

# Pinellas County Metropolitan Planning Organization

## Pinellas County Metropolitan Planning Organization

### 2015 Level of Service Report Adopted September 9, 2015

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*\*MPO Membership as of last action on this report.*

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

# Pinellas County Metropolitan Planning Organization

## Welcome to the 2015 Edition of the Pinellas County Metropolitan Planning Organization's Annual Level of Service Report, adopted September 9, 2015.

The Pinellas County Metropolitan Planning Organization (MPO) prepares an Level of Service Report each year. Roadways included in the inventory are defined by their facility type (e.g., freeway, signalized arterial, signalized collector, signalized major collector, non-signalized arterial, non-signalized collector and non-signalized major collector). These roadways are categorized by characteristics used to measure their performance, such as freeways (exclusive use of uninterrupted traffic), arterials (primarily serves thru traffic & secondary serves abutting property) and collector roads (providing land access & traffic circulation within a single or multiple land use category).

The MPO's Technical Coordinating Committee (TCC) reviews this report through a process that includes verifying the accuracy of roadway geometry assumptions and an evaluation of traffic count data as provided by the MPO, the Florida Department of Transportation and various local government agencies.

After approval, the TCC submits the report to the MPO Board for final adoption.

When adopted, the Annual Level of Service Report is provided to the public and local government agencies for informational purposes, such as roadway inventory, traffic volumes, trends and tracking road performance measures.



# Pinellas County Metropolitan Planning Organization

## Section 1: Roadway Trend Analysis

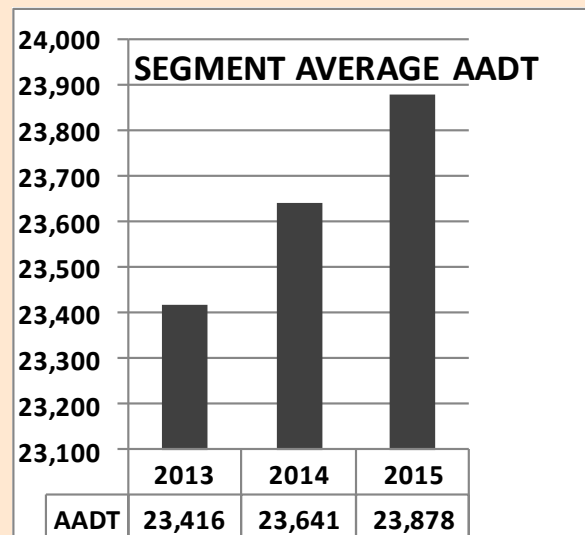
### Roadway Trend Analysis (Reported 2013 - 2015)

One of the goals of the Pinellas County Metropolitan Planning Organization (MPO) is to continually improve the performance of the Pinellas County roadway network. The level of service indicators utilized in this report provide a gauge of whether and/or to what extent this goal is being met.

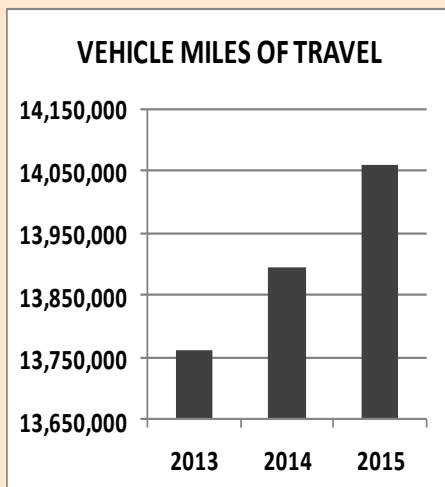
The Metropolitan Planning Organization uses key performance factors to identify roadways that are failing or about to fail. A key factor is the roadway's volume to capacity ratio (v/c). The v/c ratio shows how close travel demand is to reaching the roadway's physical capacity. A v/c ratio of 1 indicates that the roadway is operating at 100% capacity.

**NOTE:** For consistency in showing annual trends, only data that is available for the same roads monitored during the past three years is being reported in this section. Only one facility has been added since the previous report, 118th Ave N from Belcher Rd to 66th St N measuring approx. one mile.

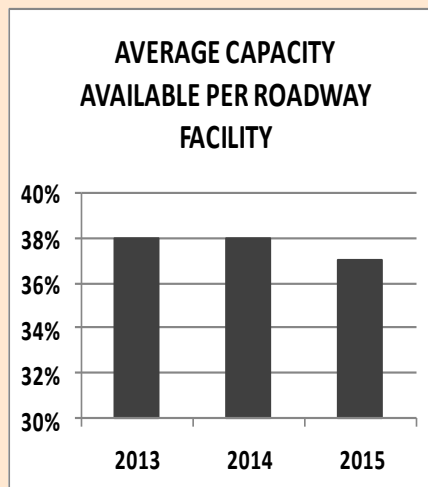
Shown below is information that demonstrates operating conditions on 588 center-line miles of major roads. The information includes analysis on average annual daily traffic (AADT), vehicle miles traveled (VMT), average capacity available per roadway facility and miles of roadway over capacity.



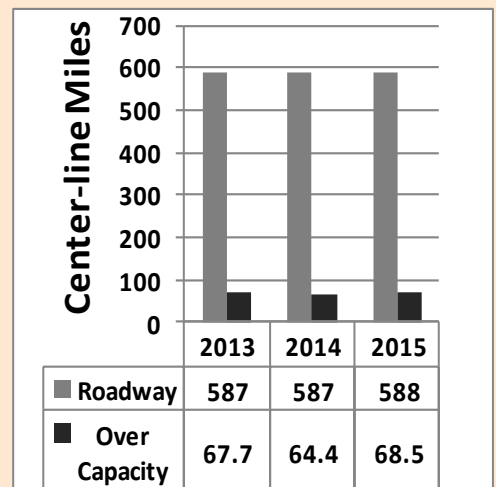
Each year was measured by facilities in common.



Roadway travel increased by 2% from year 2013 to 2015



Road capacity available decreased 1% from 2013 to 2015



11.6% of the roadways were reported over physical capacity in 2015

Note: Charts show year reported, base data year is the previous year.

# Pinellas County Metropolitan Planning Organization

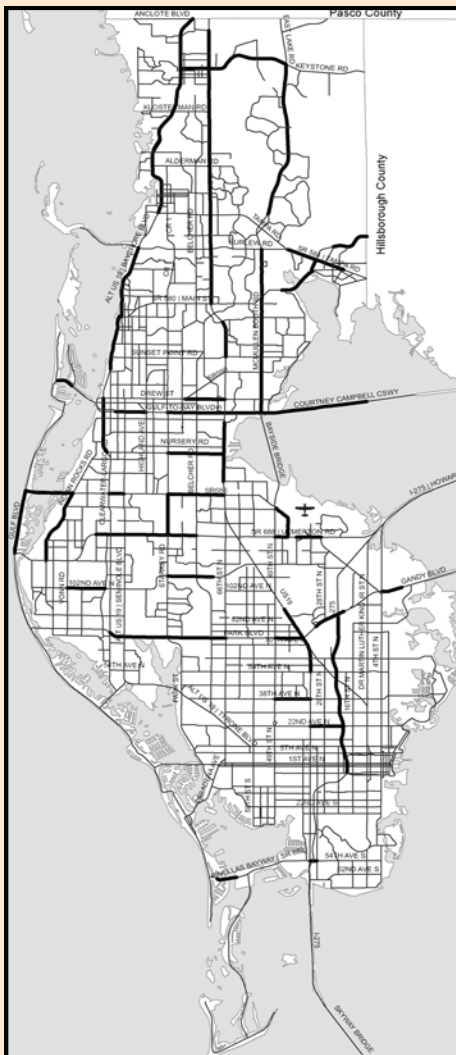
## Section 1: Roadway Trend Analysis (Continued)

### Deficient Roadways (Reported 2013 - 2015)

Volume to capacity ratio (v/c ratio) is a very useful indicator of the roadway system's operating characteristics. The Metropolitan Planning Organization (MPO) uses a facility v/c ratio as well as a road's level of service letter grade when evaluating its performance level.

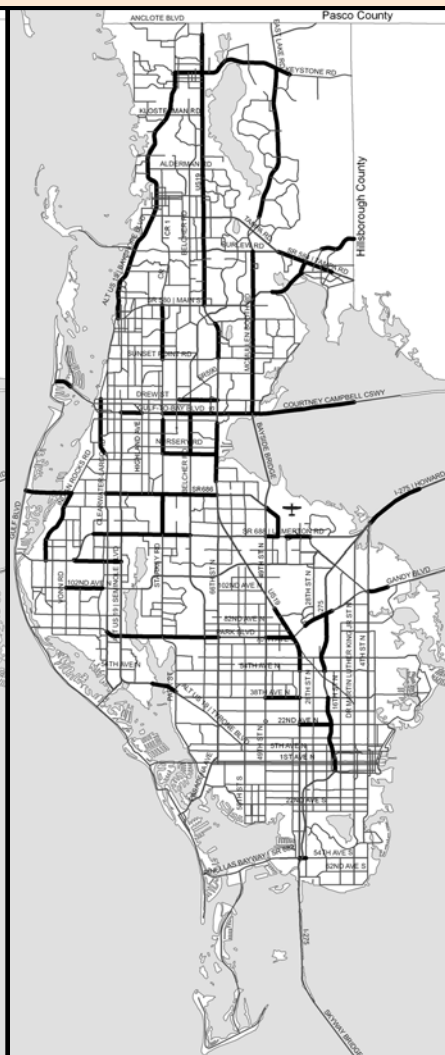
The maps below depict major roadways that have been operating under deficient LOS conditions during the three past years. A more detailed explanation of the analysis method used to identify deficient roadways and a map illustrating deficient LOS existing conditions during 2014 and reported in 2015 can be found on pages 10 - 12.

2013 Deficient Roadways



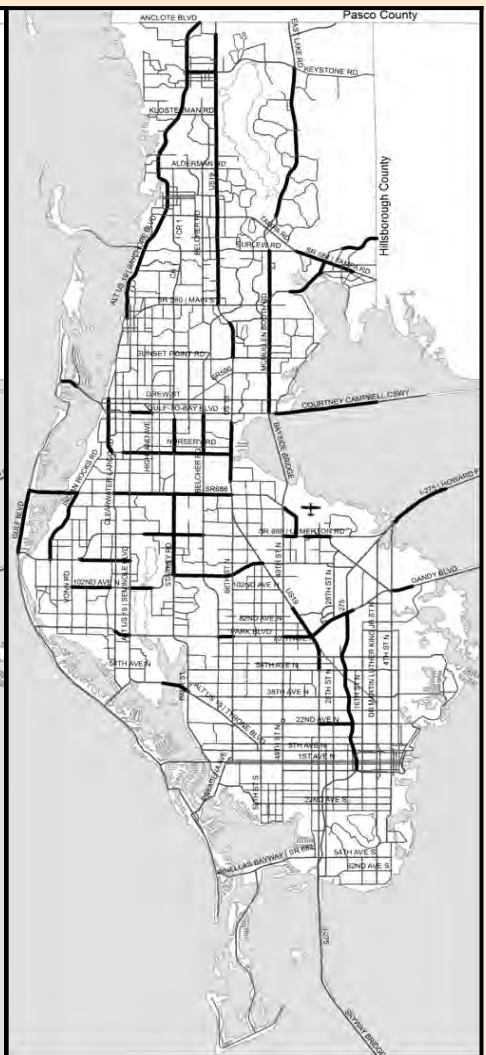
427 deficient lane miles in 2013

2014 Deficient Roadways



456 deficient lane miles in 2014

2015 Deficient Roadways



434 deficient lane miles in 2015

Note, the maps show year reported, base data year is the previous year.

# Pinellas County Metropolitan Planning Organization

## Section 2: Methodology

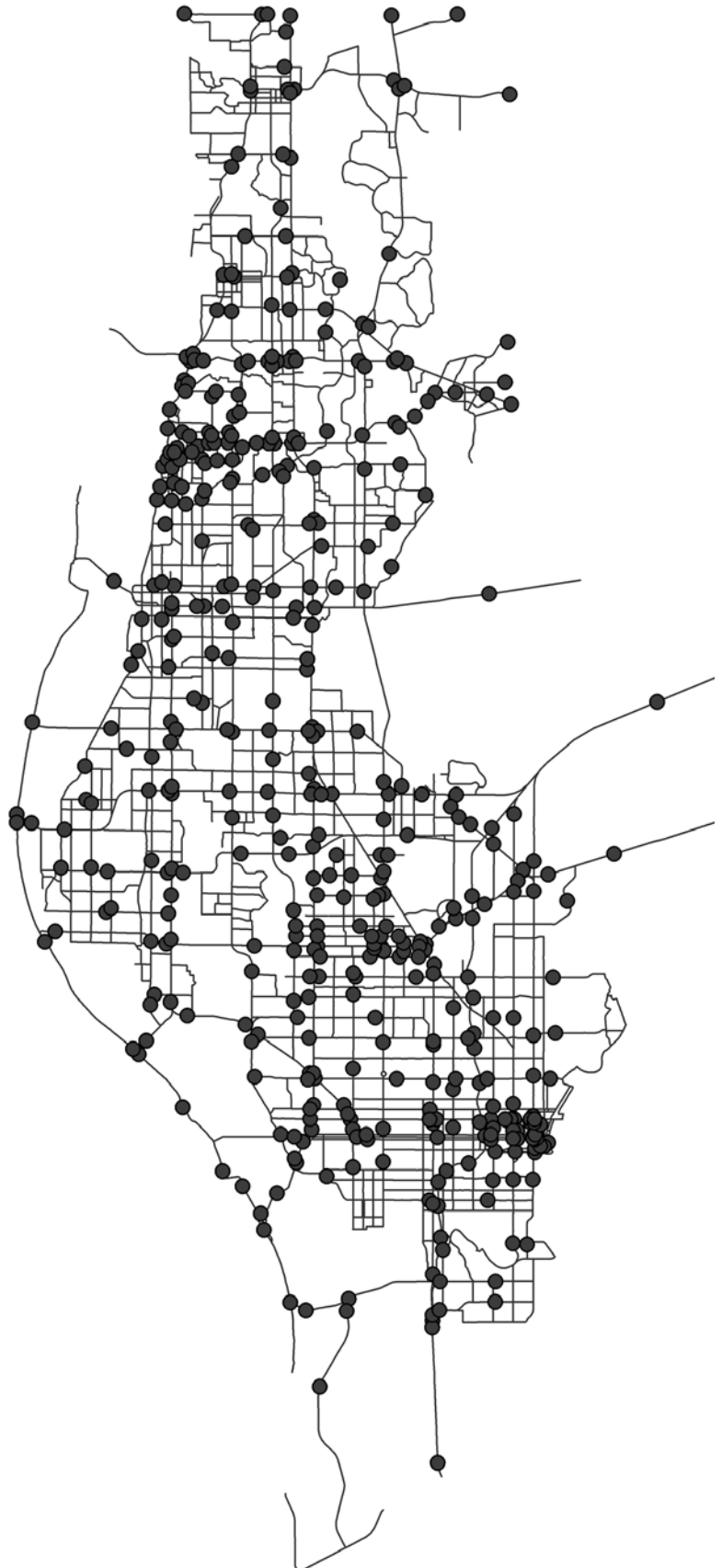
### Roadway Traffic Volume Estimation of Traffic Count Station Data

Roadway traffic volume is monitored in Pinellas County on a regular basis. Traffic counters are used to count the number of vehicles that travel the roadway network. These counters are positioned across Pinellas County to collect data that is used for roadway performance evaluation.

Each year, average daily traffic (ADT) volume data is collected from counters by the Florida Department of Transportation (FDOT), the Pinellas County Metropolitan Planning Organization (MPO), and local government agencies. The MPO coordinates and manages the countywide count data collected. The MPO collects additional counts as needed to provide good network coverage. Approximately 425 locations on the major road network are monitored using these counters.

