

2012 State of the System Report

June 12, 2013



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2012 State of the System Report

June 12, 2013



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General Description: The State of the System Report (SOS) provides a biennial snapshot of transportation trends and conditions, generally using 2011 data collected from a variety of resources, including MPO, Federal, State and local agencies. Contents of the SOS includes usage and crash data related to roads, transit, sidewalks trails and bike lanes, formatted in tables, maps, and graphs. A status report on the MPO's Congestion Management Process (CMP) is also included in this report.

Funding for this report may have 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 content of this report does not necessarily reflect the official views or policies of the U.S. Department of Transportation.

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I. Executive Summary

As the foundation of the Metropolitan Planning Organization's Congestion Management Process (CMP), the State of the System (SOS) report provides a summary of transportation trends and conditions in Pinellas County, Florida for data year (DY) 2011 (extending from January 1 through December 31). The 2012 SOS Report will be used as a reference for developing the MPO's Transportation Improvement Program (TIP) and its 2040 Long Range Transportation Plan (LRTP), and as the foundation for the MPO's Congestion Management Process (CMP). The following trends and conditions were identified:

Roads and Congestion

- Countywide, there were 587 centerline miles (2,280 lane miles) of MPO monitored roadways. While Strategic Intermodal System (SIS) roads accounted for only nine (9) percent of the centerline miles, they accommodated 28% of the vehicle miles traveled (VMT) and 25% of the vehicle hours traveled (VHT), consistent with what occurred in DY 2009.
- Analysis of the County's 14 planning sectors revealed that both VMT and VHT were down slightly (less than two percent) in DY 2011.
- Congestion has decreased slightly, as only 17½ % of the 2,280 lane miles operated under congested conditions in DY 2011, down from 21% in DY 2009.
- While Sector 6 has the most congested lane miles (100), Sector 1 (Tarpon Springs) and Sector 2 (East Lake Tarpon) continue to exhibit the highest percentage of congested lane miles (55.3% and 52.6%, respectively).
- Duration of congestion (DOC) is calculated by identifying (and adding up) all 15-minute periods during an average day in which traffic volumes congest the roadway. In DY 2011, five (5) SIS roadway facilities/ segments were identified (three on US Highway 19) with a DOC of 10 hours or greater, down from seven (7) in DY 2009, moreover, the DOC for all five segments decreased between DY 2009 and DY 2011.
- In DY 2011, only 23 non- SIS roadway facilities/segments were identified with a DOC of 10 hours or greater, down from 27 in DY 2009.
- For the first time in a State of the System Report, crash data is reflected in the tables addressing congestion, in addition to an identification of those facilities/segments under construction or planned for construction.
- The total number of tourists visiting Pinellas County increased by approximately 6.1% between 2009 and 2011, and 3.8% between 2011 and 2012.

Crash Data

- Three of the five highest crash intersections in DY 2011 were on US Highway 19, at Tampa Road, Curlew Road and Alderman Road, respectively.

- Ten percent of all pedestrian and bicycle crashes in DY 2011 occurred in parking lots or private locations.
- “Vulnerable user” fatalities (pedestrians, bicyclists and motorcyclists) accounted for approximately 60% of all fatalities in DY 2011.

Transit

- The Pinellas Suncoast Transit Authority (PSTA) routinely monitors its routes for productivity and performance. Transit ridership has grown substantially since 2007/08, other than slight declines in 2008/09 and 2010/11.
- Approximately 86% percent of PSTA routes achieved an on-time performance in 2011, a rate higher than the systemwide average, estimated to be 78%.

Bicycle Lanes, Sidewalks and Trails

- Countywide, the road network had 73.1% sidewalk coverage and 14.5% bicycle lane coverage, and there were approximately 87 miles of trail.
- Sector 11 (St. Petersburg, Gulfport) and Sector 6 (Clearwater) exceeded all other sectors in miles of roads, sidewalks and trails.
- Sector 11 also had the most miles of bike lanes, followed by Sector 3 (Palm Harbor).
- Trail miles increased 47½% between 2008 and 2011. The estimated 87 miles of trail does not include the Friendship Trail Bridge, which closed in the final months of 2008 due to concerns about structural integrity.

Air Quality

- Pinellas County is part of a regional airshed for the purposes of determining compliance with the federal ozone standard. This airshed, which is currently in attainment, is defined by EPA to include Hernando, Hillsborough, Pasco and Pinellas counties. The federal standard for ozone pollution, the primary component of what is generally termed “smog,” changed in 2008 from a threshold of 85 parts per billion (ppb) to 75 ppb. Ozone readings from 2009, 2010 and 2011 data, drawn from the three monitoring stations in Pinellas County, averaged 65 ppb, well below the federal standard.

As noted above, a major purpose of the SOS Report is to aid in the development, refinement and implementation of the Congestion Management Process (CMP). The 2012 SOS Report includes a systemwide analysis to identify the top ranked, i.e., most severely congested roadways (see Tables 6, 7, 8 and 9) and an update concerning the performance and status of existing CMP projects (see appendix). For CMP evaluation purposes, duration of congestion (DOC) and volume/capacity ratios (V/C) are the primary measures, along with crash data. The most highly congested segments identified in 2012 SOS Report are currently being addressed or are planned for improvements through the Long Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP), the Intelligent Transportation Systems (ITS) plan, and other

processes. A closer review of these facilities and segments through the congestion management process will determine if more immediate or additional actions are needed to mitigate congestion.

It is recognized that the goal of reducing congestion should be balanced against other goals, such as promoting livable community initiatives, enhancing accessibility and safe mobility for all modalities and age groups, including age 65 and over, and supporting the area's economic vitality. A major challenge in coming years will continue to be maintaining and finding new sources for funding transportation projects, given overall budget reductions as well as reductions in fuel tax receipts and other sources of tax revenue.

II. Introduction

A. Background

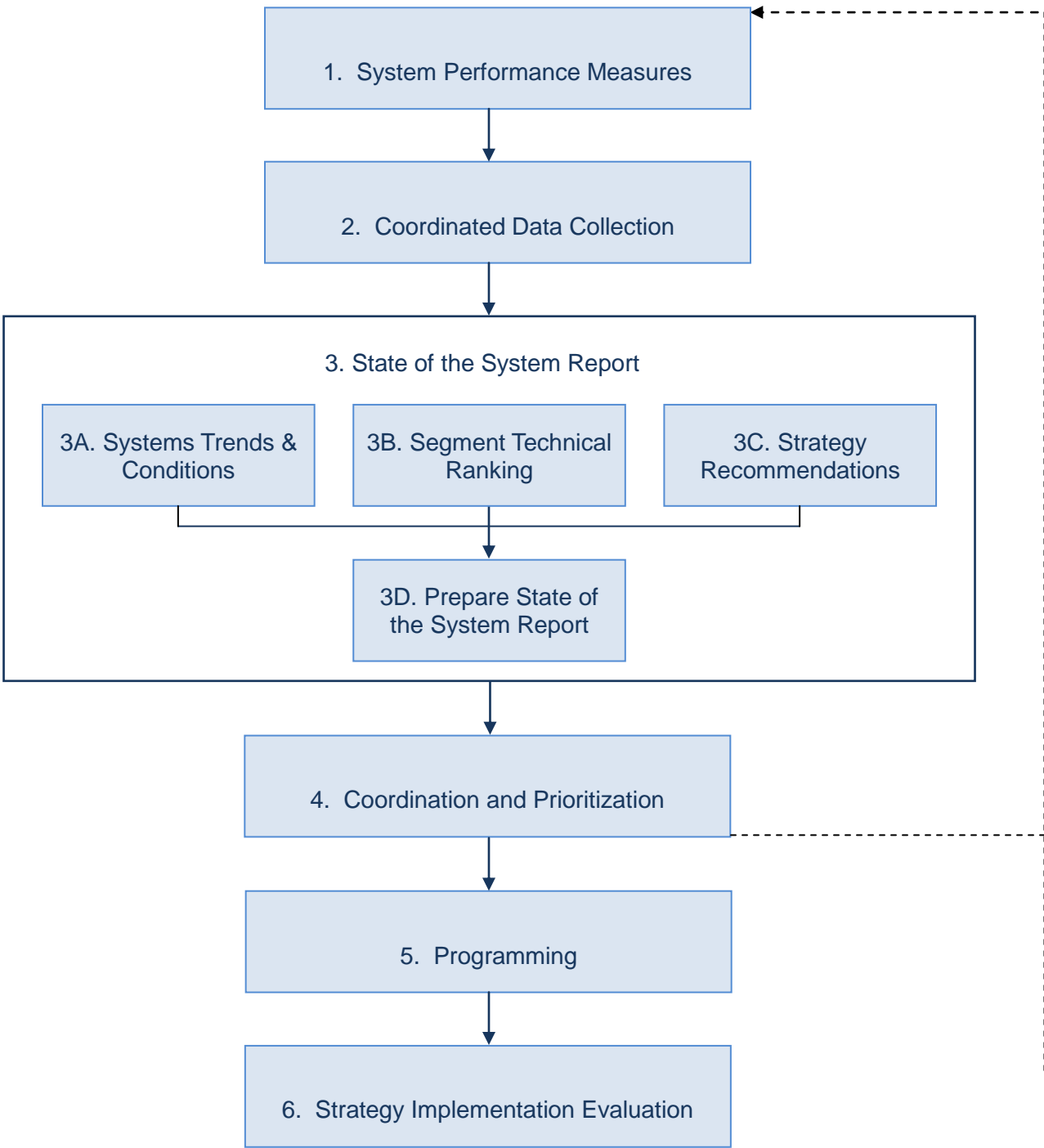
Pinellas County is geographically the second smallest county in Florida, covering approximately 280 square miles, and according to the Bureau of Economic and Business Research (BEBR), University of Florida, the County's 2012 estimated population of 920,381 still makes it the state's most densely populated county. While this population estimate is a 0.4% increase over the 2010 Census figure of 916,542, it is a 1.1% decrease from the 931,113 BEBR estimate in 2009, and a 2.5% decrease from the 944,199 estimate in 2007.

Opportunities for capital improvements on roadways are severely limited due to a variety of factors including availability of land and funding; high right-of-way costs; concern about impacts on neighborhoods, including compatibility issues, property values and environmental concerns; and a commitment to seeking alternative solutions to congestion mitigation, such as transportation demand management, wherever possible and practical. To meet the county's mobility challenges and to support quality of life, it has become increasingly important for the Pinellas County Metropolitan Planning Organization (MPO) and its partners to maximize the potential of all transportation modalities, including transit, pedestrian and bicycle, as well as roads.

The SOS Report is a "trends and conditions" report that serves as a basis for identifying where the transportation system is functioning properly and where improvements are needed. This report will be used by the MPO and its committees and local governments to identify and prioritize projects and to analyze the effectiveness of implemented congestion and safety strategies; moreover, the SOS Report provides input for developing the MPO's Transportation Improvement Program (TIP). In general, State roadway priorities are implemented through the MPO's TIP, while local roadways are addressed through the capital improvements programming process of the respective jurisdictions.

Figure 1 illustrates the role of the SOS Report pertaining to the Congestion Management Process (CMP). While priority corridors identified in the report are the top candidates for "action," given the funding constraints of the MPO and its State and local partners, "actions" are more likely to be in the form of operational improvements and ongoing monitoring, conducting detailed evaluations of corridors, and defining funding and implementing strategies.

Figure 1 – The Congestion Management Process



B. Methodology

The 2012 SOS Report summarizes the mobility conditions on the transportation system in the County for the 2011 calendar year (January 1 to December 31) and, wherever possible and appropriate, makes historical comparisons. The report addresses availability, usage, safety and environmental issues relating to the following modalities: roads, transit, bicycle and pedestrian.

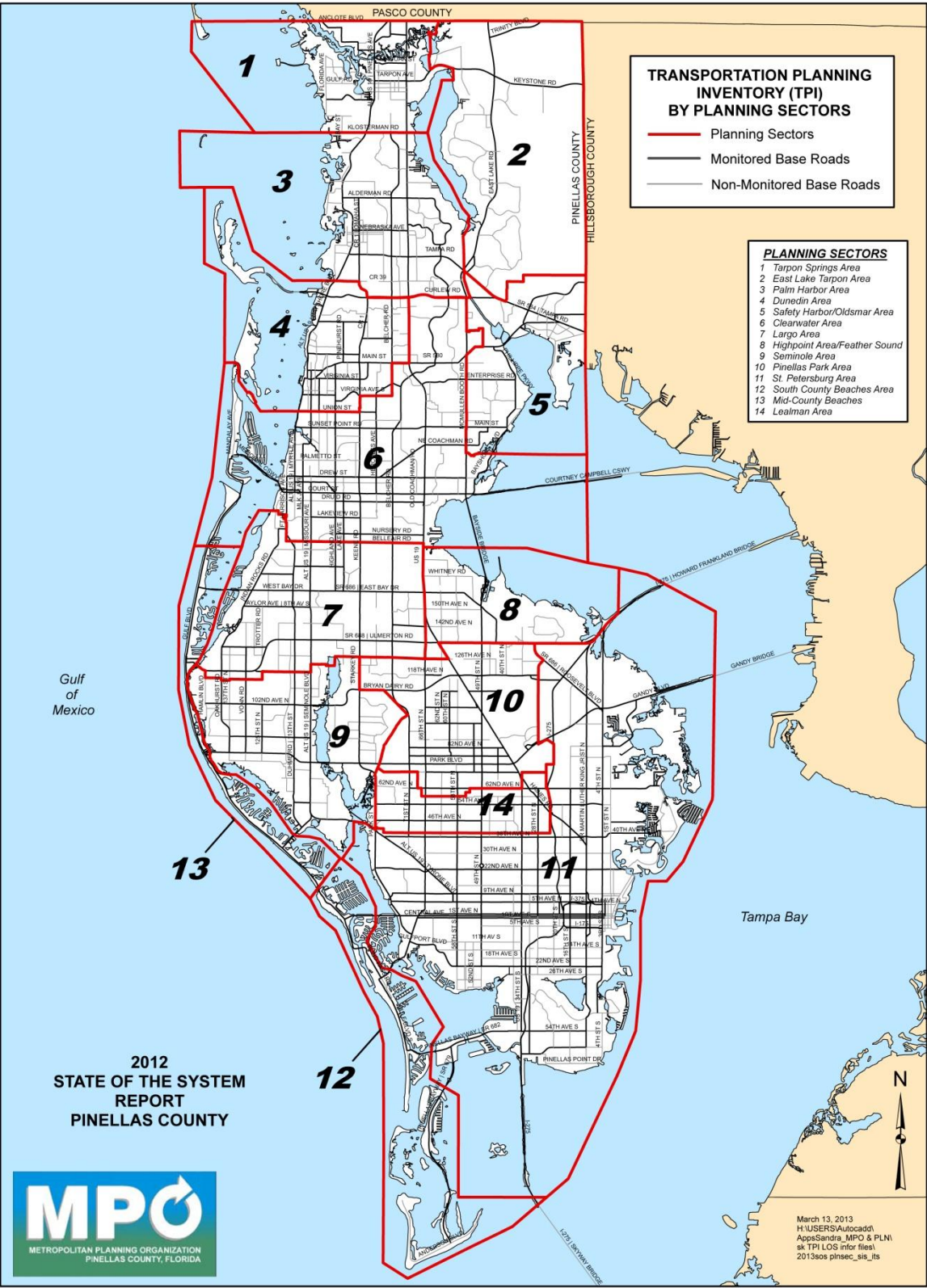
This report draws data from a variety of sources, including the following databases: the MPO's Transportation Planning Inventory (TPI) and Crash Data Management System (CDMS); the Florida Department of Highway Safety and Motor Vehicles (FDHSMV); and the Florida Department of Transportation (FDOT). Additionally, this report includes data from the U.S. Census Bureau and from other agencies, including the Pinellas Suncoast Transit Authority (PSTA) and several County departments, e.g., Strategic Planning & Initiatives, Parks & Conservation Resources, and Environment & Infrastructure. A list of resources is included in the attached bibliography. In some cases, numbers and totals may not be identical among databases, due to differences in methodologies. Explanations are provided, when and where appropriate.

Consistent with the 2010 Report, the segmentation used for the 2012 SOS Report reflects the 14 planning sectors shown in Map 1. It should be further noted that the 14 planning sectors do not necessarily conform to the boundaries of a particular local government. For example, Sector 11 includes the municipalities of St. Petersburg, Gulfport and South Pasadena, while Sector 14 includes Lealman (an unincorporated area of the County) and the Town of Kenneth City.

Map 2 depicts Strategic and Non-Strategic Intermodal System (SIS) roadway facilities. SIS facilities, which remained unchanged from the 2010 Report, include:

- The interstate highway system (Interstates 175, 275 and 375);
- US Highway 19 from the Pasco/Pinellas County Line to Gandy Blvd.; and
- SR 694/Gandy Blvd from US Highway 19 to the Pinellas/Hillsborough County Line.

Map 1 – Planning Sectors



Map 2 – Strategic Intermodal System (SIS) and Non-Strategic Intermodal System



I.TRENDS AND CONDITIONS: Roads

For DY 2011 the Pinellas County MPO's Transportation Planning Inventory (TPI) database archived information on approximately 957 centerline miles of functionally classified roads. The MPO provided additional monitoring of traffic volumes on approximately 61% of these roads (or 587 centerline miles) to obtain data for its *Level of Service (LOS) Report* and other reports. Miles of roadway are broken down by centerline and lane miles, and by Strategic Intermodal System (SIS) and Non-SIS as shown in Table 1 and Figure 2.

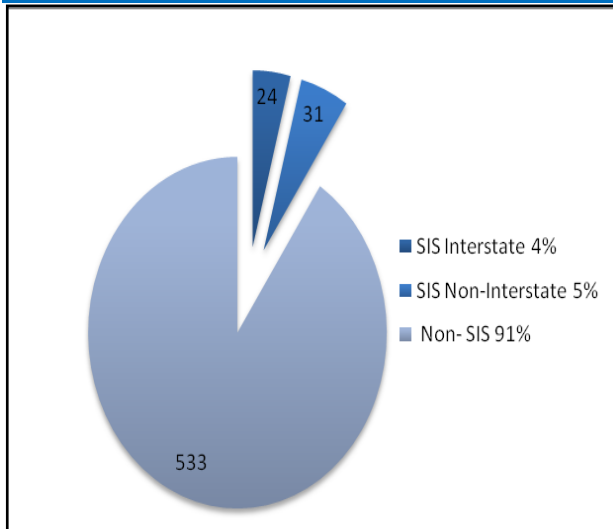
Table 1 – Roadway Miles on Monitored Roads, SIS and Non-SIS Roadways, DY 2011

	SIS by Road Classification		SIS Total (Interstate + Non Interstate)	Non- SIS Total	Total All Roads
	Interstate	Non- Interstate			
Centerline Miles	24 (4%)	31 (5%)	55 (9%)	533 (91%)	587 (100%)
Lane Miles	146 (6%)	172 (8%)	318 (14%)	1,962 (86%)	2,280 (100%)

Source: Pinellas County MPO Transportation Planning Inventory (TPI) database - monitored roads

Note: Centerline miles are measured, one-way, regardless of the number of lanes. Lane miles are the product of centerline miles times the number of lanes.

Figure 2 – Distribution of SIS/ Non-SIS Centerline Miles, DY 2011



Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

The final total of lane mile calculations on monitored, Non-SIS roadways changed slightly from the 2010 SOS Report (a one mile decrease), however, the percentages of the sub-totals have remained unchanged.

Vehicle Miles of Travel (VMT) and Vehicle Hours of Travel (VHT)

Vehicle Miles Traveled (VMT) is an estimation of the number of miles driven on the roadway network during an average day, and is a relevant measure for identifying travel habits within an urbanized area. VMT is measured by multiplying the average (mean) of the total average annual daily traffic volume (AADT) by the length of the segment, in centerline miles. Map 3 represents AADT in

Pinellas County, by segment.

Vehicle hours of travel (VHT) is a measure of the number of hours that vehicles have driven on a given roadway segment during an average day. VHT is calculated by dividing the VMT segment by the average speed.

