Tracking the Trends 2007 - 2011

A Report on Transportation System Performance and Related Indicators in the Orlando Metropolitan Area

May 2012



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Executive Summary

Purpose and Findings

The purpose of this report is to identify and evaluate transportation system trends occurring over the past several years in the Orlando Metropolitan Area. The report contains information on such transportation modes as private automobiles, transit, aviation, rail, bicycling and walking. Statistics on commercial trucks, as well as passengers and freight at Port Canaveral have been included. In addition, population and employment data are included for comparison purposes. This information is presented in a series of tables and line graphs that show changes in these various categories.

Examples of findings include:

- From 2007 to 2011, the estimated population of the Orlando Metropolitan Area (Orange, Osceola and Seminole Counties) <u>increased by 3.25%</u>. (Page 2)
- From 2006 to 2010, the estimated number of international and domestic visitors <u>increased by</u> <u>7.65%</u>. (Page 3)
- From 2007 to 2011, the number of state road mileage (lane miles) <u>increased by 4.28%</u> and the local road mileage (centerline miles) <u>increased by 4.87%</u>. (Page 5)
- From 2006 to 2010, the number of vehicle miles traveled in the Orlando Metropolitan Area increased by 1.32% yet from 2009 to 2010 the number of vehicle miles traveled decreased by 0.06%. (Page 6)
- From 2006 to 2010, the average annual daily traffic count for Interstate 4 from south of SR 417 in Osceola County to north of SR 46 in Seminole County <u>decreased by 10.74%</u> (Page 7)
- From FY 2006/07 to 2010/11, the number of gallons of gasoline consumed in the Orlando Metropolitan Area <u>decreased by 4.82%</u>. (Page 12)
- From FY 2006/07 to 2010/11, the number of gallons of diesel fuel consumed in the Orlando Metropolitan Area <u>decreased by 22.94%</u>. (Page 13)
- From 2007 to 2011, the number of E-PASS/SunPASS transponders in use on the toll roads in the area <u>increased by 33.66%</u>. (Page 17)
- From 2006 to 2010, the number of hours of annual delay per peak auto commuter <u>decreased by</u> <u>13.64%</u>. (Page 17)
- From 2006 to 2010, the number of traffic crashes in the area <u>decreased by 3.17%</u>, the number of injuries <u>decreased by 2.15%</u>, and the number of fatalities <u>decreased by 31.94%</u>. (Page 20)
- From 2006 to 2010, the number of motorcycle injuries <u>decreased by 20.57%</u> and the number of motorcycle fatalities <u>decreased by 47.06%</u>. (Page 21)

- From 2006 to 2010, the number of bicycle and pedestrian injuries <u>decreased 2.37%</u> and the number of bicycle and pedestrian fatalities <u>increased by 3.23%</u>. (Page 21 and 22)
- From FY 2006/07 to 2010/11, the total number of passengers on the LYNX transit system increased by 6.46% (Page 24) and the number of passengers on the I-Ride trolley system increased by 1.04%. (Page 27)
- From 2007 to 2011, the total number of passengers at the Orlando International Airport decreased by 2.89% and the tons of cargo imported/exported decreased by 9.06%. (Page 30)
- During the same period, the total number of passengers at the Orlando-Sanford International Airport <u>decreased by 11.41%</u> and the tons of cargo imported/exported <u>decreased by 59.69%</u>. (Page 31)
- From FY 2006/07 to 2010/11, the number of passengers using the Amtrak rail service in the Orlando Metropolitan Area increased by 27.69%. (Page 33)
- From 2006/07 to 2010/11, the number of passengers traveling out of Port Canaveral <u>decreased</u> <u>by 26.46%</u> and the tons of cargo imported/exported <u>increased by 27.31%</u>. (Page 34)
- From 2006/07 to 2010/11, the total number of toll transactions <u>decreased by 5.16%</u> yet the amount of toll revenue <u>increased by 15.59%</u>. (Page 38-39)
- From 2006/07 to 2010/11, the amount of rental car surcharge revenues collected in Orange, Osceola, and Seminole Counties <u>decreased by 17.99%</u> while statewide collections have <u>decreased by 6.80%</u>. (Page 37)

Several underlying themes arose during the collection and analysis of the data. Themes include:

Economic Impact

With the general slowdown in economic activities around the United States and locally in Central Florida, unforeseen levels of unemployment and declining personal income have negatively caused a trickle-down effect on consumer purchasing and behavior. Speculations suggest that the increase in unemployed Americans has had a reciprocal effect on fuel consumption and traffic safety incidents. The decrease in fuel consumption can be viewed in two scopes, the first relates to the reduction in gasoline consumption by commuters. Without employment, work related travel is fractionalized. The second scope relates to non-work-related fuel consumption. Without consistent employment and income, activities such as boating and other recreational activities are indefinitely postponed. The rise and fluctuation of fuel costs also contribute to this reduction in consumption.

Technological Advancements

Advances in automotive manufacturing and electronic technologies have assisted in the reduction of fuel consumption, the management of roadway congestion, and the overall travel comfort and ease for users. With hybrid technology growing and becoming more affordable, this "green" alternative will continue to assist in the reduction of need and consumption of fossil fuel. Advances in radio-frequency technology have created a constant trend of growth in electronic collection of user fees on our region's

tolled facilities. This breakthrough has allowed the Orlando-Orange County Expressway Authority (OOCEA) and Florida's Turnpike Enterprise (FTE) to utilize open road tolling, which reduces congestion and accidents caused during toll collection. The use of surveillance cameras and variable-message signs on Central Florida roadways has grown. These management tools keep both traffic engineers and roadway users in tune with real-time conditions. Variable-message signs display estimated travel times and are also used during Amber, Silver, and other community safety alerts.

Safety Enhancements

Maintaining safety on Central Florida roadways is essential. Both automotive technological advances and on-the-scene assistance contribute to the reduction in serious injuries and fatalities related to crashes. Another mechanism used to enhance safety at and around intersections are red light cameras. Their use and the recent passage of consistent statewide legislation will continue this growing trend by both local municipalities and state agencies. Safety improvements developed by automotive manufacturers can also be credited with the reduction in crash-related injuries and fatalities. Standard side curtain airbags for both the driver and passengers and collision-avoidance audible sensors are just a few examples of new and emerging features that enhance safety. The Road Rangers program has also provided relief to region's roadways by assisting accident victims and stranded commuters. This service minimizes traffic congestion caused by minor accidents and vehicle breakdowns.

<u>Transit</u>

Decades of rapid horizontal growth and suburban sprawl have caused the Central Florida region to become very dependent on the personal automobile. This is not sustainable. A greater emphasis needs to be put on transit, as acknowledged in the adopted regional growth vision and our Long Range Transportation Plan. In future years, the Central Florida region will be introduced to the operation of commuter rail. This development will cause land use and development changes at rail stations and around surrounding areas. This investment will require a stronger commitment to funding all forms of transit.

Tracking the Trends: 2007 - 2011

Introduction

The transportation system of an urban area is comparable to the circulatory system of a human body. Just as the circulatory system transports blood to organs, muscles, etc., an area's transportation system transports people and goods to and from work, school, shopping, entertainment, places of worship, health facilities, and other locations. Thus, the condition of an urban area's transportation system has a very direct impact on the "health" of the area as a whole. If an area's highways are overly congested or there is not adequate transit, rail or air service, this will have an adverse effect on the area's economy and the overall quality of life of its citizens.

The purpose of this report is to provide an overview of the condition of the Orlando Metropolitan Area's transportation system by evaluating trends that have occurred over the past several years on the area's highway, transit, aviation, rail, and bicycle and pedestrian systems. In addition, information on freight movement by air and sea is included. This data is presented using various indicators of activity for these transportation modes.

This information was provided by such state agencies as the Florida Department of Transportation, Florida's Turnpike Enterprise, and the Florida Department of Highway Safety and Motor Vehicles. Additional information was provided by the Florida Energy Office, the Florida Department of Environmental Protection, the Florida Department of Business and Professional Regulation, and the Florida Department of Revenue.

Local agencies that provided information include the Orlando-Orange County Expressway Authority, LYNX, the International Drive Master Transit and Improvement District, the Greater Orlando Aviation Authority, the Sanford Airport Authority, the Kissimmee Gateway Airport, the University of Central Florida, and the Orange, Osceola and Seminole County School Districts. The Federal Aviation Administration, Amtrak, the US Census Bureau, the University of Florida's Bureau of Economic and Business Research, the Florida Agency for Workforce Innovation, the Texas Transportation Institute, and the Canaveral Port Authority provided additional information, as did Orange, Osceola and Seminole Counties, and the City of Orlando.

MetroPlan Orlando would like to express its appreciation to all of these agencies for their assistance in compiling this report.

Note: This report is prepared on an annual basis by MetroPlan Orlando staff using information provided by many different sources, as described in the previous paragraphs. This is the latest information that was available at the time of the publication of this report for the various indicators used to measure transportation system activity over a five-year period. The beginning and ending years vary for different indicators, depending on what year the latest data is available. For example, some indicators have data available through 2011, while for other indicators, the latest available data is for 2010 or earlier. In addition, the data for some indicators is based on calendar years, and the data for others is based on fiscal years.

Orlando Metropolitan Area Profile

The Orlando Metropolitan Area, which consists of Orange, Osceola and Seminole Counties, has been one of the fastest growing metropolitan areas in the country. Historically, the area's economy has largely been based on tourism due to such major tourist attractions as Walt Disney World, Universal Studios, and Sea World, as well as many other smaller attractions. In addition, the high tech industry has a substantial presence in the Orlando Metropolitan Area, and includes such major employers as Lockheed Martin and AT&T. Other major employers in the area include the University of Central Florida, Orlando International Airport, Tupperware, Florida Hospital, Orlando Health, and Darden Restaurants.

