



2035 Pinellas County Long Range Transportation Plan

Pinellas County
Metropolitan Planning Organization

December 9, 2009



PINELLAS AREA TRANSPORTATION STUDY

2035 LONG RANGE TRANSPORTATION PLAN

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**Adopted December 2009
(Amended September 14, 2011)
(Amended April 11, 2012)
(Amended May 8, 2013)
(Amended November 13, 2013)
(Modified June 11, 2013)**

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views of policy of the U.S. Department of Transportation.

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Appendix B - Tampa Bay Regional Travel Demand Model Documentation

Appendix C - Documentation of Efficient Transportation Decision Making Process

Appendix D - Safety Element

Appendix E - Security Element

1.Introduction

Overview

The Pinellas County Metropolitan Planning Organization (MPO) spent the last two years facilitating a decision-making process for what transportation system improvements should be implemented to provide for the future mobility needs of Pinellas County's residents, workers, and visitors over the next 25 years. The final Pinellas County 2035 Long Range Transportation Plan (LRTP) was adopted by the MPO Board on December 9th, 2009 following a public comment period that began on October 14th. The 2035 Pinellas County LRTP documentation is being presented in several sections:

- Introduction
- Goals, Objectives and Policies
- Plan Context
- Needs Assessment
- Financial Plan
- Projects in the Long Range Transportation Plan
- Roadway Projects
- Transit Projects
- Bicycle and Pedestrian Projects
- Operational Improvements
- Environmental Justice
- Transportation Disadvantaged Program
- Economic Development
- Safety
- Security
- Energy, Air Quality and the Environment
- System Integration and Preservation
- Plan Consistency
- Glossary

The following Appendices are also included:

- Appendix A - FDOT 2035 Revenue Forecast
- Appendix B - Tampa Bay Regional Travel Demand Model Documentation
- Appendix C - Documentation of Efficient Transportation Decision Making Process
- Appendix D - Safety Element
- Appendix E - Security Element



History of MPO

The Pinellas County Metropolitan Planning Organization (MPO) was established in 1977 following the passage of the Federal Highway Act of 1974. It is the responsibility of the MPO to develop plans, policies and priorities that guide local decision making on transportation issues. One of the major tasks includes the development of a 20-year Long Range Transportation Plan (LRTP) and update of the LRTP every 5 years.

The MPO seeks to improve transportation in the county for all principal modes of travel, including mass transit, walking, and bicycling, as well as automobile. The MPO also seeks to facilitate the safe and efficient movement of freight. The MPO prioritizes transportation improvements to address the county's travel needs and allocates federal funding to implement the projects as identified in the Transportation Improvement Program (TIP) and the LRTP.

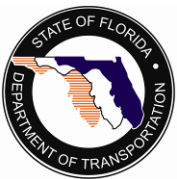
Federal Transportation Legislation

On August 10, 2005, President George W. Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU authorizes the federal surface transportation programs for highways and transit for 2005-2009 and addresses required planning processes that must be undertaken when applying federal and state funds to transportation projects. The LRTP is one of the requirements of Title 23 of the United States Code (U.S.C.). Included in SAFETEA-LU were revisions to Title 23 U.S.C. that affected the requirements for long range transportation planning. SAFETEA-LU builds on the foundation established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21) by supplying the funds and refining the framework for investments needed to maintain and grow Pinellas County's vital transportation infrastructure.

SAFETEA-LU addresses the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective federal surface transportation programs by focusing on transportation issues of national significance, while giving state and local transportation decision makers more flexibility for solving transportation problems in their communities.

Agency Coordination

Florida Department of Transportation



The Florida Department of Transportation (FDOT) has played an integral role in the development of the LRTP. The MPO works with the FDOT on an ongoing basis to plan, scope and program roadway projects on the State Highway System (SHS). For the LRTP, the MPO and the FDOT worked together to put forth a list of roadway projects based on regional and local mobility needs. For the facilities on the Strategic Intermodal System (SIS), FDOT completed a planning process to determine which projects were most needed and able to be funded prior to 2035. The SIS is a statewide network of high-priority transportation facilities, including the state's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. For the LRTP, the MPO incorporated the FDOT implementation schedule for the SIS projects. For projects not on the SIS,

but on the SHS, the MPO established a phasing plan based on available funds and where projects lined up in terms of past priorities, projected future need and whether they have commenced preliminary engineering or right-of-way acquisition. FDOT worked with the MPO in developing revenue projections, estimating project costs, determining the demand for road widening and transit investments by modeling future travel patterns, and reviewing and refining the phasing plans for transportation facilities.

Pinellas Suncoast Transit Authority



The Pinellas County MPO worked with the Pinellas Suncoast Transit

Authority (PSTA) on the development of the long range bus and rail transit network. For the first ten years of the LRTP, the bus network reflects the improvements included in the ten-year 2008 Transit Development Plan (TDP). The MPO and PSTA collaborated on how each individual route in the bus system should be enhanced in terms of headways and hours of service. Enhanced service and expansion of the bus system will require new revenue above and beyond what exists today. The transit funding



discussions of the LRTP have paralleled a funding task force run by PSTA that has been working to identify how much new funding is needed and where that funding will come from. In addition to the discussions about the existing bus network, the MPO engaged the PSTA in design of the future bus and rail transit network, which includes premium bus routes (bus rapid transit, limited stop service and commuter service) and light rail lines that serve intra-county and cross-bay travel into Hillsborough County.

Local Governments

The MPO coordinated directly with local governments in the development of the LRTP. Local government partners were important to the creation and validation of socioeconomic data and participated in the future growth scenario process, which was an important factor in determining the need for transportation investments. Local governments provided information on committed and planned roadway, multimodal and ITS projects. Pinellas County's Office of Management and Budget supported the MPO in producing revenue forecasts for local sources of revenue. The revenue forecasts used in the LRTP to determine cost feasibility were created to be consistent with the latest estimates of the County. Local government staff and elected officials who participated in the advisory committees of the MPO played a crucial role in defining the future transit system concept for bus and rail. The Pinellas Mobility Initiative Steering Committee, the Technical Coordinating Committee and the Citizens Advisory Committee assisted staff in determining what transit investments were needed in the future and how these investments should be prioritized and phased in to maximize the effectiveness and comprehensiveness of the system.

Tampa Bay Area Regional Transportation Authority



The Tampa Bay Area Regional Transportation Authority (TBARTA) adopted its Master Plan in May 2009. During development of the plan, the MPO and PSTA assisted TBARTA in defining what it calls the Mid-Term Regional Network and the Mid-Term Supporting Network. These networks were designed for 2035, which is the same horizon year for the LRTP. The TBARTA Master Plan includes concepts for regional investment corridors for rail and bus. It also includes suggested improvements to the existing local bus system that would support and complement the regional network. The MPO and PSTA worked with TBARTA to reach a consensus on what should be assumed and included in the TBARTA Master Plan and the recommended LRTP transit projects. The MPO attempted to develop recommendations for rail and bus in Pinellas County that were consistent with the Mid-Term Regional Network in the TBARTA Master Plan. The MPO also adjusted the assumptions in the LRTP for the enhancements to the existing bus system to be consistent with the assumptions in the Mid-Term Supporting Network. The MPO verified that the cost estimates for rail transit in the LRTP were within the ranges of the costs in the TBARTA Master Plan. TBARTA assisted the MPO in verifying the assumptions behind these costs. Both the LRTP and the TBARTA Master Plan are designed to be consistent with the recommendations of the PSTA Transit Development Plan.



West Central Florida Chairs Coordinating Committee



The Pinellas County MPO is a member of the West Central Florida MPO Chairs Coordinating Committee (CCC), which is responsible for coordinating transportation planning among the eight counties in a region that extends along Florida's west coast from Sarasota to Citrus County. The CCC is responsible for preparing a 2035 Regional LRTP. This Regional LRTP was prepared concurrently with the Pinellas County 2035 LRTP. The process was iterative, beginning with the CCC defining regional needs and conveying those needs to each MPO. MPOs then developed their local needs in concert with regional needs and, in some cases, regional needs were modified based on local input. The needs were then prioritized from a regional as well as local perspective to develop the final list of regional improvements for the Regional LRTP Cost Affordable Plan. During the development of the Regional LRTP, the MPO worked with the Pasco County MPO and the Hillsborough County MPO on the type, location, timing and phasing of projects that cross county lines.

2.Goals, Objectives and Policies

The Pinellas County Metropolitan Planning Organization’s Long Range Transportation Plan (LRTP) serves as a guide for making decisions regarding the future of Pinellas County’s transportation system through the year 2035. The LRTP outlines goals and objectives, as well as an integrated system plan for all major modes of transportation including automobile travel, public transportation, bicycling, walking and flight. Providing for a safe and energy efficient transportation system is a theme that runs throughout the plan. Promoting “multi-modal” and “intermodal” transportation strategies, as well as “livable community” concepts are a main focus of the 2035 Plan. In addition, the Plan will:

- Ensure coordination of state, regional and local transportation plans;
- Provide for effective movement of people and goods to and from major employment centers and intermodal facilities;
- Raise public awareness about the role and responsibilities of the MPO; and
- Implement plans/programs that are responsive to the transportation needs of Pinellas County citizens.

The 2035 LRTP continues the MPO’s increasing emphasis on alternatives to automobile travel, including mass transit, walking and bicycling. Mass transit is a particular area of focus with the 2035 LRTP as it introduces a proposed rail and premium bus network that takes advantage of advanced technology systems and vehicles. The goals, objectives and policies of the LRTP provide the framework for guiding decision making and the implementation of MPO plans and programs. The planned transportation improvements detailed in the plan are prioritized to meet the goals outlined below.

1. Goal: Provide for a safe, secure and energy efficient “multi-modal” and “intermodal” transportation system that serves the transportation needs of Pinellas County while enhancing the quality of life for its citizens.

Transportation System Performance and Congestion Management

1.1. Objective: The major road network shall operate at acceptable levels of service (LOS) in accordance with Florida Department of Transportation (FDOT) policy and LOS standards established in locally-adopted comprehensive plans.

1.1.1. Policy: Road improvements needed to alleviate deficient LOS conditions shall be identified, prioritized and scheduled in the MPO Five-Year Transportation Improvement Program (TIP).



1.1.2. Policy: Road improvements needed to alleviate deficient LOS conditions projected in 2035 shall be identified in the MPO LRTP.

1.1.3. Policy: Deficient LOS conditions on constrained roads and road segments that have a disproportionately high incidence of vehicle crashes and/or bicycle/pedestrian crashes/fatalities shall be addressed through the implementation of projects identified through the MPO Congestion Management Process. The Congestion Management Process seeks to alleviate these conditions through the implementation of operational and small-scale physical improvements and transportation demand management strategies (e.g. signalization improvements, ride-sharing, and incentives for mass transit use).

1.1.4. Policy: The MPO shall evaluate opportunities to expand the participation of the private sector in the planning and implementation of transportation projects and services.

1.1.5. Policy: The MPO shall support roadway design standards that balance the need to improve operations and traffic-carrying capacity with the economic viability of adjacent land uses.

1.1.6. Policy: The MPO shall provide technical assistance to local governments, as necessary, to implement the countywide concurrency management standards approved by the MPO in 2006.

1.2. Objective: Improve travel conditions and mobility options on constrained road corridors and other facilities afflicted with long-term level of service deficiencies.

1.2.1. Policy: The MPO shall develop congestion mitigation plans as a primary tool of the Congestion Management Process to identify and implement mobility solutions such as operational and small-scale physical improvements, transit and transportation demand management strategies for backlogged and constrained roads.

1.2.2. Policy: The MPO shall provide a dedicated source of funding for the implementation of Congestion Management Process strategies through the Transportation Improvement Program development process.

1.3. Objective: Relieve traffic congestion on US Highway 19 while minimizing the impacts of development projects within the corridor to the fullest extent possible.

1.3.1. Policy: The MPO shall support closure of nonconforming access points (i.e., driveway connections) where more appropriate access can be provided as properties are developed and re-developed.

1.3.2. Policy: The MPO shall support local land development regulations that require joint access with neighboring properties and access to side streets and service roads within the corridor, where feasible.

1.3.3. Policy: The MPO shall coordinate with property owners along a corridor to implement roadway design features that support commercial and other non-residential land uses along the corridor.

1.3.4. Policy: The MPO shall encourage local governments to adopt regulatory policies that require sidewalk installation on all new development and redevelopment sites in the corridor. Local regulations requiring sidewalk connections between bus stops, sidewalks and proximate buildings, including buffered walkways traversing through parking areas, shall also be encouraged.

1.3.5. Policy: In areas where bicycles cannot be safely accommodated in the corridor, the LRTP shall provide for bicycle facilities along or on parallel corridors with adequate east-west connections to allow for bicycle access to properties abutting the roadway.

1.3.6. Policy: The MPO shall continue to work with the Pinellas Suncoast Transit Authority (PSTA), law enforcement agencies, the Florida Department of Transportation and local governments to enhance safety for pedestrians, bicyclists and transit users in the U.S. 19 corridor.

1.3.7. Policy: The MPO shall continue to work with FDOT, local governments, transportation and law enforcement agencies to implement operational and structural improvements on US Highway 19 identified by the US Highway 19 Task Force and approved by the MPO policy board.

1.3.8. Policy: The MPO shall support PSTA's implementation of improved transit service in the corridor to increase the number of trips served by transit.

Public Transportation

1.4. Objective: *Mass transit use shall be encouraged and promoted in order to increase ridership while reducing the number of single-occupant vehicles on the county's roadways and as a primary means of travel for the transportation disadvantaged population.*

1.4.1. Policy: The MPO shall assist and support the efforts of the PSTA to implement and achieve the goals of its Ten-Year Transit Development Plan and to carry out recommended actions derived from related studies.



1.4.2. Policy: The MPO shall encourage local governments to include transit-friendly and supportive design standards in local land development codes to ensure safe passage for transit users from bus stops to proximate buildings and to encourage transit use.

1.4.3. Policy: The MPO shall encourage FDOT and local governments to include pull-out bays at transit stops on major roadways in the design of road improvement projects and on re-surfacing projects, where feasible, to provide a safe boarding area for transit riders while limiting the impedance of oncoming vehicular traffic.

1.4.4. Policy: The MPO shall continue to ensure that economically disadvantaged and physically impaired citizens of Pinellas County have access to cost-effective and efficient transportation services. The MPO shall carry out this policy under its responsibilities as the Designated Official Planning Agency (DOPA) and Community Transportation Coordinator (CTC) in accordance with Chapter 427, F.S., Rule 41-2, F.A.C., and in accordance with the goals, objectives and strategies set forth in the Five-Year Transportation Disadvantaged Program Service Plan.

1.4.5. Policy: In its role as the Pinellas County CTC, the MPO shall provide, when appropriate, 31-day unlimited use PSTA bus passes (i.e., GO Cards) to Transportation Disadvantaged Program customers as a cost effective way of providing needed transportation and increasing clients' overall mobility.

1.4.6. Policy: The MPO shall continue to work with local governments, communities and PSTA to identify and assess transit needs in the county.

1.4.7. Policy: The MPO shall work with the Tampa Bay Area Regional Transportation Authority (TBARTA) to develop and implement a regional master plan for public transit.

1.4.8. Policy: The MPO shall continue to provide a forum for discussion of countywide transit governance issues and will work with the county's legislative delegation, PSTA and the Board of County Commissioners to implement transit governance policies.

1.4.9. Policy: The MPO shall work with other governments/counties to identify projects for Jobs Access Reverse Commute (JARC) and New Freedom funding.

1.4.10. Policy: The MPO shall include the public, local governments, the private sector, nonprofit agencies and PSTA in the development of plans addressing the needs of transportation disadvantaged populations.

1.4.11. Policy: The MPO shall support/encourage provision of Americans with Disabilities Act (ADA)-compliant features and amenities at transit stops that accommodate the needs of persons with disabilities and the elderly.

1.5. Objective: Develop a long range intra-county and regionally accessible transit system in Pinellas County that features advanced technology express service to intermodal transportation facilities, major employment centers, recreational points of interest, tourist destinations and significant commercial activity.

1.5.1. Policy: The MPO shall continue to prioritize funding to support the planning and implementation activities associated with the Pinellas Mobility Initiative, which includes rail, guideway transit, expanded trolley service, bus rapid transit (BRT) strategies and other transportation improvements.

1.5.2. Policy: The MPO shall include private sector participation in the planning and implementation of strategies associated with the Pinellas Mobility Initiative.

1.5.3. Policy: The Pinellas Mobility Initiative shall be utilized to identify and implement long-term solutions to the mobility needs of Pinellas County residents and visitors.

1.5.4. Policy: The MPO shall work with local governments to ensure that mobility strategies and local land use plans are compatible and mutually supportive.

1.5.5. Policy: The MPO shall work with the PSTA, the Board of County Commissioners and the business community to develop a long term funding strategy for transit.

Transportation System Management and Operations

1.6. Objective: Protect roadway capacity, optimize operating efficiency, enhance safety of transportation facilities and reduce congestion through the application of Intelligent Transportation Systems (ITS), system management and demand management strategies.

1.6.1. Policy: The MPO shall support the implementation of ITS strategies in Pinellas County that are consistent with LRTP goals, objectives and policies.



1.6.2. Policy: The MPO shall ensure that ITS projects are consistent with the countywide ITS architecture, and that the countywide ITS architecture is consistent with the national, state and regional ITS architectures.

1.6.3. Policy: The MPO shall ensure coordinated ITS operations, primarily through the ITS Advisory Committee, which includes identifying and involving appropriate stakeholders in updating the countywide architecture and each proposed ITS deployment.

1.6.4. Policy: The MPO shall facilitate agreements on the roles and responsibilities among ITS stakeholders, including agreements on organization/management, staffing, operations control, data sharing and protocol.

1.6.5. Policy: The MPO shall partner with information service providers and other stakeholders to collect and distribute pre-trip and route guidance information, including available transit and ridesharing options, real-time roadway and parking conditions and directions to destinations.

1.6.6. Policy: The MPO shall provide policy guidance, coordination and implementation funding to local government traffic departments and the Florida Department of Transportation to reduce travel delays along I-275 and other major roadways in the county using ITS deployments that optimize traffic flow by observing and responding quickly to actual traffic conditions.

1.6.7. Policy: The MPO shall provide policy guidance, coordination and implementation funding to local government traffic departments and the Florida Department of Transportation, emergency service departments and state and local police departments in their efforts to manage incidents using cooperatively developed incident response plans that are supported by ITS strategies capable of detecting incidents quickly.

1.6.8. Policy: The MPO shall provide implementation support to the PSTA in focusing on improving operations using ITS strategies, such as computer-assisted control of vehicles, automated routing and scheduling, electronic driver and maintenance management, improved internal communication and bus rapid transit strategies.

1.6.9. Policy: MPO shall work with the FDOT to ensure that any future electronic fare and/or parking payment transaction technologies are compatible with the department's Sun Pass system.

1.6.10. Policy: The MPO shall work with and support the FDOT as it deploys commercial vehicle operations technologies, such as electronic clearance and roadside safety inspection.

1.6.11. Policy: The MPO shall provide policy guidance, coordination and implementation funding to emergency service departments in the county to develop an integrated emergency vehicle management system that is able to receive route guidance information from traffic and incident management systems.

1.6.12. Policy: MPO shall coordinate with the Primary Control Center in archiving data collected by each of the ITS deployments in such a way that ensures the integrity of the data, allows stakeholders to retrieve data and provides information needed by the MPO's Congestion Management Process and other functions.

1.6.13. Policy: The MPO shall ensure that decisions regarding traffic signal installations and median opening requests are balanced between impacts on surrounding neighborhoods and compliance with federal warrant criteria or applicable state and local roadway access rules and regulations.

1.6.14. Policy: The MPO shall maintain consistency with the regional ITS architecture consistent with ITS Rule 940.

1.6.15. Policy: The MPO shall develop and implement a process to ensure that all new projects comply with the regional ITS architecture.

1.6.16. Policy: The MPO shall support the implementation of the Master Plan for the countywide Advanced Traffic Management System.

1.6.17. Policy: The MPO shall ensure that interim ITS projects are implemented consistent with the long term concept of operations that includes coordinating and/or directing all ITS functions in a Centralized Primary Control Center.

1.6.18. Policy: The MPO shall maintain and provide a system for tracking projects (i.e., roadway construction, utility projects, drainage projects, etc.) that may impact roadway operations.

1.6.19. Policy: The MPO shall develop a master plan for countywide implementation of ITS strategies which will include all ITS market packages consistent with regional and national architectures.

Transportation Demand Management

1.7. Objective: Reduce traffic congestion and positively impact air quality by decreasing the use of single occupant vehicles (SOV) at peak hours.

1.7.1. Policy: The MPO shall work with local governments, transportation demand management (TDM) agencies and FDOT to develop vehicle trip (VT) reduction and vehicle miles of travel (VMT) reduction goals.

1.7.2. Policy: The MPO shall assist and support the efforts of Bay Area Commuter Services (BACS) to implement and achieve the goals of its Long Range Transportation Demand Management Plan and to carry out recommended actions derived from related studies.



1.7.3. Policy: The MPO shall assist and encourage the efforts of local TDM agencies by providing technical and funding support for promotion of alternatives to SOV travel, including carpool, vanpool, transit, walking, bicycling, telecommuting and variable work schedules.

1.7.4. Policy: The MPO shall continue to participate in events and other activities sponsored by local transportation-related agencies that support and facilitate the use of alternatives to driving alone by commuters and other travelers (e.g. Commuter Choices Week).

1.7.5. Policy: The MPO shall work with transportation agencies and local governments to encourage non-work trips to be made at times other than peak to assist in the reduction of traffic congestion during those periods.

1.7.6. Policy: The MPO shall work with transportation agencies and local governments to encourage all members of the public to use public transportation and/or other forms of ridesharing (i.e., carpool and vanpool) whenever possible.

1.7.7. Policy: The MPO shall encourage and participate in public-private partnerships and develop incentives to encourage employer, developer and other organizations' participation in meeting the mobility needs of County residents, visitors and businesses.

1.7.8. Policy: The MPO shall work with transportation-related agencies and local governments to encourage, promote, and support employer participation in the Qualified Transportation Fringe Benefit allowed under the federal IRS Code to provide tax-deductible public transportation benefits to their employees.

1.7.9. Policy: The MPO shall work with local governments, TDM agencies, employers and developers to encourage and implement effective parking management strategies, including preferential parking for carpools and vanpools, shared use parking and variable parking pricing.

1.7.10. Policy: The MPO shall provide policy direction and implementation support to city and county traffic departments, TDM agencies, FDOT and state/local emergency and police departments to maintain the flow of people and goods during major reconstruction of highway facilities.

1.7.11. Policy: The MPO shall continue to work with the Pinellas County School Board, private schools and BACS to expand the school based carpool program and to encourage the use of non-motorized modes to reduce traffic congestion in and around schools and improve the safety of the children.

1.7.12. Policy: The MPO shall encourage the development of a telecommunication infrastructure to provide universal service access to all citizens for expanding educational opportunities via distance learning, obtaining medical information via telemedicine, increasing commerce via the purchase of goods by online shopping, and creating job opportunities via telework. These elements will foster economic development by helping citizens and businesses move intellectual property, data and information electronically. This policy is intended to reduce or even eliminate the need to travel for these purposes.

1.7.13. Policy: The MPO shall encourage opportunities for advancement in telecommunications and other technologies and their impacts on travel behavior to identify other means for meeting some of the transportation needs of County residents and businesses.

1.7.14. Policy: The MPO shall encourage the business community to adopt telecommunication solutions such as web conferencing and telecommuting in order to substitute for some of their needs to travel by private vehicle and/or complement the transportation needs.

Transportation System Performance Monitoring

1.8. Objective: Develop and provide information and criteria regarding the performance of the county's transportation system, including roadways, public transportation and bicycle and pedestrian facilities in order to identify where capital improvement needs are most pronounced and to develop performance standards by which to measure the effectiveness of transportation projects and programs.



1.8.1. Policy: The MPO shall continue to prepare and adopt the annual Level of Service Report to identify operating conditions on the county's major roads, including level-of-service (LOS) grades and volume-to-capacity (v/c) ratios.

1.8.2. Policy: The MPO shall continue to develop and expand duration of congestion information on roads with substandard LOS grades to determine the length of time at which they operate under congested conditions.

1.8.3. Policy: The MPO shall work with PSTA and local governments to develop an appropriate quality LOS standard for mass transit as required by Rule 9J-5, F.A.C., for local government concurrency management systems.

1.8.4. Policy: The MPO shall work with FDOT and local governments to develop mobility performance indicators for bicycle and pedestrian facilities for local government comprehensive plans.

1.8.5. Policy: The MPO shall work with local governments to develop mobility goals, as required by Rule 9J-5, F.A.C. on major roads operating under deficient level of service conditions with no mitigating improvements scheduled or planned.

Environmental Protection and Neighborhood Preservation

1.9. Objective: *Ensure the protection of valued natural, cultural and community resources from the impacts of transportation projects and actions.*

1.9.1. Policy: The MPO shall continue to encourage and support conversion of transit and other public/private agency vehicle fleets to alternative fuels such as compressed natural gas and battery-powered systems.

1.9.2. Policy: The MPO shall continue to support state and local efforts designed to reduce the adverse impacts of vehicle greenhouse emissions.

1.9.3. Policy: The MPO shall continue to ensure conformity of the LRTP and TIP with the State Implementation Plan and Clean Air Act Amendments.

1.9.4. Policy: The MPO shall support the implementation of projects that minimize disruption to established communities.

1.9.5. Policy: The MPO shall encourage and support the use of traffic calming measures in residential and community focus areas, where appropriate.

1.9.6. Policy: The MPO shall continue to seek a balance between the provision of transportation capacity and community impact issues in the development and implementation of the TIP.

1.9.7. Policy: The MPO shall support and encourage the efforts of state and local agencies to include landscaping, art work and other aesthetic features in transportation projects.

1.9.8. Policy: The MPO shall ensure the protection of established neighborhoods from the impacts of motorized traffic.

1.9.9. Policy: The MPO shall evaluate the effects of candidate projects for the LRTP relative to historic, natural, cultural and community resources in coordination with federal, state and local agencies and the public, and through participation in the Florida Efficient Transportation Decision Making (ETDM) Process.

1.9.10. Policy: The MPO shall encourage FDOT and local governments to employ context sensitive solutions in the planning and development of transportation projects.



Transportation System Safety and Maintenance

1.10. Objective: *Ensure the safe accommodation of motorized and non-motorized traffic while reducing the incidence of vehicular conflicts within the county's major transportation corridors.*

1.10.1. Policy: The MPO shall continue to support and participate in the activities of the Community Traffic Safety Team in an effort to further the MPO's policies and programs relating to motorist, bicycle and pedestrian safety.



1.10.2. Policy: The MPO shall continue to sponsor Pedestrian Awareness Day each year to promote responsible driving and pedestrian activity in proximity to local schools on the day when Daylight Saving Time takes effect.

1.10.3. Policy: Needed improvements to hurricane evacuation routes and to facilities providing access to these routes shall be appropriately prioritized in the development and scheduling of projects included in the TIP.

1.10.4. Policy: The MPO shall participate in and support all hazards evacuation planning activities in coordination with local, regional, state and federal agencies.

1.10.5. Policy: Needed improvements to roadways with a high number of crashes shall be appropriately prioritized in the development and scheduling of projects included in the TIP.

1.10.6. Policy: The MPO shall work with the local governments, FDOT and law enforcement agencies to identify high crash locations in order to initiate the necessary improvements on the affected roadways and/or intersections.

1.10.7. Policy: The MPO shall continue to maintain the regional crash database to monitor accident occurrences.

1.10.8. Policy: The MPO shall continue to monitor pedestrian and bicycle related crashes and work with local law enforcement agencies, local governments and FDOT to implement measures (e.g. installation of signs and speed humps) to reduce accident occurrence.

1.10.9. Policy: The MPO shall support the installation of street lighting along major roadways, and in areas occupied by transit terminals, bus stops and where heavy bicycle and pedestrian activity occurs.

1.10.10. Policy: The MPO shall continue to support the efforts of state and local governments to develop and implement design standards for on-road bicycle facilities.

1.10.11. Policy: The MPO shall take proactive measures to ensure that bicyclists are safely accommodated on all roads.

1.10.12. Policy: The MPO shall continue to educate motorists and bicyclists on the need to share the road safely.

1.10.13. Policy: The MPO shall continue to review roadway design plans, including resurfacing plans to ensure the needs of all modes, including pedestrian and bicycle, are addressed.

1.10.14. Policy: The MPO shall continue working with local communities to develop and implement a countywide trail network connected by bicycle friendly roadways.

1.10.15. Policy: The MPO shall assist the FDOT and its safety partners in their goal as stated in the statewide Florida Strategic Highway Safety Plan to improve the safety of Florida's surface transportation system by achieving a five percent annual reduction in the rate of fatalities and serious injuries beginning in 2007.

1.11. Objective: Preserve the existing transportation system to the fullest extent possible.

1.11.1. Policy: The MPO shall encourage local and state agencies to maintain adequate funding programs for the operation and maintenance of the transportation system, including roads, transit and bicycle and pedestrian facilities.

1.11.2. Policy: The MPO shall ensure that adequate operations and maintenance funds are identified when determining the cost-feasibility of projects included in the LRTP and the TIP.

1.12. Objective: Increase the ability of the transportation system to support homeland security and to safeguard the personal security of motorized and non-motorized users.

1.12.1. Policy: The MPO shall continue to support active coordination and effective working relationships for safety and security improvements and solutions among the MPO, agency partners at the federal, state and local levels, private sector and general public.

1.12.2. Policy: The MPO shall assist local, regional and state transportation and emergency management partners in identifying vulnerable assets and prevention strategies, and planning for an appropriate and coordinated response.

1.12.3. Policy: The LRTP shall be consistent with the Regional Transit Security Strategy.

1.12.4. Policy: The MPO will encourage committed and sustained efforts to achieve federal, state and local security objectives through engineering, enforcement, education, and emergency response.

1.12.5. Policy: The MPO shall ensure that ITS project designs and procedures include mitigation for inadvertent or intentional disruption due to such things as equipment failure and security breaches.

2. Goal: Promote "livable community" concepts that allow for people to travel freely and safely in the urban environment through non-motorized travel modes such as walking, bicycling and skating.

Livable Communities

2.1. Objective: Develop and maintain urban environments in Pinellas County that encourage pedestrian and bicycle travel and transit use while providing quality of life experiences for residents and visitors.

2.1.1. Policy: The MPO shall work with local governments to implement Livable Communities Model Objectives and Policies, through their comprehensive plans and site plan



review process.

2.1.2. Policy: The MPO shall work with local governments to implement and develop land development regulations consistent with MPO Livable Communities Model Land Development Code, through their site plan review process.

2.1.3. Policy: The MPO shall work with FDOT and local governments in the development of road construction plans to support a more walkable, transit and bicycle friendly environment.

2.1.4. Policy: The MPO shall encourage the implementation of livable community improvements such as landscaped sidewalks, bus shelters and trail connections through the Transportation Impact Fee Ordinance as well as local land development codes.

2.1.5. Policy: The MPO shall support and encourage development patterns and land development codes that integrate the physical environment with the county's park system, trails and natural resources.

2.1.6. Policy: The MPO shall provide a forum for coordination and implementation of improvements to the Gulf Boulevard corridor, including pedestrian safety, community livability, transit service enhancements, etc.

Bicycle and Pedestrian Travel

2.2. Objective: Increase bicycle and pedestrian travel throughout Pinellas County for commuting to employment and school sites as well as for recreational purposes.

2.2.1. Policy: The MPO shall continue to promote the expansion of the Fred Marquis Pinellas Trail and community trails throughout Pinellas County to increase accessibility of these facilities to a greater number of people and to increase the connectivity of these facilities with major destination points. These include parks, shopping centers, major employment sites, hospitals and schools.



2.2.2. Policy: The MPO shall facilitate the expansion of sidewalks in Pinellas County through the identification of locations where they are most needed. These include areas along major roads (including roads classified in local comprehensive plans as collectors and arterials) where “gaps” remain between existing sidewalk links or between an existing sidewalk and a major destination point such as those listed in policy 2.2.1.

2.2.3. Policy: The MPO shall encourage local governments to require or incentivize developers to provide on-site amenities such as shower facilities and sheltered bicycle racks for their employees to accommodate bicycling as a form of commuter travel.

2.2.4. Policy: The MPO Bicycle Advisory Committee (BAC) and Pedestrian Transportation Advisory Committee (PTAC) shall participate in the review of roadway design plans, as appropriate, to ensure that accommodations are included for bicyclists and pedestrians.

2.2.5. Policy: The MPO shall encourage FDOT and local governments to include dedicated bicycle lanes and sidewalks in roadway improvement or resurfacing projects.

2.2.6. Policy: The MPO shall encourage sidewalk construction from school sites to surrounding neighborhoods where the Pinellas County School Board no longer provides courtesy busing service to students within a two-mile radius of their local school.

2.2.7. Policy: The MPO shall continue to work with the Pinellas County School Board to ensure safe access to and around schools.

2.2.8. Policy: The MPO shall support the PSTA in its promotion of the Bikes on Buses Program and in the provision of bicycle parking at transfer facilities and transit stops.

2.3. Objective: Ensure the safe movement of bicyclists, pedestrians, inline/roller skaters and other non-motorized modes of travel.

2.3.1. Policy: The MPO Trail Network Plan map, as depicted in the LRTP, shall be used as the policy document to define the location and type of trails throughout Pinellas County as well as regional connections to adjacent counties.

2.3.2. Policy: The Fred Marquis Pinellas Trail, the Progress Energy Trail, the Friendship Trail and other major trails shall be generally defined as 15-foot wide paved facilities that will accommodate bicyclists, pedestrians and skaters. Overpasses may be designed 12 feet wide.

2.3.3. Policy: Community Trails shall be constructed less than 15 feet wide if necessary to improve the compatibility of the facilities with the surrounding community and environment.

2.3.4. Policy: The MPO supports the design of trail overpasses and underpasses in a manner that is compatible with the surrounding environment.

2.3.5. Policy: The MPO encourages the location and design of facilities in a manner that provides maximum connectivity to origins and destinations of trail users.

2.3.6. Policy: The MPO supports controlled access to and from trails to allow for efficient and safe movement along these facilities.

2.3.7. Policy: Trail facilities may often traverse or interact with roads or sidewalks and with adjacent development. In such cases, the MPO encourages these facilities and developments to be designed in a manner that is compatible with the trails and that improves the efficiency of the trail in combination with surrounding land uses and facilities.

2.3.8. Policy: Trail facilities shall have safe transitional connections to sidewalks and other non-motorized transportation facilities such as on-street bicycle lanes. This includes the installation of signs and other visual aids designed to facilitate the safe transition from the trail to and from another transportation facility.

2.3.9. Policy: The MPO shall engage in an active education program to ensure that trail users understand how to travel safely on the trail.

2.3.10. Policy: The MPO shall engage in a public outreach program that facilitates community interest and involvement in trail facilities to ensure the maximum benefit to the community, their continued upkeep, and security interests.

2.3.11. Policy: Trail amenities such as parking, benches and water fountains shall be installed, where feasible, at strategic locations and in conjunction with other community facilities, wherever possible.

2.3.12. Policy: The MPO shall work with its local and regional partners to identify suitable regional trail connections to the MPO's planned trail network (e.g. connections between the Courtney Campbell Causeway Trail and Progress Energy Trail and connections between the Pinellas Trail and the Starkey Wilderness Trail).

2.3.13. Policy: The MPO shall prioritize the planning and implementation of the Pinellas Trail Loop that includes the Fred Marquis Pinellas Trail, the Progress Energy Trail, the North Bay Trail and other connecting segments.

2.3.14. Policy: The MPO shall encourage state and local governments to use tested and proven sensor recognition technology to detect the presence of and facilitate the movement of bicyclists and pedestrians at signalized intersections.

2.4. Objective: Develop an interconnected network of on-street bicycle lanes to ensure the safe movement of bicyclists on the county's major roadways.

2.4.1. Policy: The MPO shall encourage the installation of bicycle lanes along roadways throughout Pinellas County to ensure the safety of bicyclists as they travel to and from their destinations.

2.4.2. Policy: The location and type of existing and planned bicycle lane facilities in Pinellas County are identified in the Bicycle Lane Plan map, a component of the LRTP.

2.4.3. Policy: The MPO supports the installation of bicycle lanes as either designated or undesignated, with appropriate signs and surface markings for the designated lanes. However, the designated lane is the approved priority.

2.4.4. Policy: Urban design for designated bicycle lanes shall be at least four feet wide paved surfaces. Rural design for designated bicycle lanes shall be at least five feet wide paved surfaces. Signs shall be installed to identify these lanes and to increase the awareness of motorists of the presence of bicyclists.

2.4.5. Policy: Striping shall be installed to separate undesignated bicycle lanes from vehicular traffic in a manner that will provide adequate room for bicyclists to operate within the lane. Signs shall be installed to increase the awareness of motorists that bicyclists will be using the facility.

2.4.6. Policy: In cases where neither designated nor undesignated bicycle lanes exist, but where bicyclists are present, signs or other appropriate pavement markings shall be installed to increase the awareness of motorists that bicyclists will be using the road.

2.5. Objective: Ensure the safe movement of people along roadways and within the areas of their origin and destination.

2.5.1. Policy: Pedestrian facilities such as sidewalks and road crossings shall be provided on all roads that are classified as arterial or collector facilities.

2.5.2. Policy: Sidewalks shall be designed to maximize pedestrian safety within road rights of way while providing a comfortable experience for walkers.

2.5.3. Policy: Pedestrian crossings in road corridors shall be designed to place a priority on the safe movement of pedestrians. These crossings shall also be designed to utilize advanced technology to facilitate safe passage for pedestrians.

2.5.4. Policy: The MPO shall encourage adequate pedestrian access between building entrances and sidewalks located along adjacent roadways.

2.5.5. Policy: Private and public land development projects shall be designed in a manner that allows for safe pedestrian movements between buildings and parking lots and other common areas.

2.5.6. Policy: Expansion of the county's sidewalk network shall emphasize the connection of these facilities to major activity centers such as malls, schools and public buildings.

2.5.7. Policy: Constructing sidewalks to fill gaps or missing sections along major roadways shall be a priority of capital improvement programs regarding sidewalk facilities.

2.6. Objective: Implement bicycle and pedestrian safety programs.

2.6.1. Policy: The MPO shall engage in an education program to ensure that both bicyclists and motorists understand standard safety practices and rules as they apply to the use of bicycle lanes, trails and facilities.

2.6.2. Policy: The MPO shall work with state and local governments, law enforcement agencies and others to carry out public education activities to ensure that pedestrians and motorists understand the laws and safe practices concerning pedestrian travel. This is intended to support and encourage a safer environment for motorists as well as pedestrians and to bring emphasis to the rights of pedestrians in designated crosswalks.

2.6.3. Policy: The MPO shall, in coordination with the FHWA, the FDOT, and local agencies, develop and coordinate the implementation of a Pedestrian Safety Action Plan for Pinellas County.

3. Goal: Contribute to the economic vitality of Pinellas County through the provision of a transportation system that provides for the effective movement of people and goods to and from major employment centers and intermodal facilities.

Economic Development, Goods Movement and Intermodal Facilities

3.1. Objective: Facilitate the effective movement of goods in Pinellas County.

3.1.1. Policy: The MPO shall identify roadways suitable for truck movements in the LRTP.

3.1.2. Policy: The MPO shall maintain a current map of designated truck routes that will be updated periodically as new roadways are constructed through the implementation of the TIP.

3.1.3. Policy: In the staging of projects in the LRTP and developing priorities for funding in the TIP, the MPO shall give priority to improvements needed to improve access to intermodal facilities, such as the St. Petersburg Clearwater International Airport, including access roads to such facilities.

3.1.4. Policy: The MPO shall participate in the development and update of intermodal facility (e.g. St. Petersburg-Clearwater International Airport and PSTA bus terminals) master plans and related planning activities.



3.1.5. Policy: During the development of the LRTP and the TIP, the MPO will prioritize roadway capacity projects that serve existing and future employment centers as identified in the local comprehensive plans.

3.1.6. Policy: The MPO shall work with PSTA and FDOT to provide enhanced transit service to existing and future employment centers through reduction in transit headways, implementation of passenger amenities and expansion of service.

3.1.7. Policy: The MPO shall work with the business community to more accurately determine their transportation service and facility needs and will work with the various implementing agencies and service providers such as PSTA and BACS to respond to those needs.

3.1.8. Policy: The MPO shall consider Florida's Strategic Intermodal System Plan, as necessary, in establishing planning and funding priorities.

3.1.9. Policy: The MPO shall coordinate its long range planning activities with land use, economic development and growth management agencies.

4. Goal: Ensure coordination of state, regional and local transportation plans.

Intergovernmental Coordination

4.1. Objective: *The MPO Long Range Transportation Plan and TIP shall be consistent with the Florida Transportation Plan, local government comprehensive plans and the capital improvement programs of FDOT and PSTA.*



4.1.1. Policy: Annual TIPs and subsequent amendments shall reflect the adopted capital improvement programs of the local governments, the St. Petersburg-Clearwater International Airport, PSTA's Transit Development Plan and the FDOT District 7 Work Program.

4.1.2. Policy: The Long Range Transportation Plan shall be consistent with the capital improvement programs and comprehensive plans of the local governments, PSTA's Transit Development Plan and the Florida Transportation Plan.

4.1.3. Policy: Through its advisory committees, the MPO shall seek and incorporate input from local governments, FDOT, PSTA, the Pinellas County School Board, BACS, the Tampa Bay Regional Planning Council and other agencies in the process of developing data, analysis, goals, objectives and policies necessary to update the LRTP.

4.1.4. Policy: The MPO shall provide data and analysis necessary to support local comprehensive planning efforts.

4.1.5. Policy: The LRTP shall be developed utilizing the Regional Transportation Analysis (RTA) transportation forecasting model.

4.1.6. Policy: The LRTP shall be consistent with regional transportation plans, including the Strategic Regional Policy Plan, Tampa Bay Area Regional Transportation Authority Master Plan, the Regional LRTP and the Regional Congestion Management Process.

4.1.7. Policy: The MPO shall coordinate and participate in the Chairs Coordinating Committee (CCC) and the long range planning activities of the CCC to ensure those plans and initiatives are compatible with the MPO's planning initiatives.

4.1.8. Policy: The MPO shall coordinate its air quality planning efforts with other public and private agencies (e.g. private utilities) in the region.

4.1.9. Policy: The MPO shall support and participate in the development and enhancement of land use planning models and other analytical tools used to forecast and simulate transportation conditions under alternative land use scenarios.

4.1.10. Policy: The MPO shall support activities at the state level to facilitate better integration of transportation and land use planning.

4.1.11. Policy: The MPO shall work with airport and seaport authorities in the region, such as the Tampa Port Authority and the Tampa International Airport, to ensure coordinated planning and improvement of regional intermodal facilities.

4.1.12. Policy: The MPO shall participate in and provide technical support to the Joint Citizens Advisory Committee.

4.2. Objective: Provide technical assistance to local governments in their efforts to develop and implement their comprehensive plans and related land development codes.

4.2.1. Policy: The MPO shall provide a forum to facilitate discussion of access management strategies for the major roadway system, with specific emphasis on US Highway 19.

4.2.2. Policy: The MPO shall encourage local governments to utilize access management as a concurrency mitigation strategy on major roadways.

4.2.3. Policy: The MPO shall encourage local governments to require inter-connection between adjoining properties to minimize the need for motorists to access the roadway system when traveling between such properties.

4.2.4. Policy: The MPO shall support local land use policies and plans that are compatible with the design of transportation facilities such as the partially-controlled access design for US Highway 19.

4.2.5 Policy: The MPO shall provide technical assistance to local governments in the administration of the Transportation Impact Fee Ordinance to ensure its consistent application throughout the county.

5. Goal: Develop and implement plans and programs that are responsive to the transportation needs and interests of Pinellas County citizens while raising public awareness about the role and responsibilities of the MPO.

Public Involvement

5.1. Objective: Provide opportunities for county residents and various civic and neighborhood organizations to provide input on the subject areas considered in the LRTP.

5.1.1. Policy: The MPO shall continue to maintain, implement and evaluate its Public Participation Plan in accordance with Section 450.316, U.S. Code.

5.1.2. Policy: The MPO shall utilize the Citizens Advisory Committee (CAC) to provide a public forum for discussion of transportation plans and issues.

5.1.3. Policy: The MPO shall utilize the Bicycle Advisory Committee, the Pedestrian Transportation Advisory Committee, the Intelligent Transportation Advisory Committee and the Transportation Disadvantaged Program Local Coordinating Board to facilitate public involvement in their respective MPO program areas.

5.1.4. Policy: The MPO shall provide opportunities for public input during the development of the LRTP, TIP and Unified Planning Work Program. This shall occur through the MPO advisory committee meetings, the website, public appearances by MPO staff members at public venues and civic and business organization meetings and through MPO public hearings.

5.1.5. Policy: The MPO will support and implement the goals and objectives outlined in its Limited English Proficiency (LEP) Plan.

5.2. Objective: Inform and educate county residents and other interested parties about the MPO's ongoing planning initiatives and responsibilities.

5.2.1. Policy: The MPO shall utilize public outreach materials such as display boards, newsletters and brochures to inform the public about various MPO planning issues and programs.

5.2.2. Policy: The MPO shall continue to utilize its web site on the internet to provide information and opportunities for public comment about the agency and its programs.

5.2.3. Policy: The MPO shall participate in Pinellas County's public speakers bureau to provide interested civic and business organizations with a presentation on any topic related to the MPO's planning program.

5.2.4. Policy: The MPO shall utilize public venues such as shopping malls, government buildings, libraries and schools to provide information and to seek input on the LRTP.

5.2.5. Policy: The MPO will archive and make available on the website all agendas and videos from previous board meetings.



5.3. Objective: *The MPO shall inform the public about the transportation planning process on a regional level including the role of the CCC.*

5.3.1. Policy: The MPO shall develop and update, as necessary, information materials about the role and function of the CCC.

5.3.2. Policy: The MPO shall use existing public involvement methods and procedures, to the extent feasible, to publicize regional coordination activities and to provide opportunities for public feedback on regional transportation plans, programs and issues.

5.3.3. Policy: The MPO shall utilize the existing MPO planning processes to articulate a regional strategy for transportation planning and programming.

5.3.4. Policy: The MPO shall annually review and assess significant transportation issues facing the West Central Florida region and identify priorities for future investment.

5.3.5. Policy: The MPO shall develop a network of regional contacts, including representatives of the traditionally under-served population, for periodic communication, coordination and involvement in transportation-related discussions and activities.

5.3.6. Policy: The MPO shall ensure that regional public involvement strategies referred to under policy 5.3.2 promote understanding and involvement among traditionally under-served groups.

5.3.7. Policy: The MPO shall continue to maintain and enhance the CCC web site to provide information and receive input concerning regional transportation matters.

5.3.8. Policy: The MPO will ensure that adequate resources are allocated to the regional planning process consistent with the requirements of the CCC Interlocal Agreement.

3. Plan Context

Planning for the Future

Pinellas County is facing a key juncture in its history from the standpoint of land and economic development and the management of its environmental and public resources as well as its transportation system. The amount of undeveloped vacant land in the County has become limited. Infill development, redevelopment and adaptive reuse will be the driving forces behind change, rather than the growth of suburban scale neighborhoods and commercial developments that have been the hallmark of the last several decades of growth. At the same time this transition of development activity is taking place, the vehicle capacity of the roadway system is reaching its limit. Not only is traffic congestion a significant problem, but the ability to further widen many of the major roads is constrained by right-of-way availability, lack of funds and concerns over neighborhood and environmental impacts. The need to consider and implement new transportation and land use strategies that support the continued mobility, economic vitality and quality of life in Pinellas County is critically important.

These circumstances warrant the consideration of major transportation investments and land use policies that will create and sustain transit-supportive, walkable neighborhoods and cities. The MPO is committed to addressing land use and transportation issues emphasizing non-highway solutions. The LRTP reflects this emphasis and the need to satisfy regional and local mobility and to support a growth strategy appropriate for Pinellas County. The recommendations of the LRTP are crafted to create opportunities for travel choices (e.g., car, transit, bicycle, walking). Specific emphasis has been placed on the effect and benefits of new rail and bus transit service and supporting growth management strategies.

Livable Communities

The MPO is working with local governments to implement the “livable communities” concept which has gained considerable traction both nationwide and in Pinellas County. It centers on the integration of land use and transportation planning to create and sustain environments supported by multimodal transportation systems where walking, bicycling and transit service is safe, comfortable and efficient and where the physical environment offers an interesting and unique experience from the standpoint of street, land and building design. Additionally, livable communities are characterized by a mix of land uses that allow people to live close to places where they work, shop and play. The MPO published the *Livable Communities Model Comprehensive Plan Objectives and Policies*¹ in June, 2007. This document provided a template of objectives and policies intended for local



¹ *Livable Communities Model Comprehensive Plan Objectives and Policies* is available on the Pinellas County MPO website: <http://www.pinellascounty.org/mpo/SpecialProjects/LivableCommunity/LCModelCPObj&Pol.pdf>.

communities to incorporate into their local comprehensive plans, as applicable. During the development of the model policy framework, many communities within Pinellas County identified the need for policies and regulations that encourage infill and redevelopment in order to foster growth and economic vitality. At the same time there was a desire to regulate the location and appearance of new and infill development for the purpose of protecting existing character and enhancing “sense of place”. In particular, Pinellas County identified the need to encourage development that supports compact, walkable areas with a complementary mix of uses in proximity to transit stops.

The Model Comprehensive Plan Objectives and Policies revolve around the “four Ds”, density, diversity, design and destinations. Density refers to the number of dwelling units that can financially support transit ridership and neighborhood retail, as well as the proximity and connectivity of those dwelling units to major destination points such as work sites, schools, parks, and shopping. Encouraging higher density uses in areas where existing land uses and the surrounding transportation system are

not supportive will only exacerbate traffic congestion. But higher density uses that are strategically located and designed with buildings oriented to the street, wide tree-lined sidewalks that connect to a compact and concentrated mix of uses promote livability while encouraging people to walk, bicycle and use transit.

The model policy framework suggests that relatively higher density and intensity is appropriate in proximity to downtown districts, employment centers and transit corridors or transfer points with proper design. However, it is recognized that each community in the county has a different character and scale; and that policies addressing density, as well as other livable community characteristics, should be tailored to meet the needs of each community prior to incorporation into local comprehensive plans.

Diversity refers to a mix of land uses that support the livability concept. The mix can be vertical or horizontal, and may include a range of housing prices and types, as well as a mixture of residential units with retail, office, and institutional or civic uses. Placing retail, housing and job sites in proximity to one another while incorporating pedestrian friendly street and building design and landscaping encourages people to walk, bicycle or use public transportation.

Design refers to the architectural style of buildings and how they relate to the street in terms of scale, mass, and placement on the lot. Additionally, design refers to the layout of the street, including landscaping, sidewalks, on-street parking, width, block size, and the number of street connections between and among various destinations. Design makes higher density function more effectively from a land use standpoint by integrating it into the fabric of the surrounding area whether it is urban, suburban, employment-based or mostly residential.

Through the combined use of design, an appropriate increase in density, and a diversity of land uses, housing types and prices, unique and interesting destinations are created. The concept of destinations includes creating community focal points such as parks, town centers, vibrant downtowns, civic buildings, and other public spaces and connecting those focal points to residential, retail, employment, and institutional centers with walkable streets and paths. Communities that have well-connected, attractive and diverse destinations become desirable places to live, work, and visit, in turn increasing the community’s tax base and economic viability.

The *Model Comprehensive Plan Objectives and Policies* provide the policy framework for communities in Pinellas County to development and adopt specific land development regulations that can encourage and control the



development of walkable, transit friendly mixed use places. The release of the *Model Comprehensive Plan Objectives and Policies* was followed by the publication of the *Livable Communities Model Land Development Code*², approved by the MPO policy board on September 10, 2008. The model land development code is intended to provide local governments with a regulatory toolkit to require and encourage development projects to maintain the character or livability of an area or to change it to a more desirable urban form.

The *Model Land Development Code* defines five individual districts, Urban Core, Town Center, Traditional Neighborhood, Neighborhood Center and Suburban Center, each with associated land development standards. Each district and set of development standards corresponds with the Countywide Future Land Use Plan map categories in terms of density/intensity and land use activity. Implementation of the development standards found in the model code needs to be consistent with the Countywide Plan Rules, as well as locally adopted comprehensive plans. Local governments are encouraged to determine which of the districts and associated standards could be utilized to meet their comprehensive planning objectives relative to maintaining and/or developing livable community environments through their local site plan review processes.



In addition, the model land development code provides building and site design standards addressing architecture, parking, public art, orientation of structures on a site, driveways, open space, connectivity, signs, pedestrian movement and stormwater.

Finally, the model code provides for optional development standards that could be implemented as credit toward a development project's transportation impact fee assessment or to allow the project to comply with local concurrency management system requirements.

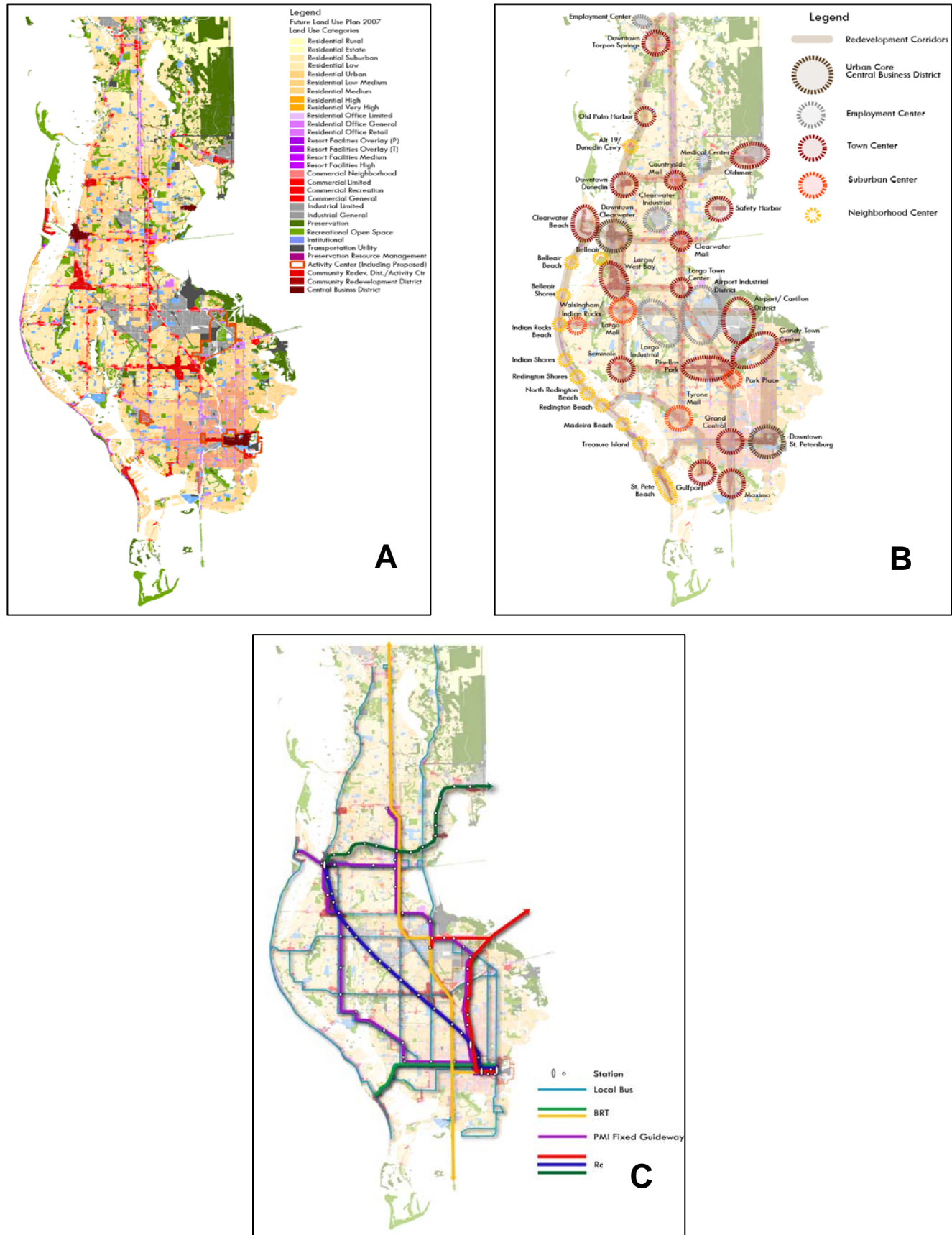
Scenario Planning

Purpose

In 2008, the Pinellas County MPO undertook a scenario planning study to provide decision making information to support the update of the Pinellas County LRTP from 2025 to 2035. The study was intended to shed light on how the transportation investments, in particular new rail and bus transit service, could be made to support a growth strategy for Pinellas County. The study reflected on alternative growth strategies, including a trend based on the development capacity of adopted future land use policies (Scenario A), a Livable Communities future based on model comprehensive plan policies and land development codes (Scenario B), and a transit-oriented growth strategy built around a transit system concept (Scenario C). The transit system concept from Scenario C was used as the basis for developing transit alternatives and the 2035 Cost Feasible Rail Transit Network. Figure 1 shows the concept maps for the three scenarios.