Typically, the traffic counters are programmed for a two or three day study during normal mid-week business days. Once collected, ADT data is assembled by the MPO staff. Adjustments are made to convert the count data to annualized average daily traffic (AADT) estimates using FDOT seasonal adjustment factors. Finally, the AADT values are applied to the corresponding roadway segments.

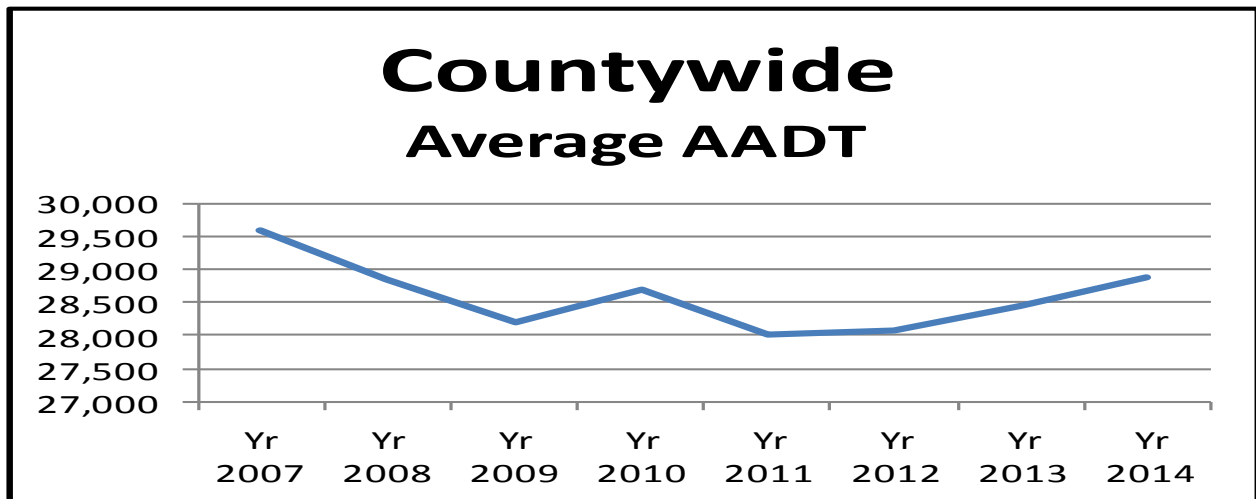
Due to circumstances such as construction on some roadways, it is not always feasible to collect traffic volumes in a specific year. When this happens, and if count data from a recent year is not available, the roadway's AADT is extrapolated using regression trend analysis of historical traffic count data from the same count location.



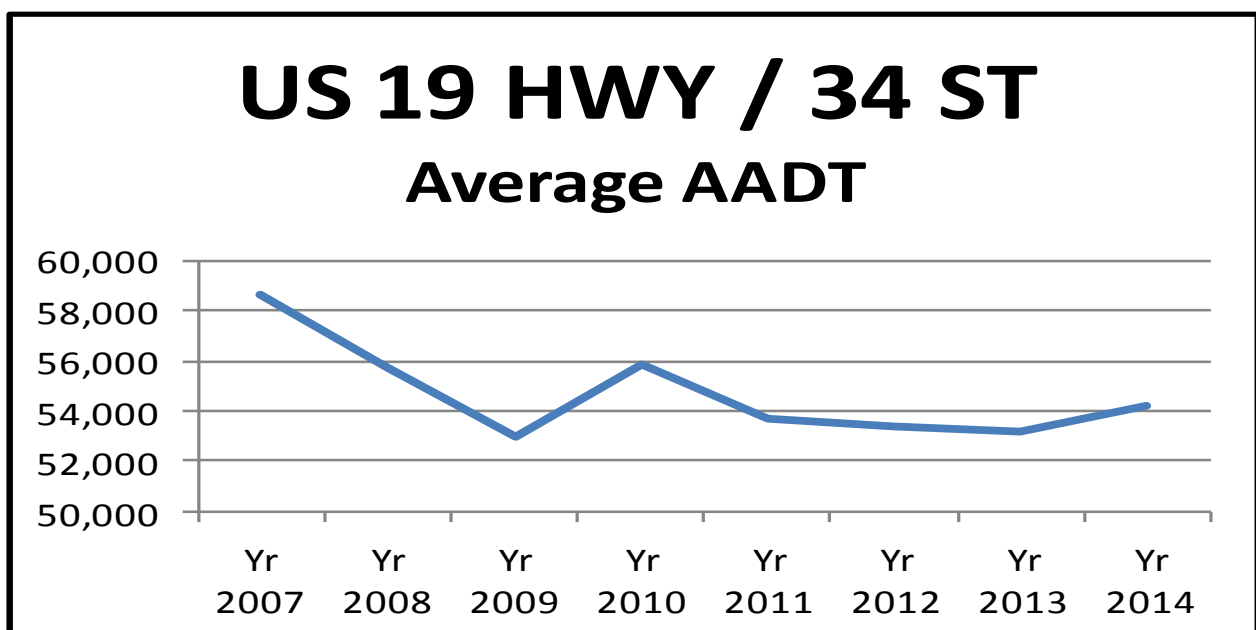
# EIGHT YEAR AADT COMPARISON CHART

(data from count station monitoring)

COUNTYWIDE AVERAGE AADT	29,589	28,856	28,187	28,698	28,015	28,063	28,437	28,884
YEAR	Yr 2007	Yr 2008	Yr 2009	Yr 2010	Yr 2011	Yr 2012	Yr 2013	Yr 2014
% Change from previous year	N/A	-2.5%	-2.3%	1.8%	-2.4%	0.2%	1.3%	1.6%



US 19 HWY / 34 ST AVERAGE AADT	58,616	55,716	52,987	55,875	53,674	53,342	53,184	54,221
YEAR	Yr 2007	Yr 2008	Yr 2009	Yr 2010	Yr 2011	Yr 2012	Yr 2013	Yr 2014
% Change from previous year	N/A	-4.9%	-4.9%	5.5%	-3.9%	-0.6%	-0.3%	1.9%





# Pinellas County Metropolitan Planning Organization

## Section 2: Methodology (Continued)

### Roadway Performance Determination

The Metropolitan Planning Organization (MPO) uses a database management software application “vTIMAS” to maintain its roadway inventory of over 2,200 individual roadway segments.

In the database, roadway geometry, volumes, and descriptions for each roadway segment are carefully identified so that an accurate evaluation of performance can be produced by the software. Level of service data contained in the report table is sorted by facility. Most of the facilities contain two or more segments. Some points regarding the methodology employed in compiling the table are listed below.

- ◆ Roadway performance measures were evaluated for the monitored major roadway network as it existed in 2014.
- ◆ Roadway level of service grades were evaluated using PM peak-hour / peak-direction conditions. A roadway’s peak-hour condition is defined as the estimated 100<sup>th</sup> highest hour ( $K_{100}$ ) of yearly traffic.
- ◆ Level of service for roadway segments can be calculated using one of two methodologies (conceptual or generalized) described in this section.

- ◇ **Conceptual** - This is a more detailed analysis than a generalized method. It

takes into account enhanced roadway geometry conditions and allows for bi-directional performance evaluation. Basic conceptual analysis can be used for non-signalized arterials and signalized collector roads. *ArtPlan* is a conceptual analysis software program developed by the Florida Department of Transportation specifically for use with signalized roadways. *ArtPlan* can be utilized for signalized arterial roads.

- ◇ **Generalized** – This analysis method incorporates standardized default roadway values established by FDOT. It provides LOS analysis based on generalized capacity tables. As an example all traffic signals are analyzed with the same green-time and cycle lengths even though actual input values vary at each location.

The vTIMAS database allows the MPO to monitor roadway changes from one year to the next. Data for current and previous years is derived from physical observation. Roadway geometry data for future year conditions is derived from planned capacity improvements.

Additional information for Conceptual and Generalized calculation methodologies can be obtained from:

#### Florida Department of Transportation Q/LOS Handbook:

<http://www.dot.state.fl.us/planning/systems/programs/SM/los/pdfs/2013%20QLOS%20Handbook.pdf>

#### Highway Capacity Manual (HCM):

<http://www.trb.org/Main/Public/Blurbs/152169.aspx>

# Pinellas County Metropolitan Planning Organization

## Section 3: Existing Conditions

### 2015 Level of Service

Critical roadway data was collected throughout the year and then compiled into this report. The conditions reported here represent physical roadway conditions as they existed during 2013. Roadway volumes represent annualized count data from collections that were performed throughout the county.

There are 2,296 lane miles of major road facilities monitored by the MPO.

- ◆ 84% of the monitored network performs at or better than LOS D.
- ◆ 16% of the monitored network performs poorly at LOS E or F.
- ◆ LOS B, & C – 1621 lane miles
- ◆ LOS D – 313 lane miles
- ◆ LOS E – 60 lane miles
- ◆ LOS F – 302 lane miles

State, County and municipal jurisdictions are responsible for maintaining the major roadways in Pinellas County. Monitored lane miles corresponding with each jurisdiction are shown below.

- ◆ State - approximately 1,017 lane miles;
- ◆ County – approximately 858 lane miles;
- ◆ Cities – approximately 421 lane miles.

Below are the lane miles of roadways operating at LOS E or F corresponding with State, County and municipal jurisdiction.

- ◆ State – 261 lane miles
- ◆ County – 88 lane miles
- ◆ Cities – 13 lane miles

**NOTE:** The LOS data was calculated using *FDOT 2009 Generalized Tables*. Using this method the LOS A category was eliminated and the threshold measures are now the same as LOS B. Therefore, a LOS A is now an LOS B.





# Pinellas County Metropolitan Planning Organization

## Pinellas County MPO 2015 Level of Service Map

Existing Conditions  
(PM Peak Hour Directional)  
2014 Base Data

### Level of Service

- Level of Service B, C
- Level of Service D
- Level of Service E
- Level of Service F

Generated by vTImas database  
Road Facility Capabilities based upon FDOT  
2009 Generalized Service Volume Tables

Gulf of Mexico

Old Tampa Bay

Tampa Bay



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Approved  
September 9, 2015

Plot Date: September 1, 2015  
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# Pinellas County Metropolitan Planning Organization

## Section 3: Existing Conditions (Continued)

### 2015 Deficient Roadways

The Pinellas County Metropolitan Planning Organization (MPO) uses a “deficient roadway” indicator to identify roadways operating below local and state LOS standards.

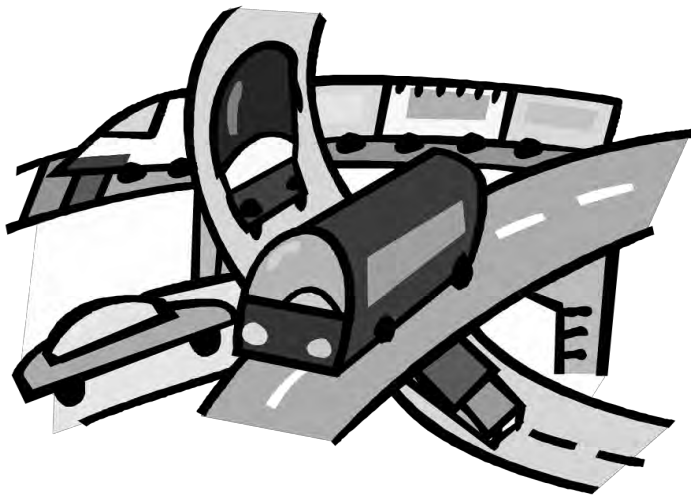
This page indicates lane miles of roadways operating at 0.9 v/c ratio along with their letter grade. According to Pinellas County’s LOS standard, a facility operating at peak hour LOS E, F, or a v/c ratio of 0.9 or higher is also considered deficient.

The 2015 report shows there were 434 lane miles or 19 percent of the Pinellas County major road network operating under deficient LOS conditions in 2014.

- ◆ Volume to Capacity Ratio < .9
  - ◇ LOS B-D - 1862 lane miles
- ◆ Volume to Capacity Ratio  $\geq$  .9
  - ◇ LOS B-D - 72 lane miles
  - ◇ LOS E, F - 362 lane miles

Below are the lane miles of major roadways operating under deficient LOS conditions and corresponding jurisdiction.

- ◆ State – 279 lane miles
- ◆ County – 142 lane miles
- ◆ Cities – 13 lane miles



**NOTE:** Both the LOS letter grade and v/c ratio are derived from the calculation of PM peak hour and PM peak hour directional volumes, which are based on AADT.



# Pinellas County Metropolitan Planning Organization

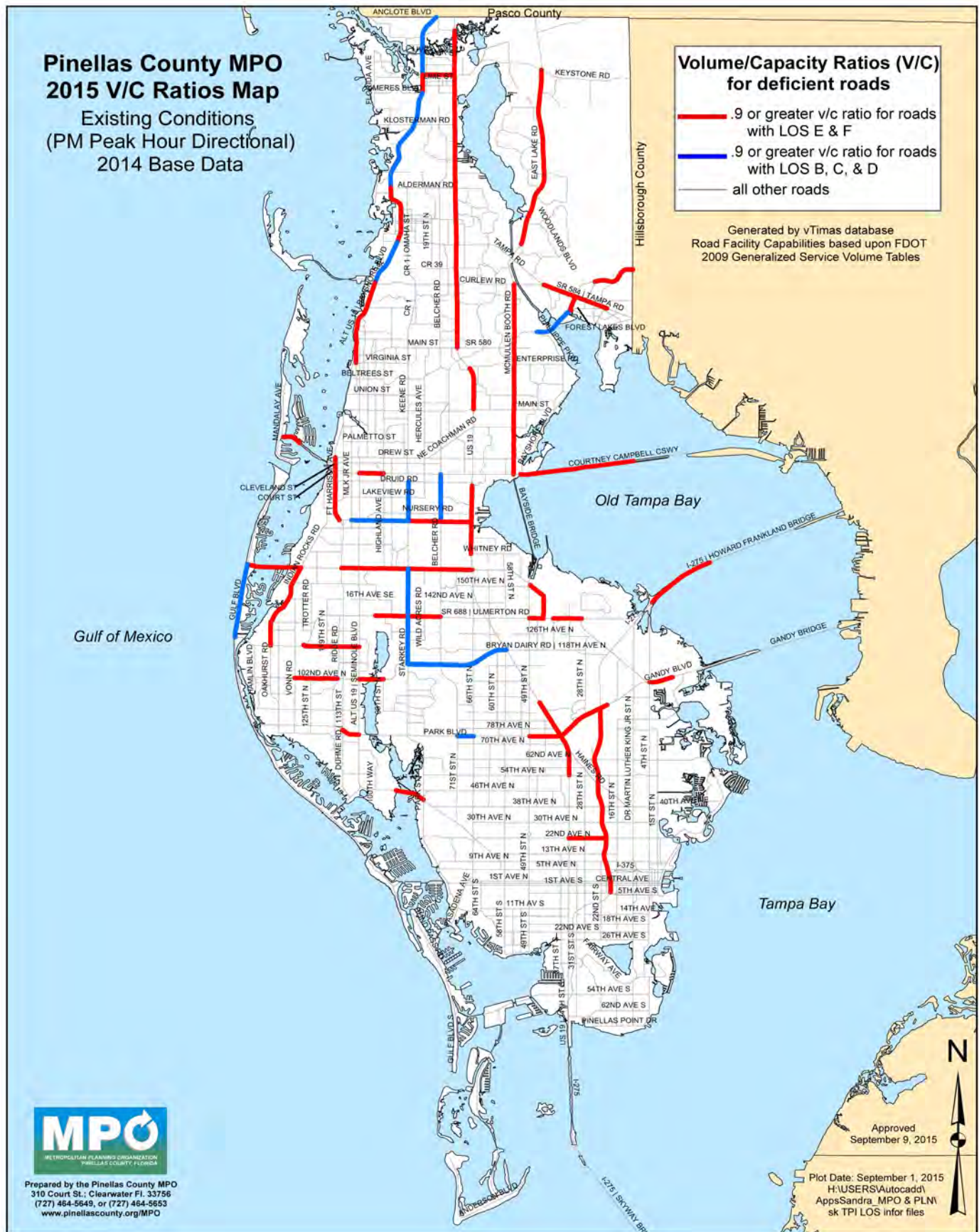
## Pinellas County MPO 2015 V/C Ratios Map

Existing Conditions  
(PM Peak Hour Directional)  
2014 Base Data

### Volume/Capacity Ratios (V/C) for deficient roads

- .9 or greater v/c ratio for roads with LOS E & F
- .9 or greater v/c ratio for roads with LOS B, C, & D
- all other roads

Generated by vTImas database  
Road Facility Capabilities based upon FDOT  
2009 Generalized Service Volume Tables



# Pinellas County Metropolitan Planning Organization

## Section 3: Existing Conditions (Continued)

### Facility Level of Service Report Pinellas County Format PM Peak Hour Directional Analysis

The following pages contain the Pinellas County Metropolitan Planning Organization's Year 2015 Level of Service / Existing Conditions Analysis Report table. The table in the report was produced using vTIMAS database v1.163 and reflects 2014 base year data. Also the next page contains a map depicting the PM peak hour travel direction of the traffic volumes used for analysis.

