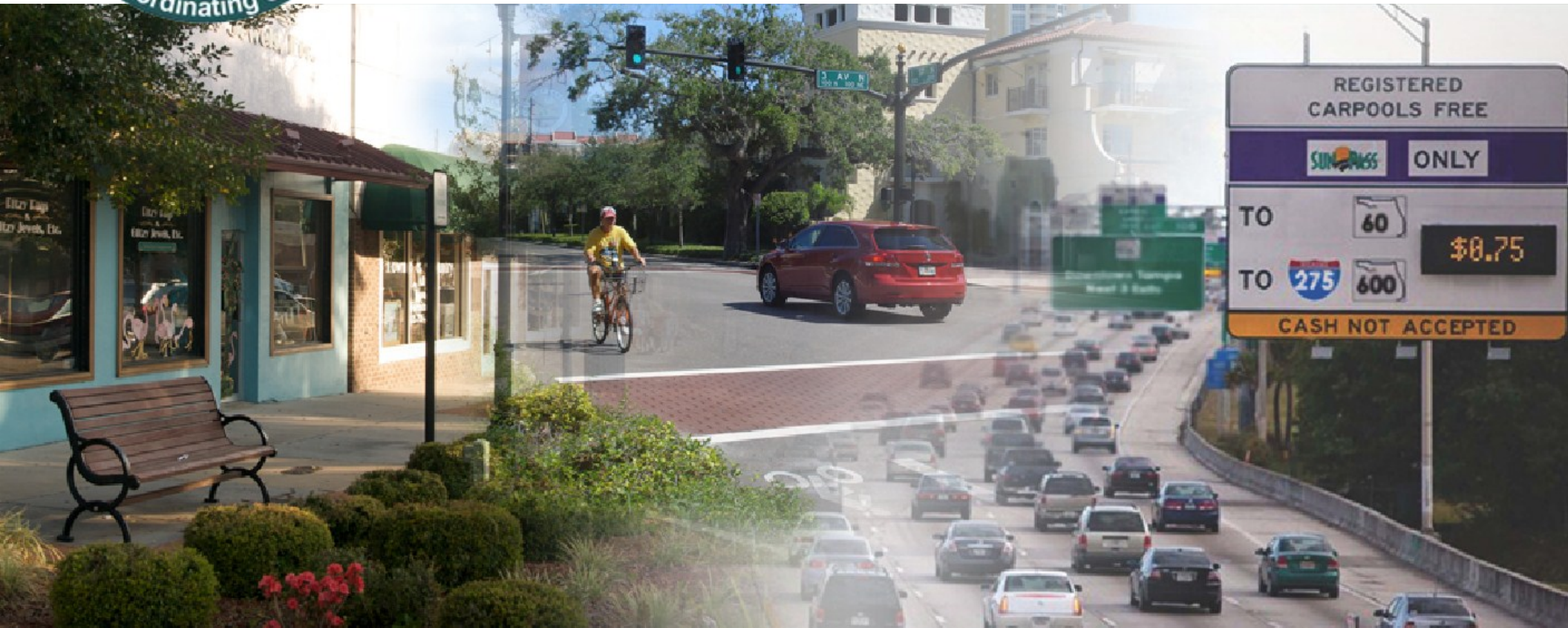




WEST CENTRAL FLORIDA METROPOLITAN PLANNING ORGANIZATIONS  
CHAIRS COORDINATING COMMITTEE

# Regional Congestion Management Process

## State of the System 2012



August 2012

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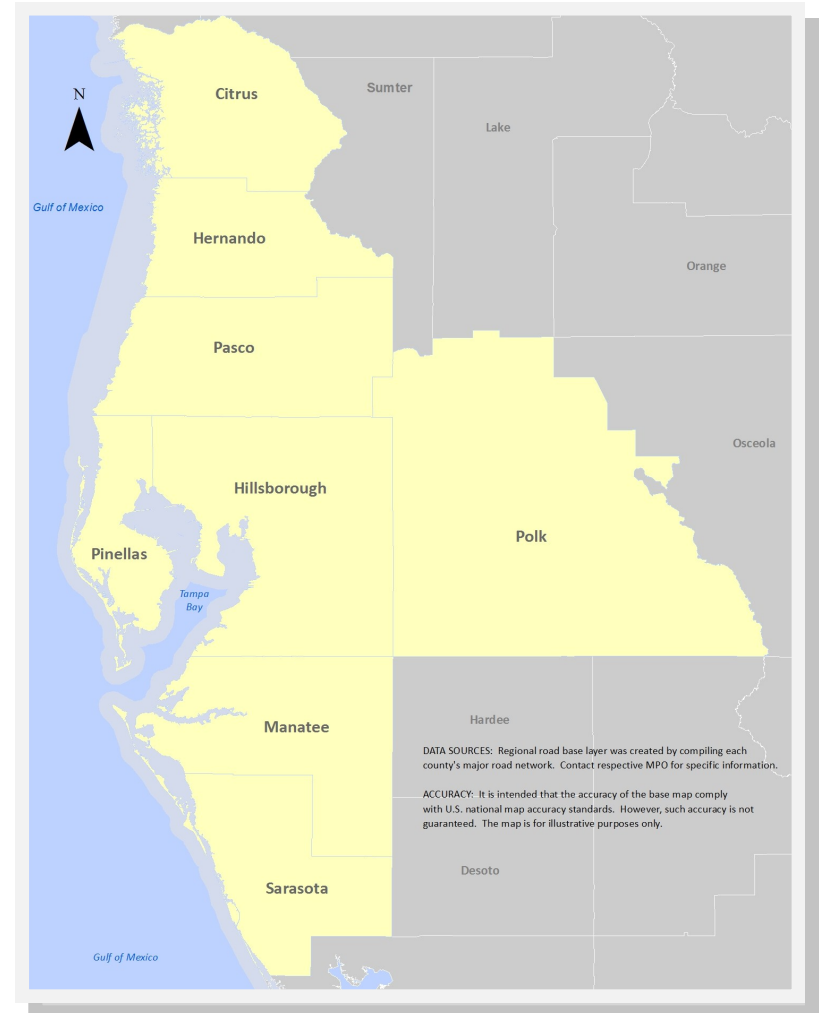
# Section 1: Introduction to the Regional CMP

## Introduction

The Regional Congestion Management Process (CMP) is a systematic and regionally-accepted approach for managing congestion that provides accurate, current information on transportation system performance and assesses alternative strategies for congestion management that meet state and regional needs. The CMP is an essential part of the metropolitan planning process. The eight MPOs that compose the region of the West Central Florida Chairs Coordinating Committee (CCC) are required by the federal government to implement a Regional CMP to address congestion of regional significance in the Tampa Bay region. This includes the counties of Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas, Polk, and Sarasota—depicted in Map 1-1.

A functional CMP provides substantial benefits to the public, including improved travel conditions through the use of low-cost improvements or strategies that can be implemented within a relatively short timeframe (5–10 years) compared to more traditional capacity improvements, which can take more than 10 years to implement and cost significantly more (such as adding additional travel lanes). Projects identified through the CMP process also may be added to future updates of the Long Range Transportation Plan (LRTP) should they require more time to implement.

The “CCC Regional CMP Policy & Procedures Handbook” sets the foundation for this State of the System Report. The Handbook presents the goals and objectives of the Regional CMP, defines the regional network, and identifies the regional performance measures. This document—the State of the System Report—will present the current state of the regional system as part of the CMP. The report overview is presented on the following page.



**Map 1-1: Tampa Bay Region—Area of Application**

# What's in this document?

## Organization of Report

This report presents the state of the regional system as part of the Regional Congestion Management Process. The purpose of this report is to annually:

1. Report the performance of the regional transportation system.
2. Identify congested corridors.
3. Identify real projects/programs to recommend for implementation to help mitigate congestion.

This State of the System Report is organized as follows:

**Section 1, Introduction:** Provides an introduction to the to the CMP and an overview of this document.

**Section 2, Goals & Objectives:** Presents the regional Goals and Objectives of the CMP.

**Section 3, Regional Performance:** Summarizes the state of the system relative to the performance measures identified in the “CCC Regional CMP Policy & Procedures Handbook.”

**Section 4, Regional Coordination:** This section presents the regional level policy issues that will be addressed.

**Section 5, Congested Corridor Review:** Identifies the congested corridors and presents the specific corridors that will be studied as part of this CMP.

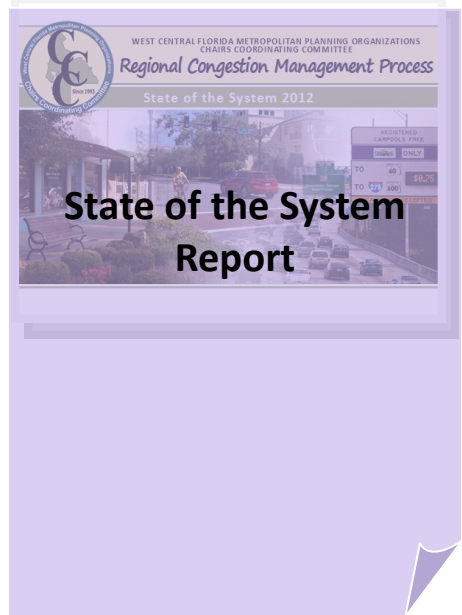
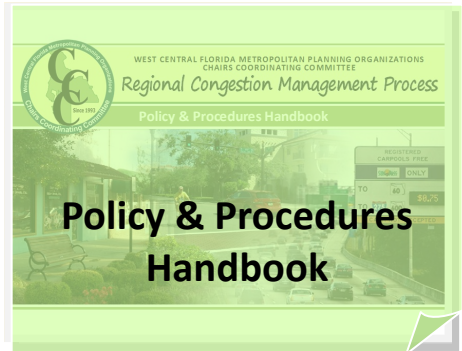
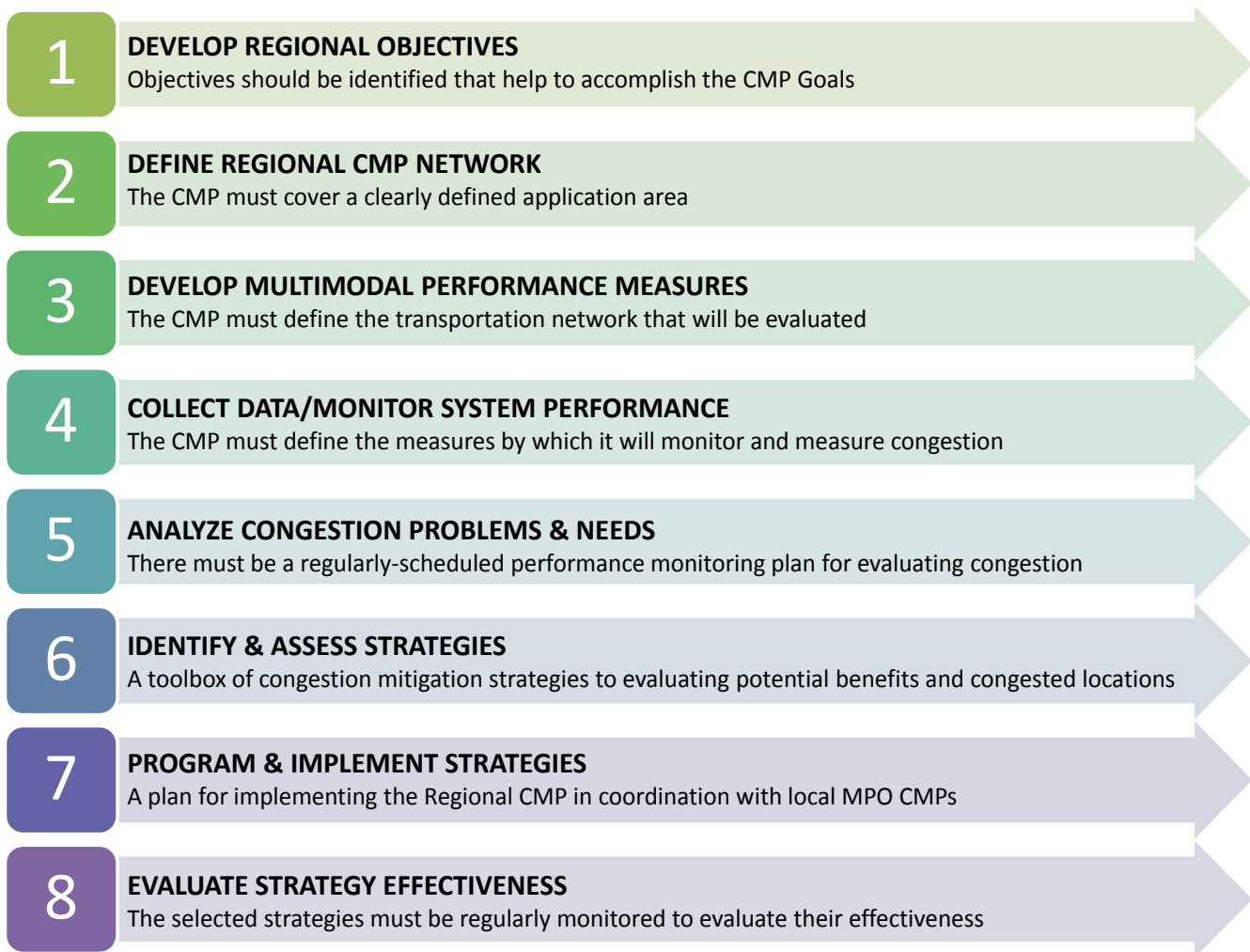
## The Eight-Step Process

As presented earlier in this section, the intent of the CMP is to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system.

Under the federal guidelines, the CMP should be developed as an eight-step process.

**Figure 1-1** illustrates the federal eight-step congestion management process. Steps 1–3 took place as part of the development of the Policy & Procedures Handbook, and steps 4–8 will be provided in this document.





**Figure 1-1: Federal Eight-Step CMP Process**





# Chapter 2: Regional Goals & Objectives

## Introduction

A series of CMP goals and objectives was developed to guide the process of monitoring congestion and improving the mobility of persons and goods in the region. These were compiled based on CMP goals and objectives used by each of the member MPOs as well as other regions in Florida and other regions with similar characteristics across the nation.

The related goals and objectives are presented to the right. They will be used as a tool for selecting strategies and performance measures for strategy monitoring and evaluation and are consistent with the goals and objectives of the CCC's Regional Long Range Transportation Plan, which was updated and adopted in 2009.

### Goal #1: Support the Region's Economy

- Objective 1-A Minimize Congestion
- Objective 1-B Optimize Goods Movement
- Objective 1-C Improve Access to Jobs

### Goal #2: Support the Region's Quality of Life

- Objective 2-A Improve the Safety of the Transportation Facilities
- Objective 2-B Expand Mode Choices



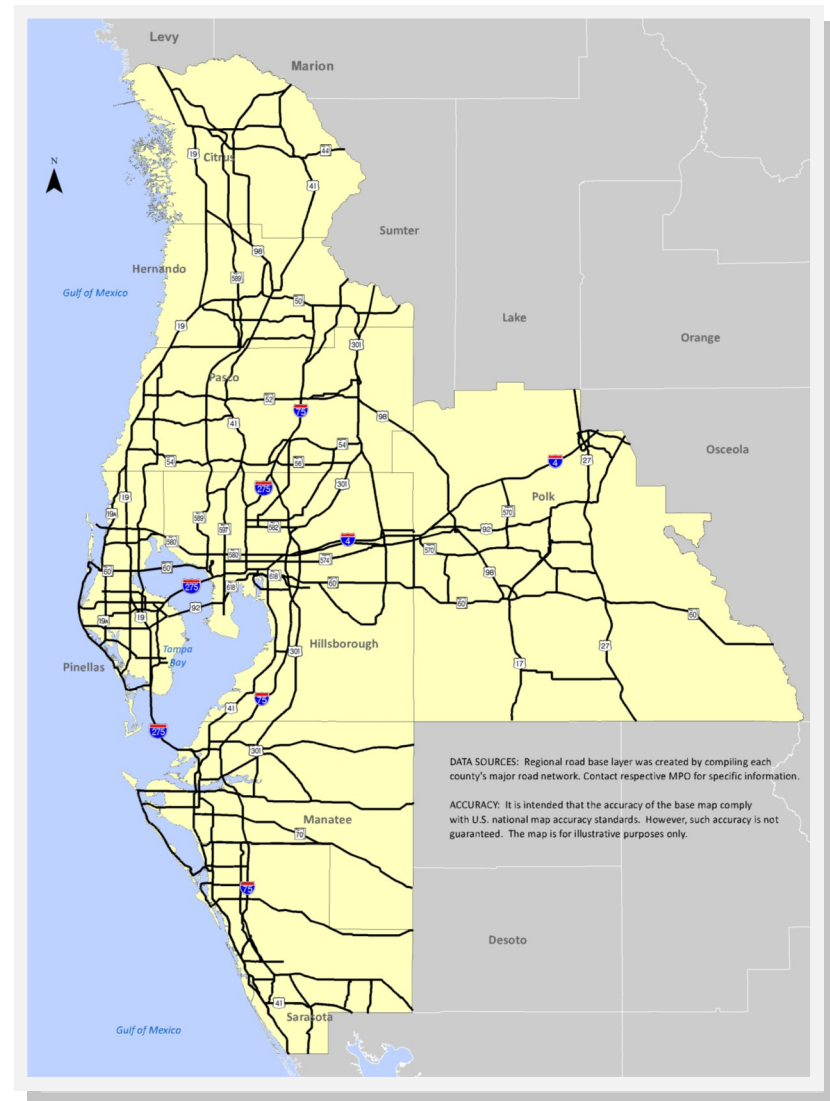


# Chapter 3: Regional Performance

## Introduction

Performance measures are used as tools to measure and monitor the effectiveness of the transportation system in the CMP. They assist in identifying and tracking the extent and severity of congestion. They are also used to evaluate the effectiveness of the implemented strategies. However, these measures are dependent upon the transportation network and the availability of data. According to “An interim Guidebook on the Congestion Management Process in Metropolitan Transportation Planning,” page 3-3, the Federal Highway Administration (FHWA) defines the following characteristics of good performance measures:

- Clarity and simplicity (e.g., simple to present and interpret, unambiguous, quantifiable units, professional credibility)
- Descriptive and predictive ability (e.g., describes existing conditions, can be used to identify problems and to predict changes)
- Analysis capability (e.g., can be calculated easily and with existing field data, techniques available for estimating the measures, achieves consistent results)
- Accuracy and precision (e.g. sensitive to significant changes in assumptions, precision is consistent with planning applications and with an operational analysis)
- Flexibility (e.g., applies to multiple modes, meaningful at varying scales and settings)



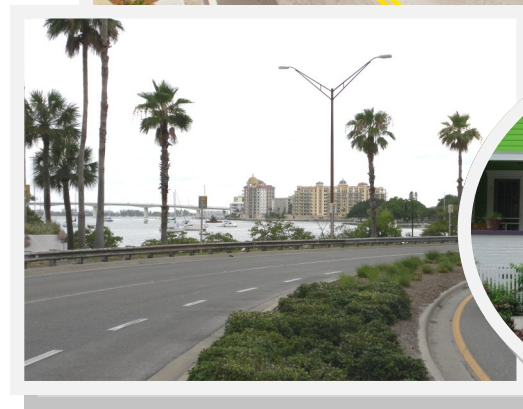
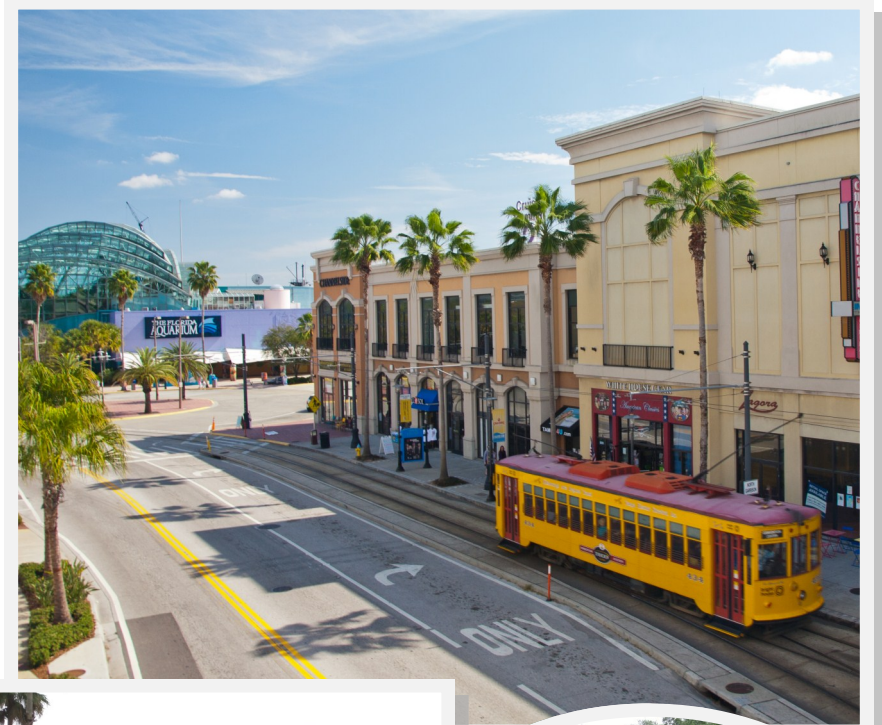
**Map 3-1: Tampa Bay Regional Road Network (2015)**  
The area depicted in this map displays the currently-adopted regional roadway network (through 2015).