Map 3 - Average Annual Daily Traffic

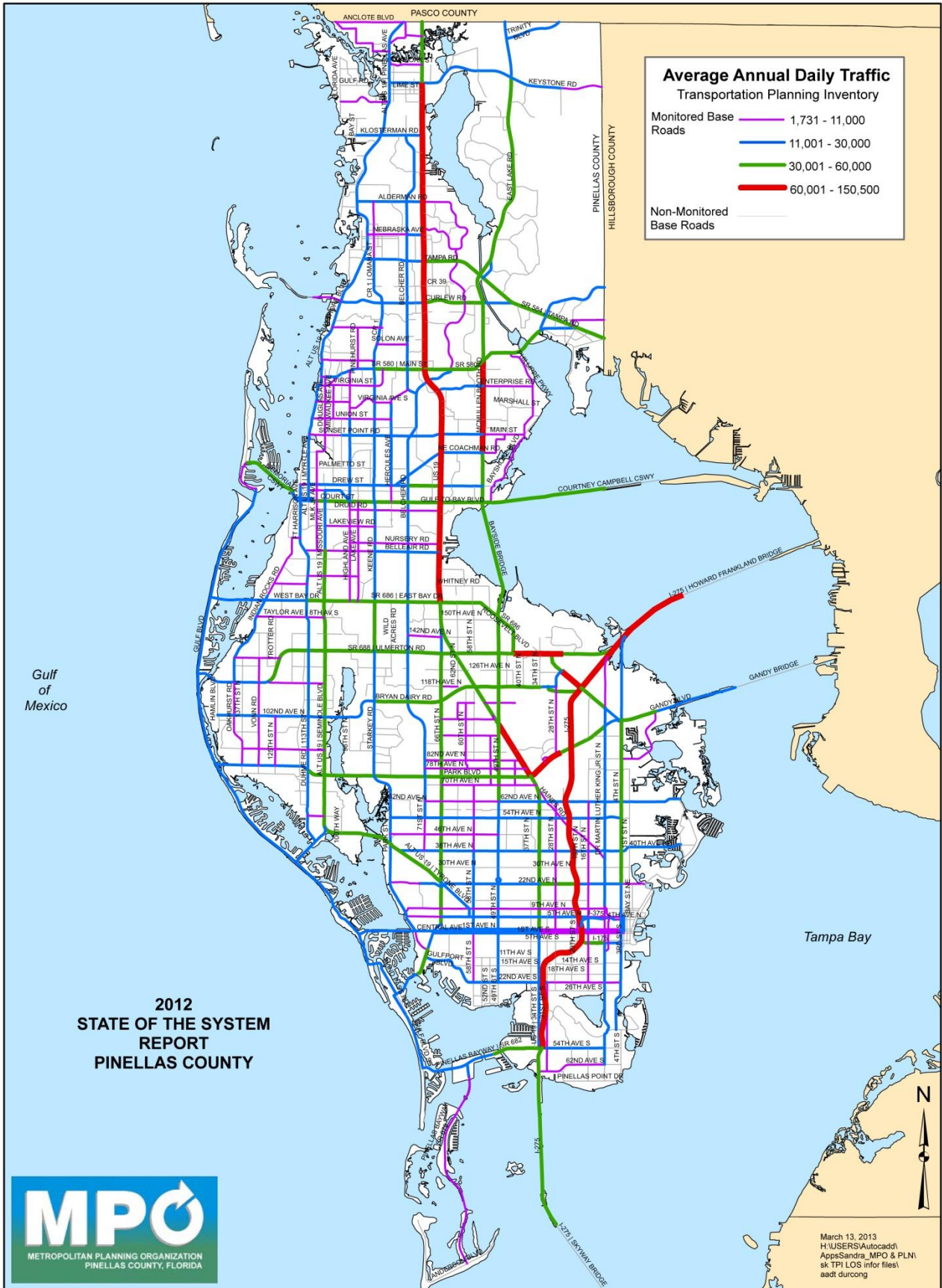


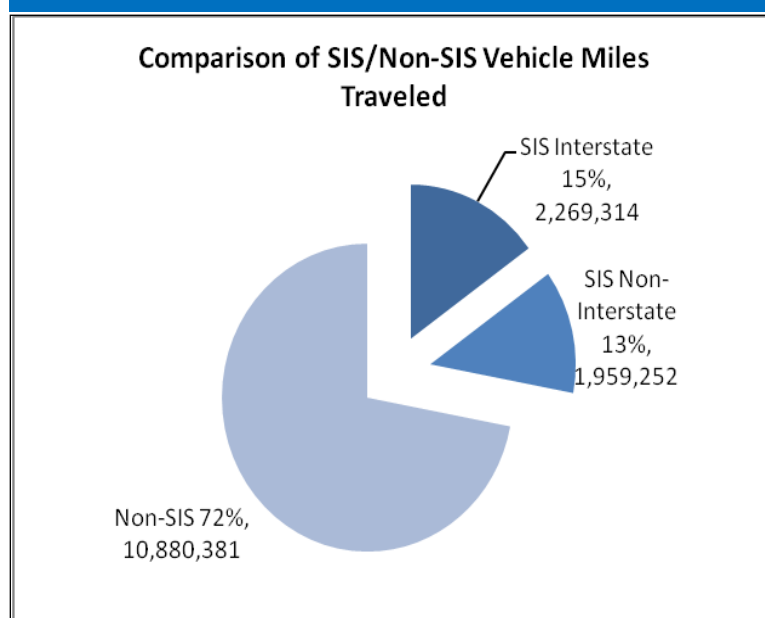
Table 2 – Vehicle Miles of Travel/Vehicle Hours of Travel, SIS and Non-SIS, DY 2011

	SIS	Non-SIS	Total
VMT (000s)	4,229	10,880	15,109
% VMT	28%	72%	100%
VHT (000s)	140	415	555
% VHT	25%	75%	100%

Source: 2011 data from Pinellas County MPO
Transportation Planning Inventory Database (TPI)
- monitored roads

Notes:

- Monitored roads represent about 61% of the 2011 TPI (functional class) database
- VMT = Average (mean) of total average annual daily traffic (AADT) volume x total length in centerline miles.
- VHT = VMT /calculated speed
- Calculated speed for SIS and Non-SIS roads were obtained by dividing the VHT by the VMT as presented in the 2010 SOS Report. Calculated speeds for the 2008 and 2010 SOS Reports were based on the Tampa Bay Regional Planning Model, which remains as the current model for this report.

Figure 3 – SIS/Non-SIS VMT, DY 2011

As shown in Table 2, while Strategic Intermodal System (SIS) roads accounted for only 55 centerline miles, or 9% of all centerline miles, 28% of the VMT and 25% of the VHT occurred on SIS roads in 2011, identical to what occurred in 2009. Figure 3 compares SIS/Non-SIS VMT. (**Trend:** While not a significant percentage of the total centerline miles that are monitored, SIS roads continue to account for a significant percentage of VMT and VHT countywide.)

Vehicle Miles of Travel (VMT) and Vehicle Hours of Travel (VHT) totals for the County's 14 planning sectors are shown in Table 3, and VMT in Figure 4. The planning sector boundaries used for this SOS Report (DY 2011) are consistent with the boundaries used in the 2010 SOS Report (DY 2009).

Sector 11, which represents the cities of St. Petersburg , Gulfport and South Pasadena, and includes the County's interstate highways and two bridge crossings to Hillsborough County, recorded the highest percentage of total VMT/VHT in DY 2011, with totals just slightly less than what was reported in DY 2009. Clearwater (Sector 6) had the second highest total VMT/VHT. In contrast, the lowest VMT/VHT occurred within Sectors 12 and 13 (South and Mid-County Beaches, respectively). Sectors 5, 7, 8 and 13 were the only sectors to experience a *slight increase* during this time period, while countywide the VMT/VHT was *down slightly* (less than 2%).

Table 3 - Vehicle Miles of Travel and Vehicle Hours of Travel by Planning Sector

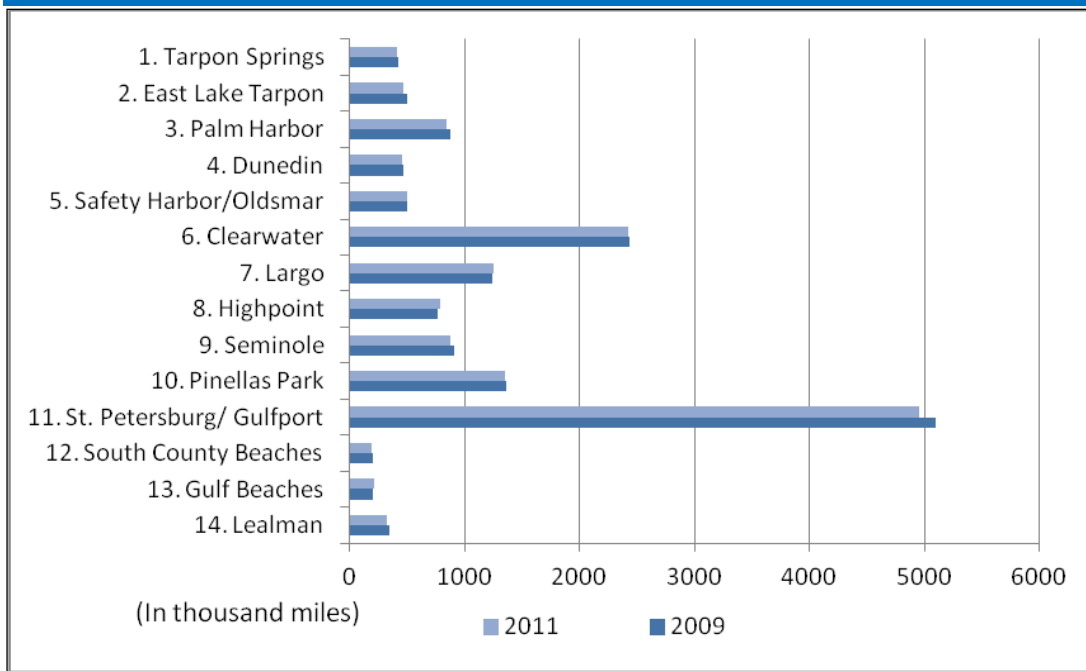
Sector		DY 2009		DY 2011			
		VMT (000s)	VHT (000s)	VMT (000s)	VMT %	VHT (000s)	VHT %
1	Tarpon Springs	426	20	417	2.8%	20	3.6%
2	East Lake Tarpon	498	21	470	3.1%	20	3.6%
3	Palm Harbor	873	37	846	5.6%	36	6.5%
4	Dunedin	473	19	457	3.0%	18	3.2%
5	Safety Harbor/Oldsmar	505	20	508	3.4%	20	3.6%
6	Clearwater	2,439	96	2,429	16.1%	96	17.3%
7	Largo	1,244	48	1,254	8.3%	48	8.6%
8	Highpoint/Feather Sound	772	28	794	5.3%	29	5.2%
9	Seminole	912	34	884	5.9%	33	5.9%
10	Pinellas Park	1,359	48	1,354	9.0%	48	8.6%
11	St. Petersburg/Gulfport	5,102	166	4,957	32.8%	161	29.0%
12	South County Beaches	206	8	195	1.3%	8	1.4%
13	Mid-County Beaches	200	7	215	1.4%	8	1.4%
14	Lealman	346	12	328	2.2%	11	2.0%
Totals		15,356	564	15,109	100%	556	100%

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads); FDOT's Tampa Bay Regional Planning Model (used for VHT calculated speeds)

Notes:

1. Monitored roads represent about 61% of the 2011 TPI (functional class) base file.
2. Calculations use centerline miles.
3. VMT = average (mean) of the total average annual daily traffic (AADT) volume x the total length, in centerline miles.
4. VHT = VMT / calculated speed. (This report used the same calculated speeds used in the 2010 SOS Report, which were based on the Tampa Bay Regional Planning Model.)
5. Data collected mid-week (not on weekends or holidays).

Figure 4 – Vehicle Miles of Travel by Planning Sector



Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Note: Measured by monitored roads, representing about 61% of the 2011 TPI base file.

(Trend: Sectors 11, 6, 10 and 7 continue to record the highest vehicle miles traveled and vehicle hours of travel.)

Congestion

This section looks at peak congestion using Transportation Planning Inventory (TPI) lane miles. For the purposes of this report, two indicators define congestion: volume to capacity (V/C) ratio, and duration of congestion (DOC) hours.

A. Congestion Measurement: Volume to Capacity (V/C) Ratio

The MPO defines a roadway as congested if the peak hour traffic volume is equal to or greater than 90% of capacity (peak hour, peak direction) volume of the adopted level of service (LOS) standard for the roadway. For all roadways, peak hour, peak directional volume is based on the MPO's TPI database, which uses vTIMAS software to implement the measurement methodology utilizing FDOT's *Quality/Level of Service (QLOS) Handbook*, and *General Tables*.

Table 4, and Figures 5 and 6, show that in DY 2011, based on V/C ratios, approximately 17.5% or 400 of the 2,281 monitored lane miles, countywide, operated under congested conditions during the peak hours. Overall, SIS roadways accounted for 137 congested miles, or about 6.0% of total lane miles, countywide.

Table 4 – Distribution of Congested Miles (≥ 0.9 V/C), SIS and Non-SIS, DY 2011

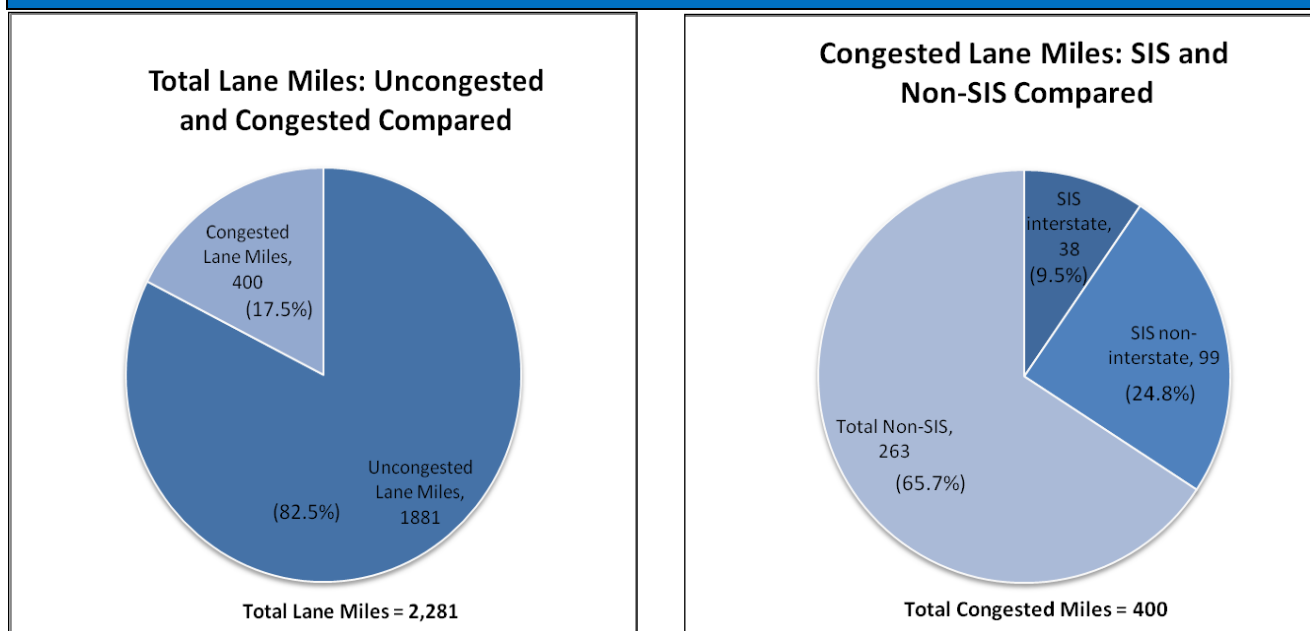
	Lane Miles	Congested Lane Miles	% Lane Miles Congested
- SIS interstate	146	38	1.7%
- SIS non-interstate	172	99	4.3%
Total SIS	318	137	6.0%
Total Non-SIS	1,963	263	11.5%
Total Lane Miles	2,281 (100%)	400	17.5%

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Notes:

- Congestion is defined as peak hour, peak direction traffic volume equal to or greater than 90% at the adopted level of service (LOS) standard for the roadway (V/C).
- Monitored roads represent about 61% of the 2011 TPI base file.
- Measurements are in lane miles.

Figures 5 & 6 - Congested Miles (≥ 0.9 V/C) and Total Miles (SIS/Non-SIS), DY 2011



(Trend: As detailed in the 2010 SOS Report (DY 2009), approximately 21% of the monitored lane miles operated under congested conditions, and overall, SIS roadways accounted for 169 congested miles, or 7.4% of the total lane miles, countywide. For DY 2011, it can be stated that countywide, the percentage of monitored lane miles operating under congested conditions *is down, from 21% to 17.5%*; and the total number of congested SIS roadway lane miles *is down, from 7.4% to 6%.*)

Although SIS roadways accounted for only 14% of all lane miles countywide, about 34.3% of congested lane miles (9.5% interstate and 24.8% non-interstate) were on SIS roadways. As shown in Table 5, Sectors 1 (Tarpon Springs) and 2 (East Lake Tarpon) accounted for the highest percentages of congested lane miles. Approximately ½ of the

monitored lane miles in these sectors were congested during peak period, while Sector 12 (South County Beaches), and Sector 14 (Lealman) experienced virtually no congestion during peak periods. (**Trend:** While the overall percentage of congested lane miles, countywide, decreased from 21% to 17.5% between DY 2009 and DY 2011, Sectors 1, 2, 5, 3 and 7 – Tarpon Springs, East Lake Tarpon, Safety Harbor/Oldsmar, Palm Harbor and Largo, respectively, continue to exhibit the highest percentage of congested lane miles. In addition, the Mid-County Beaches (Sector 13) are now experiencing congestion during the mid-week.)

Table 5 – Congested Miles (≥ 0.9 V/C), by Planning Sector, FY 2011

Sector		Lane Miles		
		Total	Congested	Congested %
1	Tarpon Springs	56	31	55.3 %
2	East Lake Tarpon	57	30	52.6%
3	Palm Harbor	123	40	32.5%
4	Dunedin	91	10	10.9%
5	Safety Harbor/Oldsmar	75	32	42.6%
6	Clearwater	347	100	28.8%
7	Largo	191	59	30.8%
8	Highpoint/Feather Sound	89	12	13.4%
9	Seminole	156	8	5.1%
10	Pinellas Park	232	23	9.9%
11	St. Petersburg/Gulfport	708	50	7.0%
12	South County Beaches	46	0.00	0.0%
13	Mid-County Beaches	38	5	13.1%
14	Lealman	71	0.00	0.0%
Totals		2,280	400	17.5%

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Notes:

- Congestion is defined as ≥ 0.9 PM peak hour, peak direction volume over capacity (V/C) ratio.
- Monitored roads represent about 61% of the 2011 TPI base file.

B. Congestion Measurement: Duration of Congestion

The duration of congestion (DOC) is calculated by identifying all 15-minute periods during an average day for which traffic volumes exceed capacity on roadways listed as congested on the MPO's LOS Report. This analysis uses traffic counts collected over a 48 to 72 hour period during 2009 and 2011, based on centerline miles of roadway. Tables 6 and 7 list the SIS and Non-SIS segments experiencing ten or more hours of congestion (base line set at maximum service volume divided by peak hour factor). For the purpose of this analysis, contiguous road segments with a DOC of 10 hours or more were joined to form a single segment, with limits defined below. In most of these cases, DOC was the same throughout the conjoined segments. Scores were averaged for a few segments where there were variations in DOC within the segment.

Table 6 - SIS Roadway Segments With Ten or More Hours of Congestion (DOC)					
On Street	From	To	2009 Hours	2011 Hours	% Change
U.S. Hwy 19*	Druid Rd	Belleair Rd	15.00	14.58	-2.8%
U.S. Hwy 19	Mainlands Blvd	Gandy Blvd.	12.75	11.83	-7.2%
I-275*	Gandy Blvd	I-175	12.00	11.79	-1.8%
U.S. Hwy 19*	Sunset Point Rd	Beckett Way	12.85	11.26	-12.4%
Gandy Blvd*	Grand Ave/ Gandy Access	I-275 West Ramps	10.75	10.25	-4.7%
<i>Gandy Blvd</i>	<i>4th St N</i>	<i>Brighton Blvd</i>	<i>11.50</i>	<i>9.50</i>	<i>-17.4%</i>
<i>I-275*</i>	<i>4th St N</i>	<i>Pinellas Shoreline</i>	<i>11.25</i>	<i>7.75</i>	<i>-31.1%</i>

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Notes: *Segment includes a top 25 crash intersection (see Table 28).

1 DOC = (Maximum Service Volume (MSV)/Peak Hour Factor) per 15 Minute Volume.

2 For the purpose of this analysis, contiguous road segments with an average of 10 hours or more DOC were joined to form a single, extended segment.

3 The SIS roadway segments listed are the same as in the 2010 SOS Report.

4 *Italic listings (Gandy Blvd & I-275) show below 10 hours DOC in DY 2011 but over 10 hours DOC in DY2009.*

As with previous years, US Highway 19 continues to show long periods of congestion, with the highest DOC hours between Druid Road and Belleair Road. However, ongoing construction, including interchange and partially controlled access improvements should alleviate congestion significantly within this segment of US Highway 19, as well as the segment between Sunset Point Road and Countryside Blvd., located farther north. The SIS roadway with the longest, contiguous miles of 10 hours or more DOC is also U.S. Highway 19, between SR 580 and Tarpon Avenue. U.S. Highway 19 is routinely reviewed by the MPO and its partners to further assess the problems and identify opportunities for improvements. The second longest conjoined segment with 10 or more hours of DOC occurred on I-275, from Gandy Boulevard to I-375. While US Highway 19 and I-275 remain the "usual suspects," it is important to recognize that all the segments shown in Table 6, including segments of US Highway 19 and I-275, show a *decrease* in DOC from DY 2009 to 2011, with I-275 between 4th

Street North and the Pinellas Shoreline to the east showing the highest decrease. **(Trend:** After review of the 2010 SOS Report, it can be stated that there are fewer SIS roadway segments operating with 10 or more hours of congestion, moreover, the DOC for all five SIS roadway segments identified in Table 6 has decreased between 2009 and 2011.)

With regard to Table 7, the highest DOC on a single, non-SIS segment was on Keystone Road from U.S. Highway 19 to East Lake Road (14.5 hours). However, this segment is currently under construction and is being improved from a 2 lane undivided to a 4 lane divided road. Other completed, on-going or funded capacity projects through 2014/15 on Ulmerton Road and Bryan Dairy Road will reduce DOC as well. In both 2008 and 2010 the intersection of NE Coachman Road and Old Coachman Road was identified as a Congestion Management Process (CMP) “hot spot” for the segment of NE Coachman between Drew St. and Old Coachman. This intersection was added to the MPO’s CMP priority list, however, due to an incorrect data collection location, this segment may be removed from the list. While there are existing operational issues, new data shows no significant congestion on this segment. The second highest DOC was on the Courtney Campbell Causeway between Bayshore Blvd. and the Hillsborough County line (13.75 hours), with no capacity improvements planned.

Additional road segments in Table 7 addressed through the CMP include: Alternate US Highway 19; 22nd Avenue N; McMullen Booth Road and East Lake Road; and Belleair Road. Details concerning the locations and current implementation status of these CMP projects are contained in the appendix.