Population

The following table shows the population for the counties and municipalities in the Orlando Metropolitan Area from 2007 through 2011:

Orange County	2007	2008	2009	2010	2011
Apopka	39,508	40,280	40,406	40,721	42,089
Bay Lake	20	20	20	20	6
Belle Isle	5,881	5,886	5,899	5,944	6,018
Eatonville	2,539	2,493	2,400	2,375	2,198
Edgewood	2,236	2,278	2,333	2,314	2,503
Lake Buena Vista	23	23	23	23	21
Maitland	16,100	16,209	16,150	16,786	15,808
Oakland	1,958	1,938	1,931	1,927	2,556
Ocoee	33,533	33,658	33,871	34,187	36,005
Orlando	228,765	234,130	233,115	233,160	241,978
Windermere	2,638	2,678	2,708	2,695	2,481
Winter Garden	30,065	30,838	30,987	31,492	35,281
Winter Park	28,486	28,921	28,581	28,434	27,727
Unincorporated	713,851	715,627	710,458	710,077	742,671
Total	1,105,603	1,114,979	1,108,882	1,110,155	1,157,342

Osceola County	2007	2008	2009	2010	2011
Kissimmee	61,036	61,458	61,250	61,202	60,375
St. Cloud	30,634	32,827	32,630	33,889	35,844
Unincorporated	174,453	179,424	178,908	180,575	177,648
Total	266,123	273,709	272,788	275,666	273,867

Seminole County	2007	2008	2009	2010	2011
Altamonte Springs	43,529	43,243	42,630	42,173	41,600
Casselberry	25,013	25,182	24,672	24,732	26,321
Lake Mary	14,288	14,944	14,615	14,559	13,868
Longwood	14,062	14,018	13,849	13,687	13,620
Oviedo	32,855	33,431	33,529	33,316	33,815
Sanford	53,099	54,306	53,816	53,392	53,422
Winter Springs	34,433	34,390	34,340	33,874	33,314
Unincorporated	208,419	206,899	206,308	204,367	208,627
Total	425,698	426,413	423,759	420,100	424,587
Grand Total	1,797,424	1,815,101	1,805,429	1,805,921	1,855,796

Source: University of Florida, Bureau of Economic and Business Research

Historic Population Overview for the Orlando Urban Area

The following line graph illustrates the 20-year population trend total for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: University of Florida, Bureau of Economic and Business Research * 1992-2000 BEBR population estimates were adjusted and validated following the 2000 National Census Reporting

Employment

The following table shows the number of employed persons living in the Orlando Metropolitan Area from 2007 through 2011:

Employment	2007	2008	2009	2010	2011
Orange County	569,869	569,111	537,363	535,509	543,589
Osceola County	126,702	129,623	124,019	123,591	125,455
Seminole County	229,094	228,136	213,889	213,151	216,367
Total	925,665	926,870	875,271	872,251	885,411

Source: Florida Research and Economic Database

Hotel/Motel Rooms

As mentioned earlier, tourism and business/convention travel are important components of the economy of the Orlando Metropolitan Area. As a result, there are a large number of hotel and motel rooms in the region. The following table shows the number of hotel/motel rooms in the Orlando Metropolitan Area from FY 2006/07 through 2010/11:

Hotel/Motel Rooms	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	78,698	79,297	78,472	83,021	84,046
Osceola County	26,595	26,317	26,159	26,132	25,330
Seminole County	4,653	4,642	4,697	5,013	5,305
Total	109,946	110,256	109,328	114,166	114,681

Source: Florida Department of Business and Professional Regulation

<u>Visitors</u>

The importance of Orlando as a travel destination is further illustrated in the following table, which shows the number of domestic and international visitors traveling to the Orlando Metropolitan Area from 2006 through 2010, the latest year this data is available.

Visitors to Orlando	2006	2007	2008	2009	2010
Domestic	45,114,000	45,907,000	45,515,000	43,319,000	47,780,000
International	2,686,000	2,838,000	3,343,000	3,264,000	3,675,000
Total	47,800,000	48,745,000	48,858,000	46,583,000	51,455,000

Source: Orlando/Orange County Convention & Visitors Bureau (Visit Orlando)

Licensed Drivers

Along with the number of registered vehicles, the number of licensed drivers in the area is another indicator of traffic congestion levels. The following table illustrates the number of licensed drivers in Orange, Seminole and Osceola Counties from 2007 through 2011:

Licensed Drivers	2007	2008	2009	2010	2011
Orange County	866,993	874,217	875,462	876,077	880,791
Osceola County	210,472	218,137	221,244	223,721	225,934
Seminole County	343,826	346,112	346,343	344,358	343,220
Total	1,421,291	1,438,466	1,443,049	1,444,156	1,449,945

Source: Florida Department of Highway Safety and Motor Vehicles

Registered Vehicles

Another indicator that can be used to measure traffic congestion in the Orlando Metropolitan Area is the change in the number of vehicles on the highway system. The following table illustrates the number of registered motor vehicles in Orange, Seminole and Osceola Counties from FY 2006/07 through FY 2010/11:

Registered Vehicles	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	933,356	920,965	962,311	931,465	931,161
Osceola County	210,329	212,696	196,051	195,998	199,159
Seminole County	381,971	386,946	410,839	415,002	412,129
Total	1,525,656	1,520,607	1,569,201	1,542,465	1,542,449

Source: Florida Department of Highway Safety and Motor Vehicles **Note:** Excludes mobile homes, travel trailers, vessels, and trailers.

Commercial Trucks

Most of the freight moved within and through the Orlando Metropolitan Area is carried by commercial trucks (trucks weighing more than 5,000 lbs.). The increase in the amount of freight carried by truck in the area had required an increase in the number of commercial trucks. This increase from FY 2006/07 to 2007/08 and decrease from FY 2008/09 to 2010/11 is illustrated in the following table:

Commercial Trucks	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	46,648	55,753	54,717	52,418	51,907
Osceola County	10,010	10,712	10,455	10,333	10,357
Seminole County	20,135	19,695	19,304	19,262	19,164
Total	76,793	86,160	84,476	82,013	81,428

Source: Florida Department of Highway Safety and Motor Vehicles

Note: The number of commercial trucks shown in this section is also included in the total number of registered vehicles shown in the previous table.

Motorcycles

The number of motorcycles in the Orlando Metropolitan Area also increased until FY 2006/07. Since that year, numbers have fluctuated, which is shown in the following table from 2006/07 through 2010/11:

Motorcycles	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	28,947	27,779	29,605	28,927	29,290
Osceola County	9,798	7,734	7,983	7,756	8,038
Seminole County	15,867	13,388	14,085	13,568	13,561
Total	54,612	48,901	51,673	50,251	50,889

Source: Florida Department of Highway Safety and Motor Vehicles

Note: The number of motorcycles shown in this section is also included in the total number of registered vehicles shown in the previous table.

Highway Statistics

As mentioned earlier, the Orlando Metropolitan Area has one of the fastest growing populations in the country, and, as a result, the number of new motor vehicles coming into the area is growing rapidly. Due to this growth, the fact that the private automobile is the predominant mode of transportation and construction delays with building additional highway capacity - the area's highway system has become increasingly congested.

State Road Mileage (Lane Miles)

The number of lane miles of state roads in Orange, Osceola and Seminole Counties from 2007 through 2011 is shown in the tables below. These have been divided into interstate facilities (I-4), toll roads such as SR 408, SR 417 and SR 528, and other state roads, such as SR 50, SR 436, SR 434, US 441, US 17/92, etc.

Orange County	2007	2008	2009	2010	2011
Interstate (I-4)	185.2	184.2	184.2	184.2	184.2
Toll Roads	623.4	642	644.7	680.1	714.6
Other State Roads	966.3	970.4	996.3	965.2	974.4
Total	1,774.9	1,796.6	1,825.2	1,829.5	1873.2

Osceola County	2007	2008	2009	2010	2011
Interstate (I-4)	48.2	47.3	47.3	47.3	47.3
Toll Roads	264.8	264.5	264.5	264.5	264.5
Other State Roads	395.0	396.2	431.0	431.0	430.8
Total	708	708.0	742.8	742.8	742.6

Seminole County	2007	2008	2009	2010	2011
Interstate (I-4)	95.2	95.2	95.2	95.2	84.8
Toll Roads	70.4	70.3	70.3	70.3	71
Other State Roads	342.9	343.3	346.6	346.7	347.7
Total	508.5	508.8	512.1	512.2	503.5

3,080.1

3,084.50

3,119.30

Grand Total2,991.43,013.3Source: Florida Department of Transportation

Note: Recent review and re-classification of State facilities has resulted in mileage deviations.

Local Road Mileage (Paved Centerline Miles)

The number of miles of local (city and county) roads in the Orlando Metropolitan Area has also increased in recent years. The table below shows the change in the number of miles of paved local roads in Orange, Osceola and Seminole Counties over the 2006-2010 timeframe, since the latest information available is for 2010. (The numbers in the table reflect the centerline miles of paved roads, information that is collected annually from local governments by FDOT. Lane mileage figures by facility-type classifications for local roads were not available.)

Local Road Mileage	2006	2007	2008	2009	2010
Orange County	3,954.8	4,073.9	4,100.4	4,118.9	4,137.5
Osceola County	1,022.7	1,133.0	1,157.1	1,164.7	1,172.6
Seminole County	1,493.1	1,473.0	1,473.0	1,477.6	1,475.8
Total	6,470.6	6,679.9	6,730.5	6,761.2	6,785.9

Source: Florida Department of Transportation

Vehicle Miles Traveled

The number of vehicle miles traveled (VMT) on the highway network is an indicator that measures the growth in both the number of vehicles and the distances driven in the Orlando Metropolitan Area. The Florida Department of Transportation annually estimates the VMT for all the counties in the state by multiplying the lengths of the state and local roads in the counties by the average daily trips on those roads. The following table and line-graph illustrate the average daily VMT in Orange, Seminole and Osceola Counties from 2006 through 2010:

Vehicle Miles Traveled	2006	2007	2008	2009	2010
Orange County	34,663,274	36,029,040	35,436,426	35,586,328	35,657,527
Osceola County	8,961,895	9,139,112	8,836,800	8,730,733	8,639,272
Seminole County	10,211,094	10,325,317	9,866,475	10,262,469	10,249,225
Total	53,836,263	55,493,469	54,139,701	54,579,530	54,546,024

Source: Florida Department of Transportation

10-Year Historic Trend - Vehicle Miles Traveled

The following line graph illustrates the 10-year VMT trend total for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation

Traffic Counts - Major Roadways

One of the main methods for measuring the level of activity on an area's highway system is the collection of traffic counts on major roadways. More than 300 traffic counts for various locations in Orange, Seminole, and Osceola Counties are obtained each year by the MetroPlan Orlando staff from the Florida Department of Transportation (FDOT), as well as from the three counties and the City of Orlando. This information is published in a Traffic Count Report, which is shown in Appendix A.