# Regional Performance

## Peer Regions

In accordance with the CCC Regional CMP *Policy & Procedures Manual*, a list of peer regions was identified prior to undertaking the performance evaluation process. This section will compare the performance of the Tampa Bay region with eight peer regions across the nation. The peer regions are presented in **Figure 3-1**. They were selected by the Tampa Bay Partnership as peer regions with which the Tampa Bay region competes. In addition, Phoenix, Salt Lake City and Orlando were selected as recommendations by CCC staff. **Figure 3-1** presents the eight peer regions and each peer’s specific jurisdictional composition. Regions are composed of one or more Metropolitan Statistical Area as defined by the United States Census Bureau. **Figure 3-2** presents five performance measure categories and key statements summarizing significant patterns or trends in the data. The full regional demographic comparisons are presented in **Figure 3-3**.



# Regional Performance

## PEER REGIONS



Figure 3-1: Peer Regions in the United States

The following Metropolitan Statistical Areas (MSAs) are defined by the U.S. Census Bureau. This report aggregated MSA-level demographic information into regional peers composed of one or more MSA. **1. Tampa Bay Region:** Tampa-St. Petersburg-Clearwater, Lakeland-Winter Haven, North Port-Bradenton-Sarasota MSAs. Counties: Hillsborough, Pinellas, Pasco, Hernando, Sarasota, Manatee, Polk. **2. Atlanta Region:** Atlanta-Sandy Springs-Marietta MSA. Counties: Fulton, DeKalb, Gwinnett, Cobb, Clayton, Cherokee, Douglas, Fayette, Henry, Rockdale, Coweta, Paulding, Forsyth, Bartow. **3. Charlotte Region:** Charlotte-Gastonia-Rock Hill MSA. Counties: Anson, Cabarrus, Gaston, York, Mecklenburg, Union. **4. Dallas Region:** Dallas-Ft. Worth-Arlington MSA. Counties: Dallas, Collin, Delta, Denton, Ellis, Hunt, Johnson, Kaufman, Palo Pinto, Wise, Rockwall, Tarrant, Parker. **5. Jacksonville Region:** Jacksonville MSA. Counties: Duval, Clay, St. Johns, Nassau, Baker. **6. Orlando Region:** Orlando-Kissimmee-Sanford MSA. Counties: Lake, Orange, Osceola, Seminole. **7. Phoenix Region:** Phoenix-Mesa-Glendale MSA. Counties: Maricopa, Pinal. **8. Raleigh-Durham Region:** Raleigh-Cary and Durham-Chapel Hill MSAs. Counties: Chatham, Franklin, Harnett, Wake, Johnston, Orange, Person, Durham. **9. Salt Lake City Region:** Salt Lake City, Ogden-Clearfield, Brigham City, Heber MSAs. Counties: Salt Lake, Summit, Tooele.



# Regional Performance Summary

The table below summarized the data presented in detail in this section. Full descriptions of each data item are contained on the following pages.

Figure 3-2: Regional Performance Summary Table

## DATA SUMMARY



### Demographics

An evaluation of demographic information in eight peer regions.

- Tampa Bay\* has the **highest median age** of any peer.
- Tampa Bay\* has **twice as many older seniors** (80+ years) of any peer region.
- Today, Tampa Bay's\* population is **five times** greater than in 1950.



### Roadway

Roadway factors directly impact congestion and its effect on residents and visitors day-to-day.

- Tampa Bay\* is one of the **top 20 most congested metro areas** in the U.S.
- Tampa Bay\* is the **second most congested metro area in Florida**, after the Miami MSA.
- Tampa Bay\* is the **6th most congested metro area** in the U.S. by lane miles.
- Congestion costs Tampa Bay\* commuters almost **\$670 Million annually**.



### Goods Movement

Truck congestion cost.

- Truck congestion in Tampa Bay\* alone costs this region over **\$210 Million** each year - these extra costs are then passed on to consumers with the price of goods in the marketplace.



### Transit

Transit provides mobility options and alleviates congestion by reducing the number of vehicles travelling.

- Tampa Bay\* ranks **#4 for annual passenger trips** of the peers.
- Tampa Bay\* has **the longest bus transit service frequency—approximately 30 minutes**.
- Tampa Bay\* has **more transit vehicles operating during rush hour of any peer region**, with the exception of Dallas and Atlanta.
- **Only 16% of jobs in Tampa are accessible via transit**—the lowest among 8 peer cities.



### Safety

Safety plays a key role in congestion mitigation. Safety issues resulting in traffic crashes, account for much of the non-recurring congestion. Crash mitigation strategies is a key step in reducing congestion.



- Hillsborough County has **the highest overall traffic fatality rate of all large U.S. counties**.
- Tampa Bay\* has the **highest pedestrian fatality rate in the U.S.**
- **Hillsborough, Pinellas, Pasco and Polk** counties all fall within the top 10 Florida counties with a **severe crash safety problem**.
- 547 fatalities occurred in the Tampa Bay Region\*\* in 2010— **more fatalities than 25 individual states**.

\*Tampa Bay is defined by the Tampa-St. Petersburg-Clearwater MSA. \*\*The Tampa Bay Region includes Tampa Bay as well as the Sarasota-Bradenton and Lakeland-Winter Haven MSAs.



# Regional Performance Summary

## KEY POINTS

The Tampa Bay region has an overrepresented senior and middle-aged population. The mobility of seniors is a growing concern, especially in Tampa Bay. Future transportation decisions should focus on improving transportation infrastructure that supports the mobility of seniors, specifically pedestrian and transit infrastructure.

The Tampa Bay region experiences an unusually high degree of congestion, which impacts the regional economy. A sustainable long-term approach to congestion relief includes coordinated land-use policies that support multimodal transportation (transit and pedestrian-oriented development). Future policy should promote new development that creates a mix of housing options closer to employment centers; this could be in the form of urban redevelopment or infill development. New development should also support the mobility of seniors.

The efficiency of freight and goods movement directly impacts the regional economy. Increased congestion drives up the price of goods and services for consumers. However, freight mobility should not work against the mobility safety for other road users, including pedestrians and bicyclists.

The Tampa Bay region is served by eight different service providers—more than any of the peer regions. Transit service in Tampa Bay is heavily relied upon during rush hour by commuters. Dispersed land development patterns make it difficult to provide comprehensive, convenient, and productive transit service. Future policy should encourage more compact development patterns that support efficient mobility. Future service changes should increase service frequencies along congested corridors and in pedestrian-oriented areas and areas with the most jobs that can generate the highest ridership.

The Tampa Bay region has some of the worst transportation safety statistics in the nation, which directly impacts the quality of life in the region. Future policy should reorient the role of safety in transportation planning from a reactive to a proactive approach. Safety issues should not simply be viewed as liabilities, but as quality of life issues that reflect on the surrounding community. New transportation facilities should consider how to support a safer transportation system beyond nominal safety standards. Context-sensitive transportation solutions should be used to ensure that the appropriate type of facility is achieved for the surrounding existing and future planned land uses—this is especially important in urban and suburban areas. All transportation improvements should support a vision for safe, efficient and convenient mobility for motorists, bicyclists and pedestrians.



# Regional Performance Summary

The table below summarized the data presented in detail in this section. Full descriptions of each data item are contained on the following pages.

Figure 3-3: Regional Performance: Relationship to Goals

## DATA SUMMARY

<b>GOAL #1:</b> SUPPORT THE REGION'S ECONOMY	 <b>Objective 1-A: Minimize Congestion</b>	<ul style="list-style-type: none"> <li>Tampa Bay* is one of the <b>top 20 most congested metro areas</b> in the U.S.</li> <li>Tampa Bay* is the <b>2nd most congested metro area in Florida</b>.</li> <li>Tampa Bay* is the <b>6th most congested metro area</b> in the U.S. by lane miles.</li> </ul>
	 <b>Objective 1-B: Optimize Goods Movement</b>	<ul style="list-style-type: none"> <li>Truck congestion in Tampa Bay* alone costs this region over <b>\$210 Million</b> each year - these extra costs are then passed on to consumers in the marketplace.</li> </ul>
	 <b>Objective 1-C: Improve Access to Jobs</b>	<ul style="list-style-type: none"> <li>Congestion costs each Tampa Bay* commuter almost <b>\$670 annually</b>.</li> <li><b>Only 16% of jobs in Tampa are accessible via transit—the lowest among 8 peer cities.</b></li> </ul>
<b>GOAL #2:</b> SUPPORT THE REGION'S QUALITY OF LIFE	 <b>Objective 2-A: Improve the Safety of Transportation Facilities</b>	<ul style="list-style-type: none"> <li>Hillsborough County has the <b>highest overall traffic fatality rate of all large U.S. counties</b>.</li> <li>Tampa Bay* has the <b>highest pedestrian fatality rate in the U.S.</b></li> <li><b>Hillsborough, Pinellas, Pasco and Polk</b> counties all fall within the 10 worst Florida counties with a <b>severe crash safety problem</b>.</li> <li>547 fatalities occurred in the Tampa Bay Region* in 2010— <b>more fatalities than 25 individual states</b>.</li> </ul>
	 <b>Objective 2-B: Expand Mode Choices</b>	<ul style="list-style-type: none"> <li>Among 8 peer metro areas, Tampa bay is in the middle for the number of people using transit and the amount of transit service provided – about 33 million transit trips and 1.7 million hours of bus service per year.</li> <li>Tampa Bay* has the <b>highest median age</b> and <b>twice as many older seniors (80+ years)</b> of any peer region.</li> <li>Tampa Bay* has the <b>longest bus service frequency—nearly 30 minutes between buses</b>.</li> </ul>

\*Tampa Bay is defined by the Tampa-St. Petersburg-Clearwater MSA. \*\*The Tampa Bay Region includes Tampa Bay as well as the Sarasota-Bradenton and Lakeland-Winter Haven MSAs.





## Regional Performance Summary

### POLICY CONSIDERATIONS

The Tampa Bay region experiences a high degree of congestion, which impacts the regional economy. **Future policy should promote development that creates a mix of housing options closer to employment centers.** A sustainable long-term approach to congestion relief includes coordinated land-use policies that support multimodal transportation (transit and pedestrian oriented development) as well as increases in automobile capacity.

The efficiency of freight and goods movement directly impacts the regional economy. Increased congestion drives up the price of goods and services for consumers. However, freight mobility should not work against the mobility safety for other road users, including pedestrians and bicyclists. New policy should consider a balanced approach between efficient freight mobility and the safety and convenience of pedestrians, bicyclists and motorcycles.

The dispersed development patterns that characterize the Tampa Bay region are prevalent in our heavy everyday reliance on transportation. Congestion in the Tampa Bay region poses a threat to quality of life because the majority of the region's population does not live or work within a walkable distance of a convenient transit route, making automobile travel the only option. **Future policy should promote new development that creates a mix of housing options closer to employment centers.**

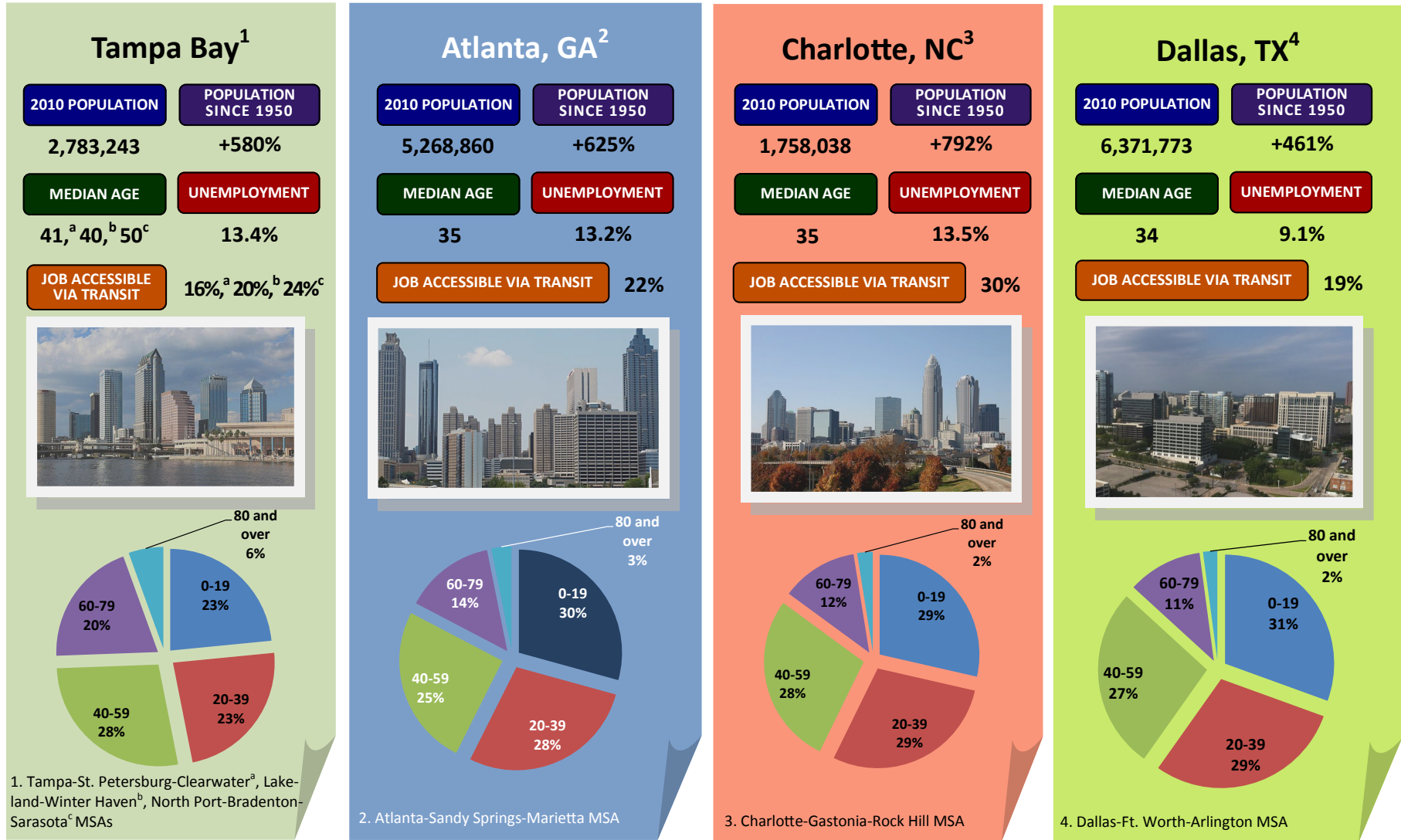
The Tampa Bay region has some of the worst transportation safety statistics in the nation, which directly impacts the quality of life in the region. Future policy should reorient the role of safety in transportation planning from a reactive to a proactive approach. Safety issues should not simply be viewed as liabilities, but as quality of life issues that reflect on the surrounding community. New transportation facilities should consider how to support a safer transportation system beyond nominal safety standards. **Context-sensitive transportation solutions should be used to ensure that the appropriate type of facility is achieved for the surrounding existing and future planned land uses—this is especially important in urban and suburban areas. All transportation improvements should support a vision for safe, efficient and convenient mobility for motorists, bicyclists and pedestrians.**

**Tampa Bay's population trends suggest the mobility of seniors will be increasingly important in the years to come. Future transportation decisions should focus on improving transportation infrastructure that supports the mobility of seniors, specifically pedestrian infrastructure and transit service.** Dispersed land development patterns make it challenging to provide comprehensive, convenient, and productive transit service to all areas of the region. **Future policy should encourage more compact development patterns that support efficient mobility. Future service changes should increase service frequencies along congested corridors and in pedestrian-oriented areas that can generate the highest ridership.**



