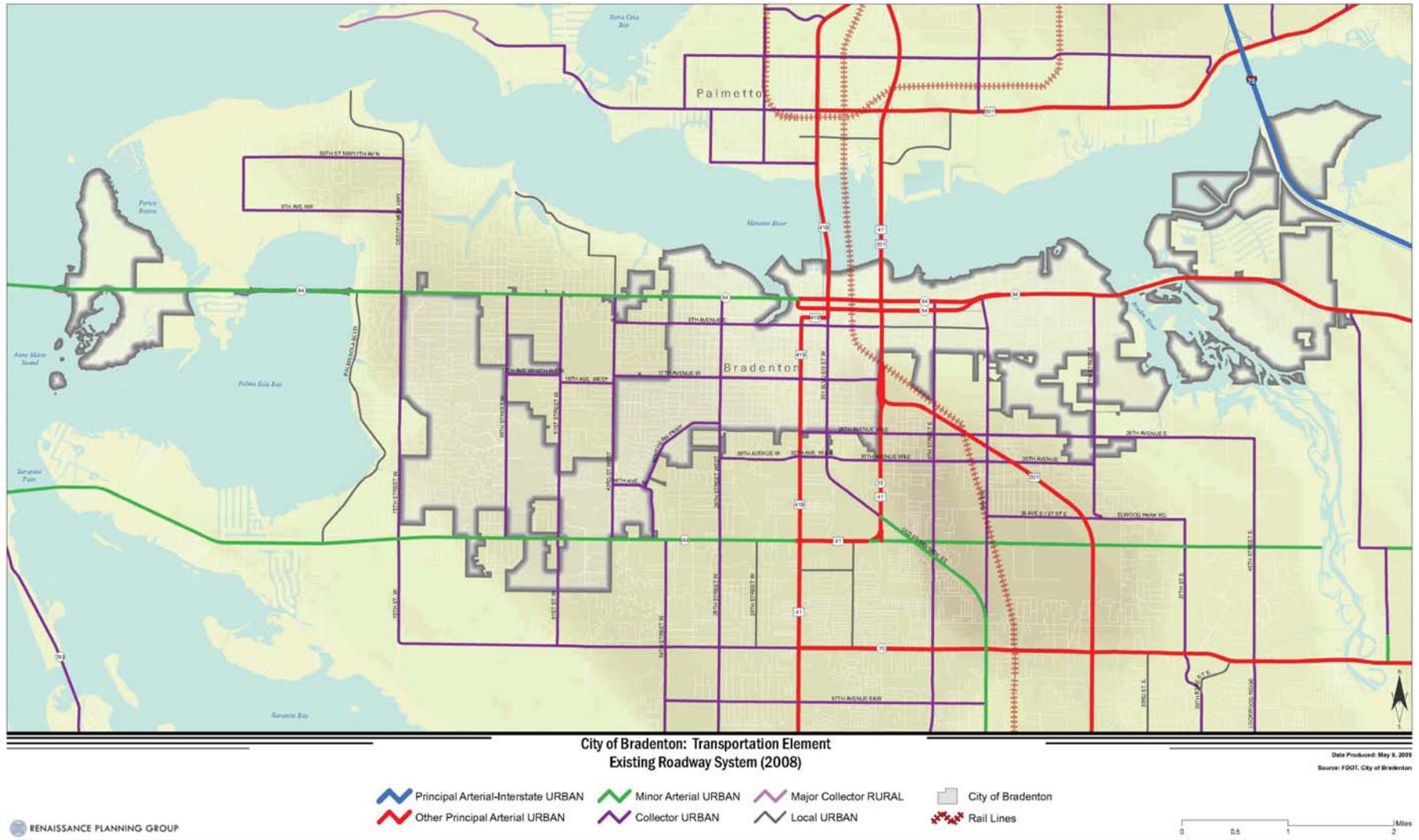
Map TRAN-5: Evacuation Routes