² *Livable Communities Model Land Development Code* is available on the Pinellas County MPO website: <http://www.pinellascounty.org/mpo/SpecialProjects/LivableCommunity/LCModelCode.pdf>.

FIGURE 1. CONCEPT MAPS OF THREE SCENARIOS



CorPlan Land Use Allocation

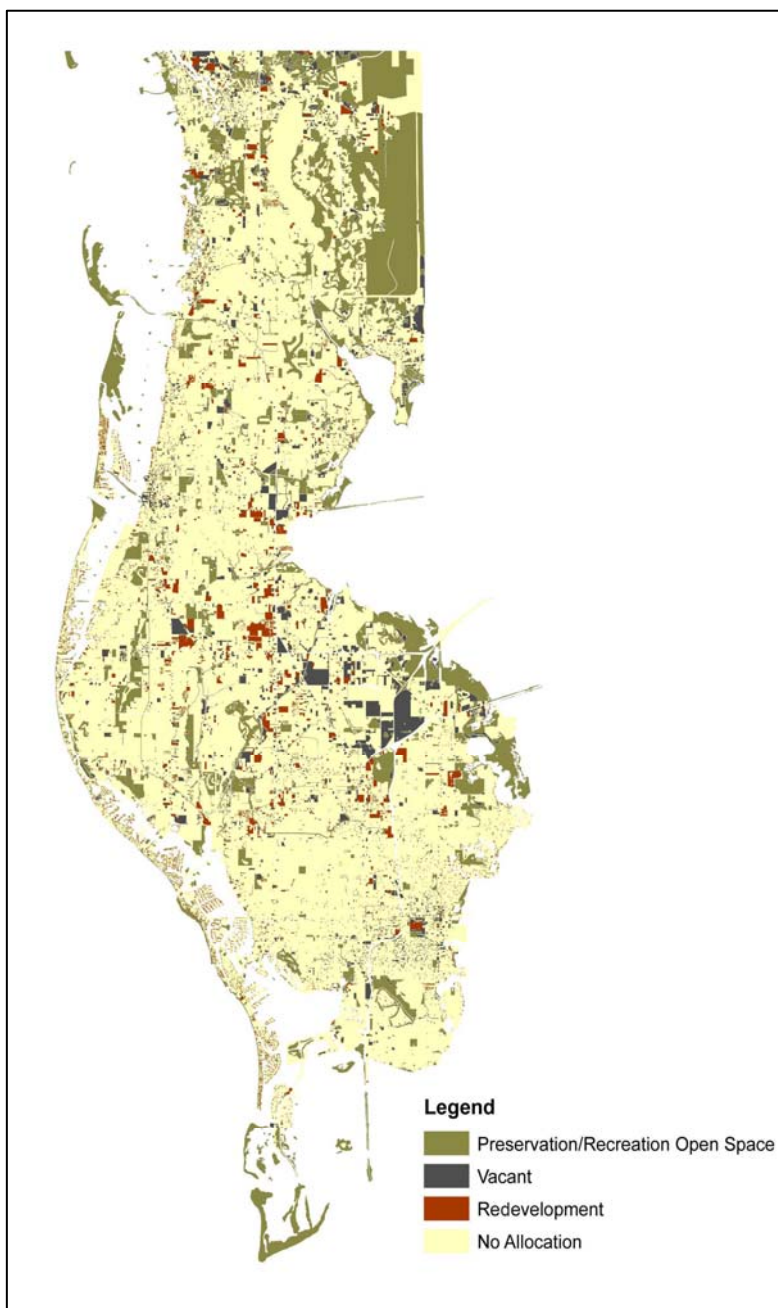
Tool

CorPlan is a land use allocation model that was used for the LRTP scenario planning study. CorPlan uses ARCVIEW© geographic information system (GIS) software. The associated databases are linked to analysis tools that can help users map and spatially summarize the CorPlan analysis results. CorPlan uses a georeferenced grid cell network to organize information by parcel or TAZ.

Determining Areas of Change

The first step in determining the future growth pattern of Pinellas County was identifying areas of change. Vacant land suitable for development and developed land that is likely to be redeveloped was identified. Prior to this step, environmentally sensitive lands, land planned for preservation and recreational land was removed from consideration. All remaining vacant land was assumed to be developable. A redevelopment propensity score was developed by dividing land value by building value. The areas where the redevelopment score was 3 or greater were included as areas of change. Figure 2 is the redevelopment propensity map, which shows the areas where new jobs and households were allocated.

FIGURE 2. REDEVELOPMENT PROPENSITY MAP



Estimating Type and Amount of Change

CorPlan relies on prototypical community place types, or community elements, to estimate land development potential and how that potential translates into the location of households and jobs. Each community element reflects a unique existing or planned development pattern, such as urban downtowns, suburban retail areas, traditional neighborhoods and town centers. Community elements were developed based on adopted future land use policies for the Scenario A and Livable Communities Initiative model policies for Scenario B. Community elements for Scenario C were based on densities appropriate for different areas of Pinellas County that also fall within minimum density requirements needed to support rail transit. Only those areas within 1/3 mile of the stations in the transit system concept were used to allocate new population and employment. Figure 3 shows the areas of change identified in the redevelopment propensity analysis that are within 1/3 mile of the stations sites. Each station was assigned

one of several place types with different densities and mix of uses. These are shown in the legend. Once areas of change were identified and place types were assigned to each, the land use allocation model allocated population and employment based on the defined densities set up for each place type.

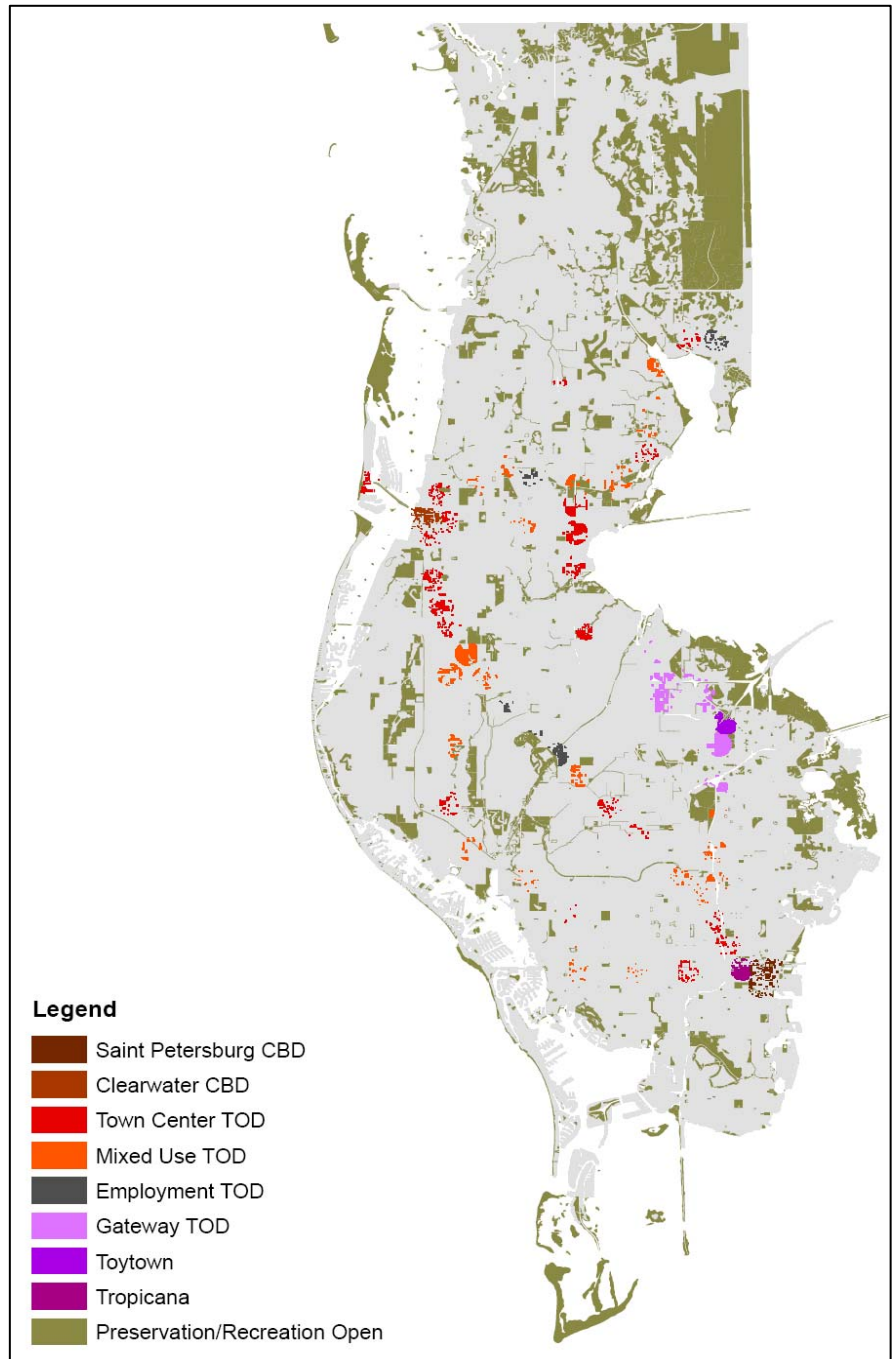
Summary of Scenario

Planning Results

The results of the scenario planning study were used to shed light on the effects of alternative land use policies on the resulting growth patterns and on the ability for these patterns to support different components of the proposed 2035 Bus and Rail Transit Network. Table 1 shows the countywide population and employment forecasts by scenario. It depicts the results of the land use allocation model run for each scenario. The model “built out” the available land in each scenario based on the land use densities and mix of uses. The information in Table 1 shows each of the scenarios having more capacity for employment growth than is anticipated by the 2035 planning horizon. Table 2 shows the amount of land assumed to be developed or redeveloped in each scenario. The results show the effect that increasing density has on land consumption over time. The land development patterns assumed for Scenario C, which assumed

optimizing new residential and employment growth around transit stations, resulted in the need for only 1/6th of the land that would otherwise be used under existing allowable densities. Table 3 shows the percentage of available land used by each scenario. The land use policies tested for Scenario B Livable Communities and Scenario C Transit Investment require development or redevelopment of a significantly smaller portion of the land available in Pinellas as compared to Scenario A. Scenario C uses only 14% of all total available land to achieve residential and employment numbers that exceed forecasts for 2035. This indicates how the linking of major transit investments with supportive land use policies and development patterns allows for a more efficient use of land. Table 4 compares projected population and employment

FIGURE 3. SCENARIO C TRANSIT STATION AREA BUFFERS WITH PLACE TYPES



densities for 2000 to the forecasts for 2025. This trend indicates a small increase in density over time. Table 5 shows the densities anticipated for new growth for each scenario.

TABLE 1. COUNTYWIDE POPULATION AND EMPLOYMENT BY SCENARIO

	2000 Base	2025 LRTP	Scenario A Future Land Use (2050 Projection)	Scenario B Livable Communities (2050 Projection)	Scenario C Transit Investment (2050 Projection)
Total Permanent Population	921,482	981,150	1,246,466 ³	1,174,620	1,143,545
Total Employment	527,499	603,719	889,490	927,012	981,263
Jobs per Person	0.57	0.62	0.71	0.79	0.86

TABLE 2. LAND CONSUMPTION BY SCENARIO

	Scenario A Future Land Use	Scenario B Livable Communities	Scenario C Transit Investment
Vacant Land Developed	10,079	4,435	1,540
Redeveloped Land	7,051	2,806	773
Total Land Used	17,130	7,241	2,313
Total Land in County	147,844	147,844	147,844
% of Total Land in County Used	12%	5%	2%

TABLE 3. PERCENTAGE OF AVAILABLE LAND USED IN EACH SCENARIO

	Scenario A Future Land Use	Scenario B Livable Communities	Scenario C Transit Investment
Vacant Land Used	10,079	4,435	1,540
Redevelopment Land Used	7,051	2,806	773
Total Land Available (Acres)	17,130	17,130	17,130
Total Land Used	17,130	7,241	2,313
% of Total Available Land Consumed	100%	42%	14%

³ The analysis was not constrained by a countywide population or employment control total. The numbers included in the table represent development potential and are intended to shed light on the desired outcome of different land use and transportation investment strategies. The numbers are constrained by the amount of vacant land and the amount of land assumed to be available for redevelopment. The findings, therefore, should not be construed as a 2035 projection or a build-out analysis.

TABLE 4. 2000 AND PROJECTED 2025 POPULATION AND EMPLOYMENT DENSITIES

	2000 Base	2025 LRTP
Population	921,482	981,150
Employment	527,499	603,722
Persons Per Acre	6.2	6.6
Dwelling Units Per Acre	3.0	3.1
Employees Per Acre	3.6	4.1
Non-residential Floor Area Ratio	0.04	0.05

TABLE 5. NEW GROWTH BY SCENARIO

	Scenario A Future Land Use	Scenario B Livable Communities	Scenario C Transit Investment
New Population	324,984	253,138	222,063
New Employment	361,991	399,513	453,764
Total Land Consumed (Acres)	17,130	7,241	2,313
New Persons Per Acre (on Land Used)	19	35	96
New Dwelling Units Per Acre	9	17	46
New Employees Per Acre (on Land Used)	21	55	196
New Non-residential Floor Area Ratio (on Land Used)	0.24	0.63	2.25

Population Data⁴

The Pinellas County Planning Department and MPO staff worked with the Technical Coordinating Committee (TCC) of the MPO and the Pinellas municipalities to update permanent, seasonal, and tourist population projections using basic population projection methodology developed in 1994 with the addition of data available from the County's geographic information system (GIS). As information from the Pinellas County GIS was obtained, the TCC and the municipalities commented on the reasonableness and accuracy of the countywide data. Comments were considered and incorporated into the data to modify the projections based on a local assessment of future development and redevelopment conditions.

⁴ The summary of socioeconomic data for population was taken from the Pinellas County MPO staff report on Population and Dwelling Unit Projections, dated October 2008.

Process for Forecasting Future Population

Population in Pinellas County, Florida is made up of three separate and distinct components as follows:

- Permanent Residents: people who live in the County year-round in permanent dwelling units and who make up the greatest portion of the general population;
- Seasonal Residents: persons owning or renting second homes in Pinellas County for a period of less than six months and who increase the use of available infrastructure and services primarily during the winter and spring months of the year; and
- Tourists: those who stay less than 2 months using hotel/motel/timeshare units or who stay in the homes of friends or relatives.

Several variables, such as number of persons per permanent dwelling unit and the percentage of the total number of dwelling units used by the seasonal population in Pinellas County were derived from the 2000 Census. However, the total number and location of existing dwelling units, acreage of vacant developable land, cost and age of structures, cost of the land, and the number of hotel, motel, and timeshare units were obtained from the Pinellas County GIS. Information on the number of tourists and visitors as well as how long and when they stayed in the County was obtained from the St. Petersburg/Clearwater Convention and Visitors Bureau.

A mathematical model was used to generate the updated permanent and seasonal population projections. The model projects trends in growth by using points in time based upon historical data and an upper limit that represents the ultimate growth planned or expected to occur at build-out. In accordance with federal guidelines for MPO plans, dwelling unit and population projections are based on the adopted Countywide Future Land Use Plan map, local comprehensive plans, community redevelopment plans, and consideration of local redevelopment initiatives or plans if they appear likely to be approved or adopted. The Countywide Future Land Use Plan limits maximum population and employment indirectly by controlling the density and intensity of development allowed within residential and nonresidential land use categories.

Base Data

In order to make projections, base population data was collected or developed for a past, present and future point in time for use in generating growth curves for future years using the model. Data were gathered or developed for permanent dwelling units, seasonal dwelling units, and tourists and visitors for 1980, 2006, and the ultimate level of growth based on the availability of vacant land and its maximum development potential according to the Countywide Future Land Use Plan. The average number of persons per dwelling unit for each Census tract was determined by multiplying the number of persons per permanent dwelling unit by the number of 2006 existing permanent dwelling units in order to convert dwelling units to permanent resident population.

A similar scenario was developed to project the number of seasonal dwelling units. Seasonal dwelling units represent a percentage of the total dwelling unit count. Beginning with the number of seasonal units identified in the 2000 Census, it was possible to determine the projected number of seasonal dwelling units as a percentage of the projected total of new or additional dwelling units. In order to determine the number of persons per seasonal unit, the Planning Department used data collected during a 1994 survey of several nearby cities to determine the number of persons per seasonal unit, if any, being used by these jurisdictions. The number of persons per seasonal unit was established by dividing the 1994 estimates by the number of

seasonal units extrapolated from the Census data. The ratios for municipalities in Pinellas County were averaged to a ratio of 1.79 persons per seasonal unit.

In determining the tourist or visitor population, it was assumed that the number of visitors staying with friends or relatives would correspondingly increase as the number of permanent dwelling units increased. Based upon this assumption, the projected number of additional visitors was calculated by multiplying the number of visitors per dwelling unit by the potential additional units. The length of stay factor is computed by dividing the number of days in a month by the average length of stay of tourists for the same month. The length of stay factor for tourists is used to estimate and project the tourist population impact. This results in a tourist population figure that is comparable to permanent population.

Table 6 shows the results of the 2035 population and dwelling unit forecasts as they compare to the 2006 base data and 2025 interim projections.

TABLE 6. PINELLAS COUNTY 2035 POPULATION FORECASTS

Permanent Population			Seasonal Population			Tourist Population			Dwelling Units		
2006	2025	2035	2006	2025	2035	2006	2025	2035	2006	2025	2035
944,605	1,017,563	1,060,260	76,874	82,004	83,452	89,403	92,252	93,225	493,509	535,885	562,342

Employment Data⁵

Socioeconomic employment data was developed through a coordinated effort between the Pinellas County Planning Department, FDOT, and the MPO, with consultant assistance. Employment data was split into three standard employment categories of industrial, commercial, and service. It was later split into five standard employment categories listed below.

- Industrial
- Regional Commercial
- Local Commercial
- Regional Service
- Local Service

Projections for each employment type were developed in five year increments through the planning horizon year of 2035. Initial control totals of each employment type were adjusted to reflect local recommendations based upon current knowledge. The basis for employment data forecasts was a 2006 employment data file provided by FDOT. Future employees were distributed based upon the availability of vacant developable land and its relative attractiveness for development. Vacant developable acres by future land use category were provided by Pinellas County staff for 2006. The vacant acreage totals were multiplied by land use densities in the local comprehensive plans to calculate the maximum employment

⁵ The summary of socioeconomic data for employment was taken from the Pinellas County MPO final report entitled Forecast 2035 Employment Socioeconomic Data, dated December 2008, prepared for the MPO by Tindale-Oliver & Associates, Inc.

potential of an area. Finally, reduction factors were applied to estimate the reasonable effective intensity that will actually be built given the current economic climate.

MPO staff reviewed the initial projections for each planning year using a series of maps illustrating the growth increment in population and industrial, commercial, and service employment for each planning year horizon. Adjustments to specific areas of the county were recommended by staff to more accurately reflect future year patterns and to include approved developments. Pinellas County is unique because it has very little vacant land available for new development. Most new employment growth will come from areas already reserved and approved for new development or the redevelopment and infill of existing developed areas.

Future commercial and service employment projections were assigned to vacant developable lands as well as developed areas based upon its potential for redevelopment. Industrial employment was not allocated based upon redevelopment potential, because industrial redevelopment is not seen as a significant factor in Pinellas County. A Redevelopment Propensity Index (RPI) was calculated for each developed parcel based upon criteria related to structure age, the relationship between structure values, property values and access to major transportation facilities. The total number of acres with a propensity to redevelop was added together and the number of employees was allocated based on a percentage share of the total acres with a propensity to redevelop. Although this methodology does not take into account the relative intensities and densities within a given area for a given land use, the relationship between land value and structure value is in part a surrogate for the existing intensity of developments. In this manner, allocation of employment for approved development, allocation of employment to vacant lands, and allocation of employment to areas anticipated to have a propensity to attract redevelopment were calculated.

Table 7 shows the 2006 base data and 2035 projections for the industrial, commercial and service employment sectors and the resultant growth for each.

TABLE 7. PINELLAS COUNTY 2035 EMPLOYMENT FORECASTS

Industrial Employees			Commercial Employees			Service Employees			Total Employees		
2006	2035	Growth	2006	2035	Growth	2006	2035	Growth	2006	2035	Growth
115,000	127,490	12,490	111,400	140,910	29,510	339,000	402,600	63,600	565,400	671,000	105,600

Hotel and Motel Data

For purposes of the TBRPM, hotel and motel units are categorized as business, economy and resort units. The majority of existing units fall into the resort category; however, due to the limited amount of vacant land available for development on the beachfront, a majority of future growth is expected to occur in the business and economy sectors. Future hotel and motel unit growth is tied to growth in service employment and population. A review of approved development was completed to determine expected locations for future units. The remaining units were then allocated based upon the location of future service employment, future land use patterns in the County, and input from County staff.

Schools Data

Population forecasts were provided by the MPO and were used as the primary input for school enrollment forecasts. In general, school enrollment was determined as a percentage of total population based upon historic data. Base enrollment figures for 2006 were forecasted for only minimal growth based upon School Board staff direction. This information was used to correlate the need for future school enrollment to areas with the highest projected dwelling unit growth. The growth rate used for education facilities was the same as the one used to determine the population growth in the immediate vicinity. If a new education facility was approved for development through a local site plan review process, the associated students were included in the enrollment calculation allocated to the applicable planning area.

Table 8 shows the 2006 base data and 2035 projections for school enrollment in K-12 grades and higher education facilities, and the resultant growth for each. Data for 2006 and 2035 projections for hotel and motel units is also shown.

TABLE 8. PINELLAS COUNTY 2035 SCHOOL ENROLLMENT FORECASTS

School Enrollment						Total Hotel/Motel Units		
K-12			Higher Education					
2006	2035	Growth	2006	2035	Growth	2006	2035	Growth
130,465	140,382	9,917	42,790	45,776	2,986	22,637	26,439	3,802

Public Involvement

A key element of the LRTP update is public involvement, which is necessary to ensure the plan reflects the needs and interests of the county's citizens. Public involvement opportunities have taken place throughout the course of the development and refinement of the LRTP. Various methods of obtaining public input have been employed, including an online survey, as well as surveys distributed at community events and local libraries.

For the 2035 update to the LRTP, MPO staff used a variety of tools to inform the public about the topics and issues addressed in the Plan. These include the MPO website, distribution of brochures and other printed materials, staff participation in public workshops addressing transportation issues, appearances on local radio and television stations, public speaking engagements and LRTP and related exhibits set up at local public events and festivals. In addition, the MPO held community workshops on the 2035 LRTP in August, 2009. Some of the events at which public participation took place for the LRTP update are listed below:

- Tuesday Club Meeting, St. Petersburg College - Seminole Campus, September 2009
- Regional Transportation Seminar, Council of North County Neighborhoods, Tarpon Springs, July 2009
- Council of Neighborhood Associations meeting, Sunshine Center, St. Petersburg, June 2009
- Hurricane Expo, Pinellas Park Arts Center, June 2009
- Villas at Forestbrook Neighborhood Association meeting, Largo City Hall, May 2009
- Pinellas Living Green Expo, Harborview Center, Clearwater, May 2009
- Weed and Seed 13th Annual Family Fun Day, James B. Sanderlin Family Center, St. Petersburg, May 2009
- Workshop on Prevention of Crime Affecting Hispanic Community, Wood Valley Park Boys and Girls Club, Clearwater, March 2009
- Human Services Coalition Quarterly Conference, Pinellas County Cooperative Extension, Largo, January 2009
- Tampa Bay Area Regional Transportation Authority (TBARTA) workshops, St. Petersburg Chamber of Commerce and Clearwater Public Library, November 2008
- Commuter Choices Week, Central Avenue/4th Street in St. Petersburg and Clearwater City Hall, October 2008

Surveys

Regarding public input for the 2035 LRTP update, MPO staff relied heavily on the use of survey instruments distributed to citizens at various public events, meetings, workshops and other transportation-related forums. These surveys have also been made available for people to complete online on the MPO website. For the 2035 LRTP update, a six question survey was distributed and posted on the MPO web site in 2008 seeking input on public priorities related to bus, rail, bicycle and pedestrian travel as well as road improvements. Approximately 455 of these surveys were completed.

Overall, the 2008 survey results indicate a desire for expanding bicycle/pedestrian facilities (71% Very Important or greater); improving safety and operation of signalized intersections (79% Very Important or greater); and to a lesser degree, improving bus services (57% Very Important or greater). Widening existing roads appeared to be less important to these survey respondents while the question of building a rail system had mixed results. The response percentages for the six questions are shown in Table 9.

TABLE 9. 2008 SURVEY RESULTS

Survey Questions	Not Important	Somewhat Important	Important	Very Important	Extremely Important
Improve or expand bus service	5%	12%	26%	26%	31%
Build a rail system	13%	14%	23%	22%	28%
Expand facilities for bicyclists and pedestrians	2%	10%	18%	28%	43%
Improve the safety and operation of signalized intersections	1%	5%	16%	33%	46%
Continue to widen existing roads	12%	16%	24%	25%	23%
Focus on intersection widening and other roadway operational improvements	4%	13%	33%	28%	21%

As drafts of the LRTP elements (e.g. premium bus, rail, road improvement, trail maps) were published in 2009, a new survey form was developed in order to collect more specific feedback on these elements and related issues. It was distributed from April to July, 2009. Over 410 of these surveys were completed and returned. Generally, these survey results indicated that almost half of the respondents thought that pedestrian safety improvements at major intersections (41%) and improvement of signal timing (45%) are “Extremely Important.” Rail improvements garnered a favorable response and particularly the Downtown Clearwater to Downtown St. Petersburg and Gateway Area to Tampa routes are considered “Extremely Important.” Widening of major roads and specifically the proposed 6-laning of Ulmerton Road is considered “Not Important” by at least a quarter of survey respondents. These results are summarized in Table 10.

TABLE 10. APRIL TO JULY 2009 SURVEY RESULTS

Transportation Improvement	Not Important	Somewhat Important	Important	Very Important	Extremely Important
Bus route expansion	12%	19%	22%	24%	23%
More frequent bus service	12%	20%	23%	20%	25%
Rail line	15%	13%	21%	18%	32%
Elevated light rail	19%	19%	18%	16%	29%
Rail/Light rail connections					
Downtown Clearwater to Downtown St. Petersburg	12%	14%	26%	20%	28%
Gateway Area to Tampa	12%	12%	25%	23%	28%
North County along US 19	11%	14%	23%	27%	24%

Transportation Improvement	Not Important	Somewhat Important	Important	Very Important	Extremely Important
Expansion of off-road trails	18%	20%	25%	18%	19%
Expansion of on-road bicycle lanes	11%	20%	23%	24%	23%
Expansion of sidewalks along major roads	5%	14%	22%	26%	33%
Pedestrian safety improvements at major intersections	3%	10%	22%	24%	41%
Widening of major roads	25%	20%	22%	18%	16%
Road improvements					
US 19, partially controlled access improvements from Park Blvd. to Pasco County	14%	19%	27%	22%	18%
Ulmerton Road – 6 laning	28%	17%	25%	16%	13%
118 th Avenue, partially controlled access improvements from US 19 to planned Roosevelt Blvd/CR 296 Connector	21%	24%	25%	17%	13%
Adding/lengthening turn lanes at road intersections	16%	18%	27%	22%	18%
Improved signal timing	5%	9%	18%	22%	45%

Public Workshops

The MPO participated in other workshops, such as the Clearwater to Clearwater Beach BRT Connection, where the LRTP was not the main focus. Two workshops focusing solely on the LRTP 2035 Update were held in August, 2009. One was held at the Dunedin Public Library and the other was held at Park Station in Pinellas Park. Minor revisions were made to the April to July 2009 survey and distributed at these workshops. Generally, the results indicate a strong desire for pedestrian safety improvements at major intersections and improved signal timing. Rail transit service garnered significant support with about 58% of respondents indicating this is at least a 'Very Important' initiative. The roadway widening proposals garnered the least support, with about 30% of respondents indicating no importance to the widening of major roads. The complete results of these workshop surveys are displayed in Table 11. All public input received throughout the course of the LRTP update was influential in identifying transportation system improvements and aiding in the prioritization of projects.

TABLE 11. AUGUST 2009 SURVEY RESULTS

Transportation Improvement	Not Important	Somewhat Important	Important	Very Important	Extremely Important
Transit					
More bus routes	6%	23%	29%	35%	13%
More frequent bus service	3%	23%	23%	23%	29%
Rail transit service	10%	6%	26%	23%	35%
Rail transit service from...					
Downtown Clearwater to Tampa, through Safety Harbor and Oldsmar, using the CSX rail line.	13%	16%	16%	19%	23%
Downtown Clearwater to Downtown St. Petersburg through the Gateway/Carillon area.	13%	13%	23%	23%	19%
Downtown St. Petersburg to Tampa (Westshore Blvd. & Downtown) via the Howard Frankland Bridge.	10%	13%	23%	16%	29%
North County (US 19) to Downtown St. Petersburg through the Gateway/Carillon area.	10%	19%	19%	23%	23%
North County (US 19) through Gateway/Carillon area, to Tampa (Westshore Blvd. and Downtown) via the Howard Frankland Bridge.	10%	16%	26%	19%	23%
Trails & Bicycle Lanes					
More off-road bicycle and pedestrian improvements	6%	29%	23%	19%	23%
More on-road bicycle lanes	10%	19%	26%	19%	26%
More sidewalks along major roads	10%	13%	26%	32%	19%
Pedestrian safety improvements at major intersections	3%	3%	26%	16%	48%
Roadways					
Widen major roads	29%	16%	23%	16%	10%
Change US 19 (from Park Blvd to Pasco County) to a partially controlled access road with overpasses across major east-west roads.	3%	16%	29%	19%	32%
Widen Ulmerton Road to six lanes	29%	10%	26%	19%	10%
Convert 118 th Avenue section of CR 296 in mid-county to partially controlled access road, with overpasses across U.S. Highway 19 and 49th Street.	13%	23%	23%	19%	16%
Widen Interstate 275	35%	23%	10%	19%	6%
Add/lengthen turn lanes at road intersections	10%	23%	13%	32%	23%
Improve timing of signals (traffic lights)	3%	10%	16%	16%	55%

Involving the Traditionally Underserved and Transportation Disadvantaged

The MPO is charged with planning for transportation services and facilities that provide mobility for the traditionally underserved. The three groups most likely to encounter mobility challenges are the elderly, persons with disabilities, and low income populations, all of whom are more likely to be transit-dependent. As the officially designated Community Transportation Coordinator (CTC) for the Transportation Disadvantaged (TD) Program, the MPO is responsible for coordinating the delivery of transportation services to the TD population of Pinellas County. In addition to its CTC function, the MPO recently participated in a joint effort with the Pasco County MPO and the Hillsborough County MPO to update the Tri-County Access Plan, which is the locally developed, coordinated public transit-human services transportation plan for the region. The update included participation through forums and interviews from housing authority representatives, transportation providers and workforce development agencies. These groups provide vital services for the traditionally underserved, especially low income, underemployed or unemployed individuals. The input received shed light on issues faced by this population group in terms of transportation costs and access between housing, transportation and employment.



In addition to the survey, the MPO held a public workshop to get feedback. The top three problems identified at the workshop included the following:

- Transportation services are too limited in the evenings and weekends;
- There is a need for one eligibility process for all applications and a centralized one stop center; and
- Some operators have a lack of sensitivity towards the elderly and disabled transit users.

The top four solutions identified included the following:

- Develop a one stop center for information, training, and brochures that list all of the available programs;
- Develop a “how-to” ride guide for Veterans Administration, EZ Ride Program, and Morton Plant Hospital clients/patients utilizing funding from the administration portion of the grant;
- Establish a coordinated eligibility program; and
- Implement a sales tax to fund the provision of transit service to all three counties.

The MPO will continue to seek grant funds and develop policies and programs that respond to these issues and proposed solutions. The recommendations of this LRTP specifically respond to the need for improved transit service and new sources of transit funding.

4. Needs Assessment

Determining the Need for Roadway Improvements

The Tampa Bay Regional Planning Model (TBRPM) Version 7.0 developed by FDOT District 7 was the primary travel demand modeling tool used to assess highway needs in the County. Several roadway networks were developed, including the “committed”, “cost affordable” and “needs”. The committed network includes existing roadways and roadways anticipated to be widened within the next five years with committed funding. The cost affordable network includes the roadway projects the MPO prioritized for funding and anticipates being complete by 2035. The needs network includes roadway widening projects where additional capacity is needed to



accommodate future traffic volumes. The needs network includes the committed projects, the cost affordable projects and projects not able to be funded prior to 2035.

Model results from the TBRPM were reviewed and used to confirm the needs assessment. A model run was conducted for the 2013 Existing plus Committed (E+C) network with 2035 socioeconomic data in order to assess future highway system performance and projected deficiencies. The results of this analysis were compared to a model run containing the final Needs network to ascertain how system performance was improved. Figure 4 illustrates those locations forecasted to experience severe levels of congestion in 2035. Corridors forecasted to experience unacceptable levels of congestion include US 19, Alt. US 19, I-275, Roosevelt Boulevard, Gandy Boulevard, and Ulmerton Road. Figure 5 illustrates the Existing Network lane configurations, Figure 6 illustrates the Cost Feasible network lane configurations and Figure 7 illustrates the Policy Plan lane configurations.

By 2035, Pinellas County is expected to produce nearly four million vehicle trips per day, compared with just over 3.5 million trips per day in 2006, a growth of approximately 10 percent. While only a modest increase compared with other counties in the region, that represents nearly 30 percent of all vehicle trips produced, according to the Tampa Bay Regional Planning Model. As a result of the growth in trips both locally in Pinellas County and the region, the County’s highway network would need to expand its roadway capacity to maintain an acceptable level of service. Total Vehicle Miles Traveled (VMT) in the County is forecasted to grow by approximately 35% by 2035. Vehicle Hours of Delay is projected to almost double from 236,000 in 2006 to 461,000 in 2035. A more detailed documentation of the Tampa Bay Regional Planning Model analysis is included as an Appendix to this document.

The results of the model analysis support the need for roadway improvements consistent with those identified in the Policy Plan. Not all of these improvements were able to be funded, however. Overall, the Cost Feasible roadway improvements will serve to maintain or improve the existing balance of capacity to demand within major roadway corridors in Pinellas County. Where there is additional demand anticipated, it is expected to be met by the significant amount of rail and bus transit service capacity that will be implemented prior to 2035. Local mobility will also be better served by an improved pedestrian and bicycle facility network.

FIGURE 4. FORECASTED SEVERE ROADWAY CONGESTION

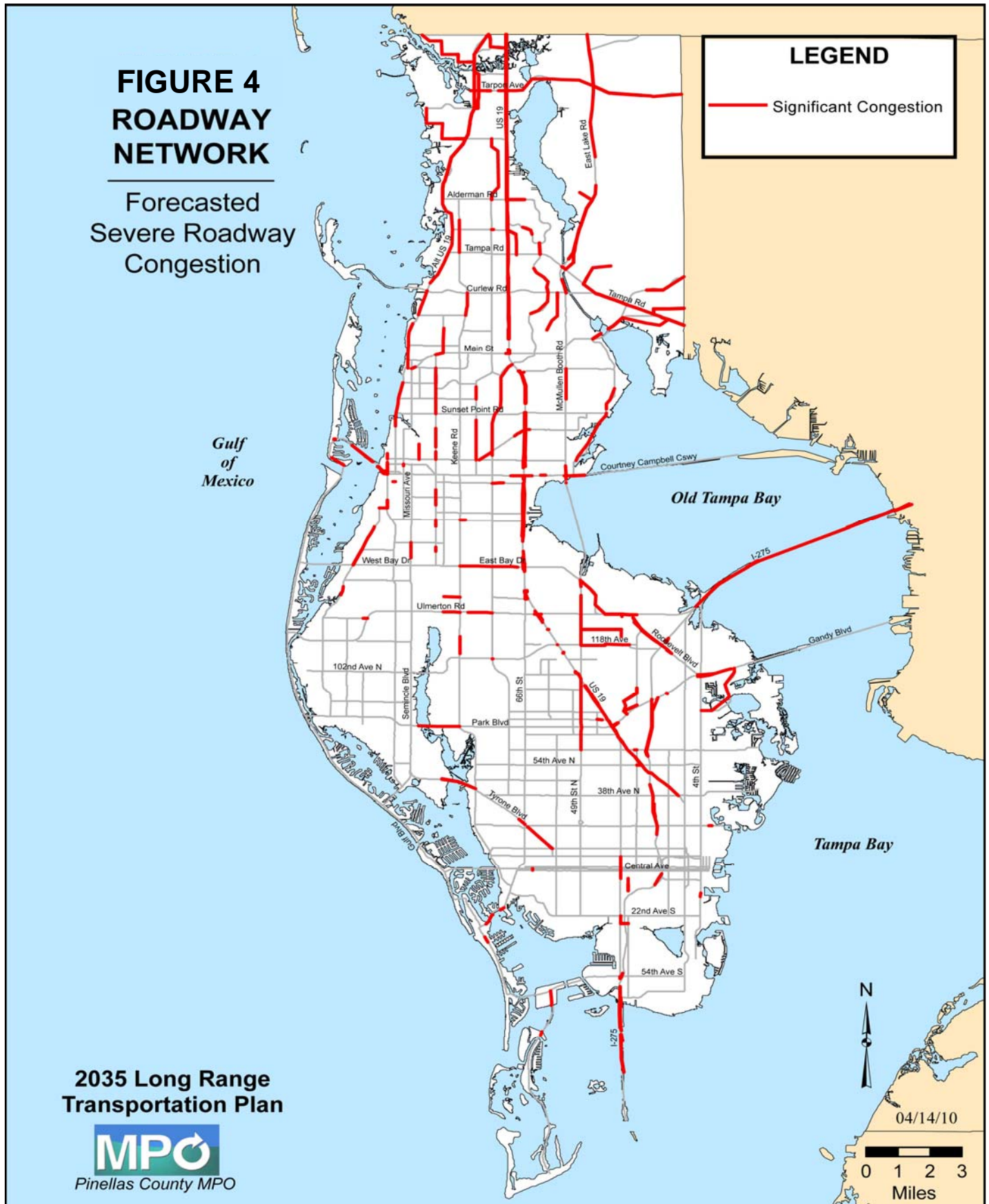


FIGURE 5. MAP OF EXISTING NUMBER OF ROADWAY LANES

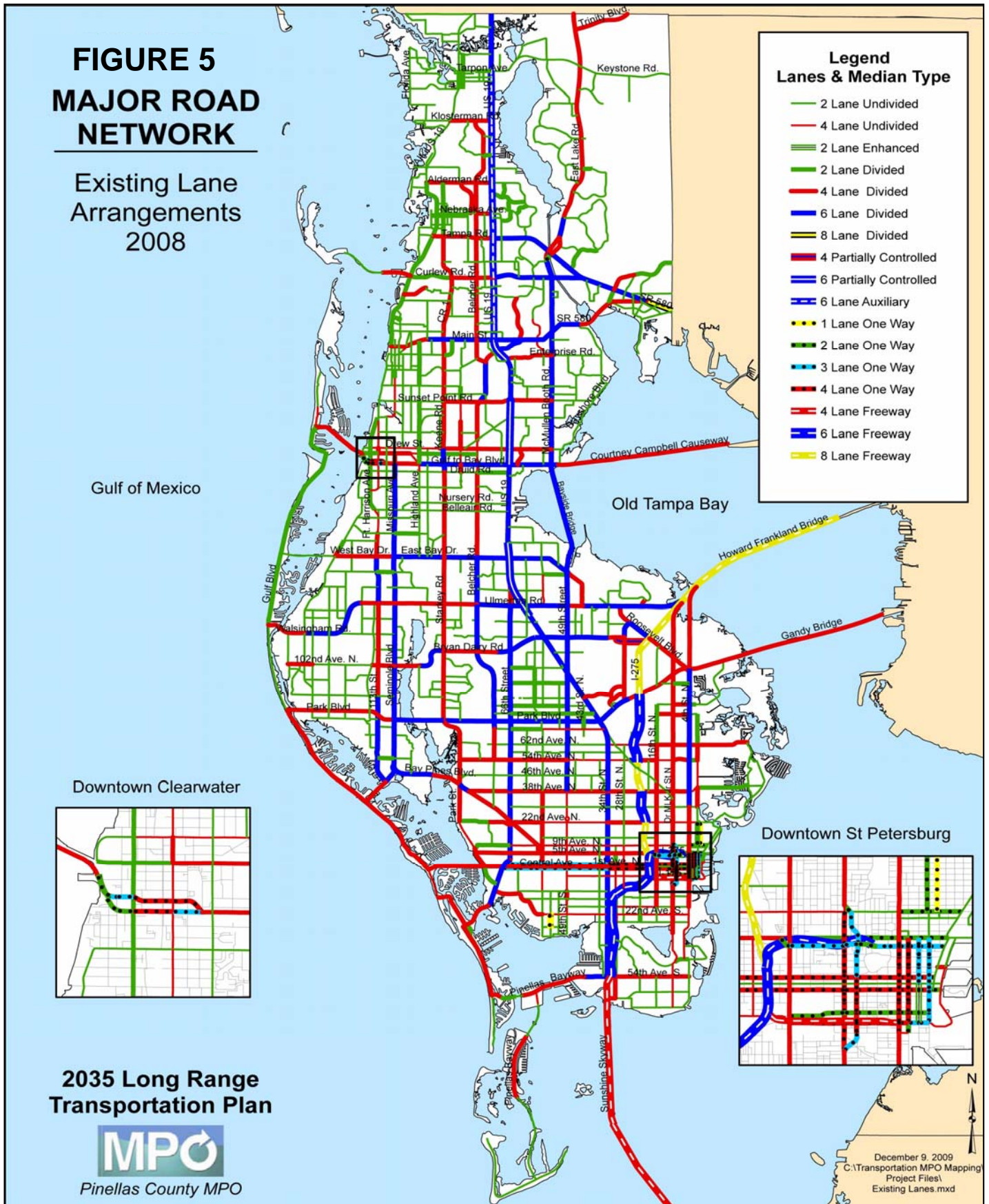


FIGURE 6. MAP OF ROADWAY NUMBER OF LANES BASED ON 2035 COST FEASIBLE PROJECTS

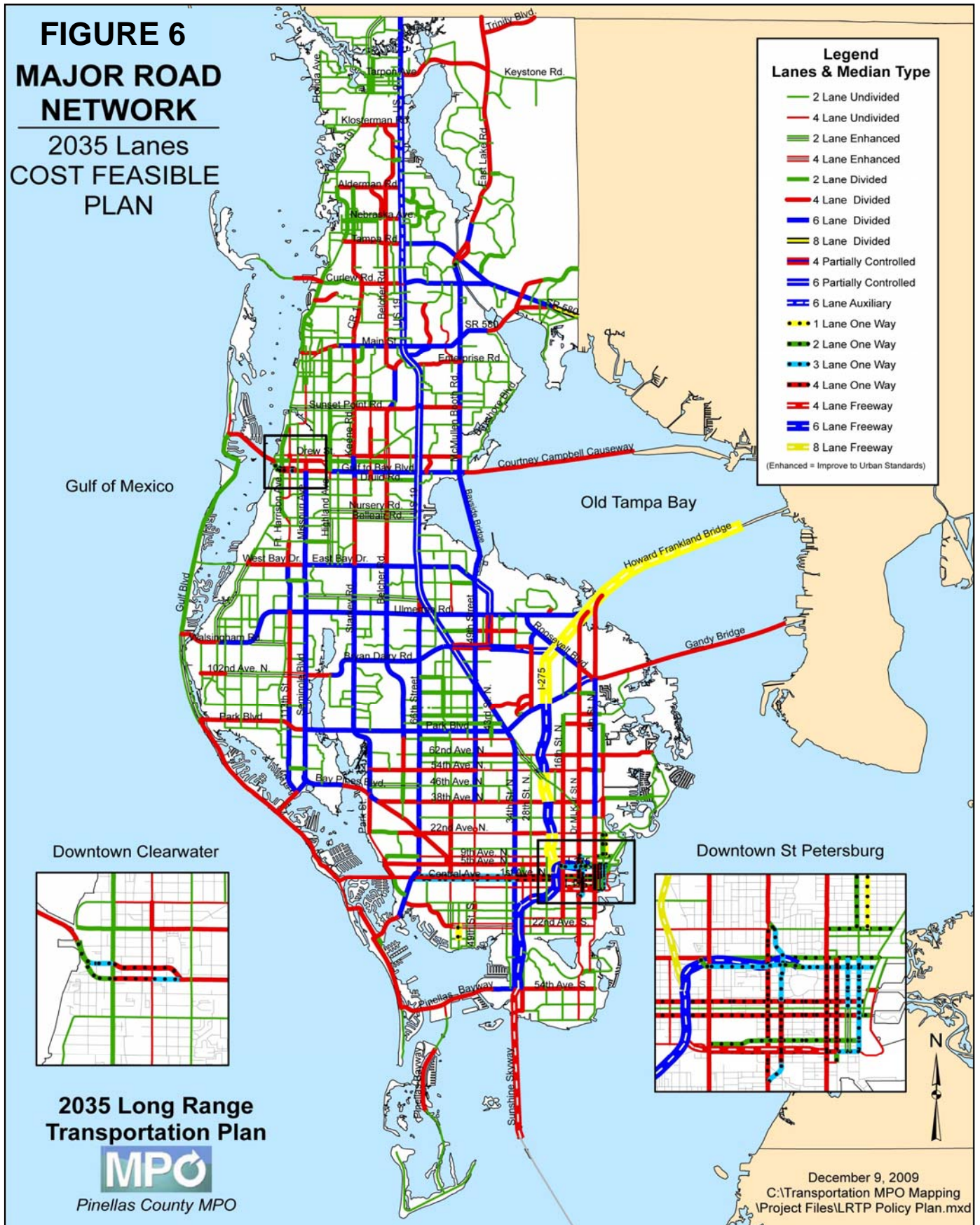
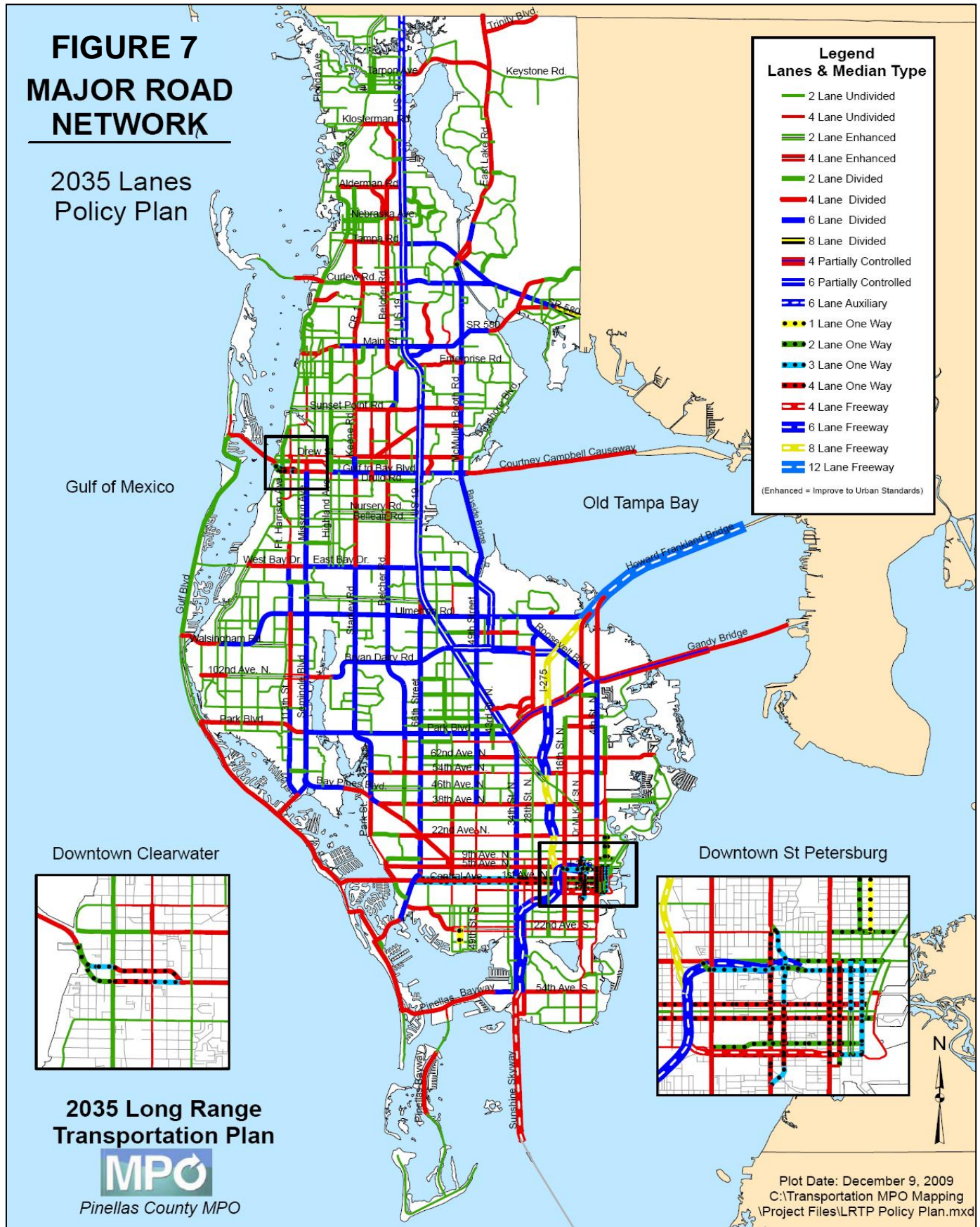


FIGURE 7. MAP OF ROADWAY NUMBER OF LANES BASED ON 2035 POLICY PLAN



Constrained Roadways

The MPO conducted the needs assessment for roadway projects in light of certain roadway facilities being constrained. A constrained roadway is one where, irrespective of the need for increasing vehicle capacity through adding additional lanes, there are impediments to widening the road. There are roadway segments in Pinellas County that cannot be widened because they are cost prohibitive due to lack of right of way. Other roadway segments may not be widened because they would negatively impact a particular community or environmentally sensitive area. The Pinellas County Comprehensive Plan lists policy constrained roadways, which are shown in Table 12 and Figure 8. These are the roadways assumed to be constrained for the purposes of developing the LRTP.

TABLE 12. LRTP POLICY CONSTRAINED ROADS

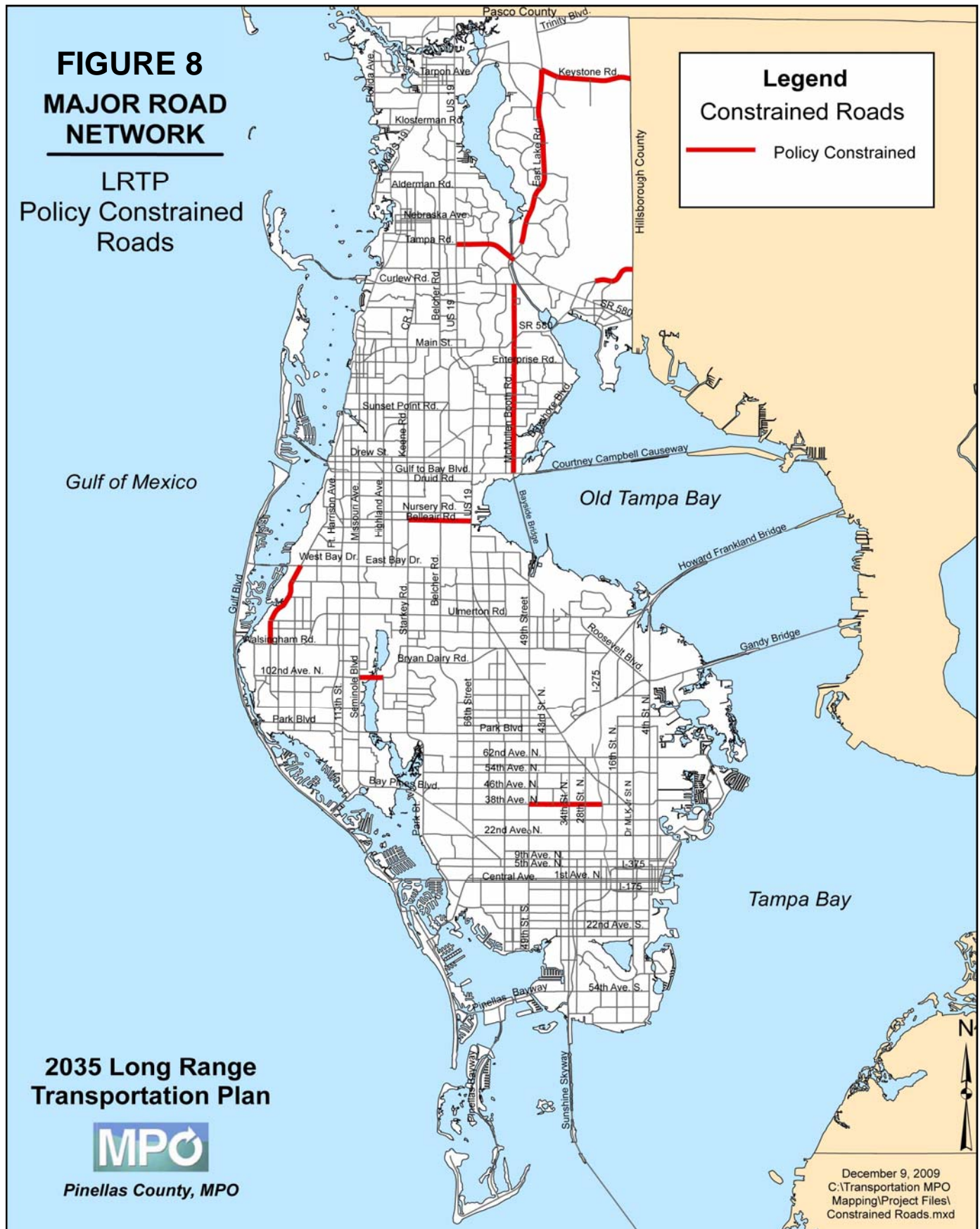
Street	From	To
Keystone Road	East Lake Road	Hillsborough County Line
East Lake Road	Keystone Road	North Split
Tampa Road	US Highway 19	East Lake East Service Road
Forest Lakes Boulevard	Pine Avenue	Hillsborough County Line
McMullen Booth Road	Curlew Road	Gulf to Bay Boulevard
Belleair Road	Keene Road	US Highway 19
Indian Rocks Road	West Bay Drive	Walsingham Road
Bryan Dairy Road	Seminole Boulevard/Alt. 19	98 th Street North
38 th Avenue North	49 th Street North	I-275

2035 Policy Plan Roadway Network

To develop the list of projects in the 2035 Cost Feasible Roadway Network, projects in the Policy Plan were prioritized based on several factors. One factor influencing the prioritization of projects was the fact that the purchasing power of state and federal revenue estimates for the 2035 LRTP was not significantly higher than the revenue assumed to be available during the development of the 2025 LRTP. There was not going to be a significant number of new roadway projects in the 2035 LRTP as a result. The MPO, working with FDOT, was attempting to preserve the projects that were in the adopted 2025 Cost Feasible Roadway Network in the 2035 LRTP. The prioritization process therefore considered first whether the projects were included in the adopted 2025 LRTP and listed on the Surface Transportation Program list of priorities found in the adopted Transportation Improvement Program. Projects that were underway or had funding committed for a particular phase were given the highest priority and planned for the committed or Cost Feasible phases of the LRTP.

The MPO created separate draft phasing plans for state and federal projects and local projects in mid-2009. These included a strategy for funding certain projects and included the projects that were not anticipated to be funded by 2035. The project priorities were reviewed by the MPO and its advisory committees. They were also included in public involvement activities that took place in the summer and fall of 2009. The MPO used the feedback from this agency and public involvement to refine the priorities to create the 2035 Cost Feasible Roadway Network, which is described in more detail in the section of the document called Projects in the Long Range Transportation Plan.

FIGURE 8. LRTP POLICY CONSTRAINED ROADS



Determining the Need for Transit Investments

In order to identify the needed investment in bus and rail transit over the next 25 years, the MPO conducted a comprehensive study of the land use and transportation issues relating to different types and levels of transit services and systems. The 2035 Policy Plan Transit Network is the result of that effort. It is intended to satisfy regional and local mobility needs and to support a growth strategy appropriate for Pinellas County. Based on an analysis of existing and projected population and employment patterns, assumptions were made regarding the expected growth in the County. Existing and future land use data were analyzed to estimate future development growth. Potential rail transit investments were analyzed and compared based on existing populations, future growth trends and a transit oriented development growth strategy within potential station areas. Analysis of travel patterns in the County and of transit supportive areas were used to select route alignments that would serve the needs of the County. Ridership estimates were developed and utilized in calculating a cost-benefit ratio to help prioritize the projects. Tampa Bay Regional Planning Model output data validate the findings of the technical analysis conducted by the MPO on the 2035 Policy Plan Transit Network and the priority recommendations of the Cost Feasible Plan relative to transit.