# Regional Performance

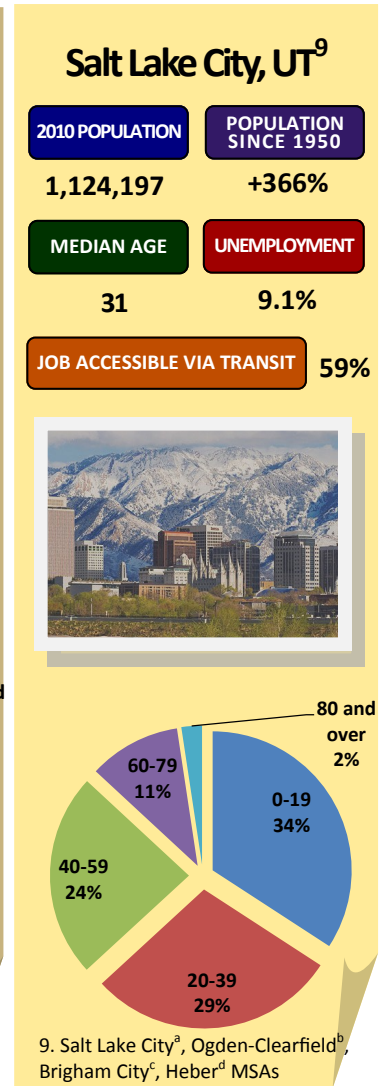
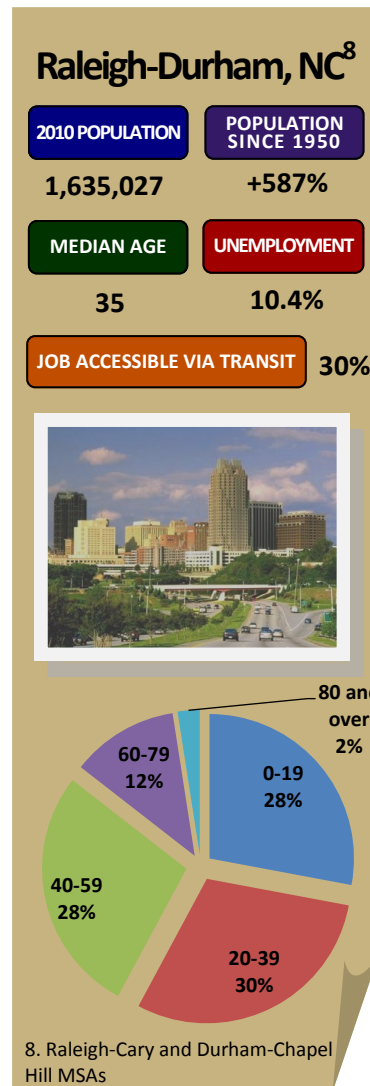
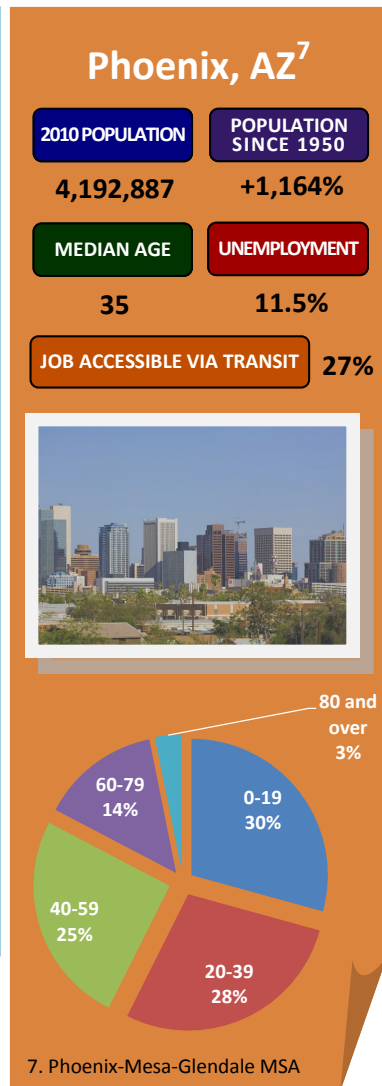
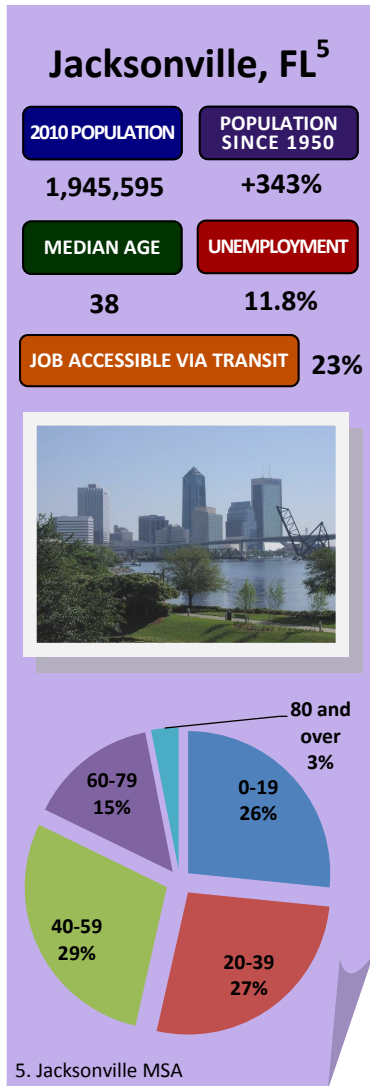
Figure 3-4: Peer Region Performance Summary (2010)



Note: Each region is composed of one or more MSA. Full definitions of each region can be found on page 3-3.



# Regional Performance



# Regional Performance

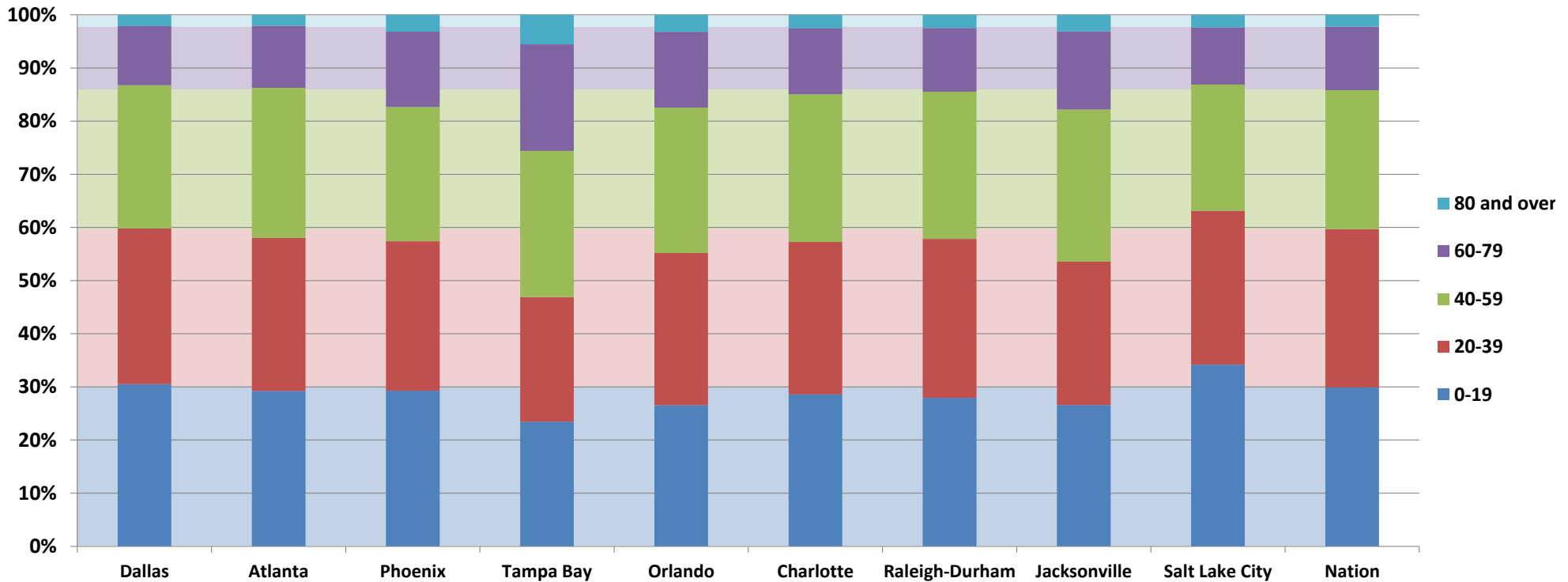
## PEER REGION DEMOGRAPHICS: AGE

An important consideration for congestion and its future impacts are the demographic characteristics of the region. The Tampa Bay region was broken down by age group to examine differences across the peer regions in Figure 3-5 shown below.

*How old are the residents of Tampa Bay?*

- *Over half of Tampa Bay residents are over the age of 40.*
- *Tampa Bay has twice as many older seniors (80 years or older) of all the peer regions.*
- *Median ages for Tampa Bay MSAs range from 41 to 50 years old.*

Figure 3-5: Demographic Breakdown by Age Group (2010)—Peer Regions and Nation



Source: U.S. Census Bureau



# Regional Performance

## CONGESTION

The eight counties comprising the West Central Florida region area served by three MSAs designated by the U.S. Census Bureau: **Tampa-St. Petersburg-Clearwater, Sarasota-Bradenton, and Lakeland-Winter Haven**. Tampa-St. Petersburg-Clearwater and Sarasota-Bradenton were included in an analysis conducted by the Texas Transportation Institute (TTI), and the results of their findings are presented here. Both of these MSAs fall within the top 25 congested metropolitan areas in the U.S., with Tampa-St. Petersburg ranked #12 and Sarasota-Bradenton ranked #17. Two peer regions also fall within the Top 25 Congested Metro Areas; Atlanta and Phoenix rank slightly higher than the Tampa-St. Petersburg MSA, and Dallas ranks just below Sarasota-Bradenton.

Source: *Urban Mobility Report*, Texas Transportation Institute, 2010

### FULFILLS OBJECTIVES

- ✓ 1-A: Minimize Congestion
- ✓ 1-B: Optimize Goods Movement
- ✓ 1-C: Improve Access to Jobs
- ✓ 2-A: Improve Transportation Safety
- 2-B: Expand Mode Choices

*How congested is Tampa Bay?*

*The Tampa Bay region stands alongside Atlanta, Dallas, Houston, and Chicago as one of the top 20 most congested metro areas in the U.S.*

*Tampa Bay is the second most congested metro area in Florida, after Miami.*

Figure 3-6: Peer Regions by Congestion Index (2010)

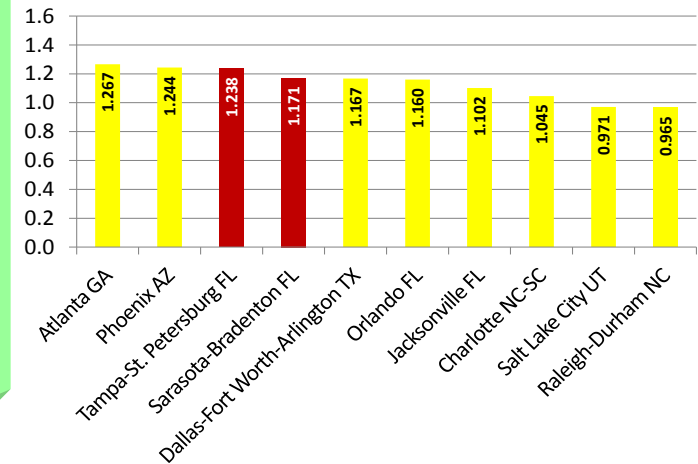
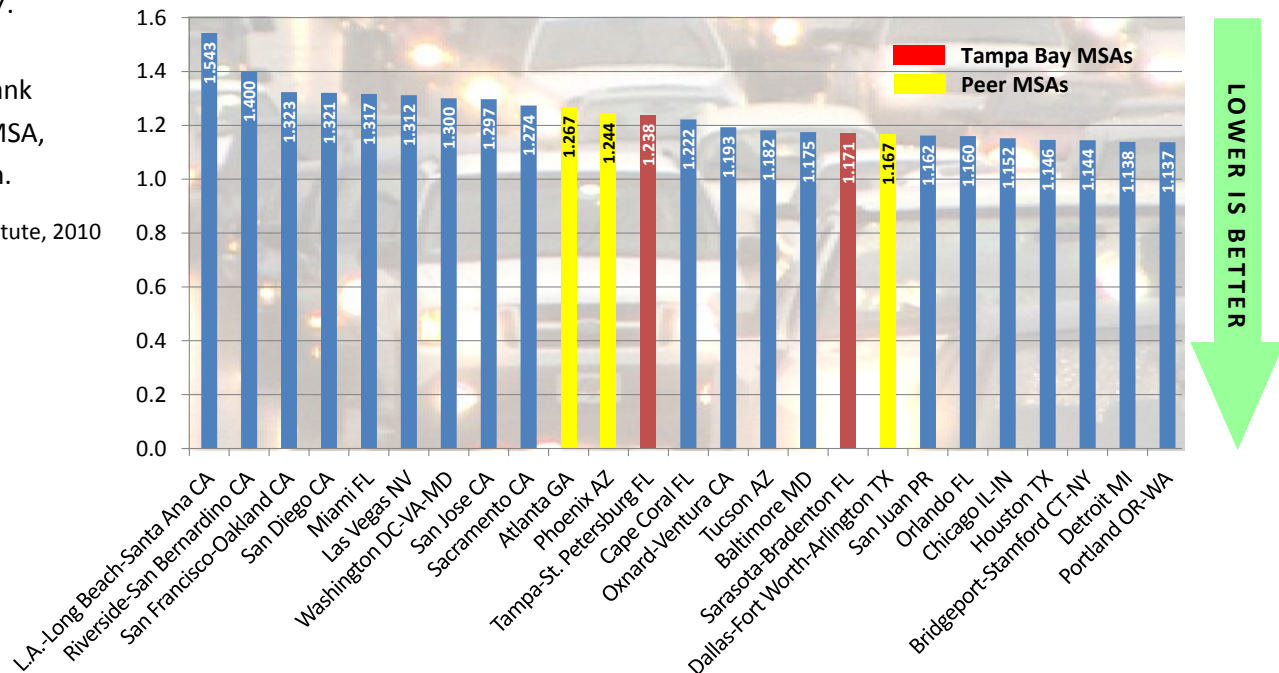


Figure 3-7: Top 25 Congested Metro Areas by Congestion Index (2010)



# Regional Performance

## CONGESTION: SYSTEM IMPACTS

Level of congestion can be calculated for the total number of lane miles of the transportation system and also in terms of its impact on vehicle miles traveled during the busiest time of the day. MSAs within the Tampa Bay region fall within the top 30 MSAs with the highest percentage of congestion during peak hours. Tampa-St. Petersburg-Clearwater is ranked #19, and Sarasota-Bradenton is ranked #26, both well above the national average of 54%. The region's MSAs also fall within the top 20 MSAs with the highest congested percentage of lane miles. In fact, Tampa-St. Petersburg ranks #6, and Sarasota-Bradenton ranks #19, well above the national average of 43%.

### How congested is Tampa Bay?

- In the Tampa-St. Petersburg-Clearwater MSA, 79% of the distance that commuters travel during peak hours is congested.
- In the Tampa-St. Petersburg-Clearwater MSA, 65% of the total lane miles function under congested conditions.
- In the Sarasota-Bradenton MSA, 61% of the distance commuters travel is congested and 56% of the lane miles are congested.

Figure 3-8: Congestion % of Lane Miles (2010) - Top 30 MSAs

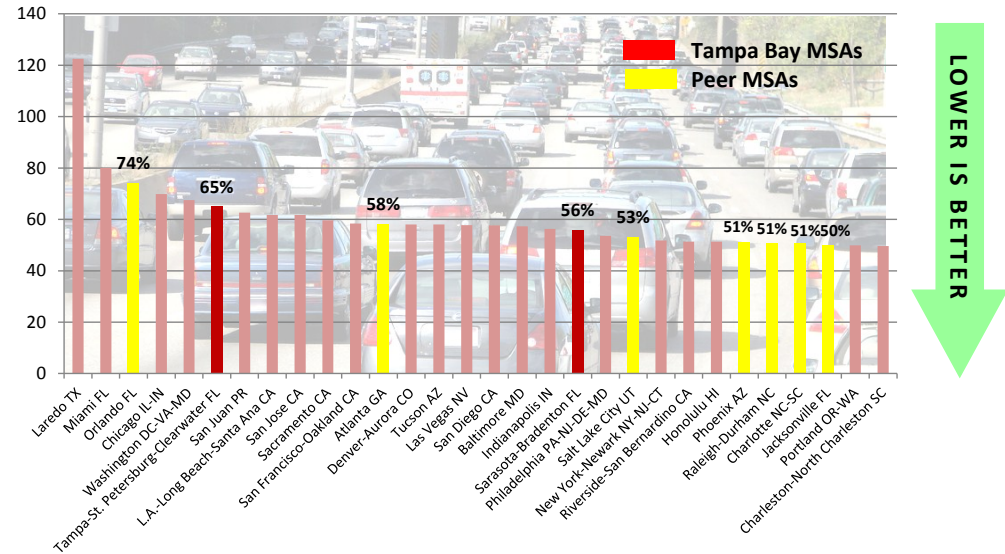
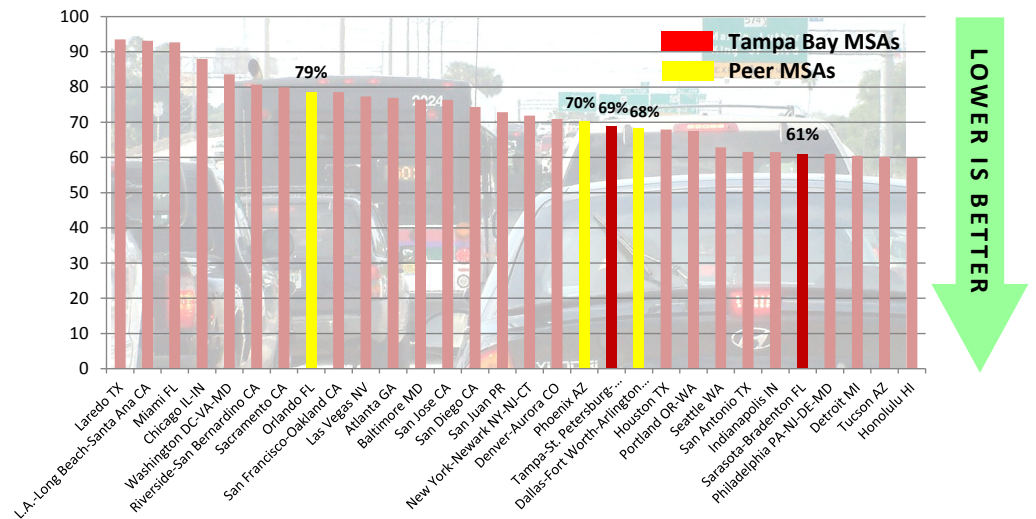


Figure 3-9: Congestion % of Peak VMT (2010) - Top 30 MSAs



Source: Urban Mobility Report, Texas Transportation Institute, 2010



# Regional Performance

## CONGESTION: REGIONAL COST

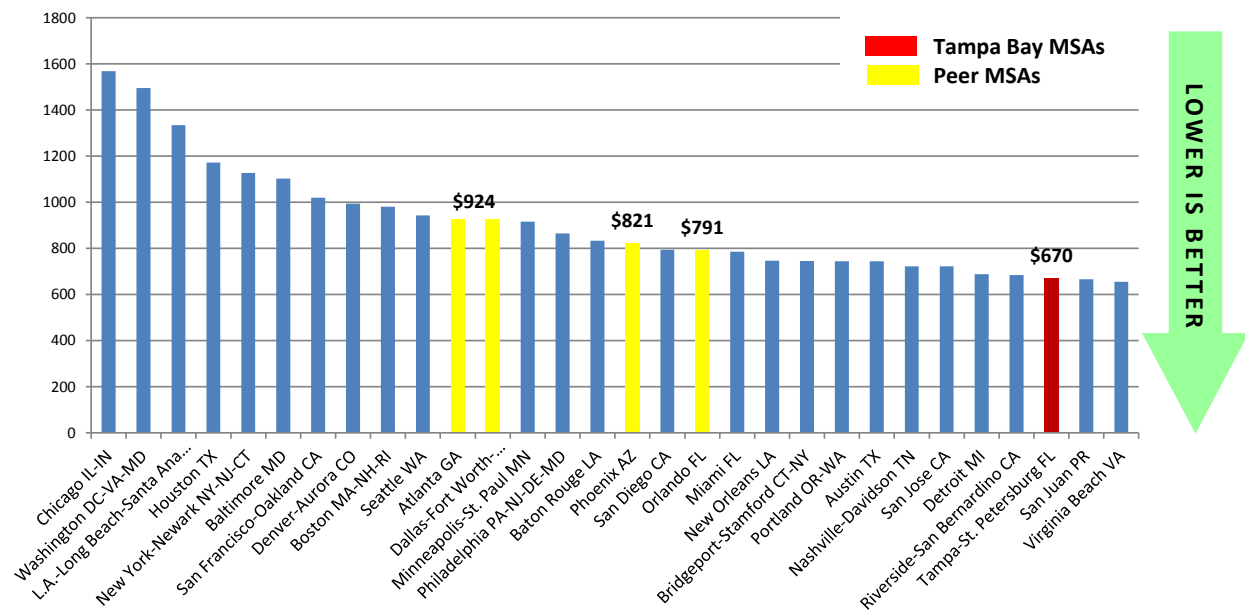
A negative impact of congestion is its **economic impact on the region**. Delay caused by congestion equates to wasted money. While this cost may impact only a portion of each trip, when summed as an annual cost, the amount is significant. Annual congestion cost by metropolitan area is displayed for the Tampa-St. Petersburg and Sarasota-Bradenton MSAs. Tampa-St. Petersburg ranks #28 in the nation with \$670 Million wasted each year as a result of congestion. Sarasota-Bradenton wastes \$318 Million annually and ranks #82 in the nation.