The tables shown on pages 7 - 9 contain FDOT daily (24-hour) traffic counts averaged annually on the following major roadways from 2006 through 2010:

- Interstate 4 (SR 400)
- State Road 50 (Colonial Drive)
- State Road 436
- State Road 527 (Orange Avenue)
- State Road 434
- United States Route 441(Orange Blossom Trail)
- United States Route 17 / 92
- State Road 423 (John Young Parkway)
- State Road 435 (Kirkman Road)
- State Road 426 (Aloma Avenue)
- United States Route 192

1-4	2006	2007	2008	2009	2010
SW of SR 417 (Osc. Co.)	95,500	79,000	78,000	78,500	85,500
NW of Osceola Co. Line	143,500	121,500	117,000	125,500	113,500
at Florida's Turnpike	157,500	160,000	146,500	152,500	157,000
N of Kaley Ave.	171,000	177,500	175,000	142,500	136,500
S of SR 50	199,500	207,000	200,000	160,000	158,000
N of Princeton St.	210,000	209,000	182,500	159,500	164,000
N of Lee Rd.	200,500	208,000	205,000	160,000	170,500
S of Seminole Co. Line	163,500	162,000	149,000	158,000	149,500
N of SR 436	138,000	142,000	139,500	142,000	146,500
N of SR 434	137,100	137,300	131,600	132,500	133,900
S of CR 46A	127,500	132,000	126,500	125,500	126,500
N of SR 46	112,000	113,000	111,000	108,000	115,000
Total Average	154,633	154,025	146,800	137,042	138,033

SR 50	2006	2007	2008	2009	2010
E of CR 545	35,600	35,200	33,300	32,800	31,500
E of Old Winter Garden Rd.	41,500	44,000	39,500	36,000	35,000
E of Powers Dr.	41,500	39,500	39,500	37,000	36,000
E of John Young Pkwy.	36,000	40,500	34,500	35,000	32,000
E of Edgewater Dr.	42,500	38,500	39,000	32,500	36,500
W of US 17/92	45,000	43,500	43,000	42,000	38,000
E of Bennett Rd.	58,500	54,500	53,000	52,000	21,500
E of SR 436	41,000	41,000	40,000	39,000	24,500
E of Goldenrod Rd.	46,000	46,000	45,000	44,000	37,000
E of Dean Rd.	46,500	49,000	45,500	42,500	41,000
E of Alafaya Tr.	44,000	47,500	46,500	44,000	45,000
W of SR 520	27,000	27,200	27,200	26,200	25,700
Total Average	42,092	42,200	40,500	38,583	33,642

SR 436	2006	2007	2008	2009	2010
E of US 441	36,500	35,500	33,500	33,500	32,000
W of SR 434	54,000	56,500	55,000	53,000	54,500
W of Montgomery Rd.	54,000	56,000	52,500	50,000	50,500
W of Palm Springs Dr.	68,500	66,500	62,500	57,000	58,000
E of CR 427	53,500	54,500	52,000	49,000	52,000
E of US 17/92	73,000	79,000	72,500	72,000	70,500
S of Red Bug Lake Rd.	60,000	65,000	61,000	59,500	55,500
N of SR 50	46,000	48,000	47,000	53,500	43,000
N of East-West Expy.	58,500	54,000	51,500	55,500	45,500
N of Curry Ford Rd.	54,500	52,000	51,000	56,500	48,000
S of Hoffner Ave.	46,000	48,500	45,701	44,600	44,800
N of Beachline Expy.	48,500	48,500	51,000	47,000	49,500
Total Average	54,417	55,333	52,933	52,592	50,317

Orange Ave.	2006	2007	2008	2009	2010
N of Sand Lake Rd.	38,000	39,500	39,500	36,500	39,000
N of Hansel Ave.	45,500	44,000	41,500	40,000	41,000
S of Michigan Ave.	38,000	37,700	36,638	36,400	36,400
S of Kaley Ave.	36,000	35,500	36,500	32,000	33,000
SW of US 17/92	15,200	13,500	15,100	14,600	15,100
S of Clay St.	21,000	18,900	20,000	21,000	17,400
Total Average	32,283	31,517	31,540	30,083	30,317

SR 434	2006	2007	2008	2009	2010
N of Edgewater Dr.	22,500	23,000	20,000	19,900	20,000
N of Orange Co. Line	38,000	40,500	38,000	39,500	40,500
N of SR 436	32,000	36,000	35,000	33,000	38,500
W of I-4	46,000	54,500	52,000	55,500	48,000
E of Palm Springs Dr.	42,500	40,800	38,992	39,300	39,200
W of CR 427	41,500	40,500	40,000	39,000	41,000
W of US 17/92	31,500	32,500	29,500	30,000	29,000
E of SR 419	34,500	38,500	35,000	33,000	33,500
E of Tuskawilla Rd.	23,000	25,500	25,500	23,500	23,500
N of Chapman Rd.	28,500	28,000	33,000	33,500	33,500
S of Seminole Co. Line	42,000	50,500	39,000	50,000	53,000
N of SR 50	66,000	68,000	64,500	62,000	62,000
Total Average	37,333	39,858	37,541	38,183	38,475

US 441	2006	2007	2008	2009	2010
NW of Plymouth-Sorrento Rd.	33,000	34,500	34,500	32,500	33,500
SW of SR 436	27,000	35,500	50,500	49,500	39,500
N of Clarcona-Ocoee Rd.	34,500	31,000	32,500	27,500	29,500
N of SR 50	30,000	28,500	26,500	27,500	25,000
S of SR 50	26,500	26,000	21,500	27,000	21,500
S of Kaley Ave.	35,000	35,500	33,000	30,500	29,000
N of Holden Ave.	66,500	65,500	60,500	58,000	57,000
N of Sand Lake Rd.	59,000	58,500	53,000	53,000	50,000
N of Beachline Expy.	74,000	71,500	75,000	70,000	71,000
S of Taft-Vineland Rd.	46,000	45,500	45,000	43,000	47,000
Total Average	43,150	43,200	43,200	41,850	40,300

US 17/92	2006	2007	2008	2009	2010
W of Pleasant Hill Rd.	28,500	26,500	25,500	26,000	26,000
S of Emmett St.	50,500	58,500	52,500	54,000	56,000
N of SR 50	29,000	28,000	27,500	25,000	27,500
S of Orange Ave.	29,500	27,500	26,000	24,500	26,000
S of Lee Rd.	35,500	35,000	35,500	32,000	31,500
N of Lake Ave.	54,500	56,000	50,500	44,000	51,000
S of Maitland Blvd.	33,000	33,000	30,000	29,500	28,500
N of Orange Co. Line	55,500	53,500	52,000	49,000	50,000
N of SR 436	56,500	52,000	51,500	50,500	52,000
N of SR 434	39,500	41,000	39,500	36,500	37,000
S of CR 427	33,000	35,500	32,000	32,500	29,500
S of Lake Mary Blvd.	37,500	40,500	37,000	35,500	35,000
S of CR 46A	26,500	26,000	24,000	21,000	21,500
S of SR 46	25,500	25,500	25,000	22,500	21,000
Total Average	38,179	38,464	36,321	34,464	35,179

John Young Pkwy.	2006	2007	2008	2009	2010
S of US 192	40,000	39,500	35,500	36,000	36,000
N of SR 408	43,000	46,000	48,500	44,000	42,500
S of SR 50	49,500	47,500	48,500	48,500	45,500
N of SR 50	47,500	46,000	44,500	44,000	42,000
S of Silver Star Rd.	32,500	28,500	30,500	29,500	27,500
S of US 441	39,500	40,000	38,000	37,000	34,500
Total Average	42,000	41,250	40,917	39,833	38,000

Kirkman Rd.	2006	2007	2008	2009	2010
N of Sand Lake Rd.	29,500	30,000	26,000	27,000	29,500
N of International Dr.	52,000	9,000	47,000	49,500	48,500
S of Vineland Rd.	61,500	60,000	56,500	55,500	53,000
S of Conroy Rd.	58,000	59,500	58,500	57,500	NC
S of Raleigh St.	58,500	51,000	57,500	54,500	53,000
S of Old Winter Garden Rd.	49,000	54,000	53,000	52,000	49,000
S of East-West Expy.	38,000	40,500	38,500	39,500	36,000
Total Average	49,500	43,429	48,143	47,929	44,833

SR 426	2006	2007	2008	2009	2010
E of I-4	41,000	38,000	36,000	36,500	30,000
E of US 17/92	28,000	26,000	25,500	13,800	13,600
E of Park Ave.	39,500	40,000	42,500	41,500	41,000
W of Lakemont Ave.	37,000	38,500	37,000	22,500	22,500
W of SR 436	43,500	44,500	39,500	42,000	44,000
E of Goldenrod Rd.	39,500	40,500	40,500	38,500	37,500
W of SR 417	42,500	44,500	41,500	44,500	33,000
E of SR 417	27,500	27,500	27,500	27,500	30,000
N of Mitchell Hammock Rd.	19,900	30,500	19,700	21,500	22,500
W of SR 434	11,500	14,300	13,900	13,600	14,100
Total Average	32,990	34,430	32,360	30,190	28,820