The longest *contiguous segment* of greater than or equal to 10 hours DOC occurred on McMullen Booth Road from Gulf-to-Bay Blvd to Curlew Road, with an average of 12.48 hours DOC, which is up 10.10% or approximately 5% annually between 2009 and 2011. As noted above, the Courtney Campbell Causeway, between Bayshore Blvd. and the Hillsborough Co. line, was the second highest DOC, and it is also the second longest contiguous segment. The 13.75 DOC is up just slightly (1.90%) from the 2010 SOS Report. It should be noted that eight segments reported as 10 or more hours DOC in the 2010 Report (DY 2009) have dropped below the threshold, as shown in Table 7, while four segments have been added. Map 4, the Duration of Congestion map, includes all 22 locations with 10 hours or more DOC. **(Trend:** Table 7 identifies 23 non-SIS roadway segments as congested, down from the 27 segments identified in the 2010 SOS Report (DY 2009)).

Table 7 - Non-SIS Roadways With Ten or More Hours Duration of Congestion (DOC)

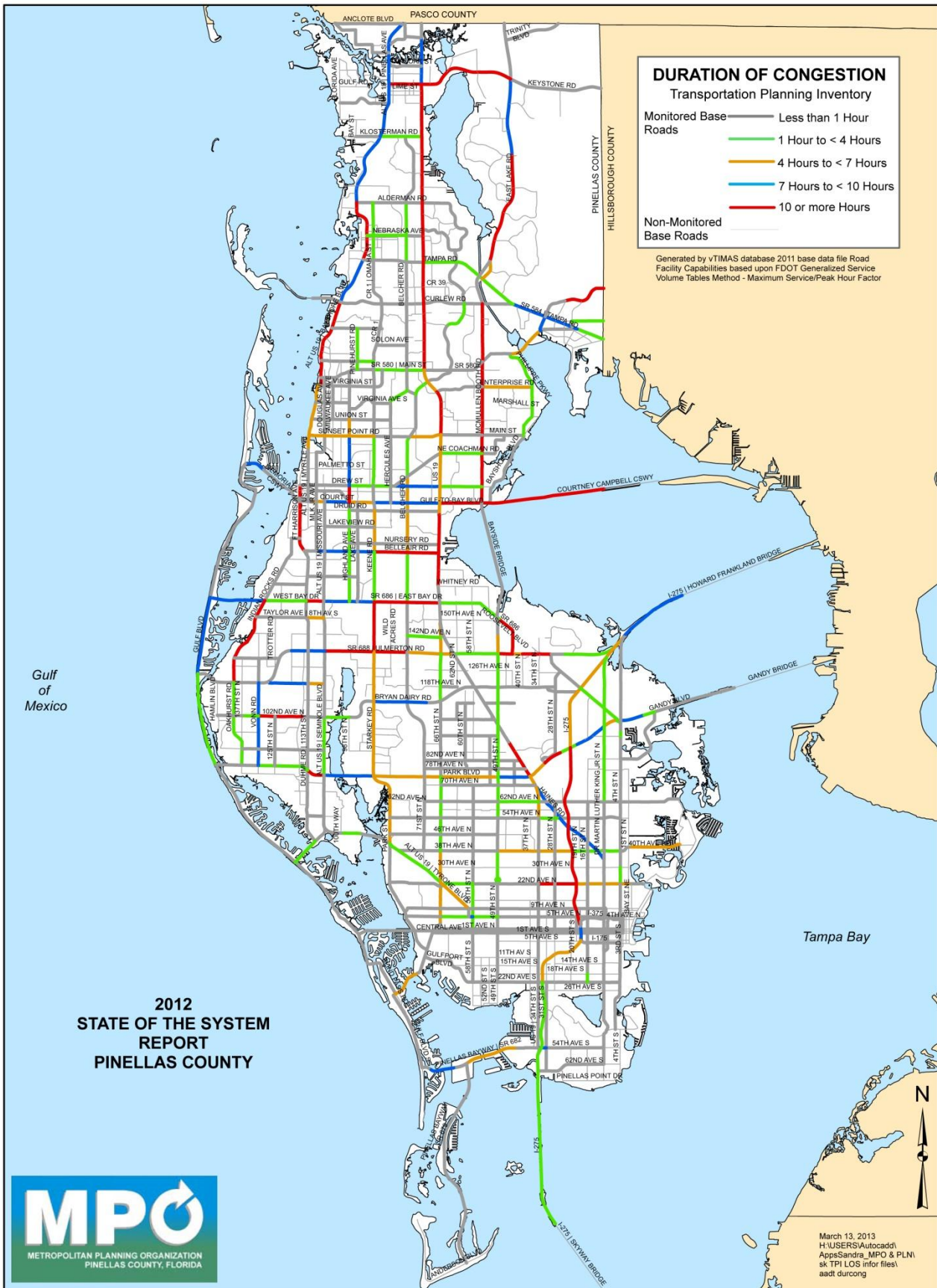
On Street		From	To	2009 Hours	2011 Hours	% Change
1	Keystone Rd	U.S. Highway 19	East Lake Rd	14.25	14.50	1.80%
2	Courtney Campbell	Bayshore Blvd	Hillsborough Co.	13.50	13.75	1.90%
3	West Bay Dr	Clearwater-Largo Rd	Missouri Ave	13.50	13.25	-1.90%
4	22 nd Avenue N.*	34 th St N	I-275	12.00	12.75	6.30%
5	McMullen Booth Rd.*	Gulf-to- Bay Blvd	Curlew Rd	11.34	12.48	10.10%
6	Ft. Harrison Ave	Belleair Rd	Drew St	12.15	12.39	2.00%
7	Indian Rocks Rd	Walsingham Rd	West Bay Dr	10.45	12.05	15.30%
8	East Lake Rd	North Split	Keystone Rd	12.85	11.90	-7.40%
9	Roosevelt Blvd.*	49 th St N	Ulmerton Rd	13.31	11.81	-11.30%
10	102 nd Ave N	Ridge Rd	Vonn Rd	10.75	11.75	9.30%
11	Ulmerton Rd./SR 688*	49 th St N	Roosevelt Blvd (east)	12.30	11.70	-4.90%
12	Ulmerton Rd./SR 688	119 th St N	Belcher Rd	13.28	11.58	-12.80%
13	Alt US Hwy 19/Bayshore	Skinner Blvd	Curlew Rd	12.13	11.25	-7.30%
14	Belleair Rd.*	U.S. Hwy 19	Keene Rd	10.75	11.25	4.70%
15	East Bay Dr	Starkey Rd/Keene	Belcher Rd	9.75	11.25	15.40%
16	Starkey Rd	Ulmerton Rd	East Bay Dr	6.75	11.25	66.70%
17	Highland Ave	Gulf-to Bay Blvd	Drew St	9.13	11.00	20.50%
18	East Bay Dr	US Hwy 19	Belcher Rd	13.00	10.75	-17.30%
19	Tarpon Ave	Alt US Hwy 19	US Hwy 19	8.06	10.69	32.60%
20	Alt. US Hwy 19/Broadway	Main St	Skinner Blvd	11.75	10.50	-10.60%
21	Forest Lakes Blvd	Pine Ave	Hillsborough Co. Line	11.25	10.50	-6.70%
22	Gulf-to-Bay Blvd	Bayshore Blvd	Keene Rd	12.15	10.38	-14.60%
23	Park Blvd*	113 th St N	Starkey Rd	11.42	10.21	-10.60%
24	<i>Forest Lakes Blvd*</i>	<i>SR 580</i>	<i>Tampa Rd</i>	<i>11.00</i>	<i>9.75</i>	<i>-11.40%</i>
25	<i>Alt. US Hwy 19</i>	<i>Tampa Rd</i>	<i>Anclote Blvd</i>	<i>11.75</i>	<i>9.73</i>	<i>-17.20%</i>
26	<i>Bryan Dairy Rd*</i>	<i>66th St N West Ramp</i>	<i>Starkey Rd</i>	<i>10.20</i>	<i>9.60</i>	<i>-5.90%</i>
27	<i>Memorial Causeway</i>	<i>Clearwater Beach</i>	<i>Island Way</i>	<i>10.50</i>	<i>9.50</i>	<i>-9.50%</i>
28	<i>Alt US Hwy 19/Bayshore</i>	<i>Curlew Rd</i>	<i>Tampa Rd</i>	<i>12.25</i>	<i>9.08</i>	<i>-25.90%</i>
29	<i>Tampa Rd</i>	<i>New SR 580</i>	<i>Curlew Rd</i>	<i>12.55</i>	<i>8.85</i>	<i>-29.50%</i>
30	<i>East Bay Dr</i>	<i>Keene Rd/Starkey</i>	<i>Seminole Blvd</i>	<i>10.06</i>	<i>8.13</i>	<i>-19.20%</i>
31	<i>Park Blvd</i>	<i>U.S. Hwy 19</i>	<i>Belcher Rd</i>	<i>11.00</i>	<i>6.96</i>	<i>-36.70%</i>

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Notes: *Segment includes a top 25 crash intersection (see Table 28).

1. DOC= Maximum Service Volume/Peak Hour Factor per 15 Minute Volume.
2. For the analysis, contiguous road segments with 10 hours or more DOC were joined to form a single extended segment.
3. Due to an incorrect data collection location, the segment of NE Coachman Rd between Drew St and Old Coachman Rd was removed from the table (see narrative). Analysis of the new traffic data has found no significant DOC for this segment.
4. The on-street segment limits (from & to) are consistent with the 2010 SOS Report except the segment limits of 102nd Ave N (listing rank 10) were adjusted (minor west shift) from the previous report to better reflect the traffic congestion.
5. The road segments of Starkey Rd (16), Highland Ave (17), Tarpon Ave (19), and East Bay Dr (15) were not listed in the 2010 SOS Report as 10 or more DOC, i.e., these are new listings.
6. Ulmerton Rd from 49th St N to Roosevelt Blvd (11) was inadvertently omitted from the 2010 SOS Report.
7. *Italic listings (roads/segments ranked 24 thru 31, above) have a DOC of less than 10 hours in DY 2011, while each exceeded 10 hours DOC in DY 2009.*

Map 4 - Duration of Congestion Map



C. Congestion Management Process (CMP) Preliminary Screening

23 Code of Federal Regulations, Part 450.320 requires MPOs to have a formal Congestion Management Process (CMP), but permits MPOs to define their own procedures. As explained in the introduction, the State of the System report contributes to the Pinellas MPO's CMP by providing a system wide screening that is useful for identifying needs and deficiencies prior to developing the Transportation Improvement Program (TIP) and the Long Range Transportation Plan (LRTP).

The CMP preliminary ranking in the following table was based on a system wide screening of all roadways to identify segments with a peak hour, peak direction V/C ratio equal to or greater than 90%. The V/C was then multiplied by the duration of congestion (DOC) hours for that segment to achieve a score. Ranked results (most severely congested for the longest period of time) are shown in Table 8 (SIS roads and segments) and Table 9 (Non-SIS roads and segments).

With regard to Table 8, eight (8) of the top 10 ranked (most severely congested for the longest period of time) SIS segments are located on US Highway 19. It should be noted, as it is elsewhere in this report, that ongoing and planned construction on US Highway 19, including interchange and partially controlled access improvements should alleviate congestion significantly, specifically between Whitney Road and SR 60/Gulf-to-Bay Blvd., and between Sunset Point Road and Countryside Blvd. It should also be noted that joined together, the segments ranked 1 and 3 comprise one congested section of US Highway 19, likewise the segments ranked 2, 4, 6, 7 and 9. **(Trend:** After review of the 2010 SOS Report, it can be stated that US Highway 19 remains the County's most congested SIS roadway. While a segment of Gandy Blvd. (between 4th Street and Brighton Blvd.) and a segment of US Highway 19 (between Alderman Road and Klosterman Road) came off of the top 10 list, two segments of US Highway 19 were added, ranked number 3 and 10 in Table 8.)

With regard to Table 9, three facilities/segments are new to the top 25 list: Ft. Harrison Ave. (#14), Indian Rocks Road (#23) and 102nd Avenue North (#24). Falling off the list (after review of the 2010 SOS Report) were the following three facilities/segments: NE Coachman Road (between Drew St. and US Highway 19); SR 686/East Bay Drive (between US Highway 19 and Belcher Road); and East Lake Road (between Lansbrook Parkway and Keystone Road). **(Trend:** All but three of the top 25 congested Non-SIS roads/segments listed in Table 9, above, were listed in the same table in the 2010 SOS Report.)

**Table 8 - Ranking Top 10
Congested SIS Facilities/Segments, DY 2011**

Rank	Facility	From/To	DY 2009: Top 10 Ranking
1	US Hwy 19 ¹	Belleair Rd to Druid Rd/Seville Blvd. ²	1
2	US Hwy 19	Sunset Point Rd to Enterprise Rd. ²	2
3	US Hwy 19 ¹	Belleair Rd. to Whitney Rd. ²	Not ranked in top 10.
4	US Hwy 19 ¹	Curlew Rd to Tampa Rd. ²	4
5	I-275 ¹	22 nd Ave. N. to 38 th Ave. N.	7
6	US Hwy 19 ¹	Tampa Rd to Alderman Rd. ²	3
7	US Hwy 19 ¹	SR 580/Main St to Curlew Rd. ²	6
8	I-275 ¹	Gandy Blvd to 54 th Ave N.	9
9	US Hwy 19 ¹	Klosterman Rd to Tarpon Ave. ²	5
10	US Hwy 19	Gandy Blvd. to Mainlands Blvd. ²	Not ranked in top 10.

Source: Pinellas County MPO Transportation Planning Inventory (Database of monitored roads).

Note: The score to determine the ranking was derived as follows: $V/C \times DOC$.

¹Segment includes a top 25 crash intersection (see Table 28).

²Under construction or construction planned in accordance with the Transportation Improvement Program (FY 2012/13 to FY 2016/17).

Table 9 - Ranking Top 25 Congested Non-SIS Facilities/Segments, DY 2011

Rank	Facility	From/To
1	East Lake Road	Woodlands Blvd to Tarpon Woods Blvd.
2	Keystone Road	US Hwy 19 to East Lake Road ²
3	Courtney Campbell Cswy	Hillsborough County Line to Bayshore Blvd
4	East Lake Road	Tarpon Woods Blvd to Lansbrook Pkwy
5	SR 688/Ulmerton Road ¹	Roosevelt Blvd to 40th Street ²
6	SR 688/Ulmerton Road	Starkey Rd to Alt US Hwy 19/Seminole Blvd. ²
7	West Bay Drive	Missouri Ave to Clearwater-Largo Road
8	McMullen Booth Road	Sunset Pt Rd/Main Street to SR 580
9	SR 688/Ulmerton Road	Belcher Road to Starkey Road ²
10	Alt US Hwy 19/Palm Harbor Blvd	Tampa Road to Alderman Road
11	Ft Harrison Avenue	Belleair Road to Chestnut Street
12	Park Blvd. ¹	Seminole Blvd to 113th Street North
13	SR 688/Ulmerton Road	Roosevelt Blvd to 49th Street North ²
14	Ft. Harrison Avenue	Chestnut Street to Drew Street
15	SR 686/Roosevelt Blvd. ¹	Ulmerton Road to 49th St (NB Ramp) ²
16	McMullen Booth Road ¹	SR 580/Main Street to Curlew Road
17	Gulf-To-Bay Blvd	Bayshore Blvd to US Hwy 19
18	Forest Lakes Blvd	Pine Ave to Hillsborough County Line ²
19	East Lake Road	North Split to Woodlands Blvd
20	22nd Ave North ¹	I-275 to 34th Street North
21	Alt US Hwy 19/Bayshore Blvd	Skinner Blvd to Curlew Road
22	McMullen Booth Road	Gulf-to-Bay Blvd. to Sunset Point Road
23	Indian Rocks Road	Walsingham Road to West Bay Drive
24	102 nd Ave. North	Vonn Road to Ridge Road
25	Bryan Dairy Road ¹	66th St N (West Ramps) to Starkey Road ²

Source: Pinellas County MPO Transportation Planning Inventory database (monitored roads)

Note: The score to determine the ranking was derived as follows: $V/C \times DOC$. ¹Segment includes a top 25 crash intersection (see Table 28). ²Under construction or construction planned in accordance with the Transportation Improvement Program (FY 2012/13 to FY 2016/17).

It should also be noted with regard to Tables 8 and 9 that for the first time in a State of the System Report, the top congested SIS and non-SIS facilities/segments are cross-referenced with the top 25 crash intersections (the latter identified in Table 28). Moreover, the facilities/segments identified in Table 9 will be studied further as part of the MPO's Congestion Management Process (CMP), in addition to the CMP Corridor and Hot Spot areas identified in Table 36 and the CMP projects identified in Table 37 in the appendix. The MPO and local governments will continue to use these identified facilities/segments as a basis for addressing congestion issues in their respective communities. Actions may include the preparation of a corridor study, development of operational strategies, or ongoing monitoring. Additional factors that may be weighed in such decision making could include:

- Safety deficiencies, as identified by crash history
- Plans for implementing Intelligent Transportation Systems (ITS) technology and operational improvements
- Importance to economic development and/or regional connectivity
- Importance to the multimodal transportation network
- Importance as an emergency hurricane evacuation route
- Existing plans for capital improvements

Intelligent Transportation Systems (ITS)/Advanced Traffic Management Systems (ATMS)

Intelligent Transportation Systems (ITS) is the application of ever emerging technologies that assist agencies in the operation and management of transportation facilities. ITS have shown to increase operational capacity, improve efficiency and enhance safety. ITS covers all transportation modes and is commonly divided into subcategories, based on services, which include Advanced Traffic Management Systems (ATMS) for arterials and freeways. ITS/ATMS have become a cost-effective, alternative strategy for managing congestion. ITS/ATMS solutions do not replace the traditional capacity building investments such as new lanes or new roads, nor are they substitutes for conventional traffic engineering and traffic operations strategies. Rather, ITS/ATMS offer transportation agencies a broad set of transportation related technologies that encompass more than smart traffic signal systems.

Pinellas County developed an ITS/ATMS Master Plan in 2006 to prioritize corridors for implementation and to ensure that technologies are compatible countywide and with that of the interstate road system. Map 5 shows corridors designated for ITS implementation, some of which are already operational. Additional details on ITS implementation can be found in the appendix of this document.

It should be noted that the deployment of ITS/ATMS requires a highly dynamic, continual process that involves performance evaluation, operational adjustments, software updates, and expansion of the system to meet the

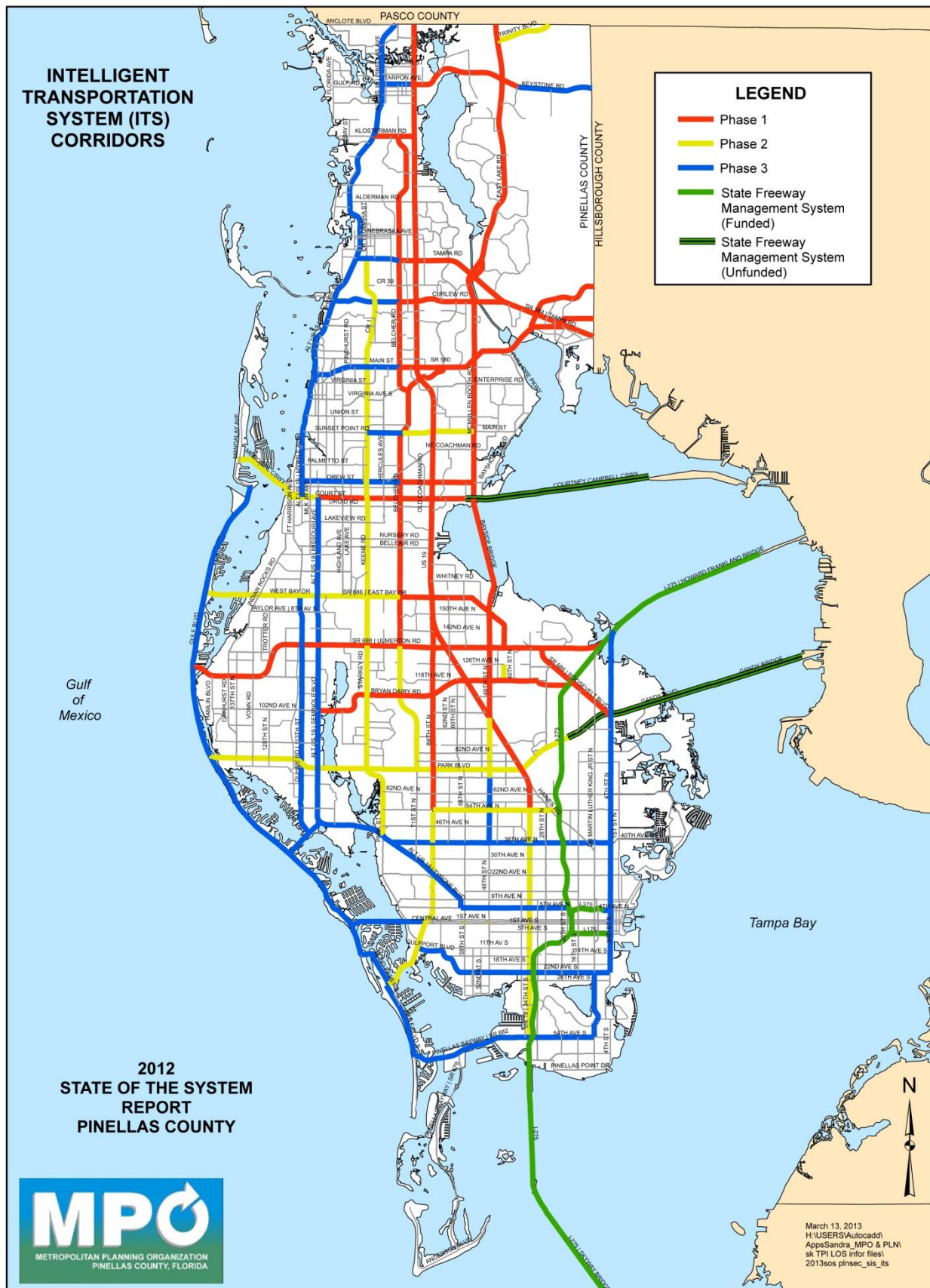
requirements of additional corridors. The countywide Primary Control Center (PCC) is the hub for ITS/ATMS operations. Table 10 shows the implementation of ITS/ATMS through DY 2011.