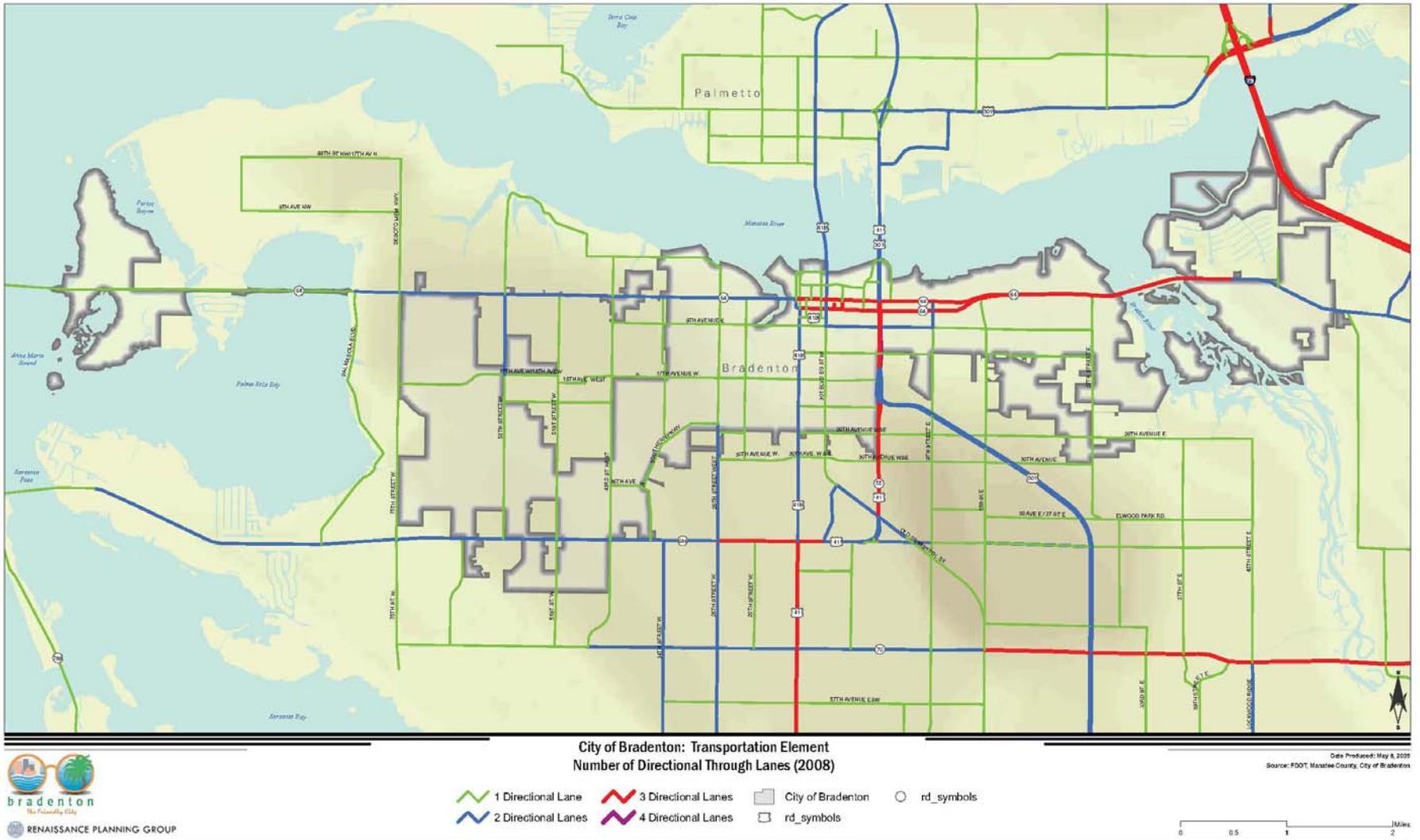
Map TRAN-6: Roadway Maintenance Responsibility