US 192	2006	2007	2008	2009	2010
E of Formosa Gardens Blvd.	59,500	58,000	55,500	46,000	49,000
W of I-4	73,500	70,000	64,500	57,500	54,000
E of I-4	55,000	59,500	60,000	45,500	58,500
SE of SR 535	57,500	54,000	58,000	50,500	54,000
W of John Young Pkwy.	45,500	43,000	41,500	45,000	45,000
E of US 441	43,000	47,000	45,500	48,000	45,500
SE of Boggy Creek Rd.	36,500	44,000	39,000	42,500	38,500
NW of Kissimmee Park Rd.	39,000	47,500	42,000	44,000	42,500
E of Canoe Creek Rd.	47,500	47,500	41,500	43,000	41,500
W of CR 532	24,000	24,000	21,000	22,000	22,000
Total Average	48,100	49,450	49,722	44,400	45,050

Source: Florida Department of Transportation

10-Year Historic Trend - I-4 Daily Traffic Counts

The following line graph illustrates the 10-year historic trend of I-4's average daily traffic count total for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation

Note: The major decrease in the average traffic counts on I-4 between 2001 and 2002 is partially due to auxiliary lane construction projects underway on several segments on I-4 during 2002. In addition, FDOT began using ITS loops on I-4 to count vehicles in 2002 rather than the tubes used in previous years for axle counts. This caused traffic counts to be decreased since the axle error factor was no longer applied.

Traffic Counts - Toll Roads

In addition to the major roadways shown above, the Orlando Metropolitan Area has a network of toll roads that are carrying increasing amounts of traffic. These toll roads are operated by the Orlando-Orange County Expressway Authority (OOCEA), the Florida's Turnpike Enterprise, and Osceola County. They include SR 408 (East-West Expressway), SR 417 (the GreeneWay), SR 429 (Western Expressway), SR 528 (Beachline Expressway), a segment of SR 414, Florida's Turnpike, and the Osceola Parkway.

The tables shown on pages 10 - 11 contain the annual average weekday traffic counts for the region's toll facilities from 2006 through 2010:

SR 408	2006	2007	2008	2009	2010
W of SR 50 Spur	44,100	49,570	46,980	42,220	42,740
E of Kirkman Rd.	71,970	75,980	71,650	64,690	65,860
W of US 441	82,700	86,440	83,380	74,660	74,980
E of Rosalind Ave.	127,170	127,590	119,820	126,480	130,650
W of Conway Rd.	138,090	138,170	132,850	132,200	138,930
E of Goldenrod Rd.	109,610	103,300	104,150	104,230	109,580
E of Dean Rd.	69,900	70,100	65,990	65,900	68,130
S of E SR 50	33,360	29,670	31,120	32,530	33,300
Total Average	84,613	85,103	81,993	80,364	83,021

SR 414 (Tolled)	2006	2007	2008	2009	2010
E of CR 437A	-	-	-	5,920	7,295
E of SR 429	-	-	-	10,500	13,025
E of Keene Rd.	-	-	-	12,400	16,075
E of Hiawassee Rd/	-	-	-	13,780	18,205
E of US 441	-	-	-	27,340	31,075
Total Average	-	-	-	13,988	17,135

Note: SR 414 Apopka Expressway partially opened to traffic in February 2009 and fully opened to traffic in May 2009

SR 417	2006	2007	2008	2009	2010
N of US 192*	20,500	21,000	21,000	19,200	18,000
W of John Young Pkwy.	42,700	45,800	43,530	38,200	39,630
E of Florida's Turnpike	41,890	43,260	40,610	35,085	36,450
W of Boggy Creek Rd.	42,400	44,800	40,390	35,900	36,520
W of Narcoossee Rd.	35,410	34,570	30,370	27,730	28,640
S of Curry Ford Rd.	74,300	76,100	68,900	63,300	63,160
S of University Blvd.	81,600	82,800	75,550	70,500	72,900
N of Aloma Ave.*	50,700	51,400	50,800	46,100	43,600
S of SR 434*	45,500	47,400	46,700	42,300	40,200
S of CR 427*	41,100	43,500	43,300	39,900	38,100
Total Average	47,610	49,063	46,115	41,822	41,720

SR 429	2006	2007	2008	2009	2010
S of US 192*	-	6,200	7,800	7,900	8,400
N of Western Way*	-	9,600	10,100	12,111	12,500
N of Seidel Rd.	8,740	13,180	12,820	11,950	13,070
S of CR 535	8,400	14,000	13,540	12,500	34,250
N of CR 535	29,130	34,090	34,010	32,510	38,470
S of SR 438	40,170	41,650	37,350	36,330	38,470
NE of Ocoee-Apopka Rd.	35,070	36,400	32,660	31,930	33,720
At Forest Lake Main Plaza	29,200	30,410	26,990	27,600	29,500
S of US 441	26,740	27,610	24,440	25,080	26,410
Total Average	19,717	23,682	22,190	21,990	26,088

SR 528	2006	2007	2008	2009	2010
E of I-4*	77,400	76,100	78,300	74,500	75,300
W of John Young Pkwy.*	80,000	78,600	81,100	77,000	77,400
E of US 441*	70,700	70,000	69,600	63,900	64,400
E of Boggy Creek Rd.	92,670	93,290	85,700	85,340	88,765
Airport Main Toll Plaza	80,700	82,400	76,260	75,200	77,840
W of Narcoossee Rd.	67,130	75,590	68,070	65,670	66,350
E of Narcoossee Rd.	55,160	61,760	55,610	53,280	54,080
Beachline Main Toll Plaza	46,300	47,700	42,450	43,300	46,300
Total Average	71,258	73,180	69,636	67,274	68,804

Florida's Turnpike	2006	2007	2008	2009	2010
S of SR 50	71,900	73,900	74,000	66,900	65,700
N of SR 429	66,000	66,900	64,500	59,800	57,600
N of SR 408	102,300	104,600	104,200	99,100	96,600
N of SR 528	69,600	74,500	70,500	67,600	69,400
N of of Osceola Co. Line	56,400	62,300	57,100	54,100	55,000
S of US 441	44,400	50,200	47,900	46,000	46,700
N of Partin Settlement Rd.	25,200	31,800	31,400	30,600	31,000
S of Neptune Rd.	26,900	32,970	33,860	32,430	32,300
Total Average	57,838	62,146	60,433	57,066	56,788

Osceola Parkway	2006	2007	2008	2009	2010
W of SR 417	19,800	20,780	21,000	20,200	18,830
W of Lake Wilson Rd.	18,880	20,000	21,000	19,900	21,970
E of John Young Pkwy.	27,120	28,660	29,800	26,800	26,800
W of Florida's Turnpike	51,800	54,560	58,000	55,750	55,750
W of Florida Pkwy.	45,020	45,320	45,300	45,300	45,300
Total Average	32,524	33,864	35,020	33,590	33,730

Sources: Orlando-Orange County Expressway Authority, Florida's Turnpike Enterprise, and Osceola County Engineering Department, Florida Department of Transportation * Annual Average Daily Traffic (AADT)

Consumption Statistics

Gasoline Consumption

The consumption of gasoline over a period of several years is another indicator of the change in the number of vehicles and amount of travel in the Orlando Metropolitan Area. The following charts illustrate the number of gallons of gasoline sold in Orange, Osceola and Seminole Counties, as well as the total for all three counties, from FY 2006/07 through FY 2010/11:

Gasoline Consumption	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	578,387,511	589,719,332	566,155,079	570,256,543	556,088,277
Osceola County	169,837,443	156,528,720	156,882,557	160,258,482	156,866,627
Seminole County	201,591,900	199,043,686	192,591,837	192,742,467	191,090,864
Total	949,816,854	945,291,738	915,629,473	923,257,492	904,045,768

Source: Florida Department of Revenue

10-Year Historic Trend - Gasoline Consumption

The following line graph illustrates the 10-year gasoline consumption trend total for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Revenue

Average Monthly Gasoline Price per Gallon

One factor that influences the amount of gasoline consumed is the price per gallon for gasoline. The average monthly price per gallon for regular gasoline in the Orlando Metropolitan Area from 2009 through 2011 is shown in the following chart.



Source: OrlandoGasPrices.com

Diesel Fuel Consumption

The consumption of diesel fuel over a period of several years is another indicator of the change in the number of vehicles, particularly commercial trucks, in the Orlando Metropolitan Area. The following charts illustrate the number of gallons of diesel fuel sold in the area's three counties, from FY 2006/07 through FY 2010/11.

Diesel Fuel Consumption	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	121,678,155	113,229,050	100,812,447	103,524,098	105,308,062
Osceola County	25,985,440	22,819,295	18,424,719	13,654,552	13,765,224
Seminole County	26,427,473	23,703,673	19,687,696	18,171,185	15,089,335
Total	174,091,068	159,752,018	138,924,862	135,349,835	134,162,621

Source: Florida Department of Revenue

10-Year Historic Trend - Diesel Fuel Consumption

The following line graph illustrates the 10-year diesel fuel consumption trend total for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Revenue

Average Monthly Diesel Fuel Price per Gallon

The average monthly price per gallon for diesel fuel from 2009 through 2011 is shown in the following chart. (These figures are for the southeast United States, since diesel price information for the Orlando area or for Florida was not available.)



Source: Energy Information Administration

Management and Operations Statistics

<u>Overview</u>

Management and operations (M&O) involves the implementation of various strategies and technologies to improve traffic flow on existing roadways without adding lanes or building new roads. MetroPlan Orlando has been placing a greater emphasis on the planning and implementation of M&O strategies in recent years as a cost-effective method to relieve traffic congestion in the area.

The Texas Transportation Institute's 2010 Urban Mobility Study provides several inventory and performance measures on congestion in the Orlando area for the years from 1982 to 2009. The report includes an estimate on the total effect of M&O treatments on traffic congestion. Information from the 2010 Urban Mobility Study is reported in this section. This report provides information for assessing the affect of these strategies on reducing traffic congestion.