Table 10 – Pinellas Countywide ITS/ATMS Projects - Completed through DY 2011				
Stage	Route	Limits	Completed	Devices
I	US Hwy 19 & SR 60	US Hwy 19 at Beckett Way to Enterprise Rd & from SR 60/Gulf-to-Bay To Haines Bayshore Rd; SR 60 /Gulf-to-Bay, from Hillcrest to Damascus Road	Spring 2006	33 Int Adaptive Control, 24 CCTV, 4 DMS and fiber optic communications
II	US Hwy 19	Mainlands to 54th Ave N	Fall 2007	8 Int Adaptive Control, 9 CCTV, 3 DMS and fiber optic communications
III	CR 611 (McMullen-Booth Rd)	Trinity Blvd to SR60/Gulf-to-Bay Blvd & legs of SR 580, 586 & Tampa Rd to US Hwy 19	Summer 2009	33 Int Adaptive Control, 15 CCTV, 5 DMS and fiber optic communications
IV	Primary Control Center	Countywide	10/1/10	New control center including ITS Operations and Traveler Information Capabilities
V	Belcher Road North	Druid Road to Klosterman Road	11/7/11	17 Int on ATMS (Adaptive to be installed in FY12), 20 CCTV, 5 DMS and fiber optic communications
VI	SR 580/586 Stage 1	SR 580/586 (Tampa Road) from Race Track Road to CR 611 (McMullen Booth Rd.)	5/19/11	Installation of fiber optic communications for SR 580 ATMS project

Source: Pinellas County Traffic Management, February 2013

Key: CCTV = Closed Circuit Television Cameras; DMS = Dynamic Message Signs

Map 5 – Intelligent Transportation Systems Corridor Plan



Results of travel time studies that tested the effectiveness of installations are represented in Table 11. The overall improvement in travel time was estimated to be 13.95%.

Table 11 - SR 60/Gulf-to-Bay Boulevard Before and After Travel Time Study

Hour	Existing* DY 2006 (Before)	Adaptive DY 2006 (After)	Existing* vs. Adaptive, DY 2006 (Improvement)	Adaptive DY 2008	Existing DY 2006* Vs. Adaptive, DY 2008 (Improvement)	Adaptive DY 2006* vs. Adaptive DY 2008 (Improvement)
Westbound						
AMP	11:02	10:11	7.70%	9:36	12.99%	5.73%
AMO	10:52	10:03	7.52%	10:01	7.82%	0.33%
PMO	12:04	10:38	11.88%	9:47	18.92%	7.99%
PMP	13:13	12:19	6.81%	10:01	24.21%	18.67%
Eastbound						
AMP	12:06	10:23	14.19%	9:42	19.83%	6.58%
AMO	10:32	10:03	4.59%	9:58	5.38%	0.83%
PMO	11:07	10:28	5.85%	9:54	10.94%	5.41%
PMP	11:45	11:42	0.43%	10:24	11.49%	11.11%

Source: Pinellas County Public Works Department, now DEI (2010 State of the System Report).

Note: Travel times are shown in (minutes):(seconds) format.

Key: AMP = morning, peak hour; AMO = morning, off-peak hour; PMO = afternoon, off peak hour; PMP = afternoon, off-peak hour

*"Existing" = signal timing running prior to new system

Additionally, a before/after analysis to study rear-end crash rates on SR 60/Gulf-to-Bay Boulevard and US Highway 19 was performed. Results are shown in Table 12 below.

Table 12 – SR 60/Gulf-to-Bay Boulevard and US Highway 19: Rear End Crashes Before and After Deployment of ATMS/ITS

SR 60/Gulf-to-Bay Boulevard					US Highway 19				
	Total Rear Ends (RE)	Total RE Crashes w/Injuries	Injuries	Fatalities		Total Rear Ends (RE)	Total RE Crashes w/Injuries	Injuries	Fatalities
Before (10/1/02 - 9/30/06)	261	135	172	0		1531	604	995	3
After (10/1/06 – 9/30/08)	248	87	114	0		1344	505	879	0
Total Reductions	13	48	58	0		187	99	116	3
Percent Reductions	5.0%	35.6%	33.7%	0.0%	12.2%	16.4%	11.7%	100.0%	

Source: Pinellas County Public Works Department, now DEI (2010 State of the System Report).

Results of studies show that ITS/ATMS have been effective in reducing travel time and rear-end crash rates. One additional study pertains to SR 580. An Adaptive Traffic Control System (ATCS) was installed by Pinellas County and

tested in March 2012 on a 2.3 mile, nine intersection corridor along SR 580, between Summerdale Drive and Pinehurst Road, which included the signal at the interchange with U.S. Highway 19. Table 13 shows a comparison of the “before” and “after” average trip speed, travel time, number of stops, and delay recorded at intersections.

Table 13 - SR 580 Travel Time Comparison (Overall Results)			
Performance Metric	Before	After	Percent Improvement
Travel Time (secs)	2,127.8	1,914.7	10%
Average Speed (mph)	23.6	26.6	13%
Total Delay (secs)	889.3	675.7	24%
Number of Stops	15.4	9.7	37%

Source: InSync Evaluation Before and After Study, prepared for Pinellas County by Kimley-Horn and Associates, Inc., July 2012.

Trends and Conditions That Affect Congestion

Demographic and economic trends can provide a clearer picture of past and future transportation usage in Pinellas County. It should be noted that some of these trends, such as daily commute patterns and seasonal tourism, are somewhat cyclical.

A. Motorist Licenses and Vehicle Registrations

Vehicle registrations and number of drivers licenses issued are valuable indicators for studying road usage. There are an estimated 1.18 million vehicles registered in Pinellas County, and while they are not all on the road at the same time the overall number affects congestion. After a peak of 1,295,185 vehicles registered in Pinellas County in 2006/07 (not shown) the number of registered vehicles steadily declined, as shown in Table 14. (**Trend:** There was an estimated 16% reduction between 2007/08 and 2009/10, however, there was an increase (11.5%) in the number of vehicles registered between 2009/10 and 2011/12.)

Similarly, Table 15 shows that the number of drivers licenses issued in Pinellas County has steadily declined about 1% per year between 2008 and 2012, with the total decline estimated to be 4.8% over that time span. Table 16 and Figure 7 show the distribution of drivers by age group. While approximately 64% of the licensed drivers are between the ages of 21 and 60, it is interesting to note that there are nearly as many licensed drivers between the ages of 81 and 90 as there are 18 to 21 (approximately 5%). Additionally, the 230,362 licensed drivers between the ages of 31 and 50 shown in Table 16 is 16,325 *fewer* than reported in the 2010 SOS Report.

Table 14 - Vehicle Registrations in Pinellas County	
Data Year	No. of Vehicles Registered
2011/2012	1,177,940
2010/2011	1,104,465
2009/2010	1,056,238
2008/2009	1,207,733
2007/2008	1,254,250

Source: Florida Department of Highway Safety and Motor Vehicles (DY: July 1 to June 30)

Note: "Vehicles" include passenger cars, lease vehicles, buses, ambulances, hearses, trucks (except tractors), and motorcycles.

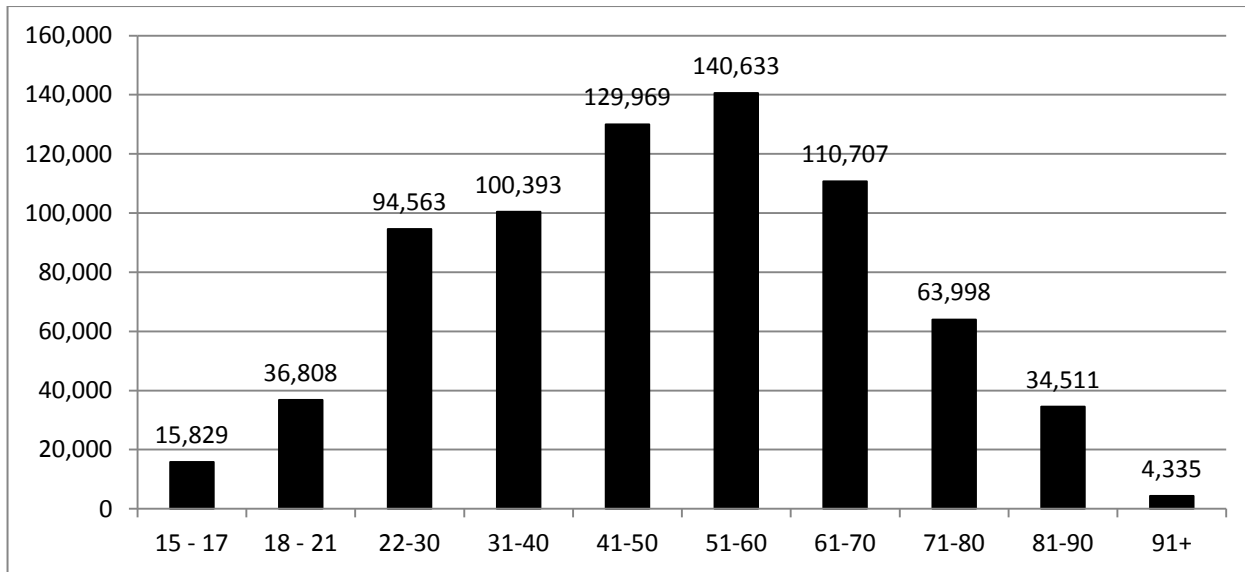
Table 15 - Number of Licensed Drivers: Pinellas County				
2008	2009	2010	2011	2012
768,511	760,643	753,931	743,339	731,746

Source: Florida Department of Highway Safety and Motor Vehicles (as of January 1 for the year shown).

Table 16 - Pinellas County: Licensed Drivers by Age Group (as of January 1, 2012)		
Age Group	Number	Percentage
15 to 17	15,829	2.1%
18 to 21	36,808	5.0%
21 to 30	94,563	13.0%
31 to 40	100,393	13.7%
41 to 50	129,969	17.7%
51 to 60	140,633	19.2%
61 to 70	110,707	15.1%
71 to 80	63,998	8.7%
81 to 90	34,511	4.7%
91 to 100	4,335	0.60%
Total	731,746	100%

Source: Florida Department of Highway Safety and Motor Vehicles.

**Figure 7 - Pinellas County: Licensed Drivers by Age Group
(as of January 1, 2012)**



Source: Florida Department of Highway Safety and Motor Vehicles.

B. Regional Commuter Traffic

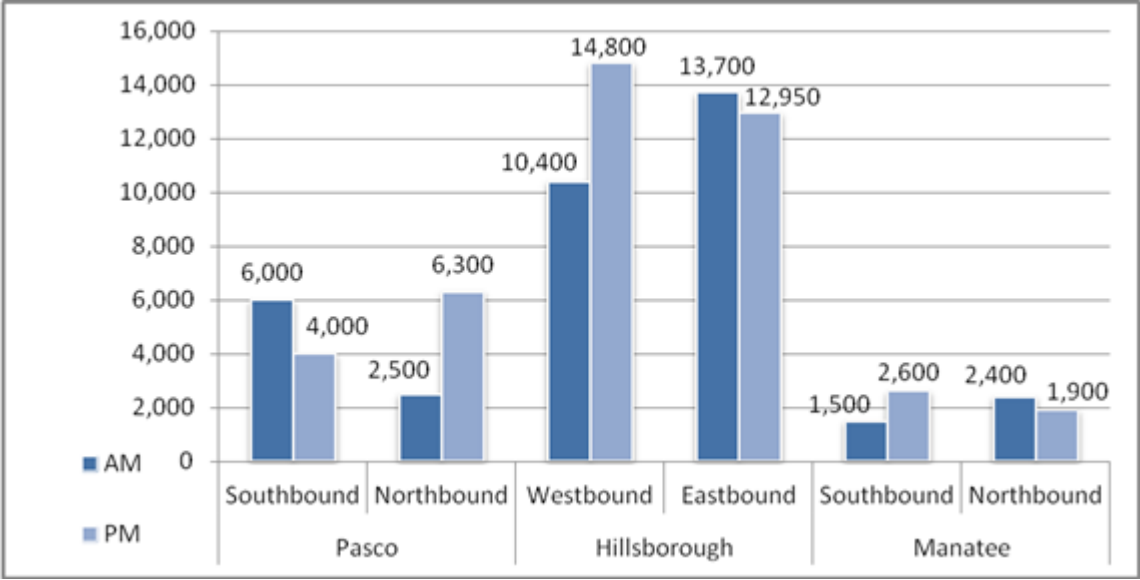
Pinellas County continues to serve as a major origin and destination for regional commuter travel. The analysis provided in Figure 8 shows the highest volume of inter-county commuter travel, measured between 7 a.m. and 9 a.m. and 4 p.m. to 6 p.m., occurred between Pinellas and Hillsborough counties (approximately 24,100 vehicles in the a.m. and 27,750 in the p.m., for a total of 51,850 vehicles). These are mid-week daily averages. In the morning rush hour, 56.8% of the vehicles are traveling eastbound from Pinellas into Hillsborough, while in the afternoon rush hour 53.3% of the vehicles are traveling westbound from Hillsborough into Pinellas.

With regard to commuter traffic between Pinellas and Pasco counties, the morning rush hour (involving approximately 8,500 vehicles) is dominated by vehicles traveling southbound from Pasco into Pinellas, estimated to be 70% of the traffic. In the afternoon rush (involving approximately 10,300 vehicles), it is estimated that 61% of the vehicles are traveling northbound from Pinellas into Pasco.

Finally, with regard to Manatee County, approximately 61% of the 3,900 vehicles in the morning are traveling northbound from Manatee into Pinellas, while the afternoon rush hour shows that approximately 58% of the 4,500 vehicles are traveling southbound from Pinellas into Manatee.

(**Trend:** After review of the 2010 SOS Report, it can be stated that commuter travel between Pinellas and the counties of Hillsborough and Pasco has not changed, other than slight changes in the traffic volumes. However, the travel pattern between Pinellas and Manatee has reversed, specifically, *in DY 2008* more traffic in the morning traveled southbound from Pinellas into Manatee, and there was more traffic northbound from Manatee into Pinellas in the afternoon.)

Figure 8 – AM/PM Peak Hour/Peak Direction Traffic Volumes
At Pinellas County Borders
(DY 2011)

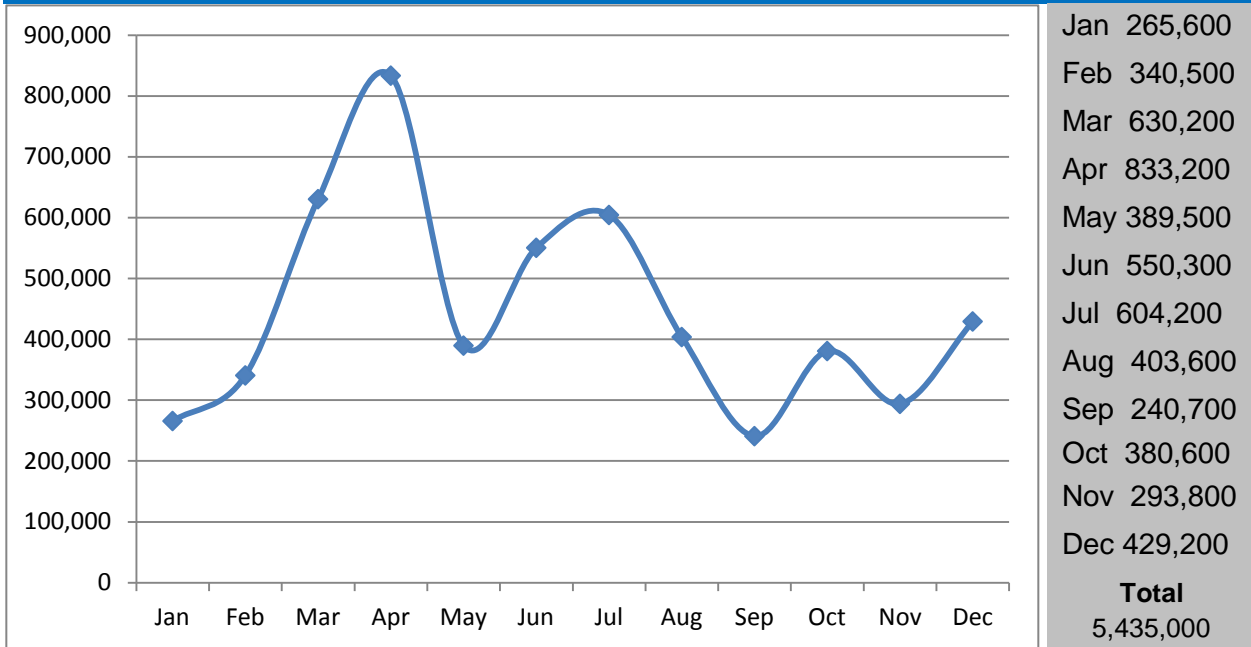


Source: Pinellas County MPO Transportation Planning Inventory (TPI) database: Monitored Roads. Note: Rush hour traffic was measured 7 AM to 8 AM or 8 AM to 9 AM, whichever was greater, and 4 PM to 5 PM or 5 PM to 6 PM, whichever was greater.

C. Impact of Tourism

Tourism is Pinellas County’s number one industry, and while it places additional demands on the area’s roadway network, i.e., more out-of-county and out-of-state cars as well as rental cars added to the transportation system, it also provides revenue to fund transportation projects via sales tax and gas tax revenues . If the condition, availability and efficiency of the transportation system are perceived by visitors as favorable, that impression contributes to Pinellas County’s overall desirability (and marketability) as a tourist destination. The St. Petersburg/ Clearwater Area Convention and Visitors Bureau’s Annual 2012 Visitor Profile reported a 3.8% increase in tourism from CY 2011 (5,235,200) to CY 2012 (5,435,000). The peak impact tends to be related to the annual occurrence of Easter and spring break for schools and colleges. (**Trend :** After review of the 2010 SOS Report, it can be stated that the total number of tourists visiting Pinellas County increased by approximately 6.1% between 2009 and 2011, and 3.8% between 2011 and 2012, the latter as shown in Figure 9.)

Figure 9 – Impact of Tourism in Pinellas County, Monthly Totals, CY 2012



Source: Klages, W. (2013), "December 2012, Visitor Profile" Prepared for Pinellas County Tourist Development Council and Visit St. Petersburg/Clearwater

D. Fuel Usage and Cost

Compiled annually by the Florida Department of Revenue, fuel sales data provides a valuable indicator of road usage. Gasoline and diesel fuel sales for seven years in Pinellas County are shown in Table 17. Overall, fuel sales have been down by approximately 12% since 2006, affecting gas tax revenues which are collected on a per gallon basis. There was a steady decline in the number of gallons of gasoline sold, beginning in 2005-2006 and continuing through 2008-2009, when it reversed slightly. Fuel sales again declined by approximately 2% between FY2009 and FY2011. Arguably, the high cost of fuel (discussed below) and the economic recession have influenced motorists to drive less, buy vehicles with better fuel economy and/or use transit. (**Trend:** Annual fuel sales continue to decline in Pinellas County for a variety of reasons, including but not limited to the cost of fuel, limited/reduced incomes, modified driving habits and use of public transit. The decline in fuel sales is also consistent with the County's loss in population, and reductions in both the number of vehicles registered and licensed drivers in Pinellas.)

Table 17 - Pinellas County Fuel Sales: Taxable Gallons Per Fiscal Year (Shown in million gallons)			
Fiscal Year	Motor fuel	Diesel Fuel	Total Gallons
2011-2012	347.7	33.5	381.3
2010-2011	346.9	35.5	382.5
2009-2010	352.5	35.7	388.3
2008-2009	349.3	37.3	386.6
2007-2008	364.8	44.4	409.2
2006-2007	386.6	47.2	418.7
2005-2006	385.1	49.0	434.2

Florida Department of Revenue, Taxable Gallons

The cost of gasoline peaked in mid-2008 in the Tampa Bay area at around \$4.00 per gallon, and after dropping to approximately \$1.55 in December 2008 the price steadily rose again to about \$3.80 per gallon in mid-2010. The price declined slightly throughout most of 2011, with a year-end average of approximately \$3.25 per gallon (Source: FloridaStateGasPrices.com). It continues to be assumed that high fuel costs will cause motorists to decrease their miles traveled as single passenger motorists, but it remains unclear as to what the cost per gallon threshold will be. Arguably, the threshold for Pinellas County appears to be somewhere in the mid- to upper \$3 to \$4 range, as both PSTA and TBARTA (Tampa Bay Area Regional Transportation Authority) have observed increases in transit usage (described in the next section of this report) and requests for commuter assistance, respectively, since 2009. It is likely, however, that the threshold is moving, i.e., as consumers develop a tolerance for higher prices and if vehicles become more fuel efficient, increased demand for public transit and commuter assistance may be reduced. With regard to commuter assistance, according to TBARTA published reports, between December 2010 and December 2011 there was a 65% increase in interest and participation in the Gateway Transportation Initiative (from 106 interested individuals/participants to 175), and a 16% increase in the same for the St. Petersburg Downtown TMO (from 170 interested individuals/participants to 197).

II. TRENDS AND CONDITIONS: Transit

Ridership

Local transit programs are operated by the Pinellas Suncoast Transit Authority (PSTA). Historic transit ridership data for fixed route bus service for fiscal year (FY) 2012, which began in October 2011 and ended September 2012, is summarized in Table 18 and Figure 10, with comparisons to previous years. A general trend of rising ridership can be seen through FY 2007/2008, which is consistent with national trends and is likely related to rising costs of gasoline and other increasing car travel expenses. A slowdown in ridership increase between FY 2008 and FY 2011 may be attributed in part to stabilizing gas prices, fare increases in FY 2008/2009, service efficiency improvements requiring reduced service on many routes, and additional partial fare increases that included the regular and discounted fares in October 2010. Fare increases and efficiency improvements were necessary to offset rising energy and operating costs. Ridership peaked again in FY 2011/12 at an estimated 13 million riders.