Roadways included in this inventory are arterials and collectors as defined in the Highway Capacity Manual and published by the Transportation Research Board. Level of Service (LOS) has been calculated using guidelines as identified by the *FDOT Quality/Level of Service (Q/LOS) Handbook*, *FDOT Generalized Tables*, *FDOT ArtPlan*, and the *Highway Capacity Manual (HCM)*.

The LOS conditions included in this report are based on the operating conditions of individual road facilities. These facilities are separated by intersections or by a point where there is a change in the lane configuration. A more complete listing of LOS input values and assumptions is available in the LOS Inventory Staff Report from the MPO.

**NOTE:** To continue our trend analysis this countywide report was compiled and LOS data was calculated utilizing *FDOT 2009 Generalized Tables*. Any specific road projects submitted to FDOT would need to adhere to the 2013 Q/LOS Handbook which can be found on the website as shown on page 7. The results of performance measures utilizing 2013 Q/LOS may be different from this report.

### Legend for LOS tables

#### Fac Type:

- ◆ "F" = Freeway
- ◆ "SA" = Signalized Arterial
- ◆ "SC" = Signalized Collector
- ◆ "SMC" = Signalized Collector (Major)
- ◆ "NA" = Non-Signalized Arterial
- ◆ "NMC" Non-Signalized Collector (Major)

#### LOS Method:

- ◆ "H" = Conceptual - Basic (only used for Memorial Causeway bridge)
- ◆ "T" = Generalized Tables

#### Abbreviations:

- ◆ "Fac" = Facility
- ◆ "V:Cap" = Volume to Physical Capacity

#### Def Flag (or Deficiency Identifier)

- ◆ "1" = Volume to Capacity Ratio  $\geq .9$  and LOS=A, LOS=B, LOS=C, or LOS=D
- ◆ "2" = Volume to Capacity Ratio  $\geq .9$  and LOS=E or LOS=F





# Pinellas County Metropolitan Planning Organization

## Level of Service

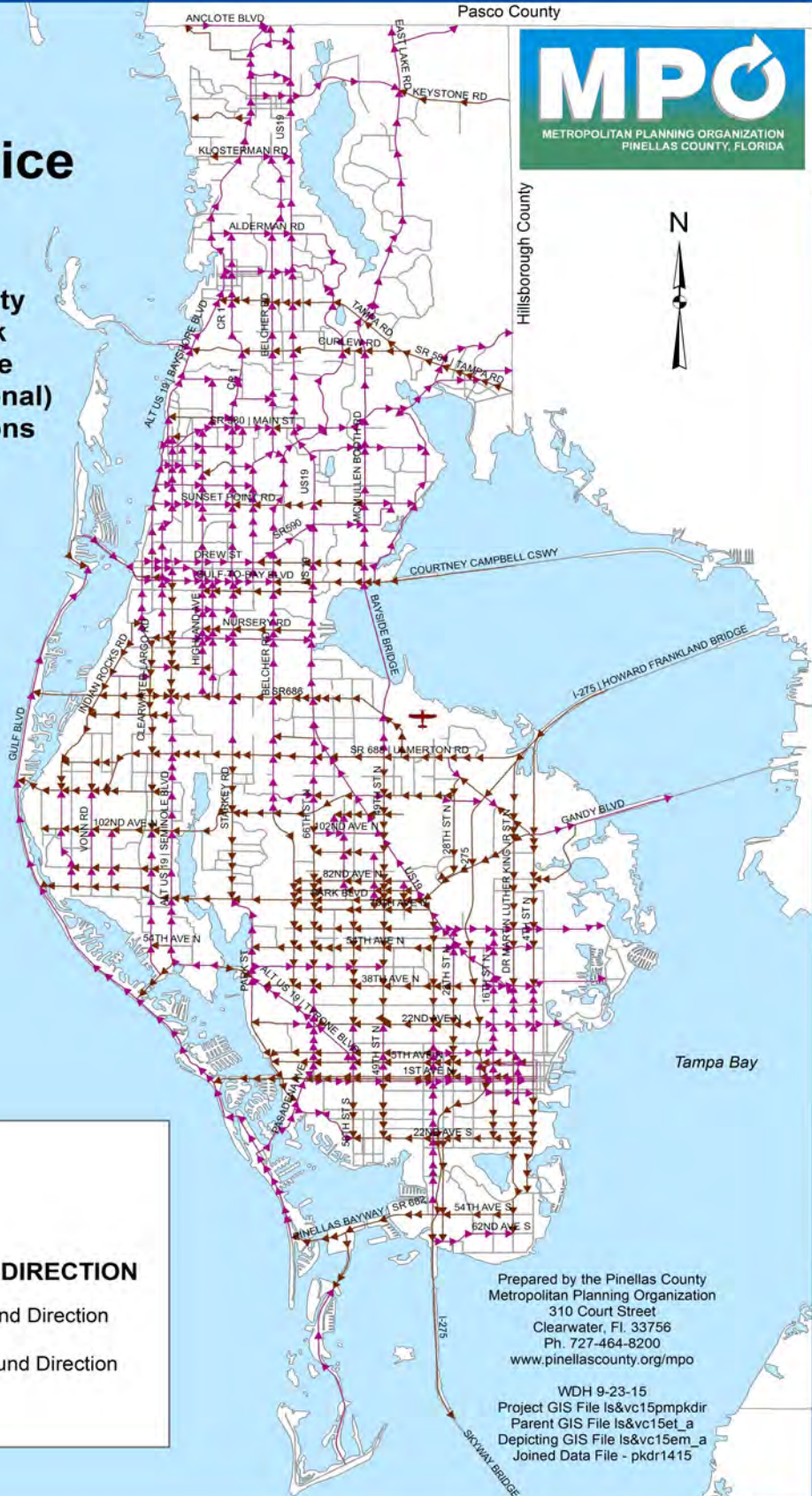
**Map of Pinellas County  
Major Road Network  
2015 Level of Service  
(PM Peak Hour Directional)  
with Existing Conditions  
(2014 Base Data)**

### Legend



#### PM PEAK HOUR TRAVEL DIRECTION

- Northbound or Eastbound Direction
- Southbound or Westbound Direction
- Other Roads



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WDH 9-23-15  
Project GIS File ls&vc15mpkdr  
Parent GIS File ls&vc15et\_a  
Depicting GIS File ls&vc15em\_a  
Joined Data File - pkdr1415

# Pinellas County Metropolitan Planning Organization

## Facility Level of Service Report (Pinellas County Format) ( PM Peak Hour Directional )

Pinellas County MPO

2015 Analysis - Existing Conditions (DY 2014) 7-21-15 A, Utilizing FDOT's 2009 General Tables

**NOTE:** Roadways included in this Inventory are monitored Arterials and Collectors as defined in the MPO's Functional Classification map. Level of Service has been calculated using the current guidelines of the FDOT Quality Level of Service, FDOT Generalized Tables, FDOT Art Plan, and Highway Capacity Manual (HCM). The LOS Input values shown on this report do not fully represent values maintained by the database, please do not attempt to use these values to reproduce LOS results. A more complete listing of LOS input values and assumptions is available, if needed please request a copy of the LOS Inventory Staff Report.

### Facility

Facility	Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Method	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
3 - 1ST AVE N: (3RD ST N -to- 20TH ST N)	SP	11	SA	30	D	1.421	5.63	T	10,804	1,026	2,776	.370	0	C
4 - 1ST AVE N: (20TH ST N -to- 34TH ST N)	SP	11	SA	30	D	1.172	4.27	T	10,804	1,026	3,056	.336	0	C
5 - 1ST AVE N: (34TH ST N -to- 66TH ST N)	SP	11	SA	30	D	2.999	1.33	T	13,000	1,235	3,175	.389	0	B
9 - 1ST AVE S: (PASADENA AVE -to- 34TH ST S)	SP	11	SA	30	D	3.247	1.54	T	13,133	1,248	3,175	.393	0	B
10 - 1ST AVE S: (34TH ST S -to- 16TH ST S)	SP	11	SA	30	D	1.505	3.32	T	10,082	968	3,056	.313	0	C
11 - 1ST AVE S: (16TH ST S -to- DR ML KING JR ST S)	SP	11	SA	40	D	.501	2.00	T	10,082	968	4,082	.235	0	C
12 - 1ST AVE S: (DR ML KING JR ST S -to- 3RD ST S)	SP	11	SA	30	D	.587	8.52	T	10,082	968	2,776	.345	0	C
30 - 3RD ST N: (CENTRAL AVE -to- 5TH AVE N)	SR	11	SA	40	D	.438	11.42	T	11,500	1,092	3,900	.280	0	C
37 - 4TH AVE N: (I-375 RAMP -to- 4TH ST N)	SR	11	SA	30	D	.254	7.87	T	10,500	998	2,988	.334	0	C
43 - 4TH ST N: (I-275 -to- GANDY BLVD)	SR	11	SA	40	D	2.557	.39	T	23,500	1,228	1,960	.627	0	B
44 - 4TH ST N: (GANDY BLVD -to- 62ND AVE N)	SR	11	SA	60	D	2.490	2.41	T	36,582	1,911	2,830	.675	0	C
45 - 4TH ST N: (62ND AVE N -to- 38TH AVE N)	SR	11	SA	60	D	1.500	1.33	T	40,003	2,090	2,940	.711	0	B
47 - 4TH ST N: (5TH AVE N -to- 2ND AVE N)	SR	11	SA	40	D	.279	10.75	T	12,796	1,216	3,900	.312	0	C
48 - 4TH ST N: (2ND AVE N -to- 1ST AVE N)	SR	11	SA	30	D	.100	10.00	T	12,500	1,188	2,988	.398	0	C
49 - 4TH ST N: (5TH AVE N -to- 30TH AVE N)	SR	11	SA	40	D	1.506	1.99	T	26,171	1,367	1,870	.731	0	D
50 - 4TH ST N: (1ST AVE N -to- CENTRAL AVE)	SR	11	SA	40	D	.060	16.67	T	11,500	1,092	3,900	.280	0	C
51 - 4TH ST N: (30TH AVE N -to- 38TH AVE N)	SR	11	SA	60	D	.501	3.99	T	30,500	1,594	2,830	.563	0	C
53 - 4TH ST S: (CENTRAL AVE -to- 5TH AVE S)	SR	11	SA	40	D	.380	13.16	T	11,500	1,092	3,900	.280	0	C
54 - 4TH ST S: (5TH AVE S -to- 6TH AVE S)	SP	11	SA	30	D	.097	10.31	T	14,643	1,391	2,776	.501	0	D
55 - 4TH ST S: (6TH AVE S -to- 9TH AVE S)	SP	11	SA	40	D	.210	4.76	T	14,643	765	1,530	.500	0	D
56 - 4TH ST S: (9TH AVE S -to- 18TH AVE S)	SP	11	NA	40	D	.626	.00	T	14,643	765	3,760	.203	0	B
57 - 4TH ST S   6TH ST CONNECTION: (18TH AVE S -to- 39TH AVE S)	SP	11	SA	40	D	1.334	1.50	T	14,066	735	1,676	.439	0	B
58 - 4TH ST S   6TH ST CONNECTION: (39TH AVE S -to- 45TH AVE S)	SP	11	NA	40	D	.410	.00	T	13,933	728	3,572	.204	0	B
61 - 5TH AVE N: (4TH ST N -to- DR ML KING JR ST N)	SR	11	SA	20	D	.500	4.00	T	10,405	988	2,244	.440	0	C
63 - 5TH AVE N: (DR ML KING JR ST N -to- 16TH ST N)	SR	11	SA	30	D	.502	1.99	T	10,300	538	1,776	.303	0	C
65 - 5TH AVE N: (16TH ST N -to- 34TH ST N)	SR	11	SA	40	D	1.503	3.33	T	23,651	1,236	1,870	.661	0	C
66 - 5TH AVE N: (34TH ST N -to- 49TH ST N)	SR	11	SA	40	D	1.252	1.60	T	26,000	1,359	1,960	.693	0	B
67 - 5TH AVE N: (49TH ST N -to- TYRONE BLVD)	SR	11	SA	40	D	.878	2.28	T	30,000	1,568	1,870	.839	0	D
68 - 5TH AVE N: (TYRONE BLVD -to- 66TH ST N)	SP	11	SA	40	D	.869	1.15	T	20,300	1,061	1,764	.601	0	B
69 - 5TH AVE N: (66TH ST N -to- 69TH ST N)	SP	11	SMC	40	D	.347	2.88	T	10,600	554	1,216	.456	0	C
70 - 5TH AVE N: (69TH ST N -to- PARK ST)	SP	11	NMC	40	D	.709	.00	T	10,600	554	3,760	.147	0	B

**Fac Type:** "F"=Freeway, "SA"=Signalized Arterial, "SC"=Signalized Collector, "SMC"=Signalized Collector (Major), "NA"=Non-Signalized Arterial, "NC"=Non-Signalized Collector, "NMC"=Non-Signalized Collector (Major)