Working with the Tampa Bay Area Regional Transportation Authority (TBARTA), the MPO coordinated local rail transit priorities with TBARTA's concepts for major transit investments in the region. This occurred during 2009 as the MPO was developing the LRTP, which occurred concurrently with the development of the TBARTA Master Plan. At the same time, a parallel and more detailed discussion of near term and future bus service expansion took place between the MPO and the Pinellas Suncoast Transit Authority (PSTA). PSTA and the MPO have been and are continuing to work together on a potential funding strategy to implement the recommendations of the Transit Development Plan and the future bus service that is included in the outer years of the 2035 LRTP beyond the 10 year planning horizon of the Transit Development Plan.

The Pinellas Mobility Initiative (PMI) Steering Committee was at the center of the development of the 2035 Transit Network and recommended transit projects to the Pinellas MPO. The MPO approved the original Policy Plan Transit Network in early 2009 and by mid-year had adopted a prioritization plan very similar to what is included in the final 2035 Cost Feasible Bus and Rail Transit Network.

Transit System Concept

The MPO developed a planned 2035 Bus and Rail Transit Network to provide the basis for a cost feasible transit network for the 2035 LRTP. This required an assessment of costs and a determination of need and effectiveness. The system was therefore envisioned as specific modes with specific alignments and defined station locations. These elements were needed to create meaningful decision-making information for the MPO and the public. Further analysis, public involvement, interagency coordination, and design will be needed to determine exactly where, how and by what means this system will be implemented. The

recommended network was the first step in creating a tangible proposal for a comprehensive rail transit system for Pinellas County – one that will need to be validated and ultimately voted on by elected officials and the public if it is to be implemented. The following is a summary of the analysis and measures used to identify the planned 2035 Bus and Rail Transit Network.

Description of 2035 Rail Transit Network

The 2035 Rail Transit Network, shown in Figure 9, includes several lines that were analyzed for viability based on future anticipated growth, the potential for transit-oriented development and the ridership analysis that was conducted. The following descriptions for each line summarize the factors that were vital to them being recommended as part of the 2035 Rail Transit Network. At the time the analysis was presented for consideration by the MPO, the Network was divided into two phases. Phase I was shown as solid lines. The dashed Green and Purple Lines were considered Future Phases. The dashed Orange Lines were considered east-west alternatives to the Purple line connection between the Gateway area and Clearwater. The dashed Teal Line was being considered an alternative to the Blue Line between Clearwater and St. Petersburg.



Red Line

The Red Line would provide the regional connection from Hillsborough County to the Gateway area and the St. Petersburg downtown along the I-275 corridor. If constructed as a first investment, it would continue to downtown St. Petersburg including the loop that is at the end of the Blue Line. Not including the Tampa Bay crossing and starting from Toytown, the Red Line would be 11 miles including the downtown St. Petersburg loop. The line would have 13 stations.

The Red Line, accompanied by a Tampa Bay crossing and the proposed Hillsborough County rail transit system, would provide a vital link to job centers in Hillsborough County including, Westshore, downtown Tampa and north Tampa. Many Pinellas residents work in Hillsborough County and would benefit from this connection. The Red Line would also provide a critical link to Tampa International Airport, serving much of the out of town travelers and tourists that come to and from Pinellas County. Despite the significant benefits of this regional connection, there are challenges to the Red Line's implementation. The cost of the Bay crossing is estimated to be in the hundreds of millions of dollars. Financial participation will be needed from the region's local governments. If the Red Line were the only line in the Pinellas portion of a regional system, including the St. Petersburg loop, it might not be substantial enough to warrant the investment in the Bay crossing for reasons discussed below.

The Red Line does provide access to existing and potential employment centers in the Gateway area (Toytown and Gateway Center) and downtown St. Petersburg. However, within Pinellas County, assuming it is constructed along or in the I-275 right of way, the Red Line has very limited opportunity for local residents to access the system. The ridership analysis that was conducted pointed to this and the fact that there was very limited opportunity for transit-oriented infill development between the Gateway area and St. Petersburg. There is a significant amount of opportunity for transit-oriented development, including residential, along the Red Line within the Gateway area and downtown St. Petersburg. However, future

land use patterns in the Gateway area would have to be transformed in order to bring about high density, transit-oriented development within station areas.

The Red Line has another challenge in that it must compete with I-275 for choice riders, which are those who choose transit even when driving on a limited access road is an available option. This would be true today and will be even more problematic if additional widening occurs or special purpose lanes are constructed. Competition between mode choices notwithstanding, these roadway improvements would limit the amount of right of way available for flexibility in rail design. Despite the limitations, the Red Line was included in the Phase I recommended network because of its importance as a regional connector and ability to serve areas with good prospects for transit-oriented development.

Blue Line

The Blue Line would connect Clearwater to downtown St. Petersburg. It would also serve areas of unincorporated Pinellas County, Largo and Pinellas Park. The Blue Line would run mostly on the existing CSX rail line between downtown Clearwater and downtown St. Petersburg. At the time of the analysis, the line was envisioned to extend to Clearwater Beach from downtown Clearwater. This line would be approximately 22 miles and have 24 stations. Given the number of stations and length of the line, limited stop service would add to the attractiveness of the line.



The Blue Line would connect two of the three major activity centers of the County: the downtowns of Clearwater and St. Petersburg. These locations and many of the points between are developed or are in the process of being developed as walkable environments with medium to high density development. The Blue Line also has the potential to serve a significant number of existing residents and goes through areas where the potential and need for the redevelopment of industrial and commercial properties is significant.

This line is unique with respect to all of the lines within the planned rail network in that it provides a direct connection between the downtowns of Clearwater and St. Petersburg, where there is no direct or expedient connection provided by the existing or planned roadway network. This would serve to make it competitive in attracting choice riders.

In addition to the potential to effectively serve key destinations and attract riders, it would be easier to construct and operate rail transit in the existing rail right of way than in the portions of rights of way in or adjacent to arterials or the Interstate. If an agreement was reached with CSX for the purchase or use of the rail lines in Pinellas and/or the region, the Blue Line would be a viable rail transit investment. It was part of the Phase I recommended network at the time it was presented.

Green Line

The Green Line would be an east-west corridor that connects downtown Clearwater to Hillsborough County via Clearwater, Safety Harbor and Oldsmar. It would run along an existing rail right of way. The entire line as initially conceived was approximately 13.5 miles and had 14 stations. The Phase I

recommended network included only the two stations in Oldsmar and 1.7 miles of track. These stations anticipated rail transit being constructed in Hillsborough County continuing through the northwest part of Hillsborough County to the Tampa International Airport and beyond.

The ridership analysis indicated that there was very limited potential demand for the Green Line as a whole. The existing development along the line and the potential for redevelopment along the line was not significant enough to produce the number of riders that would warrant pursuing this as a first or even second rail transit investment. The portion of the line from Oldsmar to Clearwater was included in the Future Phases of the network.

Purple Line 1 and Purple Line 2

Purple Line 1 would connect the St. Petersburg-Clearwater International Airport to downtown St. Petersburg by way of Roosevelt Boulevard, Ulmerton Road, and 4th Street. It was considered as an alternative to the Red Line. Other possible alternative alignments for connecting the Gateway area to downtown St. Petersburg are 9th Street and 16th Street. The Purple Line 1 was included in the Phase 1 Network. Purple Line 2 would connect Clearwater to the Gateway area along Gulf to Bay Boulevard, US 19 and Roosevelt Boulevard. The dashed portion of the line north of Gulf to Bay was included in the Future Phases of the network. The rest of the line was included in the Phase I Network. The east-west connection between Clearwater and the Gateway area along Gulf to Bay Boulevard was compared to other alternative alignments, which were shown as the Orange Lines. Together, Lines 1 and 2 are approximately 24 miles long and have 19 stations.

The combination of the northern part of Purple Line 1 and Purple Line 2, going from the Gateway area to Clearwater, would provide a link between these two activity centers (Gateway and Clearwater). By continuing north to Gulf to Bay Boulevard and then running west to Clearwater, the service would provide access to many of the Clearwater and north Pinellas County residents who commute to the Gateway area. From Toytown to the south, the Purple Line 1 would connect the Gateway area to downtown St. Petersburg via 4th Street. This alignment was added after consideration of the limitations of the Red Line and in light of the need to serve as much of the residential population between the Gateway area and downtown St. Petersburg as possible. The 4th Street alignment would improve on the ridership that is estimated on the Red Line between these two activity centers, with the tradeoff being lower operating speeds.

To some extent, the Purple Line 1 and Red Line represent competing service as they operate in the same north-south corridor between the Gateway area and downtown St. Petersburg. However, if the Red Line is implemented to serve mainly a regional function, the Purple Line would be an appropriate complement to that service. If the Red Line is not constructed, irrespective of the Bay crossing, the Purple Line 1 would provide the important link between the Gateway area and downtown St. Petersburg. If purple line were implemented in conjunction with the Bay crossing, it would provide regional access to employment, the Saint Petersburg/Clearwater International Airport, the Tampa International Airport and other destinations between Clearwater, the Gateway area, downtown St. Petersburg, Westshore, downtown Tampa and north Tampa.

Orange Lines

These lines were added to the planned network because there were several possible east-west alignments providing a connection from the Gateway area to Clearwater and Clearwater Beach. Alternative alignments are shown as dashed lines along Ulmerton Road (between Lake Drive and Roosevelt Boulevard) and East

Bay Drive (between Downtown Largo and the Largo Town Center). These potential connections are being considered as alternatives to the Purple Line 2 between the Gateway area and Clearwater.

Teal Line

This line was considered as an alternative to the Blue Line should the existing rail right of way not be available for use. It would connect downtown St. Petersburg to Clearwater via Central Avenue, Tyrone Boulevard, Bay Pines Boulevard, Seminole Boulevard and Missouri Avenue.

FIGURE 9. RAIL ALTERNATIVES ANALYZED DURING DEVELOPMENT OF TRANSIT SYSTEM CONCEPT



Analyzing the Benefits of Rail Transit Investments

Estimating Future Population and Employment

In order to assess the potential for the transit network to serve future residential and employment populations, socioeconomic data was developed for 2035. The MPO used three sets of data to measure the effectiveness of the rail alternatives to serve existing and future populations. The baseline for the data is the 2006 validated Traffic Analysis Zone information used for the Tampa Bay Regional Planning Model. A land use allocation model was used to develop 2035 trend and transit-oriented development futures.

The “existing” population and employment refers to the 2006 TAZ data. The “2035 Trend” is based on the Scenario A data, which is based on adopted future land use categories for the County. The 2035 Trend is the control total constrained for population and employment. The dwelling units and employment were set at a realistic estimate of housing and jobs in Pinellas County in 2035. The countywide dwelling unit and employment totals for the existing and trend data sets are shown in Table 13.

TABLE 13. DWELLING UNIT AND EMPLOYMENT COUNTYWIDE TOTALS FOR SOCIOECONOMIC DATA

	Existing	2035 Trend
Dwelling Units	493,509	566,042
Employment	565,400	662,967

Ridership Analysis and Summary

Land use intensity within 1/3 mile of each proposed transit station was used to prepare estimates for potential rail ridership. Potential transit ridership for the different transit corridors was derived from the station area household and employment estimates. Assumptions about transit trips per person and percentage of transit trips per person related to work, shopping and other activities (home-based and non home-based) were applied to the household and employment estimates within 1/3 mile of each station to derive potential transit corridor ridership. These assumptions were based on experience and supporting data from similar cities in the U.S. that have implemented rail transit systems. Table 14 summarizes the factors and percentages applied to the ridership analysis.

TABLE 14. TRIP GENERATION AND MODE SHARE ASSUMPTIONS FOR RIDERSHIP ASSESSMENT

	Transit Trips per Person				% Transit Trips for 1/3 mile			
	HBW	HBS	HBO	NHB	HBW	HBS	HBO	NHB
Population		0.4	0.6		6.0%	2.5%	3.5%	2.0%
Employment	2			1.5	6.7%	2.5%	3.5%	2.0%

HBW = Home Based Work; HBS = Home Based Shopping; HBO = Home Based Other; NHB = Non-home Based

The potential transit ridership data within the individual station areas was aggregated to project potential ridership by line and for the Rail Transit Network. The potential transit ridership is summarized in Table 15.

TABLE 15. POTENTIAL RAIL RIDERS PER MILES BY LINE⁶

	Estimated Ridership within 1/3 Mile of a Station		Segment Lengths	Estimated Ridership per Mile	
	Existing	Trend	Miles	Existing	Trend
Blue Line - Clearwater Beach to North Kenwood	8,265	10,134	17.1	484	594
Blue Line - North Kenwood and St Petersburg Downtown Loop	7,464	9,177	4.7	1,603	1,971
Red Line - North Kenwood to Toytown	676	1,637	6.3	108	261
Purple 1 Line - St. Pete- Clearwater International Airport to Toytown	3,450	4,222	3.5	986	1,206
Purple Line 1 - Toytown to 1st Ave So (via 4th St)	2,295	2,753	9.5	243	291
Purple Line 2 - East Downtown Clearwater to St. Pete- Clearwater International Airport	2,091	2,709	10.8	194	251
Purple Line 2- Countryside Mall to Clearwater Mall	1,659	1,758	4.8	349	369
Orange Line - Ulmerton Lake to Roosevelt – Ulmerton	1,357	1,794	5.0	270	357
Orange Line - Largo Downtown to Crossroads	875	887	3.6	244	247
Green Line - Oldsmar Forest Lakes to Oldsmar Town Center	848	949	1.7	495	554
Green Line - East Downtown Clearwater to Oldsmar Forest Lakes	3,742	4,061	11.7	319	346
Teal Line – Missouri–Court to Tropicana Field	3,248	3,724	18.5	176	201

⁶ The estimated ridership is based on a station area density and transit mode share methodology and not from a travel demand forecasting model. The transit mode share used is based on ridership on transit lines in places with similar demographic characteristics to Pinellas County.

2035 Policy Plan Transit Network

The 2035 Policy Plan Transit Network was based on the transit system concept described above and analysis conducted during the scenario planning study. The bus and rail networks were created by drawing on past and current transit studies and plans including the 2025 Long Range Transportation Plan, the TBARTA Master Plan, the PSTA Transit Development Plan and the 2003 Pinellas Mobility Initiative Final Report.

2035 Policy Plan Rail Network

For the rail network, the MPO selected alignments that connect the areas of the County that are most suitable for rail investment. This occurs where existing and anticipated residential and employment densities will support rail service and justify the capital and operations and maintenance costs associated with putting that service into place. Rail alignments that connect the major activity centers, provide accessibility, and will help improve mobility were identified based on analysis of the County population, employment, growth scenarios, travel patterns, and ridership. Some alignments are proposed to operate on existing rail alignments (CSX) and some are proposed to operate within road right of way. The 2035 Policy Plan Rail Network includes the following lines, which are depicted in Figure 10:

- Orange Line Phase 1 – Ulmerton/Roosevelt to St. Petersburg Downtown Loop
- Orange Line Phase 2 – Clearwater Downtown to Ulmerton/Roosevelt
- Red Line (Bay crossing and Gateway Connection) – Gateway (Roosevelt/ I-275) to Howard Frankland Bridge
- Blue Line (Clearwater Downtown to St. Petersburg Loop) – Clearwater Downtown to St. Petersburg, including loop
- Green Line – Clearwater downtown (S. East Avenue/Court Street) to Oldsmar (Hillsborough County line)
- Purple Line – Ulmerton/Roosevelt to Pasco County Line

2035 Policy Plan Bus Network

The Pinellas Suncoast Transit Authority (PSTA) Transit Development Plan, existing ridership data, and the MPO Bus Rapid Transit Study were used in development of the enhancements to the existing bus system and the premium bus network for the Policy Plan. Interagency coordination between PSTA, TBARTA and MPO provided consistency in the proposed improvement plans for the bus network.

There are a significant number of enhancements to the existing bus system, including vehicle purchase, transit infrastructure, expanded maintenance facilities and operations. In addition to enhancing the routes within the existing local bus network, the MPO developed a number of new Premium Bus lines to



complement the existing local bus network, feed the proposed rail lines and establish new regional service to Pasco, Hillsborough and Manatee Counties. The Premium Bus lines are depicted in Figure 11.

2035 Cost Feasible Transit Network

The 2035 Cost Feasible Transit Network includes portions of the countywide rail system concept, enhanced service for the existing local bus network and premium bus lines that represent new service to supplement the existing bus and planned rail network. Planning and design, capital and operational costs are included for the transit phasing plan. The rail Cost Feasible projects include:

- Orange Line - Clearwater Downtown to St. Petersburg Downtown via Ulmerton, Gateway and 4th Street.
- Red Line – Bay Crossing and Gateway Connection
- Green Line – Downtown Clearwater to Oldsmar and the Hillsborough County line along the CSX line (Planning and Design and Right of Way are funded)

The PSTA local and express bus Cost Feasible projects include the continuation of existing service (Phase I), proposed headway improvements, span of service enhancements to the top ten existing routes (Phase II), enhancements to the rest of the existing bus network (Phase III), and adding new premium service to some corridors. The Cost Feasible plan maintains the existing PSTA system and adds enhancements to the top ten routes that have been identified in the Transit Development Plan. After these enhancements are implemented, the existing local and commuter routes are enhanced followed by addition of new premium service in the outer year periods from 2015 to 2035.



The phasing table, maps and further description of the 2035 Cost Feasible Transit Network are located in the section of the document called Projects in the Long Range Transportation Plan.

2035 Unfunded Transit Projects

There are several Premium Bus lines in the 2035 Policy Plan Transit Network that have not been included in the Cost Feasible plan because they were redundant relative to the Cost Feasible rail network:

- I - Indian Rocks Beach/Tampa - Indian Rocks Beach to downtown Tampa via Walsingham Road/Ulmerton Road and I-275 (Two-Way Commuter Express)
- S- Ulmerton – Indian Rocks Beach to 4th Street via Walsingham Road/Ulmerton Road and Roosevelt Boulevard (Limited Stop Connector)
- K - 4th St/Gulf-to-Bay – Downtown Clearwater to Downtown St. Petersburg via Gulf-to-Bay, US 19, Roosevelt Boulevard and 4th Street (Premium Service in Mixed Traffic)
- J -Downtown St. Petersburg/Tampa - Downtown St. Petersburg to Tampa via I-375 and I-275 (Two-Way Commuter Express)

There are also portions of the 2035 Policy Plan Transit Network that are unfunded:

- Blue Line - South of Ulmerton to St. Petersburg (Planning and Design, Right of Way and Construction)
- Purple Line – North of Ulmerton to Pasco County line (Planning and Design, Right of Way and Construction)
- Green Line – Clearwater downtown to Oldsmar (Construction)

FIGURE 10. 2035 POLICY PLAN RAIL NETWORK

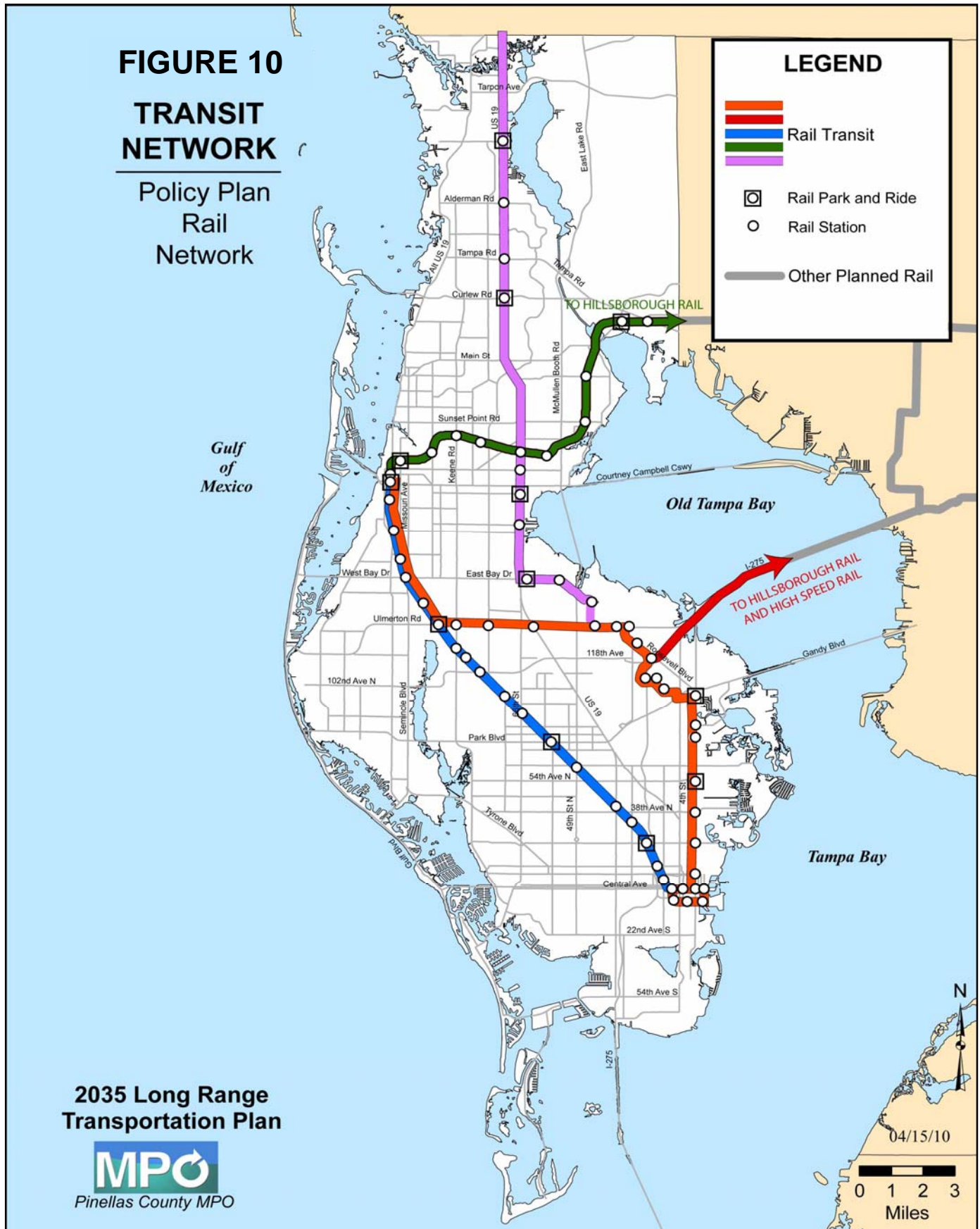
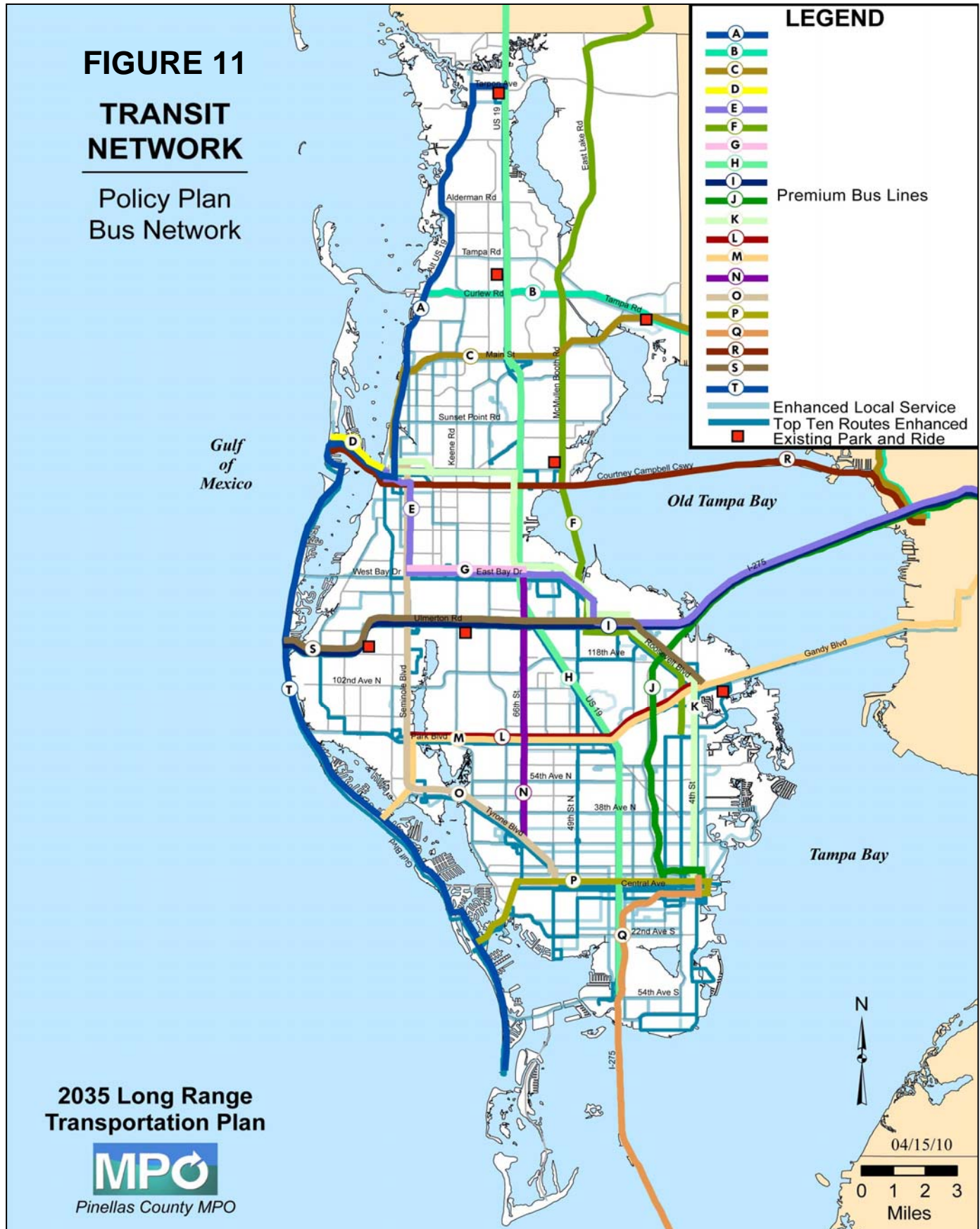


FIGURE 11. 2035 POLICY PLAN BUS NETWORK



Countywide Travel Market Analysis

The MPO analyzed travel patterns within Pinellas County and the West Central Florida region to guide the development of the Cost Feasible LRTP. This analysis utilized data about trip origins and destinations. The data used was for the 2025 trip tables from the Tampa Bay Regional Planning Model.⁷ The analysis zones shown on the following maps and tables are created from individual Traffic Analysis Zones (TAZs). The aggregation of the TAZs allowed the MPO to understand the various travel markets that exist within and adjacent to Pinellas County. The dataset included TAZs in Pasco and Hillsborough Counties in addition to those in Pinellas County. The region was broken out into different zones, and travel between the zones was examined. The major destination zones in Pinellas County are the City of Clearwater, Downtown Clearwater, the Gateway area and Downtown St. Petersburg. The areas around Downtown St. Petersburg were analyzed but were not major destination zones. Most trips to these destinations originated in adjacent areas or came from within the destination zone. Trips that begin and end in the same zone can be served by local streets, local bus routes, sidewalks, trails, and bicycle lanes. Trips from neighboring zones or areas farther away are more likely to rely on major arterials and highways, express bus and/or fixed guideway transit in the future.

The results of the intra-county travel analysis are presented in the following section for the major destination areas in Pinellas County. Cost feasible roadway and transit capacity projects are listed for each destination area to demonstrate how the projects serve the County's travel needs. In addition to these improvements, the LRTP includes bicycle, pedestrian, and trail facilities to improve non-motorized accessibility throughout the County and intelligent transportation systems (ITS) technologies to improve roadway operations. These projects are not listed for each area, but they will play an important role in meeting local travel demand, especially for accommodating trips that begin and end in the same zone.

City of Clearwater

Travel to the City of Clearwater (zone 15) comes primarily from within the zone itself. Many trips to Clearwater also begin in the adjacent zones of northern Pinellas County (zone 14) and Largo (zone 17). A significant number of trips come from other nearby zones, including Gateway (zone 18), northwest Hillsborough County (zones 29 and 25), and southwest Pasco County (zone 11). The top 10 zones of origin for trips to the City of Clearwater are shown in Table 16. The cost feasible roadway and transit capacity projects serving the City of Clearwater are listed in Table 17 and Table 18.



⁷ The 2035 trip tables were not available at the time the analysis was conducted.

TABLE 16. TOP 10 TRIPS TO CITY OF CLEARWATER

City of Clearwater			
	Trip Origin	Trip Destination	2025 Forecasted Daily Trips
1	15	15	328,383
2	14	15	101,021
3	17	15	69,231
4	11	15	40,351
5	16	15	19,864
6	18	15	18,250
7	25	15	13,161
8	29	15	12,918
9	19	15	8,438
10	21	15	4,297

FIGURE 12. TOP 10 TRIPS TO CITY OF CLEARWATER

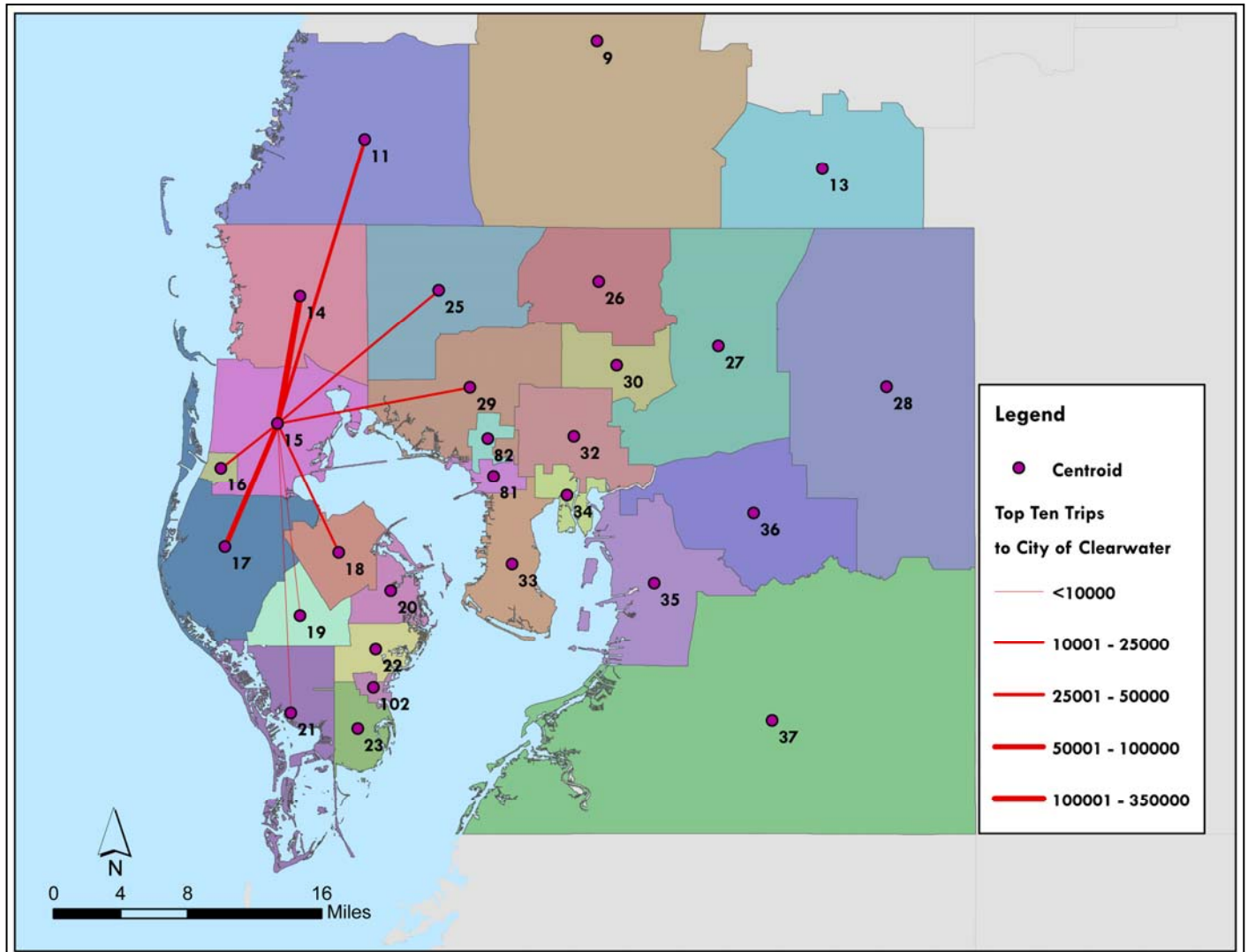


TABLE 17. COST FEASIBLE ROADWAY PROJECTS SERVING CITY OF CLEARWATER

#	Facility	From	To	Time Period
C4	US 19 (SR 55)(Curlew Road Interchange)	N. of SR 580	N. of CR 95	2026-2030
C5	Forest Lakes Boulevard	SR 580	SR 584	2021-2025
C6	Sunset Point Road	Alt US 19 (SR 595)	Keene Road	2015
C7	US 19 (SR 55) (Enterprise Road Interchange)	N. of Sunset Point Road	S. of Countryside Blvd.	2016-2020
C8	Belcher Road	NE Coachman Rd.	Druid Road	2021-2025
C9	Nursery Road	Highland Avenue	Belcher Road	2016-2020
C10	Nursery Road	Belcher Road	US 19 (SR 55)	2021-2025
C11	Belleair Road	US 19 (SR 55)	Keene Road	2015

TABLE 18. COST FEASIBLE TRANSIT PROJECTS SERVING CITY OF CLEARWATER

Project	Description	Time Period
Premium Bus - A	Suncoast North County Trolley	2015
Premium Bus - B	Curlew/Hillsborough	2026-2030
Premium Bus - C	Downtown Clearwater/Hillsborough County	2016-2020
Premium Bus - D	Clearwater BRT	2015
Premium Bus - E	Downtown Clearwater/Tampa	Prior to 2015
Premium Bus - F	Gateway/Pasco County/McMullen Booth	2021-2025
Premium Bus - H	US 19	2021-2025
Premium Bus - R	Clearwater Beach/Tampa/SR 60	2026-2030

Downtown Clearwater

The majority of trips to downtown Clearwater begin in one of three zones: the City of Clearwater (zone 15), Largo (zone 17), and within the downtown Clearwater area (zone 16). A large portion of the trips coming to the City of Clearwater are from northern Pinellas County (zone 14) and southwest Pasco County (zone 11), while very few originate in southern Pinellas or Hillsborough County. The top 10 zones of origin for trips to downtown Clearwater are shown in Table 19. The cost feasible transit capacity projects serving downtown Clearwater are listed in Table 20. There are no cost feasible roadway projects that serve downtown Clearwater.

TABLE 19. TOP 10 TRIPS TO DOWNTOWN CLEARWATER

Clearwater Downtown			
	Trip Origin	Trip Destination	2025 Forecasted Daily Trips
1	15	16	33,635
2	17	16	25,503
3	16	16	12,012
4	14	16	6,529
5	11	16	3,295
6	18	16	1,697
7	19	16	1,065
8	29	16	1,004
9	25	16	943
10	21	16	942

FIGURE 13. TOP 10 TRIPS TO DOWNTOWN CLEARWATER

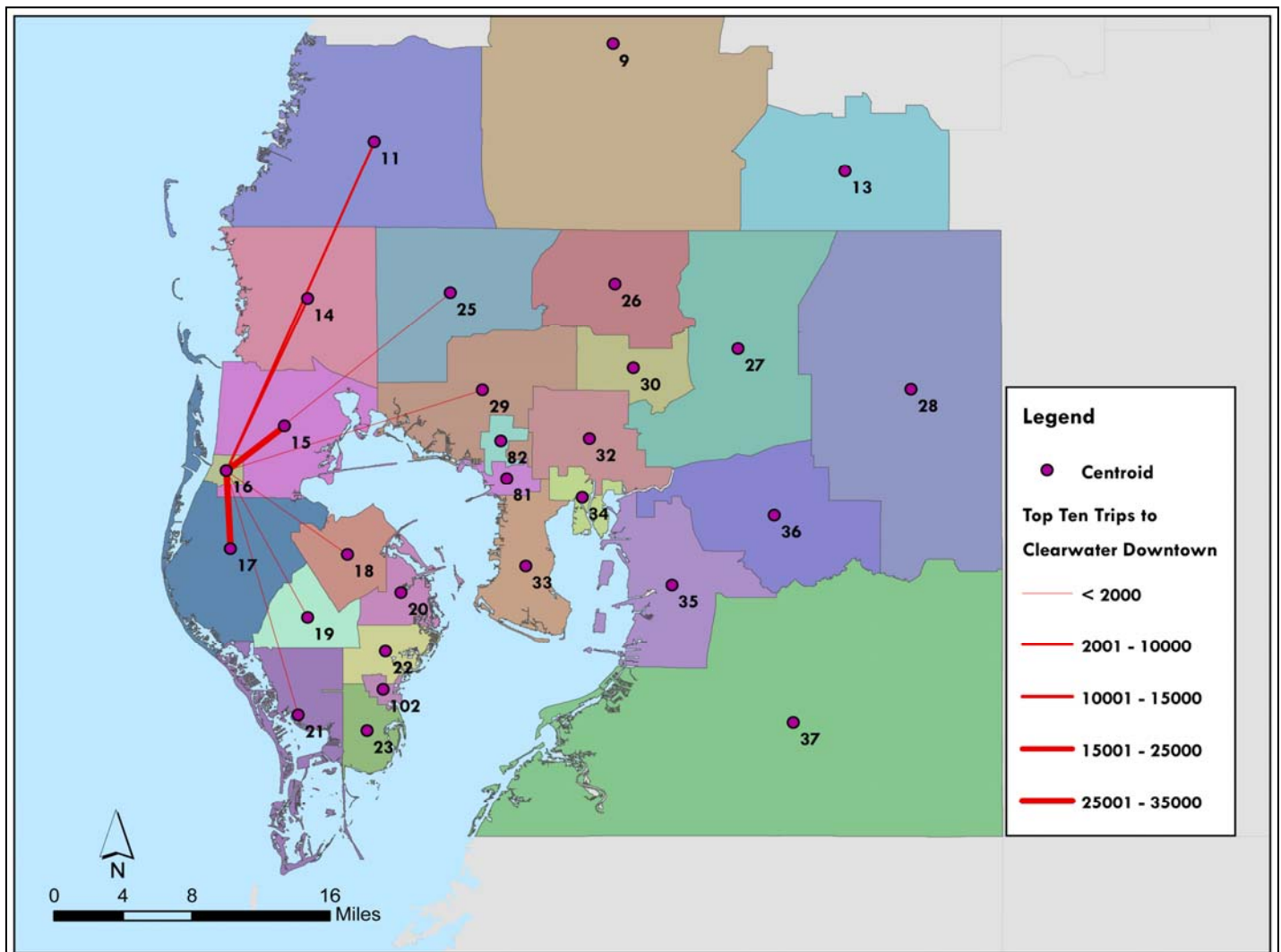


TABLE 20. COST FEASIBLE TRANSIT PROJECTS SERVING DOWNTOWN CLEARWATER

Project	Description	Time Period
Premium Bus - A	Suncoast North County Trolley	2015
Premium Bus - C	Downtown Clearwater/Hillsborough County	2016-2020
Premium Bus - D	Clearwater BRT	2015
Premium Bus - E	Downtown Clearwater/Tampa	Prior to 2015
Premium Bus - O	Alt 19	2026-2030
Premium Bus - R	Clearwater Beach/Tampa/SR 60	2026-2030
Rail - Orange Line	Clearwater to Ulmerton	2021-2025

Gateway Area

The Gateway area (zone 18) attracts trips from throughout Pinellas County. However, more trips come from within the same zone than from any other. Many trips also come from the Largo area (zone 17), the City of Clearwater (zone 15) and Pinellas Park (zone 19). The top 10 zones of origin for trips to Gateway are shown in Table 21 below. The cost feasible roadway and transit capacity projects serving Gateway are listed in Table 22 and Table 23 below.

TABLE 21. TOP 10 TRIPS TO GATEWAY AREA

Gateway Area			
	Trip Origin	Trip Destination	2025 Forecasted Daily Trips
1	18	18	146,090
2	17	18	115,792
3	15	18	65,448
4	19	18	58,415
5	20	18	34,330
6	21	18	28,090
7	14	18	26,951
8	22	18	26,744
9	11	18	18,099
10	33	18	15,942

FIGURE 14. TOP 10 TRIPS TO GATEWAY AREA

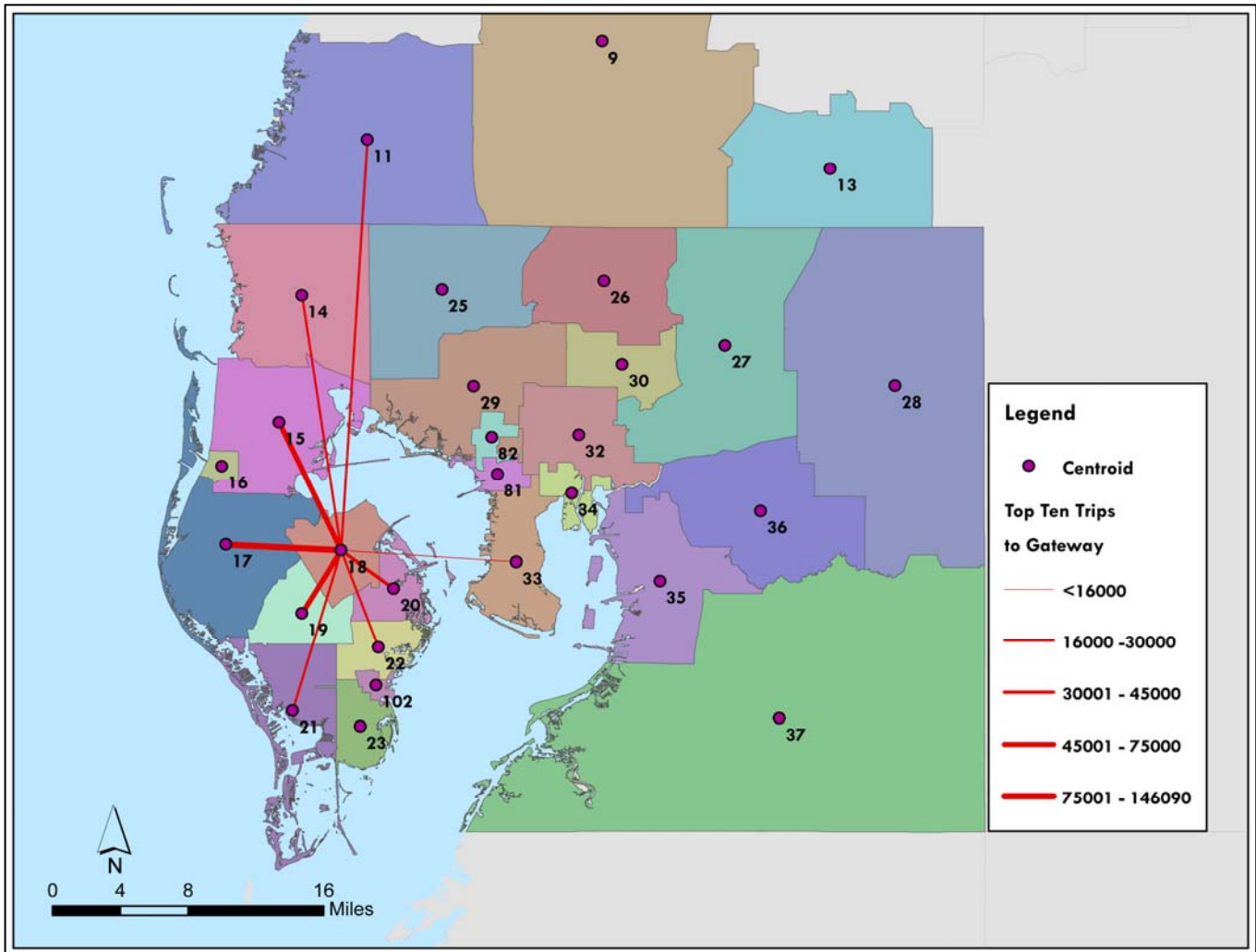


TABLE 22. COST FEASIBLE ROADWAY PROJECTS SERVING GATEWAY AREA

#	Facility	From	To	Time Period
C18	SR 688 (Ulmerton Road)	E. of 49th Street N.	W. of 38th Street	2021-2025
C19	SR 686 (Roosevelt Blvd.) Stage 6 of 6	At 49th Street Interchange	N/A	2026-2030
C20	SR 686 (Roosevelt Blvd.) Stage 5 of 6	49th St. Bridge/Roosevelt Blvd	North of SR 688 (Ulmerton Road)	2026-2030
C21	SR 686 (Roosevelt Blvd.) Stage 4 of 6	North of SR 688 (Ulmerton Road)	E. of 40th Street	2021-2025
C22	126th Ave North	34th Street North	US 19 (SR 55)	2016-2020
C23	CR 296 (Future SR 690)	US 19 (SR 55)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	2021-2025
C24	SR 686 (Roosevelt Blvd.)	SR 688 (Ulmerton Road)	28th St. N	2016-2020
C25	SR 686 (Roosevelt Boulevard) Stage 3 of 6	W. of I-275 Interchange	SR 686 (Roosevelt Blvd.) W. of 9th Street	2016-2020

TABLE 23. COST FEASIBLE TRANSIT PROJECTS SERVING GATEWAY AREA

Project	Description	Time Period
Premium Bus - E	Downtown Clearwater/Tampa	Prior to 2015
Premium Bus - F	Gateway/Pasco County/McMullen Booth	2021-2025
Premium Bus - H	US 19	2021-2025
Rail - Orange Line	Ulmerton to St Petersburg Loop	2021-2025
Rail - Orange Line	Clearwater to Ulmerton	2021-2025
Rail - Red Line	Bay Crossing and Gateway Connection	2026-2030

Downtown St. Petersburg

As in the other destination areas, most trips to the downtown St. Petersburg area (zone 102) originate there. Many trips also come from the surrounding zones of north St. Petersburg (zone 22), south St. Petersburg (zone 23), and Gulfport (zone 21). The top 10 zones of origin for trips to downtown St. Petersburg are shown in Table 24. The cost feasible transit capacity projects serving downtown St. Petersburg are listed in Table 25. There are no roadway capacity projects that serve downtown St. Petersburg.



Other Areas in St. Petersburg

In addition to the downtown St. Petersburg area (zone 102), there are other parts of the City that have a significant number of residents and some employment. The travel market analysis focused on the areas that serve as major destinations for residents throughout the county. There were several zones that had a significant number of trips originating there that were destined for other places. Specifically, north St. Petersburg (zone 22), south St. Petersburg (zone 23), and Gulfport (zone 21) had a significant number of trips that were destined for Gateway and downtown St. Petersburg. The intra-county mobility needs of these residents are served by the projects that support access to Gateway and downtown St. Petersburg.

TABLE 24. TOP 10 TRIPS TO DOWNTOWN ST. PETERSBURG

St. Petersburg Downtown			
	Trip Origin	Trip Destination	2025 Forecasted Daily Trips
1	102	102	37,708
2	22	102	36,462
3	21	102	36,212
4	23	102	35,957
5	19	102	13,368
6	17	102	11,953
7	18	102	10,689
8	20	102	8,039
9	15	102	6,999
10	33	102	4,278

FIGURE 15. TOP 10 TRIPS TO DOWNTOWN ST. PETERSBURG

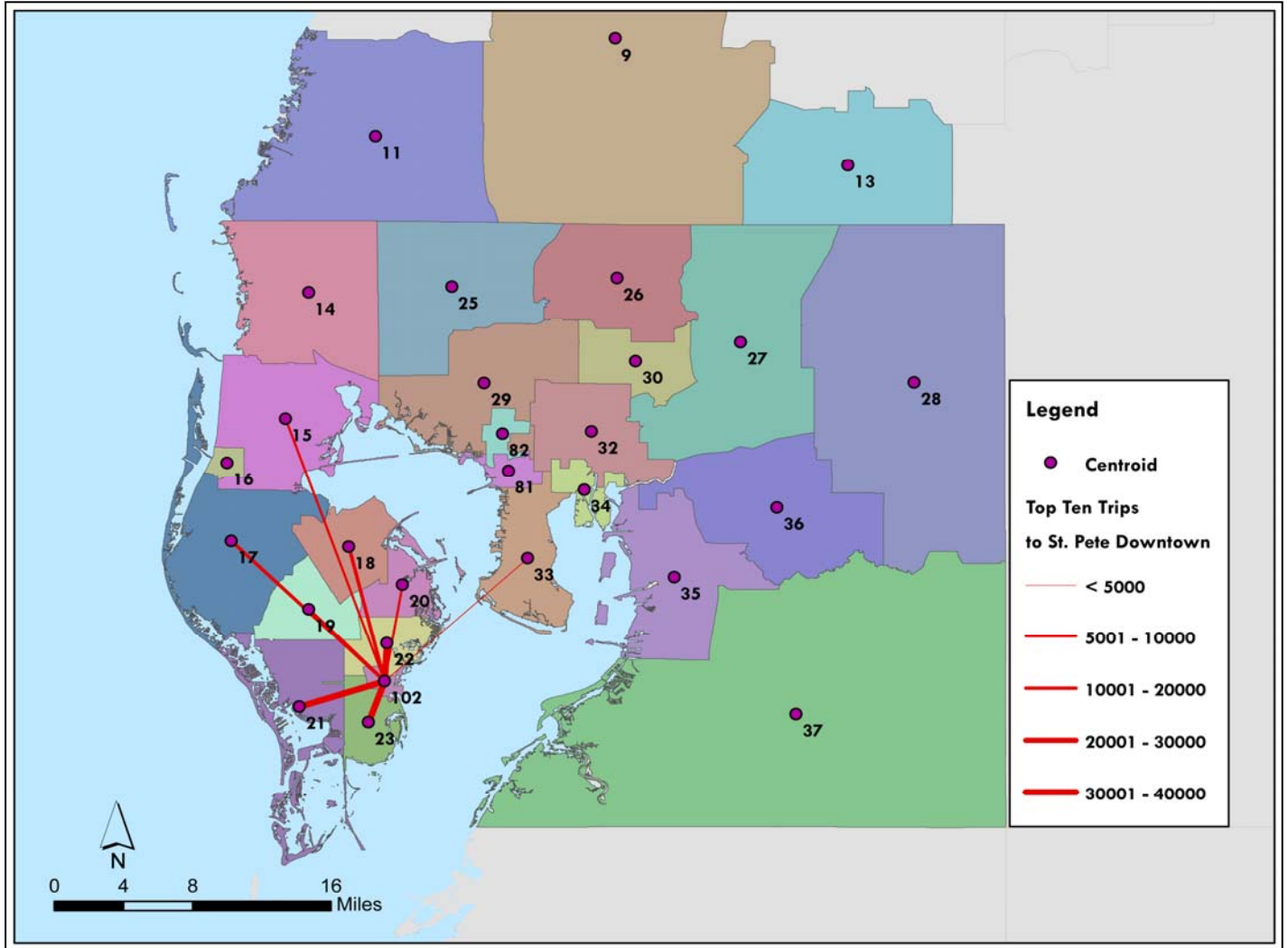
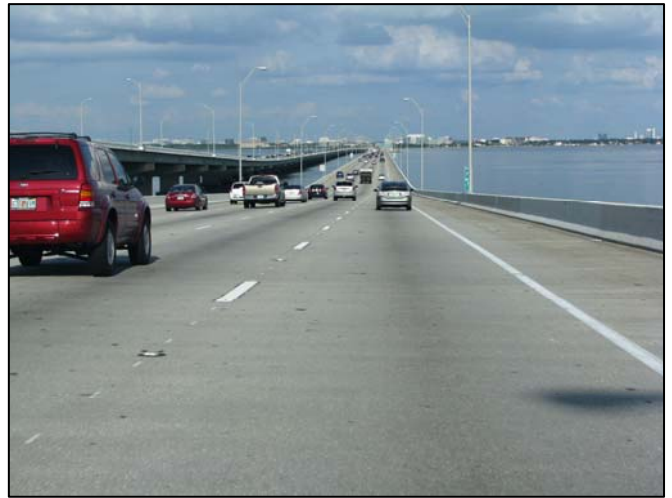


TABLE 25. COST FEASIBLE TRANSIT PROJECTS SERVING DOWNTOWN ST. PETERSBURG

Project	Description	Time Period
Premium Bus - P	Central Ave BRT	2015
Premium Bus - Q	Downtown St Petersburg/Manatee County	2026-2030
Rail -Orange Line	Ulmerton to St Petersburg Loop	2021-2025

Regional Travel Market Analysis

In addition to examining travel patterns within Pinellas County, connections between Pinellas and neighboring counties were also studied. Regional travel was analyzed by identifying travel markets that reflect general travel trends in the region. The regional travel analysis was a cooperative effort of the MPOs of the West Central Florida Chairs Coordinating Committee (CCC). The travel markets are focused on at least one major roadway, such as I-275 or US-19, and parallel transportation facilities linking together centers of activity across county boundaries. Three of the 11 travel markets analyzed in the West Central Florida region include Pinellas County.



The results of the regional travel analysis for the travel markets that include Pinellas County are presented below. The travel markets are described and presented together with a map of regional transportation needs and a list of cost feasible improvements included in the CCC's regional plan for each market. The cost-affordable regional travel plan focuses on high capacity facilities, such as freeways and rail transit improvements. The regional plan incorporates projects from the LRTPs for the contributing MPOs; it does not constitute a list of projects in addition to the LRTP.

Cross-Bay Travel Market

The Cross-Bay travel market extends from central Hillsborough County west across Old Tampa Bay to the northeast neighborhoods of St. Petersburg and the northern Gulf Beaches of Pinellas County. Figure 16 shows the future transportation needs for the Cross-Bay travel market. Existing facilities that serve this market include I-275, Gandy Boulevard, and the Courtney Campbell Causeway. There are additional transportation capacity projects on either side of the Bay identified in Figure 16 that support regional travel even though they do not cross County lines. Tables 26 and 27 list the cost feasible regional roadway and transit projects in the Cross-Bay travel market that are in Pinellas County.