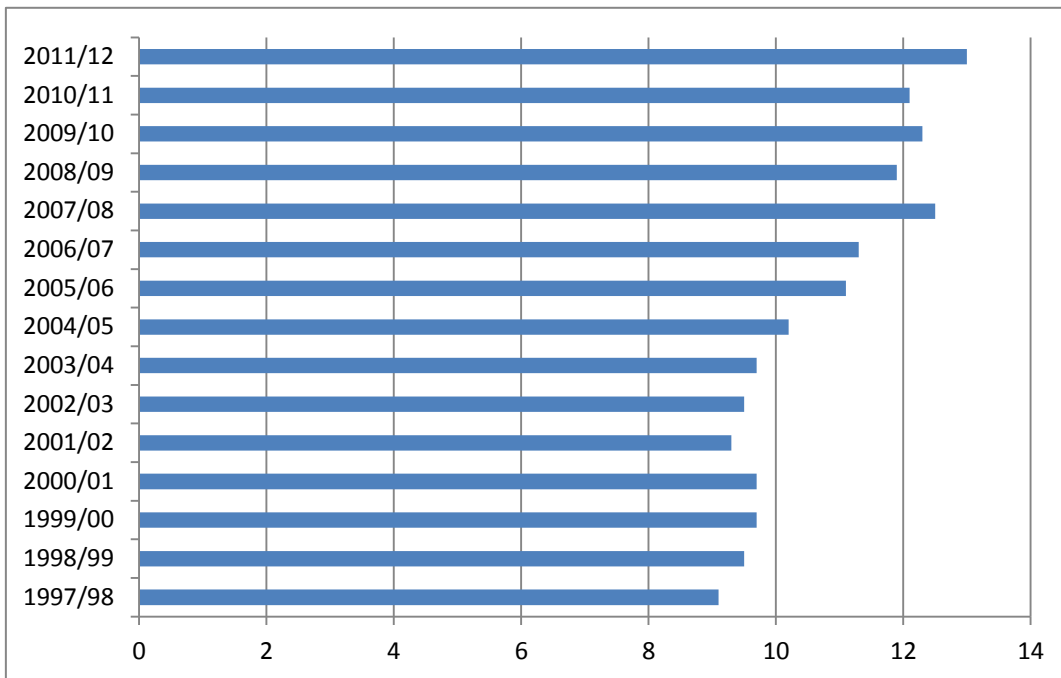
Table 18 – Annual Transit Ridership: FY1997/98 to FY2011/12

Fiscal Year	Total Ridership	% Change
1997/98	9.1	-
1998/99	9.5	4.7%
1999/00	9.7	2.1%
2000/01	9.7	-0.1%
2001/02	9.3	-4.1%
2002/03	9.5	2.1%
2003/04	9.7	2.2%
2004/05	10.2	5.4%
2005/06	11.1	8.9%
2006/07	11.3	1.4%
2007/08	12.5	10.8%
2008/09	11.9	-5.2%
2009/10	12.3	3.3%
2010/11	12.1	-1.1%
2011/12	13.0	7.4%

Source: Pinellas Suncoast Transit Authority (PSTA) database

Notes: Ridership is shown in the millions

Figure 10 – Annual Transit Ridership, 1997 to 2012



Source: Pinellas Suncoast Transit Authority (PSTA) database

Notes: Ridership is shown in the millions

PSTA routinely monitors and evaluates all routes. Routes that fall below 75% of the system averages for passenger productivity (passengers per revenue hour or passengers per revenue mile) and fare box recovery ratio (fare box revenue/operating costs), are monitored for at least two consecutive quarters before any adjustments, such as headway improvements, route realignment, scheduling modifications or the consolidation of existing fixed routes, are implemented. Additionally, PSTA routinely evaluates the appropriateness of alternative service delivery options such as point-to-point shuttles, small bus technology, and community-based transit routing.

Tables 19 through 23, provided by PSTA, illustrate major ridership and service characteristics for each fixed route. In FY 2011, ridership for Route 67, Clearwater to Oldsmar, increased by 15.8% between FY 2010 and FY 2011, the most of any route. This was affected by the elimination of Route 93 and a modification to Route 67 to serve Nielson Media Research, a major employer in the Oldsmar area. Ridership on Routes 1 and 58 fell 56.5% and 53.9%, respectively, and on Route 35 ridership fell 31.2%. Route 35 was modified to eliminate duplicated service between Williams Park and Grand Central Station. Route 58 was modified to eliminate Saturday, Sunday and holiday service; weekday service was reduced to AM and PM peak only (four AM trips and five PM trips); and service between the Seminole Mall and Gulf Blvd was eliminated. Route 1 was modified to provide only intermittent service between 37th Ave NE and the Gateway Mall, and service was modified to provide four AM and three PM trips between Northeast Shopping Center to / from Tyrone Square Mall. A total of 18 routes (Routes 7, 14, 18, 20, 30, 38, 52, 59, 62, 66, 67, 68, 78, 79, 97, 98, 100 and 300), plus the Suncoast Beach TrolleySM experienced overall ridership increases between FY 2010 and FY 2011.

In terms of productivity, nine routes fell below the passenger productivity benchmark of 75% of system averages for FY 2011, specifically, Routes 1, 23, 30, 58, 61, 62, 66, 73 and 75. Routes 60, 78, 52, 19, and 35 had the highest productivity in terms of passengers per revenue hour. In terms of passengers per revenue mile, routes 60, 78, 52, 35, and 32 were the most productive. Passengers per revenue mile on local Routes 30, 67, and Commuter Route 98 increased by more than 10% from FY 2010 to FY 2011. Passengers per revenue mile on local Routes 1, 5, Circulator Route 32, and Commuter Route 90 decreased by more than 10% from FY 2010 to FY 2011.

PSTA also monitors on-time performance and strives to have all routes run on time. On-time performance allows PSTA to ascertain which routes are being delayed, and where, in order to make corrective changes. The data for the On-Time Performance Map (Map 6) indicates that the systemwide average for all routes for on-time performance was 86% in FY 2011 and 85.4% in FY 2012. Routes that fall below the standard are assessed to determine if changes can be made to improve the route performance. Overall, PSTA has established service coverage for the entire county and as a result, some routes which are needed for connectivity such as Route 62 and Route 66 may fall below the standard. Currently, PSTA is in the process of finalizing a bus study which will provide recommendations for the entire system and will address the issue of coverage versus efficiency and may result in some changes to those routes which perform below the performance based standards.

In 2012, PSTA launched the Bus Real Time Performance Program which is a technology to monitor the location of all buses at any time. This technology also allows passengers to use their phones to determine what time the next bus is arriving. In addition, this will allow PSTA to better monitor on-time bus performance by identifying the exact locations where PSTA buses are delayed. This will provide PSTA with the ability to determine if some of the delays are caused along roads which have poor Level of Service (LOS), i.e., below D. By identifying these exact locations, PSTA will be able to work with the cities, the MPO and FDOT on some possible congestion relief strategies.

Table 19 – Transit Ridership by Route: Local Routes by Number

Route	Passengers Per Rev. Hour	Revenue Hours	Passengers Per Rev. Mile	Revenue Miles	Total Ridership	Total Ridership	% Change
	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2009/2010	
1*	6.2	3,652	0.4	59,320	22,643	52,064	-56.5%
4	24.6	43,380	1.8	584,921	1,065,514	1,067,594	-0.2%
5	17.6	11,864	1.3	164,811	209,179	216,649	-3.5%
7	16.6	8,290	1.3	103,258	137,893	131,250	5.1%
11	19.5	11,972	1.5	158,362	233,124	241,690	-3.5%
14	23.8	15,566	1.8	200,513	369,827	364,982	1.3%
15	21.8	7,074	1.5	103,903	154,414	155,751	-0.9%
18	24.4	54,565	2.0	664,179	1,329,381	1,308,946	1.6%
19	26.2	60,279	1.8	891,618	1,577,308	1,587,279	-0.6%
20	16.9	9,385	1.2	137,365	158,732	158,173	0.4%
23*	14.5	16,039	1.1	212,057	233,084	241,609	-3.5%
30*	6.5	1,896	0.4	28,409	12,399	12,249	1.2%
35	25.2	11,152	2.1	136,154	281,277	408,606	-31.2%
38	17.4	9,525	1.2	139,634	165,461	159,743	3.6%
52	30.0	43,362	2.1	634,229	1,299,237	1,233,402	5.3%
58*	9.7	4,952	0.6	86,828	47,910	103,944	-53.9%
59	22.0	35,582	1.5	520,690	781,611	753,348	3.8%
60	39.3	14,041	3.2	170,645	551,615	602,103	-8.4%
61*	14.3	13,466	1.1	168,758	192,929	211,977	-9.0%
62*	13.2	14,203	0.8	235,581	186,917	173,871	7.5%
66*	16.2	18,595	1.1	283,404	300,597	290,609	3.4%
67	21.9	7,454	1.3	128,706	162,851	140,677	15.8%
68	20.5	5,563	1.4	82,142	113,759	111,235	2.3%
73*	15.0	8,042	1.0	122,579	120,415	126,846	-5.1%
74	16.8	33,092	1.1	488,377	555,816	568,670	-2.3%
75*	14.1	10,205	1.1	136,107	144,100	147,342	-2.2%
76	20.7	6,071	1.6	81,156	125,860	129,164	-2.6%
78	30.2	8,131	2.4	104,403	245,339	234,858	4.5%
79	19.7	29,026	1.3	433,046	570,422	561,190	1.7%
Suncoast Beach Trolley SM	18.8	41,148	1.1	698,715	771,740	754,501	2.3%
SUBTOTAL	21.7	557,571	1.5	7,959,870	12,121,354	12,250,322	-1.1%
(75% of AVG)	16.3		1.1				

Source: Pinellas Suncoast Transit Authority

Notes: *Routes which fall below performance standards (75% of AVG) for passengers per revenue hour and passengers per revenue mile are noted at the end of each fiscal year

Table 20 – Transit Ridership by Route: Shuttle/Circulator Routes by Number

Route	Passengers Per Rev. Hour	Revenue Hours	Passengers Per Rev. Mile	Revenue Miles	Total Ridership	Total Ridership	% Change
	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2009/2010	
32	16.5	2,470	2.1	19,461	40,795	48,570	-16.0%
444*	6.1	2,227	0.5	25,635	13,534	13,717	-1.3%
SUBTOTAL	11.6	4,697	1.2	45,097	54,329	62,287	-12.8%
(75% of AVG)	8.7		0.9				

Source: Pinellas Suncoast Transit Authority

Note: *Routes which fall below performance standards (75% of AVG) for passengers per revenue hour and passengers per revenue mile are noted at the end of each fiscal year.

Table 21 – Transit Ridership by Route: Peak Hour Commuter Routes by Number

Route	Passengers Per Rev. Hour	Revenue Hours	Passengers Per Rev. Mile	Revenue Miles	Total Ridership	Total Ridership	% Change
	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2009/2010	
90	20.3	1,673	1.1	30,350	33,908	40,618	-16.5%
93* ¹	7.8	13	0.4	233	99	27,303	-99.6%
97	17.2	2,720	1.2	39,256	46,847	44,763	4.7%
98	20.4	1,546	1.3	25,091	31,529	26,539	18.8%
SUBTOTAL	18.9	5,952	1.2	94,930	112,383	139,223	-19.3%
(75% of AVG)	14.2		0.9				

Source: Pinellas Suncoast Transit Authority

Notes: *Routes which fall below performance standards (75% of AVG) for passengers per revenue hour and passengers per revenue mile are noted at the end of each fiscal year.

1. Route 93 was eliminated in October 2010

Table 22 – Transit Ridership by Route: Express Routes by Number

Route	Passengers Per Rev. Hour	Revenue Hours	Passengers Per Rev. Mile	Revenue Miles	Total Ridership	Total Ridership	% Change
	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2009/2010	
100	7.5	7,078	0.4	145,937	52,827	52,760	0.1%
300	5.2	7,388	0.2	160,348	38,081	36,533	4.2%
SUBTOTAL	6.3	14,466	0.3	306,285	90,908	89,293	1.8%
(75% of AVG.)	4.7		0.2				

Source: Pinellas Suncoast Transit Authority

Notes: *Routes which fall below performance standards (75% of AVG) for passengers per revenue hour and passengers per revenue mile are noted at the end of each fiscal year.

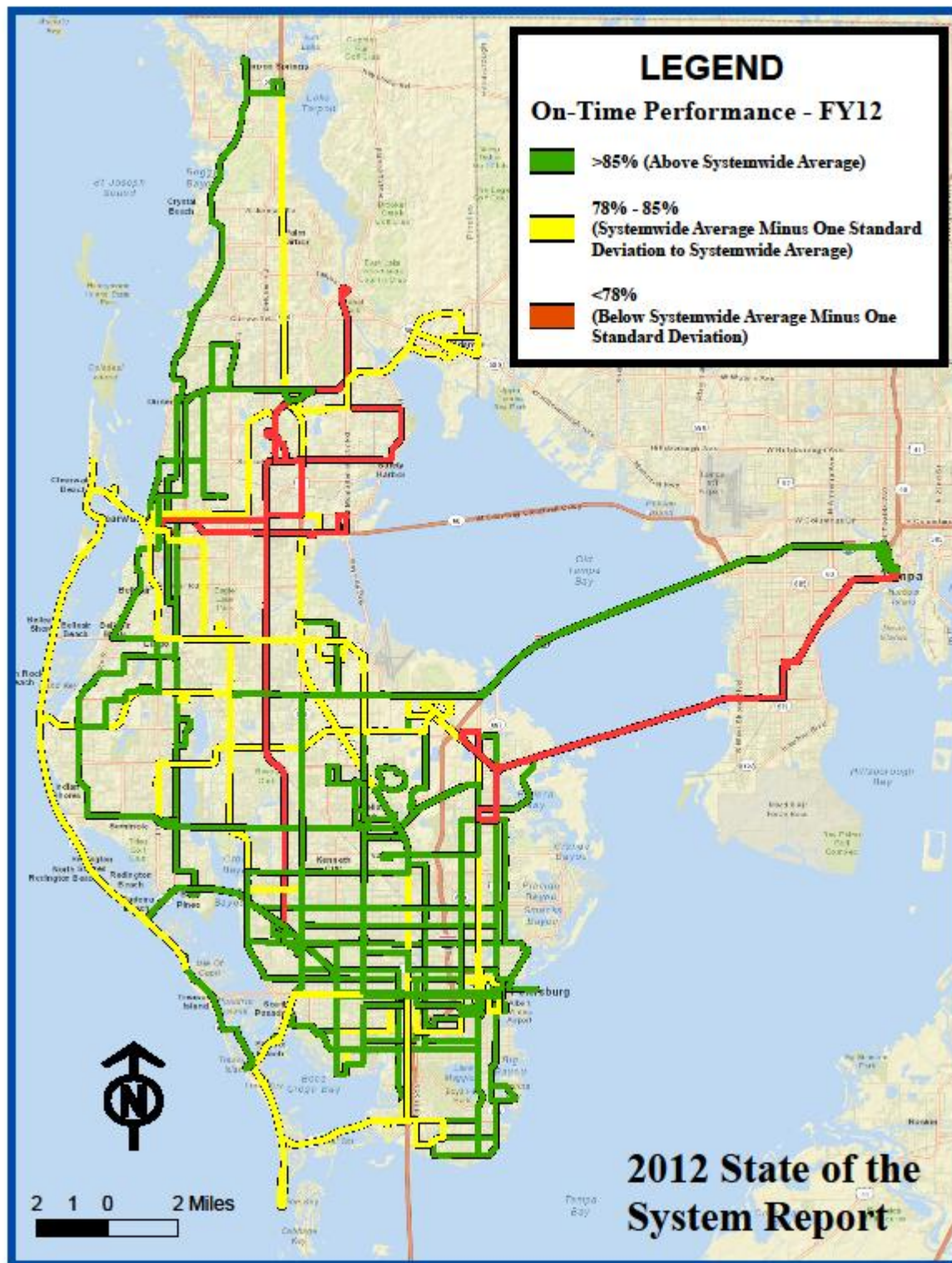
Table 23 – PSTA System-Wide and Special Services

PSTA	Passengers Per Rev. Hour	Revenue Hours	Passengers Per Rev. Mile	Revenue Miles	Total Ridership	Total Ridership	% Change
	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2010/2011	FY 2009/2010	
SUBTOTAL	21.2	582,686	1.5	8,406,182	12,378,974	12,541,125	-1.3%
Special Services					1664	6	
GRAND TOTALS	21.3	582,686	1.5	8,406,182	12,380,638	12,541,131	-1.3%

Source: Pinellas Suncoast Transit Authority

Note: Special Revenue Service includes Airport Fire Department, Alternative Transportation Week, Clearwater Jazz Fest, Dunedin High School, Oldsmar Oktoberfest, Stuff-A-Bus, Pinellas County Economic Development Department, Pinellas County Department of Public Affairs, Pinellas Park Christmas Parade, and Pinellas County Sheriff's Department.

Map 6: On-Time Transit Performance Map



III. TRENDS AND CONDITIONS: Bicycle and Pedestrian

Bike Lanes and Sidewalks

As part of the goals set forth in the Pinellas County MPO's Long Range Transportation Plan, the MPO tracks bicycle and pedestrian travel throughout the County. Table 24 provides a 2011 sector analysis of roadway, bicycle lanes and sidewalks in centerline miles. It should be noted that some of the bike lanes in Table 24 and in Map 8 do not meet minimal 4' width and connectivity standards set by FDOT.

As described in the notes associated with Table 24, the 925.6 total miles of roads is less than the figure used in the 2010 SOS Report due to the fact that 11.4 miles of bridges *and* 20 miles of "planned streets" were excluded. Thus, it is difficult to perform any trend analysis because the exclusion of 20 miles of streets will generally increase the percentage of sidewalk and bike lane coverage and decrease the percentage of sidewalk gap.

Table 24 does show, however, that countywide in DY 2011, there was approximately 73% sidewalk coverage, with the following three sectors having greater than 80% coverage: Sector 5 (Safety Harbor/Oldsmar), Sector 6 (Clearwater) and Sector 13 (Mid-County Beaches). There were also three sectors having a greater than 40% gap in sidewalk coverage, specifically Sector 2 (East Lake Tarpon), Sector 8 (Highpoint/Feather Sound) and Sector 12 (South County Beaches).

With regard to bike lanes, Table 24 shows that countywide, there was approximately 14 ½% bike lane coverage in DY 2011. Sector 11 (St. Petersburg/Gulfport) and Sector 13 (Mid-County Beaches) had the highest percentage of coverage. (**Trend:** There continues to be no bike lanes in Sector 2 (East Lake Tarpon), Sector 8 (Highpoint/Feather Sound) and Sector 14 (Lealman) in DY 2011.) It should be noted that in recent years bike lanes have generally been added in conjunction/coordination with a roadway expansion or resurfacing project. Consequently, the fewer the road miles in a sector (e.g., Lealman, Highpoint/Feather Sound) the fewer the opportunities for adding bike lanes.