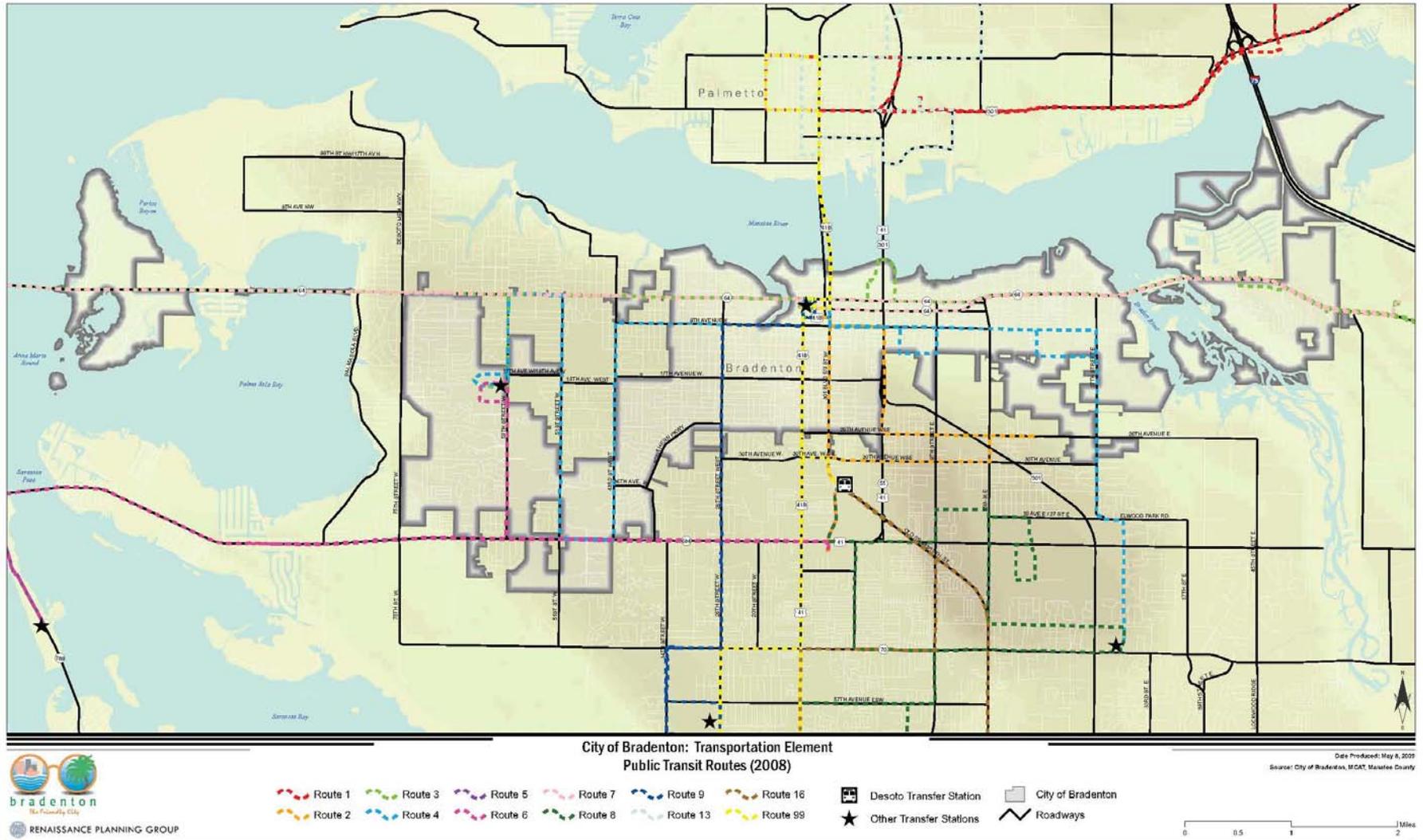
Map TRAN-7: Existing Roadway System (2008)