*How much does congestion cost the Tampa Bay region?*

*Commuters in the Tampa-St. Petersburg-Clearwater MSA spend an extra \$670 Million annually due to congestion. This cost equates to approximately \$240 annually for every resident.*

- FULFILLS OBJECTIVES:**
- ✓ 1-A: Minimize Congestion
  - ✓ 1-B: Optimize Goods Movement
  - ✓ 1-C: Improve Access to Jobs
- ✓ 2-A: Improve Transportation Safety
  - ✓ 2-B: Expand Mode Choices

**Figure 3-10: Annual Congestion Cost by MSA (2010) - Top 30**



Source: Urban Mobility Report, Texas Transportation Institute, 2010



# Regional Performance

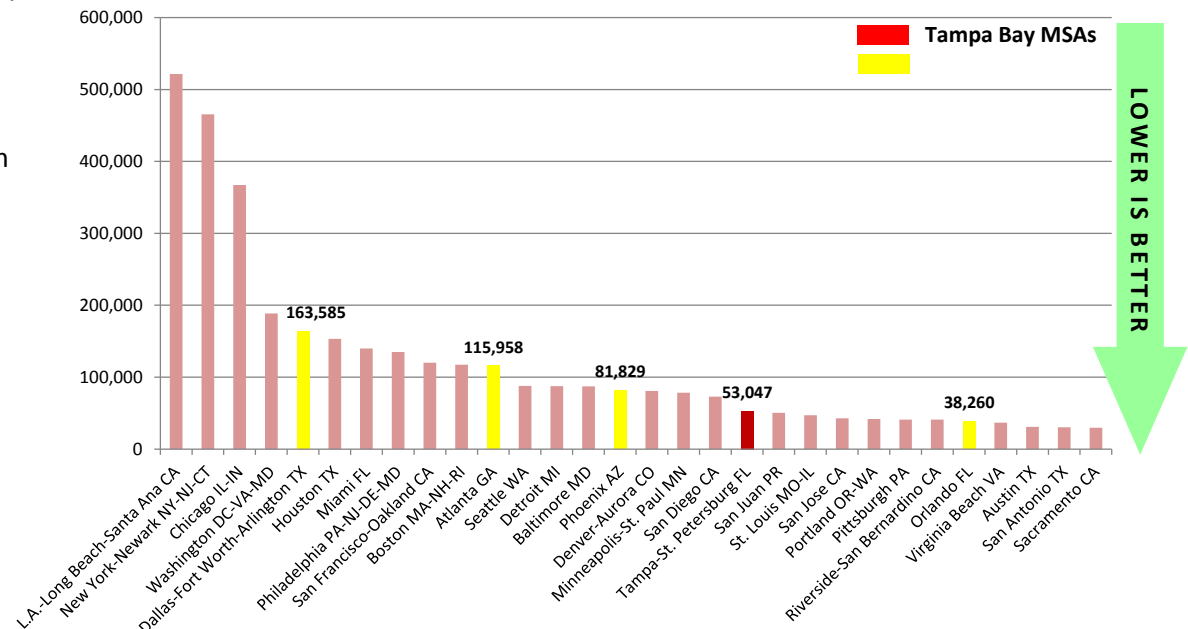
## CONGESTION: HOURS OF DELAY

Peak hour congestion and traffic accidents create delay for motorists. The delay caused by congestion can translate to thousands of hours in wasted time, which can greatly impact the regional economy. The Tampa-St. Petersburg-Clearwater MSA has the 19th longest delay due to congestion. This amounts to over 53,000 hours of wasted time sitting in traffic each year. This significantly impacts the local economy in longer delivery times, missed meetings, and business relocations. Only 19 other MSAs experience more delay due to congestion. Commuters in Los Angeles—Long Beach-Santa Ana, CA waste over 500,000 hours per year due to congestion. Improving transportation system operations and safety can minimize congestion delay and its impact on the regional economy.

*How much time do we waste sitting in traffic?*

- *In the Tampa-St. Petersburg-Clearwater MSA, 53,047 hours are wasted each year due to congestion. This equates to over 2,000 people spending an entire year sitting in traffic.*
- *Tampa-St. Petersburg-Clearwater MSA commuters experience the 19th longest congestion delay in the U.S. Only 18 MSAs waste more time sitting in congestion than Tampa-St. Petersburg-Clearwater*

Figure 3-11: Total Hours of Delay due to Congestion (2010) – Top 30 MSAs



Source: Urban Mobility Report, Texas Transportation Institute, 2010





# Regional Performance

## CONGESTION: GOODS MOVEMENT

Congestion has a significant impact on goods movement. Truck congestion cost is a measure of the value of lost time and the increased operating costs of freight vehicles caused by congestion. The costs are then passed on to consumers in higher prices for goods and services.

The Tampa-St. Petersburg MSA ranks #21 when compared to the MSAs with the highest Truck Congestion Cost. This cost amounts to \$210 Million annually and is well above the national average of \$53 Million.

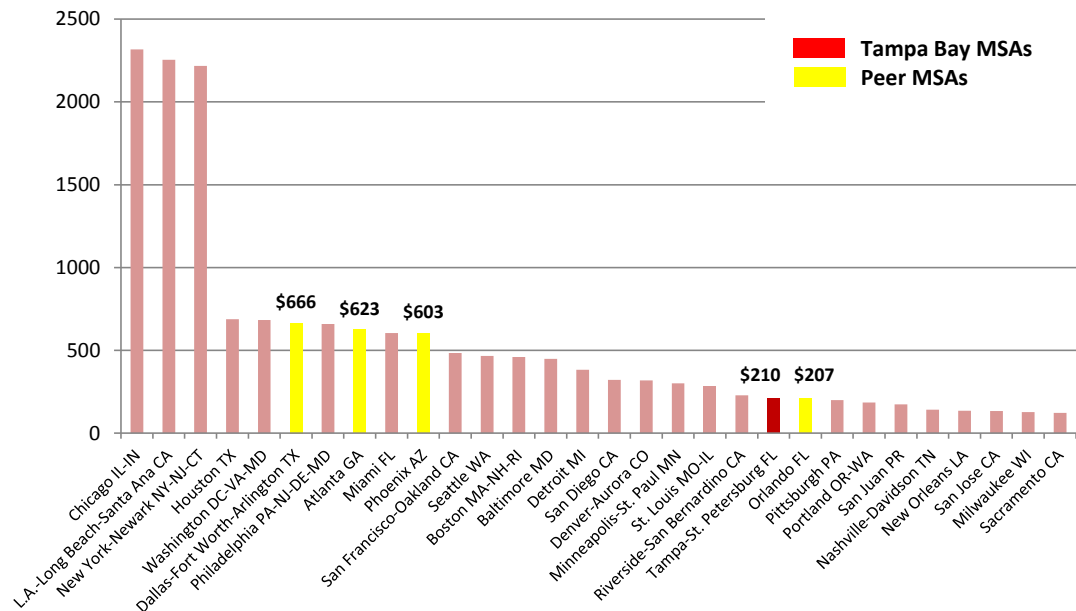
*How does congestion impact freight and goods movement?*

- *Truck congestion wastes an average of \$210 Million annually.*
- *Consumers pay more for goods and services to make up for this cost—approximately \$75 annually for each resident in the Tampa-St. Petersburg-Clearwater MSA.*

### FULFILLS OBJECTIVES

- ✓ 1-A: Minimize Congestion
  - ✓ 1-B: Optimize Goods Movement
  - ✓ 1-C: Improve Access to Jobs
- ✓ 2-A: Improve Transportation Safety
  - 2-B: Expand Mode Choices

Figure 3-12: Annual Truck Congestion Cost in Millions (2010) – Top 30 MSAs



Source: *Urban Mobility Report*, Texas Transportation Institute, 2010



# Regional Performance

## TRANSIT

As of January 1, 2011, the Tampa Bay region is serviced by the following eight transit providers:



- **West Central Florida (Tampa Bay)**
  - Hernando County/The Hernando Express (THE) Bus
  - Hillsborough Area Regional Transit Authority (HART)
  - Lakeland Area Mass Transit District/Citrus Connection
  - Manatee County Area Transit (MCAT)
  - Pasco County Public Transportation (PCPT)
  - Pinellas Suncoast Transit Authority (PSTA)
  - Sarasota County Area Transit (SCAT)
  - Winter Haven Area Transit (WHAT)

Seven peer regions were selected by CCC staff by which to compare transit performance measures.

- **Atlanta, Georgia**
  - Metropolitan Atlanta Rapid Transit Authority
  - Georgia Regional Transportation Authority
  - Clayton County
  - Cobb County
  - Gwinnett County
- **Charlotte, North Carolina**
  - Charlotte Area Transit System
- **Dallas, Texas**
  - Dallas Area Rapid Transit
  - Denton County Transportation Authority
  - Ft. Worth Transportation Authority (The T)
- **Jacksonville, Florida**
  - Jacksonville Transportation Authority
  - St. Johns County
- **Orlando, Florida**
  - Central Florida Regional Transportation Authority/LYNX
- **Phoenix, Arizona**
  - Regional Public Transportation Authority/Valley Metro
    - City of Phoenix
    - City of Glendale
    - City of Scottsdale
    - City of Tempe
    - Valley Metro Rail
  - City of Mesa
- **Raleigh-Durham, North Carolina**
  - Capital Area Transit
  - Chapel Hill Transit
  - Durham Area Transit Authority
  - Research Triangle Regional Public Transportation Authority
  - Town of Cary
  - North Carolina State University
- **Salt Lake City, Utah**
  - Utah Transit Authority



# Regional Performance

## TRANSIT: VEHICLES OPERATING DURING PEAK SERVICE

The number of vehicles operating during maximum service is a direct indication of the size of an agency or agencies. The number of vehicles operating in maximum service in Tampa Bay, Salt Lake City, Dallas, and Raleigh-Durham have remained constant over the past five years, while Jacksonville and Orlando have declined noticeably. Phoenix is the only of the eight regions that has experienced a constant steady increase over the past five years. Atlanta experienced a large increase in 2007 but has remained relatively constant since 2007. Tampa Bay was recently surpassed by Salt Lake City.

### FULFILLS OBJECTIVES:

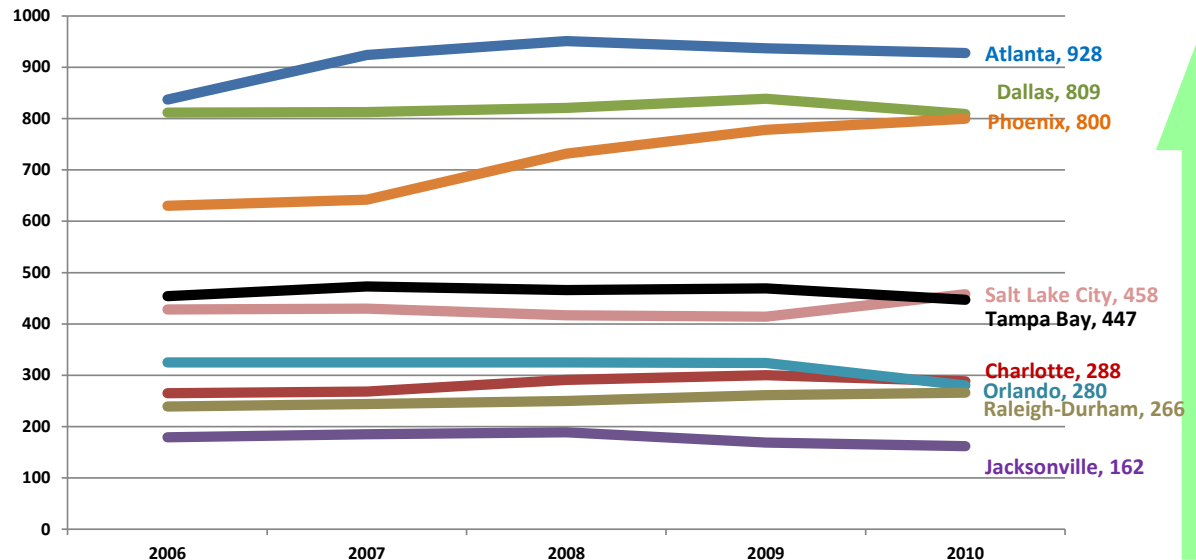
- 1-A: Minimize Congestion
- 1-B: Optimize Goods Movement
- 1-C: Improve Access to Jobs

- 2-A: Improve Transportation Safety
- 2-B: Expand Mode Choices

*How large are the transit providers in Tampa Bay?*

- *During the busiest time of the day, the Tampa Bay region has approximately 447 transit vehicles in operation.*
- *The Tampa Bay region has more vehicles in operation during peak service than Charlotte, Orlando, Raleigh-Durham and Jacksonville.*

Figure 3-13: Vehicles Operating During Peak Service (2010)—Peer Regions



Source: Integrated National Transit Database Analysis System



# Regional Performance

## TRANSIT: ANNUAL REVENUE HOURS

Annual Revenue Hours measures the amount of transit service provided in one year. This is the number of hours that all transit vehicles are in service and available for riders. Tampa Bay, Salt Lake City, Dallas, and Raleigh-Durham have remained constant in annual revenue hours over the past five years, while Jacksonville and Orlando have declined noticeably. Phoenix is and Atlanta have experienced a constant steady increase over the past five years. Atlanta experienced a large increase in 2007 but has remained relatively constant since 2007.

### FULFILLS OBJECTIVES

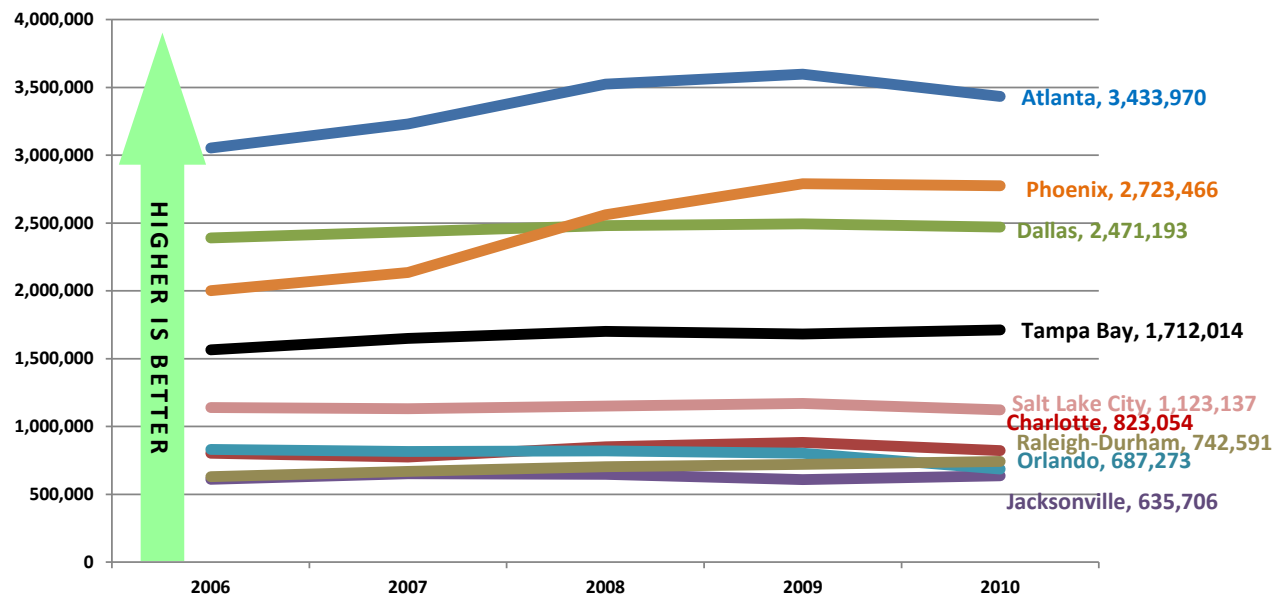
- 1-A: Minimize Congestion
- 1-B: Optimize Goods Movement
- 1-C: Improve Access to Jobs

- ✓ 2-A: Improve Transportation Safety
- ✓ 2-B: Expand Mode Choices

How much transit service does Tampa Bay provide?

- Atlanta provides nearly double the revenue hours of Tampa Bay.

Figure 3-14: Revenue Hours (2010)—Peer Regions



# Regional Performance

## TRANSIT: PASSENGER TRIPS

The number of passenger trips indicates how many people use transit service. Passenger trips is an indicator of both size and effectiveness of the transit provider(s).

*How many people use transit service in Tampa Bay?*

- Approximately 32,936,537 transit trips are made each year in Tampa Bay.
- Tampa Bay ranks #6 for Annual Passenger Trips of the peer regions.