**LOS Meth:** "A"=ApCalc, "H"=Conceptual, "T"=Generalized Tables

**Abbreviations:** "Fac"=Facility, "V/Cap"=Volume to Physical Capacity

**Def Flag:** "1"=V/C Ratio >= .9 and LOS=A, LOS=B, LOS=C or LOS=D "2"=V/C Ratio >= .9 and LOS=E or LOS=F



# Pinellas County Metropolitan Planning Organization

## Facility

Facility	Juris Plan Area	Plan Type	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V:Cap Ratio	Def Flag	Fac LOS
84 - 8TH ST N: (CENTRAL AVE -to- 1ST AVE N)	SP	11	SA	40	D	.062	16.13	T	7,791	740	3,726	.199	0	C
85 - 8TH ST N: (1ST AVE N -to- 9TH AVE N)	SP	11	SA	30	D	.656	6.10	T	7,791	740	2,776	.267	0	C
86 - 8TH ST S: (9TH AVE S -to- 6TH AVE S)	SP	11	SA	30	D	.226	4.42	T	7,791	740	3,056	.242	0	C
87 - 8TH ST S: (6TH AVE S -to- CENTRAL AVE)	SP	11	SA	40	D	.478	12.55	T	7,791	740	3,726	.199	0	C
88 - 9TH AVE N: (34TH ST N -to- 16TH ST N)	SP	11	SA	4U	D	1.504	1.33	T	11,169	584	1,676	.348	0	B
89 - 9TH AVE N: (16TH ST N -to- DR ML KING JR ST N)	SP	11	SA	4U	D	.499	2.00	T	11,169	584	1,599	.365	0	C
93 - 9TH AVE N: (34TH ST N -to- 49TH ST N)	SP	11	SA	4U	D	1.256	1.59	T	11,169	584	1,676	.348	0	B
94 - 9TH AVE N: (49TH ST N -to- 66TH ST N)	SP	11	SA	4U	D	1.744	1.72	T	8,056	421	1,676	.251	0	B
95 - 9TH AVE N: (66TH ST N -to- PARK STREET)	SP	11	SMC	2D	D	1.157	.86	T	4,900	256	601	.426	0	B
96 - 10TH AVE S   14TH ST S   14TH AVE S   10TH ST S: (MCMULLEN BOOTH RD -to- MAIN ST)	SR	05	NMC	2U	D	.907	.00	T	6,700	350	1,440	.243	0	B
116 - 16TH ST N: (CENTRAL AVE -to- 5TH AVE N)	SP	11	SA	4D	D	.439	6.83	T	14,221	743	1,530	.486	0	D
117 - 16TH ST N: (5TH AVE N -to- 22ND AVE N)	SP	11	SA	4D	D	1.003	4.99	T	10,316	539	1,530	.352	0	C
118 - 16TH ST N: (22ND AVE N -to- 62ND AVE N)	SP	11	SA	4D	D	2.511	2.39	T	9,307	486	1,683	.289	0	C
122 - 16TH ST S: (CENTRAL AVE -to- 18TH AVE S)	SP	11	SA	4D	D	1.314	6.09	T	8,958	468	1,530	.306	0	C
123 - 16TH ST S: (18TH AVE S -to- 22ND AVE S)	SP	11	SA	2U	D	.247	4.05	T	8,958	468	774	.605	0	C
134 - 20TH ST N: (1ST AVE N -to- 5TH AVE N)	SP	11	SMC	4U	D	.379	2.64	T	7,760	405	1,155	.351	0	C
138 - 22ND AVE N: (I-275 -to- 34TH ST N)	SP	11	SA	4D	D	1.162	2.58	T	32,030	1,674	1,683	.995	2	E
139 - 22ND AVE N: (34TH ST N -to- 58TH ST N)	SP	11	SA	4U	D	2.010	1.49	T	21,188	1,107	1,676	.661	0	B
140 - 22ND AVE N: (72ND ST N -to- 66TH ST N)	SP	11	SA	4D	D	.685	2.92	T	13,914	727	1,683	.432	0	C
141 - 22ND AVE N: (58TH ST N -to- 66TH ST N)	SP	11	SA	4D	D	1.016	1.97	T	21,188	1,107	1,764	.628	0	B
142 - 22ND AVE N: (72ND ST N -to- PARK ST)	SP	11	SA	2D	D	.897	1.11	T	6,800	355	832	.427	0	B
143 - 22ND AVE N: (I-275 -to- 1ST ST N)	SP	11	SA	4U	D	1.598	2.50	T	21,875	1,143	1,599	.715	0	D
144 - 22ND AVE NE: (1ST ST N -to- COFFEE POT BLVD)	SP	11	NMC	2D	D	.470	.00	T	10,423	545	1,512	.360	0	C
145 - 22ND AVE S: (4TH ST S -to- 31ST ST S)	SP	11	SA	4U	D	2.246	1.78	T	10,031	524	1,676	.313	0	B
146 - 22ND AVE S: (31ST ST S -to- 34TH ST S)	SP	11	SA	6D	D	.253	7.91	T	17,279	903	2,313	.390	0	C
147 - 22ND AVE S: (34TH ST S -to- 58TH ST S)	CR	11	SA	4U	D	2.005	2.00	T	18,555	969	1,599	.606	0	C
160 - 28TH ST N: (ROOSEVELT BLVD -to- 118TH AVE N)	CR	10	SA	6D	D	.531	1.88	T	13,535	707	2,646	.267	0	B
161 - 28TH ST N: (118TH AVE N -to- FRONTAGE RD)	CR	10	NA	4D	D	2.045	.00	T	8,849	462	3,760	.123	0	B
162 - 28TH ST N: (38TH AVE N -to- HAINES RD)	CR	14	SA	2U	D	1.193	1.68	T	6,795	355	792	.448	0	B
163 - 28TH ST N: (HAINES RD -to- 62ND AVE N)	CR	14	NA	2U	D	.312	.00	T	6,795	355	1,440	.247	0	B
164 - 28TH ST N: (38TH AVE N -to- 22ND AVE N)	SP	11	SA	2U	D	1.005	1.99	T	7,907	413	774	.534	0	C
165 - 28TH ST N: (22ND AVE N -to- 9TH AVE N)	SP	11	SA	2U	D	.754	2.65	T	6,674	349	774	.451	0	C
166 - 28TH ST N: (9TH AVE N -to- CENTRAL AVE)	SP	11	SA	4U	D	.688	4.36	T	5,440	284	1,599	.178	0	C
182 - 31ST ST S: (22ND AVE S -to- 28TH AVE S)	SP	11	SA	4D	D	.251	3.98	T	10,631	555	1,683	.330	0	C
183 - 31ST ST S: (26TH AVE S -to- 54TH AVE S)	SP	11	SA	2D	D	1.753	.57	T	10,631	555	832	.667	0	C
184 - 31ST ST S: (54TH AVE S -to- PINELLAS POINT DR)	SP	11	SA	4D	D	.708	1.41	T	10,631	555	1,764	.315	0	B
196 - 38TH AVE N: (I-275 -to- 34TH ST N)	CR	11	SA	4D	D	1.042	1.92	T	28,659	1,497	1,764	.849	0	C
197 - 38TH AVE N: (I-275 -to- 4TH ST N)	CR	11	SA	4D	D	1.477	2.71	T	23,226	1,214	1,683	.721	0	D
198 - 38TH AVE N: (34TH ST N -to- 49TH ST N)	CR	11	SA	4D	D	1.257	2.39	T	28,659	1,497	1,683	.889	0	D
199 - 38TH AVE N: (49TH ST N -to- 66TH ST N)	CR	11	SA	4D	D	1.750	1.14	T	24,704	1,291	1,764	.732	0	B
200 - 38TH AVE N: (66TH ST N -to- TYRONE BLVD)	CR	11	SA	4D	D	1.266	1.58	T	20,750	1,084	1,764	.615	0	B
203 - 40TH AVE N   38TH AVE N: (4TH ST N -to- 1ST ST N)	SP	11	SA	4U	D	.303	3.30	T	17,792	930	1,599	.582	0	C
204 - 40TH AVE NE: (1ST ST N -to- SHORE ACRES BLVD)	SP	11	NA	2D	D	1.582	.00	T	17,792	930	1,512	.615	0	D
210 - 43RD ST N: (78TH AVE N -to- PARK BLVD)	PP	10	SMC	2D	D	.280	3.57	T	4,960	259	587	.441	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
PP	10	NC	2U	D	.240	.00	T	4,960	259	1,440	.180	0	B
PP	10	SMC	2D	D	.280	3.57	T	3,617	189	587	.322	0	C
CR	14	SMC	2U	D	1.554	1.29	T	6,260	327	572	.572	0	B
CR	14	SMC	2U	D	1.748	1.72	T	4,545	237	572	.414	0	B
CR	11	SA	4U	D	1.439	2.78	T	17,929	937	1,599	.586	0	C
CR	10	SA	6D	D	1.025	1.95	T	35,766	1,869	2,646	.706	0	B
CR	08	SA	6D	D	.616	3.25	T	42,515	2,221	2,547	.872	0	D
CR	10	SA	6D	D	1.485	2.02	T	29,016	1,516	2,547	.595	0	C
CR	08	NA	6D	D	.492	.00	T	42,515	2,221	5,650	.393	0	B
CR	10	SA	6D	D	1.254	3.19	T	29,729	1,553	2,547	.610	0	C
CR	10	SA	6D	D	1.253	2.39	T	36,179	1,890	2,547	.742	0	D
CR	14	SA	6D	D	1.008	1.98	T	28,410	1,484	2,646	.561	0	B
CR	11	SA	4U	D	1.249	1.60	T	20,641	1,078	1,676	.643	0	B
GP	11	SA	4U	D	1.559	3.21	T	15,568	813	1,599	.508	0	C
PP	10	NC	2U	D	.507	.00	T	2,627	136	1,440	.094	0	B
PP	10	SC	2U	D	.500	4.00	T	4,336	231	559	.413	0	C
PP	10	NC	2U	D	.753	.00	T	2,551	132	1,440	.092	0	B
CR	14	SA	4U	D	.659	3.03	T	20,766	1,085	1,599	.679	0	C
CR	14	SA	6D	D	.344	5.81	T	20,766	1,085	2,313	.469	0	D
CR	11	SA	4D	D	1.518	1.98	T	20,766	1,085	1,764	.615	0	B
CR	09	SMC	2D	D	.508	1.97	T	8,000	418	601	.696	0	C
CR	14	SA	4U	D	1.250	1.60	T	15,900	831	1,676	.496	0	B
CR	14	SA	4D	D	1.747	2.29	T	15,281	798	1,683	.474	0	C
CR	14	SA	4D	D	1.558	1.93	T	14,811	774	1,764	.439	0	B
SP	11	SA	4D	D	1.761	1.70	T	15,372	803	1,764	.455	0	B
SP	11	SA	4D	D	.252	7.94	T	25,290	1,321	1,530	.863	0	D
PP	10	SMC	2U	D	1.001	2.00	T	4,983	260	559	.465	0	C
SP	11	SA	4D	D	.434	4.61	T	19,074	997	1,530	.652	0	D
CR	14	SMC	2U	D	1.044	2.87	T	4,983	260	559	.465	0	C
SP	11	SA	4D	D	1.003	2.99	T	19,074	997	1,683	.592	0	C
SP	11	SA	4D	D	1.006	1.99	T	10,652	557	1,764	.316	0	B
GP	11	SA	4U	D	.809	2.47	T	10,553	551	1,599	.345	0	C
GP	11	SA	2U	D	.751	2.66	T	8,671	453	774	.585	0	C
PP	10	NC	2U	D	2.009	.00	T	2,973	155	1,440	.108	0	B
CR	10	SA	2U	D	1.242	.81	T	12,944	676	792	.854	0	C
CR	10	SA	2U	D	1.748	1.72	T	8,513	445	792	.562	0	B
CR	14	SMC	2U	D	.503	1.99	T	4,432	232	572	.406	0	B
CR	14	SA	4U	D	1.502	2.66	T	21,748	1,136	1,599	.710	0	C
CR	11	SA	4D	D	1.257	2.39	T	19,129	999	1,683	.594	0	C
SP	11	NA	4D	D	1.549	.00	T	14,181	741	3,760	.197	0	B
SP	11	SMC	2U	D	1.466	2.05	T	7,153	374	559	.669	0	D
PP	10	NC	2U	D	.499	.00	T	2,083	109	1,440	.076	0	B
SR	10	SA	6D	D	1.798	2.78	T	36,708	1,918	2,830	.678	0	C
SR	10	SA	6D	D	1.254	2.39	T	39,500	2,064	2,830	.729	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
SR	11	SA	6D	D	1.279	4.69	T	39,950	2,087	2,570	.812	0	D
SR	14	SA	6D	D	1.006	1.99	T	39,125	2,044	2,940	.695	0	B
SR	10	SA	6D	D	1.498	2.00	T	37,000	1,933	2,830	.683	0	C
SR	11	SA	6D	D	.958	3.13	T	39,000	2,038	2,830	.720	0	C
SR	07	SA	4D	D	.955	2.09	T	27,500	1,437	1,870	.768	0	D
PP	10	SA	4U	D	1.139	1.76	T	9,575	500	1,676	.298	0	B
PP	10	SA	4U	D	.763	1.31	T	10,265	536	1,676	.320	0	B
PP	10	SA	2D	D	.983	1.02	T	6,774	354	832	.425	0	B
CR	10	NA	6D	D	.249	.00	T	18,502	967	5,650	.171	0	B
CR	14	SA	4D	D	1.004	1.99	T	15,984	835	1,683	.496	0	C
CR	14	SA	2U	D	1.004	1.99	T	8,447	441	774	.570	0	C
PP	10	SC	2D	D	.837	1.19	T	6,565	343	601	.571	0	B
PP	10	SMC	2D	D	1.750	1.71	T	6,877	359	601	.597	0	C
PP	10	SMC	2U	D	.506	1.98	T	3,563	186	572	.325	0	B
PP	10	SMC	2U	D	.680	1.47	T	5,059	264	572	.462	0	B
PP	10	SMC	2D	D	1.750	.57	T	4,453	233	601	.388	0	B
PP	10	NC	2U	D	.507	.00	T	2,019	105	1,440	.073	0	B
CR	09	SA	4D	D	.507	1.97	T	25,104	1,312	1,764	.744	0	B
CR	09	NA	4D	D	.180	.00	T	19,866	1,038	3,760	.276	0	B
CR	09	SA	2U	D	1.332	1.50	T	15,599	815	792	1.029	2	F
CR	09	NA	2U	D	.757	.00	T	14,628	764	1,440	.531	0	C
CR	09	SA	4D	D	.254	3.94	T	14,628	764	1,683	.454	0	C
CR	09	NA	4D	D	.505	.00	T	14,628	764	3,760	.203	0	B
PP	10	SMC	2U	D	.526	1.90	T	5,678	297	572	.519	0	B
PP	10	SMC	2U	D	.877	1.14	T	5,318	278	572	.486	0	B
PP	10	NC	2U	D	.797	.00	T	3,278	171	1,440	.119	0	B
CR	09	SA	4D	D	2.011	.99	T	20,640	1,078	1,764	.611	0	B
CR	10	SC	2U	D	1.102	1.81	T	4,228	221	572	.386	0	B
CR	10	SC	2U	D	.518	1.93	T	4,982	260	572	.455	0	B
CR	09	SC	2U	D	1.506	1.33	T	4,243	222	572	.388	0	B
CR	07	SMC	2U	D	1.020	.98	T	8,923	466	572	.815	0	C
CR	03	SA	4D	D	2.013	1.49	T	15,633	817	1,764	.463	0	B
CR	03	NMC	2U	D	1.481	.00	T	10,696	559	1,440	.388	0	C
SR	09	SA	4D	D	.927	1.08	T	47,000	2,456	1,960	1.253	2	F
SR	09	SA	6D	D	.641	3.12	T	39,000	2,038	2,830	.720	0	C
SR	09	NA	6D	D	.636	.00	T	39,000	2,038	5,650	.361	0	B
SR	04	SA	2D	D	2.453	1.22	T	20,506	1,071	924	1.169	2	F
SR	03	SA	2D	D	1.479	.68	T	16,800	878	924	.950	1	D
SR	04	SA	2U	D	.255	3.92	T	16,568	866	860	1.007	2	F
SR	06	NA	30	D	.185	.00	T	16,000	1,520	6,780	.224	0	B