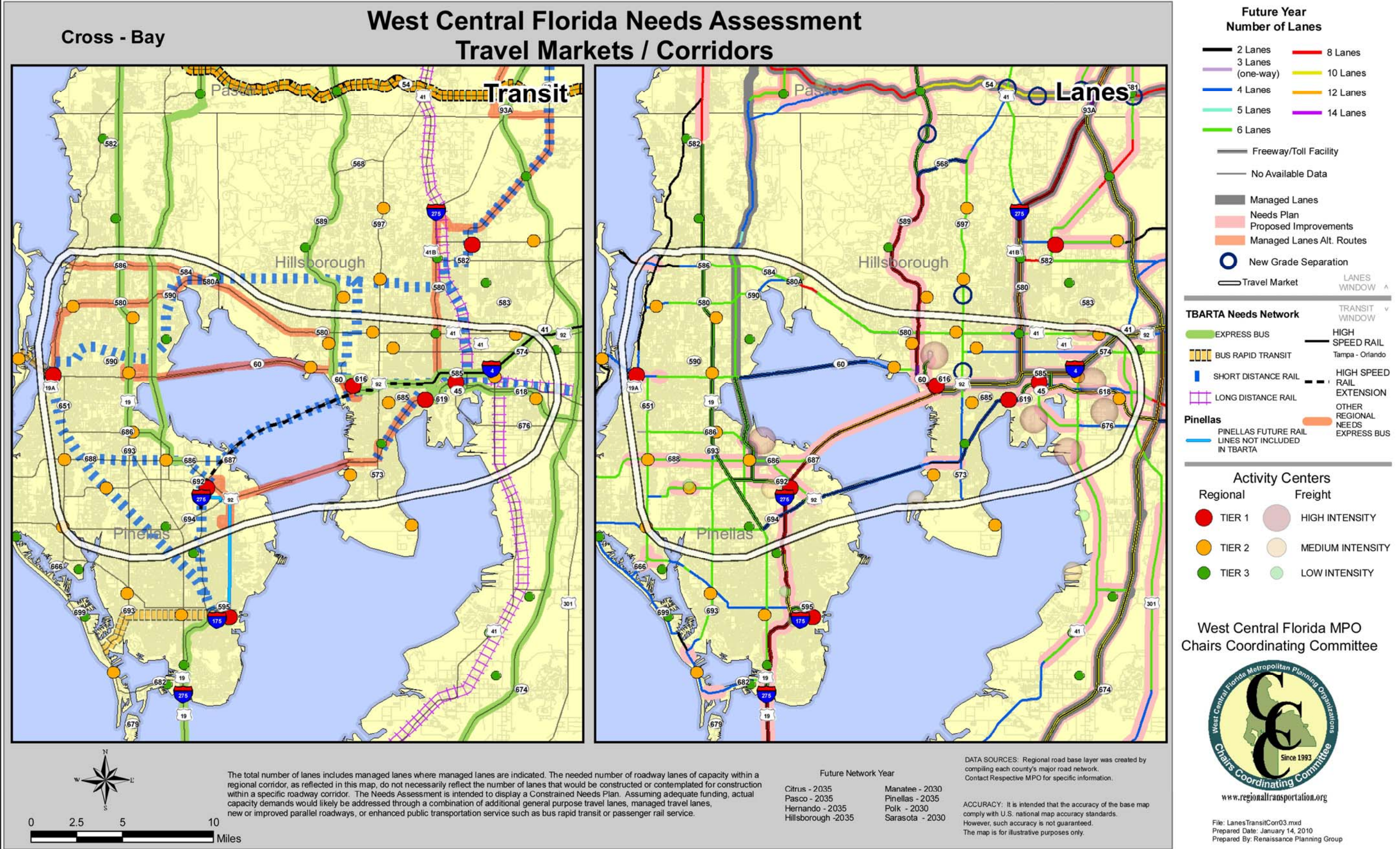
TABLE 26. ROADWAY PROJECTS SERVING THE CROSS-BAY TRAVEL MARKET

#	Project	From	To	Time Period
C4	US 19 (SR 55)(Curlew Road Interchange)	N. of SR 580	N. of CR 95	2026-2030
C7	US 19 (SR 55) (Enterprise Road Interchange)	N. of Sunset Point Rd	S. of Countryside Blvd	2016-2020
C18	SR 688 (Ulmerton Road)	E. of 49th Street N.	W. of 38th Street	2021-2025
C19	SR 686 (Roosevelt Blvd.) Stage 6 of 6	At 49th Street Interchange	N/A	2026-2030
C21	SR 686 (Roosevelt Blvd.) Stage 4 of 6	North of SR 688 (Ulmerton Road)	E. of 40th Street	2021-2025
C23	CR 296 (Future SR 690)	US 19 (SR 55)	E of SR 686 (Roosevelt Blvd.) at 40th St	2021-2025
C24	SR 686 (Roosevelt Blvd.)	SR 688 (Ulmerton Road)	28th St. N	2016-2020
C25	SR 686 (Roosevelt Boulevard) Stage 3 of 6	W. of I-275 Interchange	SR 686 (Roosevelt Blvd.) W. of 9th Street	2016-2020
C26	SR 688 (Ulmerton Road) Stage 5	Lake Seminole Bypass Canal	East of Wild Acres Road	2016-2020
C29	SR 694 (Gandy Blvd.)	West of 9th St. N.	East of 4th St. N.	2031-2035

TABLE 27. TRANSIT PROJECTS SERVING THE CROSS-BAY TRAVEL MARKET

Project	Description	Time Period
Premium Bus – B	Curlew/Hillsborough	2026-2030
Premium Bus – C	Downtown Clearwater /Hillsborough County	2016-2020
Premium Bus - E	Downtown Clearwater/ Tampa	2021-2025
Premium Bus - M	Madeira Beach/ Tampa	2021-2025
Premium Bus - R	Clearwater Beach/Tampa/SR 60	2026-2030
Rail	Orange Line (Clearwater Downtown to St. Petersburg Downtown)	2021-2025
Rail	Red Line (Gateway to Howard Frankland)	2026-2030

FIGURE 16. CROSS-BAY TRAVEL MARKET



Pinellas-Pasco Travel Market

US Highway 19 is the principal facility serving the Pinellas-Pasco travel market, which connects St. Petersburg to western Pasco County. The travel market needs assessment is depicted in Figure 17. Since it includes almost all of Pinellas County, any cost feasible project in the Pinellas LRTP could be included in a list of projects serving this market. However, the roadway and transit projects listed below in Tables 28 and 29 are those that focus on improving connections between Pinellas County and southwest Pasco County.

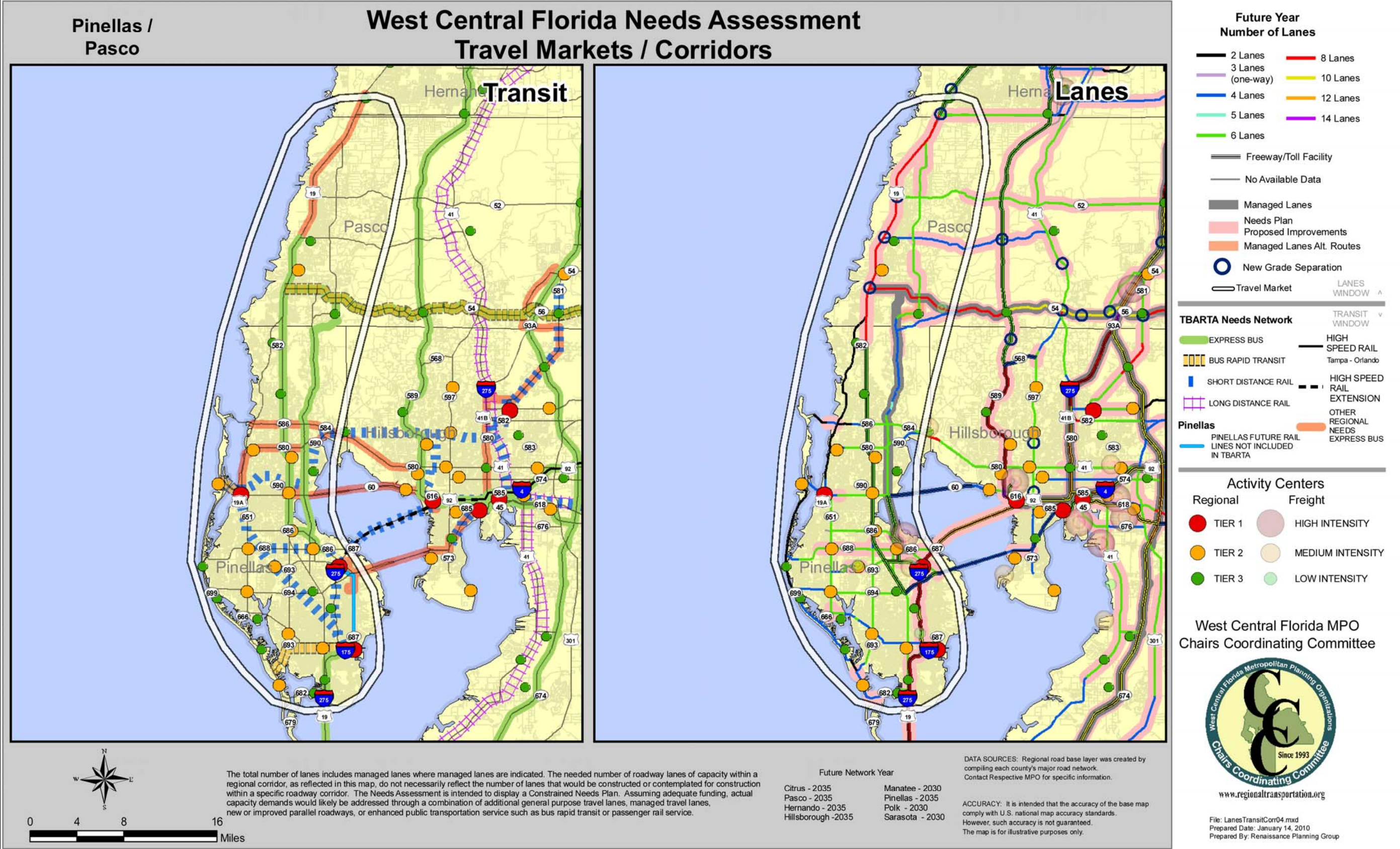
TABLE 28. ROADWAY PROJECTS SERVING THE PINELLAS-PASCO TRAVEL MARKET

#	Project	From	To	Time Period
C1	Alt US 19 (SR 595)	Anclote Boulevard	Live Oak St.	2031-2035
C4	US 19 (SR 55)(Curlew Road Interchange)	N. of SR 580	N. of CR 95	2026-2030
C7	US 19 (SR 55)(Enterprise Road Interchange)	N. of Sunset Point Road	S. of Countryside Blvd.	2016-2020

TABLE 29. TRANSIT PROJECTS SERVING THE PINELLAS-PASCO TRAVEL MARKET

Project	Description	Time Period
Premium Bus - A	Suncoast North County Trolley	2015
Premium Bus - F	Gateway/Pasco/McMullen Booth	2021-2025
Premium Bus - H	US 19	2021-2025

FIGURE 17. PINELLAS-PASCO TRAVEL MARKET



Pinellas-Manatee Travel Market

The Pinellas-Manatee travel market consists primarily of a single facility: I-275 (Sunshine Skyway Bridge), which connects southern St. Petersburg to western Manatee County just north of Palmetto. While there are no planned expansions of I-275 in the LRTP, the FDOT is planning to conduct a PD&E study to identify ways to add capacity or improve mobility within that corridor. Express bus service over the bridge is also identified as a future need for this travel market. Table 30 shows the cost feasible regional roadway projects that will serve the Pinellas-Manatee travel market. Table 31 below shows the transit improvements in Pinellas County that serve the Pinellas-Manatee travel market. Figure 18 depicts the Pinellas-Manatee travel market and its transportation facility needs.

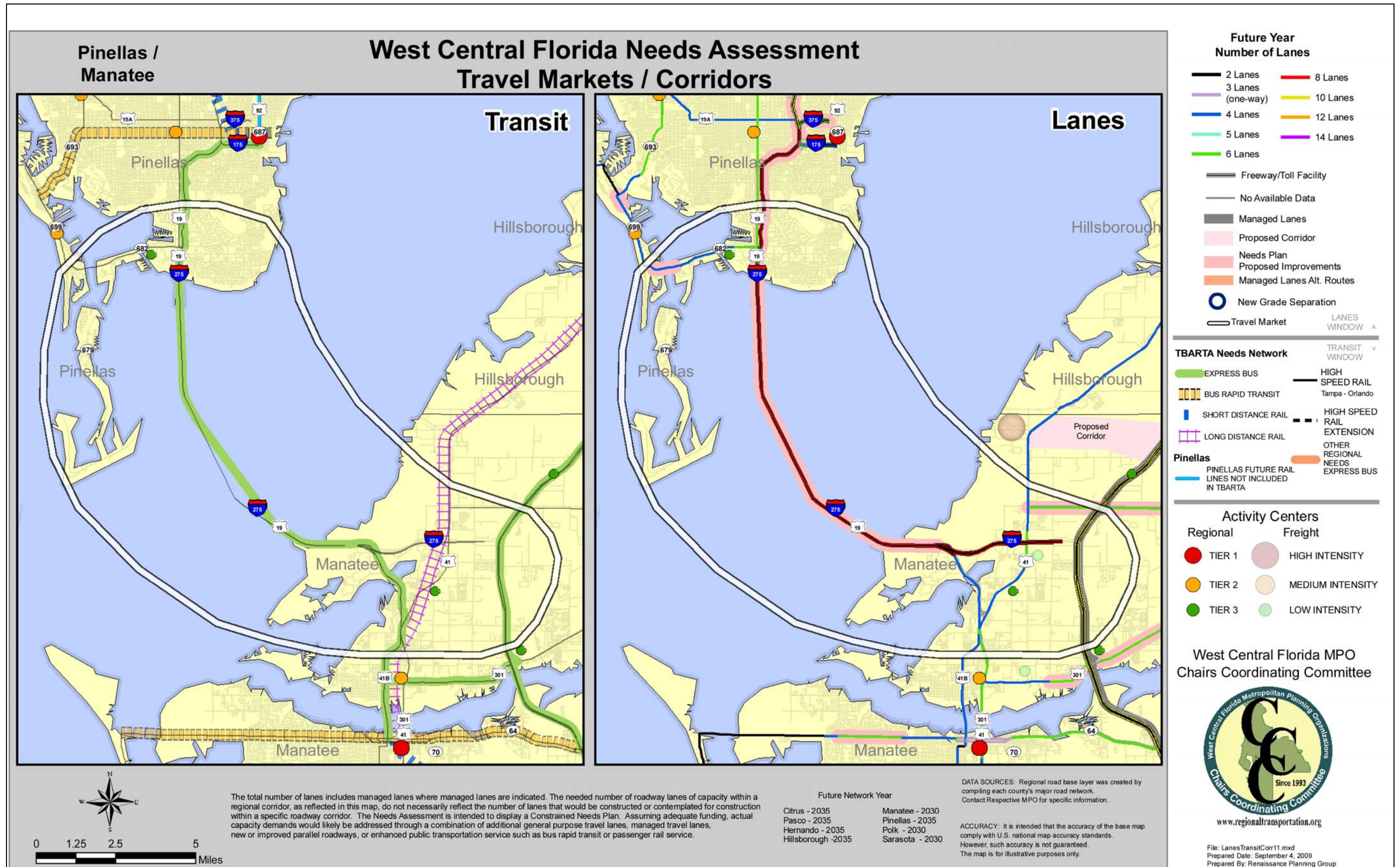
TABLE 30. ROADWAY PROJECTS SERVING THE PINELLAS-MANATEE TRAVEL MARKET

#	Project	From	To	Time Period
C36	I-275 PD&E Study	Sunshine Skyway Bridge	SR 694 (Gandy Blvd.)	2021-2025

TABLE 31. TRANSIT PROJECTS SERVING THE PINELLAS-MANATEE TRAVEL MARKET

Project	Description	Time Period
Premium Bus - Q	Downtown St Petersburg/Manatee County	2026-2030

FIGURE 18. PINELLAS-MANATEE TRAVEL MARKET



5. Financial Plan

The Financial Plan for the Pinellas County 2035 Long Range Transportation Plan (LRTP) provides documentation of the financial resources expected to be available to the Pinellas County MPO to fund needed transportation improvements through 2035. Federal and State laws require that long range transportation plans be financially constrained. After identifying needed projects to meet future travel demand, the estimated costs of planning, constructing, and managing those improvements are compared to the revenues projected to be available for those purposes from various sources. The cost affordable LRTP is the product of prioritizing projects based on need and identifying viable and sufficient funding sources to fund those projects within the planning horizon years, 2015-2035. This section includes the following:

- Existing and potential federal, state, and local funding sources that can be applied to transportation projects;
- Assumptions used to project future revenues available to the County;
- Future revenues from each source available through 2035;
- General information on how project cost estimates for capital and operations were developed; and
- Tables demonstrating the cost feasibility of roadway and transit projects for each five year planning phase in year of expenditure dollars.

For many funding programs, the revenue forecasts were prepared by the Florida Department of Transportation (FDOT), and those projections were used for this Financial Plan. For programs for which FDOT did not provide the revenue forecasts, the forecasting methods used by the MPO are described in this section, as are any additional assumptions that were made for a particular funding program.

The Financial Plan primarily covers existing funding programs, but some potential new sources of revenue, especially options for generating new local funds, are also discussed. Potential revenues from these sources were projected and utilized in developing the cost affordable LRTP. A summary of the assumptions and issues that were considered are as follows:

- The Florida Department of Transportation provided revenue estimates for most of the state and federal funding categories.
- State New Starts and Federal New Starts funds are contingent on initiating qualifying transit projects. For the rail capital costs, every one dollar of investment will be matched with one dollar of state and federal funds. To qualify for funding, the MPO is working with FDOT and PSTA on a rail study to initiate the project development process that is required by the Federal government. The study is anticipated to start in 2010.
- State bridge replacement funds will be needed for the replacement of the northbound segment of the Howard Frankland Bridge. These funds will be matched with other sources of funds in order to replace the bridge so that it includes space and infrastructure for a cross-bay passenger rail transit line.
- Local sources of revenue include gas taxes, sales taxes and transportation impact fees. Transportation impact fees are costs imposed on proposed development for transportation improvements necessary to accommodate their traffic impacts.
- The financing strategy for the expansion of the transit system relies on a one-percent sales tax being initiated. The official name for this is the Charter County Transit System Surtax. The initiation of the tax requires a voter referendum. The referendum must be approved by the Pinellas County Board of County Commissioners.
- The Penny for Pinellas is assumed to be extended through 2035.

- No additional local gas taxes are considered in this plan, although they are assumed to be extended to 2035.

Tables 32 and 33⁸ show the total revenue anticipated to be available for projects in the Long Range Transportation Plan. The revenue projections are shown in year of collection dollars. All of the project costs that follow in this document are shown in 2009 dollars.

TABLE 32. TOTAL FEDERAL AND STATE TRANSPORTATION REVENUE

Federal/State	2014-15	2016-20	2021-25	2026-30	2031-35
SIS/FIHS Const/ROW	\$0.0	\$92.2	\$184.8	\$179.5	\$279.1
State Transit	\$25.5	\$69.1	\$77.7	\$86.8	\$94.9
State New Starts Transit	\$0.0	\$59.2	\$98.5	\$0.0	\$0.0
Transportation Regional Incentive Program	\$6.0	\$26.7	\$24.1	\$23.2	\$21.5
State Bridge Replacement	\$0.0	\$0.0	\$0.0	\$445.6	\$0.0
American Reinvestment and Recovery Act	\$74.0	\$0.0	\$0.0	\$0.0	\$0.0
Other Arterials Const/ROW	\$39.7	\$122.2	\$137.6	\$148.3	\$162.2
XU / TMA	\$30.0	\$79.3	\$83.8	\$86.2	\$86.8
Transportation Enhancement	\$4.4	\$11.7	\$12.4	\$12.7	\$12.7
Federal Transit (5307/5309)	\$28.4	\$76.7	\$85.5	\$95.3	\$106.3
Federal New Starts Transit	\$22.2	\$224.3	\$330.3	\$111.7	\$0.0
Total	\$230.2	\$761.4	\$1,034.7	\$1,189.3	\$753.5

Amounts shown in \$millions

SIS = Strategic Intermodal System; FIHS = Florida Intrastate Highway System; ROW = right-of-way;
XU/TMA = Federal Transportation Management Area Funds

⁸ The revenue shown for State Transit and Federal Transit (5307/5309) in Table 32 and for Penny for Pinellas in Table 33 is based on defined revenue forecast assumptions. Not all of this money is allocated to projects in the 2035 Long Range Transportation Plan.

TABLE 33. TOTAL LOCAL TRANSPORTATION REVENUE

County and Municipal	2014-15	2016-20	2021-25	2026-30	2031-35
Constitutional Fuel Tax	\$13.6	\$33.0	\$31.4	\$29.9	\$28.4
County Fuel Tax	\$6.2	\$15.0	\$14.3	\$13.6	\$12.9
Ninth Cent Fuel Tax	\$7.7	\$18.7	\$17.8	\$16.9	\$16.1
LOGT - County	\$26.2	\$63.6	\$60.5	\$57.5	\$54.7
LOGT – Municipalities	\$17.5	\$42.4	\$40.3	\$38.3	\$36.4
Penny for Pinellas – County	\$55.8	\$153.9	\$177.2	\$203.9	\$234.7
Penny for Pinellas - Municipalities	\$50.9	\$140.4	\$161.6	\$186.0	\$214.0
Transportation Impact Fees - County	\$8.9	\$27.4	\$23.2	\$37.8	\$44.4
Local Transit Ad Valorem	\$78.2	\$211.2	\$235.5	\$262.5	\$292.7
Transit System Surtax (1 percent)	\$271.5	\$749.4	\$862.5	\$992.6	\$1,142.4
Transit Farebox and Other Transit Revenue	\$55.3	\$152.0	\$224.77	\$316.1	\$357.9
Total	\$591.8	\$1,607.0	\$1,849.1	\$2,155.1	\$2,434.6

Amounts shown in \$millions

LOGT = Local Option Gas Tax

Revenue Sources

This section describes various sources of revenue that can be applied to transportation projects. This includes explanations of where the money comes from, what restrictions are placed on how the money can be spent, and any additional issues associated with a particular source. Actual revenue projections from these sources are provided later in this section.

State and Federal Funds

State revenue for transportation comes from fuel taxes, motor vehicle fees, rental car surcharge, and aviation fuel taxes. The state-imposed tax for fuel is currently 22.0 cents per gallon. Of that amount, four cents are distributed to local governments. Of the remaining 18 cents, all but the cost of collection and small transfers for environmental issues is distributed to the Florida Department of Transportation (FDOT) for transportation projects.

Federal funds for transportation largely come from gas tax revenue. The federal tax for highway fuels purchased in Florida amounts to 18.4 cents per gallon on gasoline and 24.4 cents per gallon on diesel fuel. Other taxes include heavy vehicle use taxes on trucks weighing 55,000 pounds or more, excise taxes levied on truck tires, and a 12 percent sales tax on trucks over 33,000 pounds and trailers over 26,000 pounds. In addition to fuel and excise taxes, federal revenues also come from aviation taxes, which are comprised of fuel, air cargo, ticket and international departure taxes. Of those amounts, under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Florida is receiving 84

percent return on contributions to the Federal Highway Trust Fund. About 24.9 percent of Florida's total transportation funding in fiscal year (FY) 2006/07 came from these federal taxes and fees.⁹

Strategic Intermodal System/Florida Intrastate Highway System

The Strategic Intermodal System (SIS) is a statewide network of high-priority transportation facilities, including the State's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. The initial SIS Plan was adopted on January 20, 2005 and was updated in 2008. The SIS is funded with various sources, but there is state revenue specifically designated to the SIS. Most of the designated funding was appropriated by the Florida Legislature in 2005 in Senate Bill (SB) 360. Available revenue for the SIS is reported in the 2035 Cost Feasible Plan for the SIS.

The Florida Intrastate Highway System (FIHS) Program consists of the Interstate highway system, the Florida Turnpike, other toll roads, freeways, and other identified arterials and major transportation corridors to be upgraded to limited and controlled access facilities. The FIHS was created by the Florida Legislature in 1990 to be an interconnected roadway network serving high speed and high volume movement of people and goods statewide. The vast majority of the FIHS is part of the Strategic Intermodal System. SIS/FIHS appropriated revenues would be expected primarily to fund major highway improvements that provide links between airports, seaports, and freight rail terminals.

Other Arterials

The Other Arterials program is a capital improvements program for state roadways similar to the FIHS. The program provides funding for needed capital improvements on state roads that are not included in the SIS/FIHS. Funding priority is given to roadway projects that are regionally significant and/or that represent a sound business decision for the State.

Transportation Regional Incentive Program

The Transportation Regional Incentive Program (TRIP) was established as part of the State's major growth management legislation enacted with Senate Bill (SB) 360. The program is intended to encourage regional planning by providing matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners. The Pinellas County MPO has partnered with other MPOs in the region and Citrus County through an interlocal agreement to develop a regional transportation plan that identifies regional facilities that could be eligible for TRIP funding. Regional facilities already identified in the West Central Florida MPO Chairs Coordinating Committee's (CCC) Regional Long Range Transportation Plan and projects planned by the Tampa Bay Area Regional Transportation Authority (TBARTA) are eligible for TRIP funds.

Money from the State's General Revenue Fund is made available for TRIP through the SB 360 legislation. TRIP funds can be used as a 50% match to local or regional funds. In-kind matches such as right of way donations and private funds made available to the regional partners are also allowed. Federal funds attributable to urbanized areas over 200,000 in population may also be used for the local/regional match.¹⁰

⁹ Information obtained from the *FDOT Agency Overview*, September 2008 at http://www.dot.state.fl.us/financialplanning/AGENCY_OVERVIEW.pdf

¹⁰ Description of TRIP from <http://www.dot.state.fl.us/planning/trip/facts.pdf>

Transportation Management Area/XU

Each year, Congress appropriates funds in the federal budget for the Surface Transportation Program. These funds are apportioned among the states, and some are subsequently allocated to urban areas by a formula. Funds allocated to urban areas with populations over 200,000 are referred to as “extra urban” or “XU” funds. These funds can be applied to a variety of transportation capital improvements. There are no modal limitations. MPOs and TMAs determine the priority level of local/regional transportation improvements to be funded by XU monies. However, they must be spent within a specified time frame, or they will lapse.

Intermodal Access

The Intermodal Access program is a FDOT capacity program created to improve access to intermodal facilities and acquire associated rights of way.

Aviation

The Federal Aviation Administration (FAA) oversees the Airport Improvement Program (AIP), which provides grants for the planning and development of public use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). The grant covers 75 percent of eligible costs for large and medium hub airports and 95 percent of eligible costs for small primary, reliever, and general aviation airports. The FAA distributes AIP funds according to present national priorities and objectives. Funds are typically first apportioned into major entitlement categories, such as primary, cargo, and general aviation and remaining funds are distributed to a discretionary fund.

Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, AIP funds can be used for most airfield capital improvements or repairs except those for terminals, hangars, and non-aviation development. Professional services that are necessary for eligible projects are also eligible, as is runway, taxiway, and apron pavement maintenance. Aviation demand at the airport must justify the projects, which must also meet Federal environmental and procurement requirements. Projects related to airport operations and revenue-generating improvements are typically not eligible for funding. Operational costs (e.g. – salaries or supplies) are also not eligible for AIP grants.¹¹

State Transit

FDOT provides technical and operating/capital assistance to transit, paratransit, and ridesharing systems. The MPO participates in identifying planned projects for this category, with the caveat that FDOT is responsible for meeting certain statutory requirements for public transportation funding.

State New Starts Transit

The Florida New Starts Transit Program (NSTP) was developed to streamline transit capital project development by providing consistency between statewide transportation planning initiatives, local and regional transportation priorities, and the Federal Transit Administration’s (FTA) environmental review processes for New Starts and Small Starts capital funding programs. The NSTP is a FDOT discretionary spending program that provides a dollar for dollar match of the local/regional share of project costs for rail transit and bus rapid transit (BRT) projects that would be candidates for FTA New Starts funding. These matching funds are intended to make Florida’s transit projects more competitive for FTA funding. The

¹¹ Description of AIP from http://www.faa.gov/airports_airtraffic/airports/aip/overview/

NSTP also allows a dollar for dollar match of local funds towards transit projects funded with State and local funds only.¹²

Transportation Enhancement

The Transportation Enhancement Program (SE) is a federal program administered by FDOT. SE guidance is provided by FDOT's Environmental Management Office, while selection and implementation of projects is handled by FDOT District Offices with input from MPOs or county commissions. SE funds come from the Federal Highway Administration (FHWA) and are intended for projects or features that exceed the customary standards for transportation improvements. SE projects are related to the transportation system but go beyond requirements of normal mitigation or routinely provided features in transportation improvements. SE is not a grant program. Projects are undertaken by project sponsors, and eligible expenses are reimbursed by FDOT.

Federal New Starts (Section 5309)

The New Starts program provides funds for construction of new fixed guideway systems or extensions to existing fixed guideway systems. Eligible purposes are light and heavy rail, commuter rail, monorail, automated fixed guideway systems (such as a "people mover"), or a busway/high occupancy vehicle (HOV) facility, or an extension of any of these. Projects become candidates for funding under this program by successfully completing the appropriate steps in the major capital investment planning and project development process. Major new fixed guideway projects, or extensions to existing systems financed with New Starts funds, typically receive these funds through a full funding grant agreement that defines the scope of the project and specifies the total multi-year Federal commitment to the project. Funding allocation recommendations are made in an annual report to Congress and are allocated on a discretionary basis.¹³

Federal Small Starts (Section 5309)

The FTA Small Starts program provides a simplified project development process for new fixed-guideway capital projects, extensions to existing fixed guideway systems, or non-fixed guideway BRT projects expected to cost less than \$250 million total. The federal share for Small Starts projects shall not exceed \$75 million. The Small Starts program facilitates the development of low-cost fixed-guideway or BRT projects that have demonstrable mobility and/or economic development benefits by simplifying the alternatives analysis and consolidating the preliminary engineering and final design phases of larger New Starts projects. As with New Starts projects, funding allocation recommendations are made in an annual report to Congress and are allocated on a discretionary basis.¹⁴

Bus and Bus Facilities (Section 5309)

The Bus and Bus Facilities program provides capital assistance for new and replacement buses and related equipment and facilities. Eligible capital projects include the purchasing of buses for fleet and service

¹² Description of program was taken from *Florida New Starts Transit Program: A Decision-Support Contextual Framework*, prepared by the Florida Department of Transportation Public Transit Office, June 2006

¹³ This funding source description was taken from the Federal Transit Administration Web site:
http://www.fta.dot.gov/funding/grants_financing_263.html

¹⁴ http://www.fta.dot.gov/planning/newstarts/planning_environment_222.html

expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, bus preventive maintenance, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers and shop and garage equipment. Funds are allocated on a discretionary basis. The US DOT Secretary has the discretion to allocate funds, although Congress fully earmarks all available funding.

Large Urban Cities (Section 5307)

Federal monies are made available for urbanized areas and to Governors for transit capital and operating assistance and for transportation-related planning. The term “urbanized area” refers to an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Bureau of the Census. Recipients must be public bodies eligible to receive federal funds (e.g. – MPOs, transit authority’s, municipalities).

A wide variety of activities are eligible for funding assistance: planning, engineering design and evaluation of transit projects, capital investments in buses and bus-related activities (including vehicle replacement, bus overhaul and rebuilding, security equipment, and construction of maintenance and passenger facilities), capital investments in new and existing fixed-guideway systems (including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware/software). Also, all preventative maintenance and some Americans with Disabilities Act (ADA) complementary paratransit service costs are considered capital expenses.

Operating assistance is available to urbanized areas with a population between 50,000 and 200,000. Areas with populations of 200,000 or greater are not eligible for assistance with operating expenses. In these areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities.

Funds are allocated according to legislative formulas. For areas with a population between 50,000 and 200,000, the formula is based on population and population density. For areas with more 200,000 people, the formula combines bus revenue vehicle miles, bus passenger miles, fixed-guideway revenue vehicle and route miles, population, and population density factors.¹⁵

Congestion Mitigation and Air Quality

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides a flexible funding source for state and local governments to fund transportation projects and programs to help meet the requirements of the Clean Air Act (CAA) and its amendments. CMAQ money supports transportation projects that reduce mobile source emissions in areas designated by the U.S. Environmental Protection Agency (EPA) as in nonattainment or maintenance of national ambient air quality standards. Eligible activities include transit improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels, among others.

CMAQ funds can only be invested in nonattainment or maintenance areas, and the money must be spent on projects that reduce air pollution. All CMAQ projects must be identified in a Transportation Improvement Program and be supported by a quantified estimate of the emissions reductions that will result from the project. The federal share for most CMAQ-eligible projects is 80 percent. The CMAQ program operates on a reimbursable basis, so funds are not provided until work is completed.

¹⁵ http://www.fta.dot.gov/funding/grants/grants_financing_3561.html

Local Funds

Local Fuel Taxes¹⁶

Constitutional Fuel Tax

Pursuant to the State Constitution, a state tax of two cents per gallon on motor fuel is levied. The first call on the tax proceeds is to meet the debt service requirements, if any, on local bond issues backed by the tax proceeds. The remaining surplus funds are used as necessary to meet the debt service requirements on local bond issues backed by the surplus funds. Any remaining surplus funds are used for the acquisition, construction, and maintenance of roads, including the construction and installation of traffic signals, sidewalks, bicycle paths, and landscaping. The funds may be used as matching funds for any federal, state, or private grant specifically related to these purposes. Constitutional Fuel Tax proceeds are distributed by the State to the counties according to an apportionment formula.

County Fuel Tax

The county fuel tax is levied on motor fuel at the rate of one cent per gallon. The proceeds are to be used by counties for transportation-related expenses, including the reduction of bond indebtedness incurred for transportation purposes. These proceeds are intended to reduce the burden of county ad valorem taxes for servicing debt. They can also be applied for the purchase of rights-of-way, construction, reconstruction, operation, maintenance, and repair of transportation facilities. The proceeds of the County Fuel Tax are allocated to each county via the same distribution formula used for distributing the constitutional fuel tax.

Ninth-Cent Fuel Tax

The ninth-cent fuel tax is a tax of one cent on every net gallon of motor and diesel fuel sold within a county. The tax may be authorized by an ordinance adopted by an extraordinary vote of the governing body or voter approval in a countywide referendum. Generally, the proceeds may be used to fund transportation expenditures, including public transportation operations and maintenance; roadway and right-of-way maintenance and equipment and structures used primarily for the storage and maintenance of such equipment; roadway and right-of-way drainage; street lighting; traffic signs, traffic engineering, signalization, and pavement markings; bridge maintenance and operation; debt service and current expenditures for transportation capital projects. Pinellas County currently assesses the ninth-cent fuel tax. The Pinellas County Advanced Traffic Management System (ATMS) Master Plan prepared for FDOT in 2009 identifies the Ninth-Cent Fuel Tax as the primary funding source for implementing the ATMS program. The ATMS Master Plan was prepared to guide investment in intelligent transportation system (ITS) technologies to improve the safety and operational efficiency of the transportation network.

First Local Option Fuel Tax

Local governments are authorized to levy a tax of one to six cents on every net gallon of motor fuel sold in a county. The tax may be authorized by an ordinance adopted by a majority vote of the governing body or voter approval in a countywide referendum. Generally, the proceeds may be used to fund the same transportation expenditures as the ninth-cent fuel tax. Pinellas County currently assesses the first local option fuel tax.

¹⁶ Unless otherwise noted, all information about local funding sources comes from the 2007 *Local Government Financial Information Handbook* published by the Florida Legislative Committee on Intergovernmental Relations, October 2007.

Second Local Option Fuel Tax

County governments are authorized to levy a tax of one to five cents upon every net gallon of motor fuel sold within a county. Diesel fuel is not subject to this tax. This tax may be levied by an ordinance adopted by a majority plus one vote of the membership of the governing body or voter approval in a countywide referendum. The tax proceeds may be used for transportation expenditures needed to meet the requirements of the capital improvements element of an adopted local government comprehensive plan or for expenditures needed to meet the immediate local transportation problems and for other transportation-related expenditures that are critical for building comprehensive roadway networks by local governments. Pinellas County does not currently assess the second local option fuel tax.

Other General Local Funding Sources

Penny for Pinellas

Counties have the option to levy a Local Government Infrastructure Surtax (Sales Tax) at the rate of one-half or one percent pursuant to an ordinance enacted by a majority vote of the county's governing body and approved by voters in a countywide referendum. Pinellas County has exercised its option to levy this tax at the rate of one percent since 1989 to generate funding for capital improvements. In Pinellas County, the infrastructure surtax is called the Penny for Pinellas. Generally, the proceeds must be expended to finance, plan, and construct infrastructure; to acquire land for public recreation or conservation or protection of natural resources; and to finance the closure of local government-owned solid waste landfills.

Transportation Impact Fees

Transportation impact fees are required of any development project that adds new trips to the surrounding road network. The fees are intended to provide funding for infrastructure needs necessary to accommodate the traffic impacts of the development. These fees are used for transportation related improvements that may include roadway, bicycle, pedestrian, transit, or systems management (TSM) projects. Transportation impact fees must provide a roadway capacity benefit and may not be used for maintenance projects. Pinellas County has enacted a countywide transportation impact fee.

Local Sources of Transit Funds

Farebox and Other Sources of Transit Revenue

A portion of local transit funding will come from farebox collections and revenues from advertising on the transit system. Historically, farebox revenues have covered about 20 percent of PSTA's operating expenses, and advertising revenues have accounted for about 5 percent. These ratios are expected to remain constant as the bus and rail network is improved.

Ad Valorem Taxes

The Pinellas Suncoast Transit Authority (PSTA) is an independent special taxing district with the authority to levy ad valorem taxes on taxable real property in its service area. The millage rate may not exceed 0.75 mills. The tax cannot be levied in municipalities and unincorporated areas that are not included in the service area. Inclusion in the service area requires that voters approve their locality's participation through a referendum. Not all municipalities and unincorporated areas have approved joining the PSTA service

area, but some of them arrange for specific services through contractual agreements with PSTA. Historically, the ad valorem tax represents about two thirds of PSTA's funding.¹⁷

Charter County Transit System Surtax

Pinellas County has the option to implement a sales tax of up to one percent to fund public transportation improvements in the LRTP, including, but not limited to, new rail transit service, fixed guideway, enhanced bus operations, trolley circulators, etc. The Charter County Transit System Surtax is enabled through Florida Statutes for select counties within the State of Florida. The tax would generate revenue for planning, design, right-of-way acquisition, construction, operations and maintenance. The tax would be subject to voter approval through a county-wide referendum, and the Pinellas County Board of County Commissioners would have to place the issue on the ballot. The MPO, TBARTA, PSTA and Pinellas County have taken steps to plan, publicize the need and initiate a voter referendum for this tax. During the development of the LRTP, the MPO analyzed the potential revenue from this tax relative to transit investment options. The PSTA has conducted a survey of voters to test the viability of this type of tax to fund transit improvements. The results show that a majority of respondents would be willing to initiate this type of tax to fund the types of transit investments proposed in this LRTP. Most recently, initial steps have been taken to form a multi-agency task force to prepare for a ballot initiative, including a specific list of projects that will be associated with the referendum. While the exact date of the referendum has not been set, the assumption is that the revenue will be available starting in calendar year 2012 following a referendum to be held in 2011.

Revenue Estimate Assumptions

This section outlines the general assumptions that are utilized to project future revenues available to Pinellas County from some of the local funding sources described above. These general assumptions include population and employment growth rates and inflation over the course of the planning period. More specific assumptions related to particular revenue sources are detailed in the discussions of projected revenues for each source in the section that follows.

Population Growth

Revenues available from taxes and state and federal formula funds will grow as the county's population grows over time. Therefore, the calculation of annual revenues for many funding sources will rely on an assumed average annual population growth rate. Two figures are utilized to determine the average annual population growth rate: estimated current population for the planning base year (2007) and projected future population for the planning horizon year (2035).

Table 34 shows recent population trends in Pinellas County based on data from the US Census. The estimated population in 2007 was 917,437. Although the table shows that according to Census estimates Pinellas County's population has declined slightly in recent years, this trend is expected to reverse. Based on the Florida Bureau of Economic & Business Research (BEBR) and an independent future growth scenario, the population projection for Pinellas County for 2035 is set at 1,100,000¹⁸ residents for the

¹⁷ Description of PSTA's ad valorem taxing authority combines information from the following sources: Office of Program Policy Analysis and Government Accountability, Report No. 05-44, August 2005; and <http://www.psta.net/pstahistory.htm>

¹⁸ The population forecast for 2035 was set at 1,100,00 for the purposes of estimating revenue only. This number is not the same as the permanent population forecast discussed in the the previous section of this document on socioeconomic data.

purposes of estimating future revenue. Based on the County's population projection for 2035 and the US Census estimate for 2007, the average annual population growth rate for the county is projected to be 0.65 percent, assuming a linear growth trend.

TABLE 34. RECENT POPULATION TRENDS IN PINELLAS COUNTY, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Population ¹⁹	922,366	923,623	924,430	924,592	925,998	926,110	922,893	917,437
Population Change		1,257	807	162	1,406	112	-3,217	-5,456
Percent Change		0.14%	0.09%	0.02%	0.15%	0.01%	-0.35%	-0.59%

Employment Growth

The employment per population ratio within the county will not change substantially over time. Therefore, the population forecast has been used to estimate the future revenue in this document. The rate of change to estimate the growth in revenue accounts for the change in population and employment.

Inflation

General Inflation

Per the Bureau of Labor Statistics, the average annual consumer price index (CPI), less energy and food, for all urban consumers in the U.S. between 1998 and 2007 is 2.2 percent (energy and food generally are not subject to sales tax). Thus 2.2 percent is used as the expected annual rate of inflation through 2035 for estimating surtax revenues. This inflation rate is used to project annual revenues in year of collection dollars.

Transportation Inflation Factors

While general inflation is expected to be moderate, the costs of construction materials for building transportation improvements are expected to climb faster than general consumer goods. Year of collection revenues are discounted by general transportation or transit-specific inflation rates – depending on how the revenues are expected to be used – to project the real purchasing power of those monies to pay for transportation improvements in the future. These inflation factors are taken from FDOT's 2035 Revenue Forecast Handbook and vary throughout the planning period.

General Transportation Inflation Factors

The future inflation factors estimated in the Revenue Forecast Handbook are presented in Table 35.

¹⁹ US Census July 1, 2008 Estimates. The Census population estimates for 2006 and 2007 are different from the official Pinellas County estimates, which are reported in the previous section of this document on socioeconomic data. The Census information was used for revenue forecasts and the Pinellas County estimates were used for estimating future demand for transportation improvements through the travel demand forecasting process.

TABLE 35. FDOT GENERAL TRANSPORTATION INFLATION FACTORS, 2007-2035

From	To	Annual Rate	From	To	Annual Rate
2007	2008	7.0%	2010	2011	4.0%
2008	2009	5.0%	2011	2012	3.5%
2009	2010	4.5%	2012	2013 and beyond	3.3% each year

Transit Inflation Factors

FDOT has developed transit program and project inflation factors that MPOs and transit system operators may choose to use in the development of long range transportation plans. The FDOT transit inflation rates are derived from the forecast of the CPI (All Urban Consumers) by the State Revenue Estimating Conference (REC). The October 2008 forecast extends to state fiscal year 2018. Estimates for fiscal years 2019-2035 are based on the average of the October 2008 REC annual forecast for the years 2009-2018. Table 36 shows FDOT's transit inflation factors from 2007-2035.²⁰

TABLE 36. FDOT TRANSIT COST INFLATION FACTORS, 2007-2035

From	To	Annual Rate	From	To	Annual Rate
2007	2008	3.7%	2013	2014	2.7%
2008	2009	2.9%	2014	2015	2.4%
2009	2010	1.0%	2015	2016	2.4%
2010	2011	2.5%	2016	2017	2.4%
2011	2012	3.1%	2017	2018	2.4%
2012	2013	2.9%	2018	2019 and beyond	2.5% each year

Revenue Projections

State and Federal Funds

Revenue estimates for the State's capacity programs are provided to the MPOs by FDOT.

Strategic Intermodal System/Florida Intrastate Highway System

Table 37 shows the amounts for each planning period of the LRTP for the SIS/FIHS. These revenue projections are based on a specific project listing provided by FDOT for the projects anticipated to be funded prior to the 2035 planning horizon.

TABLE 37. SIS REVENUE DEDICATED TO PROJECTS IN PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
SIS/FIHS in Pinellas	\$0.0	\$92.2	\$184.8	\$179.5	\$279.1

²⁰ Transit inflation factors from FDOT, *Errata and Revisions – 2035 Revenue Forecast*, October 2008.

Other Arterials

Other Arterials funds are made available for regionally significant roads that are not on the SIS or FIHS networks. Revenue estimates from FDOT for the Other Arterials program are shown for Pinellas County in Table 38.

TABLE 38. OTHER ARTERIALS REVENUE DEDICATED TO PROJECTS IN PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Other Arterials in Pinellas	\$39.7	\$122.2	\$137.6	\$148.3	\$162.2

Transportation Regional Incentive Program

Revenue estimates for Transportation Regional Incentive Program (TRIP) funds were provided by FDOT at the District 7 level. For the purposes of planning for TRIP eligible projects within Pinellas, a County share from the District-wide funds is needed. The District 7 population-based formula for allocating statewide funds is 14.94%. To determine the portion of the funds that will be available for Pinellas, the West Central Florida MPO Chairs Coordinating Committee developed a methodology based on the county share of the regional population at each planning interval up to 2035. Because Pinellas County is not growing as fast as other counties in the region, the proportional share of the District TRIP funds decreases over time. The estimated TRIP amounts for Pinellas are shown in Table 39.

TABLE 39. ESTIMATED AVAILABLE TRIP FUNDS FOR PINELLAS COUNTY (\$ MILLIONS)

	2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
District 7 TRIP	\$20.15	\$89.0	\$86.0	\$86.0	\$86.0
Pinellas Estimated Share	30.0%	30.0%	28.0%	27.0%	25.0%
Pinellas Estimated Funds	\$6.045	\$26.70	\$24.08	\$23.22	\$21.50

Transportation Management Area/XU

Estimates for TMA/XU funds were provided by FDOT at the MPO level. Projected revenues are shown by planning period in Table 40.

TABLE 40. PROJECTED TMA/XU REVENUES FOR PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
TMA/XU in Pinellas	\$30.0	\$79.3	\$83.8	\$86.2	\$86.8

State Transit

Through the State Transit capacity program, FDOT provides technical and operating/capital assistance to transit, paratransit, and ridesharing systems. Revenues available for Pinellas County from this program are shown by planning period in Table 41.

TABLE 41. PROJECTED STATE TRANSIT FUNDS AVAILABLE FOR PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
State Transit Funds in Pinellas	\$25.5	\$69.1	\$77.7	\$86.8	\$94.9

State New Starts Transit

Revenue estimates for State New Starts funds was provided by FDOT at the statewide level. For the purposes of planning for Federal New Starts eligible projects within Pinellas, a state match is needed for them to be cost feasible. The local funds generated from various sources are assumed to cover 50% of the rail capital project costs. The Federal New Starts match is assumed to be 35% of the total and the state match is assumed to be 15% of the total capital cost. The revenue from the State Transit Funds shown in Table 41 above and the State New Starts funds shown in Table 42 will be used for this purpose. The State New Starts funds are shown in the five year planning periods in which they will be needed to match the Federal New Starts funds.

TABLE 42. ESTIMATED AVAILABLE STATE NEW STARTS FUNDS FOR PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Statewide New Starts	\$150	\$291.7	\$270.9	\$270.9	\$270.9
Funds Needed for Rail Projects	\$0.0	\$59.2	\$98.5	\$0.0	\$0.0

Transportation Enhancement

The Transportation Enhancement Program (SE) is a federal program administered by FDOT. Since SE funds are used primarily for non-highway capacity projects such as trails and sidewalks, they are not included in the summation of total funds for capacity improvements in the long range cost affordable plan. Estimated SE funds available for Pinellas County are displayed in Table 43.

TABLE 43. ESTIMATED TRANSPORTATION ENHANCEMENT FUNDS FOR PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
SE Funds in Pinellas	\$4.4	\$11.7	\$12.4	\$12.7	\$12.7

Federal New Starts (Section 5309)

Capital costs for proposed rail transit improvements would be paid in part by federal New Starts funds. It is assumed that the federal share of total rail capital costs for the 2035 network would amount to 35 percent, with a 50 percent share of the project costs coming from a new Charter County Transit System Surtax, Ad Valorem and a 15 percent share coming from the State. Table 44 shows the Federal New Starts funds that will need to be available to construct the projects included in the Cost Feasible Plan.

TABLE 44. ESTIMATED AVAILABLE FEDERAL NEW STARTS FUNDS FOR PINELLAS COUNTY (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Federal New Starts	\$22.2	\$224.3	\$330.3	\$111.7	\$0.0

Bus and Bus Facilities (Section 5309) and Large Urban Cities (Section 5307)

In FY 2007/08, PSTA received approximately \$12.6 million in Sections 5307 and 5309 capital funding revenues.²¹ This amount of funding is expected to remain constant over the 25-year planning period. To project revenues from these sources for each planning period, the base figure of \$12.6 million was grown using the inflation rate of 2.2 percent. Table 45 shows the projected revenues by planning period in year of collection dollars.

TABLE 45. ESTIMATED REVENUE FROM SECTIONS 5307 AND 5309 FUNDS (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Sections 5307 & 5309	\$28.4	\$76.7	\$85.5	\$95.3	\$106.3

Other Federal and State Funds Assumed for Transit

In addition to the categories of state and federal funds described above, the LRTP assumes \$4 million to be available for an Alternatives Analysis necessary to evaluate the first phase of rail improvements in the planned rail network. This \$4 million is a combination of committed PSTA, FDOT and MPO funds eligible to be used for this type of planning.

Congestion Mitigation and Air Quality

Since Pinellas County is not currently designated as a non-attainment area, no revenue projections have been developed for Congestion Mitigation and Air Quality funding.

Local Funds**Local Fuel Taxes**

Given the uncertainty of fuel prices and long term revenue tied to fuel consumption, the projection methodology assumes that current fuel tax revenues hold steady through 2015. This anticipates the FY2009 projected collections will be used through 2015 and then decline by one percent per year thereafter. This models a situation in which revenue projections decline minimally to reflect a peaking of oil consumption, the use of alternative fuels and energy sources, and increased public transportation ridership in the future. Pursuant to an interlocal agreement, the County retains 60% of the proceeds from the local option gas tax (LOGT) and the remaining 40% is allocated to the municipalities within the County. Revenues from the Ninth Cent fuel tax are allocated to ITS projects associated with the ATMS Master Plan. Table 46 shows revenue from local gas taxes.

²¹ PSTA 2008 Transit Development Plan, 2008.

TABLE 46. ESTIMATED REVENUE FROM LOCAL GOVERNMENT GAS TAXES (\$ MILLIONS)

	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Constitutional Fuel	\$13.6	\$33.0	\$31.4	\$29.9	\$28.4
County Fuel	\$6.2	\$15.0	\$14.3	\$13.6	\$12.9
Ninth Cent	\$7.7	\$18.7	\$17.8	\$16.9	\$16.1
LOGT - County	\$26.2	\$63.6	\$60.5	\$57.5	\$54.7
LOGT – Municipalities	\$17.5	\$42.4	\$40.3	\$38.3	\$36.4

Penny for Pinellas

Voters in Pinellas County voted to extend the Penny for Pinellas through 2020. Consistent historical voter support for the tax is the basis for assuming that it will remain in place through the 2035 planning horizon year.

Projections for the Penny for Pinellas infrastructure surtax are based on three factors: population growth, inflation, and the proportion of tax revenues spent on transportation. The assumed annual population growth rate (0.65 percent) and annual general inflation rate (2.2 percent) were combined to yield an inflation-plus-growth factor of 2.85 percent to grow annual sales tax revenues.

It is estimated that the revenue from the Penny would be \$119,612,189 in 2009.²² The County has put together a proposal for how the 2010-2020 funds would be allocated.²³ After a set-aside for courts and jails of \$225 million over the course of the ten-year period, the remaining portion is split between the County (52.3 percent) and the Municipalities (47.7 percent). Pinellas County has apportioned 46.1 percent of the County share for transportation and traffic flow for the ten-year period, and specific projects have been identified. For years 2021 to 2035, the same proportion of funding for transportation has been assumed. For municipal spending on transportation, the same proportion as the County has been assumed.

Annual revenues were projected by inflating projected 2009 revenues by 2.85 percent (average inflation plus population growth) each year. For each year, the amount allocated to courts and jails was held constant (about 14 percent of yearly receipts) and deducted from potential transportation revenues. The remaining amount was divided among the County and the municipalities according to the ratios described above. These amounts were then multiplied by the proportion spent on transportation (46.1 percent) by both the County and the municipalities. Table 47 shows the projected Penny for Pinellas revenues available for transportation projects by planning period in year of collection dollars.

TABLE 47. TOTAL ESTIMATED PENNY FOR PINELLAS SALES TAX REVENUES (\$ MILLIONS)

	2010- 2013	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Pinellas County	\$102.6	\$55.8	\$153.9	\$177.2	\$203.9	\$234.7
Municipalities	\$93.5	\$50.9	\$140.4	\$161.6	\$186.0	\$214.0

²² Revised Revenue Estimates for FY2008-2009, http://www.floridalcir.gov/revenue_estimates.cfm, March 2009.

²³ The information in this section comes from a document prepared by Pinellas County called *Penny for Pinellas Renewal 2010 to 2020* (http://www.pinellascounty.org/Penny/pdf/Penny_Project_Catalog.pdf)

These projections for the Penny for Pinellas infrastructure surtax represent control totals for the funds that will be available for transportation capital projects for the County and its municipalities. These revenues will be allocated to various kinds of projects, including congestion management and other small projects (assumed to be 10 percent of the control totals), trails and sidewalks (10 percent), capacity projects (60 percent), and contingency or unidentified needs (20 percent). Table 48 shows the revenue from the Penny for Pinellas surtax that is projected to be allocated to these various project types. However, the use of Penny for Pinellas funds is discretionary and not required to be spent on transportation. The County or municipalities may choose to allocate a smaller proportion of the funds to transportation or to any of the categories. These percentages are based on past spending levels and are established for planning purposes only.

TABLE 48. ESTIMATED PENNY FOR PINELLAS SALES TAX REVENUES BY PROJECT TYPE (\$ MILLIONS)

Congestion Management	2010-2013	2014-2015	2016-2020	2021-2025	2026-2030	2031-2035
Pinellas County	\$10.3	\$5.6	\$15.4	\$17.7	\$20.4	\$23.5
Municipalities	\$9.4	\$5.1	\$14.0	\$16.2	\$18.6	\$21.4
Trails/Sidewalks						
Pinellas County	\$10.3	\$5.6	\$15.4	\$17.7	\$20.4	\$23.5
Municipalities	\$9.4	\$5.1	\$14.0	\$16.2	\$18.6	\$21.4
Capacity Projects						
Pinellas County	\$61.5	\$33.5	\$92.4	\$106.3	\$122.3	\$140.8
Municipalities	\$56.1	\$30.5	\$84.2	\$97.0	\$111.6	\$128.4
Contingency						
Pinellas County	\$20.5	\$11.2	\$30.8	\$35.4	\$40.8	\$46.9
Municipalities	\$18.7	\$10.2	\$28.1	\$32.3	\$37.2	\$42.8

Transportation Impact Fees

The estimates for transportation impact fees are based on an annual average of approximately \$4 million collected from FY 1998/99 to 2006/07. This amount was adjusted for inflation using the FDOT roadway tables to arrive at future revenue. Table 49 shows estimates for impact fees in year of collection dollars.

TABLE 49. PROJECTED IMPACT FEES FROM LOCAL GOVERNMENT (\$ MILLIONS)

	2014-2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Countywide	\$8.9	\$27.4	\$23.2	\$37.8	\$44.4

Local Transit

Ad Valorem Taxes

The budget for ad valorem tax revenue for PSTA for fiscal year 2008-09 was \$33,962,000, which was 60.1% of the total \$56,539,350 operating budget for that year.²⁴ Future revenues were projected to year of

²⁴ PSTA Adopted Operating Budget 2008-2009

collection dollars by inflating budgeted FY2008-2009 ad valorem revenues by the general annual inflation rate of 2.2 percent (see Section 2.3.1). Table 50 shows projected ad valorem tax revenues in year of collection dollars by planning period.

TABLE 50. PROJECTED PSTA AD VALOREM TAX REVENUES (\$ MILLIONS)

	2009	2010- 2013	2014- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
PSTA Ad Valorem	\$34.7	\$146.6	\$78.2	\$211.2	\$235.5	\$262.5	\$292.7

Charter County Transit System Surtax

If Pinellas County implements a one-half percent or one percent transit surtax, the future revenues will depend on two factors: population growth and general inflation. The assumed annual population growth rate (0.65 percent) and annual general inflation rate (2.2 percent) were combined to yield an inflation-plus-growth factor of 2.85 percent to grow annual sales tax revenues. This inflation-plus-growth factor was applied to the current expected infrastructure surtax (Penny for Pinellas) revenue of \$119,612,189 to project future sales tax revenues in year of collection dollars. Because of current economic conditions, the 2009 sales tax revenues are assumed to be fixed through FY2010. It is also assumed that the transit sales tax will not begin to be collected until FY2012. The resulting sales tax revenues from a one percent and a half percent sales tax are provided in Table 51. The projected revenues are grouped according to the LRTP planning periods. The periods are given as ranges of fiscal years.

TABLE 51. PROJECTED TRANSIT SALES TAX REVENUES BY PLANNING PERIOD (\$ MILLIONS)

	2012-2013	2014-2015	2016-2020	2021-2025	2026-2030	2031-2035
1/2 cent	\$128.4	\$135.8	\$374.7	\$431.2	\$496.3	\$571.2
1 cent	\$256.7	\$271.5	\$749.4	\$862.5	\$992.6	\$1,142.4

Transit Operating Revenues

An estimate for farebox revenue is calculated in the Cost Feasible table for transit and shown below in Table 52.

TABLE 52. PROJECTED TRANSIT FAREBOX AND OTHER REVENUE (\$ MILLIONS)

	2012-2013	2014-2015	2016-2020	2021-2025	2026-2030	2031-2035
Farebox and Other	\$67.9	\$55.3	\$152.0	\$224.8	\$316.1	\$357.9

Estimation of Transportation System Costs

Roadway Cost Estimates

The roadway projects in the TIP, Cost Feasible Plan and Policy Plan come under different jurisdictions (e.g., state, county, municipal). The Pinellas County MPO obtained the costs of the projects from various sources, including FDOT, SIS, Pinellas County and cities depending on the jurisdiction of the project and the source of funding. The source of cost estimates are shown in Table 53.