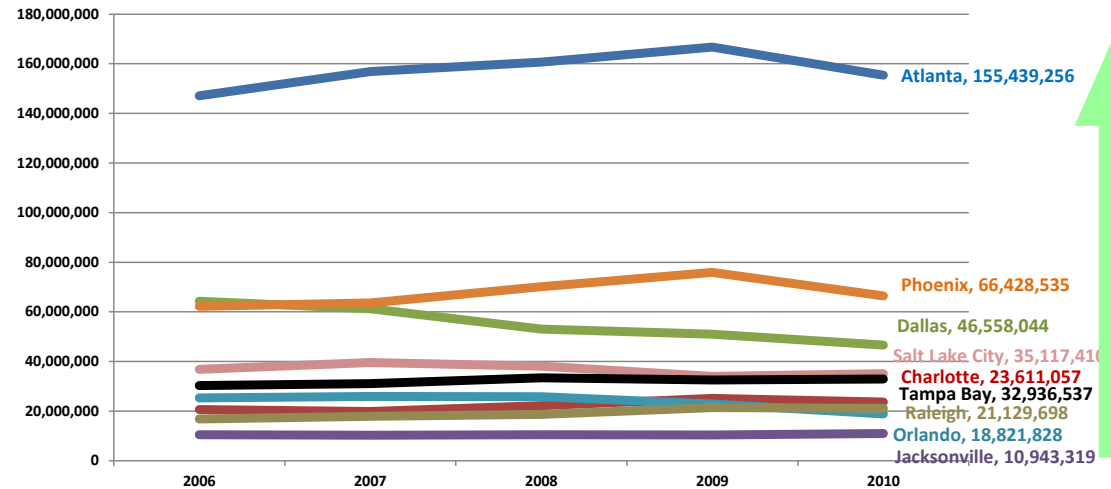
Average Service Frequency indicates transit level of service. Frequent transit service is more convenient and leads to increases in ridership. Less frequent service is inconvenient and discourages potential riders from riding transit.

*How long do transit riders in Tampa Bay wait for service to arrive?*

- Transit riders in Tampa Bay wait an average of 30 minutes for transit service.
- Tampa Bay has the longest service frequency of all the peers.

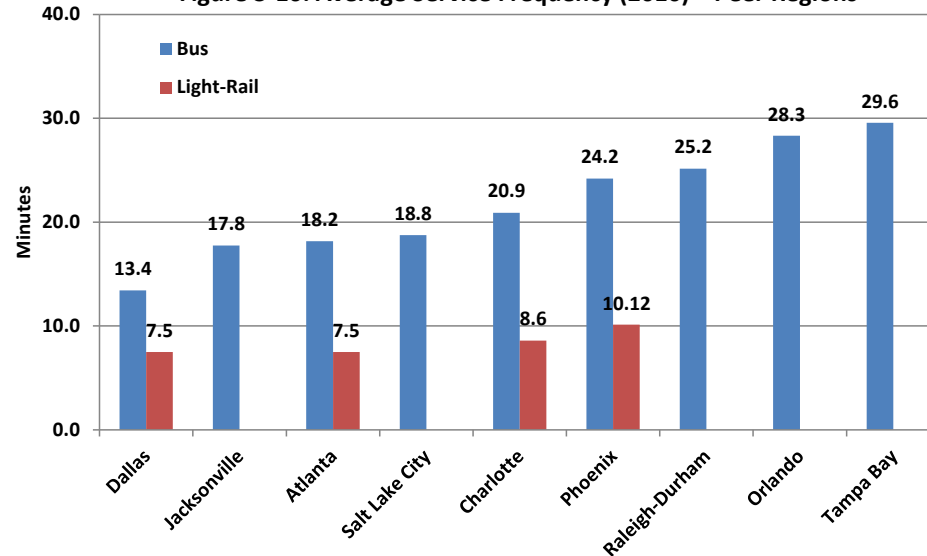
Source: Integrated National Transit Database Analysis System

Figure 3-15: Annual Passenger Trips (2010)—Peer Regions



HIGHER IS BETTER

Figure 3-16: Average Service Frequency (2010)—Peer Regions



LOWER IS BETTER

Source: Integrated National Transit Database Analysis System



# Regional Performance

## TRANSIT: ANNUAL PASSENGER TRIPS PER REVENUE HOUR

Annual Passenger Trips per Revenue Hour indicates the level of productivity of the transit service. It is a measure of how many transit riders are using service during a single revenue hour. Passenger Trips per Revenue Hour has risen significantly in Dallas over the last three years and dropped significantly in Charlotte.

*How productive is the transit service in Tampa Bay?*

- *Tampa Bay ranks low, along with Orlando and Atlanta. We have less transit riders per hour of operation than any peer region.*

### FULFILLS OBJECTIVES

1-A: Minimize Congestion

1-B: Optimize Goods Movement



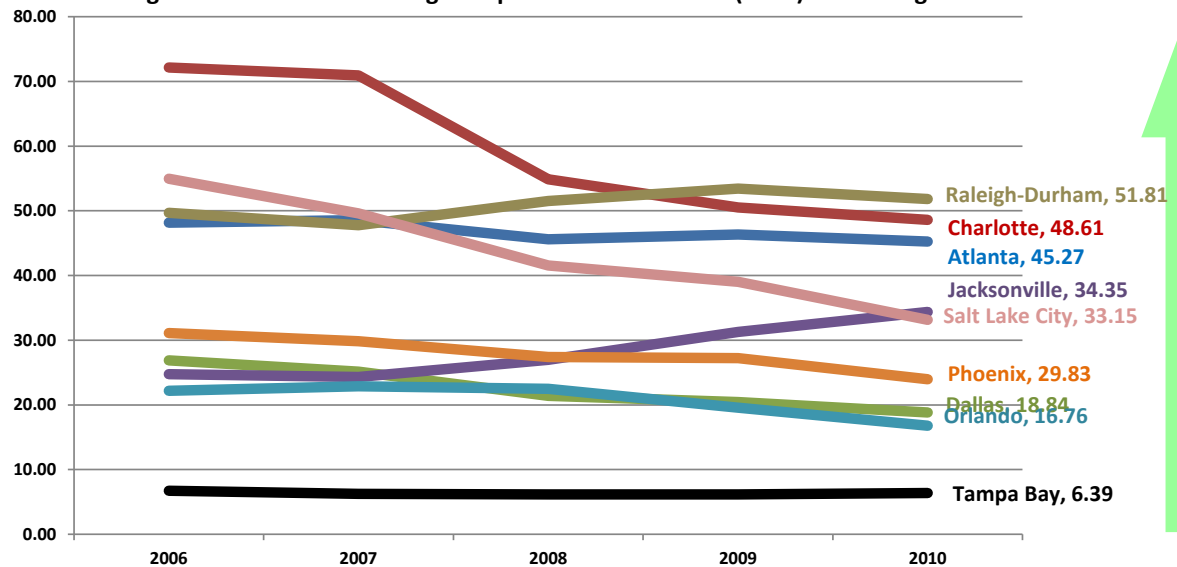
1-C: Improve Access to Jobs

2-A: Improve Transportation Safety



2-B: Expand Mode Choices

Figure 3-17: Annual Passenger Trips Per Revenue Hour (2010)—Peer Regions



# Regional Performance

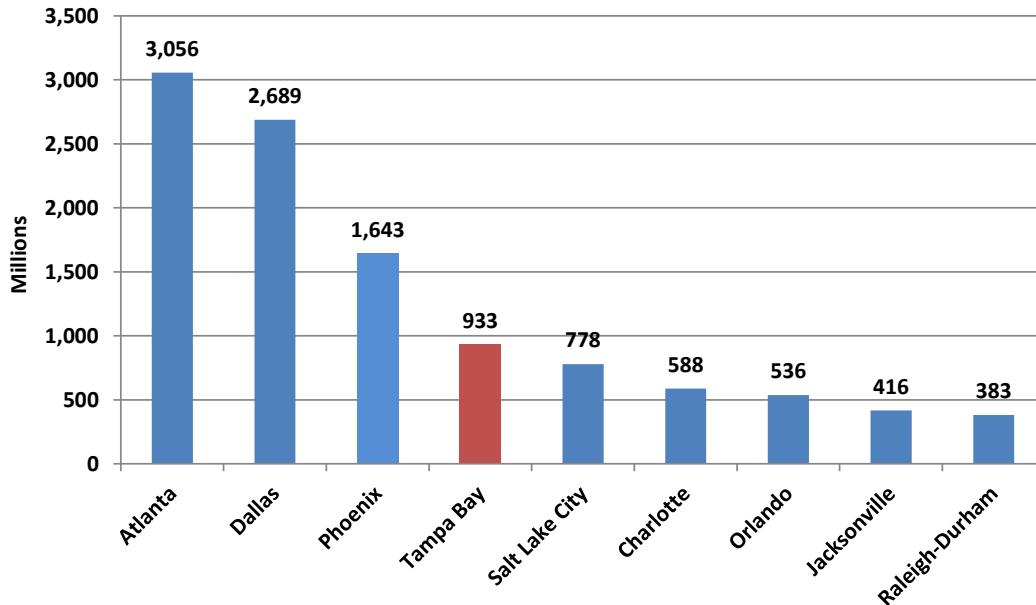
## TRANSIT: EXPENDITURES

Tampa Bay spends more on operations and maintenance for transit than most of the other peer regions. Tampa Bay also has the highest number of transit service providers—even more than Atlanta and Dallas whom have five and two, respectively. However, Raleigh-Durham spends the least amount on operations and maintenance despite its similarly high number of different service providers—seven providers compared with Tampa Bay’s eight.

*How much is spent on transit operations and maintenance in Tampa Bay?*

- Tampa spends more on transit operations and maintenance than any other peer region, with the exception of Dallas and Atlanta.*

Figure 3-18: Five-year Operations and Maintenance Costs (2006-2010)—Peer Regions



Source: Integrated National Transit Database Analysis System



# Regional Performance

## SAFETY: FATAL CRASH RATES

Safety has a major impact on the transportation system— traffic incidents create non-recurring congestion and often require innovative solutions beyond conventional roadway capacity expansion. In 2010, Hillsborough County had the highest traffic fatality rate of all large counties in the United States (populations greater than 1 Million). This amounts to 12.4 fatalities for every 100,000 residents. Hillsborough County also has a significantly smaller population when compared to the other counties— approximately 1.2 million residents. Los Angeles has more than eight times Hillsborough County’s population, and Harris (county seat Houston) has more than three times Hillsborough County’s population.

*How many traffic fatalities occur in the Tampa Bay region?*

- The Tampa Bay region has the highest traffic fatality rate of the peer regions
- Hillsborough County has the highest traffic fatality rate (fatalities per capita) of all large U.S. counties.

Source: NCSA/FHWA Fatality Analysis Reporting System

Figure 3-19: Traffic Fatality Rate Per 100k Population (2010) - Top 12 Large\* U.S. Counties

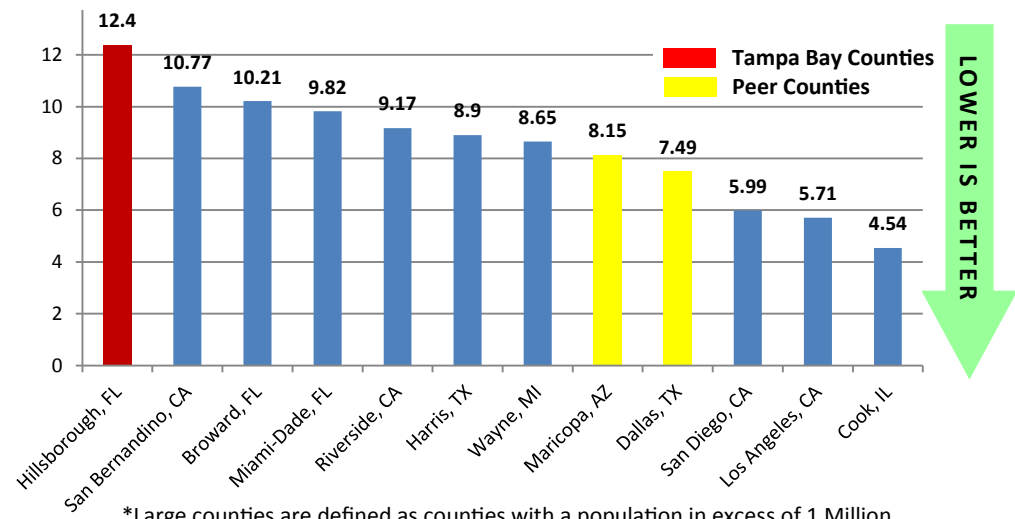
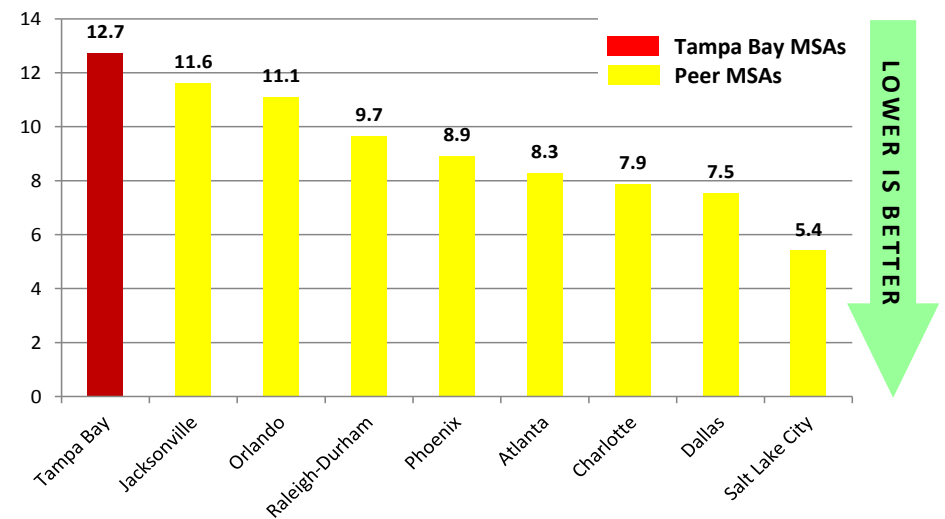


Figure 3-20: Traffic Fatality Rate Per 100k Population (2010) - Peer Region MSAs<sup>1</sup>



1. Peer Regions are defined on page 3-3.





# Regional Performance

## SAFETY: TOTAL FATALITIES

Figure 3-22 displays the top 12 large counties (populations greater than 1 Million) in the United States with the most traffic fatalities in 2010. Hillsborough County ranks #12. Two peer region counties—Maricopa County (Phoenix), Arizona, and Dallas County, Texas, ranked worse than Hillsborough County; however, this is expected as their populations are much greater. As of 2010, Hillsborough County had 1,233,846 residents, Maricopa County had 3,827,371 residents, and Dallas County had 2,377,351 residents.

Source: NCSA/FHWA Fatality Analysis Reporting System

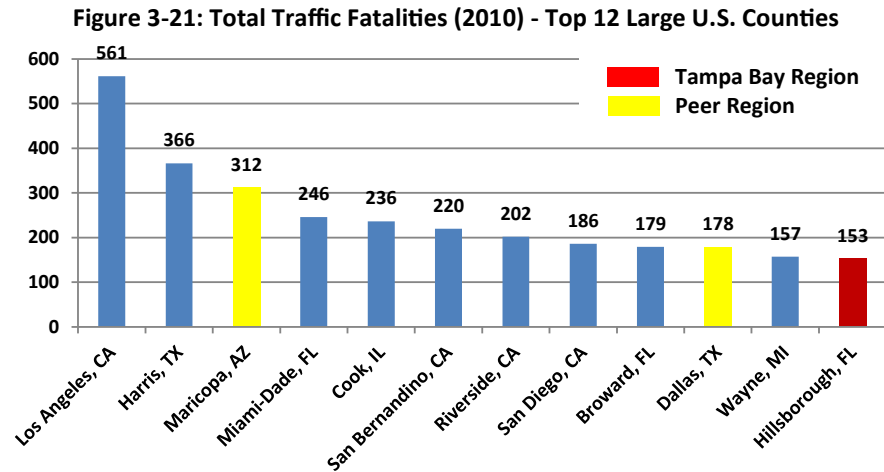
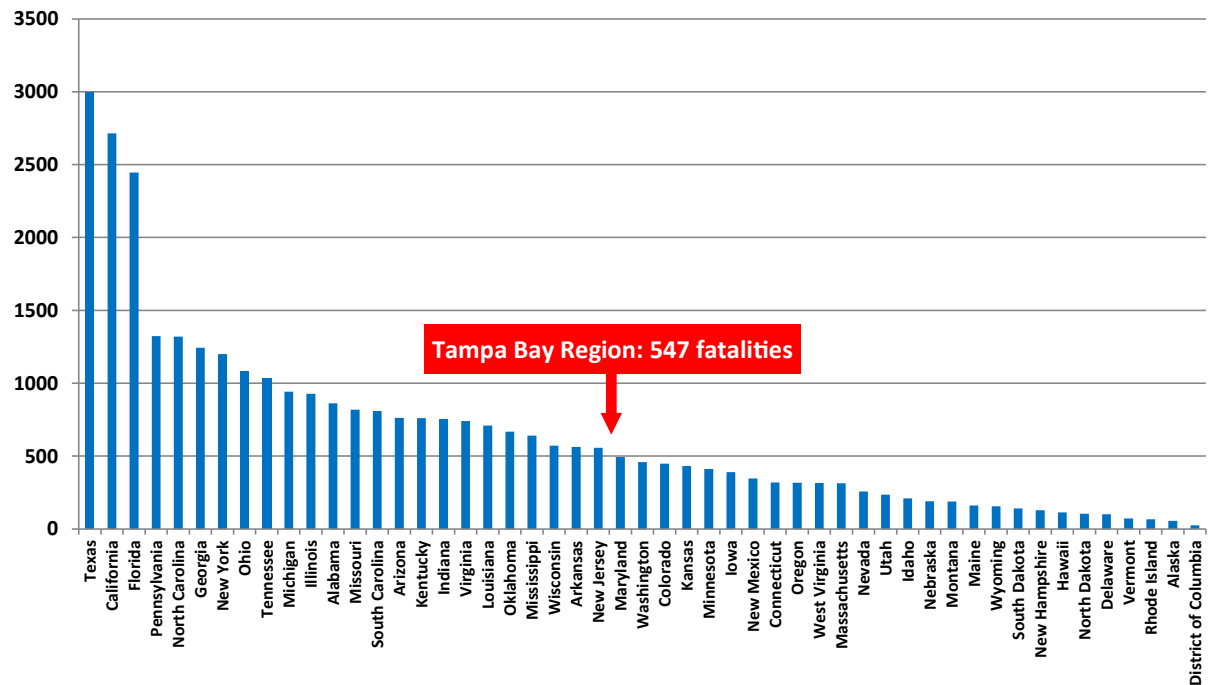


Figure 3-22: Total Traffic Fatalities (2010) - 50 States



*Is traffic safety an issue in Tampa Bay?*

- In 2010, the Tampa Bay region alone had 547 traffic fatalities.*
- If the Tampa Bay region were a state, we would rank #25 in total traffic fatalities. This is more than Alaska, Rhode Island, Vermont, Delaware, North Dakota and Hawaii combined.*



# Regional Performance

## SAFETY: STATE HIGHWAY SAFETY PLAN SAFETY EMPHASIS AREAS

The tables on this page display the top 10 Florida counties by Safety Emphasis Area crashes. The Safety Emphasis Areas are focus areas that are identified by the Florida Department of Transportation as statewide safety concerns based on the most common types of traffic crashes in the state. More information on the Safety Emphasis Areas can be found on page 3-5 of the *CCC Regional CMP Policy & Procedures Handbook*.