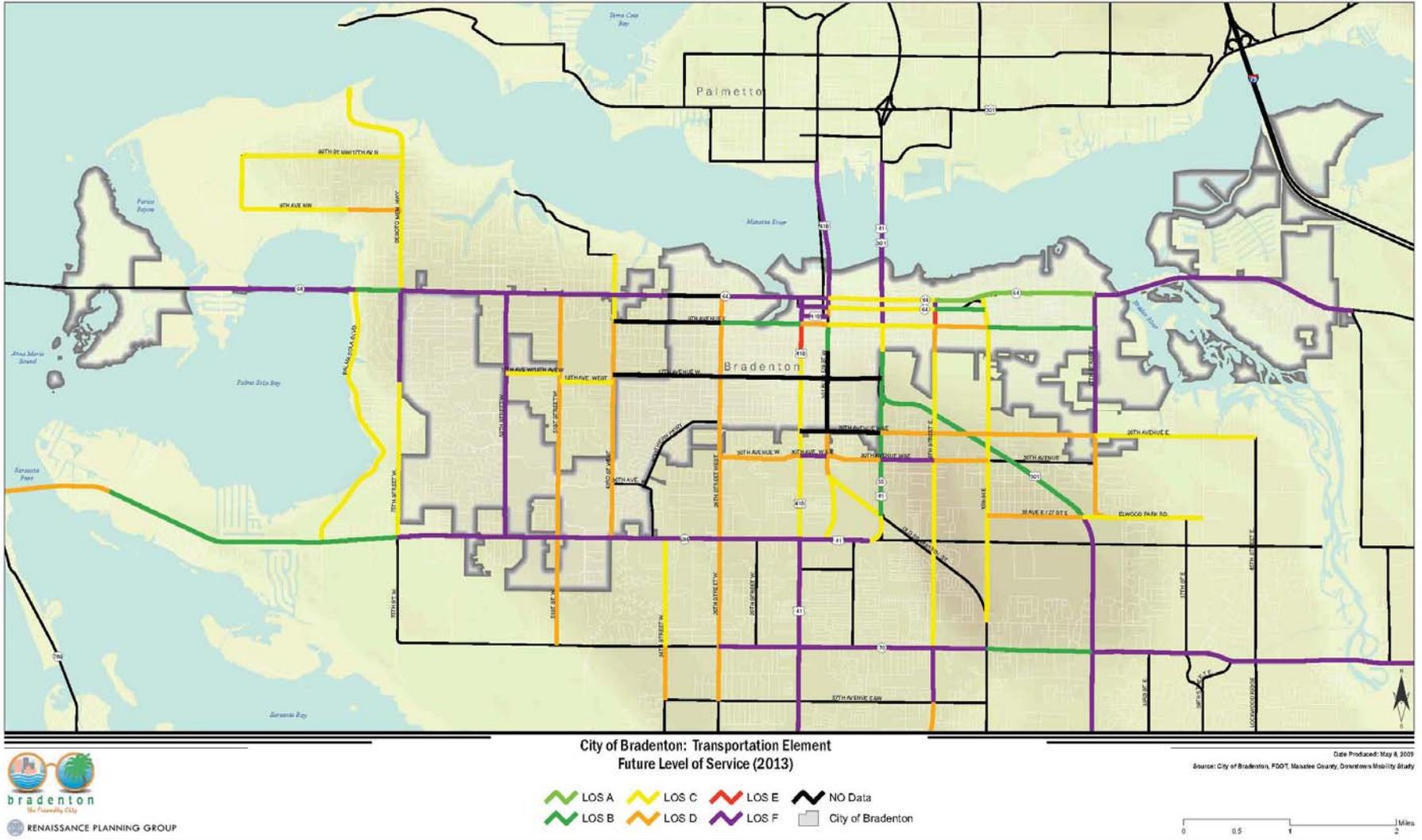
Map TRAN-8: Number of Directional Through Lanes (2008)



Map TRAN-10: Public Transit Routes (2008)



Map TRAN-11: Future Level of Service (2013)



Appendix B:
City of
Bradenton
Roadway LOS,
Average Daily
and PM Peak
Hour Trips;
2007, 2013,
2030

Table B.1: City of Bradenton Existing and Projected Average Daily Trips, PM Peak Hour Trips, and LOS; 2007, 2013, 2030

Street	From	To	Existing (2007) Average Daily	Existing (2007) PM Peak	Peak Service Vol. (2007)	Existing (2007) PM LOS	2013 PM Peak	2013 PM LOS	2030 PM Peak	2030 PM LOS w/ Improv.
75th St W	Manatee Ave	18th Ave W	17,370	1,650	1,460	F	1,815	F	2,975	D
75th St W	18th Ave W	Cortez Rd (SR 684)	18,055	1,715	2,950	C	1,887	C	3,612	F
59th St W	Manatee Ave	17th Ave W	16,595	1,577	1,460	F	1,735	F	2,525	F
59th St W	17th Ave	21st Ave W	16,795	1,596	1,460	F	1,756	F	1,950	F
59th St W	21st Ave W	Cortez Rd (SR 684)	17,709	1,682	1,460	F	1,850	F	2,025	F
51st St W	Manatee Ave	21st Ave W	4,832	459	1,112	C	505	D	1,325	F
51st St W	21st Ave W	Cortez Rd (SR 684)	9,630	915	1,112	D	1,007	D	1,812	F
51st St W	Cortez Rd (SR 684)	53rd Ave W (SR 70)	9,630	915	1,112	D	1,007	D	1,288	F
43rd St W	3rd Ave NW	Manatee Ave	2,506	238	1,112	C	262	C	0	X
43rd St W	Manatee Ave	9th Ave E	7,893	750	1,460	C	825	C	1,112	D
43rd St W	9th Ave E	Cortez Rd (SR 684)	8,827	839	1,112	D	923	D	1,762	F
26th St W	Manatee Ave	9th Ave E	7,090	1,117	0	D	1,229	D	1,462	F
26th St W	9th Ave E	13th Ave W	7,090	1,174	0	D	1,291	D	1,738	F
26th St W	13th Ave W	26th Ave W	7,090	1,174	0	D	1,291	D	1,738	F
26th St W	26th Ave W	Cortez Rd (SR 684)	16,858	1,602	2,212	D	1,762	D	3,138	F
14th St W	Manatee Ave	6th Ave	0	1,485	0	F	1,743	F	2,025	F