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
SR	06	SA	40	D	.476	4.20	T	14,500	1,378	4,536	.304	0	C
SR	06	SA	4D	D	.318	3.14	T	30,500	1,594	1,870	.852	0	D
SR	06	SA	2U	D	2.091	.96	T	14,893	778	880	.884	0	C
SR	06	SA	6D	D	1.512	2.65	T	27,667	1,446	2,830	.511	0	C
SR	07	SA	6D	D	1.531	3.27	T	30,995	1,619	2,830	.572	0	C
SR	06	SA	4U	D	.500	6.00	T	16,100	841	1,577	.533	0	D
SR	06	SA	4U	D	.988	4.05	T	11,856	619	1,776	.349	0	C
SR	06	NA	2U	D	.091	.00	T	11,500	601	1,440	.417	0	C
SR	03	SA	2D	D	1.916	.52	T	21,000	1,097	924	1.187	2	F
SR	03	SA	2D	D	2.246	.45	T	16,800	878	924	.950	1	D
SR	01	SA	2U	D	1.056	.95	T	16,500	862	880	.980	1	D
SR	01	SA	2D	D	.595	5.04	T	16,500	862	830	1.039	2	F
SR	01	SA	2U	D	2.004	1.50	T	15,432	806	880	.916	1	C
SR	09	SA	6D	D	1.529	2.62	T	35,500	1,855	2,830	.655	0	C
SR	09	SA	6D	D	1.766	1.70	T	34,428	1,799	2,940	.612	0	B
SR	09	SA	6D	D	2.026	2.47	T	33,770	1,764	2,830	.623	0	C
SR	07	SA	6D	D	1.521	1.31	T	33,000	1,724	2,940	.586	0	B
SR	11	SA	4D	D	.252	3.97	T	19,300	1,008	1,870	.539	0	C
SR	11	SA	4D	D	1.188	1.68	T	30,640	1,601	1,960	.817	0	C
SR	11	SA	4D	D	1.651	1.21	T	33,000	1,724	1,960	.880	0	C
SR	11	SA	6D	D	.299	3.34	T	41,000	2,142	2,830	.757	0	D
CR	01	SMC	2U	D	2.063	.48	T	8,016	419	572	.733	0	C
CR	01	NC	2U	D	2.416	.00	T	2,766	145	1,440	.101	0	B
CL	06	NMC	2U	D	2.463	.00	T	9,307	486	1,440	.338	0	C
CR	08	NA	6D	D	3.598	.00	T	64,680	3,451	5,650	.611	0	C
CR	01	SC	2U	D	.501	2.00	T	4,545	237	559	.424	0	C
CR	10	SA	6D	D	1.519	1.97	T	21,056	1,100	2,646	.416	0	B
CR	10	SA	6D	D	2.488	.80	T	21,056	1,100	2,646	.416	0	B
CR	07	SA	6D	D	1.527	1.31	T	27,694	1,447	2,646	.547	0	B
CR	07	SA	4D	D	1.523	1.31	T	29,612	1,547	1,764	.877	0	C
CR	06	SA	4D	D	1.516	3.96	T	29,612	1,547	1,683	.919	1	D
CR	06	SA	4U	D	.805	3.73	T	26,960	1,409	1,599	.881	0	D
CR	06	SA	4D	D	1.237	.81	T	28,874	1,509	1,764	.855	0	C
CR	06	SA	6D	D	1.353	2.22	T	30,789	1,609	2,547	.632	0	C
CR	06	SA	4D	D	2.948	1.36	T	21,372	1,117	1,764	.633	0	B
CR	03	SA	4D	D	1.293	.77	T	20,199	1,055	1,764	.598	0	B
CR	03	SA	4D	D	1.799	1.11	T	22,125	1,156	1,764	.655	0	B
CR	03	SA	4D	D	1.912	.52	T	16,564	865	1,764	.490	0	B
CR	07	SA	2D	D	1.679	.60	T	16,118	842	832	1.012	2	F
CR	07	SMC	2U	D	.252	3.97	T	9,919	518	559	.927	1	D
CR	07	SMC	2U	D	1.523	1.97	T	9,919	518	572	.906	1	C
CR	06	NMC	2U	D	.374	.00	T	9,919	518	1,440	.360	0	C
CR	06	SMC	2U	D	1.969	1.02	T	11,403	596	572	1.042	2	F
BL	07	NMC	2U	D	.249	.00	T	7,847	410	1,440	.285	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS	Std Length (mi)	Signals Per Mile	LOS	Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
DN	04	SC	2U	D	1,027	2.92	T		2,779	145	559	.259	0	C
DN	04	SC	2U	D	.915	1.09	T		1,855	97	572	.170	0	B
SR	12	SA	4D	D	1,414	1.41	T		16,307	882	1,960	.435	0	B
CR	09	SA	6D	D	1,025	3.90	T		44,730	2,337	2,547	.918	1	D
CR	09	SA	6D	D	1,118	1.79	T		41,000	2,142	2,646	.810	0	B
CR	09	SA	4D	D	.755	1.32	T		41,000	2,142	1,764	1,214	2	F
CR	10	SA	4D	D	.501	3.99	T		21,129	1,104	1,683	.656	0	C
CR	10	SA	6D	D	2,205	.45	T		46,854	2,448	2,646	.925	1	C
CR	10	NA	4D	D	.483	.00	T		41,291	2,157	3,760	.574	0	C
CR	10	SA	6D	D	.775	1.29	T		41,291	2,157	2,646	.815	0	B
CR	11	SA	4D	D	2,008	1.99	T		12,934	676	1,683	.402	0	C
CR	11	SA	4D	D	1,645	3.04	T		17,078	892	1,683	.530	0	C
SP	11	SA	4U	D	.252	7.94	T		7,984	417	1,454	.287	0	C
SP	11	SA	2U	D	2,341	3.84	T		6,359	332	774	.429	0	C
SR	06	SA	2D	D	.225	8.89	T		16,000	1,520	1,992	.763	0	D
SR	06	SA	4D	D	.252	3.97	T		16,000	1,520	4,536	.335	0	C
LA	07	SA	4D	D	1,564	2.56	T		22,150	1,157	1,683	.687	0	C
CR	07	SA	6D	D	1,542	1.30	T		24,643	1,288	2,646	.487	0	B
CL	06	SA	4D	D	.970	3.09	T		9,351	489	1,683	.291	0	C
OLD	05	NMC	2U	D	.235	.00	T		5,940	310	1,440	.215	0	B
SR	12	SA	4U	D	.789	5.07	T		25,501	1,322	1,615	.825	0	D
CL	06	SA	2U	D	.696	4.31	T		6,768	354	774	.457	0	C
CL	06	SA	4D	D	.538	3.72	T		21,500	1,123	1,683	.667	0	C
CL	06	SA	6D	D	.833	2.40	T		19,510	1,019	2,547	.400	0	C
CL	06	NA	4D	D	1,414	.00	T		11,133	582	3,760	.155	0	B
CL	06	SA	2U	D	1,010	.99	T		11,133	582	792	.735	0	C
CR	03	SC	2U	D	.361	2.77	T		4,974	260	559	.465	0	C
SR	06	SA	4D	D	.755	2.65	T		35,000	1,829	1,870	.978	2	E
SR	06	SA	3D	D	.105	9.52	T		14,500	1,378	2,988	.461	0	D
SR	06	NA	2D	D	.048	.00	T		14,500	1,378	4,512	.305	0	B
SR	06	SA	4D	D	5,235	.38	T		53,000	2,769	1,960	1,413	2	F
CR	04	SA	4D	D	2,039	1.96	T		21,780	1,138	1,764	.645	0	B
CR	03	SA	4D	D	1,448	.69	T		11,537	603	1,764	.342	0	B
CR	03	SA	2D	D	.752	1.33	T		9,518	497	832	.597	0	C
CR	03	SA	2D	D	1,008	1.98	T		7,499	392	832	.471	0	B
SR	10	NA	4G	D	1,332	.00	T		33,700	1,761	3,760	.468	0	B
CR	03	NA	4D	D	.890	.00	T		38,934	2,034	3,760	.541	0	C
SR	05	SA	6D	D	.939	3.19	T		16,300	882	2,830	.301	0	C
SR	03	SA	6D	D	1,815	1.65	T		36,387	1,901	2,940	.647	0	B
SR	04	SA	4D	D	1,286	1.56	T		29,449	1,539	1,960	.785	0	B
SR	04	SA	2D	D	1,295	.77	T		14,000	732	924	.792	0	C
CR	01	NC	2U	D	.625	.00	T		4,545	237	1,440	.165	0	B
CR	01	NC	2U	D	.398	.00	T		4,545	237	1,440	.165	0	B
CR	06	SMC	4U	D	.487	4.11	T		4,970	260	1,155	.225	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V:Cap Ratio	Def Flag	Fac LOS
CR	06	NMC	4U	D	.505	.00	T	4,970	260	3,572	.073	0	B
DN	04	SMC	2D	D	.505	1.98	T	4,970	260	601	.433	0	B
DN	04	SMC	2U	D	.478	2.09	T	5,507	288	559	.515	0	C
DN	04	NMC	2U	D	.282	.00	T	5,507	288	1,440	.200	0	B
OLD	05	SMC	2U	D	1.030	.97	T	5,940	310	572	.542	0	B
SP	11	SA	4D	D	.690	11.59	T	9,461	899	3,726	.241	0	C
SP	11	SA	4U	D	.753	1.33	T	15,113	790	1,676	.471	0	B
CR	11	SA	4D	D	2.103	1.43	T	11,788	616	1,764	.349	0	B
SP	11	SA	4D	D	1.022	2.94	T	13,983	731	1,683	.434	0	C
SP	11	SA	4D	D	2.310	2.60	T	17,263	902	1,683	.536	0	C
SP	11	SA	4D	D	1.484	1.35	T	15,092	789	1,764	.447	0	B
SP	11	SA	4D	D	.656	10.67	T	12,370	1,175	3,726	.315	0	C
SP	11	SA	4D	D	1.157	3.46	T	16,342	854	1,683	.507	0	C
SP	11	NA	4U	D	1.309	.00	T	13,594	710	3,572	.199	0	B
SP	11	SA	4U	D	1.020	2.94	T	12,594	668	1,599	.412	0	C
CL	06	SA	4D	D	1.283	2.34	T	25,622	1,339	1,683	.796	0	D
SR	06	SA	4U	D	.715	4.20	T	10,275	537	1,776	.302	0	C
CR	06	SA	4D	D	1.406	2.13	T	28,760	1,503	1,683	.893	0	D
SR	06	SA	4U	D	.794	2.52	T	19,200	1,003	1,776	.565	0	C
SR	06	SA	4U	D	.634	1.58	T	27,500	1,437	1,862	.772	0	B
SR	06	SA	4D	D	.738	4.07	T	26,711	1,396	1,870	.747	0	D
CL	06	SMC	2D	D	1.090	.92	T	6,155	322	601	.536	0	B
CL	06	SMC	2U	D	1.007	1.99	T	6,155	322	572	.563	0	B
CL	06	SMC	2U	D	.774	2.58	T	6,155	322	559	.576	0	C
CR	09	SA	6D	D	2.262	1.77	T	16,997	888	2,646	.336	0	B
CR	09	SA	6D	D	.614	1.63	T	20,790	1,086	2,646	.410	0	B
CR	09	SA	4D	D	1.016	1.97	T	20,790	1,086	1,764	.616	0	B
CR	04	SA	4D	D	.859	1.16	T	10,452	546	1,764	.310	0	B
CR	02	SA	6D	D	.658	1.52	T	61,284	3,202	2,646	1,210	2	F
CR	02	SA	4D	D	.897	1.11	T	61,284	3,202	1,764	1,815	2	F
CR	02	SA	4D	D	1.830	1.64	T	53,132	2,776	1,764	1,574	2	F
CR	02	SA	4D	D	2.357	1.27	T	44,569	2,329	1,764	1,320	2	F
CR	02	SA	4D	D	1.199	.83	T	30,034	1,569	1,764	.889	0	C
CR	02	NA	4D	D	.516	.00	T	30,034	1,569	3,760	.417	0	B
CR	02	SA	4D	D	.637	3.14	T	27,752	1,450	1,683	.862	0	D
CL	06	SA	4D	D	1.435	2.09	T	11,067	578	1,683	.343	0	C
CR	05	SMC	2U	D	1.516	.66	T	7,745	405	572	.708	0	C
CL	06	NMC	2D	D	.230	.00	T	4,970	260	1,512	.172	0	B
CR	05	SA	2D	D	.467	2.14	T	17,648	922	813	1.134	2	F
CR	05	SA	4D	D	.807	2.48	T	22,881	1,196	1,683	.711	0	C
CR	05	SA	2D	D	1.302	1.54	T	22,881	1,196	832	1.438	2	F
CL	06	SA	2D	D	1.551	4.51	T	17,093	893	747	1.195	2	F
CL	06	SA	2D	D	.498	8.03	T	14,996	784	747	1.050	2	F
SR	11	SA	4D	D	.745	1.34	T	50,000	2,613	1,960	1.333	2	F



# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V-Cap Ratio	Def Flag	Fac LOS
SR	11	NA	4D	D	.329	.00	T	50,000	2,613	3,760	.695	0	D
SR	11	NA	4D	D	2.506	.00	T	32,717	1,709	3,760	.455	0	B
SR	11	SA	4D	D	.547	3.66	T	31,607	1,661	1,870	.883	0	D
SR	11	SA	6D	D	.999	2.00	T	46,260	2,417	2,830	.854	0	D
SR	11	SA	6D	D	1.128	.89	T	65,000	3,396	2,940	1.155	2	F
SR	10	NA	4D	D	.986	.00	T	65,000	3,396	3,760	.903	2	E
CR	10	SA	6D	D	.717	1.39	T	41,291	2,157	2,646	.815	0	B
SR	08	SA	4D	D	1.283	1.56	T	42,000	2,194	1,960	1.119	2	F
CR	10	SA	4D	D	.155	6.45	T	14,701	768	1,530	.502	0	D
CR	04	SMC	2U	D	.688	1.45	T	7,629	399	572	.698	0	C
SR	12	SA	4U	D	.968	2.07	T	16,900	883	1,776	.497	0	C
SR	13	SA	4D	D	2.992	1.34	T	24,645	1,288	1,960	.657	0	B
SR	13	SA	4D	D	3.771	.80	T	16,927	884	1,960	.451	0	B
SR	13	SA	2U	D	2.879	.69	T	12,300	643	880	.731	0	C
CR	13	SA	2D	D	2.364	.42	T	15,373	803	832	.965	1	D
CR	13	NA	2D	D	2.889	.00	T	13,729	717	1,512	.474	0	C
CL	06	NA	2D	D	.771	.00	T	13,729	717	1,512	.474	0	C
SR	12	SA	4D	D	2.405	2.91	T	23,843	1,246	1,870	.666	0	C
SR	11	SA	4D	D	1.852	2.16	T	13,697	716	1,683	.425	0	C
CL	06	SA	4U	D	.446	4.48	T	9,351	489	1,599	.306	0	C
SR	06	SA	6D	D	.756	3.97	T	46,998	2,456	2,830	.868	0	D
SR	06	SA	6D	D	1.512	3.97	T	46,500	2,430	2,830	.899	0	D
SR	06	SA	6D	D	1.026	2.92	T	48,500	2,534	2,830	.895	0	D
SR	06	SA	6D	D	.986	2.03	T	48,500	2,534	2,830	.895	0	D
CL	06	NA	3U	D	.436	.00	T	6,768	364	3,572	.099	0	B
SP	11	SMC	2U	D	1.852	1.62	T	8,968	469	572	.820	0	C
CR	14	SMC	2U	D	1.208	2.48	T	8,968	469	559	.839	0	D
CL	06	SA	4U	D	.509	3.93	T	8,963	468	1,599	.293	0	C
CR	06	SA	4D	D	1.514	1.32	T	15,350	802	1,764	.455	0	B
CR	06	SA	2D	D	1.011	1.98	T	12,449	650	832	.781	0	C
CR	07	SA	2U	D	1.527	1.96	T	10,145	530	792	.669	0	C
CR	06	SA	2U	D	1.255	1.59	T	10,795	564	792	.712	0	C
CR	06	SA	4U	D	.253	3.95	T	10,795	564	1,599	.353	0	C
CL	06	SA	2D	D	.506	3.95	T	13,347	697	813	.857	0	D
CL	06	SA	2D	D	1.512	1.98	T	13,347	697	832	.838	0	C
CL	06	SA	2U	D	.504	1.98	T	11,945	624	792	.788	0	C
SP	11	NMC	2D	D	.083	.00	T	7,791	740	4,512	.164	0	B
CR	03	NMC	2U	D	2.673	.00	T	10,696	559	1,440	.388	0	C
SR	11	F	4F	D	1.302	.00	T	28,660	1,466	4,020	.365	0	B
SR	11	F	8F	D	1.929	.00	T	130,000	6,650	8,400	.792	0	D
SR	11	F	6F	D	2.269	.00	T	140,500	7,496	6,200	1.209	2	F
SR	11	F	6F	D	2.002	.00	T	98,069	5,016	6,200	.809	0	D
SR	11	F	6F	D	2.017	.00	T	91,500	4,680	6,200	.755	0	D
SR	11	F	4F	D	5.428	.00	T	54,014	2,882	4,020	.717	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
SR	11	F	8F	D	.948	.00	T	155,500	7,954	8,400	.947	2	E
SR	11	F	8F	D	2.220	.00	T	152,000	7,775	8,400	.926	2	E
SR	11	F	6F	D	1.027	.00	T	153,500	7,852	6,200	1.266	2	F
SR	11	F	8F	D	2.040	.00	T	107,260	5,486	8,400	.653	0	C
SR	11	F	6F	D	.441	.00	T	118,000	6,036	6,200	.974	2	E
SR	11	F	8F	D	1.322	.00	T	151,500	7,749	8,400	.922	2	E
SR	11	F	6F	D	2.333	.00	T	30,500	1,560	6,200	.252	0	B
BL	07	SA	2U	D	1.550	.65	T	9,303	486	792	.614	0	C
CR	07	NA	2D	D	.432	.00	T	9,303	486	1,512	.321	0	C
CR	07	SA	4D	D	.142	7.04	T	13,128	686	1,530	.448	0	D
CR	07	SA	2U	D	2.793	1.07	T	16,954	886	792	1.119	2	F
CR	07	SA	4D	D	1.526	1.31	T	29,466	1,540	1,764	.873	0	C
CR	06	SA	4D	D	1.255	2.39	T	29,466	1,540	1,683	.915	1	D
CR	06	SA	6D	D	.252	3.97	T	29,466	1,540	2,547	.605	0	C
CR	06	SA	6D	D	.393	5.09	T	28,822	1,506	2,313	.651	0	D
CR	06	SA	4D	D	1.518	.66	T	26,048	1,361	1,764	.772	0	B
CR	04	SA	4D	D	2.032	1.97	T	24,440	1,277	1,764	.724	0	B
CR	01	SA	4D	D	2.995	.67	T	25,698	1,343	1,764	.761	0	B
CR	02	NA	2U	D	2.301	.00	T	11,722	612	1,440	.425	0	C
CR	02	SA	2U	D	.543	1.84	T	12,981	678	792	.856	0	C
CR	01	SA	4D	D	1.275	1.57	T	16,961	886	1,764	.502	0	B
CR	01	NA	2U	D	.745	.00	T	10,748	562	1,440	.390	0	C
CR	07	SC	2U	D	1.534	.65	T	3,379	177	572	.309	0	B
CR	06	SC	2U	D	1.508	1.99	T	3,379	177	572	.309	0	B
CR	03	NMC	2U	D	.381	.00	T	4,974	260	1,440	.181	0	B
CR	03	SMC	2U	D	1.192	.84	T	4,974	260	572	.455	0	B
CR	06	SA	2U	D	1.533	1.96	T	8,489	444	792	.561	0	B
CR	01	SC	2U	D	1.061	.94	T	2,560	134	572	.234	0	B
DN	04	SC	2U	D	.600	5.00	T	3,661	191	514	.372	0	D
CR	05	NA	2U	D	1.274	.00	T	8,753	457	1,440	.317	0	C
CR	06	SA	6D	D	2.267	1.76	T	66,577	3,479	2,646	1.315	2	F
CR	05	SA	6D	D	2.233	1.79	T	66,577	3,479	2,646	1.315	2	F
CR	05	SA	6D	D	1.768	1.70	T	57,035	2,980	2,646	1.126	2	F
CR	03	NA	6D	D	.546	.00	T	47,984	2,507	5,650	.444	0	B
CR	07	SC	2U	D	1.009	.99	T	4,670	244	572	.427	0	B
SR	06	SA	4D	D	.447	2.24	T	34,500	1,803	1,870	.964	2	E
SR	06	NA	2D	D	.165	.00	H	14,500	758	3,400	.240	0	B
SR	06	NA	4D	D	1.118	.00	T	34,500	1,803	3,760	.480	0	C
SR	06	NA	2D	D	.162	.00	H	16,000	836	3,400	.270	0	B
CR	01	NMC	2U	D	1.606	.00	T	7,687	402	1,440	.279	0	C
DN	04	SMC	2U	D	1.537	1.30	T	4,652	243	572	.425	0	B
DN	04	SMC	2U	D	1.020	1.96	T	4,604	241	572	.421	0	B
CL	06	SA	4D	D	.328	3.05	T	12,033	629	1,683	.374	0	C
CL	06	SC	2U	D	2.015	2.98	T	5,847	306	559	.547	0	C