*How do we compare to the rest of the state in terms of safety?*

- Hillsborough, Pinellas, Pasco and Polk Counties all fall within the top 10 counties in Florida with a severe safety emphasis area crash problem.*

Figure 3-23: Aggressive Driving Crashes (2006-2010) - Top 10 Florida Counties

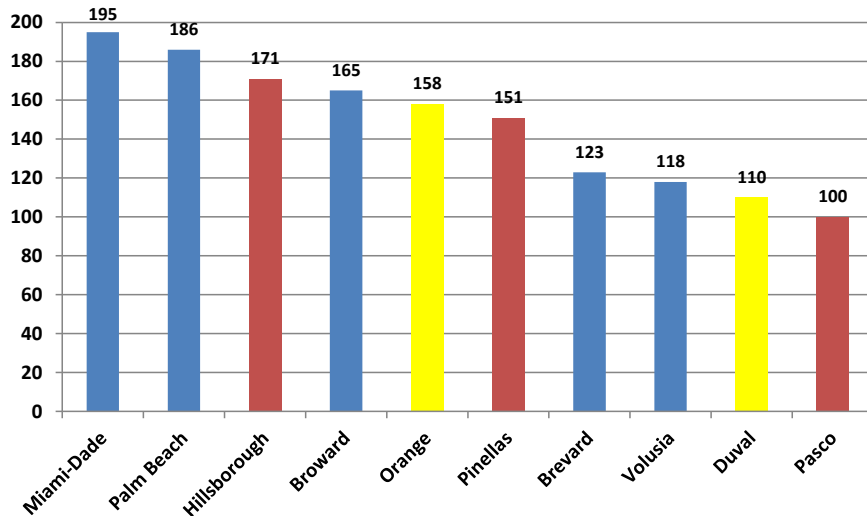


Figure 3-24: At-Intersection Crashes (2006-2010) - Top 10 Florida Counties

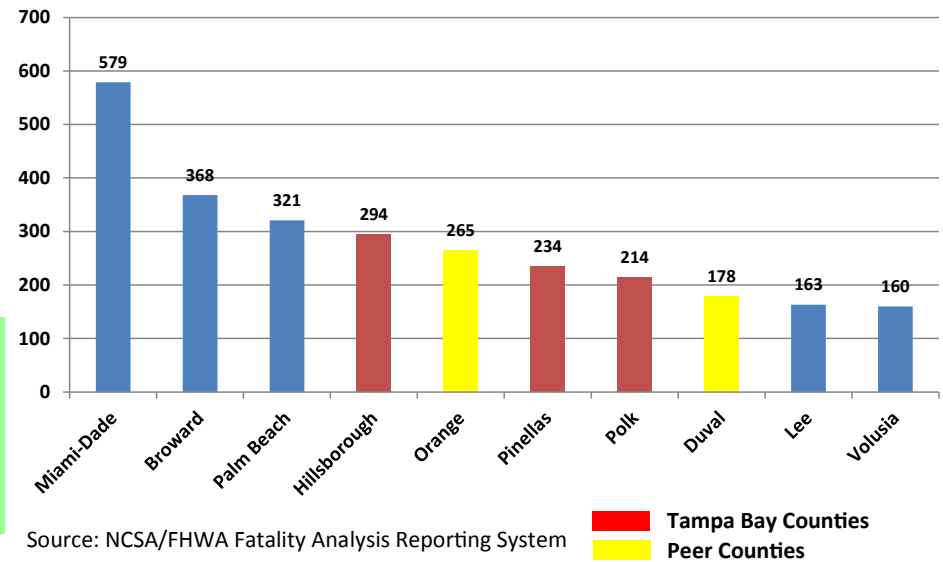
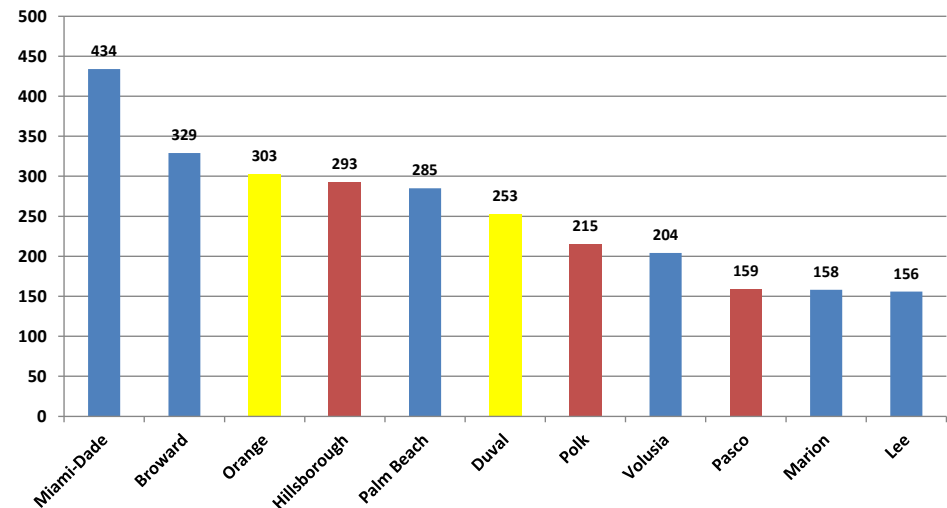


Figure 3-25: Lane Departure Crashes (2006-2010) - Top 10 Florida Counties



# Regional Performance

## DANGEROUS BY DESIGN

The chart below displays the average annual pedestrian fatality rates (fatalities per capita) for the top 52 MSAs in the U.S. This tells us at what rate our population is impacted by pedestrian fatalities. This list factors in data for 10 years, from 2000 to 2009. The Tampa-St. Petersburg MSA carries the highest rate, approximately 3.5 pedestrian fatalities per year for every 100,000 residents.

*Is pedestrian safety a problem in the Tampa Bay region?*

- *The Tampa-St. Petersburg-Clearwater MSA has the highest pedestrian fatality rate in the country.*

## FULFILLS OBJECTIVES





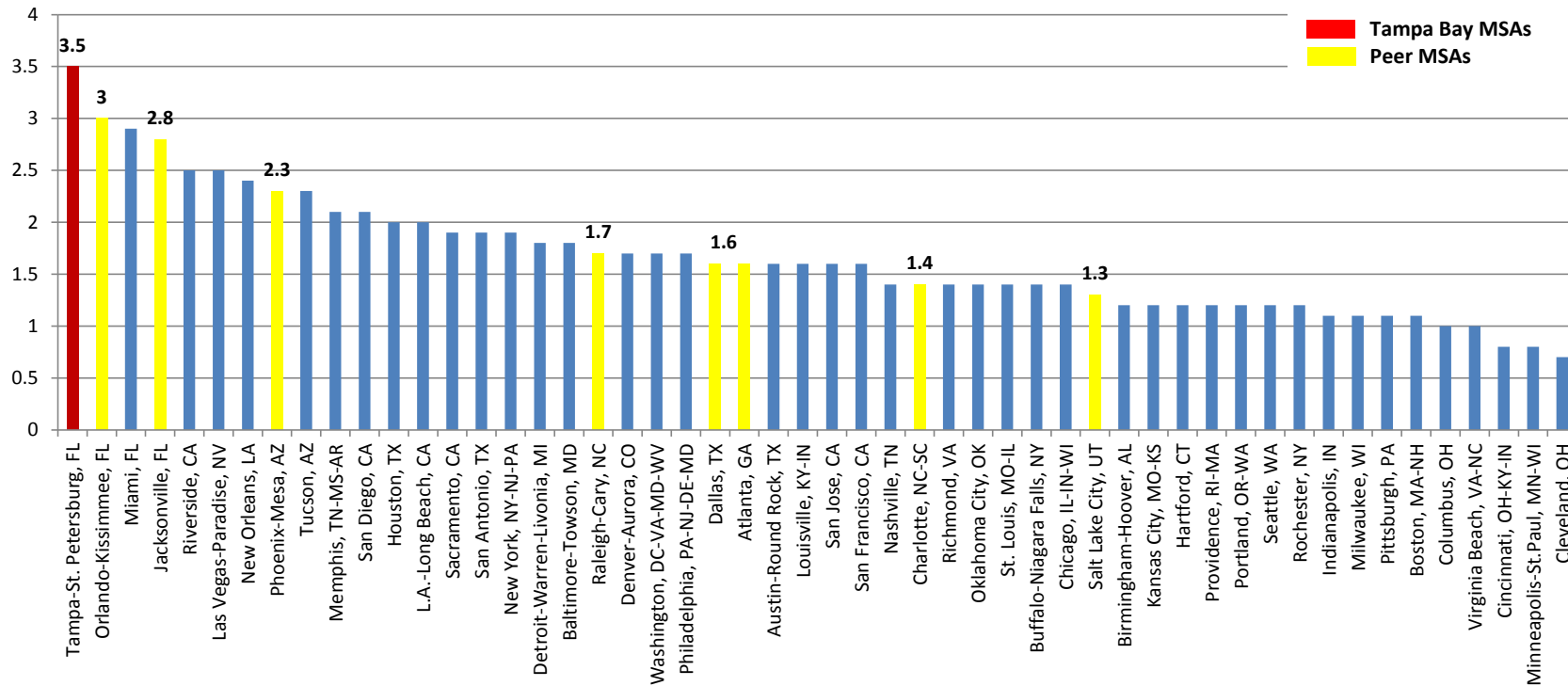
-  1-A: Minimize Congestion
-  1-B: Optimize Goods Movement
-  1-C: Improve Access to Jobs
-  2-A: Improve Transportation Safety
- 2-B: Expand Mode Choices

Figure 3-26: Average Annual Pedestrian Fatality Rate Per 100k Population (2000–2009) — Top 52 MSAs



Source: *Dangerous by Design*, Transportation for America, 2011



# Regional Performance

## COMMUTING: TAMPA BAY REGIONAL PLANNING MODEL

The data on this page was compiled using the Tampa Bay Regional Planning Model for transportation demand forecasting. The graph below calculates the average length of trips, broken down by trip purpose, originating in environmental justice areas in the region.

*What types of trips are the longest? Where do they originate?*

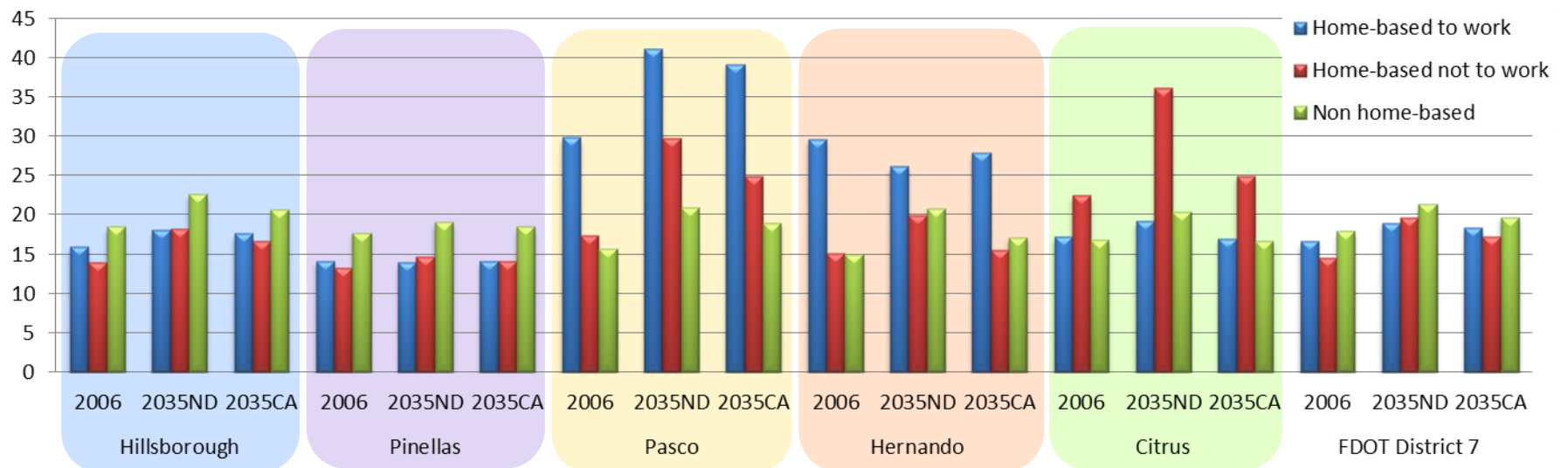
- *Home-based trips to work in Pasco and Hernando Counties are the longest in the region – over 30 minutes.*
- *Home-based trips not to work in Hillsborough and Pinellas Counties are the shortest in the region – under 15 minutes.*

### FULFILLS OBJECTIVES

- ✓ 1-A: Minimize Congestion
- ✓ 1-B: Optimize Goods Movement
- ✓ 1-C: Improve Access to Jobs

- 2-A: Improve Transportation Safety
- 2-B: Expand Mode Choices

Figure 3-27: Average Trip Length by Purpose within Environmental Justice Areas (in minutes)



# Regional Performance

## COMMUTING: TAMPA BAY REGIONAL PLANNING MODEL

The chart below displays the percent of environmental justice population within one-quarter mile of a transit headway of 30 minutes or less. This information provides insight into the access to transportation of disadvantaged populations.

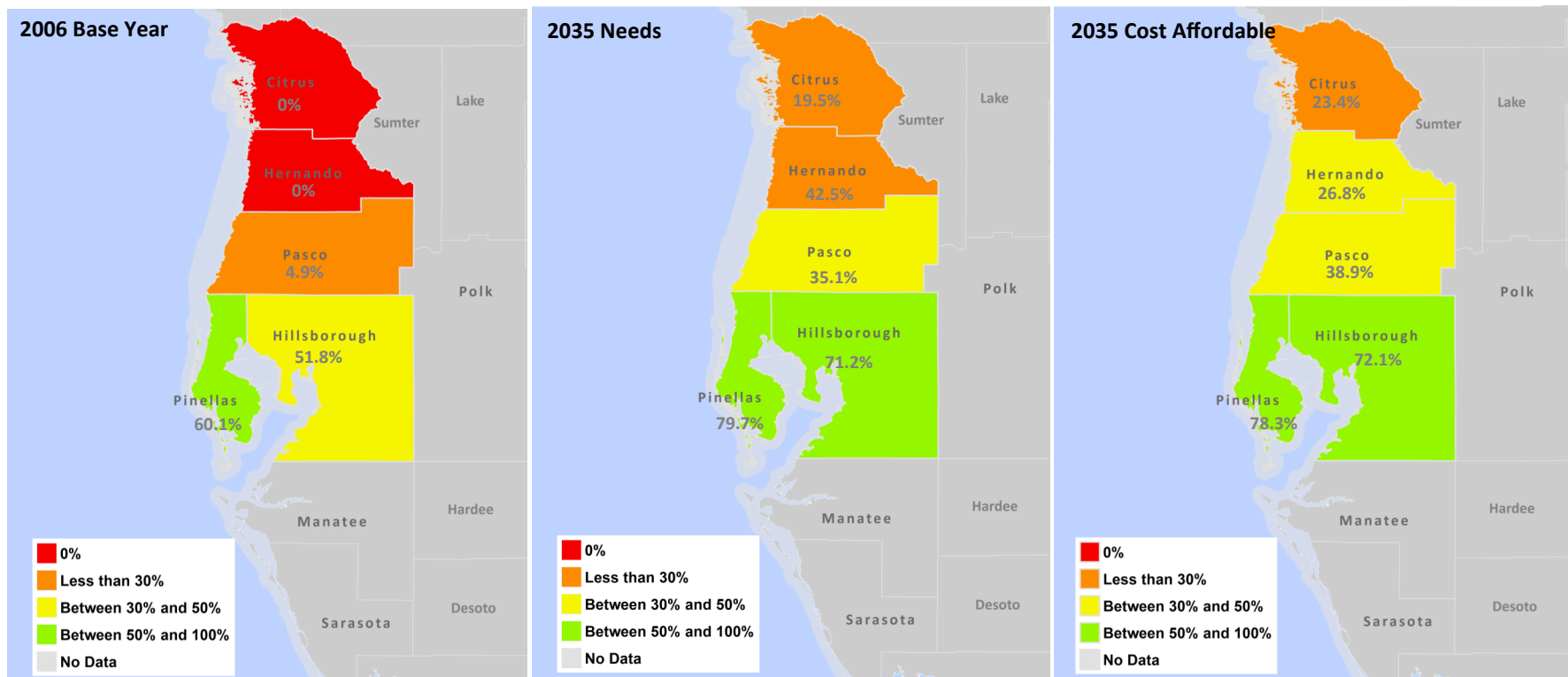
*Is access to transit going to improve for the disadvantaged?*

- Access to transit for the disadvantaged will improve for Hillsborough and Pinellas. But in Pasco, Hernando and Citrus, a majority of the disadvantaged are still without access to transit.*

### FULFILLS OBJECTIVES

- ✓ 1-A: Minimize Congestion
- ✓ 1-B: Optimize Goods Movement
- ✓ 1-C: Improve Access to Jobs
- 2-A: Improve Transportation Safety
- ✓ 2-B: Expand Mode Choices

Figure 3-28: Percent of Environmental Justice Population within one-quarter mile of a transit headway 30 minutes or less





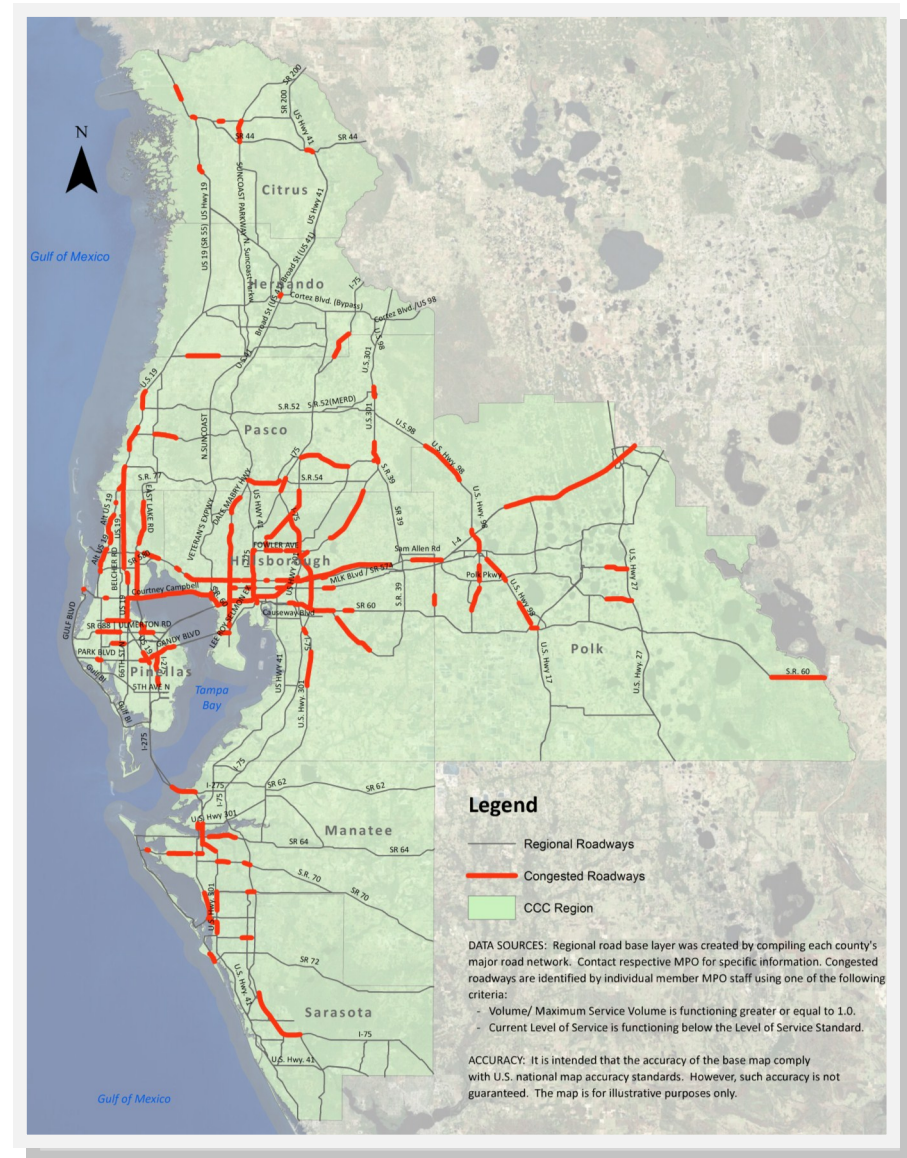
# Chapter 4: Congested Corridor Review

## Introduction

Using the CMP Annual Update process, the region was evaluated using regional roadway congestion data and fatal crash history to identify roadways with urgent problems that can be mitigated as part of this process.