Street	From	To	Existing (2007) Average Daily	Existing (2007) PM Peak	Peak Service Vol. (2007)	Existing (2007) PM LOS	2013 PM Peak	2013 PM LOS	2030 PM Peak	2030 PM LOS w/ Improv.
14th St W	6th Ave	9th Ave	0	1,485	0	F	1,768	F	3,908	F
Bus 41	4th St (Palmetto)	Manatee Ave (Bradenton)	0	2,965	0	F	3,451	F	8,800	F
Bus 41 (9th St W)	Manatee Ave	6th Ave	0	2,457	0	F	2,713	F	5,364	F
Bus 41 (9th St W)	6th Ave	9th St W	0	1,477	3,130	C	1,637	D	4,914	F
Bus 41 (8th Ave)	9th St W	14th St W	17,600	1,884	1,460	F	2,088	F	2,859	F
Bus 41 (14th St W)	8th Ave	9th Ave	17,600	1,884	1,460	F	2,243	F	3,908	F
Bus 41 (14th St W)	9th Ave	13th Ave	17,600	1,485	0	E	1,763	E	4,240	F
Bus 41 (14th St W)	13th Ave	17th Ave	22,500	2,409	3,110	C	2,650	C	3,662	F
Bus 41 (14th St W)	17th Ave	26th Ave	22,500	2,409	3,110	C	2,650	C	3,651	F
Bus 41 (14th St W)	26th Ave	Cortez Rd (SR 684)	29,500	2,803	3,390	C	3,083	C	4,368	F
9th St W	9th Ave	13th Ave	0	1,217	0	B	1,344	B	3,225	F
9th St W	13th Ave	17th Ave	0	0	0	X	0	X	0	X
9th St W	17th Ave	26th Ave	0	0	0	X	0	X	0	X
301 Blvd	9th St W	US 41	10,422	990	2,950	C	1,089	C	1,975	C
US 41	Haben Blvd (Palmetto)	Manatee Ave	54,000	4,872	0	F	6,072	F	10,011	F
US 41	Manatee Ave	6th Ave	52,000	4,787	0	F	5,503	F	10,011	F

Street	From	To	Existing (2007) Average Daily	Existing (2007) PM Peak	Peak Service Vol. (2007)	Existing (2007) PM LOS	2013 PM Peak	2013 PM LOS	2030 PM Peak	2030 PM LOS w/ Improv.
US 41	6th Ave	9th Ave	52,000	4,226	0	F	4,814	F	10,011	F
US 41	9th Ave	13th Ave	61,000	4,042	0	C	4,741	C	10,011	F
US 41	13th Ave E	26th Ave E	36,000	3,420	5,080	B	3,762	B	7,013	F
US 41	26th Ave E	301 Blvd	36,000	3,420	5,080	B	3,762	B	6,306	F
9th St E	Manatee Ave	6th Ave	4,521	429	2,950	F	482	F	2,750	F
9th St E	6th Ave	9th Ave	7,274	561	2,950	E	641	E	5,225	F
9th St E	9th Ave	13th Ave	7,967	935	2,950	D	1,370	D	3,462	F
15th St E	Manatee Ave	US 301	10,900	1,036	1,560	C	1,140	C	1,996	F
27th St E	Manatee Ave	13th Ave E	12,638	1,201	1,112	F	1,623	F	2,750	F
SR 64	75th St W	59th St W	31,500	2,993	3,110	D	3,292	F	3,910	D
SR 64	59th St W	51st St W	42,500	4,038	3,110	F	4,456	F	4,944	F
SR 64	51st St W	43rd St W	42,500	4,038	3,110	F	4,456	F	4,944	F
SR 64	43rd St W	34th St W (City Limits)	42,500	4,038	3,110	F	4,456	F	5,486	F
SR 64/Manatee Ave	34th St W (City Limits)	26th St W	0	0	0	X	0	X	0	X
SR 64/Manatee Ave	26th St W	15th St W	0	3,815	0	F	4,212	F	5,977	F
SR 64/Manatee Ave	15th St W	Bus 41	0	2,620	0	E	3,028	F	5,128	F
SR 64/Manatee Ave	Bus 41	US 41	0	1,679	0	C	1,943	C	3,050	F