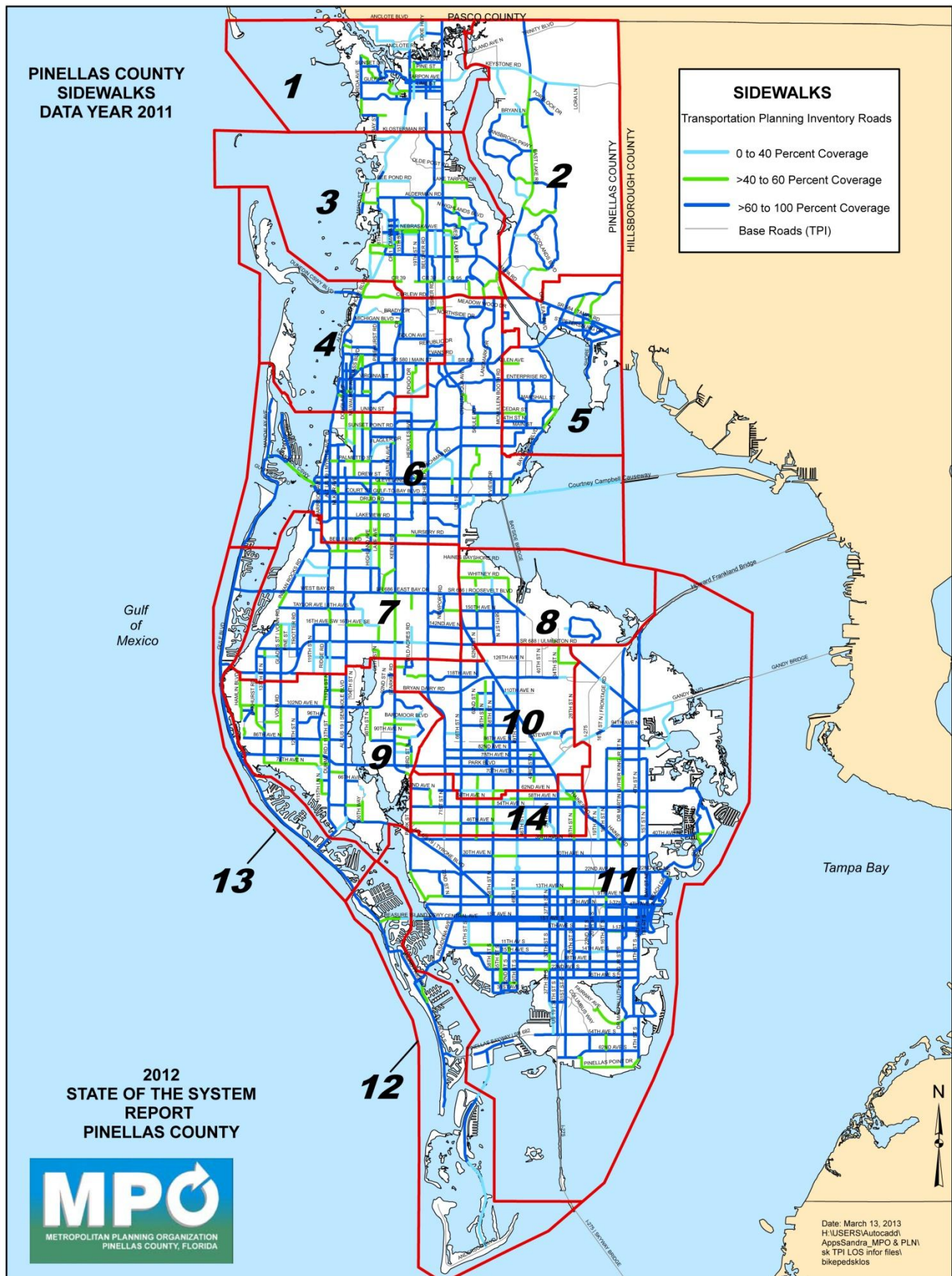
Table 24 – Road, Sidewalk and Bike Lane Centerline Miles by Sector, DY 2011

Planning Sectors		Roads	Sidewalks				Bike Lanes	
		Miles	Miles	Percent Coverage	Gap Miles	Percent Gap	Miles	Percent Coverage
1	Tarpon Springs	36.9	23.4	63.4	13.5	36.6	1.28	3.5
2	East Lake Tarpon	36.9	20.9	56.6	16	43.4	0.0	--
3	Palm Harbor	63.9	41.4	64.8	22.5	35.2	14.28	22.3
4	Dunedin	47.8	36	75.3	11.8	24.7	4.19	8.7
5	Safety Harbor/Oldsmar	35.8	31	86.6	4.8	13.4	2.21	6.1
6	Clearwater	132.6	110	83.0	22.6	17.0	9.33	7.0
7	Largo	74.5	54.8	73.5	19.7	26.4	3.61	4.8
8	Highpoint/Feather Sound	30.1	17.2	57.1	12.9	42.8	0.0	--
9	Seminole	69.0	48.6	70.4	20.4	29.6	4.1	5.9
10	Pinellas Park	75.1	52.6	70.0	22.5	30.0	1.57	2.0
11	St. Petersburg/Gulfport	260	197.3	75.9	62.7	24.1	80.37	31.0
12	South County Beaches	20.3	11.8	58.1	8.5	41.9	4.65	23.0
13	Mid-County Beaches	12.7	12.6	99.2	0.1	--	8.12	64.0
14	Lealman	30	19.9	66.3	10.1	33.7	0.0	--
Totals		925.6	677.5	73.1	248.1	26.8	133.71	14.5

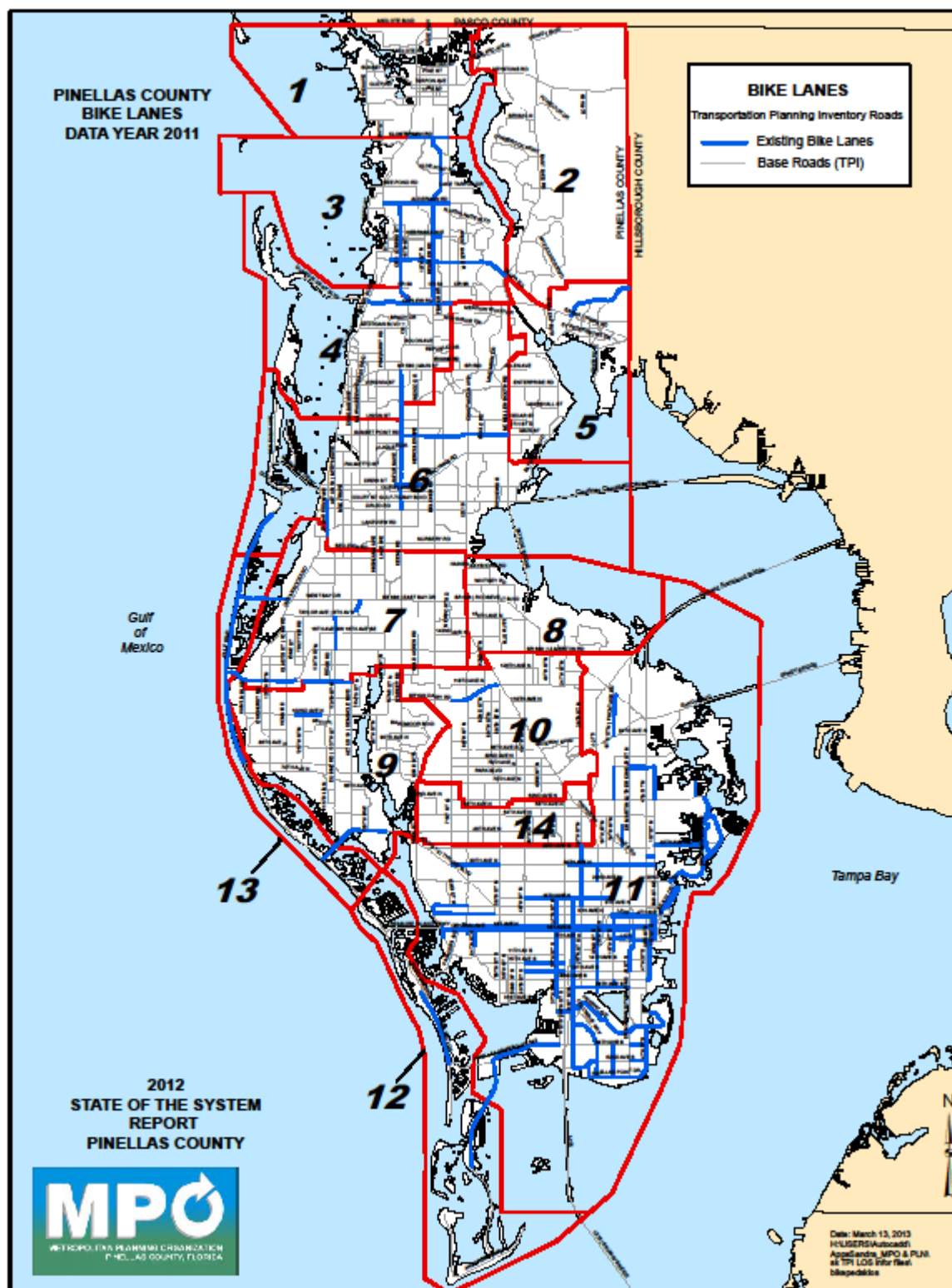
Source: Pinellas County MPO Transportation Planning Inventory (base miles)

Notes: There are a total of 957 centerline miles in the Transportation Planning Inventory database. The 925.6 miles of roads shown here is less than the figure used in the 2010 SOS Report due to the fact that 11.4 miles of bridges *and* 20 miles of “planned streets” were excluded. No trend analysis is provided because the percentage of sidewalk coverage and sidewalk gap, as well as bike lane coverage will be skewed. Finally, the 2010 SOS Report incorrectly identified 6.34 miles of bike lanes in Sector 7 (Largo). The number should have been 3.61 miles, which remains unchanged.

Map 7 - Sidewalks by Planning Sector



Map 8 - Bike Lanes by Planning Sector



Trail Availability and Usage

Table 25 identifies trail miles and distribution by planning sectors. The sectors with the two largest cities, Clearwater and St. Petersburg/Gulfport (Sectors 6 and 11, respectively) had the most trail miles, thus the highest percentages. (**Trend:** The DY 2011 total trail miles figure of 86.68 is an increase of 15.7% over the DY 2010 trail mile estimate of 74.88, and a 47.5% increase over the DY 2008 estimate of 58.74 miles.)

Table 25 - Trail Miles by Planning Sector, DY 2011		
Planning Sectors	Trail Miles	Percentage of Trail Miles
1. Tarpon Springs	4.98	5.74%
2. East Lake Tarpon	4.77	5.50%
3. Palm Harbor	5.38	6.20%
4. Dunedin	6.77	7.81%
5. Safety Harbor/Oldsmar	0.90	1.03%
6. Clearwater	14.04	16.19%
7. Largo	5.1	5.88%
8. Highpoint/Feather Sound	0.0	0.0%
9. Seminole	6.48	7.47%
10. Pinellas Park	0.0	0.0%
11. St. Petersburg/Gulfport	29.76	34.33%
12 South County Beaches	8.40	9.69%
13 Mid-County Beaches	0.10	0.11%
14 Lealman	0.0	0.0%
Total Trail Miles	86.68	100.0%

Source: Pinellas County GIS database

Notes: Equestrian, canoe, and some municipal trail data were not included in this table. The adjustment in sector boundaries and upgraded software permits improved sector analysis.

The Pinellas County Parks and Conservation Resources Department monitors trail usage (attendance) for the Pinellas Trail and for the Friendship Trail-Bridge, the latter which closed in November 2008 due to concerns about structural integrity. Adjoining catwalks were closed one month later.

The map on the following page shows the location of existing trails, countywide, that are included in the Trailways Network.

Map 9 - Trails by Planning Sector

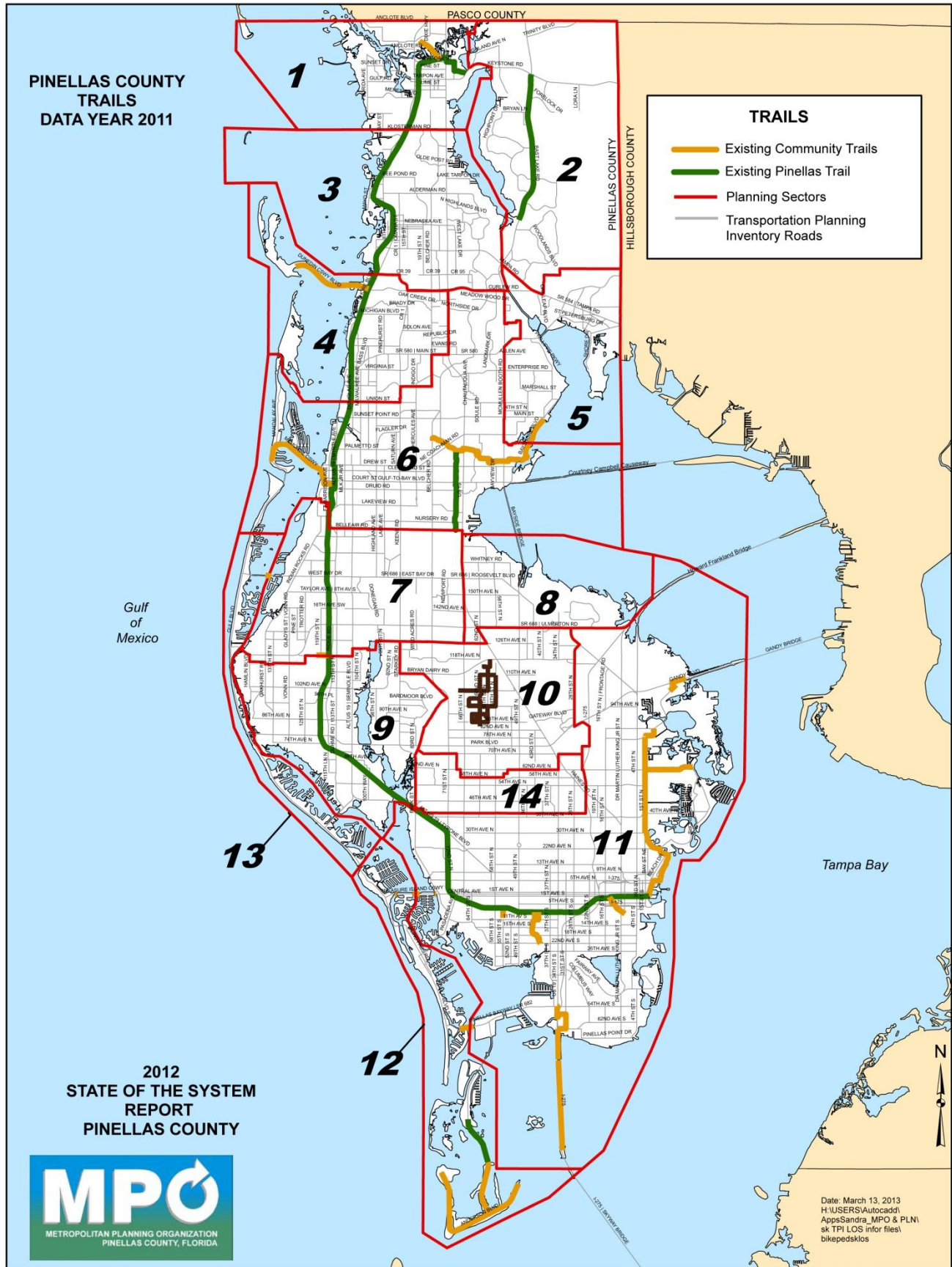


Table 26 identifies specific elements that make up the trail network and provides mileage data on each. As previously stated, overall, trail miles in 2011 have increased by approximately 47% since 2008. Slight discrepancies in miles between the 2010 SOS Report and this report are attributable to improvements in software and additional refinements to more accurately locate and measure the length of the trails. This analysis does not include canoe or equestrian trails.

**Table 26 - Existing Trails in Pinellas County:
Comparisons of Data Years 2008, 2010 and 2011**

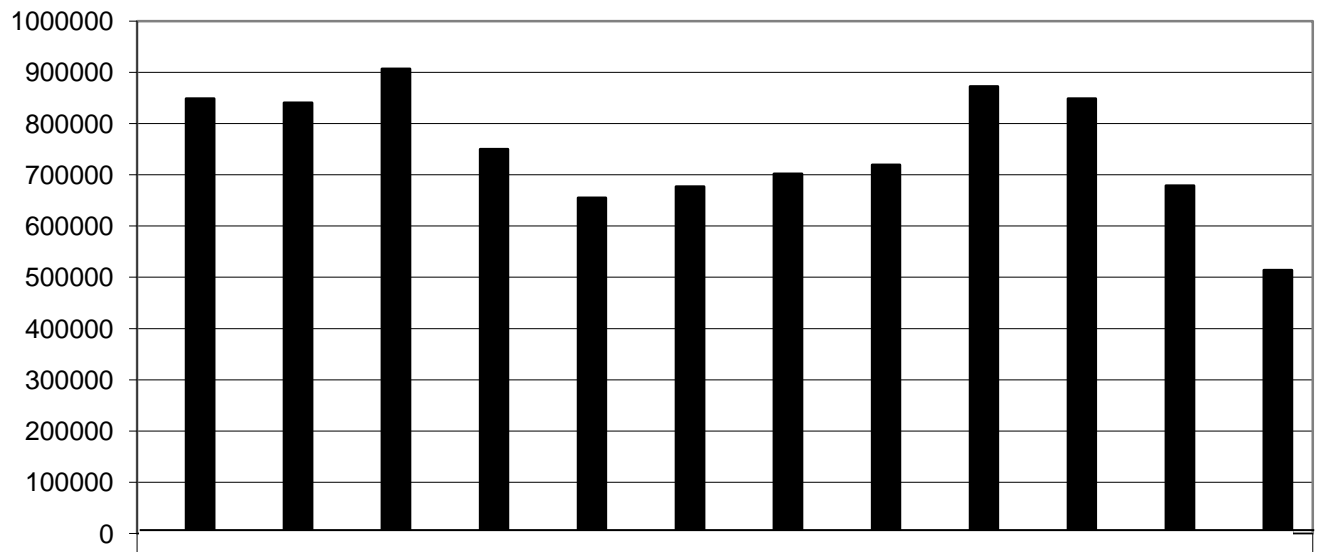
2008	2010	2011	Trailway Name
Miles	miles	miles	
-	1.55	1.55	62nd Avenue NE Trail
0.79	0.79	0.79	Bayshore Trail (Clearwater)
0.89	0.89	0.89	Bayshore Trail (Safety Harbor)
-	1.54	1.54	Bayway Trail South
-	0.30	0.30	Belleair Causeway Trail
-	2.26	2.26	Clearwater Beach Connector Trail
-	0.78	0.78	Clearwater Beach Trail
-	3.06	3.06	Downtown Connection Trail
0.87	0.87	0.87	Elfers Spur
0.30	0.30	0.30	Friendship Trail/Savona Drive
-	-	2.97	Friendship Trail/Gandy Blvd.
6.37	6.37	6.37	Fort Desoto Park Trail
0.32	0.32	0.32	Gulfport Spur
-	-	0.90	Booker Creek Trail
2.56	2.56	2.56	Honeymoon Island Trail
-	1.85	6.30	North Bay Trail
-	0.54	0.54	North Bay Trail – Rio Vista Trail Connection
34.26	34.26	34.26	Pinellas Trail
4.76	4.76	4.76	Pinellas Trail – East Lake Road
1.06	1.06	1.06	Pinellas Trail Northeast Extension – Jasmine Section
-	2.59	2.59	Progress Energy Trail (Pinellas Trail Extension)
3.71	3.71	3.71	Ream Wilson Clearwater Trail
2.85	3.36	6.90	Skyway Trail
-	0.50	0.50	South Beaches Trail
-	0.33	0.33	Treasure Island Causeway Trail
-	0.33	0.33	Walsingham Spur
58.74*	74.88*	86.74	Total Miles

Source: Pinellas County GIS database (*As reported in the 2010 SOS Report.)

Notes: Equestrian, canoe and some municipal trail data were not included in this table. The former 0.51 mile Clam Bayou/Childs Park Trail is now part of the Skyway Trail.

As shown in Figure 11, 2002 was the banner year for the total estimated users of the Pinellas Trail at 906,831. Trail usage increased by approximately 33% between 2004 and 2008. However, between 2008 and 2011, trail usage declined by approximately 41%. Traditionally, the months with highest usage are April, May and June.

Figure 11 - Pinellas Trail Usage by Year, 2000 to 2011



Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Attendance	848,565	840,434	906,831	750,105	655,342	676,842	701,675	719,658	872,424	848,861	678,735	513,814

IV. TRENDS AND CONDITIONS: Crash Data

This section reviews crash data from the Florida Department of Highway Safety and Motor Vehicles (FDHSMV) and the Pinellas County MPO's Crash Data Management System (CDMS) databases. The FDHSMV database draws directly from long- and short-form reports submitted by law enforcement agencies on crashes that meet the following criteria: significant damage to property; bodily injury or death; leaving the scene of a crash; driving under the influence of alcohol, or other criminal activity.

Crash History

Table 27 provides a five-year crash history for Pinellas County. Between 2007 and 2010, the Florida DHSMV database contained an average of 13,508 long-form crash reports for Pinellas County, while the CDMS averaged 25,397 long- and short-form crash reports.

In 2011, there was a significant reduction in the number of MPO/CDMS reports due to several factors, including an overall decrease in the number of crashes and the State no longer providing the short-form data to local agencies.

While the crash numbers are now closer for trend analysis, the Pinellas MPO CDMS continues to maintain a larger data set than the FDHSMV due to the private property/parking lot crashes as well as the crashes that are not specifically located by x/y coordinate.

Table 27 - Pinellas County Crash History: DY 2007 through DY 2011

Year	2007	2008	2009	2010	2011
FDHSMV Reports	13,228	13,685	13,669	13,450	10,882
Pinellas MPO CDMS Reports	26,428	26,269	25,760	23,131	14,853

Sources: Florida Department of Highway Safety and Motor Vehicles, 2011 Florida Traffic Crash Statistics Report; and the Pinellas County MPO Crash Data Management System (CDMS).

Crashes by Location

Table 28 identifies the 25 intersections in Pinellas County with the highest number of crashes in DY 2011. It should be noted that not all of the crashes occurred exactly within the identified intersection. In many instances the intersection was the closest intersection for reporting purposes. It should also be noted that intersections with high crash frequencies also tend to be those with high traffic volumes. For the first time in a State of the System Report,

the top 25 crash intersections are cross-referenced with those roadway facilities/segments identified as congested. Approximately 64% of the top 25 crash intersections identified in Table 28 are associated with either the top congested SIS or non-SIS facilities/segments (previously identified in Tables 8 and 9). (**Trend:** Although there are differences in the methodology used, it is significant to note that three out of the top five crash locations in DY 2007 were on US Highway 19; the top five crash locations in DY 2009 were all on US Highway 19; and as shown in Table 28, three out of the top five crash locations in DY 2011 were on US Highway 19. Moreover, since 2007, the intersection of US Highway 19 and SR 584/Tampa Road has been the number one crash location, countywide.)

Table 29 identifies in greater detail the top ranked crash intersections and congested SIS and non-SIS facilities/segments, and similar to Tables 8 and 9, there is an indication of present or planned construction activities.

Table 30 shows that in DY 2011, bicycle & pedestrian crashes accounted for approximately 6.1% of all crashes, moreover, parking lot/private property crashes represented nearly 10% of all bicycle/pedestrian crashes. (**Trend:** Bicycle & pedestrian crashes as a percentage of all crashes has increased since 2009, while parking lot/private property crashes as a percentage of all bicycle/pedestrian crashes increased from 17% to 23% between 2008 and 2009, but decreased in 2010 (down to 15%) and 2011 (down to 10%).