## CONGESTED ROADWAYS

The congested roadways in the CCC region are presented in the map to the right. This map displays roadways functioning below the level of service standard. As indicated on the map, concentrations of congested roadways are more common in the urban areas of the region. Congested roadways are highlighted in red.



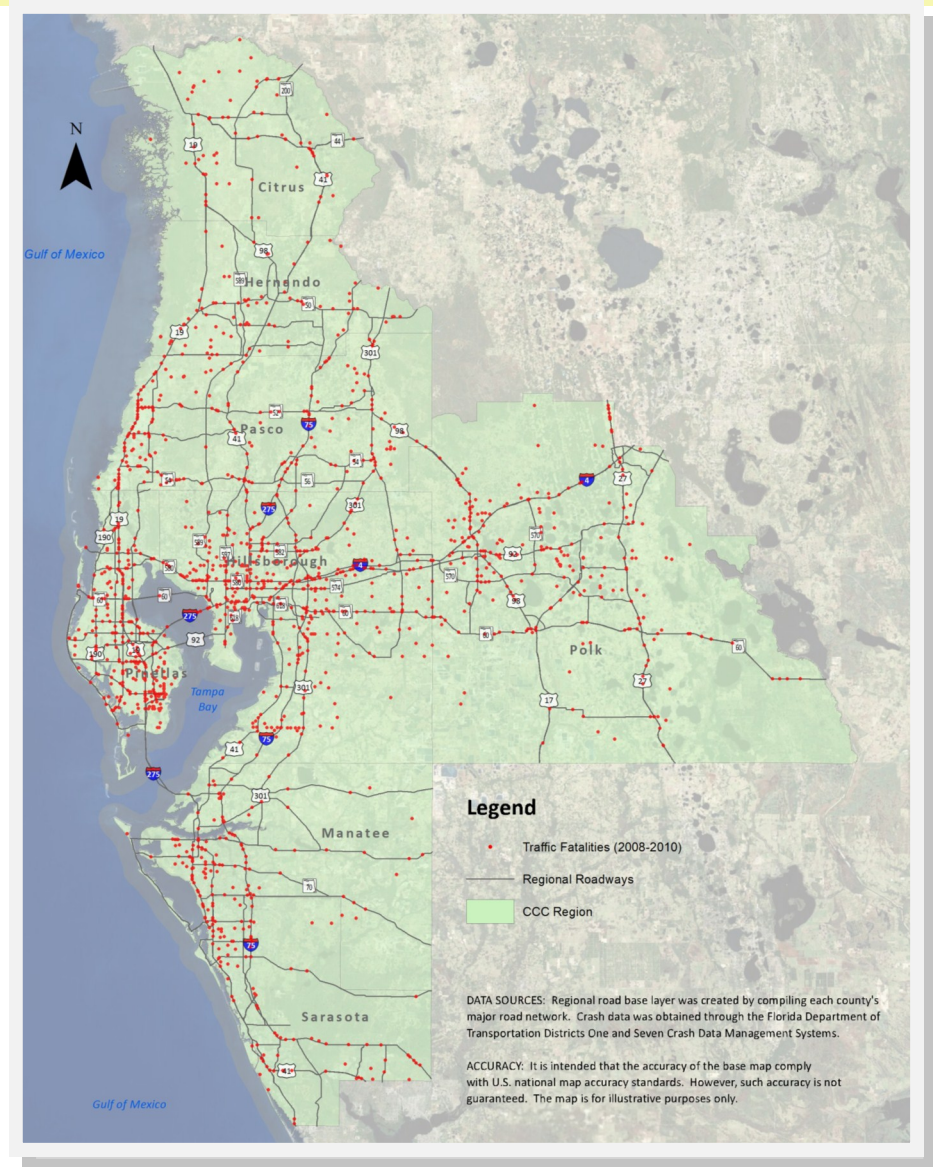
Map 4-1: Congested Regional Roadways (2011)



# Which roadways have safety problems?

## TRAFFIC FATALITIES

A three-year traffic fatality history is displayed for the region in the map to the right. Fatalities are clustered along major arterials, especially in urbanized areas.



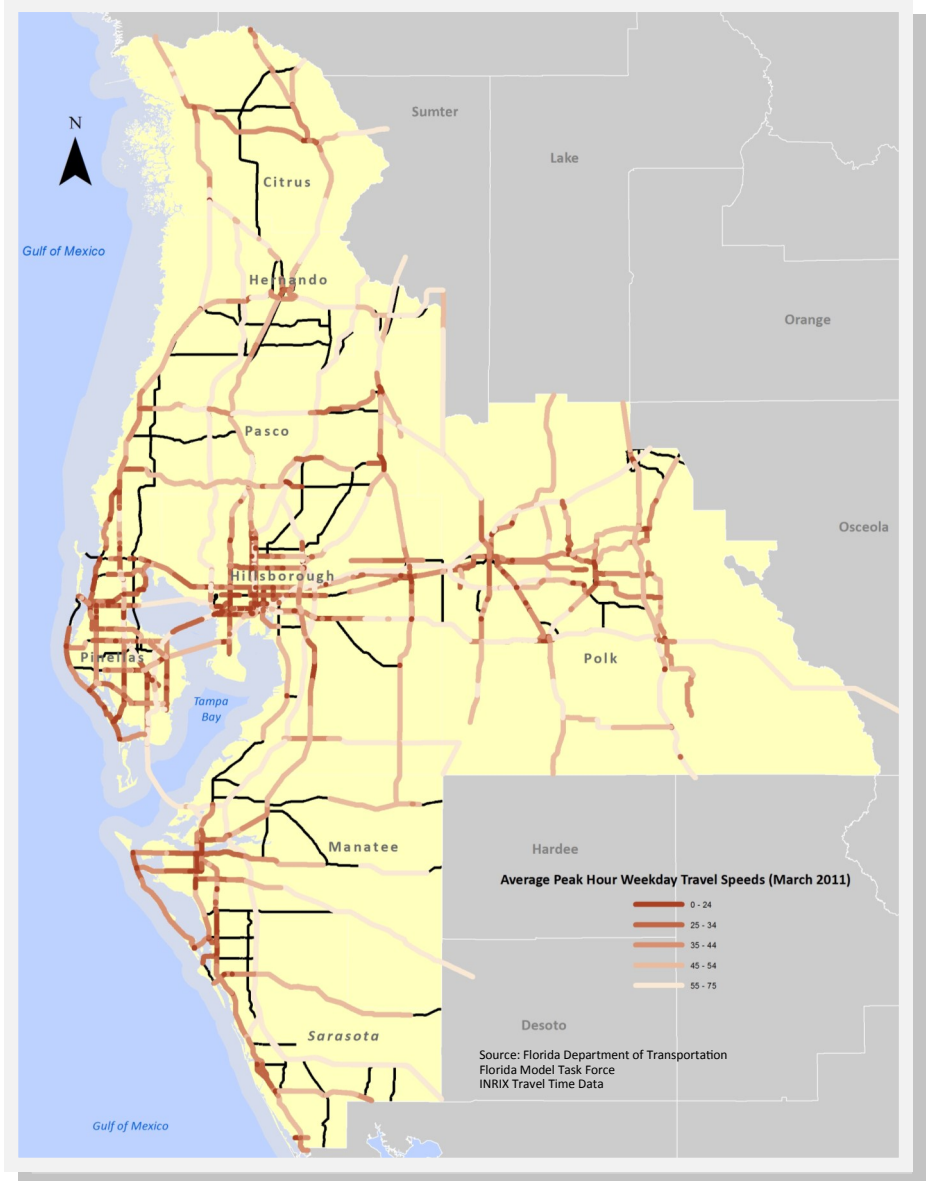
Map 4-2: Three-Year Traffic Fatality History (2008–2010)





## PEAK TRAVEL SPEEDS

Congestion can also be measured by average speeds during peak hours. This information is collected and calculated by the Florida Department of Transportation's Model Task Force using technology implemented by mobile telecommunication service providers. The map to the right displays average travel times on regional roadways during rush hour (5:00 PM—5:55 PM) during the month of March 2011. The darkest red color indicates slower travel speeds—below 25 miles per hour—approaching breakdown conditions. The lightest pink color indicates the highest travel speeds—greater than 55 miles per hour—the closest to free flow conditions.



Map 4-3: Average Travel Speeds During Peak Hours (March 2011)



# Identifying congested corridors for evaluation ...

## Congested Corridor Selection

The following activities took place as part of the CCC Regional CMP update process:

### MPO Interviews—April 2012

Stakeholder interviews were conducted during the month of April 2012 with individual member MPO/TPO staff. The purpose of these interviews was to identify specific corridors to evaluate in the Congested Corridor Review process. Special consideration was given to corridors crossing jurisdictional boundaries with existing or future congestion issues that require a greater level of regional consensus. The following corridors selected for review are outlined below:

- **Corridor #1—Gunn Highway from S. Mobley Road to SR 54**

This corridor was selected by staff for review during the MPO interviews held during the month of April 2012. While this roadway is not on the current regional roadway network and is not currently congested, it was identified by both the Hillsborough MPO and Pasco MPO as being of regional significance because it crosses a jurisdictional boundary. Both MPOs identified different economic development and land use preservation strategies for adjacent communities. A regional approach is needed to reconcile how these different approaches impact the future of the corridor in an effort to mitigate existing and future congestion. This corridor review workshop was held on July 12, 2012 during a CCC Technical Review Team meeting and members of the CCC Technical Review Team/CCC Regional CMP Task Force were invited to participate. A summary of the results of this workshop is presented on page 4-10.

- **Corridor #2—US 301 from Rutland Road to Sun City Center Boulevard/SR 674**

This corridor was selected by staff for review during the MPO interviews held during the month of April 2012. While this roadway is not currently congested, it was identified by both the Hillsborough MPO and Sarasota-Manatee MPO as being of regional significance because it crosses a jurisdictional boundary. Recently, portions of the corridor have been identified as congested and both MPOs sited concerns about the potential for future congestion as a reason for greater regional consensus on potential mitigation strategies. Additionally, prior MPO Long Range Transportation Plan updates have identified inconsistencies in future improvements along the corridor—particularly the future number of lanes. This corridor review workshop was held via teleconference on July 18, 2012. A summary of the results of this workshop is presented on page 4-12.



















# Strategies to mitigate congestion ...

## Congestion Mitigation Strategies

Figure 4-1 illustrates types of mitigation strategies. Typically, corridors in urban areas that have a high level of congestion will look favorably upon Tier 1, 2, or 3 strategies. These tiers are supportive of community planning efforts such as mobility plans, transportation concurrency

exception areas, multimodal transportation districts, etc. Tier 4 strategies to improve roadway operations usually are favored where congestion is not extreme and minimal public transportation service exists or is less practical.

Figure 4-1: Regional CMP Strategies: Relation to CMP Goals & Objectives

Tiers of Strategies		Goal #1 Support the Region's Economy			Goal #2 Support the Region's Quality	
		Objective 1-A Minimize Congestion	Objective 1-B Optimize Goods Movement	Objective 1-C Improve Access to Jobs	Objective 2-A Improve Safety of Transp. Facilities	Objective 2-B Expand Mode Choices
Tier 1	Reduce Person Trips or Vehicle Miles Traveled					
Tier 2	Shift Vehicle Trips to Alternative Modes					
Tier 3	Increase Vehicle Occupancy					
Tier 4	Improve Roadway Operations					
Tier 5	Increase Roadway Capacity					

# Strategies to mitigate congestion on a corridor ...

## Congestion Mitigation Strategy Matrix

After identifying congested corridors as part of **Phase 1** of the CMP Annual Update, **Phase 2** of the process involves screening to identify mitigation strategies appropriate to reduce congestion. The Congestion Mitigation Process Strategy Matrix in Figure 4-2 was used to evaluate all appropriate strategies. This streamlines the process of identifying strategies and adds

credibility to the selection process early in the evaluation of the corridors. Committee participants have indicated that the review process is one of the most lively and enjoyable workshops in which they have participated. All of the appropriate strategies identified for each location are summarized in **Appendix A**.

Figure 4-2: CMP Corridor Solution Matrix

Tier	Strategy #	Congestion Mitigation Strategy	Distribution of Trip Types				Potential Effectiveness	Recommendations/Comments
			Regional Traffic	Regional Access	Local Access	Local Circulation		
TIER 1: Strategies to Reduce Person Trips or Vehicle Miles Traveled (VMT)	1.01	<b>Congestion Pricing:</b> Congestion pricing can be implemented statically or dynamically. Static congestion pricing requires that tolls are higher during traditional peak periods. Dynamic congestion pricing allows toll rates to vary depending upon actual traffic conditions. The more congested the road, the higher the cost to travel on the road. Dynamic congestion pricing works best when coupled with real-time information on the availability of other routes.	🚗🚗🚗	🚗🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.02	<b>Alternative Work Hours:</b> There are three main variations: staggered hours, flex-time, and compressed work weeks. Staggered hours require employees in different work groups to start at different times to spread out their arrival/departure times. Flex-time allows employees to arrive and leave outside of the traditional commute period. Compressed work weeks involve reducing the number of days per week worked while increasing the number of hours worked per day.	🚗🚗	🚗🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.03	<b>Telecommuting:</b> Telecommuting policies allow employees to work at home or a regional telecommute center instead of going into the office, all of the time or for a certain number of days per week.	🚗🚗	🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.04	<b>Emergency Ride Home Programs:</b> These programs provide a safety net to those people who carpool or use transit to work so that they can get to their destination if unexpected work demands or an emergency arises.	🚗🚗	🚗🚗	🚗🚗	🚗🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.05	<b>Alternative Mode Marketing and Education:</b> Providing education on alternative modes of transportation can be an effective way of increasing demand for alternative modes. This strategy can include mapping websites that compute directions and travel times for multiple modes of travel.	🚗	🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.06	<b>Safe Routes to Schools Program:</b> This federally-funded program provides 100 percent funding to communities to invest in pedestrian and bicycle infrastructure surrounding schools.	🚗	🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.07	<b>Preferential for Free Parking for High-Occupancy Vehicles (HOV):</b> This program provides an incentive for employees to carpool with preferred or free-of-charge parking for HOVs.	🚗🚗	🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	
	1.08	<b>Negotiated Demand Management Agreements:</b> As a condition of development approval, local governments require the private sector to contribute to traffic mitigation agreements. The agreements typically set a traffic reduction goal (often expressed as a minimum level of ridesharing participation or a stipulated reduction in the number of automobile trips).	🚗	🚗	🚗	🚗	1 2 3 4 5 6 7 8 9 10 Low Medium High Existing N/A	

**Potential Effectiveness:** Each potential strategy is evaluated or reviewed during a CMP Committee Task Force Workshop. This quickly identifies the potential strategies that may be appropriate for the specific corridor. Two columns are provided to identify the potential differences in benefit for significant Mobility Corridors vs. Non-Mobility Corridors.

**Recommendations/Comments:** Once each strategy is evaluated, the reviewers identify which strategies are recommended for additional consideration and what the specific recommended action item is. Action items may include coordination with other departments or agencies to focus on a rideshare program in the corridor or undertaking a detailed analysis at specific intersections to identify operational improvements.



## Safety Mitigation Strategies

Each year, nearly 3,000 fatalities and 17,000 severe injuries occur on our roadways, *just in Florida*. Nearly 500 fatalities occur in this region on an annual basis. Traffic crashes are the leading cause of death of persons ages four to 24. Reducing congestion is important to the public, but safety is even more important. It is strongly recommended that CMP efforts include both congestion and safety considerations. One of the most successful programs implemented on Interstates in Florida is the “Road Rangers” Program, which responds to crashes or renders aid to stranded motorists. An added benefit of the Road Rangers Program is that accidents are cleared more quickly, which reduces congestion and, potentially, other accidents. This is a good example of how a safety

program can reduce some of the worst types of congestion.

MPOs are required to address the Safety Emphasis Areas of the State Strategic Highway Safety Plan (SHSP) in their planning efforts. This often is performed as part of each MPO’s Long Range Transportation Planning efforts, but it is difficult to forecast crashes long into the future, and addressing existing safety issues should not be delayed. Including safety countermeasures is an important part of the Congestion Management Process. Preventing a crash can lead to a congestion reduction, but more severe crashes often take longer to clear. The Florida SHSP identifies four “Safety Emphasis Areas” as indicated below.