Street	From	To	Existing (2007) Average Daily	Existing (2007) PM Peak	Peak Service Vol. (2007)	Existing (2007) PM LOS	2013 PM Peak	2013 PM LOS	2030 PM Peak	2030 PM LOS w/ Improv.
SR 64/Manatee Ave	US 41	9th St E	0	1,687	0	C	1,951	C	2,350	C
SR 64/Manatee Ave	9th St E	15th St E	0	1,541	0	A	1,785	A	2,575	A
SR 64/Manatee Ave	15th St E	27th St E	0	1,541	0	A	1,846	A	5,962	F
SR 64	27th St E	Carlton Arms Blvd	41,000	4,334	4,680	D	4,880	F	8,013	F
SR 64	Carlton Arms Blvd	43rd St E	41,000	3,895	3,110	F	4,386	F	7,928	F
SR 64	43rd St E	48th St Ct	43,500	4,133	3,110	F	4,654	F	7,653	F
SR 64	48th St Ct	Morgan Johnson Rd	43,500	4,133	3,390	F	4,654	F	7,653	F
6th Ave	15th St W	9th St W	0	1,823	0	E	2,110	F	2,231	F
6th Ave	9th St W	1st St W	0	1,223	0	C	1,363	C	2,612	C
6th Ave	1st St W	9th St E	0	1,424	0	C	1,572	C	2,312	C
7th Ave	9th St E	15th St E	0	1,955	0	A	2,168	B	2,538	B
9th Ave E	43rd St W	26th St W	0	0	0	X	0	X	0	X
9th Ave E	26TH ST W	22ND ST W	0	656	0	B	724	B	2,600	B
9th Ave E	22ND ST W	14TH ST W	0	656	0	B	724	B	3,075	F
9th Ave E	14TH ST W	9TH ST W	0	680	0	D	751	D	2,488	B
9th Ave E	9TH ST W	1ST ST	0	1,057	0	C	1,167	C	6,238	F
9th Ave E	1ST ST	9TH ST E	0	807	0	C	891	C	6,100	F

Street	From	To	Existing (2007) Average Daily	Existing (2007) PM Peak	Peak Service Vol. (2007)	Existing (2007) PM LOS	2013 PM Peak	2013 PM LOS	2030 PM Peak	2030 PM LOS w/ Improv.
9th Ave E	9TH ST E	15TH ST E	0	788	0	D	870	D	2,738	F
9th Ave E	15TH ST E	27TH ST E	0	788	0	B	870	B	1,500	B
17th Ave W	59th St W	51st St W	3,525	335	1,460	C	369	C	2,075	C
18th Ave W	51st St W	43rd St W	2,445	232		C	255	C	1,875	F
17th Ave W	43rd St W	26th St W	0	0	0	X	0	X	0	X
17th Ave W	26th St W	Bus 41	0	0	0	X	0	X	0	X
17th Ave W	Bus 41	9th St E	0	0	0	X	0	X	0	X
26th Ave	Bus 41	301 Blvd/9th St W	0	0	0	X	0	X	0	X
26th Ave	301 Blvd/9th St W	US 41	0	0	0	X	0	X	0	X
30th Ave W	26th St W	14th St W	7,385	702	1,112	D	1,018	D	1,700	F
30th Ave W	14th St W	301 Blvd/9th St W	13,329	1,266	1,112	F	1,669	F	0	X
30th Ave W	301 Blvd/9th St W	US 41	6,609	628	1,112	C	828	D	1,575	F
SR 684	75th St W	59th St W	39,000	3,705	3,110	F	4,076	F	2,334	F
SR 684	59th St W	26th St W	39,000	3,705	3,100	F	4,076	F	4,176	F

Sources: Manatee County Link Sheet 2007 VOL; Downtown Mobility Study 2008 VOL, FDOT CD 2007.