TABLE 53. SOURCES OF COST ESTIMATES FOR ROADWAY PROJECTS

Map #	Facility	From	To	Source of Cost
C1	Alt US 19 (SR 595)	Anclote Boulevard	Live Oak St.	FDOT
C2	Huey Avenue Extension	Cypress Street	Pine Street	Tarpon Springs
C3	Disston Avenue Extension	Woodhill Drive	Meres Blvd.	Tarpon Springs
C4	US 19 (SR 55)(Curlew Road Interchange)	N. of SR 580	N. of CR 95	FDOT SIS
C5	Forest Lakes Boulevard	SR 580	SR 584	County
C6	Sunset Point Road	Alt US 19 (SR 595)	Keene Road	County
C7	US 19 (SR 55)(Enterprise Road Interchange)	N. of Sunset Point Road	S. of Countryside Blvd.	FDOT SIS
C8	Belcher Road	NE Coachman Rd.	Druid Road	2025 LRTP
C9	Nursery Road	Highland Avenue	Belcher Road	County
C10	Nursery Road	Belcher Road	US 19 (SR 55)	2025 LRTP
C11	Belleair Road	US 19 (SR 55)	Keene Road	County
C12	16th Avenue SE	Seminole Boulevard	Donegan Road	2025 LRTP
C13	16th Avenue SE	Donegan Road	Lake Avenue	2025 LRTP
C14	16th Avenue SE	Lake Avenue	Starkey Road	2025 LRTP
C15	142nd Avenue North	Belcher Road	Starkey Road	2025 LRTP
C16	142nd Avenue North	66th Street N.	Belcher Road	2025 LRTP
C17	Indian Rocks Road	Walsingham Road	West Bay Drive	2025 LRTP
C18	SR 688-(Ulmerton Road)	E. of 49th Street N.	W. of 38th Street	FDOT
C19	SR 686 (Roosevelt Blvd.) Stage 6 of 6	At 49th Street Interchange	N/A	FDOT
C20	SR 686 (Roosevelt Blvd.) Stage 5 of 6	49th St. Bridge/Roosevelt Blvd	North of SR 688 (Ulmerton Road)	FDOT
C21	SR 686 (Roosevelt Blvd.) Stage 4 of 6	North of SR 688 (Ulmerton Road)	E. of 40th Street	FDOT
C22	126th Ave North	34th Street North	US 19 (SR 55)	2025 LRTP
C23	CR 296 (Future SR 690)	US 19 (SR 55)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	FDOT

Map #	Facility	From	To	Source of Cost
C24	SR 686 (Roosevelt Blvd.)	SR 688 (Ulmerton Road)	28th St. N	FDOT
C25	SR 686 (Roosevelt Boulevard) Stage 3 of 6	W. of I-275 Interchange	SR 686 (Roosevelt Blvd.) W. of 9th Street	FDOT
C26	SR 688 (Ulmerton Road) Stage 5	Lake Seminole Bypass Canal	East of Wild Acres Road	FDOT
C27	Starkey Road	East Bay Drive	SR 688 (Ulmerton Road)	County
C28	Starkey Road	SR 688 (Ulmerton Road)	Bryan Dairy Road	County
C29	SR 694 (Gandy Blvd.)	West of 9th St. N.	East of 4th St. N.	FDOT SIS
C30	Belcher Road (71st Street)	38th Av N	54th Av N	County
C31	62nd Avenue North	49th Street	66th Street	County
C32	Haines Road	US 19 (SR 55)	I-275	County
C33	58th Street South	11th Avenue S.	22nd Avenue S.	2025 LRTP
C34	22nd Avenue South	58th Street South	34th Street South	County
C35	SR 682, Bayway Bridge	East of SR 699 (Gulf Blvd)	West of SR 679	FDOT
C36	I-275 PD&E Study	Sunshine Skyway Bridge	SR 694 (Gandy Blvd.)	FDOT SIS
C37	SR 694 (Gandy Blvd.)	US 19 (SR 55)	West of Grand Avenue	FDOT
C38	102nd Avenue North	137th Street North	125th Street North	2025 LRTP
C39	102nd Avenue North	125th Street North	113th Street North	2025 LRTP
C40	102nd Avenue North	113th Street North	Seminole Blvd.	2025 LRTP
C41	62nd Avenue North	49th Street North	34th Street North	2025 LRTP
C42	I-275 Replacement of Northbound Bridge	SR 687 (4th St)	Pinellas County Line	FDOT
P1	US 19 (SR 55)	North of CR 95	N. of Nebraska Ave.	FDOT
P2	US 19 (SR 55)	N. of Nebraska Ave.	S. of Timberlane Rd.	FDOT
P3	US 19 (SR 55)	S. of Timberlane Rd.	South of Lake Street	FDOT
P4	US 19 (SR 55)	South of Lake Street	Pinellas Trail	FDOT
P5	US 19 (SR 55)	Pinellas Trail	Pasco County Line	FDOT
P6	Alt US 19 (SR 595)	Klosterman Rd.	Brevard St.	FDOT

Map #	Facility	From	To	Source of Cost
P7	Alt US 19 (SR 595)	Tampa Rd.	Orange Street	FDOT
P8	SR 590/NE Coachman Rd.	McMullen-Booth Road	Drew Street	2025 LRTP
P9	Tampa Bay Intermodal Center	Pinellas County	N/A	FDOT
P10	I-275	Northbound I-275	Westbound Ulmerton Rd. return flyover	FDOT SIS
P11	SR 686 (Roosevelt Blvd.) Stage 4 of 6	North of SR 688 (Ulmerton Road)	E. of 40th Street	2025 LRTP
P12	CR 296 (Future SR 690)	US 19 (SR 55)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	FDOT
P13	SR 694 (Gandy Blvd.)	East of SR 687 (4th Street N.)	West end of Gandy Br.	FDOT SIS
P14	US 19 (SR 55)	N. of SR 694 (Gandy Blvd.)	South of 49th Street	2025 LRTP
P15	SR 694 (Gandy Blvd.)	US 19 (SR 55)	West of Grand Avenue	FDOT SIS
P16	SR 694 (Gandy Blvd.)	W. of Grand Avenue	W. of I-275	FDOT SIS
P17	SR 694 (Gandy Blvd.)	West of I-275	W. of 9th Street	FDOT SIS
P18	Tyrone Boulevard Overpass Removal/Trail Overpass Construction	Pinellas Trail Crossing	71st Street North	2025 LRTP
P19	I-275	North of SR 688 (Ulmerton Rd.)	SR 687 (4th St)	2025 LRTP

Operations and Maintenance

For the State Highway System (SHS) projects, FDOT allocates revenue to two categories: capacity program and non-capacity program. The capacity program includes each major FDOT program that expands the capacity of existing transportation systems (e.g., highways, transit). The non-capacity program refers to FDOT programs designed to support, operate and maintain the SHS: safety, resurfacing, bridge, product support, operations and maintenance, and administration.

Operations and Maintenance includes activities to support and maintain transportation infrastructure once it is constructed and in place. This includes Program and Resource Plan categories like routine maintenance, toll operations, traffic engineering and motor car compliance. Funds available for these purposes are shown in Table 54.

TABLE 54. STATEWIDE NON-CAPACITY PROGRAM ESTIMATES 2035 REVENUE FORECAST

Major Programs	5-Year Period (Fiscal Years in \$Millions)						27-Year Total
	2009-2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	
Operations and Maintenance ²⁵	\$2,025	\$4,937	\$5,868	\$6,962	\$7,955	\$9,076	\$36,823

Statewide estimates are developed by FDOT but there is no definitive allocation of revenue to operations and maintenance of a particular metropolitan area. Statewide estimates include sufficient funding to achieve 100% of acceptable maintenance condition standard on the SHS.

For the County projects, revenue collected from taxes, licensing and permitting fees, charges for services/public safety and transportation, interest earnings, rents, surplus/refunds, reimbursements are included as a primary source for operations and maintenance projects. Also, revenue can be allocated from Constitutional Fuel Tax, County Fuel Tax, Ninth Cent Fuel Tax, First Option Local Fuel Tax and Penny for Pinellas.

- Constitutional Fuel Tax proceeds are distributed by the State to the counties according to an apportionment formula and can be used as matching funds from different sources like federal, state or private grant for maintenance projects.
- County Fuel Tax revenue is also distributed by the state in the same apportionment formula as the Constitutional Fuel Tax. The revenue can be used for operations and maintenance of transportation facilities.
- Ninth Cent Fuel Tax can be utilized to fund public transportation operations and maintenance, roadway and right-of-way maintenance and traffic engineering.
- First Option Local Fuel Tax can also be utilized to fund public transportation operations and maintenance, roadway and right-of-way maintenance and traffic engineering.
- Penny for Pinellas – A maximum of fifteen percent of the revenue from Penny for Pinellas can be used for funding operational costs.

For detailed description of each revenue source, refer to Appendix for the Metropolitan Long Range Plan - 2035 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans and Financial Plan section in the 2035 Long Range Transportation Plan.

For the Municipal projects, operation and maintenance projects are funded using the municipal share of the Local Option Gas Tax, and general funds including ad-valorem taxes, proceeds from sale of assets, interest earnings on investments, franchise fees, utility service taxes, license and permit fees, intergovernmental state sharing, grants, public service district charges, leisure service user fees, fines and forfeits.

²⁵ Based on the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013.

Transit Cost Estimates

Bus Transit

The Cost Feasible Plan includes the capital, operations and maintenance costs for bus transit. The assumptions for the bus costs are shown in Table 55. Capital costs for bus transit cover the purchase of hybrid vehicles for new service added as well as fleet replacement for the existing service. Capital Costs also cover bus stops, stations, enhanced stations and park and rides. Operations and maintenance costs cover vehicle operations, vehicle maintenance and general administration. Costs for vehicle maintenance cover all activities associated with revenue and non-revenue (service) vehicle maintenance, including administration, inspection and maintenance, and servicing (cleaning, fueling, etc.) vehicles. In addition, vehicle maintenance includes repairs due to vandalism and accident repairs of revenue vehicles. Costs for vehicle operations cover activities associated with vehicle operations, including transportation administration and support, revenue vehicle movement control, scheduling of transportation operations, revenue vehicle operation, ticketing and fare collection, and system security. Costs for general administration cover activities associated with the general administration of the transit agency, including transit service development, injuries and damages, safety, personnel administration, legal services, insurance, data processing, finance and accounting, purchasing and stores, engineering, real estate management, office management and services, customer services, promotion, market research and planning. The Cost Feasible Plan also includes the construction and operation of a bus garage for facilities maintenance.

Planning level cost estimates were developed based on data obtained from the Pinellas MPO, PSTA, TBARTA and FDOT for bus service in Pinellas County. Cost assumptions were based on similar local projects and costs from TBARTA and PSTA unit costs.

Operational costs were developed in conjunction with TBARTA, PSTA and Tindale and Oliver Associates based on the National Transit Database.

Current operating cost per revenue hour and per revenue mile was determined from the National Transit Database and used to calculate the operational costs for the proposed system. Average operating speeds includes delays at stops and signalized intersections. Cycle time includes layover times. A total of 300 days annual factor was used to calculate annual operating costs from daily operating costs. Baseline (NTD 2007) expenses were inflated to 2008 dollars using Consumer Price Index for the Tampa area (1.038).

TABLE 55. FUTURE BUS NETWORK OPERATIONS AND MAINTENANCE COST MODEL

	Total Operating Cost for 2035 LRTP ²⁶
Operating Expenses	
Vehicle Operations	\$86,817,420.52
Vehicle Maintenance	\$15,347,573.25
Facilities Maintenance	\$6,157,850
General & Administrative	\$26,218,907.89
Total	\$134,541,752
Operating Statistics	
Annual Revenue Bus-Hours	1,749,900
Annual Revenue Bus-Miles	21,846,570
Bus Garages	2
Peak Buses	391
System Unit Costs	
per Revenue Bus-Hour	\$49.61
per Revenue Bus-Mile	\$0.70
per Garage	\$3,078,925
per Peak Bus	\$67,056

Capital costs were split into two categories – Vehicle Purchase and Other Capital Costs. Vehicle Purchase capital costs include the purchase of vehicles to provide service for recommended routes with proposed headways and span of service. Vehicle costs range from \$550,000 to \$650,000 each depending on the type of vehicle. For local routes, it was assumed that hybrid buses will be purchased. Other Capital Costs cover bus stops, stations, enhanced stations, and park and ride lots. The costs range from \$20,000 to \$1,000,000 each depending on the type of stop, station and size of the park and ride lot. Unit costs were based on TBARTA costs, PSTA costs and costs for similar local transit projects. Unit costs are any cost linked to a measurable unit, such as revenue hours, a single bus, etc. Capital Cost assumptions are based on the BRT study for the specific routes listed below, excluding Central Avenue which was provided by PSTA:

- 4th St/Gulf to Bay - K
- Alt 19 - O
- US 19 - H
- East Bay Alt 19 to 66th St -G
- Ulmerton- S
- Park Blvd - L
- 66th from East Bay to Tyrone Square Mall – N
- Central Ave – P

²⁶ Baseline (NTD 2007) expenses inflated to 2008 dollars using Consumer Price Index for the Tampa area (1.038)

The Capital Unit Cost Assumptions are listed below:

- Hybrid Bus - \$550,000
- Shuttle/ Circulator - \$590,000
- Premium Limited Stop Connector - \$650,000
- Commuter Express \$575,000
- Limited Stop Connector \$550,000
- Park and Ride (covered) - \$1,000,000
- Park and Ride – \$500,000
- Station – \$150,000
- Enhanced Stop - \$40,000
- Stop – \$20,000

Rail Transit

The MPO prepared planning level cost estimates for the rail transit network. The estimates were based on light rail powered by overhead electric lines running in rail right of way and road right of way. Planning and Design costs were established at 10% for the first \$300,000,000 5% for next \$200,000,000 and 2% for the rest of the amount of the capital cost of the individual projects. Right of way and construction costs were developed based on FTA categories. Right of way costs include a 10% contingency. Unit costs for construction were based primarily on similar local studies including the Hillsborough MPO Transit Study and TBARTA costs. Construction costs categories include guideway and tracks; stations, stops and terminals; sitework and special conditions; systems control and signals and communications; and vehicle purchase.

There is a contingency factor built into each of the construction cost categories that varies between 15 and 25 percent. Rail maintenance facility costs are assumed to be ten percent of construction costs of each rail line. All of the capital costs of construction for each line include this set aside for maintenance facilities. No specific maintenance facility site was identified in the LRTP. Howard Frankland Bridge costs are based on costs provided by Florida Department of Transportation and coordinating rail costs with the Hillsborough County MPO. Operational cost for the Red Line and Purple Line (north of Green line) are based on one million per mile. Right of way and construction costs for the Purple Line (North of Green Line) are based on the effective per mile cost of the Orange Line.

6. Projects in the Long Range Transportation Plan

This section presents a series of maps and tables identifying the projects included in the Pinellas County 2035 Long Range Transportation Plan. This section includes listings for the following types of projects:

- Roadways;
- Transit;
- Bicycle and Pedestrian; and
- Operational Improvements.

Each project falls into one of the categories or plan phases listed below.

- Committed projects are those that are funded in the first five years of the LRTP. These projects have funds programmed in the Transportation Improvement Program or are funded by dedicated revenue sources that are anticipated to commence prior to 2015.
- Cost Feasible projects are funded in the years 2015 to 2035. Based on the availability of funds, each project has been planned for a future phase leading up to 2035. The phases of the cost feasible plan are 2015, 2016-2020, 2021-2025, 2026-2030, and 2031-2035.
- The Policy Plan projects cannot be implemented given the limitations of funding assumed for the LRTP. These projects have been included because they have been identified as being necessary to address future transportation needs. They are described as projects not able to be funded in the LRTP.

Year of Expenditure

The highway and transit capacity projects in the LRTP are required to be in Year of Expenditure (YOE) dollars. The tables in this document include estimates of all revenue sources that can reasonably be anticipated over the lifetime of the plan. Revenue by source and cost estimates for roadway capacity projects and transit capital and operating costs are included in this section. The YOE methodology in this LRTP is consistent with the methodologies and reporting requirements presented in the financial guidance developed by FDOT²⁷ and the Metropolitan Planning Organization Advisory Council.

²⁷ FDOT 2035 Revenue Forecast Handbook: Forecast of State Transportation Revenues and Program Levels. May 2008 and errata.

Roadway Projects

The LRTP includes State Highway System projects to be implemented by the Florida Department of Transportation as well as county and municipal roadway projects. The roadway projects described in Table 56 are the major investments planned for the Pinellas County roadway network over the next 25 years. They include capacity projects that will add lanes to existing facilities, special purpose lanes that will facilitate improved local and through traffic, bridge replacement projects and new highway interchanges.

Figure 19 and Table 56 identify committed roadway projects that are funded in the first five years of the LRTP. These projects have funds scheduled in the Transportation Improvement Program or are funded by dedicated revenue sources that are anticipated to be available prior to 2015.

Figure 20 and Table 56 identify projects included in the Cost Feasible Plan that are funded from 2015 to 2035. Based on the availability of funds, each of the projects has been planned for a future phase leading up to 2035. The phases of the cost feasible plan are 2015, 2016-2020, 2021-2025, 2026-2030, and 2031-2035.



Figure 21 and Table 56 show projects that are not able to be funded for construction prior to 2035 due to limitations of funding assumed for the LRTP. Like the committed and cost feasible projects, these projects are also necessary for the County to meet its long range transportation needs.

Table 56 lists all committed, cost feasible and unfunded state and local roadway projects. It also provides the details of the cost of the projects in the year of expenditure dollars along with the revenue sources for the Cost Feasible projects.

Bridge Projects

Many bridge projects do not increase the physical capacity of the transportation system, but rather serve as an in-kind replacement for what already exists. Some of these bridges are regionally significant, while others serve more of the local travel needs in Pinellas County. The following bridges in Pinellas County will soon be in need of replacement and federal funding will be sought to assist with the construction of new facilities:

- Beckett Bridge
- Dunedin Causeway
- San Martin Bridge

FIGURE 19. MAP OF COMMITTED PROJECTS IN THE TRANSPORTATION IMPROVEMENT PROGRAM

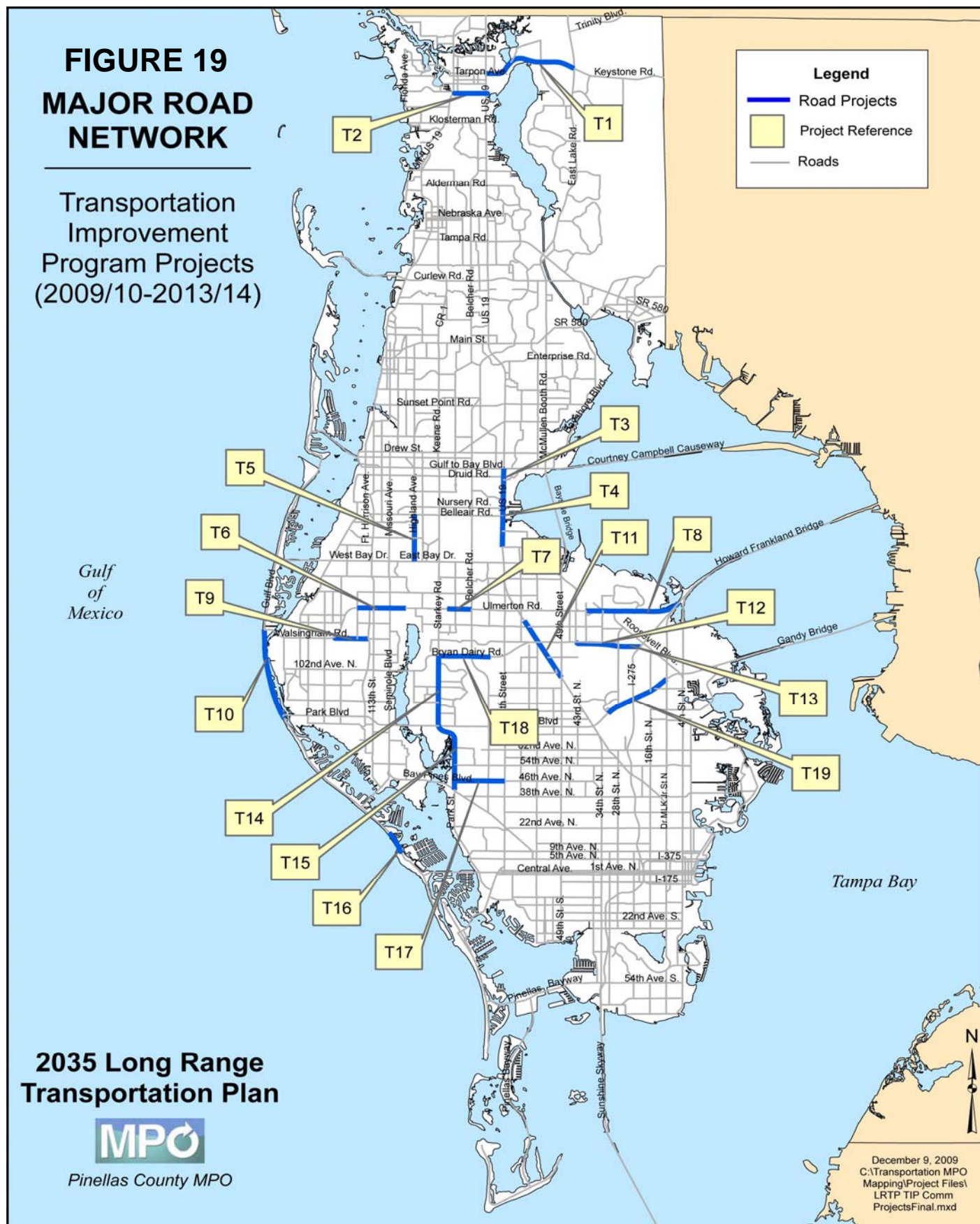


FIGURE 20. MAP OF COST FEASIBLE ROADWAY PROJECTS

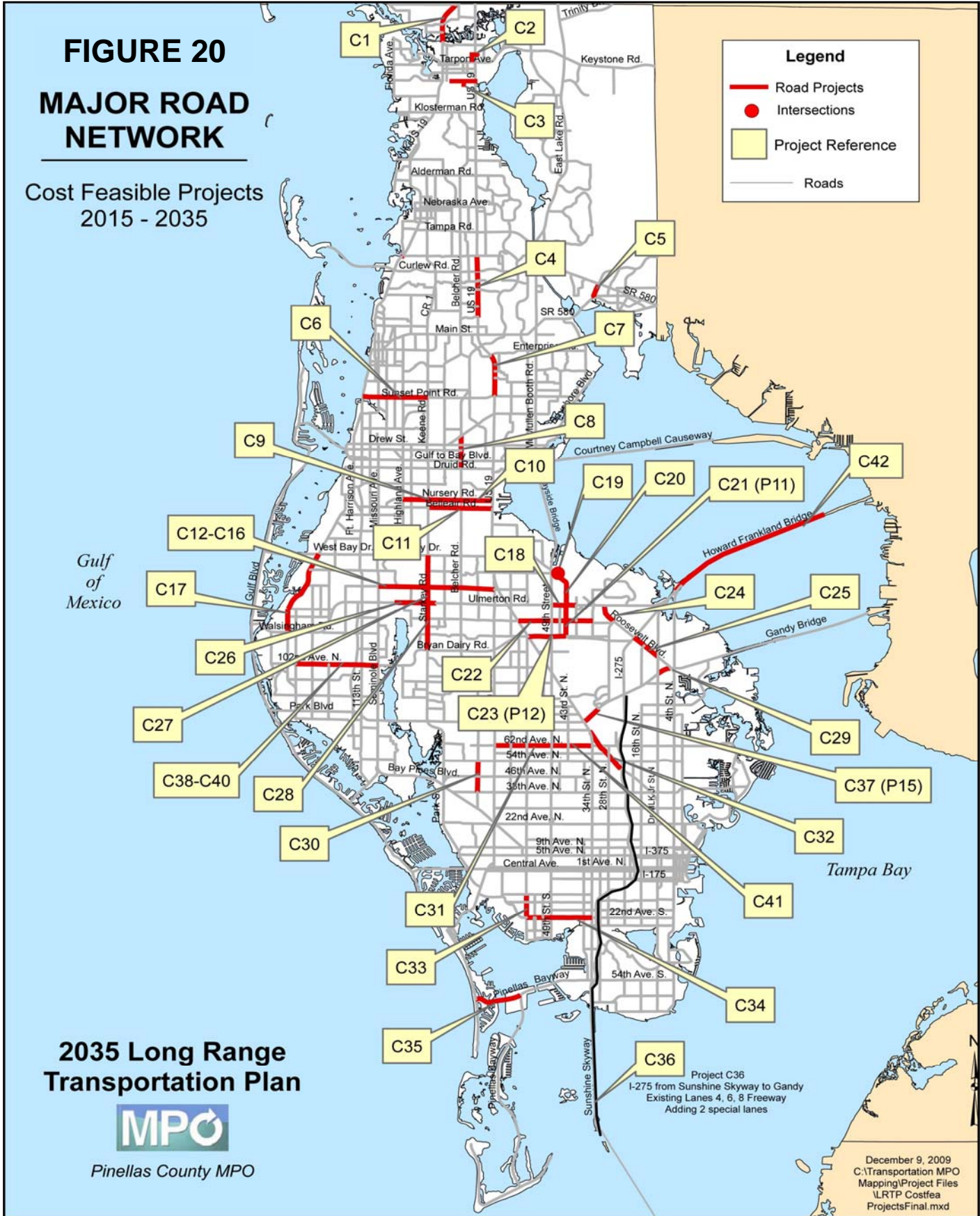
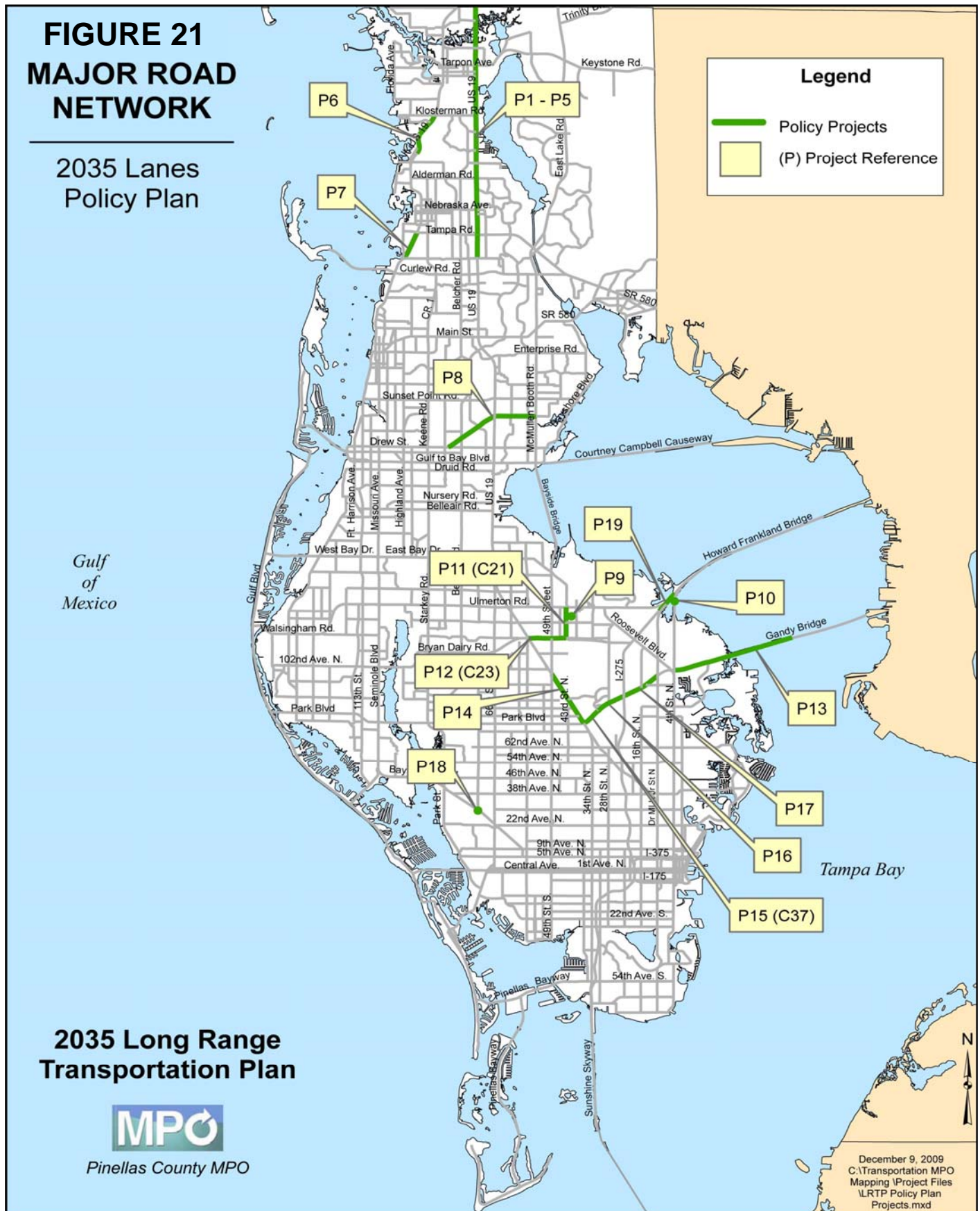


FIGURE 21. MAP OF ROADWAY PROJECTS NOT ABLE TO BE FUNDED IN THE LRTP



Project #	Facility	From	To	Existing or Committed Lanes	2035 Need	Map #	PD&E/PE²		ROW¹		CST¹		Total Project Cost² (PDC)	Committed 2009-2014³			2015⁴			2016-2020⁴			2021-2025⁴			2026-2030⁴			2031-2035⁴			Source
							Cost (PDC)	Time Period	Cost (PDC)	Time Period	Cost (PDC)	Time Period		PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	
920522	Keystone Road	US 19 (SR 55)	East Lake Road	2U	4D	T1	\$5.48	Committed	\$1.00	Committed	\$62.00	Committed	\$68.48	\$ 5.48	\$ 1.00	\$ 62.00																
2639	Meres Boulevard	Alt US 19 (SR 595)	US 19 (SR 55)	N/A-2U	2U/2D	T2					\$2.80	Committed	\$2.80	\$ -	\$ -	\$ 2.80																
256881-1	US 19 (SR 55)	South of Seville Blvd.	N of SR 60 (Gulf-to-Bay)	6D/5P	6P	T3					\$132.13	Committed	\$132.13	\$ -	\$ -	\$ 132.13																
256881-1	US 19 (SR 55)	N. of Whitney Rd.	South of Seville Blvd.	6D	6P	T4						Committed		\$ -	\$ -	\$ -																
1402	Highland Avenue	East Bay Drive	Bellear Road	2U	2E	T5					\$5.41	Committed	\$5.41	\$ -	\$ -	\$ 5.41																
257155-1	SR 688 (Ulmerton Road) Stage 1 of 6	E. of 119th Street	W. of Lake Seminole Bypass Canal	4D	6D	T6					\$24.96	Committed	\$24.96	\$ -	\$ -	\$ 24.96																
409154-1	SR 688 (Ulmerton Road) Stage 4 of 6	East of Wild Acres Road	Ei Centro Ranchero	4D	6D	T7	\$1.00	Committed			\$10.37	Committed	\$11.37	\$ 1.00	\$ -	\$ 10.37																
257147-1	SR 688 (Ulmerton Road) Stage 6 of 6	West of 38th Street	West of I-275	4D/6D	6D	T8	\$3.24	Committed			\$35.52	Committed	\$38.76	\$ 3.24	\$ -	\$ 35.52																
922518	Walsingham Road	119th Street	Old Ridge Road	2U	2E	T9					\$3.40	Committed	\$3.40	\$ -	\$ -	\$ 3.40																
County - 875; State - 257083-1	SR 699 (Gulf Boulevard)	Walsingham Road/ Indian Rocks Bridge	Park Boulevard	2U	2E	T10					\$8.50	Committed	\$8.50	\$ -	\$ -	\$ 8.50																
257070-1	US 19 (SR 55)	N. of 49th Street North	South of 126th Avenue	6D	6P	T11					\$4.55	Committed	\$4.55	\$ -	\$ -	\$ 4.55																
256994-1	SR 686	E. of 40th Street	W. of 28th Street	N/A	6P	T12					\$6.91	Committed	\$6.91	\$ -	\$ -	\$ 6.91																
256994-2	SR 686 (Ramps Stage 2-2)	NB I-275 Interchange (Ramp P)	WB SR 686	4P	4P+2AUX	T13					\$19.37	Committed	\$19.37	\$ -	\$ -	\$ 19.37																
865	Starkey Road/ Park Street	Bryan Dairy Road	84th Lane	4D	6D	T14	\$1.20	Committed			\$15.80	Committed	\$17.00	\$ 1.20	\$ -	\$ 15.80																
864	Starkey Road/Park Street	84th Lane	Tyrone Boulevard Bridge Replacement	4D	6D	T15	\$1.20	Committed			\$18.80	Committed	\$20.00	\$ 1.20	\$ -	\$ 18.80																
406474-1	SR 699 (Gulf Boulevard)	At John's Pass		4D	4D	T16					\$4.61	Committed	\$4.61	\$ -	\$ -	\$ 4.61																
922493	46th Avenue North	80th Street North	62nd Street North	2U	2E	T17	\$0.64	Committed			\$5.13	Committed	\$5.77	\$ 0.64	\$ -	\$ 5.13																
County - 920588; State - 420629-1	Bryan Dairy Road	Starkey Road	72nd Street	4D	6D	T18	\$1.10	Committed	\$2.69	Committed	\$19.20	Committed	\$ 22.99	\$ 1.10	\$ 2.69	\$ 19.20																
418869-1	SR 694 (Gandy Boulevard)	9th Street North	28th Street (Extended)	4D/6D	6D	T19	\$1.50	Committed			\$11.00	Committed	\$ 12.50	\$ 1.50	\$ -	\$ 11.00																

TABLE 56. COMMITTED, COST FEASIBLE AND POLICY PLAN ROADWAY PROJECTS

Project #	Facility	From	To	Existing or Committed Lanes	2035 Need	Map #	PD&E/PE ²		ROW ¹		CST ¹		Total Project Cost ²	Committed 2009-2014 ³			2015 ⁴			2016-2020 ⁴			2021-2025 ⁴			2026-2030 ⁴			2031-2035 ⁴			Source
							Cost (PDC)	Time Period	Cost (PDC)	Time Period	Cost (PDC)	Time Period		PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	
	Alt US 19 (SR 595)	Anclote Boulevard	Live Oak St.	2U	2E	C1			\$5.44	2031-2035	\$5.31	2031-2035	\$ 10.75	\$ -	\$ -	\$ -												\$12.08	\$11.79	OA		
	Huey Avenue Extension	Cypress Street	Pine Street	N/A	2U	C2					\$2.30	2016-2020	\$ 2.30	\$ -	\$ -	\$ -				\$3.15										PFP		
	Disston Avenue Extension	Woodhill Drive	Meres Blvd.	N/A	2U	C3					\$1.90	2015	\$ 1.90	\$ -	\$ -	\$ -			\$2.32											PFP		
2567742	55)(Curlew Road Interchange)	N. of SR 580	N. of CR 95	6D + 2AUX	6P	C4	\$7.50	Committed	\$32.00	2026-2030	\$62.96	2026-2030	\$ 102.46	\$ 7.50	\$ -	\$ -									\$60.48	\$118.99				SIS		
	Forest Lakes Boulevard	SR 580	SR 584	2D	4D	C5	\$1.10	2021-2025	\$2.00	2021-2025	\$6.60	2021-2025	\$ 9.70	\$ -	\$ -	\$ -				\$1.77	\$3.22	\$10.63								PFP		
	Sunset Point Road	Alt US 19 (SR 595)	Keene Road	2U	2E	C6		Committed		Committed	\$11.84	2015	\$ 11.84	\$ -	\$ -	\$ -			\$14.44											PFP		
2568901	55)(Enterprise Road Interchange)	N. of Sunset Point Road	S. of Countryside Blvd.	6D	6P	C7		Underway	\$12.67	2016-2020	\$39.60	2016-2020	\$ 52.27	\$ -	\$ -	\$ -				\$17.36	\$54.25									SIS		
	Belcher Road	NE Coachman Rd.	Druid Road	4U	4E	C8	\$0.65	2021-2025	\$5.53	2021-2025	\$7.71	2021-2025	\$ 13.89	\$ -	\$ -	\$ -						\$1.05	\$8.90	\$12.41						PFP		
	Nursery Road	Highland Avenue	Belcher Road	2U	2E	C9	\$0.48	2015	\$0.44	2015	\$3.80	2016-2020	\$ 4.72	\$ -	\$ -	\$ -	\$0.59	\$0.54				\$5.21								PFP		
	Nursery Road	Belcher Road	US 19 (SR 55)	2U	2E	C10					\$2.50	2021-2025	\$ 2.50	\$ -	\$ -	\$ -								\$4.03						PFP		
	Belleair Road	US 19 (SR 55)	Keene Road	2U	2E	C11					\$1.37	2015	\$ 1.37	\$ -	\$ -	\$ -			\$1.67											PFP		
	16th Avenue SE	Seminole Boulevard	Donegan Road	2U	2E	C12		Committed		Committed	\$1.99	2016-2020	\$ 1.99	\$ -	\$ -	\$ -						\$2.73								PFP		
	16th Avenue SE	Donegan Road	Lake Avenue	2U	2E	C13		Committed		Committed	\$1.28	2016-2020	\$ 1.28	\$ -	\$ -	\$ -						\$1.75								PFP		
	16th Avenue SE	Lake Avenue	Starkey Road	N/A	2E	C14		Committed		Committed	\$1.60	2016-2020	\$ 1.60	\$ -	\$ -	\$ -						\$2.19								PFP		
	142nd Avenue North	Belcher Road	Starkey Road	N/A	2E	C15		Committed		Committed	\$3.27	2016-2020	\$ 3.27	\$ -	\$ -	\$ -						\$4.48								PFP		
	142nd Avenue North	66th Street N.	Belcher Road	2U	2E	C16		Committed		Committed	\$3.27	2016-2020	\$ 3.27	\$ -	\$ -	\$ -						\$4.48								PFP		
	Indian Rocks Road	Walsingham Road	West Bay Drive	2U	2E	C17	\$0.75	2015	\$0.68	2015	\$5.96	2021-2025	\$ 7.39	\$ -	\$ -	\$ -	\$0.92	\$0.83						\$9.60						PFP		
2569951	SR 686	N. of Ulmerton	E. of 40th St.	4D/6D	6D	C18 (part of C21)					\$100.90	2021-2025	\$ 100.90	\$ -	\$ -	\$ -								\$162.45						PFP		
2569961	SR 686 (Roosevelt Blvd.) Stage 6 of 6	At 49th Street Interchange	N/A	N/A	2U Ramp	C19	\$3.90	Committed	\$0.34	2015	\$53.28	2026-2030	\$ 57.52	\$ 3.90	\$ -	\$ -		\$0.41							\$100.70					OA		
2569971	SR 686 (Roosevelt Blvd.) Stage 5 of 6	49th St. Bridge/Roosevelt Blvd	North of SR 688 (Ulmerton Road)	4D	6P	C20		Underway	\$17.50	2015	\$20.00	2026-2030	\$ 37.50	\$ -	\$ -	\$ -		\$21.35							\$37.80					TMA		
2569971	SR 686 (Roosevelt Blvd.) Stage 5 of 6	49th St. Bridge/Roosevelt Blvd	North of SR 688 (Ulmerton Road)	4D	6P	C20			\$29.20	2015	\$21.90	2026-2030	\$ 51.10	\$ -	\$ -	\$ -		\$35.62							\$41.39					OA		
2569952	43rd St. Extension	CR 296 (118th Ave. N.)	40th St. N.	N/A	4P	C21		Underway	\$6.23	Committed	\$4.20	2016-2020	\$ 10.43	\$ -	\$ 6.23	\$ -					\$4.80			\$136.85						Other Federal Funds		
2569953	SR 688 (Ulmerton Rd.)	E. of 49th St.	W. of 38th St. N.	4D	6D	C21					\$22.50	2016-2020	\$ 22.50	\$ -	\$ -	\$ -					\$25.60			\$68.51						Other Federal Funds		
	126th Ave North	34th Street North	US 19 (SR 55)	N/A-2U	2D/4D	C22	\$2.20	2015	\$5.00	2016-2020	\$20.50	2016-2020	\$ 27.70	\$ -	\$ -	\$ -	\$2.68				\$6.85	\$28.09								PFP		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23		Underway	\$33.50	Committed			\$ 33.50	\$ -	\$ 33.50	\$ -								\$161.00						SIS		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$19.00	2026-2030	\$ 19.00	\$ -	\$ -	\$ -									\$35.91					TMA		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$28.30	2031-2035	\$ 28.30	\$ -	\$ -	\$ -										\$62.83				TMA		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$27.70	2031-2035	\$ 27.70	\$ -	\$ -	\$ -										\$61.49				OA		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$14.90	2021-2025	\$ 14.90	\$ -	\$ -	\$ -							\$23.99							TRIP		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$12.20	2026-2030	\$ 12.20	\$ -	\$ -	\$ -									\$23.06					TRIP		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$9.60	2031-2035	\$ 9.60	\$ -	\$ -	\$ -										\$21.31				TRIP		
4136222	CR 296 (Future SR 690)	E. of SR 686 (Roosevelt Blvd.) at 40th Street	US 19 (SR 55)	6D	4P	C23					\$64.80	2031-2035	\$ 64.80	\$ -	\$ -	\$ -										\$143.86				PFP		

Project #	Facility	From	To	Existing or Committed Lanes	2035 Need	Map #	PD&E/PE ³		ROW ¹		CST ¹		Total Project Cost ²	Committed 2009-2014 ³			2015 ⁴			2016-2020 ⁴			2021-2025 ⁴			2026-2030 ⁴			2031-2035 ⁴			Source
							Cost (PDC)	Time Period	Cost (PDC)	Time Period	Cost (PDC)	Time Period		PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	
	SR 694 (Gandy Blvd.)	East of SR 687 (4th Street N.)	West end of Gandy Br.	4D	4P	P13	\$27.56	Unfunded	\$137.78	Unfunded	\$137.78	Unfunded	\$ 303.12	\$ -	\$ -	\$ -																
	US 19 (SR 55)	N. of SR 694 (Gandy Blvd.)	South of 49th Street	6D	6P	P14	\$9.40	Unfunded	\$29.43	Unfunded	\$47.34	Unfunded	\$ 86.17	\$ -	\$ -	\$ -																
	SR 694 (Gandy Blvd.)	US 19 (SR 55)	West of Grand Avenue	6D	4P	P15	\$2.40	2026-2030	\$34.58	2031-2035	\$43.49	Unfunded	\$ 80.47	\$ -	\$ -	\$ -									\$4.54				\$76.77			
	SR 694 (Gandy Blvd.)	W. of Grand Avenue	W. of I-275	6D	4P	P16	\$3.27	Unfunded	\$4.59	Unfunded	\$60.99	Unfunded	\$ 68.85	\$ -	\$ -	\$ -																
	SR 694 (Gandy Blvd.)	West of I-275	W. of 9th Street	6D	4P	P17	\$3.35	Unfunded	\$24.58	Unfunded	\$62.59	Unfunded	\$ 90.52	\$ -	\$ -	\$ -																
	Tyrone Boulevard Overpass Removal/Trail Overpass Construction	Pinellas Trail Crossing	71st Street North	4D Grade Separated	4D at Grade + Trail Overpass	P18		Unfunded		Unfunded	\$17.93	Unfunded	\$ 17.93	\$ -	\$ -	\$ -																
	I-275	North of SR 688 (Ulmerton Rd.)	SR 687 (4th St)	8F	12F	P19	\$7.50	Unfunded	\$23.50	Unfunded	\$37.82	Unfunded	\$ 68.82	\$ -	\$ -	\$ -																
													\$ -	\$ -	\$ -	\$ -																
Total														\$26.76	\$52.84	\$543.19	\$4.58	\$58.76	\$145.48	\$2.64	\$59.68	\$442.80	\$35.69	\$12.12	\$598.46	\$12.57	\$60.48	\$818.45	\$10.00	\$165.61	\$593.81	

Road Types:
U = Undivided; D = Divided; P = Partially Controlled Access; AUX = Auxillary Lanes; E = Enhancement; NA = Not Applicable; SU = Special Use; F = Freeway

Fund Sources:
OA = Other Arterial funds (State & Federal);
TMA = Transportation Management Area funds (Federal)
SIS = Strategic Intermodal System funds
TRIP = Transportation Regional Incentive Program

PFP = Penny for Pinellas
TOLL = Toll Revenue

- Notes:
- in millions; shown in present day costs (PDC) / "constant" 2009 dollars;
 - in millions; shown in present day costs (PDC) / "constant" 2009 dollars; include PD&E/PE, ROW and CST except for those phases that are underway
 - in millions; as shown in adopted TIP and WP; shown in year of expenditure or "current" dollars
 - in millions; shown in year of expenditure or "current" dollars
 - in millions; shown in present day costs (PDC) / "constant" 2009 dollars; 20% ratio of project cost; for Other Arterials only;

Revenue	OA				\$39.7		\$122.2		\$137.6		\$148.3		\$162.2
	TMA				\$30.0		\$79.3		\$83.8		\$86.2		\$86.8
	SIS				\$0.0		\$92.2		\$184.8		\$179.5		\$279.1
	TRIP				\$6.0		\$26.7		\$24.1		\$23.2		\$21.5
	PFP				\$64.0		\$176.6		\$203.3		\$233.9		\$269.2
	TOLL				\$74.4		\$0.0		\$0.0		\$0.0		\$0.0
	BR				\$0.0		\$0.0		\$3.1		\$445.7		\$0.0
	Other Federal Funds												
					\$0.0		\$30.4		\$0.0		\$0.0		\$0.0
Remaining Balance	OA			\$7.9	\$0.0	\$24.4	\$0.4	\$27.5	\$137.6	\$25.1	\$0.0	\$32.4	\$0.1
	TMA				\$0.0		\$0.1		\$68.8		\$0.2		\$0.5
	SIS				\$0.0		\$20.6		\$0.0		\$0.0		\$279.1
	TRIP				\$0.6		\$17.8		\$0.1		\$0.2		\$0.2
	PFP				\$4.7		\$4.0		(\$10.7)		\$233.9		\$125.3
	TOLL				\$0.0		\$0.0		\$0.0		\$0.0		\$0.0
	BR				\$0.0		\$0.0		\$0.0		\$0.0		\$0.0
	Other Fed				\$0.0		\$0.0		\$0.0		\$0.0		\$0.0

Note: Remaining balance for Other Arterials - "PD&E/PE" represents PD&E/PE costs balanced to an assumed 20 percent of Other Arterial revenues for each time period.

If a project cannot be fully funded through CST in the CFP by 2035, the PD&E/PE costs need to be included so that federal funds can be obligated.
Unfunded Costs for SIS and SHS is CST phase 52; LRE FY 2009

"MPOs are encouraged to include estimates for key pre-construction phases in the LRTP, namely for Project Development and Environmental (PD&E) studies and Engineering Design. This is particularly important for projects that cannot be fully funded (through construction) in the Cost Feasible Plan by 2035, so that federal funds can be obligated for PD&E or Design should the priority for these projects change. For projects funded with the revenue estimates for Other Arterials Construction & ROW Funds -provided by FDOT, MPOs can assume that 20 percent of those estimated funds will be available from the statewide Product Support' estimates for PD&E and Engineering Design. MPOs should document these assumptions."

Per guidance 9/17/08 from FDOT Central Office does not apply to TMA funds

Transit Projects

The transit element of the LRTP includes a planned countywide rail system, enhanced service for the existing local bus network and premium bus lines that represent new service to supplement the existing bus and planned rail network. Transit projects identified in the LRTP include planning, design, capital and operational costs.

For the rail transit projects, revenue sources include farebox collection, other revenue sources like advertising, federal and state match, ad valorem and transit system surtax. The following assumptions were used to generate certain sources of revenue:

- Farebox collection and other revenue – 25% of the operating costs for rail and bus transit
- Federal Match – 30% of rail transit capital costs and 25% of bus transit capital costs
- State Match - 20% of rail transit capital costs and 5% of bus transit capital costs



The cost and revenue balances are made for five planning periods through 2035, including projects committed in the first five years of the LRTP. Though the rail projects are cost feasible by 2035, the magnitude of the rail transit projects and limited source of revenue generated every planning period doesn't enable the complete funding of the project in a particular planning time period. In planning periods where revenue is not spent, it is carried over to the next planning phase. Some planning periods show a negative revenue balance at the end of the time period, and in those planning periods small bond issuances will need to be made or other funding sources identified. There is adequate revenue left over at the end of the 2031-2035 planning period to support this assumption. Table 57 shows the cost feasibility analysis for rail and bus transit capital projects and operations. Figure 22 shows existing bus route coverage, park and ride locations and intermodal/transfer centers. Figure 23 shows planned premium bus projects with committed funding that are anticipated to be completed prior to 2035. Figure 24 shows planned rail projects with committed funding that are anticipated to be completed prior to 2035. This map also shows (for reference) unfunded rail lines, which are not anticipated to be complete prior to 2035.

Type of Rail Service

The type of rail transit envisioned for Pinellas County is intended to serve regional and local trip purposes. To facilitate regional travel, the type of transit technology utilized must be designed for relatively high speeds to cover long distances quickly. To effectively accommodate local travel, the rail technology employed must be able to accelerate and decelerate quickly, so that delay as a result of frequent stops is minimized. The rail systems considered would operate adjacent to rail, Interstate and arterial road rights-of-way. In order to function within these rights-of-way, the rail vehicles will need to operate at grade, share right of way and space with motor vehicles and pedestrians, and maneuver both horizontally and vertically. Daily service is envisioned along with local stops. Express trains to serve longer intra-county and county to county trips will be needed in order for travel time to be minimized.

Types of Bus Service

Local Bus Service serves as the traditional local bus service similar to what PSTA currently provides. The existing routes are shown on Figure 22, Transit Network – Existing Bus System map.

Premium Bus Service includes routes that integrate different premium bus service features and technology.

Limited Stop Connector Service is a variant of local bus service with wider stop spacing and faster travel speed.

Commuter Express Service is designed to provide limited stop service to commuters during peak hours of travel.



Premium Bus in Mixed Traffic operates in standard vehicle through lanes, but has infrastructure in place to improve the operational efficiency of the route. This may include stations where fares are paid before boarding, establishing communications between buses and traffic signals to reduce delay for buses and motorists at intersections or queue jump lanes that allow buses to proceed through intersections in advance of other vehicle traffic.

Enhanced Trolleys are high frequency (10 to 20 minute headways) trolley routes that act as local circulators. The vehicles put in service on these lines are typically smaller than standard buses.

Premium Bus Lines

The Premium Bus lines described below are illustrated in Figure 23, Transit Network – Cost Feasible Premium Bus Network.