Table 28 - Top Twenty-Five Crash Intersections, DY 2011			
Rank	On Street	Cross Street	No. of Crashes
1	US Highway 19	SR 584/Tampa Road ¹	139
2	US Highway 19	SR 586/Curlew Road ¹	117
3	I-275	SR 687/4 th Street N. (Eastbound)	81
4	I-275	22 nd Avenue North ¹	72
5	US Highway 19	Alderman Road ¹	71
6	SR 686/SR 688 Ulmerton Rd.	34 th Street N. ²	70
7	I-275	38 th Ave. N. ¹	67
8	Alt. US 19/Seminole Blvd.	Park Blvd. North	65
9	US Highway 19	Nebraska Avenue ¹	63
10	I-275 Interchange	SR 600/Gandy Blvd. Interchange ¹	61
11	I-275 Interchange	54 th Avenue N. Interchange ¹	55
12	I-275 Interchange	SR 686/Roosevelt Blvd. Interchange	55
13	SR 586/Curlew Road	CR 611/McMullen Booth Rd. ²	52
14	SR 688/Ulmerton Rd.	CR 611/49 th Street N. ²	51
15	CR 1/Starkey Road	SR 694/Park Blvd.	51
16	SR 584/Tampa Road	Forest Lakes Blvd.	49
17	US Highway 19	Klosterman Road ¹	48
18	CR 1/Starkey Road	CR 296/Bryan Dairy Road ²	47
19	SR 686/Roosevelt Blvd.	CR 611/49 th Street N. ²	45
20	I-275 Interchange	SR 688/Ulmerton Road Interchange	44
21	US Highway 19	SR 688/Ulmerton Road Interchange	42
22	SR 580/Main Street	CR 1/Keene Road	42
23	US Highway 19	Republic Drive/ Hammock Pine Blvd. ¹	41
24	SR 693/66 th Street	54 th Avenue North	40
25	US Highway 19	Belleair Road ¹	39

Source: Pinellas County MPO Crash Data Management System (CDMS)

Notes: ¹ Associated with a Top 10 Congested SIS Facility/Segment, see Table 8; ² Associated with a Top 25 Congested Non-SIS Facility/Segment, see Table 9; and because the CDMS database uses both long-form and short-form crash reports, the number of crashes will be greater than what is reported in the FDHSMV database.

**Table 29 - Cross-Referencing the Top 25 SIS and Non-SIS Crash Intersections
With the Top 10 Congested SIS and Top 25 Congested Non-SIS
Facilities/Segments, DY 2011**

Crash Intersection	Crash Rank	Congestion Segment(s)	Congestion Rank(s)
US Highway 19 @ Tampa Road	1	US 19: Curlew Rd. to Tampa Rd. ¹	4 (SIS)
US Highway 19@ Curlew Road	2	US 19: Curlew Rd. to Tampa Rd.; and 580/Main St. to Curlew ¹	4, 7 (both SIS)
I-275@22 nd Avenue North	4	I-275: 22 nd Ave. N. to 38 th Ave. N.	5 (SIS)
Ulmerton Rd. @34 th Street N.	6	Roosevelt Blvd to 40th Street ¹	5 (non-SIS)
I-275@38 th Ave. N.	7	I-275: 22 nd Ave. N. to 38 th Ave. N.	5 (SIS)
US Highway 19@ Nebraska Avenue	9	US 19: Tampa Rd. to Alderman Rd. ¹	6 (SIS)
Curlew Rd @ McMullen Booth Rd.	13	580/Main St. to Curlew Rd.	16 (non-SIS)
US Highway 19@ E. Klosterman Road	17	Klosterman Rd. to Tarpon Ave. ¹	9 (SIS)
Starkey Road@ Bryan Dairy Road	18	66th St N (West Ramps) to Starkey Road ¹	25 (non-SIS)
49 th Street N. @ Roosevelt Blvd.	19	Ulmerton Rd. to 49 th St. (NB Ramp) ¹	15 (non-SIS)
US Highway 19@ Hammock Pine Blvd.	23	US 19: 580/Main St. to Curlew ¹	7 (SIS)
US Highway 19@ Belleair Road	25	Belleair Rd. to Whitney Rd. ¹	3 (SIS)

Sources: Tables 8, 9 and 28. ¹Under construction or construction planned in accordance with the Transportation Improvement Program (FY 2012/13 to FY 2016/17).

Table 30 - Location of Bicycle and Pedestrian Crashes

Type	Location	2008		2009		2010		2011	
		Number	% of All Bike/ Ped Crashes	Number	% of All Bike/ Ped Crashes	Number	% of All Bike/ Ped Crashes	Number	% of All Bike/ Ped Crashes
Bicycle	Public Traffic Way	586	92	441	80	500	91	456	95
	Parking Lot/Private	52	8.0	113	20	49	9	25	5
	Total	638	100%	554	100%	549	100%	481	100%
Pedestrian	Public Traffic Way	345	71	351	74	357	78	369	85
	Parking Lot/Private	143	29	122	26	101	22	65	15
	Total	488	100%	473	100%	458	100%	434	100%
Combined Bicycle & Pedestrian	Public Traffic Way	931	83	792	77	857	85	825	90
	Parking Lot/Private	195	17	235	23	150	15	90	10
	Total	1,126	100%	1,027	100%	1,007	100%	915	100%
All Crashes (Table 27)		26,269	100%	25,760	100%	23,131	100%	14,855	100%
Bike & Ped. Percentage of all Crashes			4.2		3.98		4.3		6.1

Sources: Pinellas County MPO Crash Data Management System (CDMS); 2009 Crash Facts Report; and 2008 State of the System Report. Notes: The MPO's CDMS includes data on both long- and short-form crash reports. The 2010 SOS Report was the first SOS report to analyze crashes by location, e.g. parking lots.

Crash Fatalities

Table 31 shows that alcohol-related crashes decreased nearly 23% between 2007 and 2011, but after a decline of alcohol-related fatalities in 2009 and 2010 there was an increase of approximately 21% between 2010 and 2011. Total crash fatalities in Pinellas County decreased by 16% between 2007 and 2010, but increased by the same amount between 2010 and 2011.

Table 31 – Pinellas County: Five Year History of Alcohol-Related Crashes, Alcohol-Related Fatalities and Total Fatalities					
	2007	2008	2009	2010	2011
Alcohol-Related Crashes (Suspected)	1,443	1,390	1,223	1,198	1,114
Alcohol-Related Fatalities (Suspected)	40	51	45	42	51
Total Fatalities	114	114	104	96	112

Source: Florida Department of Highway Safety and Motor Vehicles, *2011 Florida Traffic Crash Statistics Report*. Note: The total number of fatalities is driver-only.

Crash Fatalities: Vulnerable Users

The Pinellas County MPO's CDMS tracks fatality data for pedestrians, bicyclists and motorcyclists (three vulnerable user categories). As shown in Table 32, these vulnerable users accounted for 50 percent or more of all crash fatalities annually over the five-year period, with a high of approximately 62% in DY 2009. In 2011, there were seven more bicyclist fatalities than 2010, but three fewer than 2009; and nine more pedestrian fatalities than 2010, but only one more than 2009. (**TREND:** The majority of crash fatalities in Pinellas County continue to involve pedestrians, bicyclists and motorcyclists – all vulnerable users.)

Table 32 – Pinellas County: Five Year History of Vulnerable User Fatalities					
	2007	2008	2009	2010	2011
Motorcycle Fatality	28	33	24	26	28
Bicyclist Fatality	5	8	11	1	8
Pedestrian Fatality	32	25	30	22	31
Total Fatalities (from Table 31)	114	114	104	96	112
Percentage of Vulnerable User Fatalities	57%	58%	62%	51%	60%

Source: Pinellas County MPO Crash Data Management System (CDMS).

At-Risk Drivers: Age 19 and Younger, and Age 65 and Older

One of the emphasis areas addressed in the Florida Department of Transportation's 2012 Strategic Highway Safety Plan is "at risk" drivers, described as being comprised of two groups: teen drivers and "aging road users," i.e., drivers age 65 and older.

Teen Drivers

Motor vehicle crashes are the number one killer of teens in the United States. More teens die in crashes than the next three leading causes of death – homicide, suicide and disease – combined. On average, eleven 15-19 year-olds are killed in teen driver crashes every day. For crashes involving teen drivers, fatalities and serious injuries declined from 5,749 in 2006 to 3,313 in 2010. Over this five-year period, 1,898 people died in teen driver crashes, and 20,644 were seriously injured. In Florida, between 2009 and 2011, teen crashes declined from 29,485 to 28,176, however, teen drivers killed increased from 80 to 91.

Male teen drivers accounted for nearly 60 percent of the fatalities and serious injuries from 2006 to 2010. Most of the fatal and serious injury crashes involving teen drivers occur in the spring months and peak in March. The largest proportion of crashes (57 percent) occurs during daylight hours. Programs and initiatives designed to address these crashes must reach out to teen drivers and their parents. The Florida Department of Transportation is focusing on the following strategies:

1. Expand the network of concerned individuals to build recognition and awareness as it relates to teen driver safety and supports the Florida Teen Coalition.
2. Create a safe driving culture for teen drivers through outreach and education.
3. Support initiatives that enhance traffic laws and regulations related to safe teen driving.

Aging Road Users

As an increasing number of aging adults drive on Florida's roadways, or travel the roads as pedestrians, passengers, bicyclists, or motorcyclists, the issue of transportation safety for this population is an increasingly significant public health concern. From 2007 to 2009, adults age 65 and older made up an increasing percent of all fatalities from crashes over the three years – 18.3 percent, 18.7 percent and 20.6 percent, respectively.

Today's older drivers are driving longer and driving more miles per year than in the past. Research shows that older adults can expect to outlive their ability to safely drive by 7 to 10 years. Florida leads the nation with 18 percent of its population age 65 and older. By the year 2030, over 27 percent of Floridians will be over age 65, and half of them will be 75 or older. Mirroring this growth, an increasing proportion of licensed drivers in Florida are trending older. Florida's population of older residents and licensed drivers grew in composition from 2006 to 2010, and their representation among motor vehicle-related crashes, fatalities, and injuries is larger and increased at a faster rate.

In January 2011, one-quarter of all licensed drivers in Florida were age 60 and older, a small but steady increase from 23.7 percent in 2009. The Florida Department of Transportation is focusing on numerous strategies, including the following:

1. Manage and evaluate aging road user safety, access, and mobility activities to maximize the effectiveness of programs and resources;
2. Provide the best available data to assist with decisions that improve aging road user safety, access, and mobility;
3. Provide information and resources regarding aging road user safety, access, and mobility;
4. Inform public officials about the importance of and need to support national, state, regional, and local policy and program initiatives which promote and sustain aging road user safety, access, and mobility;
5. Promote and encourage practices that support and enhance aging in place (i.e., improve the environment to better accommodate the safety, access, and mobility of aging road users);
6. Promote safe driving and mobility for aging road users through licensing and enforcement; and
7. Promote the safe mobility of aging vulnerable road users (pedestrians, transit riders, bicyclists and other non-motorized vehicles).

Table 33 shows (for the state of Florida in 2010) the percentage of drivers involved in a crash, the percentage killed and injured, and the crash rate per 10,000 drivers, by age group. While the table contains several important comparisons, the two that really stand out are the percentage of drivers involved in crashes (a difference of only one percent), and the crash rate per 10,000 drivers (with younger drivers nearly four times the rate of seniors).

Table 33 - Percentage of Drivers Killed/Injured and Crash Rates by Age Group, Florida (DY 2010)				
Age Group	% Drivers Involved in Crash	% Drivers Injured	% Drivers Killed	Crash Rate per 10,000 Drivers
Age 19 and younger	8.68	8.09	5.69	364
Age 65 and Older	9.71	10.2	19.64	94

Source: Florida Department of Highway Safety and Motor Vehicle, 2010 Florida Traffic Crash Statistics.

Pinellas County

As was previously shown in Table 16, as of January 1, 2012 approximately 7.1% of the licensed drivers in Pinellas County were age 21 or younger, while 29.1% were age 61 or older. It is interesting to note that there are nearly as many licensed drivers between the ages of 81 and 90 as there are 18 to 21 (approximately 5%).

In 2011, the U.S. Census Bureau released figures estimating Pinellas County's percent of residents less than 21 years of age at 21.2%. This is a slightly lower percentage than the state of Florida (25.6%). The following are 2011 U.S. Census population estimates for the five largest Pinellas cities (specifically, percentage of population under 21 years of age): St. Petersburg (24.1%), Pinellas Park (22.1%), Clearwater (22%); Dunedin (17.5%) and Largo (17.4%).

The 2011 U.S. Census Bureau's estimate for Pinellas County's percent of residents age 65 and older is 21.4%. This is a higher percentage than the state of Florida, which led the nation at 17.6%. The following are population estimates for Pinellas' five largest cities (specifically, percentage of population age 65 and older): St. Petersburg (15.2%), Pinellas Park (21.1%), Clearwater (20.7%); Dunedin (26.6%) and Largo (25.7%). The University of Florida, Bureau of Economic and Business Research (Florida's official demographer), estimates that by the year 2030, 26.2% of Florida's population will be 65 years or older, i.e., one of every four Florida resident drivers will be over the age of 65. It should be noted, however, that the actual number of senior drivers will likely be fewer than represented, because many will give up driving but keep their licenses active for identification purposes. Additionally, data show that those age 65 and older who continue to drive do so less frequently and for fewer miles than other age groups. Regardless, as the population of the state and nation ages, local governments will begin to focus on the mobility and safety needs of older drivers, and Pinellas and a few other Florida counties will likely become models for the state as well as the nation with regard to how these challenges are managed.

The Pinellas County crash, fatality and injury data provided in Table 34 is compelling, especially DY 2009, when the difference in the total number of crashes, fatalities and injuries *between the two age groups* was 8% or less. In DY 2010, the difference in the total number of crashes and injuries was 6.2% and 14.3%, respectively. Finally, in DY 2011, the difference in the total number of crashes and injuries was 21.3% and 16.5%, respectively.

**Table 34 - Crashes/Fatalities/Injuries by Age Group,
Pinellas County (DY 2009 through 2011)**

	2009			2010			2011		
Age Group	Crashes	Fatalities	Injuries	Crashes	Fatalities	Injuries	Crashes	Fatalities	Injuries
20 and younger	2,511	14	456	2,388	9	409	1,540	7	638
65 and older	2,312	15	486	2,544	21	477	1,956	12	764

Source: Pinellas County MPO, CDMS

V. TRENDS AND CONDITIONS: Air Quality

To meet federal ambient ozone and fine particulate standards, Pinellas County's air quality is continuously monitored and evaluated annually. The federal standard for ozone pollution, the primary component of what is generally termed "smog," changed in 2008 from a threshold of 85 parts per billion (ppb) to 75 ppb. Compliance with the 75 ppb standard is determined using daily averages of the eight highest consecutive hourly readings. An area is considered to be in *nonattainment* if the average of the annual fourth highest ozone readings at any ozone monitoring station for the most recent three-year period equals or exceeds 75 ppb.

The pollutants that drive ozone formation in the atmosphere are nitrogen dioxide and volatile organic compounds. Nitrogen dioxide emissions in Pinellas County are dominated by mobile sources, on-road and off-road vehicle emissions from cars, trucks, construction equipment, etc. Mobile sources also account for the majority of volatile organic compound emissions in Pinellas, but stationary source industrial and commercial facilities that use solvents or chemicals in their processes currently account for nearly as much (according to the 2008 EPA National Emissions Inventory, which is the most recent).

Ozone readings from 2009, 2010 and 2011 data, drawn from the three monitoring stations in Pinellas County, are summarized in Table 35. Similar to 2007 and 2008, Pinellas County's ozone readings remain below the standard, indicating attainment. Pinellas County has not exceeded the ozone standard since the 1980s. (**Trend:** After review of the 2010 SOS Report, it can be stated that the County's ozone readings remain below the threshold for nonattainment.)

Pinellas County is part of a regional airshed for the purposes of determining compliance with the ozone standard. This airshed is currently defined by EPA to include Hernando, Hillsborough, Pasco and Pinellas counties. In 2011, two of Hillsborough County's four monitoring stations reported readings right at the 75 ppb attainment level. The EPA evaluated data for the entire four-county airshed in 2011 and in 2012 determined the airshed to be in attainment. The 2009 to 2011 attainment averages for the two monitoring stations in Pasco County were 68 and 63 (and there are no stations in Hernando County). If ozone readings at any monitoring location within the airshed indicate non-attainment in 2013 or beyond, the multi-year process of verification and planning to bring the airshed back into attainment would begin (per EPA regulations regarding air quality maintenance, prevention of significant deterioration and re-attainment). EPA plans to propose a rule on whether and how to revise the 2008 ozone NAAQS in December 2013 and to issue a final rule in September 2014, which could lead to further attainment evaluations.

Table 35 - Ozone Attainment Status: Ozone Readings, 2009 to 2011

Year	St. Petersburg College, Clearwater Campus		John Chesnut Sr. Park, East Lake Tarpon		Azalea Park, St. Petersburg	
	Reading (ppb)	Date	Reading (ppb)	Date	Reading (ppb)	Date
2009	60	2/13/2009	58	4/23/2009	65	3/30/2009
2010	67	3/24/2010	65	10/9/2010	65	10/9/2010
2011	72	4/14/2011	67	4/30/2011	66	5/10/2011
Three Years Attainment Average	66		63		65	
Attainment Status	Attainment		Attainment		Attainment	

Source: Florida Department of Environmental Protection, Division of Air Resource Management, 2011 Air Monitoring Report

Notes: An area is considered to be nonattainment 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 (ppb); readings are 4th-highest eight-hour averages; and Pinellas County shares an airshed with Hernando, Hillsborough and Pasco counties.

APPENDIX:

- Table 36: Status Report on CMP Studied Corridors and “Hot Spots”
- Table 37: Update on CMP Projects (V/C x DOC), DY 2008, DY 2009 and DY 2011
- Table 38: Status Report on Advanced Traffic Management Systems (ATMS)/Intelligent Transportation Systems (ITS) Planned and Implemented Projects
- Table 39: Pinellas Suncoast Transit Authority (PSTA) Bus Routes

Table 36, Status Report: Implementation of Identified Strategies - CMP Corridor and Hot Spot Studies			
Study Limits	Study Performed	Updates/Notes	Remaining
ALT US HWY 19 Lakeview RD to Pasco County Line	Oct. 1998 Updated Mar. 2004	<ul style="list-style-type: none"> Alignment changed in Clearwater and Largo in 2007. TIP: Resurfacing from Whisper Lake RD to Harry ST CST 2012/2013 Tentative Work Program – Resurfacing from N of Curlew Rd to N of Whisper Lake PE 2012/2013, CST 2014/2015 Gulf Beach Trolley service to Dunedin, Tarpon Springs, etc begun in 2010. 2035 LRTP: Forecasts severe congestion; transit enhancements have been implemented and segment has been identified for premium transit routes between beaches, Largo, St. Petersburg, Tampa and US HWY 19; roadway enhancements between Anclote BLVD and Live Oak ST and between Klosterman RD and Brevard ST. Phase III ITS Truck route (unrestricted) 	Previously identified improvements mostly completed, with the exception of southbound right turn lane at Dodecanese BLVD and southbound left turn lane at Curlew PL. Recent request to look at pedestrian safety and transit access at Florida AVE and Alt 19 in Palm Harbor.
22nd AVE N Park ST to Dr. M.L.King Jr. ST	Oct 2003	<ul style="list-style-type: none"> Implemented at Dr. Martin Luther King, 16th ST and 28th ST - pedestrian signal heads at trail crossings. Solar powered crossing equipment installed at Pinellas Trail. Implemented at I-275 - mast arms on both sides with backplate. Truck route (unrestricted) Bike lane system expanded in area. FDOT performed extensive study in summer, 2012 	Provide additional eastbound left turn lane to the northbound on-ramp at I-275. FDOT will complete an Interchange Operations Analysis.
54th AVE S 28th ST S to 41st ST S	Mar 2007	<ul style="list-style-type: none"> Implemented signalization improvements. Phase III ITS. Bicycle lanes between 34th ST to east of 41st ST underway Truck route (unrestricted) 	Add exclusive eastbound right-turn lane at 31 st ST, extend westbound lane and modify it to a shared through/right turn lane. At 34 th ST, modify the southbound approach to two exclusive left-turn lanes, one through lane and one right turn lane.
McMullen-Booth RD Gulf-to-Bay BLVD to Tampa RD	Jul 2003	<ul style="list-style-type: none"> ITS in 2009. Identified in 2035 LRTP for premium bus Truck route (daylight) Safety study of signal at Briar Creek RD complete Intersection improvements Drew ST, complete Modifications for Enterprise Rd complete, 	County on-road bike lanes due to be completed by 2012 end.
East Lake RD Tarpon Woods BLVD to Keystone RD	Sept 2008	<ul style="list-style-type: none"> 2035 LRTP: Forecasted for significant congestion; premium bus lines. Safety Audit - Tampa RD to Trinity RD 2009 (Identified Keystone RD as highest crash. Overall, highest type was rear-end.) ITS 2009. Keystone RD widening underway Truck route (daylight). Safety related improvements at Tarpon Woods intersection. 	2008 CMP study recommended access management, but 2009 Safety Audit Report concluded that access was "very good," with a minimum of openings. Implementation of recommendations drawn from 2009 safety audit to be identified by County.
Belleair RD Intersection at Belcher RD	Sept 2008	<ul style="list-style-type: none"> Interchange at US HWY 19 under construction; 2035 LRTP: intersection improvements and other enhancements planned for Belleair RD; planned Progress Energy Trail extension (Belleair RD to Ulmerton RD). In Tentative Work Program intersection improvements PE 2012/2013; CST 2014/2015 Eagle Lake Park opened 2010 at Keene RD, 	Bicycle and pedestrian safety improvements and signalization.