M&O strategies include the use of Intelligent Transportation Systems (ITS). A number of ITS technologies are currently being applied in the Orlando area, including the use of 75 surveillance cameras and 63 variable message signs along I-4 from the St. Johns River bridge to west of US 192. Additionally, the Orlando-Orange County Expressway Authority has installed 36 variable message signs and 167 cameras along SR 408 from Kirkman Road to SR 417, SR 417 from SR 408 to the Seminole County line, as well as at mainline toll plazas throughout the expressway system. These cameras and signs enable the Florida Highway Patrol to determine the location and severity of traffic incidents and inform motorists of delay times, alternate routes, etc. Several toll plazas on the 100-mile expressway system have been converted to "open road tolling" express lanes, which provide another application of technology. It allows drivers to bypass the cash lane because electronic monitors over the roadway collect the tolls as the E-PASS (electronic tolling) vehicles travel at posted highway speed.

An Automated Traveler Information Service (511), which was initially operated by FDOT along 50 miles of the I-4 corridor in the Orlando area, enables callers to get up-to-the-minute information simply by saying aloud the area of the Interstate about which they are seeking information. This service, which has since been expanded statewide, enables commuters to determine the best route to take to their respective destinations by providing information on traffic congestion due to accidents, etc., as well as suggested alternate routes. Information on transit service and airport operations is also available. The service started in Central Florida in 2002, and more than 400,000 people used the service during 2011 in the Orlando urban area.

In addition to considering the benefits from M&O strategies, and based on responses to the MetroPlan Orlando Survey of Public Opinion on Transportation Issues, more resources will be invested in traffic signal timing and computer coordination in some corridors. Within the MetroPlan Orlando area, there are approximately 1,600 traffic signals. Control of these traffic signals is split between various jurisdictions. Studies have shown that retiming traffic signals may improve the operations of a corridor (reduce delays and stops, improve safety, reduce fuel consumption and emissions) from 5 to 25 percent. The use of computer-coordinated traffic signal systems in the area is discussed further in the next section.

Computer-Coordinated Traffic Signals

As mentioned on the previous page, computer-coordinated traffic signal systems, which improve traffic flow and help traffic signals become more efficient, are being utilized in Orange, Osceola and Seminole Counties.

The growth in the number of computer-coordinated signals in the area from 2007 through 2011, as compared to the total number of signals, is illustrated in the following tables:

Orange County	2007	2008	2009	2010	2011
Total Traffic Signals	999	1,022	1,107	1,024	1,081
Computer Coordinated Signals	773	765*	862	807	957
% Total Traffic Signals	77%	74%	75%	79%	89%
Osceola County	2007	2008	2009	2010	2011
Total Traffic Signals	150	150	164	172	171
Computer Coordinated Signals	41	40*	50	60	67
% Total Traffic Signals	27%	26%	30%	35%	39%
Seminole County	2007	2008	2009	2010	2011
Total Traffic Signals	370	366*	374	368	375
Computer Coordinated Signals	190**	193	220	234	249
% Total Traffic Signals	51%	52%	59%	64%	66%

* The 2008 traffic signal numbers for Orange, Osceola and Seminole Counties that are lower than for 2007 is due to the removal of several signals that were causing traffic congestion and were not needed.

** The number of Seminole County's coordinated signals for 2007 is lower than for previous years due to the use of a more accurate counting methodology. Revised figures for previous years are not available.

3-County Total	2007	2008	2009	2010	2011
Total Traffic Signals	1,533	1,538	1,645	1,564	1,627
Computer Coordinated Signals	1,028	998	1,132	1,101	1,273
% Total Traffic Signals	67%	65%	69%	70%	78%

Source: Local Government Engineering Department

10-Year Historic Trend - Computer-Coordinated Traffic Signals

The following line graph illustrates the 10-year computer-coordinated traffic signal trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Local Government Engineering Departments

Road Rangers

Road Rangers is a service operating on I-4 and the toll roads in the area that involves the use of specially-equipped trucks to help stranded motorists and minimize traffic congestion caused by minor accidents and vehicle breakdowns. The trucks are equipped to make minor car repairs, such as tire changes, fuel/fluid replacement, belt and hose replacement, etc. Other Road Ranger services include removing vehicles and debris from travel lanes, assisting with non-injury accidents, and providing communication with law enforcement and emergency services.

LYNX, the local transit provider, is operating the Road Rangers service in partnership with FDOT and MetroPlan Orlando on I-4 from I-95 in Volusia County to the Polk/Osceola County line. This service utilizes 12 trucks that operate 24-hours-a-day, seven-days-a-week. The Orlando-Orange County Expressway Authority (OOCEA) also operates a Road Ranger service jointly with Florida's Turnpike Enterprise on the toll roads in the Orlando area, including SR 408, SR 417, SR 429, and SR 528. This service utilizes six vehicles, and has been in operation since 2001. In addition, Florida's Turnpike Enterprise operates its own Road Ranger vehicles on the Florida's Turnpike mainline facility.

The number of Road Ranger service assists that occurred on I-4 and the toll roads in the area between 2007 and 2011 is shown in the following table:

Road Ranger Program	2007	2008	2009	2010	2011
# of Service Assists	89,951	55,910	85,588	69,303	66,593

Source: Florida Department of Transportation, LYNX, Orlando-Orange County Expressway Authority, Florida's Turnpike Enterprise

Note: The large decrease in the number of Road Ranger service assists that occurred between 2007 and 2008 was primarily due to a major reduction in the funding for the Road Ranger program by the Florida Legislature as a result of budget cuts.

10-Year Historic Trend - Road Ranger Service Assists

The following line graph illustrates the 10-year Road Ranger service assist trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation, LYNX, Orlando-Orange County Expressway Authority, Florida's Turnpike Enterprise

E-PASS/SunPassTransponders

One ITS technology that has been successfully implemented in the region is the use of an electronic toll collection system on the area's toll roads. OOCEA's system, called E-PASS, began operating in 1994, and, since 2001, has been integrated with the SunPass system operated by Florida's Turnpike Enterprise on toll roads throughout the state of Florida. E-PASS/SunPass users have transponders in their vehicles which enable them to have their tolls collected automatically as they pass through the tollgates. As the use of this technology continuously expands, traditional stop-and-pay toll plazas have become a thing of the past.

The following table shows the substantial increase in the number of E-PASS/SunPass transponders in use in the area from 2007 through 2011:

E-PASS / SunPass Transponders	2007	2008	2009	2010	2011
# of Transponders	685,873	724,080	832,307	869,543	916,779

Source: Orlando-Orange County Expressway Authority, Florida's Turnpike Enterprise

10-Year Historic Trend - E-Pass / SunPass Transponders

The following line graph illustrates the 10-year E-PASS/SunPass transponders trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Orlando-Orange County Expressway Authority, Florida's Turnpike Enterprise

System Performance

The Texas Transportation Institute (TTI) at Texas A & M University annually produces a study, the Urban Mobility Report, which compares traffic congestion levels of many urban areas around the country, including the Orlando Metropolitan Area.

The tables below show the annual delay and congestion cost per peak auto commuter from 2006 through 2010:

Annual Delay (Hours)	2006	2007	2008	2009	2010
per Peak Auto Commuter	44	43	37	41	38
Congestion Cost	2006	2007	2008	2009	2010
per Peak Auto Commuter	\$ 1,106	\$ 846	\$ 760	\$ 829	\$ 791

Source: Texas Transportation Institute - Urban Mobility Report

Note: <u>Annual Delay per Commuter</u>: A yearly sum of all the per-trip delays for those persons who travel in the peak period. This measure illustrates the effect of the per-mile congestion as well as the length of each trip. <u>Congestion Cost</u>: Value of travel delay for 2010 (estimated at \$16.30 per hour of person travel and \$88.12 per hour of truck time) and excess fuel consumption (estimated using state average cost per gallon) Costs calibrated annually based on current year economic conditions.

Red Light Camera Implementation and Enforcement

Red light cameras are used for traffic enforcement in a growing number of communities throughout the United States. The cameras, which operate 24-hours-a-day and 7-days-a-week, automatically capture the image of violators who disobey posted traffic control devices. Depending on the particular technology, a series of photographs and/or video images show the red light violator prior to entering the intersection on a red signal, as well as the vehicle's progression through the intersection. Cameras record the date, time of day, time elapsed since the beginning of the red signal, vehicle speed, and license plate. Tickets are typically mailed to owners of violating vehicles, based on review of photographic evidence.

Prior to the development and passage of state legislation concerning this issue, several local municipalities in the Orlando metropolitan area adopted ordinances to enforce red light violations (on county and city roadways) under the code enforcement process. The code enforcement process does not assess points against the vehicle owner's drivers' record, but does levy a civil fine for the violation. Actual fines varied among jurisdictions per the adopted ordinances.

On May 18, 2010, Governor Charlie Crist signed the Mark Wandell Traffic Safety Act (HB 325) into law. This law created statewide consistent standards for the use of cameras as traffic enforcement devices. Major changes included: uniform fine structure, the authorization to use red light cameras on state roads, and the distribution of funds collected from violations.

lurisdiction	Tota	l Number of In	tersection Ap	proaches Enfo	rced
Sursaction	2007	2008	2009	2010	2011
City of Apopka	2	2	2	8	13
City of Ocoee	-	-	5	5	5
City of Orlando	-	7	7	7	22
City of Maitland	-	-	-	-	9
City of Winter Park	-	-	-	-	2
Unincorporated Orange County	-	-	-	-	10
City of Winter Springs	-	2	2	2	2
Total	2	11	16	22	63

The following table illustrates the growing trend and utilization of red light cameras by local governments from 2007 through 2011:

Source: Local Government Traffic Engineering and Police Departments Note: Includes all active directional and turning approaches

5-Year Historic Trend - Red Light Camera Enforcement

The following line graph illustrates the 5-year red light camera utilization trend for Orange, Osceola, and Seminole Counties - The Orlando Urban Area.