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V-Cap Ratio	Def Flag	Fac LOS
CL	06	SC	2U	D	1.004	1.99	T	3,902	204	559	.365	0	C
CR	10	NA	2U	D	.440	.00	T	5,823	304	1,440	.211	0	B
SR	06	SA	2U	D	1.741	1.72	T	11,500	601	880	.683	0	C
SR	06	SA	2U	D	1.267	.79	T	14,400	752	880	.855	0	C
CR	03	SA	2U	D	1.196	2.51	T	8,952	468	774	.605	0	C
CR	03	SA	4D	D	.515	1.94	T	15,830	827	1,764	.469	0	B
CR	06	SMC	2U	D	.961	1.04	T	4,487	234	572	.409	0	B
CR	06	SMC	2U	D	1.008	.99	T	4,592	240	572	.420	0	B
CR	06	NMC	2U	D	.773	.00	T	4,696	245	1,440	.170	0	B
CR	09	SA	2U	D	2.624	1.91	T	9,087	475	792	.600	0	C
SR	10	SA	6D	D	.983	3.05	T	56,500	2,952	2,830	1.043	2	F
SR	10	SA	6D	D	1.749	1.14	T	49,711	2,597	2,940	.883	0	C
CR	10	SA	6D	D	.505	1.98	T	47,181	2,465	2,646	.932	1	C
CR	10	SA	6D	D	1.553	1.29	T	44,862	2,344	2,646	.886	0	C
CR	09	SA	6D	D	1.525	1.97	T	44,862	2,344	2,646	.886	0	C
CR	09	SA	4D	D	.552	3.62	T	33,205	1,735	1,683	1.031	2	F
CR	09	SA	4D	D	1.541	1.95	T	24,898	1,301	1,764	.738	0	B
CR	09	SA	4D	D	1.282	1.56	T	16,591	867	1,764	.491	0	B
CR	11	SA	4D	D	1.177	.85	T	22,254	1,163	1,764	.659	0	B
CR	09	SA	4D	D	2.347	2.13	T	24,975	1,305	1,683	.775	0	D
CR	11	SA	4D	D	1.702	1.18	T	14,920	780	1,764	.442	0	B
SP	11	SA	2U	D	.729	1.37	T	7,237	378	792	.477	0	B
SR	11	SA	6D	D	1.673	4.18	T	32,049	1,675	2,830	.592	0	C
DN	04	SA	2D	D	1.470	2.04	T	10,234	535	813	.658	0	D
SH	05	SA	2U	D	1.524	.66	T	10,794	564	792	.712	0	C
SR	05	SA	2U	D	1.345	.74	T	10,700	559	880	.635	0	C
DN	04	SC	2U	D	1.259	1.59	T	5,392	282	572	.493	0	B
SR	11	NA	4U	D	.379	.00	T	15,800	826	3,572	.231	0	B
CR	12	NA	2U	D	2.909	.00	T	4,400	230	1,440	.160	0	B
SR	11	NA	2U	D	1.086	.00	T	10,100	528	1,440	.367	0	C
SR	12	NA	4D	D	2.170	.00	T	4,400	230	3,760	.061	0	B
SR	11	SA	4D	D	1.098	1.82	T	27,270	1,425	1,960	.727	0	B
SR	11	NA	4D	D	.411	.00	T	19,300	1,008	3,760	.268	0	B
SR	11	NA	2D	D	.723	.00	T	19,300	1,008	1,512	.667	0	D
SR	12	SA	4D	D	.296	3.38	T	19,300	1,008	1,870	.539	0	C
SR	11	SA	6D	D	.933	1.07	T	35,000	1,829	2,940	.622	0	B
SR	11	NA	6D	D	.249	.00	T	35,000	1,829	5,650	.324	0	B
SP	11	SA	4D	D	.248	4.03	T	11,625	607	1,683	.361	0	C
SP	11	NMC	2U	D	.366	.00	T	7,153	374	1,440	.260	0	B
LA	07	SA	2D	D	1.036	1.93	T	10,041	525	832	.631	0	C
LA	07	SA	2U	D	.513	1.95	T	10,041	525	792	.663	0	C
DN	04	NMC	2U	D	1.106	.00	T	4,370	228	1,440	.158	0	B
DN	04	SMC	2U	D	.501	2.00	T	6,221	325	559	.581	0	C
CR	11	SC	2D	D	2.308	.43	T	3,972	208	601	.346	0	B

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
DN	04	SC	2U	D	.929	1.08	T	4,076	213	572	.372	0	B
SR	06	SA	6D	D	1.859	2.69	T	37,650	1,967	2,830	.695	0	C
SR	06	NA	6D	D	.775	.00	T	35,000	1,829	5,650	.324	0	B
SR	05	SA	4D	D	1.387	1.44	T	37,193	1,943	1,960	.991	1	D
SR	04	SA	4D	D	.658	3.04	T	21,587	1,128	1,870	.603	0	C
SR	04	SA	6D	D	.556	1.80	T	45,500	2,377	2,940	.809	0	B
SR	04	SA	6D	D	.522	3.83	T	31,500	1,646	2,830	.582	0	C
SR	04	SA	6D	D	1.019	3.93	T	45,000	2,351	2,830	.831	0	D
SR	05	SA	4D	D	1.126	1.78	T	21,500	1,123	1,960	.573	0	B
SR	04	SA	4D	D	.482	2.07	T	11,600	606	1,870	.324	0	C
SR	05	SA	8D	D	.856	2.34	T	52,986	2,769	3,780	.733	0	C
SR	05	SA	6D	D	2.105	2.38	T	57,000	2,978	2,830	1.052	2	F
SR	09	SA	6D	D	.640	1.56	T	28,000	1,463	2,940	.498	0	B
SR	09	SA	4D	D	.873	2.29	T	28,000	1,463	1,870	.762	0	D
SR	07	SA	6D	D	.987	3.04	T	62,000	3,240	2,830	1.145	2	F
SR	07	SA	6D	D	1.011	1.98	T	61,500	3,213	2,940	1.093	2	F
SR	07	SA	6D	D	1.551	2.58	T	52,654	2,761	2,830	.972	2	E
SR	08	SA	6D	D	1.975	2.53	T	39,830	2,081	2,830	.735	0	D
SR	11	NA	4D	D	.626	.00	T	40,500	2,116	3,760	.563	0	C
SR	11	SA	4D	D	1.274	1.57	T	26,504	1,385	1,960	.707	0	B
SR	11	NA	6D	D	.805	.00	T	57,000	2,978	5,650	.527	0	C
SR	11	NA	4D	D	.401	.00	T	36,000	1,881	3,760	.500	0	C
SR	08	SA	6D	D	1.629	1.23	T	39,500	2,064	2,940	.702	0	B
SR	08	NA	6D	D	.346	.00	T	39,500	2,064	5,650	.365	0	B
SR	08	NA	6D	D	.869	3.45	T	69,927	3,664	2,830	1.291	2	F
SR	08	SA	4D	D	.469	2.13	T	39,500	2,064	1,870	1.104	2	F
SR	08	SA	6D	D	1.529	1.31	T	42,197	2,205	2,940	.750	0	B
SR	07	SA	4D	D	1.018	1.96	T	47,500	2,482	1,960	1.266	2	F
SR	07	SA	6D	D	1.000	3.00	T	43,247	2,260	2,830	.799	0	D
SR	08	NA	6D	D	.288	.00	T	77,500	4,049	5,650	.717	0	D
SR	08	SA	6D	D	1.252	1.60	T	40,500	2,116	2,940	.720	0	B
SR	07	SA	4D	D	1.015	1.97	T	49,300	2,576	1,960	1.314	2	F
SR	07	SA	6D	D	1.802	1.11	T	33,000	1,724	2,940	.586	0	B
SR	07	SA	6D	D	1.042	2.88	T	28,252	1,476	2,830	.522	0	C
SR	07	SA	4D	D	1.193	1.68	T	18,965	991	1,960	.506	0	B
CR	07	SA	4D	D	1.520	.66	T	30,657	1,602	1,764	.908	1	C
CR	07	SA	4D	D	1.521	1.97	T	32,638	1,705	1,764	.967	1	D
CR	09	SA	4D	D	2.275	2.20	T	27,730	1,449	1,883	.861	0	D
CR	06	SA	4D	D	.959	4.17	T	26,907	1,406	1,883	.835	0	D
CR	06	SA	2U	D	1.991	2.51	T	10,278	537	774	.694	0	D
CR	06	SA	4D	D	1.098	1.82	T	26,907	1,406	1,764	.797	0	C
CR	06	SA	4D	D	1.260	.79	T	20,163	1,054	1,764	.598	0	B
CR	02	SA	6D	D	1.216	1.64	T	42,665	2,229	2,646	.842	0	C
CR	05	SA	6D	D	1.979	2.02	T	38,517	2,013	2,547	.790	0	D

# Pinellas County Metropolitan Planning Organization

## Facility

Juris	Plan Area	Fac Type	Road Type	LOS Std	Length (mi)	Signals Per Mile	LOS Meth	AADT	Volume	Physical Capacity	V/Cap Ratio	Def Flag	Fac LOS
CR	03	SA	4D	D	1.853	2.70	T	21,219	1,109	1,683	.659	0	C
TS	01	SA	2U	D	1.444	1.39	T	15,300	799	792	1.009	2	F
CR	07	SC	2D	D	.542	3.69	T	9,392	491	587	.836	0	D
CR	07	SA	2U	D	1.522	.66	T	9,392	491	792	.620	0	C
TI	12	SA	4D	D	1.754	1.71	T	19,097	998	1,764	.566	0	B
CR	02	SA	4D	D	1.706	.59	T	18,433	963	1,764	.546	0	B
CR	04	SMC	2U	D	1.912	1.05	T	4,694	245	572	.428	0	B
CR	06	SC	2U	D	.504	1.98	T	4,694	245	572	.428	0	B
SR	10	SA	6D	D	1.065	4.69	T	49,429	2,583	2,570	1.005	2	F
SR	14	SA	6D	D	1.252	.80	T	41,000	2,142	2,940	.729	0	B
SR	10	SA	6D	D	1.266	1.58	T	63,500	3,318	2,940	1.129	2	F
SR	10	NA	6P	D	1.969	.00	T	56,756	2,966	5,650	.525	0	C
SR	08	NA	6P	D	3.362	.00	T	57,639	3,012	5,650	.533	0	C
SR	07	SA	6D	D	1.013	1.97	T	75,200	3,929	2,940	1.336	2	F
SR	06	SA	6D	D	1.210	2.48	T	80,350	4,198	2,830	1.483	2	F
SR	06	NA	6P	D	2.441	.00	T	82,107	4,290	5,650	.759	0	D
SR	06	SA	6D	D	1.333	.75	T	71,000	3,710	2,940	1.262	2	F
SR	06	NA	6D	D	.802	.00	T	73,811	3,857	5,650	.683	0	D
SR	06	SA	6D	D	2.035	.98	T	83,000	4,337	2,940	1.475	2	F
SR	03	SA	6D	D	1.253	.80	T	75,500	3,945	2,940	1.342	2	F
SR	03	SA	6D	D	1.818	1.10	T	78,500	4,102	2,940	1.395	2	F
SR	03	SA	6D	D	2.026	.99	T	65,000	3,396	2,940	1.155	2	F
SR	01	SA	6D	D	1.603	1.25	T	65,500	3,422	2,940	1.164	2	F
SR	01	SA	6D	D	1.417	1.41	T	59,000	3,083	2,940	1.049	2	F
SR	01	NA	6D	D	.438	.00	T	59,000	3,083	5,650	.546	0	C
SR	11	SA	6D	D	1.009	1.98	T	35,500	1,855	2,940	.631	0	B
SR	11	SA	6D	D	.435	4.60	T	38,500	2,012	2,570	.783	0	D
SR	11	SA	6D	D	1.003	2.99	T	38,000	1,986	2,830	.702	0	C
SR	11	SA	6D	D	2.011	2.98	T	24,500	1,280	2,830	.452	0	C
SR	11	SA	6D	D	1.559	3.85	T	24,500	1,280	2,830	.452	0	C
CR	04	SC	2U	D	.500	2.00	T	2,175	114	559	.204	0	C
CR	04	SMC	2U	D	1.392	1.44	T	9,028	472	572	.825	0	C
DN	04	SMC	2D	D	.700	1.43	T	7,349	384	601	.639	0	C
CR	07	SC	2U	D	.751	1.33	T	6,944	363	572	.635	0	C
CR	09	SMC	2U	D	2.524	1.19	T	9,538	498	572	.871	0	C
CR	09	SC	2U	D	.501	2.00	T	12,602	658	559	1.177	2	F
CR	07	SMC	2U	D	1.250	1.60	T	12,602	658	572	1.150	2	F
LA	07	SA	4D	D	.535	3.74	T	44,000	2,299	1,683	1.366	2	F
CR	07	SA	4D	D	1.266	3.16	T	22,103	1,155	1,683	.886	0	C
CR	07	NC	2U	D	1.386	.00	T	4,015	210	1,440	.146	0	B

**Fac Type:** "F"=Freeway, "SA"=Signalized Collector, "SMC"=Signalized Collector (Major), "NA"=Non-Signalized Arterial, "NC"=Non-Signalized Collector, "NMC"=Non-Signalized Collector (Major)

**LOS Meth:** "A"=ApCalc, "H"=Conceptual, "T"=General Tables **Abbreviations:** "Fac"=Facility, "V/Cap"=Volume to Physical

**Def:** "I"=V/C Ratio >= .9 and LOS=A, LOS=B, LOS=C or LOS=D "Z"=V/C Ratio >= .9 and LOS=E or LOS=F

# Pinellas County Metropolitan Planning Organization

## Section 4: Support for Local Government and Development Review

Since the first edition of this Level of Service Report in 1994, it has been utilized by local governments in Pinellas County as a data source to identify roads within their jurisdictions operating under substandard level of service conditions. Local concurrency systems applied by local governments require development projects impacting these roads to address their impacts as part of their site plan approval.