		<p>making this intersection link between trail and park.</p> <ul style="list-style-type: none"> • CIP: County will do intersection improvements. 	
East Bay DR Intersection at Belcher RD	Sept 2008	<ul style="list-style-type: none"> • ITS 2010-2011. • 2035 LRTP: Forecasted for significant congestion; identified for premium bus network, including to Downtown Tampa. • Truck route (unrestricted) • County performed safety study in 2011 	Pedestrian refuge and other safety improvements. ITS due to be operational in 2012 or slightly later. County performed a road safety audit in July 2011.
N.E. Coachman RD Intersection at Old Coachman RD	Sept 2008	<ul style="list-style-type: none"> • Upgraded signal and pavement 2009. • Progress Energy Trail expansion to US HWY 19 at Enterprise RD • Truck route (unrestricted) • Super Walmart provided some modifications to turn lanes west of US Hwy 19. • Tentative Work Program - Resurfacing PE 2012-2013, CST 2014-2015 may provide opportunities 	Intersection improvements including left turn lane, protected turn signal and bicycle facility/safety improvements. (Needs to be included in LRTP prior to FDOT consideration for PD&E study.)
Drew ST. Intersection at Betty LA	Sept 2008	<ul style="list-style-type: none"> • Bicycle lane in 2035 LRTP. • ITS Phase III • Truck route (unrestricted) • Resurfacing, Tentative Work Program from Alt US 19/Myrtle to Mariva Ave. may provide opportunity for improvement. CST 2012/2013 • Drew St/Betty Lane lot is currently under residential development, but this will not address road improvements. • City permitted use of golf course property for left turn storage, but FDOT was not able to provide full funding for construction, and Clearwater did not have funds available for remainder. • Sidewalk improvements will be made to eliminate gap. • Alternative bike route was established at Cleveland Street. (Road is too narrow for bike lane at Drew St.) Clearwater was asked to consider signage to reroute bicyclists to Cleveland Street. 	Provide left turn storage lane. Eliminate gaps in the sidewalk.
This table was presented to the Intelligent Transportation System (ITS) Advisory Committee on February 6, 2013.			

**Table 37: Update on CMP Projects, as Measured by V/C x DOC
Data Years 2008, 2009 and 2011**

Facility	Limits	Score (V/C X DOC) (2009 score is compared to 2008↑↓; and 2011 score is compared to 2009↑↓.)		
		2008	2009	2011
NE Coachman Rd	Drew St to US HWY 19	17.63	22.23↑	n/a
East Lake Rd	Tarpon Woods Blvd to Lansbrook Pkwy	20.72	21.11↑	19.84↓
Alt US HWY 19/Palm Harbor Blvd.	Tampa Rd to Alderman Rd	15.00	15.60↑	15.25↓
East Bay Dr	Belcher RD to US HWY 19	14.92	14.69↓	11.61↓
McMullen Booth Rd	Main St/Sunset Pt Rd to SR 580	17.02	13.75↓	17.35↑
East Lake Rd	Lansbrook Pkwy to Keystone Rd	15.38	13.73↓	9.77↓
22nd Ave North ¹	34th St N to I-275	11.99	13.44↑	12.88↓
McMullen Booth Rd	Gulf-to-Bay Blvd to Main St/Sunset Pt Rd	15.87	12.29↓	12.62↑
Alt US HWY 19/Bayshore Blvd.	Curlew Rd to Tampa Rd	12.24	12.99↑	8.81↓
Alt US HWY 19/Pinellas Ave.	Tarpon Ave to Anclote Blvd	10.34	11.72↑	7.91↓
Alt US HWY 19/Palm Harbor Blvd.	Alderman Rd to Klosterman Rd	12.10	11.36↓	9.44↓
Alt US HWY 19/Pinellas Ave.	Meres Blvd to Tarpon Ave	12.22	11.27↓	8.60↓
Alt US HWY 19	Broadway/Main St to Skinner Blvd	13.11	11.05↓	10.71↓
McMullen Booth Rd. ¹	SR 580 to Curlew Rd	12.97	10.84↓	14.03↑
Alt US HWY 19/Pinellas Ave.	Klosterman Rd to Meres Blvd	12.34	10.64↓	7.92↓
East Bay Dr	Keene RD to Belcher RD	14.25	10.04↓	11.70↑
Alt US HWY 19/Bayshore Blvd.	Skinner Blvd to Curlew Rd	14.93	13.46↓	12.71↓
Belleair Road ¹	US Hwy 19 to Keene Rd	5.59	9.25↑	11.36↑
54th Ave S	34th St S to 31st St S	8.60	8.51↓	8.37↓
Alt US HWY 19	(Edgewater Dr) Myrtle Ave to Broadway Ave	9.77	8.05↓	3.98↓
Drew St	Missouri Ave to Highland Ave	0.14	0.00↓	0.00

- This table includes corridors and intersections (hot spots) studied by the MPO's CMP program. Prior to 2008 corridor studies were performed on: Alternate US Hwy 19 (Lakeview to Pasco County); 22nd Avenue N (Park St to Dr. M L King St); 54th Avenue S (28th St to 41st St); and McMullen-Booth Rd (Gulf-to-Bay Blvd to Tampa Rd). Five studies were performed in 2008, including one corridor, East Lake Rd (Tarpon Woods Blvd to Keystone Rd), and four intersections: Belleair Rd at Belcher Rd; NE Coachman Rd at Old Coachman Rd; East Bay Dr at Belcher Rd; and Drew St at Betty La. For purposes of comparison, the table above converts corridor, intersection and segment data to facility data.
- V/C ratios and volumes were drawn from the MPO's 2012 Level of Service Report. "Volume" refers to peak hour, peak (one way) direction.
- Duration of congestion figures were generated by vTIMAS (visual Transportation Inventory Management and Analysis).

¹ Segment includes a top 25 crash intersection (see Table 28).

Table 38 - Status Report on Advanced Traffic Management Systems (ATMS)/ Intelligent Transportation Systems (ITS) - Planned and Implemented Projects (Updated April 2013)

On Street	Project No.	From	To	Improvement Type	Fund	Comments
I-275	FPN 4072334	54th Ave South	54th Ave North	DMS/CCTV/RTMS	State Funds	Project has been completed and has been accepted by the District.
	FPN 4072335*	54th Ave South	Sunshine Skyway Bridge	DMS/CCTV/RTMS	State Funds	In construction.
	FPN 4086713*	ITS Communication System			State Funds	Sunshine Skyway Patrol 24 hours surveillance OPS 2011/2012
SR 688/Ulmerton Rd	FPN 2571391	49th St	US 19	ATMS/ITS	State Funds	Project complete.
	FPN 2570502	Oakhurst Ave	119 th Ave	ATMS	State Funds	Signalized intersections under adaptive control system. To be let for CST in Sept. 2013.
US Hwy 19	PID TBD FPN 4062553	SR 580/Main St	SR 60/Gulf-to-Bay Blvd	Signal Controllers, CCTV, Cameras, Communication Backbone	State Funds	Upgrade signal controllers at intersections; add CCTV Cameras, DMS, and communication backbone. Letting October 2013.
	FPN 4062553*	Beckett Way	Pasco County Line	Stage 3 ATMS	State Funds	Design by Pinellas County at 90%
	FPN 4062555*	49 th St	126 th Ave	ATMS/ITS	State Funds	Design at 30%
	FPN 4062556	54 th Ave. S	46 th Ave N	ATMS/ITS	State Funds	PE in FY 2011-2012 & CST in FY 2013-2014. Letting scheduled for 8/21/13, but will likely be pushed back due to delay in letting 427005-1 (south loop project).
McMullen Booth Rd. ATMS/ITS	PID 743 FPN	Pasco County Line	SR 60/Gulf-to-Bay Blvd	ATMS/ITS	State Funds (CIGP), Penny for	Major side-streets implemented with this project including: Tampa Rd - McMullen Booth to US 19

49th St ATMS/ITS	4166041 FPN 4166081	Roosevelt Blvd	US 19		Pinellas	Curlew Rd - McMullen Booth to US 19 SR 580 - McMullen Booth to US 19 Drew St - McMullen Booth to US 19 Construction is complete / Software integration is complete .
Belcher Rd ATMS/ITS	PID 1626/2059 FPN 4206281	Klosterman Rd	Druid Rd	ATMS/ITS	Federal Earmark/ TRIP	Stage 1 construction complete. Stage 2 construction complete / software Integration to begin June 2013
SR 688/Ulmerton Rd ATMS/ITS	FPN 2571541	US 19	El Centro	ATMS/ITS	State Funds	Project Complete
SR 60/Gulf-to- Bay BLVD ATMS/ITS	PID 1810 FPN 4206283	Island Way	Hillcrest Ave	ATMS/ITS	Federal Earmark	Includes DMS signs at Keene Rd and Damascus Rd. Project Complete
<u>SR 60/ Courtney Campbell Causeway</u>	<u>FPN 4245073</u>	<u>McMullen Booth Rd.</u>	<u>Hills. Co. line</u>	<u>ITS Freeway Mgmt.</u>		
SR 584/ Main St	PID 1809 FPN 4200851	McMullen Booth Rd	SR 580/Main St	ATMS/ITS	State Funds (CIGP), 9th Cent Fuel Tax	Remaining segment of SR 580 from Alt US 19 to US 19 will be implemented by FDOT as part of their 3R project on SR 580/Main St. Project Complete
SR 580/ Tampa Rd		McMullen Booth Rd	Race Track Rd			Stage 1 construction underway. Stage 2 plans are complete and ready to go to bid. Project Complete
SR 586/Curlew Rd		McMullen Booth Rd	SR 584/Tampa Rd			Remaining Segment of SR 586 from Alt US 19 to US19 will be constructed by County forces upon completion of eastern segment.
SR 686/Roosevelt BLVD ATMS/ITS	PID 2023 FPN 4230841	Alt US 19	SR 688/Ulmerton Rd	ATMS/ITS	State Funds (CIGP), 9th Cent Fuel Tax	Project construction to start April 15, 2013
SR 686/ Roosevelt Blvd.	256995-1	North of Ulmerton Rd	East of 40 th St.	Although not a dedicated ITS/ATMS project, infrastructure will be installed as a part of FDOT's road widening.		In design, but not funded for construction.
SR 688/Ulmerton Rd ATMS/ITS*	FPN 2570502	Oakhurst Rd	119th St	ATMS/ITS	State Funds	Scoping is underway, followed by design.
Ulmerton Rd	FPN 256995-3	Although not a dedicated ITS/ATMS project, infrastructure will be installed as a part of FDOT's road widening.				In design and funded for construction in 2015.

Bryan Dairy ATMS/ITS	PID TBD FPN 4230861	Alt US 19	28th St	ATMS/ITS	State Funds TRIP, 9th Cent Fuel Tax	CST FY14. Portion outside of road widening project to be done after road project is complete. Design to begin April 2013
SR 693/66th St ATMS/ITS*	PID TBD FPN 4240111	Gulf Blvd	US 19	ATMS/ITS	State Funds, 9th Cent Fuel Tax, TRIP	Sequence 01 includes new ATMS signal system improvements, CCTV Cameras, DMS signs, and fiber optic cable for inclusion in countywide system. 2013-2014. No ATMS installed in St. Petersburg City limits, as per Interlocal Agreement. Design at 30%
SR 694/Park BLVD ATMS/ITS*	PID 2159 FPN 4240121	Gulf Blvd	4th Street	ATMS/ITS	State Funds, 9th Cent Fuel Tax	Sequence 01 includes new ATMS signal system improvements, CCTV Cameras, DMS signs, and fiber optic cable for inclusion in countywide system. 2013-2014. No ATMS installed within St. Petersburg city limits, as per Interlocal Agreement. Design to begin April 2013
Alt US 19 - South Fiber Loop	PID 2160 FPN 4270051	Downtown Clearwater	US 19 / 54th Ave N	ATMS/ITS	State Funds, 9th Cent Fuel Tax	Design complete, construction to begin October 2013
Alt US 19 - North Fiber Loop	PID 4501 000405 FPN TBD 428970	SR 586	Downtown Clearwater	ATMS/ITS	State Funds, 9th Cent Fuel Tax	Project Complete 12/31/2012
ITS Website	N/A				9th Cent Fuel Tax	Draft website developed to be completed June 2013
Highway Advisory Radio	N/A				9th Cent Fuel Tax	Underway – completion June 2013
Gulf Blvd ATMS	PID 00131 FPN 429068	Various Locations		ATMS / ITS	State Funds, 9th Cent Fuel Tax, TRIP	Design 2014 Construction 2015
South Belcher Road ATMS	PID 001030 FPN 4290671	Druid Road	Park Blvd	ATMS/ITS	State Funds, 9th Cent Fuel Tax	Design 2014 Construction 2015
Enhancer Systems	FPN 4245326*	Various Locations	Various Governments	ITS/Ped	State Funding	Pedestrian crossing enhancements. PE 2011-2012 & CST 2013-2014

KEY:

ATMS = Advanced Traffic Management System
CIGP = County Incentive Grant Program
CCTV = Closed Circuit Television
CST = C D = Design construction
CIGP = County Incentive Grant Program
DMS = Dynamic Message Sign
DET = Detection Station
FMS = Freeway Management System

FPN = Financial Project Number
ITS = Intelligent Transportation System
PID = Project Identification Number
RTMS = Remote Traffic Microwave Sensors
TBD = To Be Determined
TENT = Tentative
TRIP = Transportation Regional Incentive Program
• In the Five Year Tentative Work Program 2011-2016

Table 39 - Pinellas Suncoast Transit Authority Bus Route Designations

Suncoast Beach Trolley SM	St. Pete Beach, Treasure Island, John's Pass Village, Redington Beach, North Redington Beach, Redington Shores, Indian Shores, Indian Rocks Beach, Clearwater Beach, Park Street Terminal, Downtown Clearwater
Route 1	Tyrone Square Mall, Crossroads Shopping Center, 22nd Avenue N, 1 Street NE, Northeast Shopping Center, Gateway Mall
Route 4	25 Way S & Roy Hanna Dr, 4 St S, Coquina Key, University of South Florida (USF), Williams Park (Downtown St. Petersburg), 4 St N, Northeast Shopping Center, Gateway Mall, Koger Office Center, Goodwill Industries, 116 Ave N & 7 St
Route 5	Williams Park (Downtown St. Petersburg), St. Anthony's Hospital, St. Petersburg High School, Grand Central Station, Tyrone Gardens Shopping Center, St. Petersburg College, Azalea Middle School, St. Petersburg Science Center, Tyrone Square Mall
Route 7	Williams Park (Downtown St. Petersburg), Jordan Park, Campbell Park, Grand Central Station, Tyrone Gardens Shopping Center, Tyrone Square Mall
Route 11	34th Street N, PSTA Facility, Carillon Complex, 28 Street, Gateway Centre Pkwy, Shoppes at Park Place, 28th St. N, 38th Avenue N., Joe's Creek Industrial Park, Grand Central Station, Pinellas Technical Education Center (PTEC), 38th Ave S, Lakewood High School, Skyway Plaza, 62nd Ave S, 25th Way S, Roy Hanna Dr, Pinellas Point Drive S
Route 14	Williams Park (Downtown St. Petersburg), Bayfront Medical Center Hospital, 18 Ave S, Grand Central Station, Gulfport Blvd, Pasadena Ave, Palms of Pasadena Hospital
Route 15	Williams Park (Downtown St. Petersburg), 15th Ave S, Gibbs High School, Grand Central Station, Town Shores Apartments, Gulfport Casino
Route 18	Park Street Terminal (Downtown Clearwater), Missouri Ave, Largo Mall, Seminole Blvd, Heritage Apartments, Seminole Mall, Bay Pines VA Medical Center, Tyrone Square Mall, Tyrone Gardens Shopping Center, Grand Central Station, Tropicana Field, Williams Park (Downtown St. Petersburg)
Route 19	US Highway 19 via: Tarpon Springs, Westfield Shopping Town Countryside, Coachman Fundamental Middle School, Hampton Rd, Clearwater Mall, Shoppes at Park Place, Grand Central Station, Pinellas Technical Education Center (PTEC), Gibbs High School, 46 Ave S & 34 St S, Eckerd College
Route 20	Tyrone Square Mall, Edward White Hospital, Williams Park (Downtown St. Petersburg), 9 St S/Dr ML King St, Skyway Plaza, Roy Hanna Dr S & 25 Way, Pinellas Point Dr
Route 23	Tyrone Square Mall, Tyrone Gardens Shopping Center, Boca Ciega High School, Town Shores, Gulfport Casino, Lakeview Shopping Center, 22 Ave S, Williams Park (Downtown St. Petersburg)
Route 30	Northeast Shopping Center, 30 Ave N, St. Pete Plaza Shopping Center, Crossroads Shopping Center, Tyrone Mall
Route 32	Downtown St. Petersburg Circulator: Williams Park (Downtown St. Petersburg), Sunshine Senior Center, Mirror Lake Area, St. Anthony's Hospital, John Knox Apartments, Greyhound Bus Terminal, Tropicana Field, Graham Park, Bayfront Medical Center, All Children's Hospital, Suncoast Medical Center, Publix Supermarket
Route 35 Central Ave. Trolley	Grand Central Station, West Central Shopping Center, Pasadena Shopping Center, Palms of Pasadena Hospital, St. Pete Beach, Pass-a-Grill.
Route 38	Williams Park (Downtown St. Petersburg), Beach Dr NE, Northeast Shopping Center, Colony Shopping Center, St. Petersburg Medical Center Hospital, Tyrone Square Mall
Route 52	Park Street Terminal (Downtown Clearwater), Clearwater Largo Rd, West Bay/East Bay Drive, Imperial Palms Apartments, Tri City Plaza, Whitney Rd, US 19 Frontage Rd, Pinellas Technical Education Center (PTEC), Roosevelt Blvd, 49th St N, Pinellas County Criminal Justice Center, 118th Ave, 34th St N, PSTA Facility, 49th St, Shoppes at Park Place, Grand Central Station, Williams Park (Downtown St. Petersburg)
Route 58	Gateway Mall, 4 St N, Roosevelt Blvd, Carillon Franklin-Templeton, Raymond James Towers, 118 Ave, Bryan Dairy Rd, 102 Ave N/CR296, St. Petersburg College, 113 St N, Seminole Mall
Route 59	Williams Park (Downtown St. Petersburg), Dr. MLK/9th St N, Gateway Mall, Dr. MLK/9 St N, Roosevelt Blvd, 28 St N, 118 Ave N, 34 St N, Ulmerton Rd/SR 688, ICOT Center, Largo Mall, Walsingham Rd, Indian Rocks Shopping Center, Indian Rocks Beach
Route 60	Park Street Terminal (Downtown Clearwater), Cleveland St, Gulf-to-Bay Blvd/60, Clearwater Mall, Drew St & Bayview Ave
Route 61	Palm Lake Village, County Rd 1, Main St/580, Mease Manor, Park Street Terminal (Downtown Clearwater), Missouri Ave/Seminole Blvd, Goodens Crossing, Indian Rocks Shopping Center

Route 62	Tyrone Square Mall, 71 St N, Belcher Rd, Sunset Point Rd, Safety Harbor, McMullen Booth Rd/CR 611, Westfield Shopping Town Countryside, The Shoppes of Boot Ranch
Route 66	Tarpon Springs, Tarpon Springs Sponge Docks, Alternate 19, Causeway Plaza, Bayshore Blvd, Main St/580, Mease Manor, Patricia/Highland Ave, Sunset Point Rd, Park Street Terminal (Downtown Clearwater), Morton Plant Hospital, Diagnostic Clinic, Largo Medical Center, Sun Coast Hospital, Indian Rocks Rd, Indian Rocks Shopping Center
Route 67	Park Street Terminal (Downtown Clearwater), Cleveland St, Gulf-to-Bay Blvd/60, Clearwater Mall, Drew St & Bayview Ave
Route 68	Tyrone Square Mall, Tyrone Blvd, Bay Pines VA Medical Center, Bay Pines VA Regional Office, Maderia Beach Shopping Center, Gulf Blvd, John's Pass Village
Route 73	Tyrone Square Mall, 66 St N, 46 Ave N, Park St, Starkey Rd, Keene Rd, Highland Ave, Park Street Terminal (Downtown Clearwater)
Route 74	Williams Park (Downtown St. Petersburg), Tropicana Field, 16 St N, Gateway Mall, Gandy Blvd, Shoppes at Park Place, Park Plaza, Park 66 Shopping Center, Park Blvd/74 Ave N, Lake Seminole Park, Seminole Mall, Oakhurst Rd, Indian Rocks Shopping Center
Route 75	Gateway Mall, Shoppes at Park Place, US 19/34 St N, 54th Ave N, Five Towns, Park Street, 22nd Ave N, Tyrone Square Mall
Route 76	Park Street Terminal (Downtown Clearwater), Cleveland St, St. Petersburg College, On Top of the World East and West, Westfield Shopping Town Countryside
Route 78	Park Street Terminal (Downtown Clearwater), Clear Bay Terrace Apartments, Dunedin City Hall, Mease Dunedin Hospital, Mease Manor, Main St/580, Westfield Shopping Town Countryside
Route 79	US 19 Frontage Rd, Whitney Rd, 58th St, Ulmerton Rd/SR 688,, 66 St N, Park 66 Shopping Center, Tyrone Square Mall, St. Petersburg College, Lutheran Residences, Bethany Towers, Pasadena Shopping Center, Gulfport Blvd/22 Ave S, 5 Ave S, Grand Central Station, Williams Park (Downtown St. Petersburg)
Route 90	Commuter Service: Grand Central Station, Palm View Apartments, The Woods Apartments, Don CeSar Beach Resort, Tradewinds Resort, St. Pete Beach
Route 97	Commuter Service: Williams Park, Downtown St. Petersburg, Grand Central Station, Central Ave., 49 St, 118th Ave, Carillon Office Complex, Ulmerton Rd, 34 St N, PSTA Facility, Criminal Justice Center, Shoppes at Park Place
Route 98	Commuter Service: Park Street Terminal (Downtown Clearwater), West Bay Dr/East Bay Dr, US 19 Frontage Rd, Whitney Rd, 49th St N, Criminal Justice Center, Carillon Office Complex, 34th St N, PSTA Facility
Route 100X	Express Service: Gateway Mall, 4 St N, Certegy, Goodwill Park N Ride, Dale Mabry Hwy, Lee Roy Selmon Crosstown Expressway, Britton Plaza Station, Downtown Tampa, Marion Transit Center
Route 300X	Express Service: Limited Stops Only: Ulmerton Park N Ride, Ulmerton Rd, Stonybrook Dr Park N Ride, Downtown Tampa, Marion Transit Center
Route 444	Crystal Lakes Manor, Heatherwood Apartments, Shoppes at Park Place, Walmart, Mainlands of Tamarac, 102 Ave N, St. Giles Manor, Pinellas Park City Hall, Pinellas Park Library, Park Plaza

Source: Pinellas Suncoast Transit Authority (PSTA)

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