Source: Local Government Traffic Engineering and Police Departments

Health and Safety Statistics

<u>Traffic Crashes</u> The number of traffic crashes occurring at particular locations in the area may indicate where transportation system safety improvements are needed. In 2009, MetroPlan Orlando developed an online Geographic Information System (GIS) based crash database to provide its regional partners with an accessible crash analysis and reporting tool. In recent years, the tool has been upgraded and modified to allow for more detailed analysis; including; time-of-day, cause, age, and other related crash indicators.

High Frequency Crash Intersections

The following tables show the top twenty-five locations in the Orlando Metropolitan Area that had the highest number of crashes during 2010.

Intersection	County	Crash Count	Fatalities	Injuries
W SR 434 & E I-4	SEMINOLE	68	0	5
S SEMORAN BOULEVARD & CURRY FORD ROAD	ORANGE	47	0	9
N HIAWASSEE ROAD & SILVER STAR ROAD	ORANGE	44	1	7
W MAITLAND BOULEVARD & I-4 ON RAMP W	ORANGE	44	0	1
S KIRKMAN ROAD & L B MCLEOD ROAD	ORANGE	43	0	13
ARNOLD PALMER DRIVE & S KIRKMAN ROAD	ORANGE	41	1	3
N ORANGE BLOSSOM TRAIL & N JOHN YOUNG PARKWAY/LEE ROAD	ORANGE	40	0	1
S KIRKMAN ROAD & VALENCIA COMMUNITY COLLEGE DRIVE	ORANGE	39	1	8
S KIRKMAN ROAD & EAGLESMERE DRIVE	ORANGE	39	0	21
N GARLAND AVENUE & W COLONIAL DRIVE	ORANGE	38	2	8
CONROY ROAD & I-4	ORANGE	37	0	1
E COLONIAL DRIVE & N ALAFAYA TRAIL	ORANGE	37	0	11
W PRINCETON STREET & N JOHN YOUNG PARKWAY	ORANGE	37	0	7
CURRY FORD ROAD & S GOLDENROD ROAD	ORANGE	37	1	11
W SR 436 & W I-4	SEMINOLE	37	0	2
W IRLO BRONSON MEM HWY & CELEBRATION PL/PARKWAY BLVD	OSCEOLA	36	1	16
N SR 434 & W SR 436	SEMINOLE	36	0	1
N HIAWASSEE ROAD & W COLONIAL DRIVE	ORANGE	36	0	11
N SEMORAN BOULEVARD & ALOMA AVENUE	ORANGE	36	0	11
I-4 & I-4 OFF RAMP W	ORANGE	35	1	3
CONROY ROAD & MILLENIA BOULEVARD	ORANGE	35	0	1
E VINE ST & DENN JOHN LN	OSCEOLA	35	0	17
s Kirkman Road & Pine Shadows Parkway	ORANGE	35	0	10
SILVER STAR ROAD & N POWERS DRIVE	ORANGE	33	0	8
N JOHN YOUNG PARKWAY & W COLONIAL DRIVE	ORANGE	33	0	14

Source: MetroPlan Orlando's Web-Based Crash Database

Automobile Safety Statistics

The following charts show the changes in the total number of auto occupant crashes, injuries and fatalities from 2006 through 2010 as compiled by the Florida Department of Highway Safety and Motor Vehicles for each of the three counties:

Vehicle Crashes	2006	2007	2008	2009	2010
Orange County	17,506	18,089	16,712	16,092	17,090
Osceola County	3,002	3,004	2,810	2,795	3,141
Seminole County	2,906	2,895	2,717	2,574	2,440
Total	23,414	23,988	22,239	21,461	22,671

Source: Florida Department of Highway Safety and Motor Vehicles

Personal Injuries	2006	2007	2008	2009	2010
Orange County	15,148	15,163	14,395	14,272	14,898
Osceola County	2,978	3,144	2,664	2,634	2,933
Seminole County	2,383	2,417	2,407	2,532	2,237
Total	20,509	20,724	19,466	19,438	20,068

Source: Florida Department of Highway Safety and Motor Vehicles

Fatalities	2006	2007	2008	2009	2010
Orange County	184	186	170	142	130
Osceola County	65	52	55	50	34
Seminole County	39	48	42	23	32
Total	288	286	267	215	196

Source: Florida Department of Highway Safety and Motor Vehicles

<u>10-Year Historic Trend - Crash and Injury</u>

The following line graph illustrates the 10-year crash and injury trend for Orange, Osceola, and Seminole Counties - The Orlando Urban Area.



Source: Florida Department of Highway Safety and Motor Vehicles

Motorcycle Safety Statistics

The following charts show the changes in the total number of motorcycle injuries and fatalities from 2006 through 2010 as compiled by the Florida Department of Highway Safety and Motor Vehicles for each of the three counties:

Motorcycle Injuries	2006	2007	2008	2009	2010
Orange County	507	531	538	493	429
Osceola County	113	125	125	98	85
Seminole County	148	135	137	126	96
Total	768	791	800	717	610

Source: Florida Department of Highway Safety and Motor Vehicles Note: Included in Automobie Safety Statistics

Motorcycle Fatalitles	2006	2007	2008	2009	2010
Orange County	32	31	28	25	19
Osceola County	11	9	11	10	3
Seminole County	8	9	4	9	5
Total	51	49	43	44	27

Source: Florida Department of Highway Safety and Motor Vehicles Note(s): 1) Included in Automobile Safety Statistics

2) Includes Motorcycle Drivers Only

Bicyclist and Pedestrian Safety Statistics

The following charts show the changes in the total number of bicyclist and pedestrian injuries and fatalities from 2006 through 2010 as compiled by the Florida Department of Highway Safety and Motor Vehicles for each of the three counties:

Bicyclist Injuries	2006	2007	2008	2009	2010
Orange County	282	285	280	284	295
Osceola County	39	35	41	27	54
Seminole County	61	59	62	78	64
Total	382	379	383	389	413

Source: Florida Department of Highway Safety and Motor Vehicles

Bicyclist Fatalities	2006	2007	2008	2009	2010
Orange County	10	14	9	6	4
Osceola County	2	1	1	0	2
Seminole County	2	0	2	0	1
Total	14	15	12	6	7

Source: Florida Department of Highway Safety and Motor Vehicles

20-Year Historic Trend - Bicyclist Injuries

The following line graph illustrates the 20-year bicyclist injury rate trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: MetroPlan Orlando Bicycle and Pedestrian Program

Pedestrian Injuries	2006	2007	2008	2009	2010
Orange County	551	506	569	523	509
Osceola County	111	111	86	112	115
Seminole County	96	111	112	99	76
Total	758	728	767	734	700

Source: Florida Department of Highway Safety and Motor Vehicles

Pedestrian Fatalities	2006	2007	2008	2009	2010
Orange County	42	40	28	32	43
Osceola County	1	7	10	5	3
Seminole County	5	7	8	5	11
Total	48	54	46	42	57

Source: Florida Department of Highway Safety and Motor Vehicles

20-Year Historic Trend -Pedestrian Injuries

The following line graph illustrates the 20-year pedestrian injury rate trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: MetroPlan Orlando Bicycle and Pedestrian Program

Air Quality

Traffic congestion can have a major impact on the air pollution levels in an urban area. The pollutant that has been a cause for concern in the Orlando Metropolitan Area in recent years is ground-level ozone, for which motor vehicle emissions are a primary source. The Federal Environmental Protection Agency (EPA) standard for ozone was recently changed from 85 parts per billion to 75 parts per billion averaged over any eight-hour period. An area will be considered as nonattainment (not meeting the standard) if the average of the annual fourth-highest ozone readings at any monitoring site for any three-year period equals or exceeds the 75 parts per billion standard.

In 2009, EPA averaged the fourth-highest eight-hour average ozone readings in urban areas around the country from 2006 through 2008 to determine which areas would be declared to be in attainment with the EPA standard and which would be designated as nonattainment. Several ozone readings in the Orlando Metropolitan Area exceeded the EPA standard during that three-year period. If additional violations occur during 2009 or 2010, the Orlando Metropolitan Area could eventually be designated as a nonattainment area. In addition, EPA is considering further tightening its ozone standards in the future. Therefore, in order to help prevent a nonattainment designation, such measures as the expansion of flex time and telecommuting, vehicle maintenance, and the use of alternate forms of transportation, are being promoted as part of a public awareness campaign.

The line charts in **Appendix B** show the highest monthly eight-hour average ozone readings for 2010 at each of the four monitoring stations operated by the Florida Department of Environmental Protection in the Orlando Metropolitan Area. The following table shows the fourth-highest eight-hour average readings, shown in parts per billion, for the area from 2007 through 2011:

Ozone Monitoring	2007	2008	2009	2010	2011
Seminole State College	75	72	66	65	66
Winegard Elementary School	81	75	71	69	71
Lake Isle Estates	80	75	70	68	71
OCFD - Four Corners	73	72	69	67	66

Source: Florida Department of Environmental Protection

10-Year Historic Trend - Regional 3-Year Ozone Attainment Average Status

The following line graph illustrates the 10-year regional 3-year ozone attainment average status trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Environmental Protection Note: Displayed in parts per billion (ppb)

Transit Statistics

LYNX Service

As the highway system in the Orlando area becomes more congested and more emphasis is put on livable communities, alternative modes of transportation are becoming an increasingly important means of transportation. LYNX is the area's local transit provider, and the majority of LYNX's passengers are dependent on transit service to get to work, shopping, etc. As a result, this service is essential to the area's economy and the quality of life of many of its citizens. The transit services provided by LYNX include:

- Fixed-Route Bus Service
- LYMMO Downtown Circulator Service (a form of Bus Rapid Transit on an exclusive route)
- Shuttle Services
- Express Bus Service between Volusia County and Orlando in Cooperation with VOTRAN
- Transportation Disadvantaged Service called ACCESS LYNX
- Van Pooling Service called VanPlan

LYNX Vehicles	2006/07	2007/08	2008/09	2009/10	2010/11
Fixed Route Buses*	290	288	288	267	298
ACCESS LYNX Vehicles	146	176	197	181	202
VanPlan Vehicles	59	71	87	79	82

Source: Central Florida Regional Transportation Authority d.b.a. LYNX * Includes LYMMO and Shuttle Vans

Ridership Statistics

The number of unlinked passenger boardings on the LYNX services from FY 2006/07 through 2010/11, as well as the vehicle miles traveled, is shown in the following tables:

Fixed-Route Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	24,098,719	25,209,815	23,697,244	24,780,704	25,979,951
LYMMO Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	1,176,406	1,170,237	1,257,154	1,180,710	1,016,207
Special Shuttle Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	23,175	30,208	44,960	28,716	37,236
ACCESS LYNX Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	550,578	609,005	686,514	749,601	549,290
VanPlan Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	205,365	180,065	182,295	189,592	205,859
Total LYNX Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	26,101,430	27,199,330	25,868,167	26,929,323	27,788,543

Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Note: The total ridership figures also include the number of VOTRAN Express passengers traveling from Volusia County to downtown Orlando (Link 200).