The 2011 Community Planning Act eliminated State mandated transportation concurrency in Florida. In response to this legislation, the MPO endorsed the Pinellas County Mobility Plan in 2013. The Mobility Plan provides a framework for a coordinated multi-modal approach to managing the traffic impacts of development projects as a replacement for local transportation concurrency systems.

The Plan calls for establishing a tiered development review approach requiring larger scale projects adding new trips to the surrounding road network to implement transportation management plans (TMPs) as credit toward their impact fee assessment. Transportation management plans include strategies such as trail, sidewalk, bus stop and intersection improvements or trip reduction programs such as vanpooling or telecommuting. Smaller scale projects with limited impact on the transportation system only require payment of an impact fee commensurate with the number of new trips they generate. The Plan is also intended to ensure consistency between County and municipal site plan review processes as they pertain to reviewing and managing the traffic impacts of development projects while increasing mobility for all users of the transportation system.

Transportation management plan requirements apply to development projects that impact major roads identified as deficient. They also apply to projects causing level of service conditions to degrade on roads that are not identified as deficient. The Mobility Plan identifies “deficient roads” as facilities operating at peak hour level of service E or F and/or volume to capacity ratios of 0.9 or greater. In order to identify deficient facilities, the Mobility Plan will rely on the Level of Service Report for its implementation. Implementation of the Mobility Plan in Pinellas County requires the amendment of the countywide Transportation Impact Fee Ordinance as well as local comprehensive plans and land development codes. It is anticipated that these amendments will occur in 2016. Until the necessary amendments are adopted, local governments will continue to implement transportation concurrency in accordance with their comprehensive plans.





# Pinellas County Metropolitan Planning Organization

## MPO TRAFFIC IMPACT STUDY METHODOLOGY

### 1. Purpose

The purpose of a traffic impact study is to identify the potential impacts of new development on the major road network and to assist local governments in their efforts to manage these impacts through their site plan review processes. This methodology is intended to define the requirements and procedures for submission of a traffic impact study in Pinellas County while providing an equitable, consistent and systematic means of determining the impact of proposed development projects.

### 2. Applicability

The requirements, procedures and methodology contained in this report shall apply to all site plans where a traffic study is required by the presiding local government.

### 3. Study Contents

- a. Description and location of project, current and proposed zoning, parcel identification number, address and size of the project.
- b. Identification of traffic impact study area, described as all segments on the major road network that are impacted by the project's generated traffic at a level equal to or greater than one percent (1.0%) of the maximum service volume of peak hour level of service D up to a maximum radius of two miles from the project site boundaries.
- c. Inventory of existing conditions (including listing of all segments within the study area, existing traffic volumes and identification of roadway characteristics).
- d. Local governments may apply percent new trip and capture rates from corresponding land use category in the fee schedule of the Pinellas County Transportation Impact Fee Ordinance. Otherwise, the applicant would need to provide this information in the study.
- e. Traffic distribution and assignment methodology.
- f. Projected traffic volumes within the study area.
- g. Intersection analysis as deemed necessary by the local government.
- h. Improvement needs for roads and/or other transportation facilities (identification of proposed improvements and cost).
- i. Internal site circulation and access needs.
- j. Appendix (as applicable to the specific traffic impact study) including information listed below.
  1. Traffic count data
  2. Trip generation, internal and adjacent street capture worksheets
  3. Trip distribution and assignment worksheets
  4. Intersection capacity analysis worksheets
  5. Link capacity analysis
  6. Computerized modeling documentation
  7. Other analysis worksheets

### 4. Traffic Impact Area

The following procedure will be used to determine the extent of the Traffic Impact Area.

Peak hour traffic attributable to the development will be assigned to all segments on the major road network that are impacted by the development traffic at a level equal to or greater than one percent (1.0%) of the maximum service volume of peak hour level of service D up to a maximum radius of two miles from the project site boundaries.

Additional impacted segments, over and above those required in this section may be added to the study network when determined by the local government to be necessary to adequately address the impacts of the development project.

Phased projects will be required to perform a traffic study which analyzes both the impact of the phase(s) and the ultimate build out of the entire project. The analysis of the total build out of the project will be performed as part of the site plan review for the first phase of the project to assess the ultimate transportation needs of the entire project, but shall not be used as a basis for determining whether the project complies with local site plan requirements.

The methodology for performing the analysis shall be based on the following:

The study area of the total build out of the project will be determined by the extent of all impacted segments for the total project, including future phases and phases that were previously approved.

Projects that consist of an expansion or an addition to existing development will be analyzed based upon the cumulative impact of all development on the site.

### 5. The projected traffic will be assigned only to the following roadways:

- a. Shown on the major road network (i.e., functionally classified as arterials and collector facilities);
- b. Proposed for inclusion as part of the major road network and scheduled for construction within the first three (3) years of the MPO's Transportation Improvement Program or local capital improvements elements; and

## MPO TRAFFIC IMPACT STUDY METHODOLOGY

- c. Scheduled for completion prior to the initial date of project impact on the roadway, if such roadway or improvement is to be completed pursuant to a local government development agreement or binding contract and proposed for inclusion as part of the major road network.

### 6. Traffic Counts

- a. Traffic count data used should be consistent with the MPO Level of Service Report. The data and procedures shown below shall apply for studies relying on independent sources for this information.
  - 1. Provide segment traffic counts, by direction, for a minimum of seventy-two (72) consecutive hours between 12:00 p.m. Monday and 12:00 p.m. Friday. Legal holidays or other days as specified by the local government shall be excluded. Friday, weekend, or holiday counts may be required for land uses active on weekends, as determined by the local government.
  - 2. The data should include a summary of traffic volumes by direction in fifteen (15) minute increments. The a.m., p.m. and other peak hours should be identified as well as the peak hour-to-daily traffic ratio and peak hour directional split. The average daily traffic counts will be adjusted to annual average daily traffic (AADT) using appropriate FDOT seasonal adjustment factors and truck axle adjustment factors.
  - 3. The peak hour segment volume will be determined by applying the approved K-factor for that segment to the AADT volume. All data will be subject to review and acceptance by the local government.
- b. The applicant shall provide intersection turning movement counts if deemed necessary by the local government. These turning movement counts shall be made on one (1) typical weekday (Tuesday, Wednesday or Thursday) from 7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m., or as otherwise specified. Legal holidays or other days, as specified by the local government, shall be excluded.

Friday, weekend, or holiday turning movement counts may be required for development proposals for land uses active on weekends, as determined by the local government. The data will include a summary of traffic volumes in fifteen (15) minute increments, with a.m., p.m. and other peak hours being identified.

All data will be subject to review and acceptance by the local government.

### 7. Trip Generation

- a. Each traffic impact study will list all project land uses, applicable ITE land use code, building size (s) and/or dwelling units.
- b. Traffic impact study data from a similar land use previously approved by a local government, or the MPO in Pinellas County.
- c. A site specific trip generation study of the same type or similar land use shall be conducted at three (3) separate similar land use sites. The survey data will be collected for at least a continuous seventy-two (72) hour period between Monday 6:00 p.m. and Friday at 6:00 a.m., or as otherwise determined by the local government. Legal holidays or other days specified by the local government will be excluded. Selection of other trip generation study times will be made when it is determined by the local government that collection of the data between the above times will not result in a reasonable estimation of the trip generation characteristics of the proposed land use. The data will include the following:
  - 1. Summary of traffic count data by fifteen (15) minute increments;
  - 2. Average daily volume, volume during the a.m. and p.m. peak hours of the adjacent street;
  - 3. The accuracy of the traffic counts will be verified by performing manual counts and comparing them to machine count volumes twice daily, once in the a.m. and once in the p.m. for each day of the traffic counts; and
  - 4. All data will be subject to review and acceptance by the local government. This review will be based on currently accepted traffic engineering principals.

### 8. Percent New Trips

- a. The percent new trips factor represents the percent by which the trip rate is multiplied to account for only those new trips that are added to the roadway by the proposed development. Thus, diverted or secondary trips going to the proposed development should not be included in the trip total.
- b. Each traffic impact study will list all land uses, applicable ITE land use code, building size and/or number of dwelling units.
- c. Allowable sources for the percent new trips factor for each land use are listed below:
  - 1. The percent new trips factor identified in the Pinellas County Transportation Impact Fee Ordinance.

## MPO TRAFFIC IMPACT STUDY METHODOLOGY

2. Percent new trips factor from a previously approved study of a similar land use or a published study as approved by a local government or the MPO.
  3. A site specific origin/destination survey of an identical or similar land use as approved by a local government or the MPO in Pinellas County.
    - a. The origin/destination survey shall collect, at a minimum, the following information:
      1. Date
      2. Location
      3. Time of Interview
      4. Time of the interviewee trip
      5. From where the interviewee trip began immediately prior to arriving (e.g., home, work, retail site, other location).
      6. The city, area or zip code where the trip began (i.e., the last destination before arriving at the site being studied).
      7. The nearest intersecting streets closest to the location of where the trip began (i.e., the last destination before arriving at the site being studied).
      8. Where the interviewee trip will end immediately upon leaving home, work, retail site, other location.
      9. The city, area or zip code nearest the trip's next destination
      10. The nearest intersecting streets closest to the trip's next destination.
    - b. The location of each origin and destination should be plotted graphically on a map and the trip lengths calculated. To determine whether the trip is to be considered a new trip, a rectangle will be drawn on the map in such a manner so as to locate the origin of the trip in one (1) corner and the destination of the trip in the opposite corner. If the interview location is outside the rectangle, the trip is considered to be a new trip and if the interview site is inside the rectangle, then the trip is not classified as a new trip. The percent new trips are computed by dividing the number of new trips by the total number of trips generated by the site.
    - c. Copies of the original surveys and maps indicating trip ends will be submitted as part of the study. All data will be subject to review and acceptance by the local government. This review will be based on currently accepted traffic engineering principles.
- ### 9. Traffic Distribution and Assignment
- a. The distribution and assignment of project traffic shall be made in accordance with the procedures listed below and in conformity with accepted traffic engineering principles, such as those documented in NCHRP Report 187, "Quick-Response Urban Travel Estimation Techniques and Transferable Parameters - Users Guide".
    1. Use of a gravity model as approved by the local government.
    2. Observations of similar developments in the vicinity of the proposed development.
    3. Traffic distribution may be based upon a previously approved traffic impact study of a similar land use in the vicinity of the proposed development. Such use of a prior study must be justified based upon sound traffic engineering principles and techniques and approved for use by the local government.
  - b. The traffic distribution and assignment technique must be approved by the local government. Local government review shall be based on currently accepted traffic engineering principles.
- ### 10. Internal Capture
- a. The use of an internal capture factor will be allowed for certain types and sizes of mixed-use developments.
  - b. Allowable sources for internal capture rates are identified below.
    1. The internal capture rate from a previous traffic impact study of a similar land use approved by a local government or the MPO.
    2. The internal capture rates or equations contained in the most recent version of the *ITE Trip Generation Handbook* as approved for use by the local government.

## MPO TRAFFIC IMPACT STUDY METHODOLOGY

3. A site specific internal capture study of the same type or similar development approved by the local government. Such a site specific study will be conducted at three (3) separate similar land use sites. The survey data will be collected for at least a two consecutive hour period each day for three (3) days between Tuesday at 12:00 p.m. and Thursday at 8:00 p.m., or as otherwise determined by the local government. Legal holidays or other days specified by the local government will be excluded. Selection of other internal capture study times will be made when it is determined by the local government that collection of the data between the above times will not result in a reasonable estimation of the internal capture characteristics of the proposed project.

The data will include a summary of internal capture data by fifteen (15) minute increments during the p.m. peak hours of the adjacent street. All data will be subject to review and acceptance by the local government. This review will be based on currently accepted traffic engineering principles.

- c. Requests for use of internal capture factors other than those identified above must be submitted along with justification to the local government. All data will be subject to review and acceptance by the local government. This review will be based on currently accepted traffic engineering principles.
- d. The total internal capture trip ends shall not exceed twenty-five percent (25%) of the gross project trip ends.

### 11. Intersection Analysis

- a. An intersection analysis must be performed on each major intersection (including signalized intersections, unsignalized intersections and those proposed to be signalized), where the total peak hour traffic volume on one (1) or more links forming a leg of the intersection is projected to equal or exceed ninety percent (90%) of the maximum service volume of peak hour level of service D for any phase of the project for which approval is being sought.
- b. The procedure for performing an intersection analysis will be based upon the methodology contained in the most recent edition of the Highway Capacity Manual, Transportation Research Board Special Report 209, or other professionally accepted methodology. Any questions, issues or methodology other than that referenced in the above publication will be subject to the review and approval by the local government.

- c. For each intersection at which the total traffic results in a level of service below peak hour level of service D, the applicant will recommend improvements to the intersection analysis by including:
  1. Printouts and worksheets for all highway capacity analysis performed on the intersections or roadway links;
  2. Copies of any traffic counts performed or used in the analysis, including the source of count data;
  3. Documentation of any assumptions used in the analysis including trip generation data, if not already specified for the analysis;
  4. Turning movement volumes and documentation of methodology used to project existing, prior vested and project traffic; and
  5. Any other applicable data or information.

### 12. Segment Analysis

- a. A segment capacity analysis may be performed to review signal spacing and timing, as well as signal coordination. Such segment capacity analysis shall be performed in accordance with accepted traffic engineering principles and techniques using such computer software programs as the Highway Capacity Software, ART\_TAB, ART\_PLAN, Transyt-7F, Passer II, or Traf\_Netsim at the discretion of the local government.
- b. A travel study may be performed to determine the operating speed and corresponding level of service at which the roadway is operating. The methodology for conducting a travel time study, including the number of sample runs, time periods, and length of the relevant roadway link, must be submitted in writing and receive approval by the local government prior to conducting the study.

# Pinellas County Metropolitan Planning Organization

## Section 5: Roadway Improvement Constraints

### Constrained Facilities

Constrained facilities are county and municipal roadways that cannot be expanded as necessary to alleviate a substandard level of service (LOS) condition due to a policy or physical constraint.