- A North County Trolley - Clearwater Beach to Tarpon Springs via Memorial Causeway and Alternate 19 (Enhanced Trolley Service)
- B Curlew/Hillsborough - Dunedin to Westshore Mall via Curlew Road, Tampa Road/Hillsborough Ave and Veterans Expressway (Limited Stop Connector)
- C Downtown Clearwater/Hillsborough - Downtown Clearwater to Westshore Mall via Alternate 19, SR 580, Tampa Road/Hillsborough Avenue and Veterans Expressway (Two-Way Commuter Express)
- D Clearwater BRT – Downtown Clearwater to Clearwater Beach via Memorial Causeway (Premium Service in Mixed Traffic)
- E Downtown Clearwater/Tampa - Downtown Clearwater to Downtown Tampa via Alternate 19, East Bay Drive, Roosevelt Boulevard, Ulmerton Road, and I-275 (Two-Way Commuter Express) – This route will be taken out of service when the Orange Line rail connection between Clearwater and Gateway is complete.
- F Pasco County/ McMullen Booth/Gateway - Pasco County (SR 54) to Gateway via Trinity Boulevard, East Lake Road, McMullen Booth Road, Bayside Bridge, Roosevelt Boulevard and Dr. MLK Jr. Street (Premium Limited Stop Connector)
- G East Bay – Downtown Largo (Alternate 19/ Missouri Avenue) to US 19 via East Bay Drive (Premium Service in Mixed Traffic)

- H US 19 – Pasco County (SR 54) to Eckerd College via US 19 (Limited Stop Connector)
- L Park Boulevard – Seminole to 4th Street via Park Boulevard and Gandy Boulevard (Limited Stop Connector)
- M Madeira Beach/Tampa - Madeira Beach to Downtown Tampa via 150th Avenue S, Alternate 19, Park Boulevard, Gandy Boulevard and the Crosstown Expressway (Two-Way Commuter Express)
- N 66th St- East Bay Drive to Tyrone Square Mall via 66th Street (Limited Stop Connector)
- O Alternate 19 – Downtown Clearwater to Central Avenue via Missouri Avenue/Seminole Boulevard and Tyrone Boulevard (Premium Service in Mixed Traffic)
- P Central Avenue BRT – Medical Center to St. Pete Beach via Central Avenue corridor and Pasadena Avenue (Premium Service in Mixed Traffic)
- Q Downtown St. Petersburg/Manatee County - Downtown St. Petersburg to Downtown Palmetto and Bradenton via I-175, I-275, US 19 and Business SR 41 (Two-Way Commuter Express)
- R Clearwater/Tampa/SR 60 - Clearwater Beach to Westshore Mall via Memorial Causeway and SR 60 (Limited Stop Connector)
- T South County Trolley - Clearwater Beach to Pass-a-Grille via Gulf Boulevard (Enhanced Trolley Service)

Legend:

- Existing PSTA Routes (Blue line)
- Park and Ride (Red square)
- Intermodal Centers (Red circle)

Map Labels:

- Tarpon Ave
- US 19
- Alderman Rd
- Tampa Rd
- Curlew Rd
- Main St
- Sunset Point Rd
- McMullen Blvd
- Keene Rd
- Courtney Campbell Cswy
- West Bay Dr
- East Bay Dr
- Ulmerton Rd
- 102nd Ave N
- 54th Ave N
- 38th Ave N
- 54th Ave S
- 22nd Ave S
- Central Ave
- 4th St
- 6th St
- 8th St
- 118th Ave
- 102nd Ave S
- 104th Ave S
- 106th Ave S
- 108th Ave S
- 110th Ave S
- 112th Ave S
- 114th Ave S
- 116th Ave S
- 118th Ave S
- 120th Ave S
- 122nd Ave S
- 124th Ave S
- 126th Ave S
- 128th Ave S
- 130th Ave S
- 132nd Ave S
- 134th Ave S
- 136th Ave S
- 138th Ave S
- 140th Ave S
- 142nd Ave S
- 144th Ave S
- 146th Ave S
- 148th Ave S
- 150th Ave S
- 152nd Ave S
- 154th Ave S
- 156th Ave S
- 158th Ave S
- 160th Ave S
- 162nd Ave S
- 164th Ave S
- 166th Ave S
- 168th Ave S
- 170th Ave S
- 172nd Ave S
- 174th Ave S
- 176th Ave S
- 178th Ave S
- 180th Ave S
- 182nd Ave S
- 184th Ave S
- 186th Ave S
- 188th Ave S
- 190th Ave S
- 192nd Ave S
- 194th Ave S
- 196th Ave S
- 198th Ave S
- 200th Ave S

Geographic Features:

- Old Tampa Bay
- Tampa Bay
- I-275
- I-4
- US 19
- US 90
- US 301
- US 41
- US 50
- US 60
- US 70
- US 80
- US 90
- US 100
- US 110
- US 120
- US 130
- US 140
- US 150
- US 160
- US 170
- US 180
- US 190
- US 200
- US 210
- US 220
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- US 350
- US 360
- US 370
- US 380
- US 390
- US 400
- US 410
- US 420
- US 430
- US 440
- US 450
- US 460
- US 470
- US 480
- US 490
- US 500
- US 510
- US 520
- US 530
- US 540
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- US 560
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- US 580
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- US 600
- US 610
- US 620
- US 630
- US 640
- US 650
- US 660
- US 670
- US 680
- US 690
- US 700
- US 710
- US 720
- US 730
- US 740
- US 750
- US 760
- US 770
- US 780
- US 790
- US 800
- US 810
- US 820
- US 830
- US 840
- US 850
- US 860
- US 870
- US 880
- US 890
- US 900
- US 910
- US 920
- US 930
- US 940
- US 950
- US 960
- US 970
- US 980
- US 990
- US 1000

Scale: 0 1 2 3 Miles

North Arrow: N

FIGURE 23. MAP OF COST FEASIBLE PREMIUM BUS NETWORK

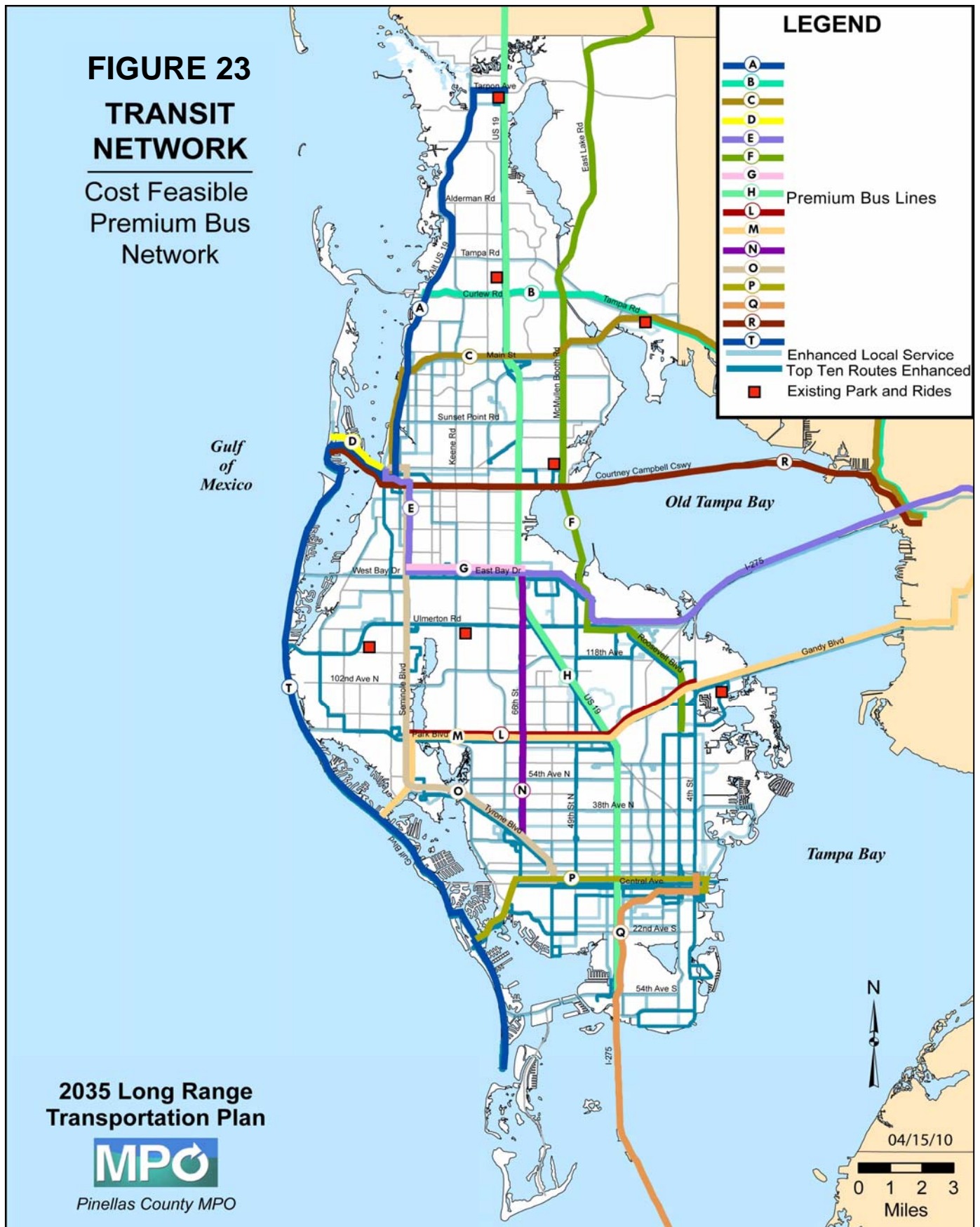


FIGURE 24. MAP OF COST FEASIBLE RAIL NETWORK

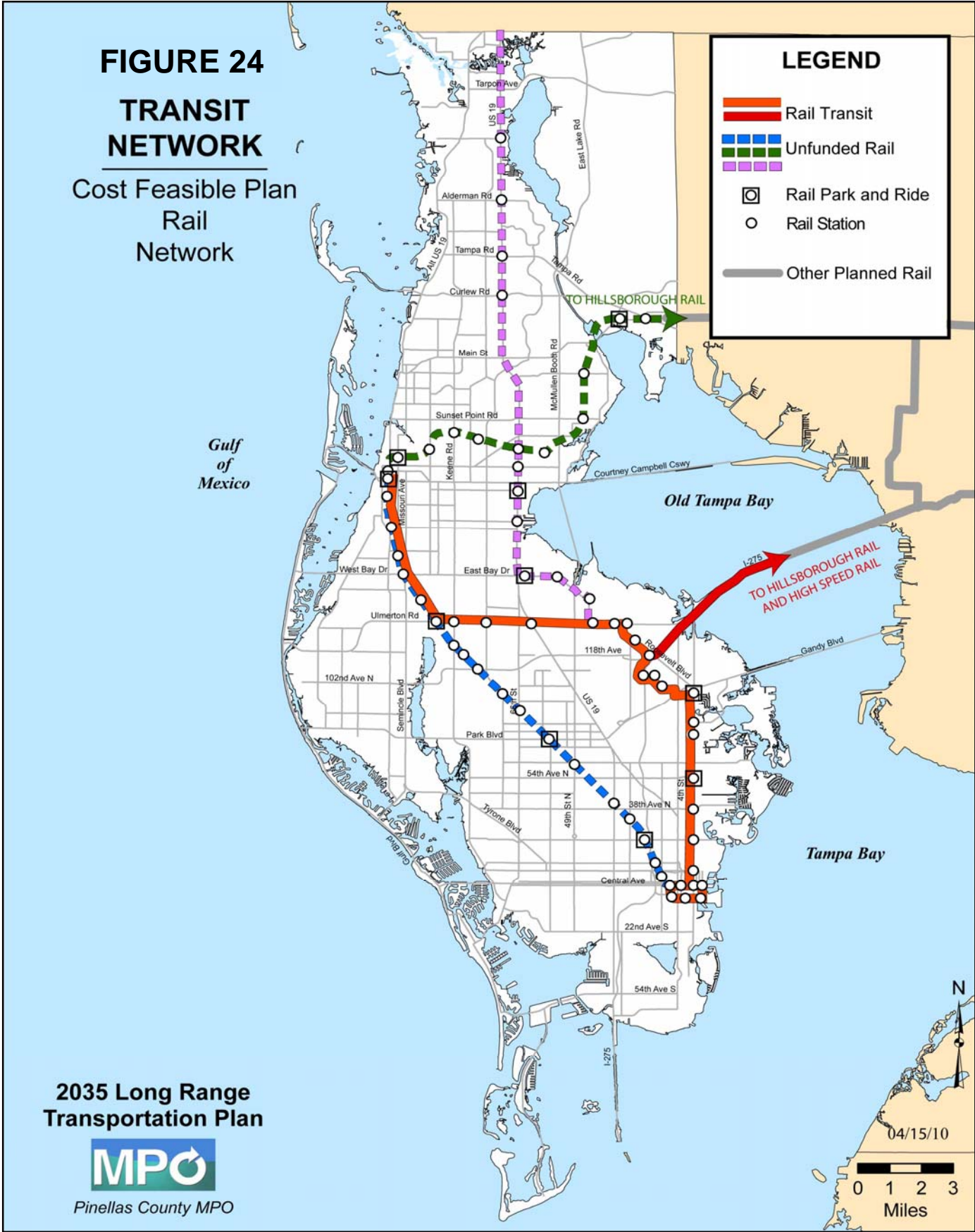


TABLE 57. COST FEASIBLE AND POLICY PLAN TRANSIT PROJECTS

[illegible]

*** Top Ten Routes - 4, 18, 19,
35,52,59,60,74,79,Suncoast Beach Trolley**

	Present Value of Revenue through 2025
Farebox Collection and Other revenue	\$797.19
Transit System Surtax (starts 2012)	\$2,974.19
Ad Valorem	\$916.14
Federal Match	\$824.65
State Match	\$332.44
Other Committed Funds	\$4.00
Total Revenue	\$5,848.60

Revenue

2009-2013				2014-2015				2016-2020				2021-2025				2026-2030				2031-2035			
67.91				55.33				\$151.96				224.77				\$316.13				357.88			
256.66				271.50				\$749.40				862.50				\$992.60				1142.40			
181.3				78.20				211.20				235.50				262.50				292.70			
\$62.15				50.58				301.03				415.82				206.95				86.73			
\$12.43				20.42				128.33				176.20				82.83				37.17			
\$4.00																							
584.45				476.04				1541.93				1914.79				1861.01				1916.88			

Remaining Balance

[illegible]

Bicycle and Pedestrian Projects

Sidewalks

The MPO coordinates with FDOT and local governments on short-term sidewalk projects and programs that need to be included in the Transportation Improvement Program. Local governments set aside a significant amount of funds for new sidewalk construction. Individual projects that come out of these sidewalk programs are often selected based on immediate and obvious needs rather than long term planning. Sidewalk construction projects in Pinellas County are also constructed as a result of the State or local government addressing a safety concern or as part of a road construction or resurfacing project. They are also constructed by developers in compliance with local site plan review requirements.

Consequently, most sidewalk construction in Pinellas County does not result from long range planning efforts although MPO policy does facilitate the expansion of the County's sidewalk network to fill existing gaps on the major road network and to ensure safe travel conditions for pedestrians, particularly with regard to school children. The MPO tracks sidewalk projects and monitors pedestrian needs by maintaining a database of roadway facilities with and without parallel sidewalks. A list of the sidewalk construction projects in the first five years of the LRTP and TIP are included in Table 58.



TABLE 58. SIDEWALK PROJECTS WITH FUNDS COMMITTED PRIOR TO 2015

TIP#	Project	Funding Amount	Funding Source	Jurisdiction
1623	School Sidewalk Program	\$922,000	SR2S	Pinellas County
1096	General Sidewalk Program	\$18,964,000	PP	Pinellas County
1313	ADA Sidewalk Ramp Improvements	\$6,750,000	MSTU	Pinellas County
940	Walsingham Rd	\$724,000	LF	Pinellas County
941	49th Street	\$1,647,700	LF	Pinellas County
1219	Gooden Crossing Sidewalk	\$315,000	FG	Pinellas County
2004	Curb/Sidewalks	\$170,000	LF	Belleair
4013	Infrastructure/Sidewalks	\$350,000	LF	Belleair Bluffs
6053	Citywide Sidewalks - New	\$2,250,000	LF	Clearwater
7022	Citywide Sidewalks	\$275,000	GT	Dunedin
7063	Sidewalk Extension	\$95,000	GT	Dunedin
8015	Citywide Sidewalk Upgrades	\$160,000	LF	Gulfport
8019	49th Street South Sidewalk	\$1,650,000	LF	Gulfport
1369	Citywide Sidewalks	\$3,100,000	GT, ST	Largo
1443	Bayshore Dr Sidewalk	\$200,000	LF	Madeira Beach
	Streets and Sidewalks	\$510,000	LF	North Redington Beach
	CRA Streetscaping	\$1,000,000	LF	North Redington Beach
	St. Petersburg Drive	\$50,000	LF	North Redington Beach
	Sidewalk, Ramp and Neighborhood Program	\$500,000	ST	Pinellas Park
	Sidewalks for CRA	\$250,000	CRA, TIF, CDBG, HUD	Pinellas Park

SR2S-Safe Routes to School; PP-Penny for Pinellas; MSTU-Municipal Service Taxing Unit; FG-Federal Grant; LF-Local Funds; GT-Gas Tax; ST-Sales Tax; CRA-Community Redevelopment Funds; TIF-Tax Increment Financing; CDBG-Community Development Block Grant; HUD-Housing and Urban Development.

Bicycle Lanes

The MPO also maintains an on-street bicycle lane needs list for purposes of the LRTP. Although funding is not specifically earmarked for bicycle lanes, they are installed as part of construction and resurfacing projects involving major roads, where feasible. Table 59 lists the bicycle lane projects in the current TIP.

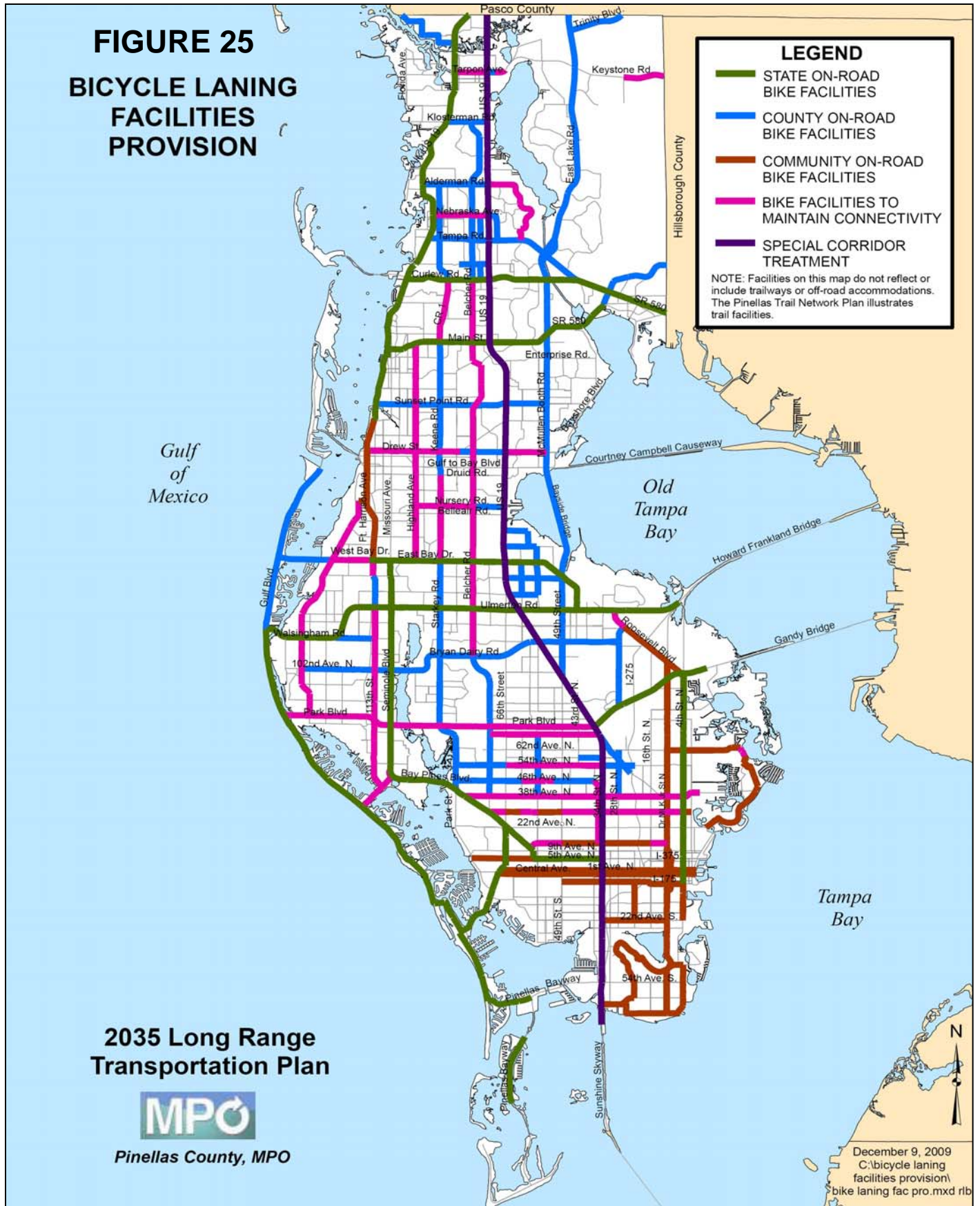
The Countywide Bicycle and Pedestrian Master Plan includes a Bicycle Lane Facilities Plan. The Bicycle Lane Facilities Plan is used to maintain the bicycle lane needs list for purposes of the LRTP. Figure 25 identifies major roads where bicycle lanes currently exist or are planned for installation contingent on their feasibility and cost within the scope of the larger roadway project.

TABLE 59. BICYCLE LANE PROJECTS WITH FUNDS COMMITTED PRIOR TO 2015

TIP#	Project	Length (miles)	Funding Amount	Funding Source
4131051	Lake Maggiore	1.85	\$93,446	SE
4131041	Mid-town Bike Lanes	-	\$317,000	SE
967	McMullen Booth Road	-	\$480,000	PP
4131071	St. Petersburg Bike Lanes (various locations)	-	\$153,629	SE
736	22nd Avenue South (part of roadway project)	2.0	\$13,210,00	PP
922518	Walsingham Road (part of roadway project)	0.51	\$2,484,200	PP

PP=Penny for Pinellas; SE=Enhancement Program; LF=Local Funds

FIGURE 25. BICYCLE LANE FACILITIES PLAN



Multi-use Trails

The Cost Feasible multi-use trail projects were developed based on the Pinellas Trailways Plan. This Plan is intended to further the MPO's objective to encourage bicycling and walking for commuting as well as for recreational uses. A main component of the Trailways Plan is the 75-mile Pinellas Trail Loop. The Trail Loop incorporates the existing and planned sections of the two longest corridors, the Pinellas Trail and the Progress Energy Trail. The Pinellas Trailways Plan also seeks to provide east-west connectivity between the Pinellas Trail and the Progress Energy Trail. Listed below and on the following pages are the LRTP trail, bicycle and pedestrian facility maps and corresponding tables included in this section.



Table 60 shows the funding strategy for trailways projects. Figure 26 shows existing and planned multi-use trail projects. Figure 27 shows existing and planned multi-use trail projects to complete the Pinellas Trail Loop. Table 61 shows the trailways projects with funds committed prior to 2015 and Table 62 shows the planned Cost Feasible trailways projects that are anticipated to be complete by 2035. Table 63 shows other planned multi-use projects.

TABLE 60. FUNDING STRATEGY FOR TRAILWAYS IMPROVEMENTS

	2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Penny for Pinellas County	\$5.6	\$15.4	\$17.7	\$20.4	\$23.5
Penny for Pinellas Municipalities	\$5.1	\$14.0	\$16.2	\$18.6	\$21.4
Transportation Enhancement Funds	\$4.4	\$11.7	\$12.4	\$12.7	\$12.7
Total	\$10.7	\$41.1	\$46.3	\$51.7	\$57.6

FIGURE 26. TRAILWAYS PLAN

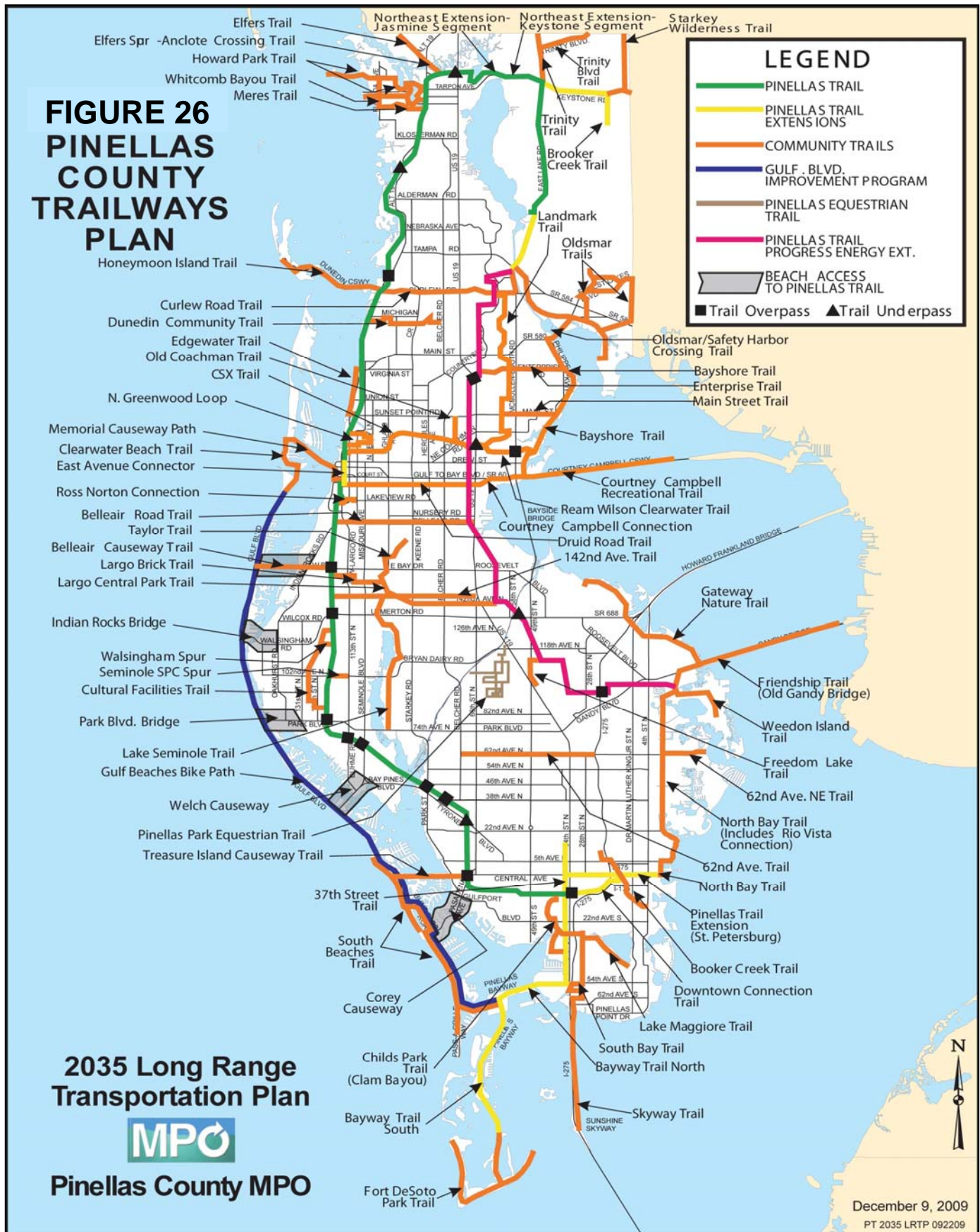


FIGURE 27. TRAILWAYS LOOP PLAN

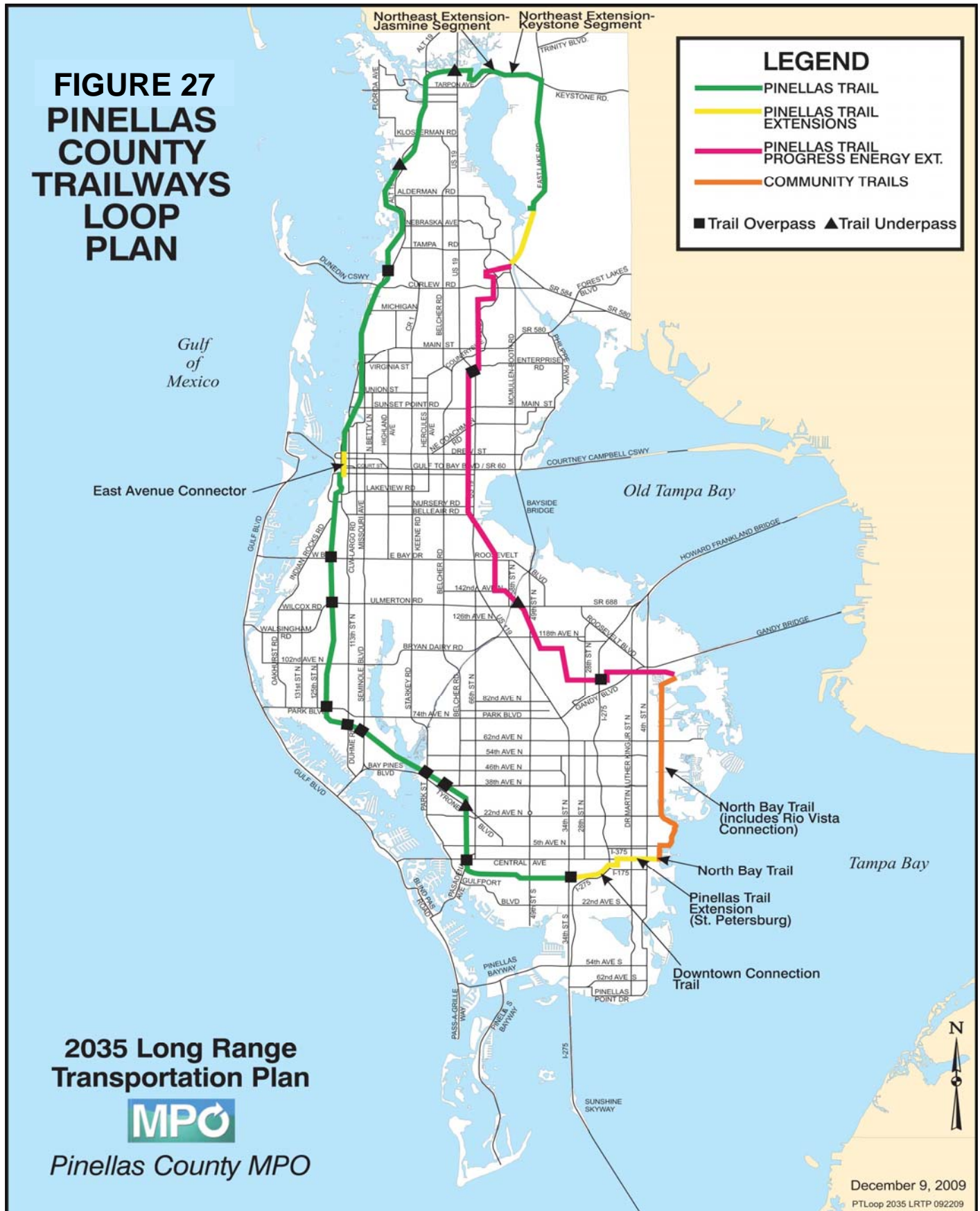


TABLE 61. TRAILWAYS PROJECTS WITH FUNDS COMMITTED PRIOR TO 2015

TIP#	Project	Length (miles)	Funding Amount (in YOE dollars)					Funding Source
			2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	
920522	Northeast Extension Keystone Road Segment (includes cost of roadway widening)	2.27	14,741,630	11,900,000	4,650,000			PP, TIF
922499	Progress Energy B (US 19 to SR 590)	2.4		1,998,900	1,075,500			PP, TIF
1288	Downtown Connection Trail Overpass at 34th St.	0.15	500,000					TIF
6010	Druid Trail (Pinellas Trail to Glen Oaks Park)	1.5	1,250,000					LF
4137011	Bayway Trail North (34th St. to Toll Plaza)	1.14		290,000			1,097,000	SE
4157382	Oldsmar Trail - 1 of 5 (Forest Rd. @ Pine Ave. N. to Forest Lakes Blvd. @ Racetrack Rd.)	13.31		579,300				SE
4157383	Oldsmar Trail - 2 of 5 (Tampa Rd. to R.E. Olds Park)			347,200				SE
4157384	Oldsmar Trail - 3 of 5 (R.E. Olds Park to Forest Lakes Blvd.)				478,300			SE
4157385	Oldsmar Trail - 4 of 5 (Northside RE Olds Park to Harbor Palms Nature Park)			838,200				SE
4157386	Oldsmar Trail - 5 of 5 (Sheffield Park to Curlew Rd.)				282,900			SE
4245613	SR 60 (Courtney Campbell Causeway Trail) (Bayshore Blvd. to E. of Tampa Bay Bridge)	1.76	349,000				4,331,746	SE/DIH
4245614	SR 60 (Courtney Campbell Causeway Trail) (E of Bridge #138 to Pinellas/Hills Co Line)	1.739	190,000		3,673,097			TA

ARRA = American Recovery and Reinvestment Act; PP = Penny for Pinellas; HPP = SAFETEA-LU Earmark; SE = Enhancement Program; TIF = Transportation Impact Funds; LF = Local Funds, DIH = District In-House Design Funding

TABLE 62. PLANNED COST FEASIBLE TRAILWAYS PROJECTS

Project	Length (miles)	Present Day Cost
Pinellas Trail Loop		
Chesnut Park Connector	1.8	\$11,984,000
Progress Energy A (Tampa Road to US 19)	4.5	\$12,768,000
Progress Energy C (Belleair Road to Ulmerton Road)	3.63	\$7,400,000
Progress Energy D (Ulmerton to I-275)	5.3	\$26,432,000
Progress Energy E (I-275 to Weedon)	2.5	\$8,176,000
North Bay Trail (Rio Vista Connection to Friendship TrailBridge)	0.9	\$912,000

Pinellas Trail Extensions		
37th Street Trail	4.55	\$404,240
Bayway Trail North (toll plaza to Gulf Blvd)	1	\$786,078
Bayway Trail South	4.82	\$3,788,896
Brooker Creek Trail	2.6	\$1,550,846
Treasure Island Causeway Trail Connection	0.51	\$407,500
Community Trails		
142nd Avenue Trail	3.36	\$1,043,200
62nd Avenue Trail	4.3	\$3,303,078
Bayshore Trail	2.2	\$737,000
Belleair Causeway Trail	2.68	\$897,800
Belleair Road Trail	4	\$1,369,200
Booker Creek Trail (8th St S to Bayboro Harbor; 1st Ave S to 13th Ave N)	2	\$635,700
Clearwater Beach Trail (Hamden Dr to city limits)	0.78	\$611,152
Courtney Campbell Connection	1.99	\$489,000
CSX Trail	3.75	\$1,256,250
Cultural Facilities Trail	4.15	\$1,630,000
Curlew Road Trail	4.3	\$1,401,800
Druid Trail (Glen Oaks Park to Progress Energy Trail)	2.37	\$4,422,400
Dunedin Community Trail	3.47	\$1,317,040
Edgewater Trail	2	\$658,520
Elfers Trail	1.07	\$1,433,580
Enterprise Trail	2.88	\$958,440
Freedom Lake Trail	1.14	\$815,000
Friendship Trail	2.5	\$837,500
Friendship Trail Bridge Rehabilitation	1.1	\$7,500,000
Gateway/ Weedon Island Nature Trail	5.4	\$2,934,000
Gulf Beaches Bike Path	21	\$6,846,000
Howard Park Trail	3.71	\$3,245,724
Lake Maggiore Trail	1.85	\$285,250
Lake Seminole Trail	4.71	\$3,263,369
Landmark Trail	6.78	\$5,053,000
Largo Brick Trail	1.67	\$570,500
Largo Central Park Trail	5.86	\$2,934,000
Main Street Trail	2.03	\$417,280
Meres Trail	2.71	\$850,860
North Greenwood Loop	1.75	\$586,250

Community Trails		
Old Coachman Trail	0.7	\$234,500
Oldsmar/ Safety Harbor Crossings Trail	2.58	\$489,000
Ross Norton Connection	0.48	\$160,800
Seminole SPC Trail Spur	0.73	\$570,500
Skyway Trail Extension (34th Ave S to 54th Ave S)	1.03	\$244,500
South Bay Trail	2.5	\$570,500
South Beaches Trail	8.31	\$2,282,000
Starkey Wilderness Trail	2.65	\$887,750
Taylor Trail	1.8	\$1,335,968
Treasure Island Causeway Trail	1.72	\$576,200
Trinity Boulevard Trail	1.68	\$563,805
Trinity Trail	1.71	\$572,850
Weedon Island Trail	1	\$757,748
Whitcomb Trail	2.8	\$929,100

TABLE 63. OTHER SHARED PATH/TRAIL PROJECTS

Other Shared Path/Trail Projects:
FPN 4243981 = Tangerine Avenue Shared Use Path (6-ft 54th St to 49th St), SE
FPN 4245322 = Walter Fuller Park - connection to Pinellas Trail, SE
FPN 4131071 = Pinellas Point/Lakewood Bike Path (various locations), SE
FPN 4245328 = 30th Ave N Bicycle Facility (Dr. MLK Jr St to 58th St)
FPN 4245321 = Bicycle Facilities (various locations)

Operational Improvements

The Pinellas County MPO works with the Florida Department of Transportation, its constituent local governments and its MPO and local government partners in the region to identify operational improvements to the roadway network. The improvements come from the Congestion Management Process, the Intelligent Transportation System planning process and the freight mobility planning conducted at the county and regional level. The financial feasibility of operational improvements relies on the availability of various sources of funds. The MPO has taken a long term view of the need to fund these types of improvements and programs and has set aside funds to do so. Table 64 shows the amounts available for different categories of funds.

TABLE 64. FUNDING STRATEGY FOR OPERATIONAL IMPROVEMENTS²⁸

	2014-2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035
Ninth Cent Fuel Tax ²⁹	\$7.7	\$18.7	\$17.8	\$16.9	\$16.1
TRIP ³⁰	\$6.6	\$17.8	\$1.1	\$2.2	\$2.2
TMA ³¹	\$8.3	\$3.1	\$9.0	\$8.8	\$13.5
Other Arterials	\$0.0	\$0.0	\$0.0	\$6.2	\$0.0
Penny for Pinellas County	\$5.6	\$15.4	\$17.7	\$20.4	\$23.5
Penny for Pinellas Municipalities	\$5.1	\$14.0	\$16.2	\$18.6	\$21.4
Impact Fees ³²	\$2.2	\$6.9	\$5.8	\$9.5	\$11.1
Total	\$29.5	\$75.9	\$66.6	\$80.6	\$85.8

Though the primary sources of funding are listed in the table above, there are other possible sources that may be available for ITS/ATMS projects

- Congestion Mitigation and Air Quality
- County Incentive Grant Program (CIGP)

²⁸ Amounts are shown in \$Millions and year of collection dollars.

²⁹ A portion of the Ninth Cent Fuel Tax is currently being used to fund operations. The amounts shown are the entire revenue forecast and are not reduced to reflect the continuation of this practice.

³⁰ TRIP is for Transportation Regional Incentive Program. This is a discretionary program prioritized at the regional level. TRIP has been used in the past to fund ATMS/ITS projects and is anticipated to be used for that purpose in the future. The amounts shown are increments of the anticipated TRIP revenue based on remaining funding that is not spent on capacity projects.

³¹ TMA is Transportation Management Area. These federal funds are prioritized by the MPO. The amounts shown are a set aside from the total TMA amount.

³² Impact fees can be used to fund certain types of operational improvements. The amounts shown in this table are 25% of the forecasted impact fee revenue for Pinellas County.

Congestion Management Process

The MPO organizes, maintains and implements an ongoing Congestion Management Process (CMP) which is designed to ensure that lower cost alternatives to major capital investments are considered in identifying improvements necessary to address roadway congestion. Intelligent Transportation System (ITS), Travel Demand Management (TDM), and Transportation System Management (TSM) strategies are derived from the MPO's Congestion Management System process, which provides a systematic approach for defining system-wide congestion management strategies. The CMP defines constrained corridors and defines operational strategies to manage congestion within these corridors.

CMP Projects

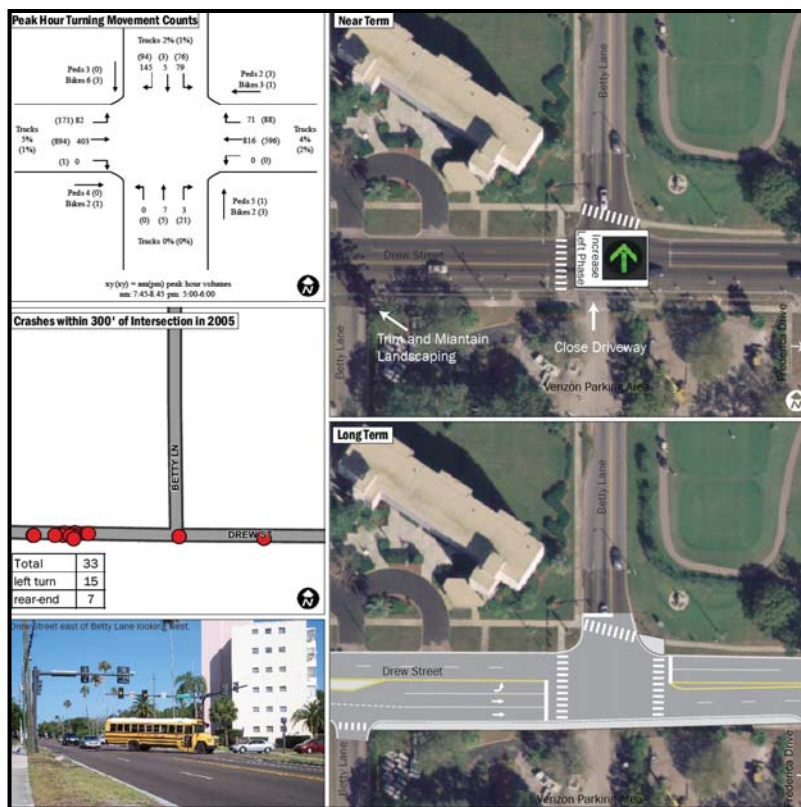
The traffic congestion and related problems identified through the CMP are addressed by identifying small scale physical improvements such as intersection modifications, median closings and sidewalk construction to fill existing gaps in the network. Over the last several years, the MPO performed corridor studies on the following roads using transportation performance data as the basis for project selection:

- Alternate US Highway 19 in 1998
- 22nd Avenue N in 2003
- McMullen-Booth Road in 2003
- 54th Avenue S in 2007

State of the System Report

The MPO has recently completed the 2008 State of the System (SOS) Report. The purpose of this report is to provide information on trends and conditions of the county's multimodal transportation system, including crash locations, duration of congestion, transit quality of service and other considerations. The MPO conducts the SOS report every two years. The report helps the MPO understand operations and management issues and opportunities that can be addressed through various plans and program responses.

As a part of its bi-annual State of the System Report, the MPO specifically reviews the data on each of these roads to determine the implementation status of planned improvements and to monitor the current efficiency of the roadway. In 2008, the MPO conducted a study to identify congestion-related improvements at five locations. The Traffic Signal & Median Control Committee (TSMCC) and the ITS Committee participated in a process to identify and select road segments for advanced study. The process included weighting the SOS duration of congestion data and crash data to develop a short list of 25 candidate segments. From this list, the following five segments were selected for study:



- East Bay Drive from Starkey Road to US 19;
- East Lake Road from Tarpon Woods Boulevard to Keystone Road;
- Northeast Coachman Road from Belcher Road to US 19;
- Belleair Road from Belcher Road to US 19; and
- Drew Street from North Myrtle Avenue to Betty Lane.

The recommendations included short and long term improvements aimed at operational efficiency and intersection safety. As these and similar small scale projects are able to be funded, they are scheduled in the TIP as individual projects or folded into larger widening, resurfacing or enhancement projects.

Intelligent Transportation System Projects

Sustained growth in Pinellas County and growing demand for travel has put forward the need to look at methods other than capacity improvements to improve traffic flow in the County. To achieve the County's goals to provide safe and efficient transportation, the Pinellas County MPO is working to implement Intelligent Transportation Systems (ITS) projects in partnership with FDOT, Pinellas County, and municipal governments. Investments in ITS will help alleviate congestion and improve traffic flow. Examples of ITS projects include dynamic message signs, pedestrian controlled street crossings and automated bus passes. Intelligent Transportation Systems also encompasses Advanced Traffic Management Systems (ATMS), which refers to an infrastructure of interconnected traffic signal and traffic condition surveillance equipment that can be remotely managed from a centralized location.

The Pinellas County ITS/ATMS Master Plan³³ details an implementation strategy for developing and maintaining a project schedule, and identifying associated project elements in support of the Pinellas County ITS/ATMS program. The Master Plan Report identifies projects that enhance the operating efficiency of the transportation system for all modes of travel.

The ITS element of the LRTP provides for the countywide implementation of an ATMS for arterial roadway and a freeway management system. This includes traveler information systems that direct motorists to alternate routes and that provide information concerning delays. It also includes traffic signal synchronization and remote management, which enable the system to minimize travel delay under normal operating conditions. In addition to helping manage traffic flow and minimizing congestion, the ATMS improvements utilized in Pinellas County are being installed in a manner that will enhance the incident management and emergency response times within each corridor. Listed on the following pages are the maps indicating the ITS corridor phasing plan and ATMS/ITS projects and corresponding tables.

Figure 28 shows the phasing plan for ITS projects. Figure 29 shows projects that are part of the Advanced Traffic Management System for the County. Table 65 lists projects with funds committed prior to 2015. In addition to these projects, the ITS/ATMS Master Plan provides a significant amount of detail for other projects and describes how they fit in with the overall ITS/ATMS strategy for Pinellas County. These projects are listed in three implementation phases, which are shown in Tables 66, 67 and 68.

³³ Pinellas County Intelligent Transportation System/Advanced Traffic Management Systems Master Plan Report. April 2009.

FIGURE 28. INTELLIGENT TRANSPORTATION SYSTEM (ITS) CORRIDORS

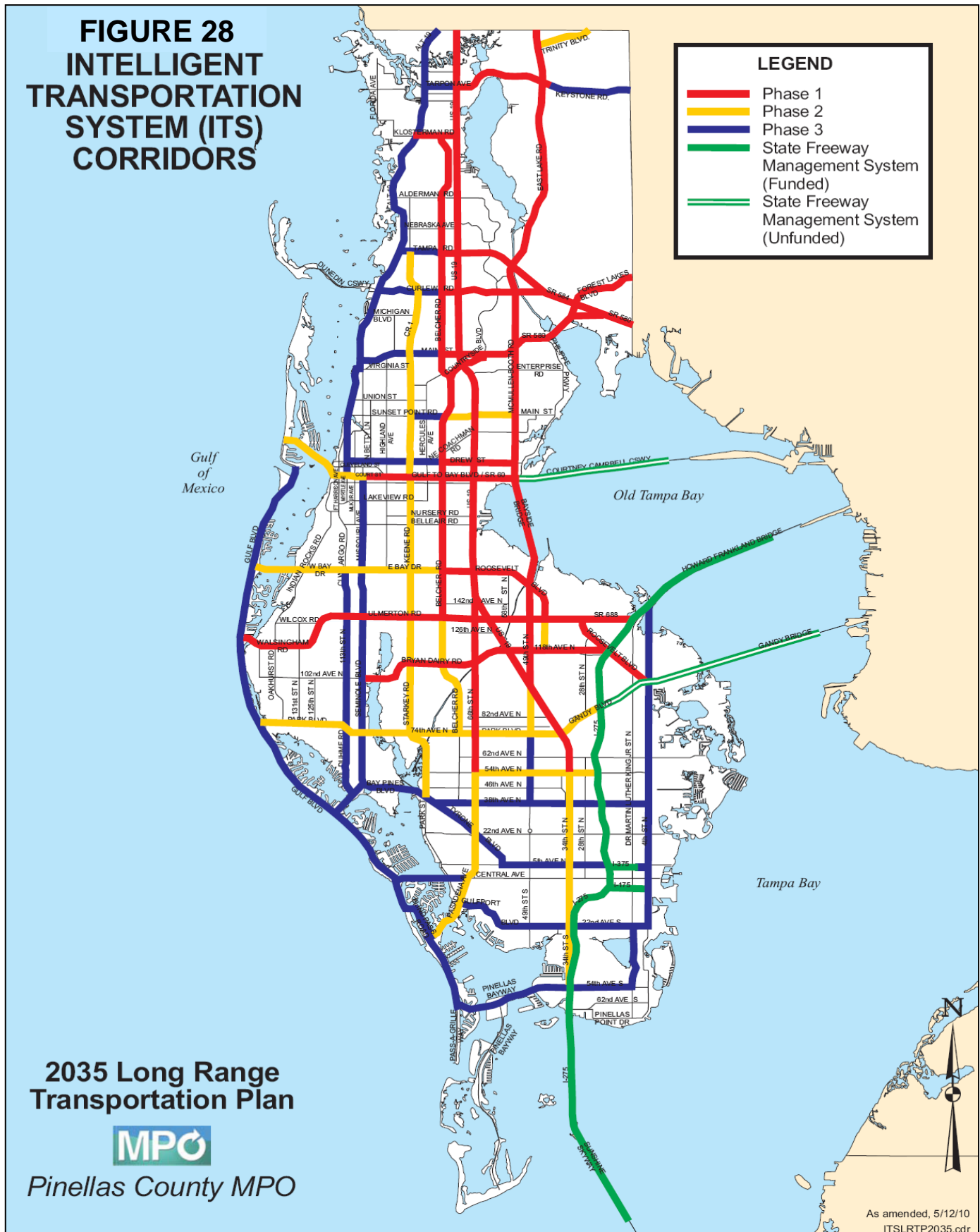


FIGURE 29. ATMS/ITS OPERATIONAL PROJECTS

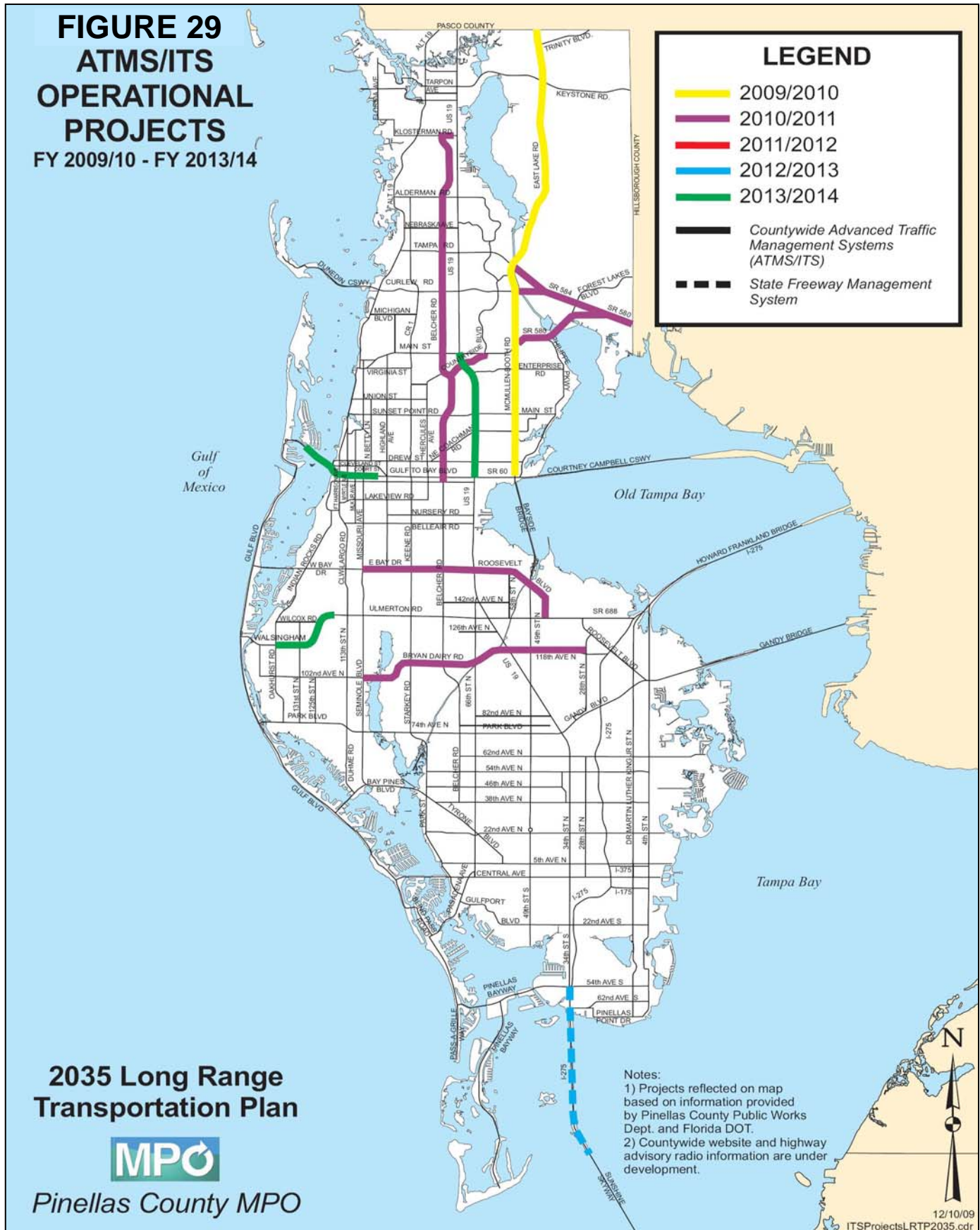


TABLE 65. INTELLIGENT TRANSPORTATION SYSTEM PROJECTS WITH FUNDS COMMITTED PRIOR TO 2015

On Street	Project Number (s)	From	To	Improvement Type	Fund
SR 686 (Roosevelt Boulevard)	2023 423084-1	SR 595 (Alt US 19)	SR 688 (Ulmerton Road)	ATMS/ITS	9 th Cent Fuel Tax, CIGP, TRIP
Bryan Dairy Road	4230861	SR 595 (Alt US 19)	28th Street	ATMS/ITS	CIGP, 9 th Cent Fuel Tax
SR 580/584/586	1809	McMullen Booth Rd	Race Track Road	ATMS/ITS	9 th Cent Fuel Tax, TRIP
I-275	407233-5	54th Avenue South	Sunshine Skyway Bridge	DMS/CCTV/RTMS	DIH, DITS
US 19 (SR 55)	4062553	SR 580/Main Street	SR 60 (Gulf-to-Bay Blvd)	Signal Controllers, CCTV, Communication Backbone	DDR, DIH, DS
McMullen Booth Road	743	Pasco County Line	SR 60 (Gulf-to-Bay Blvd)	ATMS/ITS	CIGP, 9 th Cent Fuel Tax, Transportation Impact Fee
Belcher Road	4206281 1626	Klosterman Rd	Druid Road	ATMS/ITS	SAFETEA-LU Earmark, HPP
SR 60 (Gulf-to-Bay Boulevard)	4084192 1810	Island Way	Hillcrest Avenue	ATMS/ITS	ACSA, DIH, Federal Appropriations, 9 th Cent Fuel Tax
SR 688 (Ulmerton Road)	2570502	Oakhurst Rd	119 th Street	ATMS/ITS	DIH, SU
	1501 ³⁴	Countywide		ATMS/ITS	9 th Cent Fuel Tax*

ACSA = Advanced Construction; ATMS = Advanced Traffic Management System; CIGP = County Incentive Grant Program; CCTV = Closed Circuit Television; DDR = District Dedicated Revenue; DIH = State In-House Product Support; DITS = Statewide ITS; DMS = Dynamic Message Sign; DS = State Primary Highways and PTO; HPP = High Priority Projects; ITS = Intelligent Transportation Systems; RTMS = Remote Traffic Microwave Sensors; SU = STP, Urban Areas>200K; TRIP = Transportation Regional Incentive Program

³⁴ Note: Project number 1501 is a generic depository for 9th Cent, ITS funds. Such funds may be used anywhere in the County, for example, to purchase hardware when the construction of an ITS project is being performed in-house by Pinellas County. ITS on SR 580/Main Street from SR 595 (Alt US 19) to SR 55 (US HWY 19) and 49th Street from SR 686 (Roosevelt Boulevard) to SR 595 (US Highway 19) are two examples of projects partially funded by 1501.

TABLE 66. PHASE I INTELLIGENT TRANSPORTATION SYSTEMS PROJECTS FROM ITS MASTER PLAN

On Street	From	To	Cost
US 19/SR 55	Beckett Way	54th Avenue N.	\$4,073,980
McMullen Booth/East Lake Rd.	Trinity	Gulf to Bay/SR 60	\$1,086,279
I-275	Howard Frankland Bridge	Skyway Bridge	No Cost Available
Gulf to Bay/SR 60	Hillcrest Ave.	Damascus Drive	\$741,266
Tampa Rd./SR 584/SR 580	East Lake Rd.	County Line	\$1,585,495
SR 686+	49th St.	Bryan Dairy	\$602,721
Bryan Dairy	Seminole Blvd/Alt. US 19	Roosevelt/SR 686	\$3,314,948
Main St./ SR 580	McMullen Booth	SR 584/Tampa Rd.	\$962,482
Roosevelt/SR 686	Ulmerton Rd./SR 688	Gandy Blvd./4th St. N./ SR 694	\$797,359
Tampa Rd*	Belcher Rd.	McMullen Booth	\$218,132
Curlew Rd./SR 586	McMullen Booth	SR 584/Tampa Rd.	\$267,751
49th St. N./Bayside Bridge	US 19/SR 55	Gulf to Bay/SR 60	\$1,044,818
Tarpon Avenue/Keystone Rd.	US 19/SR 55	East Lake Rd.	\$509,733
East Bay/Roosevelt/SR 686	Belcher Rd.	49th St. N./Bayside Bridge	\$1,400,014
Curlew Rd./SR 586*	Belcher Rd.	McMullen Booth	\$168,829
Main St./ SR 580*	Belcher Rd.	McMullen Booth	\$724,956
Walsingham Rd./ Ulmerton Rd. / SR 688	Gulf Blvd	66th St. N.	\$3,112,301
Countryside Blvd	Belcher Rd.	Main St.	\$316,679
Walsingham Rd./ Ulmerton Rd. / SR 689	66th St. N.	I-275	\$1,491,659
66th St. N./SR 693	US 19/SR 55	46th Avenue N.	\$2,723,804
Belcher Rd.	Klosterman Rd.	Druid Rd	\$3,955,263
Drew St.	Belcher Rd.	McMullen Booth	\$202,733
Belcher Rd.	Druid Rd.	Ulmerton Rd./SR 688	\$2,041,671

TABLE 67. PHASE II INTELLIGENT TRANSPORTATION SYSTEMS PROJECTS FROM ITS MASTER PLAN

On Street	From	To	Cost
Starkey Rd./Keene Rd. Park St.	Tyrone Blvd/ Alt US 19/SR 595	Tampa Rd.	\$7,753,118
Trinity	East Lake Rd.	County Line	\$242,715
Park Blvd./Gandy Blvd./SR 694	Gulf Blvd	I-275	\$4,909,498
49th St.	Park Blvd. N.	US 19/SR 55	\$754,127
Sunset Point Rd.	Belcher Rd.	McMullen Booth	\$579,202
Belleair CSWY/ (West/East) Bay Drive/ SR 686	Gulf Blvd	Belcher Rd.	\$2,445,796
US 19/SR 55	54th Avenue S.	54th Avenue N.	\$3,435,930
Belcher Rd.	Ulmerton Rd./SR 688	Park Blvd	\$1,135,229
54th Avenue N.	66th St. N.	I-275	\$1,488,599
66th St. N./SR 693	46th Avenue N.	Gulf Blvd	\$2,707,732
Clearwater CSWY/Gulf to Bay/ SR 60	Gulf Blvd	Hillcrest	\$1,170,928

TABLE 68. PHASE III INTELLIGENT TRANSPORTATION SYSTEMS PROJECTS FROM ITS MASTER PLAN

On Street	From	To	Cost
Gandy Blvd	I-275	Hillsborough County	\$623,503
Sunset Point Rd.	Keene Rd.	Belcher Rd.	\$251,242
Tyrone Blvd/SR 595	Alt. US 19/ SR 595/ Seminole Blvd	5th Avenue N./ SR 595	\$1,602,725
Tarpon Ave	Alt. US 19/ SR 595	US 19	\$427,419
Keystone Rd.	East Lake Rd.	County Line	\$401,889
Alt. US 19/ SR 595 Palm Harbor Blvd./ Bayshore Blvd./Broadway/Edgewater Dr./ Myrtle Avenue	Klosterman Rd	Gulf to Bay/SR 60	\$3,469,947
49th St. N.	Park Blvd./ SR 694	38th Avenue N.	\$788,161
Missouri Ave/ Seminole Blvd./SR 595/SR 651	Gulf to Bay/SR 60	Tom Stuart CSWY/SR 666/ Welch CSWY/ Madeira CSWY	\$3,835,105
Treasure Island Causeway	Gulf Blvd	Alt 19/ 66th St.	\$1,037,901
38th Avenue N.	Tyrone Blvd/SR 595	4th St. N.	\$1,948,506

On Street	From	To	Cost
Gulf Blvd./ Pinellas Bayway	Clearwater CSWY	I-275	\$3,184,277
Tom Stuart CSWY/ SR 666 / Welch CSWY/ Madeira CSWY	Gulf Blvd	Seminole Blvd/Alt. US 19/ Bay Pine Blvd.	\$593,055
Courtney Campbell	Damascus Rd.	Hillsborough County	\$170,585
Curlew Rd./SR 586	Alt US 19/SR 595/ Bayshore Blvd	Belcher Rd.	\$475,953
4th St. N.	22nd Avenue S.	I-275	\$3,544,701
22nd Avenue S./Gulfport Blvd.	Pasadena Ave	4th St. N.	\$2,541,847
9th St. S.	54th Avenue S.	22nd Avenue S.	\$880,514
5th Avenue N./ SR 595/Bay Pines Blvd.	Tyrone Blvd/ SR 595	4th St. N.	\$1,834,847
Alt. US 19/SR 595/ Pinellas Ave.	Klosterman Rd.	Pasco County Line	\$1,042,441
Alt US 19/SR 595/ Ft. Harrison Ave./Clwr/Largo Rd./West Bay/113th St.	Gulf to Bay/SR 60	Tom Stuart CSWY/ SR 666 / Welch CSWY/ Madeira CSWY	\$4,285,033
Drew St./ SR 590	Alt US 19/SR 595/ Ft. Harrison Ave.	Belcher Rd.	\$1,219,670
Main St./ SR 580	Alt US 19/SR 595/ Broadway	Belcher Rd.	\$1,134,858
54th Ave. S.	I-275	9th St. S.	\$823,168
Tampa Rd	Alt US 19/SR 595/ Palm Harbor Blvd	Belcher Rd.	\$376,712

7.Environmental Justice

Overview

The federal government mandates that Metropolitan Planning Organizations (MPO) incorporate environmental justice (EJ) issues in their long range planning activities. The EJ analysis for the Pinellas County MPO LRTP builds on the policy framework established in Title VI of the Civil Rights Act of 1964, which is designed to ensure nondiscrimination in federal programs. The three main objectives of this mandate are:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision making process; and
- To prevent the denial of, reduction, or significant delay in the receipt of benefits by minority and low income populations.