<u>10-Year Historic Trend - LYNX Total Ridership</u> The following line graph illustrates the 10-year LYNX total ridership trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Transit Supplied

Vehicle Revenue Miles	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Miles	22,002,545	23,038,559	22,840,981	23,192,565	24,583,550

Vehicle Revenue Hours	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Hours	1,435,122	1,549,475	1,515,885	1,524,265	1,576,812

Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Transit Consumed

Passenger Miles Traveled	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Miles	159,324,353	166,769,628	151,389,724	148,294,757	156,697,957
Unlinked Passenger Trips	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Unlinked Trips	26,078,255	27,235,197	24,616,414	25,719,897	27,788,543

Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Quality of Service

Average Headway	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Minutes	44.3	43.8	43.9	42.1	42.0
Average Speed	2006/07	2007/08	2008/09	2009/10	2010/11
M.P.H. (Rev. Mile/Rev. Hour)	14.0	13.9	13.8	13.9	14.2

Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Average Mileage of LYNX Bus Fleet

In order to maintain the highest service standards possible, LYNX regularly purchases new buses to replace older buses that have exceeded the mileage criteria used by LYNX for replacement. This helps to reduce maintenance costs and alleviates interruptions in service caused by mechanical problems. Typically, LYNX retires a bus from service after it has reached about 600,000 miles. However, the Federal Transit Authority's minimum service life for large transit buses is 500,000 miles; LYNX would prefer to retire its buses with mileages in the 550,000-mile range if funding becomes available. As the bus fleet ages over time, the need for replacement buses will become increasingly important, in addition to the need for new buses to expand the fleet. The average mileage of LYNX's bus fleet from FY 2006/07 through 2010/11 is shown in the following table:

Bus Fleet Average Mileage	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Miles	332,909	244,495	244,612	274,278	300,048

Source: Central Florida Regional Transportation Authority d.b.a. LYNX

Carpool Matching Program

In order to help alleviate traffic congestion, LYNX has operated a carpool matching program in the area for many years. This is a free service that involves matching commuters who are interested in carpooling with other like-minded commuters who live within three miles and work within one mile of one another. Commuters are also matched according to personal preferences, such as smoking, gender match, work flexibility, and driving or riding preferences. In July 2010, FDOT established a regional commuter assistance program to better address the needs of commuters across all nine counties in District Five. This regional program, known as reThink, works with employers and commuters to form carpool and vanpool groups, and provides information on transit options, biking, walking, and telecommuting.

The number of persons participating in the carpool matching database from FY 2006/07 through 2010/11 is shown in the following table:

Rideshare Matching	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Participants	3,349	3,868	4,166	3,800	3,228

Source: reThink, Central Florida Regional Transportation Authority d.b.a. LYNX

10-Year Historic Trend - Rideshare Participants

The following line graph illustrates the 10-year rideshare matching participant trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Central Florida Regional Transportation Authority d.b.a. LYNX, reThink Note: The recent decline in rideshare database participants is related to database validation and cleansing.

I-RIDE Service

I-RIDE, a trolley service that runs in the International Drive corridor, is operated by the International Drive Master Transit and Improvement District, and currently utilizes 11 trolleys. The total number of passenger boardings on the I-RIDE system from FY 2006/07 through 2010/11 is shown in the following table:

I-RIDE Trolley Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	2,091,763	2,138,199	1,951,730	1,935,177	2,069,918

Source: International Drive Master Transit and Improvement District

10-Year Historic Trend - I-RIDE Trolley Ridership

The following line graph illustrates the 10-year I-RIDE Trolley ridership trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: International Drive Master Transit and Improvement District

Park-and-Ride Lots

There are four designated park-and-ride lots in the Orlando Metropolitan Area, all operated by the Florida Department of Transportation. The following table shows the locations of these lots, the number of parking spaces, and the average number of occupied spaces during 2010 and 2011. (FDOT conducts weekday occupancy surveys of the park-and-ride lots on a quarterly basis.)

Location	# of	Average Spaces	Average Spaces	% Change	
LOCATION	Spaces		Occupied - 2011	% change	
S.R. 50 & Dean Road	43	5/41 (12.2%)	5/43 (10%)	-2.20%	
S.R. 50 & S.R. 419	87	25/87 (28.7%)	40/92 (43%)	14.30%	
U.S. 192 & Shady Lane	117	8/111 (7.2%)	9/117 (7%)	-0.20%	
Lake Lotus Park & Magnolia Homes Road	35	1/33 (3.03%)	1/35 (2%)	-1.03%	

Source: Florida Department of Transportation

Note: Additional lots in west Volusia County are located at I-4 and Saxon Blvd. and I-4 and Dirksen Blvd.

School Bus Ridership

In addition to the public transit systems in the area, the public school districts in Orange, Osceola and Seminole Counties all operate major transportation systems in order to transport children to and from school each day by bus. The total number of public school students in each county school district from 2006/07 through 2010/11, the number and percentage of students transported by bus, and the number of school buses on daily routes, are shown in the following tables:

Orange County	2006/07	2007/08	2008/09	2009/10	2010/11
# Public School Students	175,308	175,302	175,363	172,989	179,400
# Students Riding Buses	72,000	66,993	72,000	72,000	72,666
% Total Students Riding Buses	41%	38%	41%	42%	41%
# Buses on Daily Routes	1,012	1,036	980	936	931

Osceola County	2006/07	2007/08	2008/09	2009/10	2010/11
# Public School Students	52,725	51,798	53,189	50,998	54,762
# Students Riding Buses	22,273	23,911	23,176	24,599	22,886
% Total Students Riding Buses	42%	46%	44%	48%	42%
# Buses on Daily Routes	288	306	300	300	333

Seminole County	2006/07	2007/08	2008/09	2009/10	2010/11
# Public School Students	65,775	65,446	64,102	65,300	63,961
# Students Riding Buses	30,812	31,034	31,161	31,138	32,071
% Total Students Riding Buses	47%	47%	49%	48%	50%
# Buses on Daily Routes	398	403	386	382	379

Total	2006/07	2007/08	2008/09	2009/10	2010/11
# Public School Students	293,808	292,546	292,694	289,287	298,123
# Students Riding Buses	125,085	121,938	126,337	127,737	127,623
% Total Students Riding Buses	43%	42%	43%	44%	43%
# Buses on Daily Routes	1,698	1,745	1,666	1,618	1,643

Source: Orange, Osceola, and Seminole County Public Schools

10-Year Historic Trend - School Bus Ridership

The following line graph illustrates the 10-year school bus ridership trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Orange, Osceola, and Seminole County Public Schools

University of Central Florida - Transportation Services

The University of Central Florida is striving hard to meet the demand for alternate transportation for its students. The program serves many local student residential communities, providing safe and convenient transportation to and from the main campus. The campus destination points are strategically selected to allow students a short distance to travel to classrooms or campus activities. The transportation service allows students to leave their vehicles at their places of residence, thereby saving them time and money. There is no per trip cost to ride, and students have the additional benefit of centralized access to the core facilities of the campus without having to deal with heavy campus traffic and finding a place to park. The service offers 11 routes, servicing 17 off-campus residential communities and Central Florida Research Park, and conveniently located stops on campus. All shuttle buses are ADA compliant.

In addition, in order to give UCF students, faculty, and staff members a viable, alternate means by which to get around campus in a safe and convenient way, UCF Parking & Transportation Services provides an on-campus circulator shuttle system called The Black & Gold Line. This system consists of four buses, all of which are ADA compliant. The Black & Gold Line operates 12 hours a day (7:00 A.M. to 7:00 P.M.) each class day during the fall and spring semesters; on every class day during the summer terms, it runs 9 hours per day (7:00 A.M. to 4:00 P.M.). For the fall and spring semesters, all four buses operate, while two buses run during the summer semester.

The total number of passenger boardings on UCF's On/Off Campus Shuttles and the Black & Gold Circulator systems from FY 2006/07 through 2010/11 are shown in the following tables:

Black & Gold Circulator	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	50,820	38,304	36,276	35,712	31,200

Source: University of Central Florida Parking and Transportation Services

On/Off Campus Shuttles	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	1,614,652	1,528,004	1,728,443	1,951,855	2,100,000

Source: University of Central Florida Parking and Transportation Services

10-Year Historic Trend - On / Off Campus Shuttle System

The following line graph illustrates the 10-year system ridership trend for UCF's On/Off Campus shuttle system.



Source: University of Central Florida Parking and Transportation Services Note: Introduction of shuttle service established in late 2001.