In Pinellas County, 286 major roadway network lane miles have been designated as a constrained facility with no improvements scheduled or planned. The 286 lane miles were based upon existing conditions in 2014.

In 2006, the Pinellas County Metropolitan Organization (MPO) initiated an effort to develop countywide standards for local concurrency management systems. These applied to LOS Standards, methodologies for review of developer-sponsored traffic impact studies and the adoption of a countywide constrained corridors map.

Since the Pinellas County MPO is currently working with local governments to develop a countywide mobility plan the anticipated results of this effort will be a replacement of local concurrency management systems. Therefore an updated constrained facilities map as shown on the next page may change in the future.





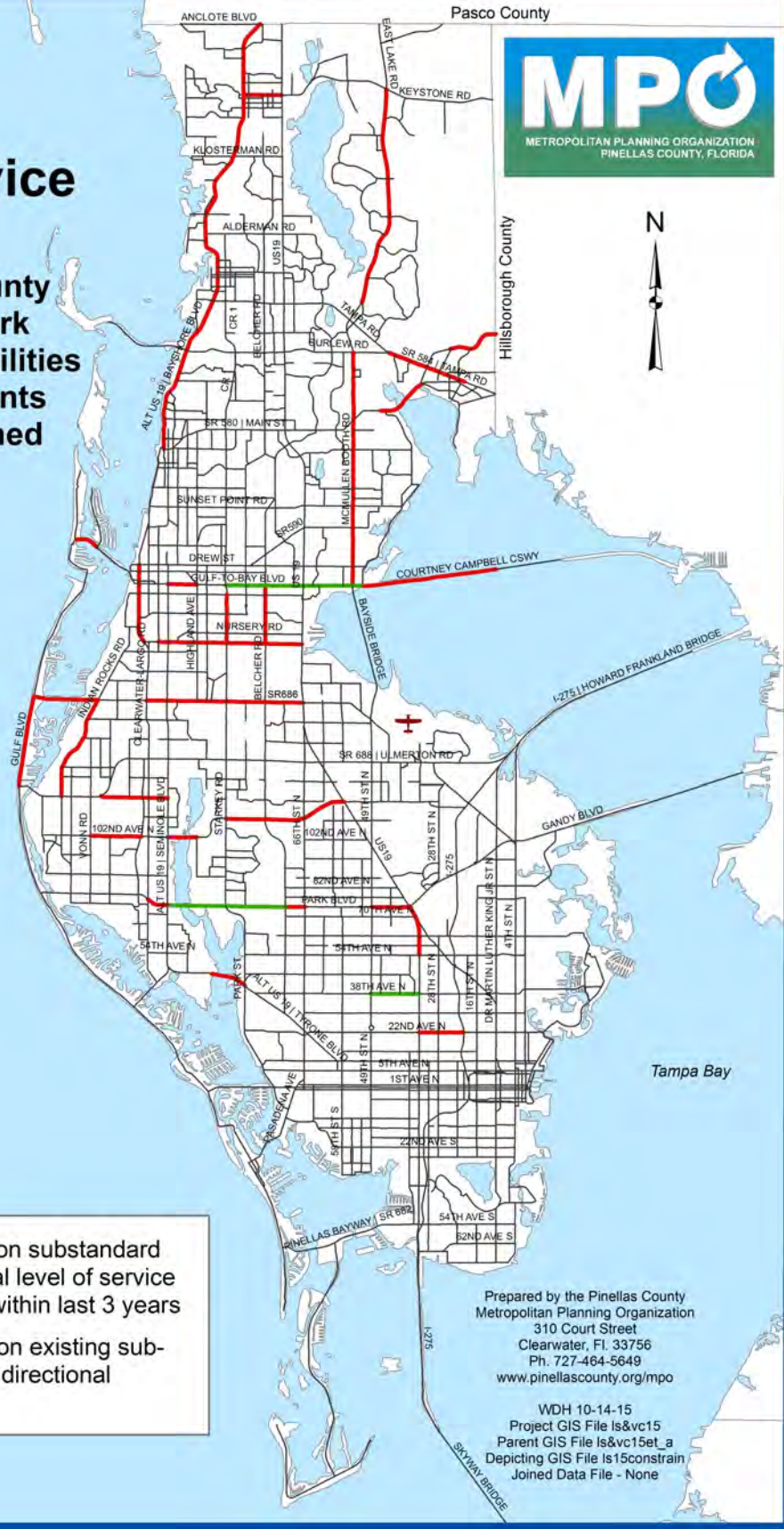
# Pinellas County Metropolitan Planning Organization

## Level of Service

**Map of Pinellas County  
Major Road Network  
2015 Constrained Facilities  
with No Improvements  
Scheduled or Planned**

Generated by  
vTIMAS database &  
Road Facility Capabilities  
based upon FDOT 2009  
Generalized Service Volume Tables

- Constrained based on substandard peak hour directional level of service conditions existing within last 3 years
- Constrained based on existing substandard peak hour directional level of service





# Pinellas County Metropolitan Planning Organization

## Section 6: Scheduled Improvements

### LIST of SCHEDULED ROAD IMPROVEMENTS for 2015 LOS REPORT

#### Recently Completed, Current & Future Capacity Projects Thru Year 2017/18

Estimated Start of Construction Year	Roadway	From	To	Type of Construction	Project Number
Under Construction & Completed during 2014	SR682 / PIN. BAY-WAY	E OF GULF BLVD	W OF SR679	REPLACE BRIDGE WIDEN TO 4 DIVID- ED	** 2569031
Under Construction during 2014	SR55 / US19HW	N OF WHITNEY RD	N OF SR60	OVERPASS/ FRONTAGE RDS	** 2568811
Under Construction during 2014	SR688 / ULMERTON RD	W OF LK SEMINOLE BYPASS CANAL	E OF WILD ACRES RD	WIDEN TO 6 LANE DIVIDED	** 4091551
Under Construction during 2014	SR688 / ULMERTON RD	E OF WILD ACRES RD	EL CENTRO BLVD & RANCHERO BLVD	WIDEN TO 6 LANE DIVIDED	** 4091541
Under Construction during 2014	SR55 / US19HW	SUNSET POINT RD	S OF COUNTRY- SIDE BLVD	RECONSTRUCT AND FRONTAGE RDS	** 2568901
Under Construction during 2014	SR694 / GANDY BLVD	W OF DR ML KING ST N	E OF 4 <sup>th</sup> STREET N	ADD LANES AND RECONSTRUCT	** 2569312-5201
Under Construction during 2014	SR688 / ULMERTON RD	E OF 49 <sup>th</sup> ST N	W OF 38 <sup>th</sup> ST N	ADD LANES AND RECONSTRUCT	** 2569953
FY – 2014 / 2015	PARK ST / STARKEY RD	84 <sup>th</sup> LANE	FLAMEVINE AVE	WIDEN TO 6 LANE DIVIDED	*001039A
FY – 2015 / 2016	PARK ST	TYRONE BLVD	54 <sup>th</sup> AVE N	WIDEN TO 6 LANE DIVIDED	*001038A
FY – 2016 / 2017	GATEWAY EXPRESS (118 <sup>th</sup> AVE N / CR296)	US19 HWY	E OF 28 <sup>th</sup> ST N	RECONSTRUCT AND NEW MAIN ROAD	**4338801
FY – 2016 / 2017	GATEWAY EXPRESS (SR686 and 44 <sup>th</sup> ST)	118 <sup>th</sup> AVE N / CR296	BAYSIDE BRIDGE	RECONSTRUCT AND NEW MAIN ROAD	**4338801
<b>NOTE:</b> The above listed items are transportation projects that are expected to improve the level of service for monitored roadway facilities. Only transportation projects scheduled for construction within the next three years that are anticipated to increase roadway capacity are listed. Also, due to utilizing generalized tables and GIS for LOS analysis some projects such as intersection improvements, auxiliary lanes, add-on/drop-off lanes, frontage roads, ramps, and ITS devices are not included. <b>Prepared by the Pinellas County MPO</b>					* County & City Projects
					** State Projects



# Pinellas County Metropolitan Planning Organization

## Section 6: Scheduled Improvements (continued)

Map shows estimated start of construction year:

Under const. & completed in 2014

Under construction in 2014

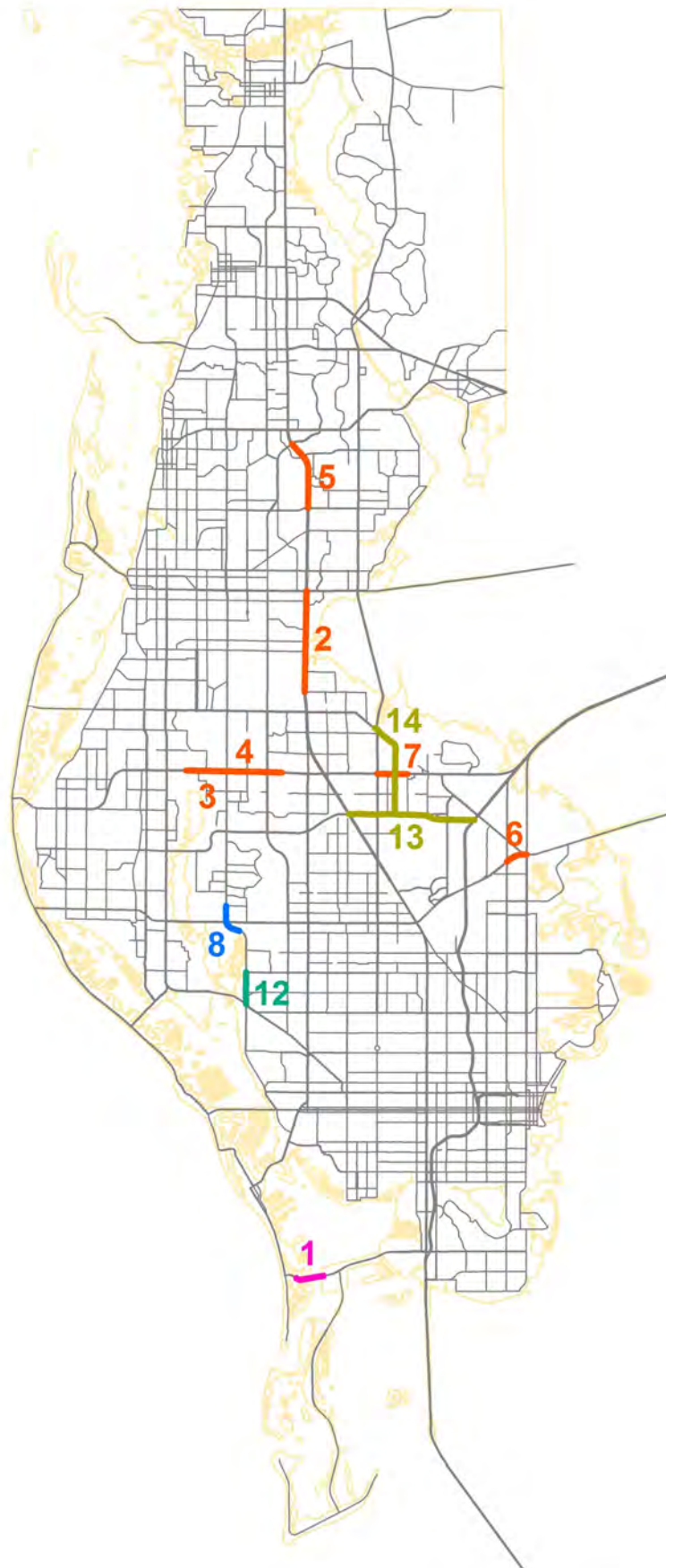
Construction start expected 2014/15

Construction start expected 2015/16

Construction start expected 2016/17



**Note:** The improvements listed on the previous page are transportation projects that are expected to improve the level of service for roadway facilities. Only transportation projects scheduled for construction within the next three years that are anticipated to increase roadway capacity are listed.

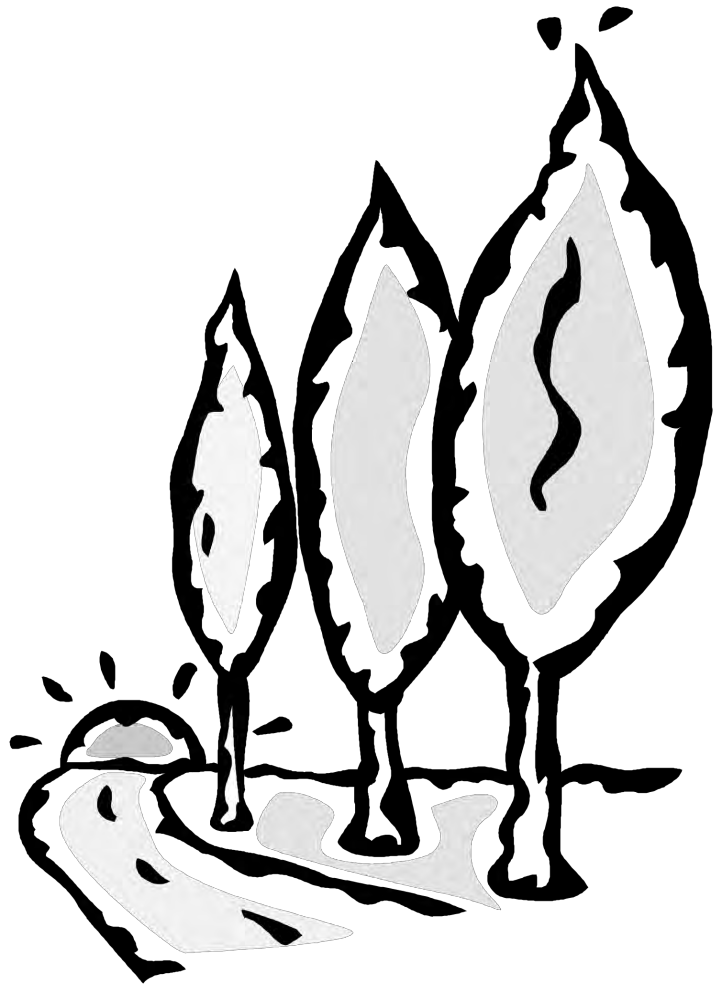


## Section 6: Scheduled Improvements *(continued)*

### Planning for the Future

Using the assistance of computer based scenario analysis tools, the Pinellas County Metropolitan Planning Organization is able to project the performance of the roadway network into any future year.

Scenario analysis tools were used to create the LOS and V/C Ratio maps with scheduled improvements on the following pages. The maps depict how the roadway network is expected to perform after all improvements scheduled thru 2017/2018 have been completed.





# Pinellas County Metropolitan Planning Organization

## Pinellas County MPO 2015 Level of Service Map with Scheduled Improvements 2017/18 (PM Peak Hour Directional) 2014 Base Data

Level of Service	
<span style="color: green;">—</span>	Level of Service B, C
<span style="color: yellow;">—</span>	Level of Service D
<span style="color: blue;">—</span>	Level of Service E
<span style="color: red;">—</span>	Level of Service F

Generated by vTImas database  
Road Facility Capabilities based upon FDOT  
2009 Generalized Service Volume Tables

Gulf of Mexico

Old Tampa Bay

Tampa Bay



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Approved  
September 9, 2015

Plot Date: September 1, 2015  
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sk TPI LOS infor files



# Pinellas County Metropolitan Planning Organization

## Pinellas County MPO 2015 V/C Ratios Map with Scheduled Improvements 2017/18 (PM Peak Hour Directional) 2014 Base Data

### Volume/Capacity Ratios (V/C) for deficient roads

- .9 or greater v/c ratio for roads with LOS E & F
- .9 or greater v/c ratio for roads with LOS B, C, & D
- all other roads

Generated by vTImas database  
Road Facility Capabilities based upon FDOT  
2009 Generalized Service Volume Tables

Gulf of Mexico

Old Tampa Bay

Tampa Bay

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Approved  
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Plot Date: September 1, 2015  
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# Pinellas County Metropolitan Planning Organization

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