**Figure 4-3: Florida State Strategic Highway Safety Plan Safety Emphasis Areas**



### Vulnerable Users

Crashes involving pedestrians, bicyclists, or motorcyclists, who are more vulnerable to severe injuries or death.



### Aggressive Driving

Crashes that include impaired driving, reckless driving, or other crash types that often result in more serious crashes.



### Intersections

Intersections are planned conflict points and result in the greatest exposure for crashes to occur. These also are locations where mitigation activities may yield the greatest benefit.



### Lane Departures

Crashes that include head-on collisions and run-off-the-road crashes that result in serious crashes, and sideswipe crashes.

## *Technical strategies to mitigate congestion across the region ...*

**Phase 2** of the of the CMP Annual Update also is used to reduce congestion or improve safety to reduce crashes. Figure 4-4 on the following page shows the Safety Strategy Matrix for the technical evaluation of safety problems. Each emphasis area is addressed in the Regional Performance section of this report.



# Technical strategies to mitigate congestion across the region ...

## Related Crash Type and Frequency

Crash data management systems (CDMS) are capable of identifying crashes by type and location. These crashes then are mapped or plotted on intersections to identify concentrations of specific crash types that would benefit most from mitigation improvements.

## Safety Emphasis Areas

Each crash type is identified by a safety emphasis area. MPOs are required to address the Safety Emphasis Areas of the State SHSP in their planning efforts.

## Common Mitigation

These are the activities that are most commonly used to mitigate the crash types identified.

Figure 4-4: Safety Mitigation Strategy Matrix

	Related Crash Types	Strategic Highway Safety Plan				Crash Frequency along the Corridor (circle one)	Standard Mitigation	Recommended Follow-up
		Aggressive Driving	Intersection	Lane Departure	Vulnerable Road User			
<b>ENGINEERING</b>	Angle and left turn crashes occurring at stop-controlled intersections					N/A LOW MED HIGH	Provide advance warning sign on approach to intersection. Double up on traffic control signs. Provide warning flashers. Evaluate for possible signalization.	
	Crashes that occur during slippery or wet conditions					N/A LOW MED HIGH	Improve pavement friction through resurfacing or high-friction overlays.	
	Angle and left turn crashes occurring away from signalized intersections					N/A LOW MED HIGH	Channelize to prohibit a specific movement. Close median to prohibit all movements.	
	Left turn crashes occurring at signalized intersections					N/A LOW MED HIGH	Install of protected left turn phasing at signalized intersections. Consider protected only left turn phasing.	
	Crashes that occur during night-time hours					N/A LOW MED HIGH	Provide street lighting to increase road visibility at nighttime.	
	Rear end crashes with injuries.					N/A LOW MED HIGH	Provide advance signal warning sign at signalized intersections. Provide advance street name signs.	
	Crashes that involve a u-turning vehicle					N/A LOW MED HIGH	Prohibit U-turns at signalized intersection where there are conflicts with channelized right turns. Prohibit U-turns along corridors where sight distance is inadequate or there are conflicts.	
	Crashes that occur at driveways away from signalized intersections					N/A LOW MED HIGH	Consolidate driveways to decrease vehicular conflict points. Provide raised medians.	
	Crashes that occurred along a curved section of roadway					N/A LOW MED HIGH	Provide advance warning sign on approach to turns, particularly along rural roadways. Enhance signage. Provide solar flashing beacons on signs.	
	Crashes that involve vehicles leaving the roadway, including single vehicle collisions with fixed objects					N/A LOW MED HIGH	Provide guardrail. Provide delineation along the curve and inverted profile pavement markings (or raised pavement markings). Provide advance warning sign on approach to turns, particularly along rural roadways.	
	Crashes that involve left turning vehicles					N/A LOW MED HIGH	Provide turn lanes, increase left turn storage, provide positive offset.	
	Crashes that involve right turning vehicles					N/A LOW MED HIGH	Provide turn lanes, prohibit right turn on red, provide receiving lane for channelized right turn.	
	Crashes that involve motorcycles					N/A LOW MED HIGH	Evaluate pavement friction. Evaluate shoulders to ensure proper drainage. Increase speed enforcement.	
	Crashes that occur at intersections that involve parked cars					N/A LOW MED HIGH	Prohibit parking near major intersections to increase driver/pedestrian visibility.	
	Crashes that involve pedestrians					N/A LOW MED HIGH	Provide countdown heads for signalized intersections, refuge islands for unsignalized crossings, sidewalks along roadways, consolidate driveways to decrease vehicle/pedestrian conflict points.	
	Crashes that involve bicyclists					N/A LOW MED HIGH	Provide countdown heads for signalized intersections, refuge islands for unsignalized crossings, bike lanes along roadways, consolidate driveways to decrease vehicle/bicyclist conflict points.	
	Rear end and angle crashes at signalized intersections along east west corridors					N/A LOW MED HIGH	Install back plates or high visibility back plates on signalized intersections to increase signal head conspicuity (particularly along east-west corridors).	
	Crashes involving a heavy trucks					N/A LOW MED HIGH	Provide adequate clearance for heavy truck's reduced stopping distance at signals or provide dilemma zone detection at signals. Provide passing lanes, and acceleration/deceleration lanes. Increase turn radius.	
<b>ENFORCEMENT</b>	Crashes that cite disregard of traffic control as a contributing cause.					N/A LOW MED HIGH	Increase red light running enforcement.	
	Crashes that involve a speeding vehicle (cited by officer)					N/A LOW MED HIGH	Increase speed enforcement. Install post mounted speed feedback signs.	
	Crashes where drugs and/or alcohol was involved					N/A LOW MED HIGH	Increase DUI enforcement.	

## Recommended Follow-Up

Based on the review of crashes at the specific location, a recommended action is identified. In many cases, this will involve gaining assistance from FDOT or local Public Works Department to evaluate the safety issue in more detail. Often, improvements can be made using existing budgets that have been set up to address identified safety issues. Existing plans to improve or resurface roadways also can be modified to include safety improvements at a lower cost. Additional funding may be available through Federal safety grant programs, resulting in more projects being implemented as a part of the CMP process to provide benefits to the community.



# Evaluation of selected corridors ...

## Corridor #1 Evaluation Summary

Table 4-1: Congested Corridor #1

<b>Corridor #1</b>	Gunn Highway
<b>Limits</b>	S. Mobley Rd to SR 54
<b>Affecting MPOs</b>	Hillsborough, Pasco

Table 4-2: Gunn Highway Traffic Counts

From Street/To Street	2008	2009	2010	2011
S of Tarpon Springs Rd.***	17,300	17,100	16,700	18,600
S of SR 54 (County Count in 2009)	N/A	11,515	N/A	12,500

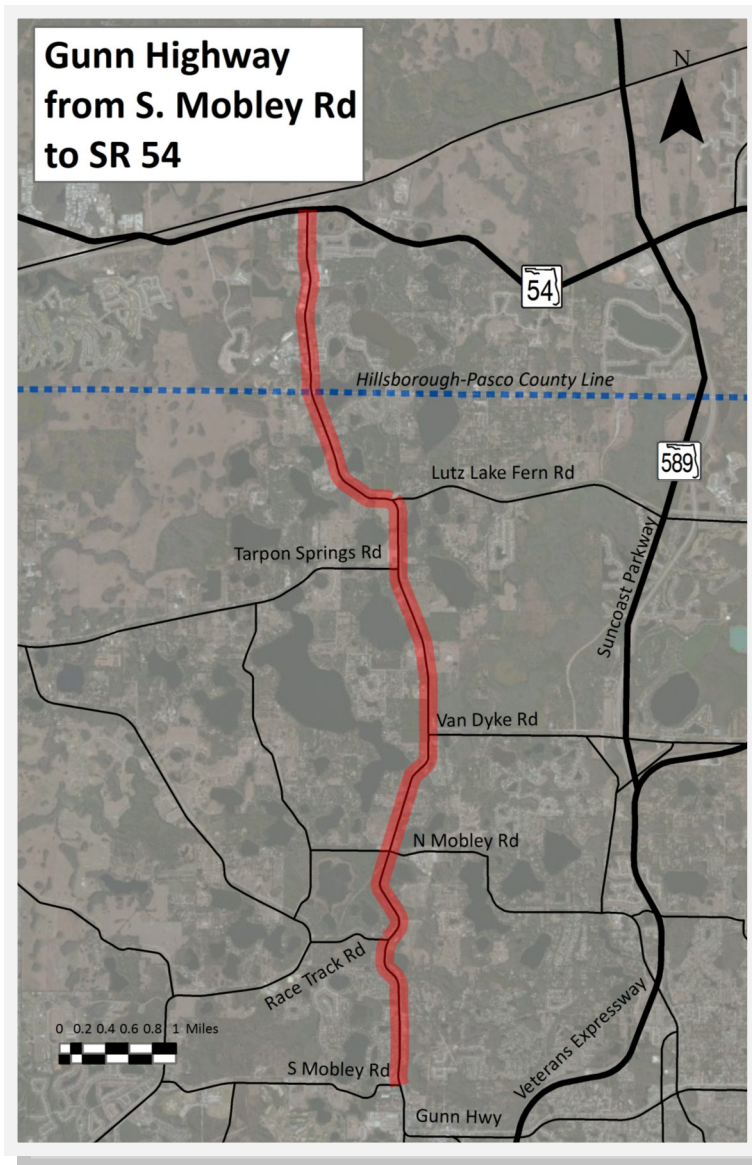
\*\*\*Peak direction is Southbound. Source: FTI, Pasco County 2009

Table 4-3: Gunn Highway Level of Service

From Street/To Street	Lanes	Standard	2011
S Mobley Rd. to Race Track Rd.	2U	D	F
Race Track Rd. to N Mobley Rd.	2U	D	F
N Mobley Rd. to Van Dyke	2U	D	F
Van Dyke to Tarpon Springs Rd.	2U	D	F
Tarpon Springs Rd. to Lutz Lake Fern Rd.	2U	D	D
Lutz Lake Fern Rd. to County Line Rd.	2U	D	D
County Line Rd. to SR 54	2U	D	C

### Safety Summary:

The top crash intersections on this segment are at State Road 54 (Pasco County), and at S. Mobley Road (Hillsborough County). The most common crashes at State Road 54 are rear-end crashes associated with signal failure during rush hour. The most common crash type at S. Mobley Road is rear-end crashes caused by following too closely and excessive speeding. Other common issues are lane departure crashes and run-off-road crashes.



Map 4-4: Gunn Highway from S. Mobley Rd to SR 54





## Evaluation of selected corridors ...

**Table 4-4: Gunn Highway Corridor Strategies and Action Items**

Potential Strategy	Rank	Action Item	Potential Responsible Agency	Implementation Time Frame
5.05 Develop Parallel Corridor/Increase Network Connectivity	High	Expand Suncoast Parkway/Veterans Expressway	Florida Turnpike Enterprise	Long-Term
4.07 Intersection Improvements	High	Identify and implement intersection improvements to increase efficiency without widening/adding lanes	Hillsborough County Public Works, Pasco County Engineering Services	Mid-Term
4.14 Access Management Policies	High	Identify opportunities for access management on corridor	Hillsborough County Public Works, Pasco County Engineering Services	Mid-Term
5.02 Convert Existing Intersections to Roundabouts	High	Identify and implement roundabout conversions	Hillsborough County Public Works, Pasco County Engineering Services	Long-Term
2.03 Implementing Premium Transit	Medium	Expand transit service on Suncoast Parkway/Veterans Expressway	Pasco County Public Transportation, Hillsborough Area Regional Transit Authority	Long-Term
3.01 Ridesharing (Carpools & Vanpools)	Medium	Promote/Expand ridesharing education/marketing	TBARTA, Commuter Services	Short-Term
3.03 Park-and-Ride Lots	Medium	Expand Park-and-Ride lots north of County Line	Pasco County	Mid-Term
1.03 Telecommuting	Medium	Promote Telecommuting and Develop Telecommuting Centers north of County Line	Pasco County	Mid-Term
2.08 Designated Bicycle Lanes on Facilities or Routes	Medium	Identify opportunities for construction of bicycle lanes along corridor	Pasco MPO, Hillsborough MPO	Mid-Term
4.02 Advanced Traveler Information Systems (ATIS)	Medium	Provide ATIS communication technology for commuters to alleviate congestion and encourage use of Suncoast/Veterans	Pasco County, Hillsborough County, Florida Turnpike Enterprise	Long-Term



# Evaluation of selected corridors ...

## Corridor #2 Evaluation Summary

Table 4-5: Congested Corridor #2

<b>Corridor #2</b>	US 301
<b>Limits</b>	Rutland Rd to Sun City Center Blvd/SR 674
<b>Affecting MPOs</b>	Hillsborough, Manatee

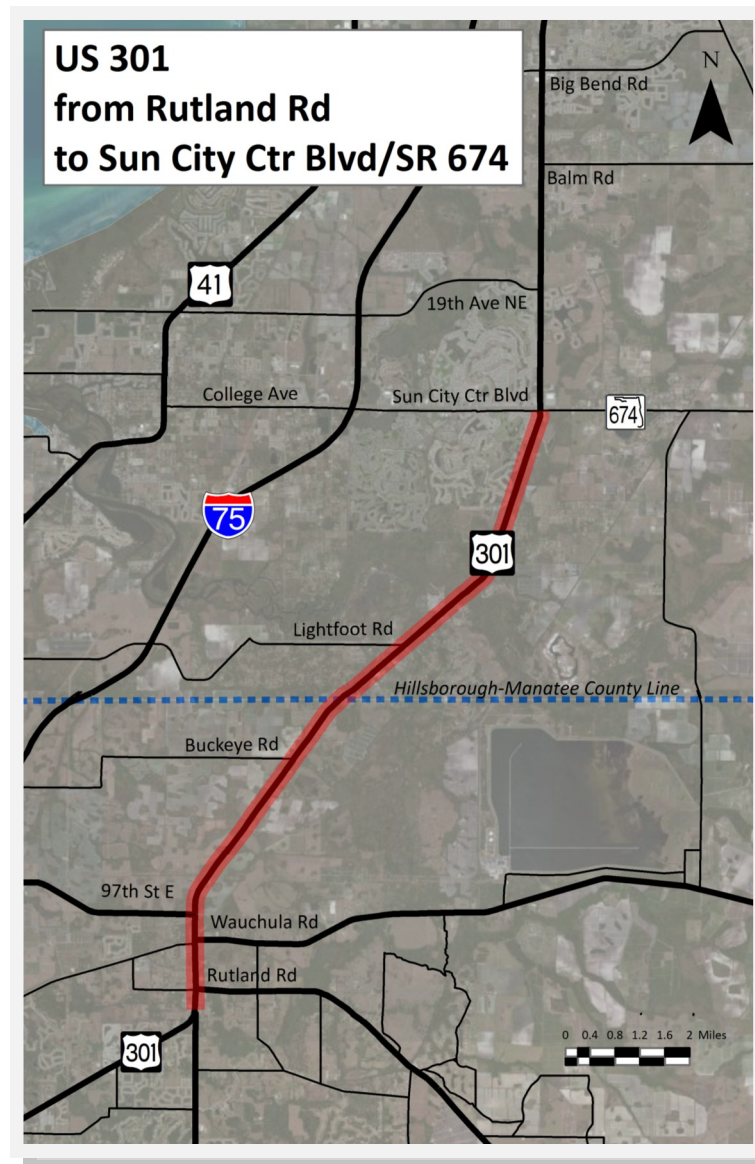
Table 4-6: US 301 Traffic Counts

From Street/To Street	1997	2007	2008	2009	2010	2011
NE of Chin Rd.	N/A	9,700	9,600	10,600	10,400	10,400
just N of Moccasin Wallow	2,600	N/A	N/A	N/A	3,600	3,400
just N of Hillsborough-Manatee County Li	2,600	3,600	3,600	3,400	3,200	3,400
just N of SR 674/Sun City Center Blvd	5,900	10,300	9,900	9,600	9,800	9,700
South of Symmes Rd.	34,000	24,500	23,500	22,000	21,500	20,500

Source: FTI

Table 4-7: US 301 Level of Service

From Street/To Street	Lanes	Improvement	Standard	2011
CR 675 to Moccasin Wallow Rd.	2U	4D	D	B
Moccasin Wallow Rd to County Line Rd.	2U	none	C	B
County Line to Lightfoot Rd.	2U	none	D	B
Lightfoot Rd. to SR 674	2U	none	D	B
SR 674 to 19th Ave.	2U	6D	D	C
19th Ave. to Balm Rd.	2U	6D	D	C
Balm Rd. to Big Bend Rd.	2U	6D	D	F



Map 4-5: US 301 from Rutland Rd to Sun City Center Blvd/SR 674



## Evaluation of selected corridors ...

**Table 4-8: US 301 Corridor Strategies and Action Items**

Potential Strategy		Rank	Action Item	Potential Responsible Agency	Implementation Time Frame
5.02	Convert Existing Intersections to Roundabouts	Medium	Identify and implement roundabout conversions	Hillsborough and Sarasota-Manatee MPO, FDOT	Long-Term
1.11	Design Guidelines for Pedestrian-Oriented and Transit-Oriented Development	Medium	Establish development guidelines for pedestrian-oriented and transit-oriented development south of the County Line	Hillsborough County, Manatee County	Mid-Term
1.12	Mixed-Use Development	Medium	Encourage mixed-use development south of County Line	Hillsborough County, Manatee County	Long-Term
2.07	New Sidewalk Connections	Medium	Identify opportunities for new sidewalk/trail/path connections along corridor	Hillsborough MPO, Sarasota-Manatee MPO	Mid-Term
2.08	Designated Bicycle Lanes on Facilities or Routes	Medium	Identify opportunities for construction of bicycle lanes along corridor	Hillsborough MPO, Sarasota-Manatee MPO, FDOT	Mid-Term
2.10	Improved Safety of Existing Bicycle and Pedestrian Infrastructure	Medium	Identify locations where safety enhancements can be made to existing bicycle or pedestrian facilities	Hillsborough MPO, Sarasota-Manatee MPO, FDOT	Mid-Term
3.01	Ridesharing (Carpools & Vanpools)	Medium	Promote/Expand ridesharing education/marketing	TBARTA, Commuter Services	Short-Term
4.02	Advanced Traveler Information Systems (ATIS)	Medium	Provide ATIS communication technology for commuters to alleviate congestion and encourage use of I-75	Hillsborough MPO, Sarasota-Manatee MPO, FDOT	Long-Term
4.07	Intersection Improvements	Medium	Identify and implement intersection improvements to increase efficiency	Hillsborough MPO, Sarasota-Manatee MPO, FDOT	Mid-Term
4.14	Access Management Policies	Medium	Identify opportunities for access management on corridor	Hillsborough MPO, Sarasota-Manatee MPO, FDOT	Mid-Term





**WEST CENTRAL FLORIDA METROPOLITAN PLANNING ORGANIZATIONS CHAIRS COORDINATING COMMITTEE**

## *Regional Congestion Management Process*

For additional information on the Regional CMP, contact  
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