With respect to the LRTP, the EJ analysis addresses how low income and minority populations are benefitting from the transportation projects being proposed. An important product of this analysis is maps showing the proposed LRTP projects overlaid on the zones of minority and low income populations. The maps and summary data show levels of investment in the portion of the transportation system that serves low income and minority areas.

Methodology

Identifying Environmental Justice Populations

The MPO and county staff conducted a demographic analysis of Pinellas County. This included the summarization of minority and/or low income population groups by Census tract. The Census tract summary data was used to develop benchmarks for determining the location of minority and low income populations.

The demographic analysis identifies minority persons as African American, Hispanic, Native American, Asian, other races, and two or more races. The minority population threshold was determined by calculating the average percentage of minority populations within the county. The county-wide average percentage of minority populations per Census tract is 17.98 percent. Tracts where the minority population was greater than the county-wide average were identified as EJ zones.

Low income populations include households with incomes at or below the U.S. Department of Health and Human Services poverty guidelines. The guidelines are defined by household size. The average household size for Pinellas County was determined to be 2.23 persons. The poverty guidelines indicate that the poverty threshold for a family of two was \$10,829 and a family of three was \$13,738 in 2000. Thus, the poverty threshold for a family of 2.23 is \$11,498. Census tracts with 20 percent or more of the households at or below the poverty threshold were considered in poverty and identified as EJ zones.

In order to determine where transportation improvements occur relative to EJ zones, the Census tract database was combined with the Census tract data layer. This was then compared to the individual traffic analysis zones (TAZs) being used for the LRTP. Figure 30 illustrates the TAZs identified as EJ zones.³⁵

Transportation Projects

Transportation projects identified through various MPO planning efforts were geo-coded and added to a GIS database. Attributes of the project database include present day cost information. The GIS database includes transportation projects identified in the following planning documents:

- Pinellas County MPO 2008 State of System Report;
- 2009/10 - 2013/14 Transportation Improvement Program (TIP);
- 2008 Pinellas Suncoast Transit Authority Transit Development Plan; and
- 2035 LRTP Cost Feasible Plan.

The locational GIS analysis of the transportation projects was conducted relative to the EJ and non-EJ zones. Project costs were evaluated based on the areas served. The project costs were divided into zone type. Project segments were assumed to serve EJ zones, non-EJ zones, or both EJ and non-EJ zones. The cost for projects serving both zone types was divided between the EJ and non-EJ zones, as both populations are served by these projects.

A map series was created to illustrate the location of transportation system improvements in Pinellas County. Figure 31 illustrates the projects in the MPO's currently adopted TIP. The top ranked segments from the latest State of the System Report are shown in Figure 32. These are the segments used in the selection of candidate study areas for the Congestion Management Process. The 2035 Cost Feasible transportation networks are shown separately. The highway network is shown in Figure 33. The rail and premium bus networks are illustrated in Figure 34 and Figure 35. The trailways network map is included as Figure 36. The trailways map identifies facilities that currently exist or are planned for construction.

Spatial Analysis

A GIS relational analysis was performed to identify transportation projects that serve minority and low income populations. Table 69 summarizes the locational impacts of transportation projects relative to EJ and non-EJ zones. The table includes the per capita impacts of transportation investments in these respective zones. The transportation investment per capita was calculated by determining the total cost of projects in an area and dividing that by the number of people living in that area. Only transportation projects with a cost estimate were used for this per capita analysis.

³⁵ The area of Treasure Island and South Pasadena has been identified as an EJ zone. Despite the average income of people living in these areas there are enough households that have very low incomes to qualify as an EJ zone.

TABLE 69. TRANSPORTATION INVESTMENT PER CAPITA

	EJ Areas	Non-EJ Areas	Total
Population	357,000	564,482	921,482
Percent of Population	39%	61%	100%
Other Planning Documents			
2009/10-2013/14 TIP	\$250,301,379	\$396,687,349	\$646,988,728
Per Capita Funding	\$701.12	\$702.75	\$702.12
PSTA TDP	\$34,401,321	\$35,338,679	\$69,740,000
Per Capita Funding	\$96.36	\$62.60	\$75.68
2035 Long Range Transportation Plan			
Cost Feasible Highways	\$263,608,002	\$1,205,511,998	\$1,469,120,000
Per Capita Funding	\$738.40	\$2,135.61	\$1,594.30
Cost Feasible Rail Network	\$567,822,218	\$3,083,931,610	\$3,651,753,828
Per Capita Funding	\$1,590.54	\$5,463.29	\$3,962.91
Cost Feasible Premium Bus	\$46,206,865.02	\$87,853,134.98	\$134,060,000
Per Capita Funding	\$129.43	\$155.63	\$145.48
Cost Feasible Trailways	\$15,793,218	\$125,724,456	\$141,517,674
Per Capita Funding	\$44.24	\$222.73	\$153.58
Total LRTP Investment	\$893,430,303	\$4,503,021,199	\$5,396,451,502
Per Capita Funding	\$2,502.61	\$7,977.26	\$5,856.27

Summary of Results

The results of the EJ spatial analysis indicate there is a noticeably higher investment per capita in Non-EJ zones for the Cost Feasible highways, rail network and trailways projects. However, these results do not represent an overall disproportionate investment toward Non-EJ zones when the benefits of the investments are considered. With respect to highways and rail, most of the major investments are intended to improve access to the three major activity centers in the County (central Clearwater, Gateway and downtown St. Petersburg) or serve inter-county travel.

A significant portion of the highway dollars are going to projects that support inter-county travel and facilities that improve access to regional facilities. The drivers and bus patrons who use these facilities will all benefit from these improvements, which include reconstructing the northbound section of the Howard Frankland Bridge, a significant investment in the area of Roosevelt Boulevard and other facilities to improve access to and from I-275, and an investment in Gandy Boulevard to improve connections to I-275 and the Gandy Bridge. None of these major investments fall within EJ zones, but all of them provide significant benefits to EJ populations.

With respect to the Cost Feasible rail network, the rationale for the initial investments leading up to 2035 is to serve the three major activity centers in Pinellas County and to connect to Hillsborough County via I-275. The rail network, along with the supporting bus network will provide EJ and Non-EJ populations access to these very important employment, civic and cultural destinations. This is especially true for connecting EJ populations in central St. Petersburg and Clearwater to Gateway and areas in between. For the transit dependent, the rail access across Tampa Bay will provide new access to employment opportunities that currently do not exist.

The trailways network has relatively limited investments in EJ zones due to the fact that much of the previous investment in the trailways network has already been in areas with a significant EJ population. Finishing the Pinellas Trail Loop is the highest priority and highest dollar project. Much of the work left to complete that loop is in Non-EJ areas.

With respect to the PSTA Transit Development Plan (TDP), the investments emphasize greatly enhanced bus service, providing more frequent buses and longer hours of service. There is a higher spending per capita in EJ zones than in Non-EJ zones for the TDP improvements to the PSTA local bus network. This will provide local mobility benefits for the transit dependent and choice riders who are members of the EJ population of Pinellas County.

FIGURE 30. MINORITY AND LOW-INCOME AREAS

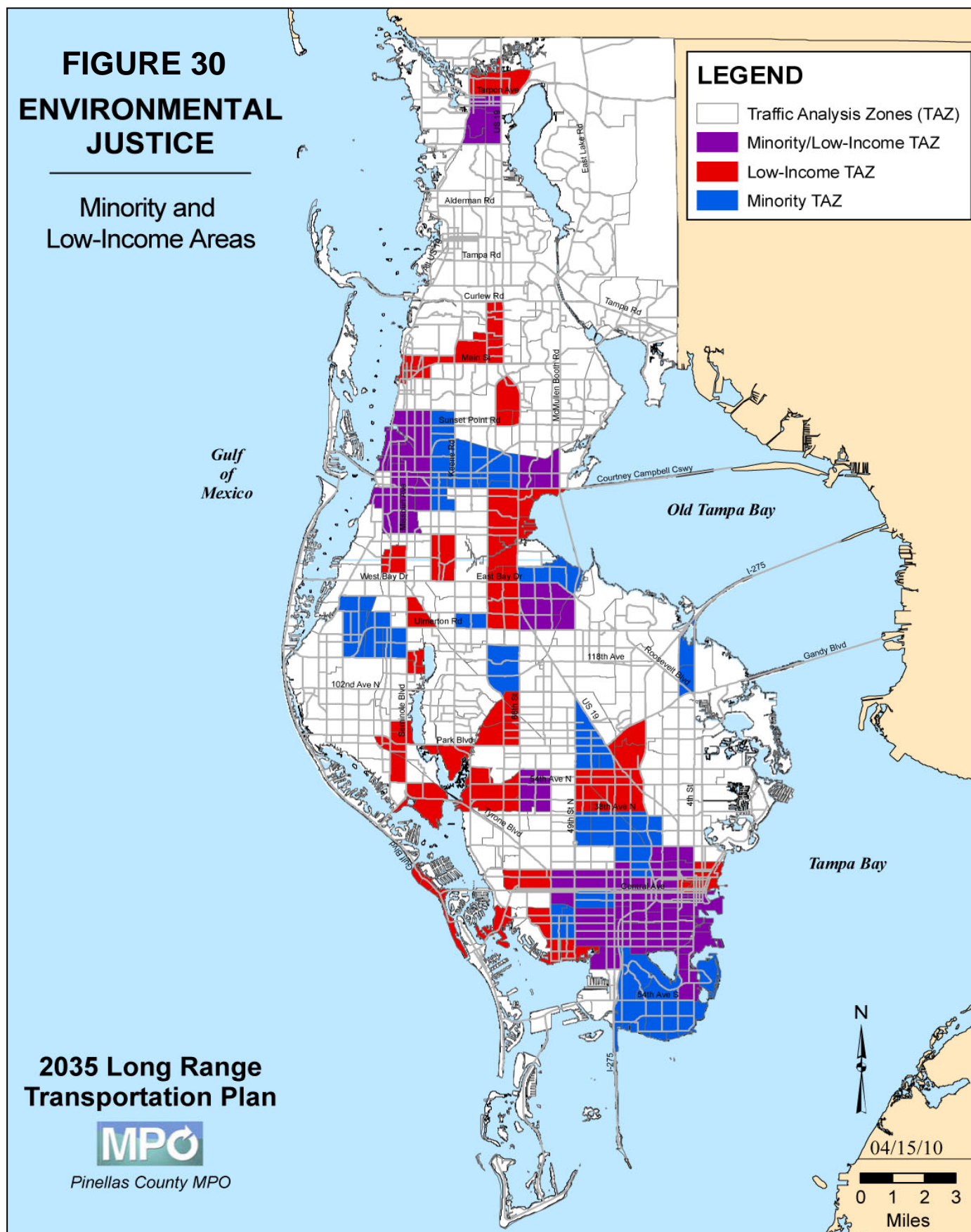


FIGURE 31. TRANSPORTATION IMPROVEMENT PROGRAM PROJECTS

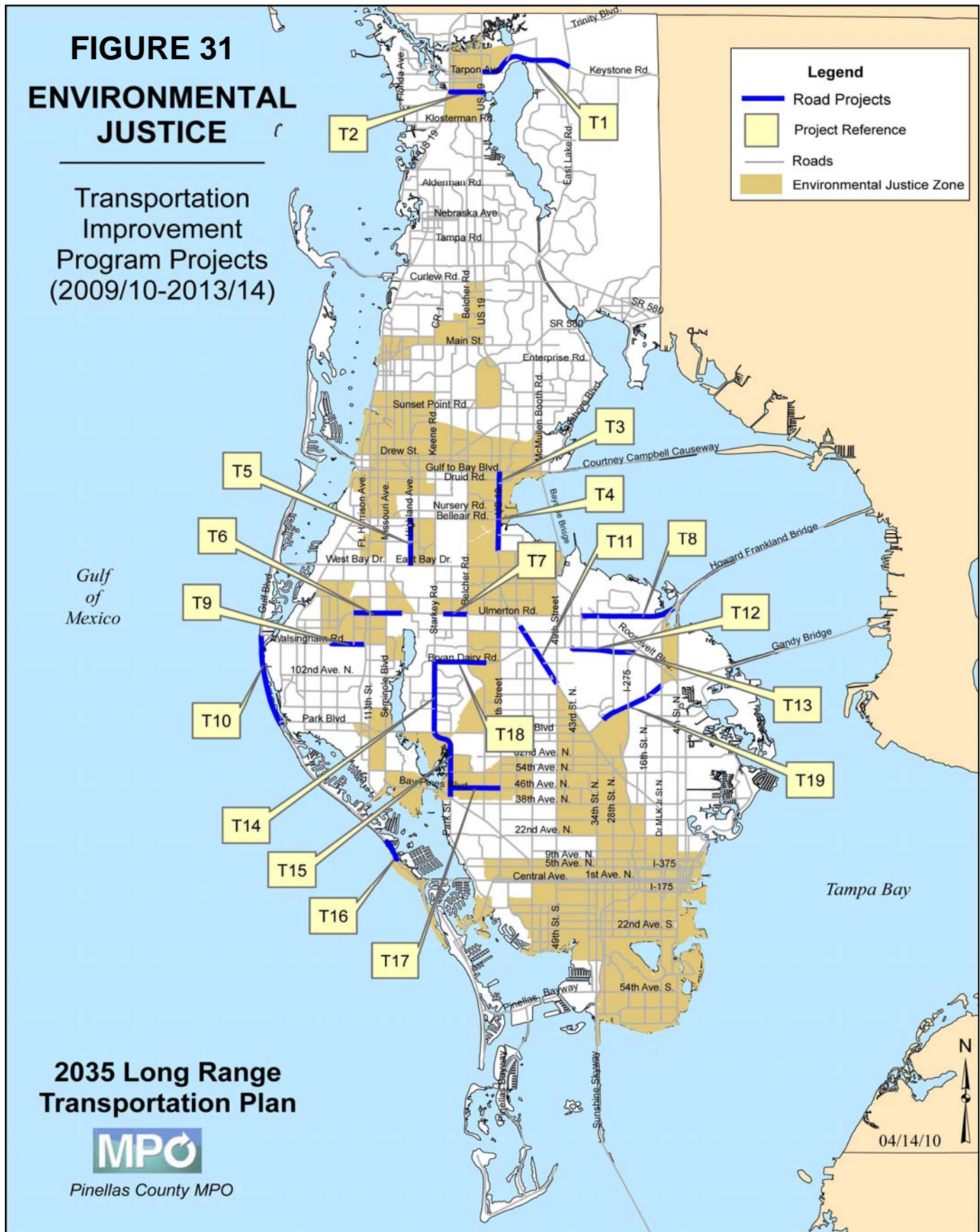


FIGURE 32. TOP RANKED STATE OF THE SYSTEM SEGMENTS

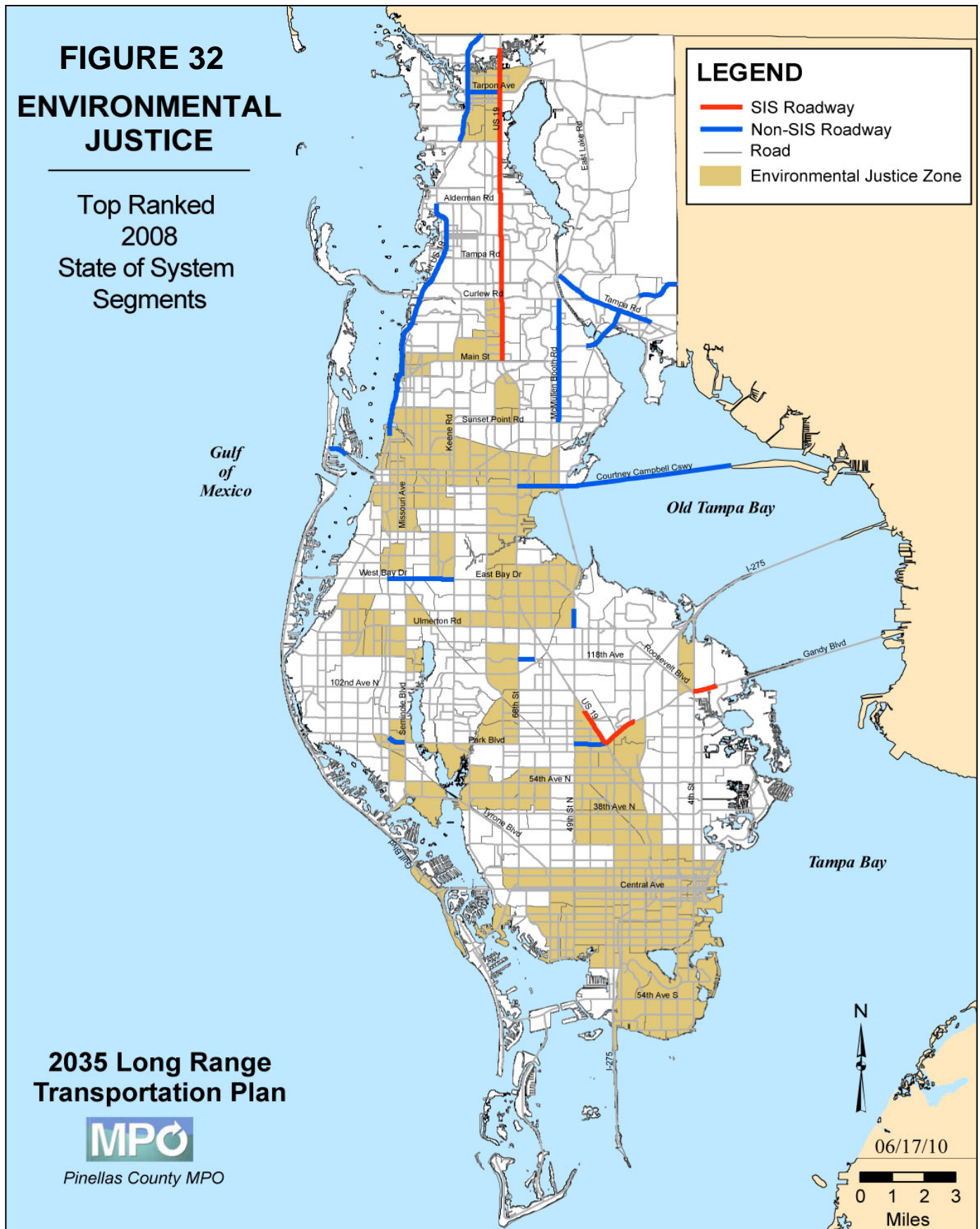


FIGURE 33. COST FEASIBLE HIGHWAY NETWORK

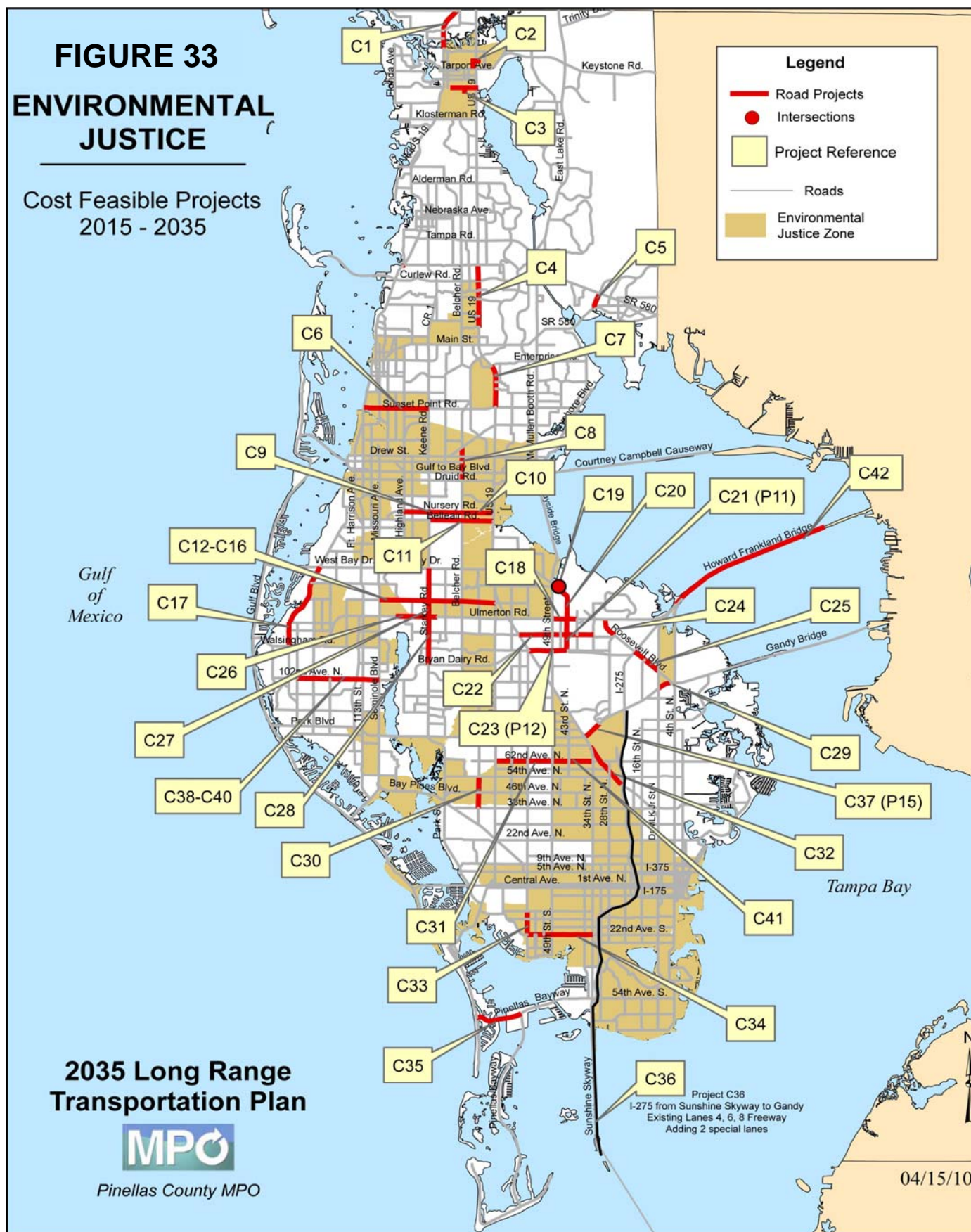


FIGURE 34. COST FEASIBLE RAIL NETWORK

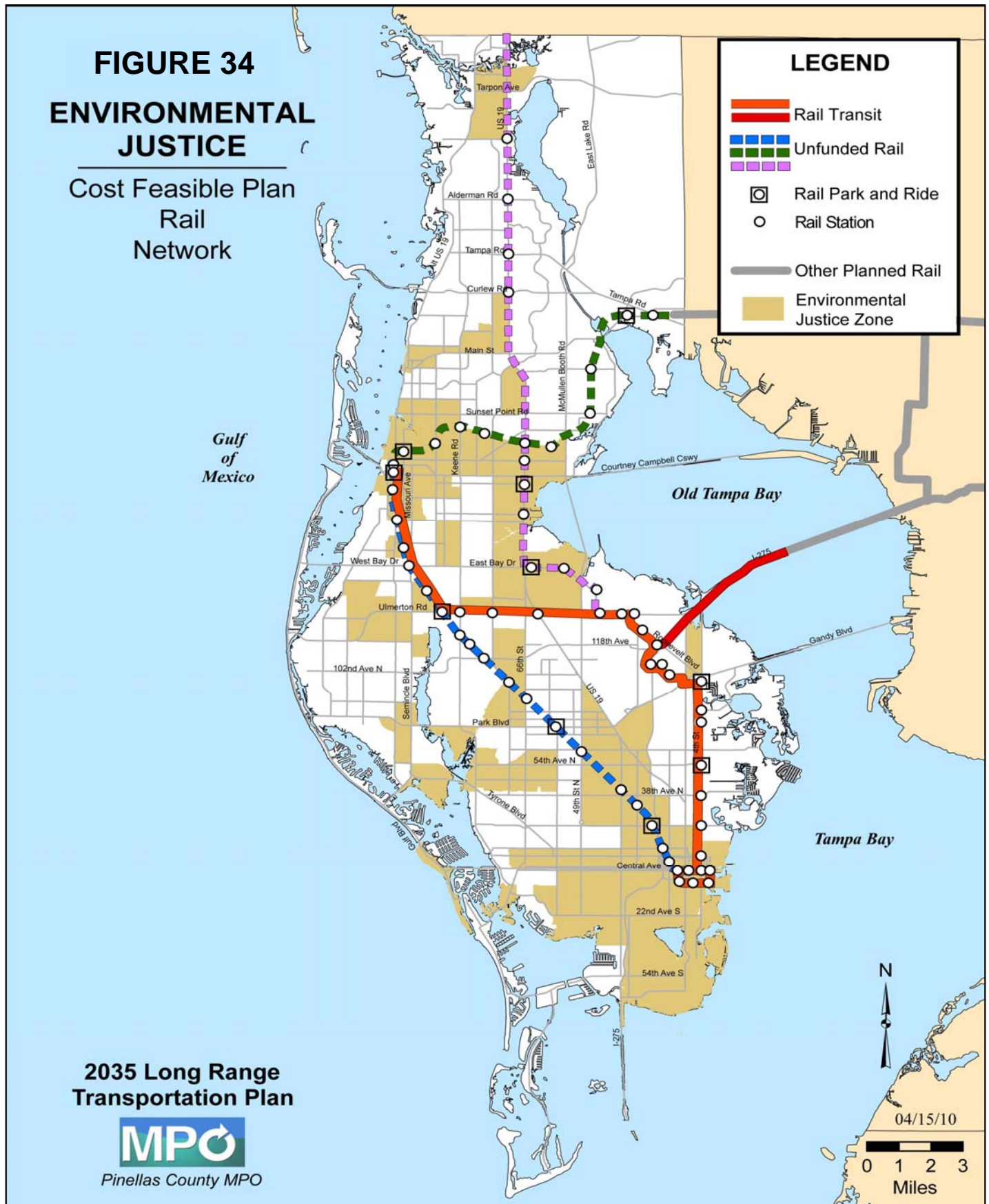


FIGURE 35. COST FEASIBLE PREMIUM BUS NETWORK

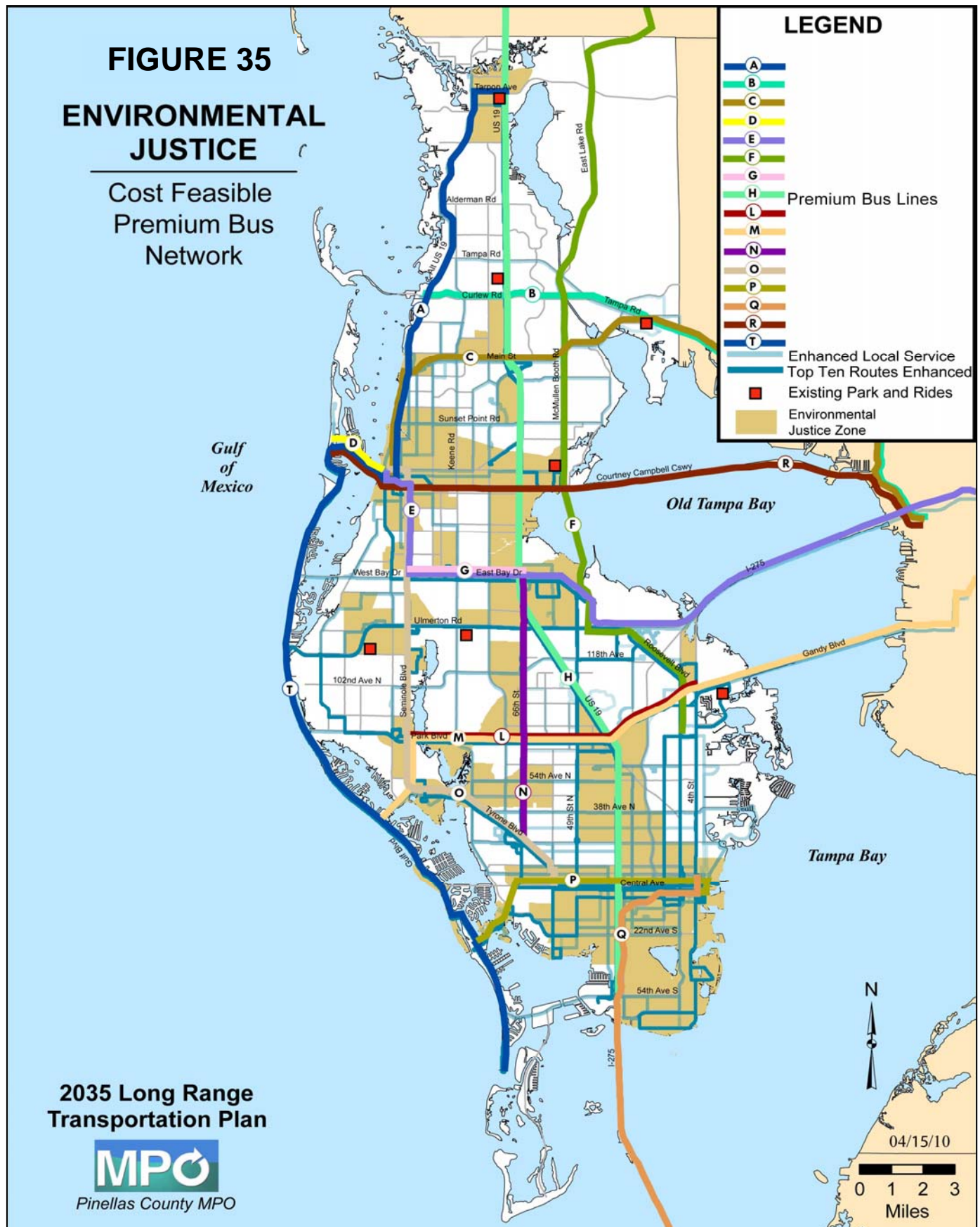
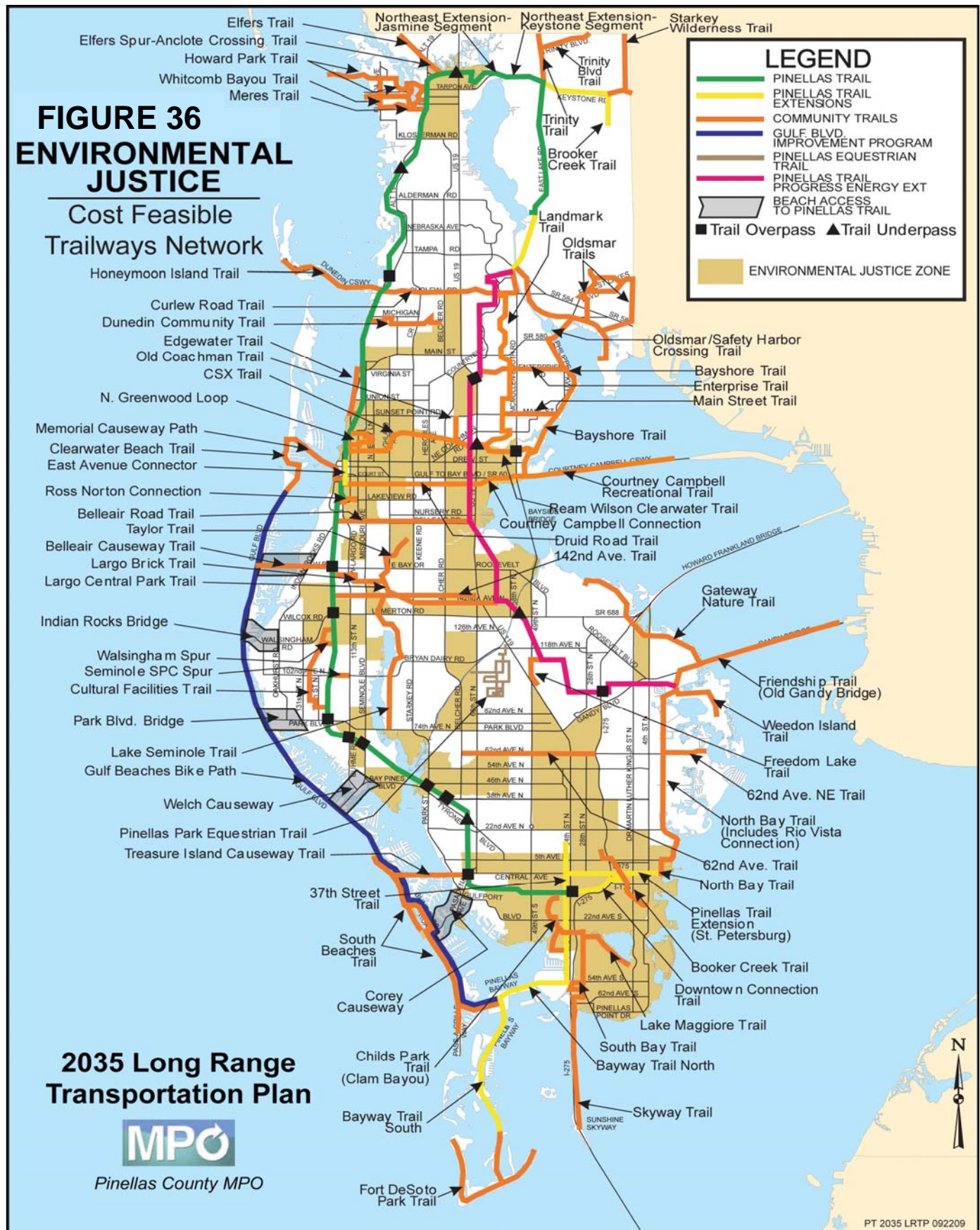


FIGURE 36. TRAILWAYS NETWORK



8. Transportation Disadvantaged Program

The Pinellas County Transportation Disadvantaged (TD) Program serves those persons who because of physical or mental disability, income status, or age are unable to transport themselves or purchase transportation. These individuals are dependent upon others to obtain access to health care, employment, education, shopping, social outings and other life-sustaining activities. The MPO is the designated official planning agency (DOPA) for the local TD Program. The Florida Commission for the Transportation Disadvantaged (CTD) has also designated the MPO as the Community Transportation Coordinator (CTC) for Pinellas County. As the CTC, the MPO is responsible for managing the County's TD Program and for coordinating all transportation disadvantaged services in Pinellas County.

Tri-County Access Plan (2007)

The MPO and its regional partners developed and adopted a locally developed, coordinated public transit human services transportation plan entitled the Tri-County Access Plan (TCAP) in 2007. The plan identifies transportation needs and solutions for older adults, persons with disabilities, and people with lower incomes and helps the MPOs identify and select projects for funding through the New Freedom and Jobs Access Reverse Commute (JARC) federal matching grant programs. During the TCAP's initial development, over 200 citizens, human service agency representatives, elected officials and transportation providers attended nine workshops for the TCAP, identifying the need for increased transportation services on evenings and weekends, public education programs, inter-county travel opportunities and greater access to jobs. Solutions identified in the 2007 TCAP included a voucher program, cross-county service, a one-stop information center, volunteer based transportation services and expanded transit services. An update to the TCAP is currently underway, with adoption of the updated TCAP anticipated in January 2010. As part of the update process, another series of workshops, an employer forum, and an affordable housing forum were conducted to obtain input from citizens, human service agency representatives, transportation providers, affordable housing representatives, and employers. Unmet transportation needs of the targeted populations are identified in the plan, as are strategies and potential projects to address those needs.

Pinellas County Transportation Disadvantaged Service Plan (2008)

The Transportation Disadvantaged Service Plan (TDSP), developed by the MPO, is a policy and administrative plan that includes planning, service delivery, quality assurance, cost/revenue allocation and rate structure justification elements. The TDSP is developed and updated through an extensive public participation process, including input from members of the public, transportation providers, human service agencies, and others providing transportation services for the disadvantaged community. The plan contains goals and objectives as well as an implementation schedule outlining the means to achieve them.

Transit Utilization

The Pinellas County TD program relies heavily on the use of bus passes to provide cost effective transportation to its customers. Through the implementation of its Transit Development Plan (TDP), the Pinellas Suncoast Transit Authority (PSTA) has improved frequency and service hours, further increasing the utilization of the bus passes provided to TD users. The TDP transit enhancements have included bike racks on buses and at bus stations/stops, transit shelters, ADA improvements, increased service frequencies, later service and cleaner emission vehicles. The TDP includes a 10-year vision plan that includes a goal of doubling fixed route transit ridership. The TDP includes the types of improvements necessary for PSTA to meet its 10-year goal in addition to the challenges they face, including new funding sources for transit. The LRTP provides a funding strategy for expanding the transit system and improving the level of service on existing routes.

9. Economic Development

Pinellas County has many economic advantages, including a favorable cost of living, a diversified economy and low average commuting times, all of which are advantageous to the County's economic growth in the coming years. The primary challenge, however, will be to accommodate this growth in a County that is dependent on redevelopment and infill development. There are virtually no large, vacant, developable tracts of land available to accommodate future growth. As such, the County's economic development strategies focus on shifting land development policies to support and encourage infill and redevelopment projects, attract high-wage jobs to the County and maintain the County's economic competitiveness in regional, national, and global markets.

The transportation system performs a number of very important functions in the overall economic development strategy for the County. The 2035 Long Range Transportation Plan supports Pinellas County's long range economic development goals by improving accessibility and mobility to existing and future employment districts. The need for redevelopment and infill development is supported by placing a greater emphasis on multimodal transportation.

State of Florida growth management laws require that adequate public infrastructure is in place to serve identified targeted industry employer locations and where planned development and redevelopment is desired. The Comprehensive Plans for Pinellas County and its municipal governments address the importance of maintaining economic competitiveness through creation of jobs and training opportunities and the maintenance of existing industries through enterprise zones, activity centers and redevelopment areas. They include short-term and long term transportation investment plans that are linked to the Long Range Transportation Plan. The LRTP is an important document in establishing a countywide future transportation network, upon which local growth strategies can rely.

The Long Range Transportation Plan includes a significant investment in transit, which will serve the needs of residents, workers and visitors. Bus and rail transit serve the County's major employment destinations and provide additional transportation capacity that cannot be achieved by widening roadways due to cost and right-of-way constraints. Transit investments maintain high levels of mobility and accessibility in densely developed areas, supporting the compact urban development that will typify future growth in Pinellas County and encouraging greater bicycle and pedestrian activity as modes of access to transit.

A continued commitment to improving and connecting the sidewalk, bicycle facility and multi-use trail network will enhance the quality of life for residents and maintain the County's desirability as a tourist destination. Bicycle and pedestrian facilities also improve local accessibility to support higher intensity land uses and a more flexible land development process. Multimodal improvements promote development patterns that are compact, of mixed use, pedestrian friendly, and provide options for housing in close proximity to employment centers to ease traffic congestion and reduce worker commutes.

Roadway capacity improvements are needed for Pinellas workers and visitors to continue to have convenient access to and from job centers and tourist destinations in Pinellas and throughout the Tampa Bay region. The Cost Feasible roadway capacity projects in the Long Range Transportation Plan provide additional capacity in the areas of the County that experience severe congestion. Strategic roadway investments will support the efficient movement of freight in Pinellas County and promote industrial and commercial expansions in targeted areas.

10. Safety

The primary responsibility of the MPO is the creation and maintenance of an affordable, safe, and effective transportation system to move people and goods. To help fulfill this objective the MPO has outlined strategies and measures in the Safety Element of the 2035 LRTP. This is done to provide Pinellas County with a transportation system that protects the health, safety and welfare of its citizens.

The Pinellas MPO has developed a safety strategy framework that uses the Four E's framework from the State Highway Safety Manual. This framework is as follows:

- *Engineering/Operational Considerations/ Improvements:* Bicycle Lanes, Sidewalks, Pedestrian Street Crossings, Intersection and Road Safety, Goods Movement, Livable Community Concepts, and Trailways Network
- *Education/Encouragement:* Safe and Mobile Seniors, School Age and Youth Safety, Transit and Ridership Safety, Safety Measures for Bicycles and Pedestrians, and Public Outreach
- *Enforcement:* Motorists, Bicyclists, Pedestrians and the Law
- *Emergency Medical Services/ Emergency Response:* As per the Florida Strategic Highway Safety Plan

To ensure that safety is taken into account during the planning design phase of roadway projects the Pinellas County MPO has created an assessment tool called the Project Safety Checklist (PSC). The criteria for this tool includes: Pedestrian, Bicycle, Intelligent Traffic System (ITS), ADA/ Senior Zone/Youth Zone, Livable Communities Tools, Goods/Truck Movement, Overall Crash Reduction, Transit, Transportation Use, and Security/ Evacuation/ Recovery.

The MPO Safety Element (available in the Appendix) addresses the main target areas of the Florida Strategic Highway Safety Plan as required under SAFETEA-LU. These are aggressive driving, intersection crashes, vulnerable road users, and lane departure crashes. The Pinellas County MPO has identified performance measures it will use to track these targets on an annual basis to monitor the success of reduction factors based on the four traffic safety strategies it has identified.

The Pinellas MPO provides several resources that facilitate safety planning, including a network of advisory committees comprised of professionals, policymakers, and private citizens. These advisory committees include the Bicycle Advisory Committee (BAC), Citizens' Advisory Committee (CAC), Intelligent Transportation System (ITS) Committee, Pedestrian Transportation Advisory Committee (PTAC), Pinellas Mobility Initiative (PMI) Steering Committee, Pinellas Trail Security Task Force (PTSTF), School Transportation Safety Committee (STSC) and Technical Coordinating Committee (TCC). The MPO also has partnerships with the Pinellas County Community Traffic Safety Team (CTST) and Pinellas County School Board School Transportation and Enhanced Pedestrian Safety (STEPS) Committee.

In order to ensure the availability of accurate and timely crash data to maintain, prioritize, and monitor the transportation network, the MPO administers a Countywide Crash Data Center (CDC), Enhanced Monitoring Program (ESMP), Traffic Incident Management (TIM), Transportation Studies/ Safety Audits, Congestion Management Process (CMP), and the Pedestrian Safety Action Plan (PSAP).

The Pinellas MPO's use of the four E's framework and application of the programs above aids them in making the transportation system in Pinellas County safer and more user-friendly.

11. Security

The Pinellas County Metropolitan Planning Organization (MPO) has prepared a Security Element as a part of the 2035 LRTP. The entire element is included in the Appendix. A summary of the issues covered in the Security Element is below.

MPO Role in Security

The Pinellas County Metropolitan Planning Organization (MPO) carries out several roles in security-related activities. Depending on the activity the MPO may act as facilitator, participant, or leader in coordination with several other agencies. Possible MPO functions include:

- Conduct vulnerability analyses on regional facilities and services
- Develop GIS information and data on roadways, bridges, crashes, crime, etc.
- Disseminate best practices in incident specific engineering design and emergency responses to agencies
- Sponsor Regional Emergency Operations Preparedness and Response Workshop traditional and nontraditional partners
- Incorporate security as evaluation criteria for project selection
- Develop an Emergency Preparedness Guide for Elected Officials
- Engage nontraditional stakeholders into the planning process

To ensure that the essential MPO office functions would continue in the advent of a natural or manmade disaster, the MPO initiated and approved a Continuity of Operations Plan (COOP) in 2007. This document is in accordance with continuity of Government Executive Order 12656 (1988) and Homeland Security Continuity of Operation Guidance (2004)

Personal Security

The Pinellas County Department of Emergency Management has several education efforts designed to inform residents and visitors how to be prepared for a large scale emergency, particularly a hurricane. These include guidebook and contact information, pet checklist, special needs checklist, a utilities guide, and a list of safety shelters. The Department has identified several methods of disseminating information to the public and in the event a large scale emergency.

Community

Pinellas County Emergency Management Department is responsible for administering and maintaining the Pinellas County Comprehensive Emergency Management Plan (CEMP). This document must be updated every four years. The CEMP is an operations-based plan that addresses evacuation, sheltering, and recovery procedures for deployment of resources and providing disaster relief. This Plan adopts the National Incident Management Systems (NIMS) as the comprehensive framework for all response and recovery operations, and identifies the appropriate lead agency for specific types of events. If an emergency event is beyond the capability of the lead agency the Emergency Operations Center (EOC) is activated to support operations and logistics regardless of jurisdiction.

To facilitate coordination, Pinellas County uses the Florida CEMP and the Emergency Support Function (ESF) concept similar to the National Response Plan. Pinellas County identifies essential services that must be provided after a major event.

The MPO also coordinates with the St. Petersburg-Clearwater International Airport (PIE) and cites the Airport Emergency Plan in the Security Element of the LRTP. This is a stand-alone document used to coordinate with outside agencies. It identifies the policies and procedures that are activated during an emergency that might be at, or in the vicinity of PIE.

Mitigation

After a major disaster, the Federal Emergency Management Agency (FEMA) Hazard Mitigation Assessment Teams (MATs) assess the damage to the areas affected. The Local Mitigation Strategy (LMS) Workgroup assist the MAT and establish an ongoing process. The LMS serves as a bridge between the Pinellas County CEMP, the comprehensive growth management plans of local governments, land development regulations, and relevant ordinances and codes. The LMS was developed by Pinellas County and local jurisdictions in 1998 and later updated in 2004. It provides a unified and consistent course of action needed to eliminate or reduce the impact of disasters that threaten Pinellas County and its municipalities.

12. Energy, Air Quality and the Environment

Air Quality

To meet national ambient air quality standards (NAAQS), Pinellas County's ambient ozone and fine particulate matter are measured annually. The federal standard for ozone pollution changed in 2008 to a threshold of 75 parts per billion averaged over any eight hour period. According to the federal standard, an area will be considered in non-attainment if the average of the annual fourth highest ozone readings at any ozone monitoring station for any three year period equals or exceeds 75 parts per billion. The federal standard for fine particulate matter is a 24-hour average of 65 micrograms per cubic meter (three year average of 98th percentile) and an annual average of 15 micrograms per cubic meter (three year running average of annual mean).

In March, 2009, the Florida Department of Environmental Protection (DEP) identified four regions in presumptive non-attainment status based on 2006-2008 data. One of the four regions was the Tampa-St. Petersburg-Clearwater core based statistical area, which includes Pinellas County. The U.S. Environmental Protection Agency (EPA) has the final authority in designating an area as non-attainment and defining the boundary of the airshed.

In September, 2009, the EPA announced that it would reconsider the federal standard for ground level ozone to ensure that the 2008 standard sufficiently protects public health and safety. Recommended revisions to the standard will be published by December, 2009, and the EPA will issue a final decision on those revisions by August, 2010. The reconsidered standards will be completed by August, 2011. State Implementation Plans based on the reconsidered standards will be due by December, 2013.

The EPA has continued the implementation of the 2008 standards for purposes of designating attainment and non-attainment areas until the reconsidered standards are completed. Until that time, the previous (1997) ozone standard of 80 parts per billion shall remain in effect for determinations of air quality attainment. As such, Pinellas County remains in attainment of the NAAQS standard.

Efficient Transportation Decision Making

The intent of the Efficient Transportation Decision Making Process (ETDM) is to improve the effectiveness of the transportation planning and project development process by integrating ecosystem and cultural resource preservation with land use and social considerations early in the transportation planning process. In support of this process, an environmental resource evaluation is conducted for each highway project in the draft Cost-Feasible LRTP to determine the relative potential project effects to natural and cultural resources. The potential project effects are evaluated for certain issues defined within the ETDM Environmental Screening Tool (EST). These issues include Contaminated Sites, Farmlands, Floodplains, Historic Resources, Archaeological Sites, Navigation, Recreation Areas, Section 4(f) Potential (refers to publicly owned parks, recreational areas, wildlife and waterfowl refuges or public/private historical sites), Special Designations, Water Quality and Quantity, Wetlands, and Wildlife and Habitat. Evaluation measures including a distinct range of values used to determine potential low, moderate, and high level impacts on resources were developed for each issue.

The environmental resource evaluation characterizes projects in the LRTP as having potentially low, moderate or high effects to the natural and cultural resources. Potential project effects are analyzed within

a defined buffer area around each candidate project. Low potential effects suggest that the project's potential impacts to environmental resources are relatively low in comparison to other candidate projects. Moderate potential effects indicate that the project's potential impacts are moderate relative to other projects. High potential effects indicate relatively high impacts and suggest that specific environmental mitigation measures may need to be identified during the project development phase. The Environmental Evaluation Memo in the Appendix provides more detailed information on the methodology.

Environmental Evaluation Results

The results of the ETDM environmental evaluation provide a summary of potential effects for the Cost-Feasible highway projects in the LRTP. The full environmental evaluation results are available in a spreadsheet located in the Appendix.

ETDM Planning Screen

The ETDM process allows for early input on transportation projects and facilitates communication and coordination with resource agencies, including regulatory agencies. The ETDM planning screen is the first step in the ETDM process, occurring well before projects are being considered for the FDOT Work Program. Generally, projects that must be screened under the ETDM Process are those categorized as major capacity improvements that are anticipated to be funded with State or Federal funds. Additionally, local projects that are anticipated to have significant effects or public controversy may be screened at the request of the MPO or local government. An ETDM screening should not occur in the following cases:

- Not funded by a State or Federal funding source
- Project phase is beyond the beginning stages of the PD&E phase
- Previously screened as an ETDM programming project
- Previously screened as an ETDM planning project, but not currently a candidate for advancement to the FDOT Work Program
- Minor projects that do not add capacity

A resource agency, or Environmental Technical Advisory Team (ETAT) member, has the opportunity to comment on any project in regards to their particular area of concern. The ETDM process covers 21 issues, as shown in Table 70.

TABLE 70. ETDM ISSUES

ETDM Issues			
Aesthetics	Air Quality	Coastal & Marine	Contaminated Sites
Economic	Farmlands	Floodplains	Historic & Archaeological
Infrastructure	Land Use	Mobility	Navigation
Recreation	Relocation	Secondary & Cumulative Effects	Section 4(f)
Social	Special Designations	Water Quality & Quantity	Wetlands
Wildlife & Habitat			

Once the ETDM planning screen, which is open for review comments for 45 days, is complete, the MPO ETDM Coordinator summarizes the issues and assigns a summary degree of effect. More information on the ETDM screenings or the ETDM process as a whole is described in the ETDM Manual (<http://etdmpub.flas-etat.org/est/>).

The draft policy plan and cost-feasible plan rail projects were entered in the Environmental Screening Tool (EST) and released to the ETAT for review. The passenger rail projects, with assigned ETDM numbers, are listed below.

- Red Line (ETDM #12256)
- Purple Line (ETDM #12257)
- Orange Line (ETDM #12258)
- Green Line (ETDM #12259)
- Blue Line (ETDM #12260)

The MPO uses the information and suggestions from the ETAT review to identify issues or fatal flaws of the rail projects. It is anticipated that all five rail lines will form a complete system in Pinellas County. However, not all are able to be funded by 2035. A purpose and need statement has been developed for all five rail projects, which describes the primary needs being met by the projects, as well as the projects' consistency with local planning initiatives. The purpose and need statement is provided in the Appendix and summary of ETAT comments is available via the ETDM Public Web site at <http://etdmpub.flas-etat.org/est/>.

During the ETAT review, the resource agencies assign a degree of effect indicating the level of impacts to the particular resource (see Table 70). Once the review is complete, the FDOT ETDM Coordinator provides a summary of ETAT comments and assigns a summary degree of effect for each issue. Generally, the rail projects included summary degrees of effect ranging from an Enhanced Effect to a Substantial Effect. While most of the issues garnered a Minimal to Substantial degree of effect, a few received an Enhanced degree of effect, including Mobility and Economic. This is primarily due to the potential for the rail projects to link an

increasing number of people to jobs, while spurring redevelopment around transit stations. In addition, passenger rail provides an alternative mode of transportation, potentially reducing the number of vehicles on the roadway and leading to improved air quality in the process. Several ETDM issues received a Substantial summary degree of effect, indicating that adverse impacts to a resource are very likely and should be further evaluated and mitigated. These particular comments are helpful in determining appropriate mitigation strategies, which is discussed later. Table 71 indicates which projects were rated with Substantial summary degrees of effect by ETDM issue³⁶.

TABLE 71. ETDM PROJECTS WITH SUBSTANTIAL DEGREES OF EFFECT, BY ISSUE

ETDM Issue	ETDM Project Number
Coastal & Marine	12256 & 12259
Contaminated Sites	12257 & 12258
Floodplains	12256, 12257, 12258 & 12259
Historic & Archaeological	12256, 12258, & 12260
Special Designations	12256, 12257, 12259 & 12260
Water Quality & Quantity	12256, 12257, 12258, 12259 & 12260
Wetlands	12256 & 12259
Wildlife & Habitat	12259

Potential Impacts to Resources

Coastal and Marine

The two rail projects falling in this category all experience similar issues relating to Coastal and Marine resources. The projects occupy watersheds that are included in the 2200-square mile Tampa Bay Estuary Watershed, designated “estuary of national significance” by the US Congress in 1990. The projects may also impact certain Essential Fish Habitats (EFH), which would require consultation and an EFH Assessment. Any necessary stormwater treatment systems should be designed to prevent degraded water from entering estuarine habitats within Old Tampa Bay, Moccasin Creek and Safety Harbor.

Contaminated Sites

Significant amounts of contaminated sites, including toxic release inventory sites, biomedical waste sites and Resources Conservation and Recovery Act (RCRA) regulated facilities are present within the 500-foot project buffer of the affected projects. ETDM Project #12257 (“Purple” Line) is located in a highly karstic area known to contain numerous sinkholes and there is a relatively high DRASTIC pollution vulnerability score for the surficial aquifer and Floridan aquifer. In addition to several contaminated sites being located

³⁶ The Summary Degree of Effects are subject to change, pending a review by the Florida Department of Community Affairs and Florida Department of Transportation. The summary reports for all rail projects will be available via the ETDM Public Web site by February 2010.

in the project area, ETDM Project #12258 (“Orange” Line) also traverses the Toytown Landfill, Sludge Disposal Site, and the St. Petersburg Brush Transfer Site.

Potential issues relating to contaminated sites include leaking underground storage tanks, leaking aboveground storage tanks, improper storage and/or disposal of hazardous material, and spills/leaks from transportation vehicles. All of this leads to a high potential for groundwater, surface water and soils pollution.

Floodplains

For the projects with potential floodplain impacts, a significant amount of the project area is in the 100-year floodplain (Zones A, AE, or VE) – ranging from 15% to 60%. Segments of the project built at-grade may intercept these areas, which may result in damage due to inundation and return flow from storm surge events. Any development within this area has the potential for placing citizens and property at risk of flooding, by limiting flood storage capacity.

Historic and Archaeological

The three rail projects with a Substantial degree of effect will require a Cultural Resources Assessment Survey to ascertain any impacts to archaeological sites. In addition, a significant number of historic sites, including historic standing structures, National Register of Historic Places and historic bridges were identified in the 100-foot buffer. Due to the high concentration of historic sites, it is likely the project’s undertaking will adversely affect historic districts in the area. Any adverse effects should be mitigated to preserve as many resources as possible and maintain the character of historic districts.

Special Designations

Special designations occurring in the vicinity of the four rail projects garnering a Substantial degree of effect include: Outstanding Florida Water, Tampa Bay Estuary Watershed, brownfield, special flood hazard area, mangroves, and public land. Water bodies in the Pinellas County Aquatic Preserve are designated Outstanding Florida Waters, which are provided the highest level of protection under the Florida Administrative Code. Watersheds in the Tampa Bay Estuary Watershed are designated “estuary of national significance” and state/local regulations are enforced to protect mangrove forests. Public land in the project areas include Cross Bayou North, Anclote Island Management Area, a Pinellas Trail extension, Lake Tarpon West Management Area, Tampa Bay Ecosystem Management Area, Alligator Lake Management Area and Cliff Stephens Park. All of these public lands are important for recreation, protection of environmental resources and for serving wildlife and habitat needs.

Water Quality and Quantity

All five rail projects garnered a Substantial degree of effect for Water Quality and Quantity. The Pinellas County Aquatic Preserve is listed as an Outstanding Florida Water (OFW). Degradation of water quality in an OFW is prohibited except under certain circumstances. Pollutant discharges must not lower existing ambient water quality. Any activity within an OFW requiring a Florida Department of Environmental Protection permit, must be deemed necessary for the public interest. In addition, several Impaired Waters have been identified and the projects have potential to generate stormwater runoff and increased sedimentation that may contribute to a delay in the recovery of these water bodies. Lastly, over a hundred Environmental Resource Permits, present within the 200-foot buffer, may be impacted.

Wetlands

The National Wetlands Inventory shows a significant amount of estuarine and palustrine wetlands. Impacts to wetlands may include the elimination or reduction of remaining wetland systems, loss of flood storage and loss of wildlife function habitat. High quality estuarine wetlands along the project (ETDM #12256 – “Red” Line) in coastal areas are particularly important.

The two rail projects appear as though they could affect certain Essential Fish Habitats (EFH), which would require consultation and an EFH Assessment. To prevent degraded water from entering estuarine habitats located within Moccasin Creek, Safety Harbor, and Old Tampa Bay stormwater treatment systems should be designed appropriately.

Wildlife & Habitat

For a majority of the rail projects, there is a Minimal summary degree of effect for Wildlife and Habitat. However, ETDM #12259 “Green” Line garnered a Substantial degree of effect due to potentially significant impacts to a number of species listed by the Florida Fish and Wildlife Conservation Commission as Endangered, Threatened or Species of Special Concern. The project is located within the U.S. Fish and Wildlife Service Consultation Area for piping plover, scrub jay, and West Indian manatee, all of which are either Endangered or Threatened.

The alignment crosses Moccasin Creek, Safety Harbor, Bishop Creek, Mullet Creek, and Alligator Lake – all important resources utilized by Federally listed species (manatees, sea turtles), state protected species (wading birds, small mammals) and National Marine Fisheries trust resources (migratory birds, wildlife). In addition, there are three primary areas of concern listed below where an expanded right-of-way would affect valuable wetland habitats.

1. An undeveloped tract east of US 19, containing wooded habitat important for small mammals, woodland and migratory birds, reptiles and amphibians.
2. Bridge crossing at the northwest lobe of Safety Harbor (where a new bridge would be required) would impact the shallow estuarine habitat and the fringing mangrove and salt marsh vegetation.
3. New bridge crossing over the floodplain wetlands associated with Moccasin Creek, a tributary of Safety Harbor.

Full summary reports, containing all ETAT review comments, are available on the ETDM Public Web site at <http://etdmpub.flas-etat.org/est/>.

In addition to the rail projects, one draft cost-feasible highway project is undergoing a planning screen, I-275: Sunshine Skyway Bridge to Gandy Boulevard (Add two special use lanes). Because the I-275 project is a Strategic Intermodal System (SIS) facility, FDOT District Seven has the lead role in preparing and releasing the project for an ETDM screening. The Purpose and Need Statement is available in the Appendix and results of this planning screen will be available February 2010 at which point the planning screen summary report will be posted to the ETDM Public Site at <http://etdmpub.flas-etat.org/est/>.

Upon review of the ETAT commentary, the MPO has identified potential issues that will be considered during the finalization of the 2035 Cost-Feasible Plan. Examples of potential issues include an agency response indicating that a project does not conform to agency statutory requirements and may not be permitted; responses indicating very strong community opposition to a project; and/or severe negative impacts on the community. The information gained from the Planning Screen has been conveyed to the MPO Board for consideration in the decision-making process.

Environmental Protection/Mitigation

In response to SAFETEA-LU planning provisions which require that the LRTP describe opportunities for mitigation activities, and potential locations for these activities, the Plan's potential effects to environmental resources were evaluated using the ETDM Process. As previously discussed, one highway project and five rail projects were released to the ETAT for review. From that, the MPO has received a summary of major issues and comments which assist in identifying specific geographic areas for mitigation strategies. In instances where local policies/laws are more stringent than state, federal or regional policies/laws concerning acceptable environmental impacts, the local laws and policies shall apply. National Environmental Policy Act (NEPA) regulations identify a sequence of events for mitigation actions as follows:

- Avoid the impact altogether
- Minimize impact by limiting degree or magnitude of the action and its implementation
- Rectify impact by repairing, rehabilitating, or restoring the affected resource
- Reduce or eliminate the impact over time by preserving and maintaining operations during the life of the action
- Compensate for the impact by replacing or providing substitute resources or environments

The following section describes mitigation opportunities associated with the LRTP's potential impacts to wetlands, water resources, and wildlife/habitat.

Wetlands Mitigation

Impacts to wetlands are monitored under federal, state, regional and sometimes local law. Water Management Districts oversee wetland mitigation and Pinellas County is located within the Southwest Florida Water Management District (SWFWMD). Common requirements include avoidance, minimization and mitigation approaches. Avoidance and minimization should emphasize the following techniques:

- Adjusting the alignment to avoid direct impacts to wetlands
- Implementing strict controls over sediment transport off site during construction
- Restricting activity of vehicles/equipment to only those areas that must be used for construction
- Selecting treatment pond sites away from existing wetlands
- Elevating segments of the facility to avoid estuarine wetlands (especially in the rail projects)
- Selecting rail station locations away from wetlands;
- Employing steep/vertically retained side slopes and median width reductions
- Implementing stormwater treatment measures that incorporate quality wetlands in their design

Once avoidance and minimization are exhausted, mitigation measures must be proposed to offset adverse impacts to wetlands, especially forested wetland systems and seagrass beds (which are difficult to mitigate). Compensatory treatment, as opposed to installing stormwater conveyance and treatment swales in adjacent uplands, is the preferred method. Any anticipated wetland and surface water impact should be submitted to the SWFWMD, at which point the preferred mitigation measure will be determined. Mitigation options include:

Enhancement of Wetland and Upland Habitats within Existing Public Lands

For projects located in the same drainage basin as the public lands, enhancement (creation and restoration) of wetlands may be a viable mitigation option. The ability to utilize public lands may be affected by

funding sources and any encumbrances on the property (i.e. types of improvements proposed on the property).

Private Land Acquisition

This mitigation strategy involves the purchase of privately owned lands for creation, restoration and/or enhancement of wetland. Land acquisition, design, construction, maintenance and monitoring are all costly components. Thus, this mitigation option is often the plan of last resort.

Purchase of Private Mitigation Bank Credit

Mitigation banking has been in practice for years by private developers for mitigating wetland impacts associated with transportation improvements. According to Chapter 373 of the Florida Statutes, the “banker” (public or private entity) provides mitigation for unavoidable wetland impacts within a defined region (mitigation service area). A mitigation credit represents the wetland ecological value equal to the complete restoration of one acre.

Water Resource Mitigation

Water quality and quantity are regulated by WMDs and the FDEP. Differences in regulations exist; however, water quality and quantity must be addressed in order to obtain permits. The following are ways in which impacts to water quality/quantity related to contamination, floodplain regulation and water resources, can be minimized:

- Minimize the at-grade project segments and cross sections in floodplain areas;
- For rail projects, select a facility design that eliminates the production of pollutants from the interaction of the rail with the rail car wheels;
- Avoid sites with known contaminated soils;
- Evaluate potential stormwater treatment pond sites for the presence of contamination and isolate stormwater from contaminated soil or groundwater;
- Conduct an Environmental Audit to identify contaminated facilities and develop a plan for their removal; and
- Coordinate with FDEP and EPA to prepare a Contamination Assessment Report (if needed).

In addition, projects that will result in the disturbance of one acre of land or greater will require a National Pollution Discharge Elimination System (NPDES) permit pursuant to Chapter 40, Code of Federal Regulations (CFR), parts 122-123. The NPDES program is administered by FDEP. The Florida Administrative Code (FAC), Chapter 62-25, requires an NPDES General Storm Water Permit for Construction Activities for project construction. When avoidance and minimization approaches have been exhausted or are not applicable, specific mitigation options for water quality/quantity are described in the following section.

Construct Treatment/Attenuation Ponds Outside Floodplain Areas

First flush treatment and attenuation requirements involve the construction of a stormwater pond as part of the project design. The first flush is considered the first 0.5 – 1.0 inch of rain that runs off of the road during a storm event. During construction, attenuation ponds are created to treat the first flush volume through retention (in-place treatment and volume containment) or detention (in-place treatment and temporary volume containment). The pond is designed to hold (attenuate) the volume from a 50 or 100-year storm event. The attenuated treated volume is released through a control structure (e.g. weir) to a downstream receiving body of water.

Provide Compensation for Lost Floodplain Storage

Generally, replacement of 100-year floodplain volume lost as a result of the placement of fill material during construction is required. To match the volume that was lost, an area of equal volume is typically dug to an elevation below the 100-year floodplain level.

Utilize Best Management Practices (BMPs) During Construction

Utilizing BMPs during construction to minimize the conveyance of sediment to sensitive habitats off-site involves developing a sediment and erosion control plan. The plan should consider the treatment of pre-existing, impervious areas that are now under treated or untreated altogether. This plan includes the majority of information needed to apply for a NPDES permit.

Protected Species Habitat Mitigation

Threatened and endangered species in Florida are protected by the Florida Fish and Wildlife Conservation Commission (FWC) for animals and by the Florida Department of Agriculture and Consumer Services (FDACS) for plants. Federally listed species are protected by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Any potential project impacts to listed species must be reviewed by the applicable agencies, and may require varying types of conservation measures to prevent or minimize impacts. Potential conservation measures are described in the following section.

Avoidance of Impact

Impacts to protected species may be avoided through such actions as:

- Locating drainage retention areas and equipment staging areas in previously disturbed sites to avoid habitat destruction
- Avoiding elevated construction across known important bird flight patterns and nesting areas (especially with rail projects)
- Eliminating habitat damage by limiting construction equipment to existing road right-of-way and providing a buffer around bird nesting colonies
- Utilizing the FWC Standard Manatee Conditions for In-Water Work, which includes restrictions on blasting, monitoring of turbidity barriers, exclusionary grating on culverts, presence of manatee observers, a defined/limited construction window, and no nighttime work

Relocation of Protected Species

If protected species are found within the project area, it may be possible to relocate them to an off-site location. Public or private lands held in conservation are generally used to “house” these species. These types of arrangements are agreed upon by the resource agencies prior to construction.

Mitigation for Lost Habitat

When avoidance and relocation are not possible, the acquisition of privately held lands and the transfer of these lands to a public agency for management should be considered as a strategy in replacing lost habitat. Compensatory mitigation plans should include replacement of any wetland, upland, or aquatic habitat lost as a result of the project. This can be achieved by purchasing land, securing conservation easements over lands adjacent to existing public lands and by habitat restoration. Replacement habitat for mitigation should be “type for type” as productive, and of equal to or of higher functional value than the lost habitat. While the creation of a conservation bank is an option, the approval process is lengthy and generally not conceivable on a project-by-project basis.

13. System Integration and Preservation

The MPO partners with FDOT in system integration planning, especially as it relates to the Strategic Intermodal System (SIS). Florida's Strategic Intermodal System was developed to cover all modes of transportation and prioritize investments predominantly on interregional, interstate and international transportation facilities. These types of trips are likely to have the greatest impact on the region and the state. The primary emphasis of SIS-funded projects is related to mobility for people and freight and improving economic competitiveness. The SIS facilities (or portions thereof) in Pinellas County are:

- I-275, I-175, I-375
- US 19 (SR 55) (Gandy Boulevard to SR 44)
- SR 686/118th Avenue North connector (future SR 690) from I-275 to US 19 (planned addition)
- St. Petersburg-Clearwater International Airport
- US 92/SR 694 (Gandy Boulevard) from US 19 (SR55) to South Crosstown Expressway (planned drop)
- US 19 from 118th Avenue to Gandy Boulevard (planned drop)
- SR 686 (Roosevelt Boulevard) Connector from St. Petersburg Clearwater International Airport entrance to 118th Avenue (planned addition)

Freight Mobility

An important component of ensuring transportation system integration includes planning for efficient goods movement throughout the county and state. The potential conflict of competing for capacity, mobility and accessibility within a finite transportation network must be balanced so that the growing volume of commuter and freight movement within the region can be accommodated in a sustainable manner. The Pinellas MPO conducts freight mobility planning within the County and has a Freight Mobility Study separate from the Long Range Transportation Plan. The Pinellas MPO is also working with the Florida Department of Transportation on the ongoing Regional Goods Movement Study.

Freight Security and Safety

Freight transportation issues and concerns have been integrated into the Safety and Security elements of the 2035 LRTP. Within the Security Element of the LRTP, freight transportation is addressed in terms of the following:

- Federal requirements for security planning for the transportation system
- MPO's role in local and regional security planning activities
- Protection of and recovery planning for critical freight transportation infrastructure including airports, railroads, intermodal terminals and transit facilities
- Policy development covering planning and coordination, communications and programming, security projects prioritization, and green transportation initiatives to support homeland security
- Incorporation of freight security planning in coordination with FDOT and FHWA

Within the Safety Element of the LRTP, freight transportation is addressed in terms of LRTP policy 1.10.15, which supports the Florida Strategic Highway Safety Plan objective to ensure the safe accommodation of motorized and non-motorized traffic. FDOT District Seven has embarked on a Tampa Bay Regional Goods Movement Study, currently in Phase Two, which includes Pinellas County and intends to enhance freight movement throughout the region. A desired end-result of this effort includes the consideration of freight

activity and freight-related projects in the LRTP. According to this study, Pinellas County's transportation system serves regional freight movement as described in the following section.

Truck Routes

There are several local truck routes in Pinellas County, some of which include SR 60, SR 580, SR 686 and SR 595. These routes also serve as regional freight corridors as they connect to key freight activity centers throughout the state. A key to ensuring continuity with truck route planning is for each community to work collaboratively with neighboring jurisdictions with respect to truck route ordinances, plans, routes and existing and future land uses. Figure 37 Pinellas County Truck Route Plan shows the truck routes for day use only, as well as the unrestricted through routes.

St. Petersburg-Clearwater International Airport

According to the St. Petersburg-Clearwater International Annual Report, freight at this airport totaled 29,842 tons of air cargo in 2008. The airport specializes in the shipment of express mail and small packages (UPS and Airborne Express), but also transports tropical fish, human remains, and high-tech medical equipment. The airport site and adjacent industrial and office land uses serve as a major freight activity center for the region. It includes potential for expansion to become a major regional hub for intermodal activity.

Rail Corridors

The CSX Rail Line carries freight between Pinellas County and Tampa, via a 50-mile long route. According to the Tampa Bay Regional Goods Movement Study, approximately six trains per day use this line with most of the traffic occurring between the Gary junction in Tampa and the Drew Street Spur in Clearwater and four trains per day operating between Clearwater and St. Petersburg.

Regional Highways

Major highways in the County play a key role in ensuring that goods and services are delivered throughout the region. The following eight regional highways in Pinellas County have been identified in the Tampa Bay Regional Goods Movement Study:

- I-275 (Howard Frankland Bridge to Sunshine Skyway Bridge) - SIS
- US 19 (SR 55) (Gandy Boulevard to Curlew Road) – SIS (partial drop)
- SR 688/Ulmerton Road (Seminole Boulevard to I-275)
- SR 686/Roosevelt Boulevard (US 19 to US 92)
- US 92/Gandy Boulevard (Gandy Bridge to US 19) – SIS (planned drop)
- SR 584/SR 586/Tampa Road/Curlew Road (Hillsborough County Line to US 19)
- CR 611 and 49th Street North (SR 688 to 118th Avenue North)
- CR 296/Bryan Dairy Road/118th Avenue North (Starkey Road to I-275) – partial planned SIS

To further address the transportation needs of freight movement in Pinellas County, the Pinellas MPO has undertaken a countywide freight study. This study is in addition to and supports the MPO's participation in the FDOT District Seven Regional Goods Movement Study. The study identifies and recommends transportation and land use policies that support freight mobility and economic development in order to promote Pinellas County's intermodal capabilities. It addresses safety and operations and includes truck route plans. The study also identifies short, medium, and long term capacity improvements.

Short-term improvement recommendations include upgrading signalization, installing turning lanes, lengthening turn lanes, advanced street signage, and access management. Long-term improvements include grade separated interchanges, installing auxiliary lanes, and road widening.

Potential Funding Sources

The capacity projects in the Pinellas County Goods Movement Study have several potential funding sources through programs such as Other Arterial (OA), TMA, SIS, Penny for Pinellas, Transportation Impact Fees, and TRIP.

The Pinellas County freight system, as part of the Tampa Bay Regional freight system, is a key resource in promoting regional goods movement, job creation and economic development.

FIGURE 37

MAJOR ROAD NETWORK

Pinellas County Truck Route Plan

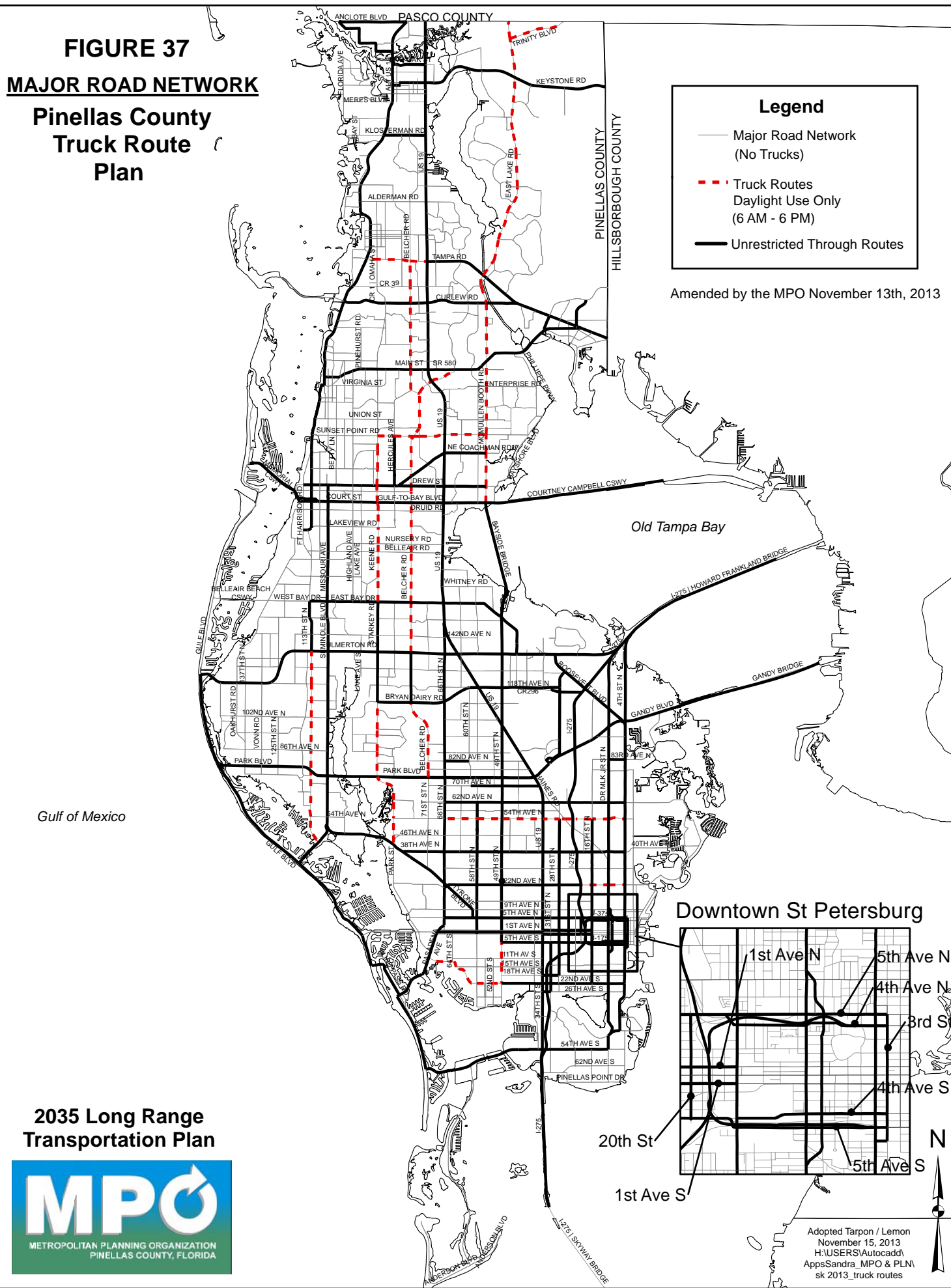
Legend

Major Road Network
(No Trucks)

Truck Routes
Daylight Use Only
(6 AM - 6 PM)

Unrestricted Through Routes

Amended by the MPO November 13th, 2013



2035 Long Range
Transportation Plan



Adopted Tarpon / Lemon
November 15, 2013
H:\USERS\Autocadd\ Apps\Sandra_MPO & PLN\ sk 2013_truck routes

14. Plan Consistency

Local Comprehensive Plans

The 2035 LRTP supports the mobility and accessibility goals described in the local comprehensive plans for Pinellas County and its municipalities. While each jurisdiction has its own comprehensive plan, there are general policy issues common to all communities throughout the county. The policy issues summarized below are consistent with the goals, objectives, and policies of the LRTP, the methods used to develop that plan and prioritize projects, and the ongoing planning activities that will support it.

LEVEL OF SERVICE: Provide a countywide transportation system that is well-maintained and maximizes performance. Strategies:

- Maintain roadway operations at the existing LOS standards by expanding incident management coverage and improving incident clearing times on major roadways.
- Invest in operational improvements, transportation demand management strategies, congestion management systems approaches, and multimodal improvements, especially in constrained corridors.
- Test operational strategies prior to making capacity improvements to ensure their application by jurisdiction.
- Increase use of intelligent transportation system technology to maximize efficiency and safety.
- Improve efficiency and safety of the roadway network in the County through maintenance of existing infrastructure to maximize the lifespan of transportation system investments.

MULTIMODALISM: Promote alternative modes of transportation. Strategies:

- Invest in bicycle and pedestrian infrastructure and mass transit improvements, including fixed guideway and/or rail transit, to create an integrated multimodal transportation network.
- Offer equitable service to all users and provide for the travel needs of the elderly, disabled, low income citizens, and other transit dependent populations.
- Participate in the development of regional plans for multiple transportation modes including mass transit, ridesharing and carpooling, bike and pedestrian access where appropriate to reduce dependence on single occupant vehicles (SOV) and the need for more roads and lane capacity.
- Support the development of expanded, efficient passenger rail transportation links to the state and national network.
- Investigate dedicated guideway transportation options such as bus rapid transit, future rail corridors for trolleys, light and commuter rail, and/or high occupancy vehicle lanes.
- Support “complete streets” and “context sensitive solutions” within the County where appropriate.
- Design and implement a bicycle and pedestrian plan.
- Implement a Safe Routes to Schools program.
- Encourage multiple modes for freight movement: rail, air, truck.
- Secure funding for airport and port expansion/improvement.

INTEGRATION: Link land use and transportation. Strategies:

- Coordinate local land use with transportation services, systems and facilities in a mutually supportive manner to provide a full range of transportation options to County residents and visitors.
- Encourage the coordination of land use plans and zoning along and in immediate proximity to community boundaries within the County.

- Ensure that existing neighborhoods are not disrupted and the long-term land use and development vision for each jurisdiction is supported properly by appropriate transportation investments.
- Regulate the location and appearance of new or infill development in order to protect existing character and to define and enhance the community's sense of place.
- Encourage development that supports compact, walkable areas with a complementary mix of uses in proximity to transit stops.

SAFETY: Consider transportation system safety in all transportation decision making. Strategies:

- Improve safety through roadway and intersection design improvements, enforcement of traffic laws, and public education campaigns.
- Pursue effective access management and land use strategies that strengthen the relationship between land use and transportation systems to enhance the safety of all transportation modes.
- Reduce pedestrian and bicycle accidents by providing an improved bicycle/pedestrian network.
- Assess the adequacy of existing bicycle/pedestrian and other non-motorized travel alongside and on roadways and prioritize safety improvements.
- Implement traffic calming measures in high risk areas, such as in the vicinity of schools or elderly living facilities.

ECONOMIC DEVELOPMENT: Promote economic development and quality job creation through transportation system improvements. Strategies:

- Link economic development strategies to transportation availability by encouraging infill and redevelopment to foster economic viability and growth.
- Improve and enhance investments in the transportation system to strengthen linkages between Pinellas County, the region, state and nation.
- Provide for the efficient movement of people and goods across all modes to promote the economic competitiveness of the County.
- Strengthen transportation linkages between employment centers and residential areas.
- Encourage the creation of quality jobs as a component of extending transportation infrastructure at public expense.

ENVIRONMENTAL SUSTAINABILITY: Design improvements to the transportation system in such a way as to minimize impacts on the natural and built environments, including noise, air, and water pollution and the disruption of recreational areas, natural habitats, historic places, and existing neighborhoods. Strategies:

- All transportation system improvements will comply with federal, state and local regulations concerning the avoidance, minimization and mitigation of impacts.
- Support energy efficient transportation choices such as bio-fuels, hybrid technologies, transit use, promoting car and vanpooling choices, promoting telecommuting and alternative work schedules.
- Reduce impervious surfaces to minimize stormwater quantity and quality impacts from road and rail systems and from streets and parking lots.
- Identify and implement air quality attainment strategies to manage vehicular emissions and ensure that larger non-point pollution sources within the County are mitigated.

Florida Transportation Plan

The Florida Transportation Plan (FTP) outlines the goals and objectives for transportation planning throughout the State through 2025. The FTP focuses on long term mobility needs, economic competitiveness, livable communities, transportation system safety and security, and environmental sustainability. The goals and objectives of the 2035 LRTP for Pinellas County are consistent with the statewide goals defined in the FTP. Additionally, the methods employed in identifying future transportation needs, project prioritization, and ongoing planning efforts support the FTP's major policy issues described below:

- Providing a safer and more secure transportation system for residents, businesses, and visitors. This includes reducing injuries and fatalities on the transportation system, making focused investments to improve safety in specific areas based on data and trends, and deterring and responding to attacks on transportation facilities while preserving mobility for users.
- Enhancing quality of life and responsible environmental stewardship. This involves conserving non-renewable resources and protecting the natural environment, coordinating transportation and land use planning and intergovernmental/interagency cooperation, planning communities at the human scale, and incorporating public input into the planning process.
- Preserving Florida's transportation assets and administering adequate, cost-effective maintenance. This entails routine maintenance of the existing transportation infrastructure, strict enforcement of weight limits for vehicles traveling on public roads and bridges, and shifting oversized and overweight loads to alternative modes when feasible.
- Strengthening Florida's economic competitiveness by enhancing the mobility of persons and goods. The FTP calls for new and enhanced multimodal and intermodal facilities, reducing SOV travel, reducing delay on critical facilities, enhancing regional coordination, and developing a transportation system accessible to persons of all ages, abilities, and incomes.
- Making sustainable transportation investments. Matching funds with future needs to reduce project backlog, establishing investment priorities to ensure the effective functioning of the Strategic Intermodal System, reducing costs, and documenting funding gaps are all part of this initiative.

15. Regional 2035 LRTP

The West Central Florida MPO Chairs Coordinating Committee (CCC) is comprised of six metropolitan planning organizations and eight counties. The CCC strives to address long-range mobility issues affecting the region including, access to jobs, goods movement, personal mobility, emergency evacuation and growth management. Urban areas in the region, once isolated from each other, have expanded to the point where needed transportation improvements overlap; making the need for coordination important.

The WCF Long Range Transportation Plan (WCF LRTP) is the CCC's primary means for coordination. It identifies transportation improvements that agencies in the region will plan for, design and construct over the next 20 years. The WCF LRTP is updated once every five years to coincide with transportation plan updates made by the participating MPOs in Hillsborough, Pinellas, Pasco and Hernando, Polk, and Sarasota-Manatee counties. The update process begins with a forecast of land development over the next 20 years followed by an estimate of travel demand generated by that development, determination of transportation improvement needs based on the demand, prioritization of those needs, and finally, identification of the improvements that will be made based on available funding. Figure 38, Figure 39 and Figure 40 depict the highway, transit and trail projects in the WCF LRTP.

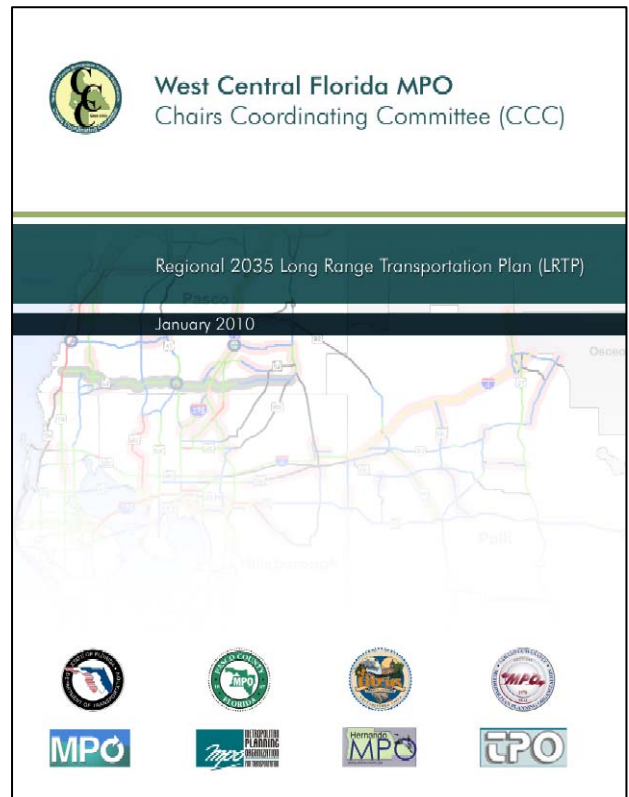


FIGURE 38. CCC 2035 COST AFFORDABLE PLAN NUMBER OF LANES AND IMPROVEMENTS

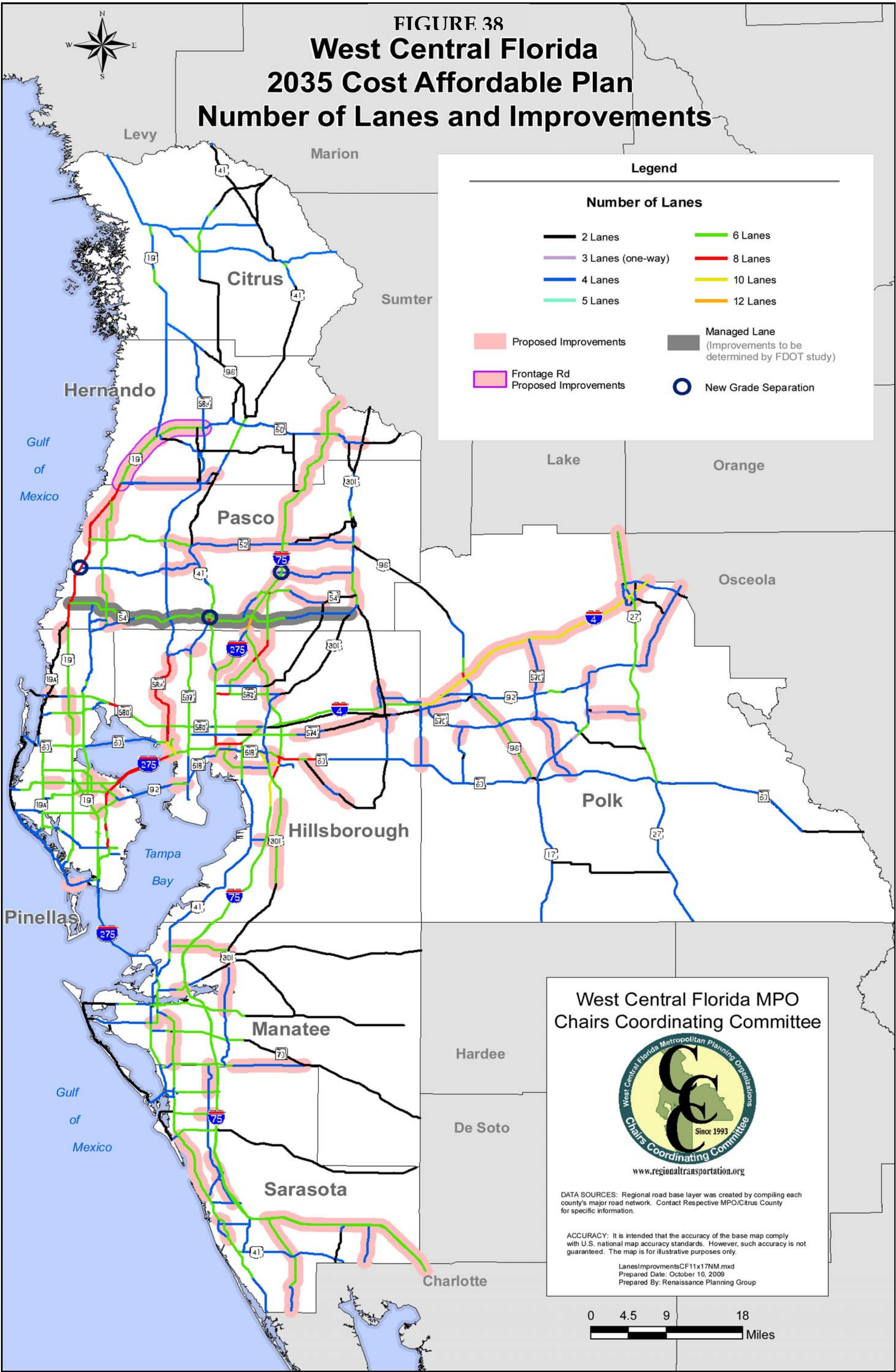
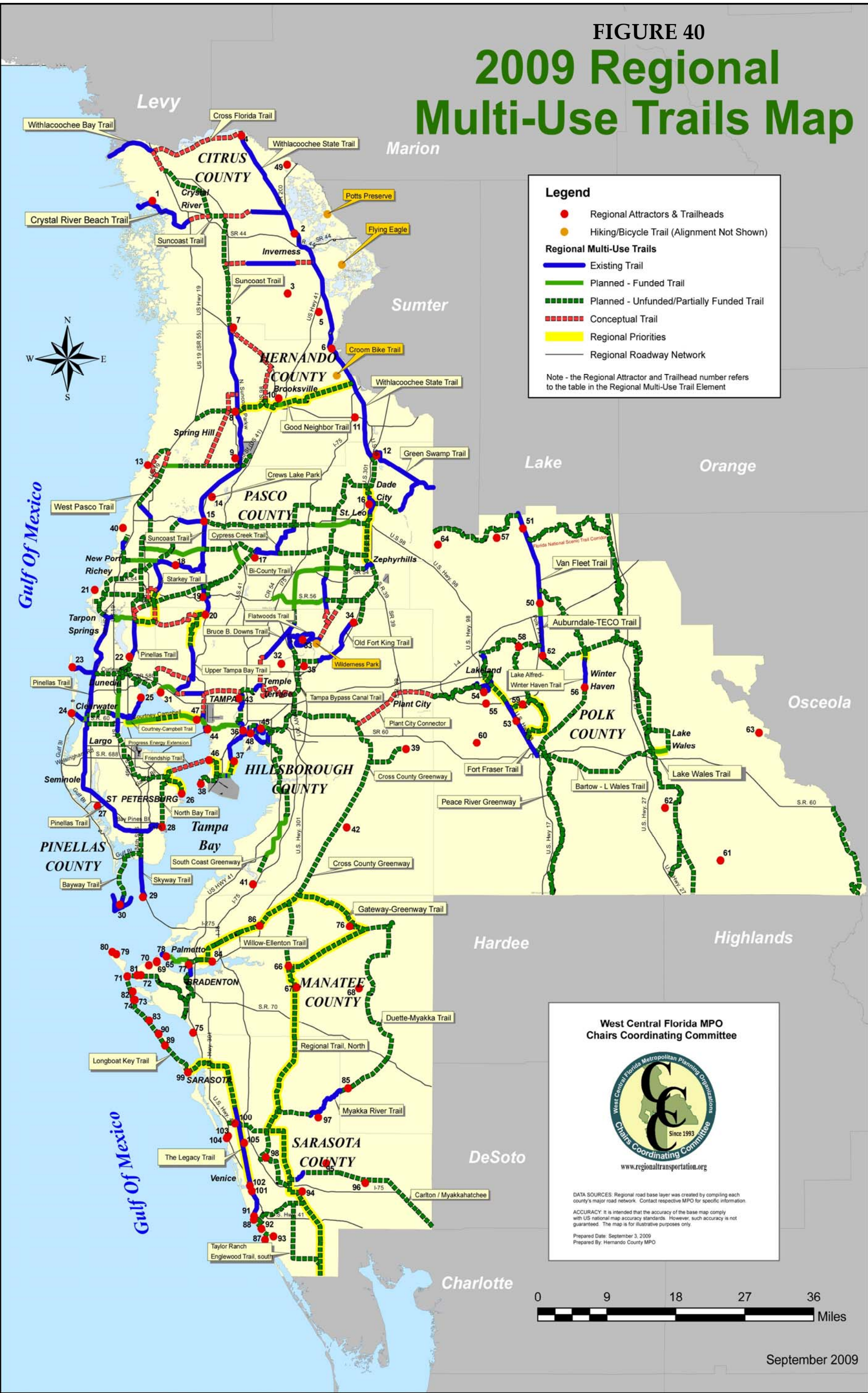


FIGURE 39. CCC 2035 COST AFFORDABLE PLAN TRANSIT IMPROVEMENTS



FIGURE 40. CCC 2009 REGIONAL MULTI-USE TRAILS MAP



16. Glossary

A

ACCESS MANAGEMENT – The regulation and control of vehicular access to public roads to insure the safe and efficient operation of the roadway system.

ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS) – An Intelligent Transportation System process that employs a variety of detectors, cameras, and communication systems to monitor traffic, optimize signal timings on major arterials, and control the flow of traffic.

AMERICANS WITH DISABILITIES ACT (ADA) – Federal legislation outlining specific rights of persons with disabilities, and providing that publicly funded mass transit agencies must provide complementary paratransit service within the fixed-route service area to those persons unable to use fixed-route service because of a disability.

AVERAGE ANNUAL DAILY TRAFFIC (AADT) – The total volume of traffic on a highway segment for one year, divided by the number of days in the year.

B

BACKLOGGED – A term applied to roads that are not designated as constrained, are operating below locally adopted level of service standards, and are not scheduled for construction in the first three years of either the FDOT's Adopted Work Program or the Six-Year Schedule of Improvements within the Pinellas County Capital Improvements Element.

BAY AREA COMMUTER SERVICES (BACS) – A private, non-profit organization funded by FDOT to operate a regional commuter assistance program in areas not served by Transportation Management Initiatives (TMIs) and responsible for developing and promoting alternatives to SOV travel through private businesses, citizens, and public agencies.

BICYCLE ADVISORY COMMITTEE (BAC) – An MPO appointed committee comprised of representatives of various government agencies, law enforcement officials and private citizens interested in bicycle issues. The BAC advises the MPO in the process of planning and developing bicycle facilities and promoting bicycle use in Pinellas County.

BICYCLE FACILITIES – A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically designated for bicycle use.

BIKE LANE – An undivided, paved, signed and marked portion of a roadway, sharing the same right-of-way with motorized vehicles, but designated for the preferential or exclusive use of bicyclists.

BIKEWAY – A generic term for any road, street, path that is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

BUS RAPID TRANSIT (BRT) – A flexible high performance form of rapid transit that combines features of rail systems with those of over-the-road vehicles, and is characterized by being able to operate in special purpose lanes or on city streets. BRT stations are used as a link between the community and the transit system. Service is frequent enough that passengers do not need a schedule. Moreover, service is integrated

with other regional transportation systems, enhancing mobility and promoting intermodal connectivity. ITS technology keeps track of vehicles, provides passengers with updated travel information, and improves safety.

C

CITIZENS ADVISORY COMMITTEE (CAC) – Private citizens representing municipal area and at-large membership appointed by the MPO to review transportation issues and topics that will be considered by the MPO. The CAC forwards recommendations to the MPO regarding these issues and topics.

CHAIRS COORDINATING COMMITTEE (CCC) – A regional coordinating committee that oversees transportation planning activities in the West Central Florida region. The CCC is made up of the chairs from six member MPOs for the counties of Hernando, Hillsborough, Pasco, Pinellas, Polk, and Sarasota-Manatee. Citrus County is represented on the CCC with limited voting. In addition, the Region's FDOT District Secretaries, TBARTA and the Regional Planning Councils are represented on the CCC in a non-voting capacity. The CCC meets quarterly to develop regional solutions to transportation problems and to ensure a consistent planning approach among the six MPOs.

COMMUNITY TRAIL – A local, community based, paved, bicycle/pedestrian corridor designated and restricted to nonmotorized traffic and designed to be built to a width less than 15 feet, and to standards that provide a high degree of safety, efficiency, and comfort for the user while reflecting the unique circumstances of the trail's location.

COMMUNITY TRAFFIC SAFETY TEAM (CTST) - The Pinellas Community Traffic Safety Team meets monthly with the primary goal to reduce the number of traffic fatalities, crashes, and injuries on all roadways in Pinellas County. The Team membership includes representatives from Education, Enforcement, Engineering and Emergency Response agencies.

COMMUNITY TRANSPORTATION COORDINATOR (CTC) – Transportation entity responsible for ensuring that coordinated transportation services are provided to the transportation disadvantaged population in the designated service area. In Pinellas County, the Pinellas County MPO is the community transportation coordinator.

COMMUTER ASSISTANCE PROGRAM – Program designed to encourage commuters to participate in transportation demand management initiatives, including vanpooling, telecommuting, and guaranteed ride home programs.

CONCURRENCY – As used in growth management and in accordance with Rule 9J-5, F.A.C., the requirement that public facilities and services needed to support development shall be available at the time the impacts of such development will occur.

CONCURRENCY MANAGEMENT SYSTEM – The process Pinellas County and local government jurisdictions use to ensure that development orders and permits issued do not result in an unacceptable degradation of the adopted levels of service in their Comprehensive Plans.

CONGESTION MANAGEMENT PROCESS (CMP) – A systematic process designed to emphasize effective management of existing transportation facilities through the use of travel demand and operational strategies.

CONGESTION MITIGATION AND AIR QUALITY (CMAQ) – A program under SAFETEA-LU which provides funding for projects that contribute to the attainment of the National Ambient Air Quality

Standards (NAAQS). Eligible projects include intersection improvements, transit projects, and Transportation Management Organizations/Initiatives.

COORDINATED PUBLIC TRANSIT-HUMAN SERVICES TRANSPORTATION PLAN – A unified, comprehensive strategy for public transportation services delivery that identifies the transportation needs of individuals with disabilities, older adults, and individuals with limited incomes, lays out strategies for meeting these needs, and prioritizes services.

COUNTYWIDE TRUCK ROUTE PLAN – A plan adopted by the MPO that designates roads suitable for travel by heavy trucks and vehicles carrying hazardous materials.

D

DEMAND MANAGEMENT – A set of strategies that promote increased efficiency of the transportation system by reducing the incidence of single occupant vehicle travel.

DESIGNATED OFFICIAL PLANNING AGENCY (DOPA)– Agency designated by the state Commission for the Transportation Disadvantaged to provide planning services to the local transportation disadvantaged service area. In Pinellas County, the Pinellas County MPO is the designated official planning agency.

DEVELOPMENT OF REGIONAL IMPACT (DRI) – Any development which, because of its character, magnitude, or location, would have a substantial effect on the health, safety or welfare of citizens in more than one county. This includes the traffic generation of developments above a certain size.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM – A U.S. Department of Transportation Program that helps small businesses owned and controlled by socially and economically disadvantaged individuals, including minorities and women, to participate in contracting opportunities for federally funded capital improvement projects.

E

EFFICIENT TRANSPORTATION DECISION MAKING (ETDM) – An FDOT initiative intended to improve and streamline the environmental review and permitting process by involving resource protection agencies and concerned communities from the first step of planning. Agency interaction continues throughout the life of the project, leading to better quality decisions and an improved linkage of transportation decisions with social, land use and ecosystem preservation decisions.

F

FEDERAL HIGHWAY ADMINISTRATION (FHWA) METROPOLITAN PLANNING (PL) FUNDS – Source of planning funds allocated in UPWP in accordance with 23 U.S.C., Section 134.

FEDERAL TRANSIT ADMINISTRATION (FTA) SECTION 5303 – Source of transit planning funds allocated in Pinellas County UPWP in accordance with SAFETEA-LU and 49 U.S.C., Chapter 53.

FUNCTIONAL CLASSIFICATION – The assignment of roads into categories according to the character of service they provide in relation to the total road network to assist in determining appropriate regulatory controls and roadway design criteria.

H

HEADWAY – The amount of time between successive arrivals of a bus on a fixed bus route.

HIGH OCCUPANCY VEHICLE (HOV) – Any vehicle carrying two or more passengers. The term usually refers to private vehicles.

HIGHWAY BEAUTIFICATION ACT - Federal legislation passed in 1965 providing for the cleanup and beautification of federal highways.

I

INCIDENT MANAGEMENT SYSTEM – An Intelligent Transportation System monitoring process that provides traffic operators with the tools to allow quick and efficient response to accidents, hazardous spills, and other emergencies. Redundant communications systems are used to link data collection points, transportation operations centers, and travel information portals.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) – Encompass a broad range of communications based information, control and electronics technologies. When integrated into the transportation system infrastructure, and in vehicles themselves, these technologies help monitor and manage traffic flow, reduce congestion, provide alternate routes to travelers, enhance productivity, respond to incidents, adverse weather or other road capacity constricting events.

INTELLIGENT TRANSPORTATION SYSTEMS COMMITTEE - Intelligent Transportation Systems (ITS) were introduced in January 1996 by the United States DOT with a goal of saving every American up to 15 percent in travel time. In 2001, the Pinellas ITS Committee was founded to develop a countywide strategic ITS plan. The 38-member committee consists of law enforcement officers, emergency medical service representatives, convention and visitor representatives, transit representatives, elected public officials, FDOT representatives and traffic engineers.

INTERMODAL – Denotes the seamless movement of people or cargo between transport modes (e.g., rail to heavy truck).

INTERMODAL FACILITIES – Transportation facilities that provide for linkages between travel modes, such as rail or bus stations at airports.

J

JOB ACCESS REVERSE COMMUTE (JARC) – 49 USC Section 5316 a FTA grant program to improve access to transportation services to employment and employment related activities for welfare recipients and eligible low income individuals.

JOINT CITIZENS ADVISORY COMMITTEE (CAC) – Hillsborough, Pasco, Hernando, Sarasota-Manatee, Polk and Pinellas county CAC representatives who meet to discuss and review transportation issues of regional significance.

JOINT PARTICIPATION AGREEMENT (JPA) – A general agreement on the terms of legal joint participation between two or more government agencies and/or public partnerships in planning or implementing a process or capital project, which is subject to the legal terms and constraints agreed upon in the executed document.

L

LEVEL OF SERVICE (LOS) – A qualitative measure of roadway performance expressed in letter grades ranging from A through F, with A roads operating under optimum free-flow conditions and F roads operating under the most deficient conditions characterized by forced-flow traffic with considerable delays.

LIMITED ENGLISH PROFICIENCY (LEP) PLAN – A strategy developed by the MPO to help recognize and assist a person who does not speak, read, write or understand English very well.

LOCAL COORDINATING BOARD (LCB) – A 15 member board comprised of representatives of the MPO Board, social service agencies, PSTA, private transportation providers, School Board, FDOT and citizens responsible for governing the Pinellas County Transportation Disadvantaged Program.

LONG RANGE TRANSPORTATION PLAN (LRTP) – A long-range (20 to 25-year) strategy and capital improvement program developed to guide the effective investment of public funds in transportation facilities that takes into account all modes of transportation including automobile, bicycle, air, rail, surface freight, and pedestrian travel. In air quality maintenance areas, the plan is updated every three years and may be amended as a result of changes in federal, state and local funding, socioeconomic conditions, major improvement studies, congestion management process plans, interchange justification studies and environmental impact studies.

M

METROPOLITAN PLANNING ORGANIZATION ADVISORY COUNCIL (MPOAC) – A statewide organization created by the Florida Legislature to augment the role of the individual MPOs in the cooperative transportation planning process. The MPOAC assists MPOs in carrying out the urbanized area transportation planning process by serving as the principal forum for collective policy decisions.

MPO LEVEL OF SERVICE REPORT – Annual report containing transportation performance and operations data such as average annual daily traffic counts, level of service grades, volume-to-capacity ratios and speed limits.

MPO PUBLIC PARTICIPATION PLAN – Sets forth strategies for generating meaningful public involvement in the course of preparing, developing and implementing MPO plans, programs and projects.

MPO LONG RANGE TRANSPORTATION PLAN (LRTP) - Plan adopted by the Pinellas County MPO which sets forth the future transportation system of Pinellas County, and takes into account all modes of transportation, including automobile, bicycle, air, transit, surface freight, and pedestrian travel.

MPO LONG RANGE TRANSPORTATION PLAN UPDATE – A process of updating the MPO LRTP to account for and analyze changes in transportation patterns, socioeconomic conditions, technology, and policies since the most recent adoption date.

MULTIMODAL – Any planning process, capital improvement, or transportation system which takes into account all available modes of travel including vehicle, mass transit, rail, aviation, bicycle, and pedestrian activity.

N

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) – Minimum air quality standards established by the Clean Air Act Amendments of 1990.

NEW FREEDOM – 49 USC Section 5317 a FTA formula grant program to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the workforce and full participation in society.

P

PARATRANSIT SERVICE – Demand response transportation provided in lieu of fixed-route bus service, including taxi and wheelchair van transportation.

PEDESTRIAN TRANSPORTATION ADVISORY COMMITTEE (PTAC) – MPO appointed committee comprised of representatives of state and local governments and the National Safety Council as well as private citizens. The PTAC assists the MPO in its efforts to serve the needs of pedestrians in Pinellas County.

PINELLAS AREA TRANSPORTATION STUDY (PATS) – Refers to Pinellas County as the area for which the MPO is responsible.

PINELLAS COUNTY GEOGRAPHIC INFORMATION SYSTEM (GIS) – Socioeconomic and land use data utilized for the MPO Long Range Transportation Plan is derived from this GIS which is administered by the Pinellas County Board of County Commissioners Business Technology Services Department.

PINELLAS MOBILITY INITIATIVE COMMITTEE - Formerly, the Major Investment Study Steering Committee, the Pinellas Mobility Initiative (PMI) Committee was formed in 2001 to assist the MPO in identifying long range transit solutions in Pinellas County. The committee consists of nine elected officials, and CAC, TCC, FDOT and transit representatives.

PINELLAS SUNCOAST TRANSIT AUTHORITY (PSTA) – The Pinellas County transit agency.

Q

QUALIFIED TRANSPORTATION FRINGE BENEFITS - Employers may provide employees with transportation benefits, the value of which is exempt from federal taxes up to specified annual limits. Qualified transportation benefits include transit passes, rides in a commuter highway vehicle, or reimbursement for commuting by bicycle.

R

REGIONAL TRANSPORTATION ANALYSIS (RTA) TRAFFIC DEMAND MODEL – State-sponsored modeling program used to forecast traffic volumes and to simulate future travel conditions for personal and commercial vehicles and public transit in FDOT District Seven.

S

SAFE, ACCOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS (SAFETEA-LU) – An Act of the US Congress authorizing federal highway and transit programs for fiscal years 2005 through 2009. SAFETEA-LU establishes numerous new transportation programs and reauthorizes many of the programs created under ISTEA and TEA-21.

SCHOOL TRANSPORTATION SAFETY COMMITTEE - The School Transportation Safety Committee (STSC) was established by the MPO in 1998. The STSC is made up of representatives of the School Board,

Board of County Commissioners and local municipalities. The STSC was formed to consider transportation and safety matters that involve both the School Board and local jurisdictions.

ST. PETERSBURG DOWNTOWN TRANSPORTATION MANAGEMENT ORGANIZATION - Organization formed in 1996 to develop parking management strategies, promote transit services, and assist with and promote ride-share programs in downtown St. Petersburg.

STATE IMPLEMENTATION PLAN (SIP) – A federally approved State Plan that documents emission control strategies for criteria pollutants (such as carbon monoxide, nitrogen dioxide, ozone, lead, particulate matter, and sulfur dioxide), which are applicable in air quality nonattainment and attainment/maintenance areas to protect the air quality in the airshed. State Implementation Plans can be extensive, containing state regulations or other enforceable documents and supporting information such as emission inventories, monitoring networks, and modeling demonstrations.

STRATEGIC INTERMODAL SYSTEM (SIS) – A transportation system comprised of facilities and services of statewide and interregional significance, including appropriate components of all modes.

SURFACE TRANSPORTATION PROGRAM (STP) – One of the key federal funding programs in SAFETEA-LU. It provides flexibility in expenditure of "road" funds for non-motorized and transit modes and for a category of activities known as transportation enhancements. It also broadens the definition of eligible transportation activities to include pedestrian and bicycle facilities and enhancement of community and environmental quality with ten categories of activities. The STP provides flexible funding that may be used by states and localities for projects on any Federal-aid highway, including the National Highway System, bridge projects on any public road, transit capital projects, and intra-city and intercity bus terminals and facilities.

T

TAMPA BAY AREA REGIONAL TRANSPORTATION AUTHORITY (TBARTA) – An authority formed by the legislature in 2007 to study regional transportation opportunities in the Tampa Bay Region.

TAMPA BAY REGION - Area served by the Tampa Bay Regional Planning Council, comprised of Pinellas, Pasco, Hillsborough, Manatee, and Sarasota counties.

TECHNICAL COORDINATING COMMITTEE (TCC) – Over 30 member committee representing local governments, the School Board, PSTA and the Pinellas County Department of Environmental Management that assists the MPO by reviewing transportation plans and programs and making recommendations based on their technical adequacy.

TELECOMMUTING - An arrangement whereby employees work at a location other than the conventional office site, usually from home or an office close to home, which results in the electronic transfer of information rather than movement of people to and from the workplace.

TELEMEDICINE – The use of communications and information technologies for medical consultation and delivery of clinical care.

TRAFFIC ANALYSIS ZONE (TAZ) – A traffic analysis zone is a special area delineated by state and/or metropolitan planning organizations for compiling and tabulating traffic-related land use and socioeconomic data- used as planning assumptions to forecast travel demand. Traffic analysis zones are also used as the origin and/or destination for trip making. A TAZ usually consists of one or more Census blocks, block groups, or Census tracts.

TRANSIT DEVELOPMENT PLAN (TDP) – PSTA’s planning, development and operational guidance document required for Florida Public Transit Block Grant funding. The TDP is used in creating the mass transit elements of the MPO Long Range Transportation Plan, the TIP and the FDOT Work Program.

TRANSPORTATION DEMAND MANAGEMENT (TDM) – Using various techniques, such as vanpooling, increasing transit use, and telecommuting, to reduce the demand for SOV travel and vehicle-miles traveled (VMT).

TRANSPORTATION DISADVANTAGED (TD)– 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 on others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities. These persons also include children who are handicapped or high risk or at risk as defined in Ch. 411, F.S.

TRANSPORTATION DISADVANTAGED (TD) PROGRAM – Program created by Ch. 427, F.S., to coordinate and provide funding for transportation services to transportation disadvantaged persons.

TRANSPORTATION ENHANCEMENT FUNDING PROGRAM – A federal funding program under SAFETEA-LU Sections 1113, 1122 and 6003 that apportions a 10% set-aside of the Surface Transportation Funding Program to transportation enhancements such as provision of bicycle and pedestrian facilities, provision of safety and educational activities for pedestrian and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs, land rehabilitation and operation of historic transportation buildings, preservation of abandoned railway corridors, control and removal of outdoor advertisement, archeological planning and research, environmental mitigation, and environmental museums.

TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA 21) - Federal legislation that provided funding for transportation improvements, including roads, bicycle/pedestrian facilities, and mass transit systems and that set forth requirements for MPOs and other agencies utilizing these funds for planning or construction activities. TEA 21 replaced the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). TEA-21 was replaced with the Safe, Accountable, Flexible, Efficient Transportation Equity Act-A Legacy for Users (SAFETEA-LU) in 2005.

TRANSPORTATION IMPACT FEE – An assessment levied by local governments against land development activity to help mitigate its impact to the existing transportation infrastructure by funding transportation improvements required to provide for public services and facilities needed to service the proposed new growth in land development.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) – A five-year program of transportation improvements adopted annually by the MPO that incorporates state and federal work programs along with the capital improvement programs/elements of local governments within the MPO’s jurisdiction.

TRANSPORTATION MANAGEMENT AREA (TMA) – Areas subject to special requirements under SAFETEA-LU that benefit from preferential treatment with regard to air quality needs and local authority to select transportation projects. Any urban area over 200,000 in population is automatically a TMA, which subjects it to additional planning requirements but also entitles it to funds earmarked for large urbanized areas under the Surface Transportation Program.

TRANSPORTATION MANAGEMENT INITIATIVE (TMI) – Organization formed to encourage and coordinate the participation of local businesses in transportation demand management activities. These agencies are also known as transportation management organizations (TMO).

TRANSPORTATION SYSTEM MANAGEMENT (TSM) – A program involving the implementation of traffic control measures, such as HOV lanes, signal timing adjustments, median closings, and access management strategies to increase the operating efficiency of the traffic circulation system.

TRI COUNTY ACCESS PLAN (TCAP) – The locally coordinated public transit human service transportation plan for the urban area which includes Pinellas, Pasco and Hillsborough counties. Projects selected for JARC and New Freedom funding must be derived from this plan.

TRIP ATTRACTION VARIABLES - Based on employment conditions, trip attraction variables are used by the Regional Transportation Analysis traffic demand model to simulate the attraction of vehicle trips to destination points in Pinellas County.

TRIP PRODUCTION VARIABLES - Based on land use conditions and population statistics, trip production variables are used by the Regional Transportation Analysis traffic demand model to simulate the generation of vehicle trips from points of origin in Pinellas County.

V

VANPOOL – A group of six or more passengers sharing a prearranged ride to and from work in a van.

W

WEST CENTRAL FLORIDA AIR QUALITY COMMITTEE (WCFAQCC) – Formed to provide a continuing forum for the many public and private agencies of the region that deal with air quality.

Z

ZONAL DATA – Trip simulation data that is organized according to individual traffic analysis zones for the Regional Transportation Analysis traffic demand model.