Aviation, Rail, and Seaport Statistics

Scheduled/Charter Aviation Service

Aviation is another important mode of transportation in the Orlando Metropolitan Area. Due to the large number of tourists, business travelers, and residents flying to and from Orlando, the Orlando International Airport has been one of the fastest growing airports in the world for several years.

<u>Orlando International Airport (MCO)</u> The following tables show the number of passengers, tons of cargo, and operations at the Orlando International Airport from 2007 to 2011:

Orlando Int'l Airport	2007	2008	2009	2010	2011
Domestic Passengers	34,182,947	32,973,829	30,715,729	31,632,100	31,923,422
Orlando Int'l Airport	2007	2008	2009	2010	2011
International Passengers	2,297,469	2,686,913	2,977,920	3,245,799	3,502,006

Orlando Int'l Airport	2007	2008	2009	2010	2011
Total Passengers	36,480,416	35,660,742	33,693,649	34,877,899	35,426,006

Source: Greater Orlando Aviation Authority

10-Year Historic Trend - Total Passengers

The following line graph illustrates the 10-year total passenger trend for Orlando International Airport.



Source: Greater Orlando Aviation Authority

Orlando Int'l Airport	2007	2008	2009	2010	2011
Tons of Cargo	205,733	178,501	155,535	172,001	187,095

Source: Greater Orlando Aviation Authority

Orlando Int'l Airport	2007	2008	2009	2010	2011
Aircraft Operations	360,075	334,780	300,431	307,784	309,884

Source: Greater Orlando Aviation Authority

<u>Orlando-Sanford International Airport (SFB)</u> The Orlando Sanford International Airport has also grown rapidly in recent years. This airport handles international service (charter and regular scheduled) to and from Europe, as well as domestic flights to a growing number of U.S. cities. The airport also serves general aviation traffic and a large flight training facility.

The following tables show the number of passengers, tons of cargo, and operations at the Orlando Sanford International Airport from 2007 to 2011:

Orlando-Sanford Int'l	2007	2008	2009	2010	2011
Domestic Passengers	842,741	1,071,666	1,246,699	767,057	1,129,496
Orlando-Sanford Int'l	2007	2008	2009	2010	2011
International Passengers	937,754	765,581	455,713	398,378	447,811
Orlando-Sanford Int'l	2007	2008	2009	2010	2011
Total Passengers	1,780,495	1,837,247	1,702,412	1,165,435	1,577,307

Source: Sanford Airport Authority

10-Year Historic Trend - Total Passengers

The following line graph illustrates the 10-year total passenger trend for Orlando-Sanford International Airport.



Source: Sanford Airport Authority

Orlando-Sanford Int'l	2007	2008	2009	2010	2011
Tons of Cargo	7,496	5,370	2,215	3,555	3,022

Orlando-Sanford Int'l	2007	2008	2009	2010	2011
Aircraft Operations	294,781	225,011	219,745	189,675	218,181

Source: Sanford Airport Authority

General Aviation

The general aviation airports, which handle private and business air traffic, are also an important part of the area's aviation system. These include the Orlando Executive and Kissimmee Gateway Airports.

The following tables show the number of operations that have occurred at these airports from 2007 through 2011:

Orlando Executive	2007	2008	2009	2010	2011
Aircraft Operations	149,991	133,373	108,828	103,216	110,264

Source: Greater Orlando Aviation Authority

Kissimmee Gateway	2007	2008	2009	2010	2011
Aircraft Operations	169,022	151,838	120,772	125,236	121,226

Source: Kissimmee Gateway Airport

10-Year Historic Trend - General Aviation Aircraft Operations

The following line graph illustrates the 10-year general aviation aircraft operations trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Greater Orlando Aviation Authority, Kissimmee Gateway Airport

Passenger Rail Service

At the present time, passenger rail service in the Orlando Metropolitan Area is provided by Amtrak, which has stations in Orlando, Winter Park, and Kissimmee, and the Auto Train service, which runs between Sanford and the Washington, D.C. area.

The following tables show the number of rail passengers who utilized these stations from FY 2006/07 through FY 2010/11:

Amtrak - Orlando	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	129,469	147,491	145,775	159,533	179,124
Amtrak - Winter Park	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	26,491	29,514	30,998	31,962	34,858
Amtrak - Kissimmee	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	34,828	38,495	41,054	43,163	47,823
AutoTrain - Sanford	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	217,822	234,839	232,955	244,252	259,944
Amtrak - Total Ridership	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	408,610	45,033	450,732	478,910	521,749

Source: National Railroad Passenger Corporation d.b.a. Amtrak

<u>10-Year Historic Trend - Amtrak Ridership</u> The following line graph illustrates the 10-year Amtrak total ridership trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: National Railroad Passenger Corporation d.b.a. Amtrak

Port Canaveral Statistics

Although Port Canaveral is in Brevard County and is thus outside of the Orlando Metropolitan Area, much of the cargo that is handled at the port, and many of the port's cruise ship passengers, are destined for this area. As a result, Port Canaveral is considered an important regional asset.

This port's freight and passenger statistics from FY 2006/07 through FY 2010/11 are shown in the following tables:

Port Canaveral	2006/07	2007/08	2008/09	2009/10	2010/11
Number of Passengers	4,275,922	3,573,960	3,250,775	2,802,951	3,144,668
Port Canaveral	2006/07	2007/08	2008/09	2009/10	2010/11
Tons of Cargo	3,572,206	2,395,779	2,626,795	3,218,144	4,547,724

Source: Canaveral Port Authority

10-Year Historic Trend - Port Canaveral

The following line graph illustrates the 10-year passenger and cargo trend for Port Canaveral.



Source: Canaveral Port Authority

Bicycle and Pedestrian Facilities Statistics

Bicycling and walking are popular in the Orlando Metropolitan Area due to the mild climate and level terrain, and are excellent transportation modes for short trips to school, work and shopping. They are especially popular as fitness and recreational activities. Unfortunately, much of the area is an intimidating environment for those who wish to walk or bike, because so much emphasis in the past has been on planning for automobiles.

Bike lanes and wide curb lanes can make cycling more comfortable on arterial and collector roadways. Paved shoulders improve safety and comfort on rural highways. Shared-use paths (trails) provide alternative routes with reduced motor vehicle conflicts. Sidewalks are critical for safe, comfortable pedestrian travel on arterial and collector roads. The majority of pedestrian injuries and fatalities occur to walkers attempting to cross high-speed arterials, often at night. Medians, street lighting, special-emphasis crosswalks, and signalized mid-block crossings can facilitate safer roadway crossings.

MetroPlan Orlando's Bicycle and Pedestrian Advisory Committee has been working for several years to ensure that bicycle and pedestrian facilities are included in roadway projects, wherever feasible. This committee has prioritized a number of shared-use paths and other pedestrian and bicycle projects for funding and construction.

Bikeways and Bicycle Level of Service

Most local bicycle facility construction programs in the Orlando Metropolitan Area have only been in place since 1994, and few miles of bikeways were built during the early years of these programs. More recently there has been a sharp increase in the miles of bike lanes, paved shoulders and shared-use paths built by local governments and the FDOT.

The tables below show the numbers of miles of existing on-roadway and off-roadway bikeway facilities from 2007 to 2011:

On-Roadway Bicycling Facilities	2007	2008	2009	2010	2011
Number of Miles	415	441	449	462	465

10-Year Historic Trend - On-Roadway Bicycling Facilities

The following line graph illustrates the 10-year on-roadway bicycling facility mileage trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: MetroPlan Orlando: Bicycle and Pedestrian Program

Shared-Use Pathways	2007	2008	2009	2010	2011
Number of Miles	69	74	80	80	84
Sidewalk Bikeways	2007	2008	2009	2010	2011
Number of Miles	39	45	47	50	54
Grade-Separated Facilities	2007	2008	2009	2010	2011
Number of Miles	20	20	21	20	21

Source: MetroPlan Orlando: Bicycle and Pedestrian Program

<u>10-Year Historic Trend - Shared-Use, Sidewalk, and Grade-Separated Facilities</u> The following line graph illustrates the 10-year shared-use, sidewalk, and grade-separated bicycling facility mileage trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: MetroPlan Orlando: Bicycle and Pedestrian Program

Transportation Revenue and Funding Statistics

In order to provide the Orlando Metropolitan Area's citizens with a transportation system that continues to enable them to get where they want to go, millions of dollars from federal, state and local funding sources have been programmed for transportation infrastructure in recent years. These expenditures include the right-of-way acquisition, routine maintenance, construction of new highways and the widening of existing highways, as well as transit system improvements, such as purchasing new transit vehicles, installing bus shelters and transit centers. Numerous upgrades have also been made to the airports in the area, such as terminal expansions and runway enhancements. In addition, bicycle and pedestrian facilities, such as trails and sidewalks, have been constructed in the area.

Rental Car Surcharge Revenues

Florida has a substantial rental car market, primarily due to its tourism industry, and the Orlando Metropolitan Area has the largest rental car market in the country. As a result, rental vehicles have a major impact on the levels of traffic congestion in the area, particularly on those roadways in the vicinity of the Orlando International Airport and tourist attractions.

The tables below show the amount of Florida's \$2-per-day rental car surcharge revenues collected in the area and state from FY 2006/07 through FY 2010/11:

Rental Car Surcharge	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$ 37,871,674	\$ 34,974,782	\$ 31,719,186	\$ 30,327,999	\$ 32,057,902
Osceola County	\$ 749,454	\$ 767,516	\$ 601,478	\$ 514,636	\$ 570,312
Seminole County	\$ 4,583,388	\$ 4,447,598	\$ 3,462,100	\$ 2,786,111	\$ 2,805,932
Three-County Total	\$ 43,204,516	\$ 40,189,896	\$ 35,782,764	\$ 33,628,746	\$ 35,434,146

Rental Car Surcharge	2006/07	2007/08	2008/09	2009/10	2010/11
Statewide Total	\$147,813,498	\$152,765,088	\$130,843,464	\$127,265,142	\$137,755,882

Source: Florida Department of Revenue

10-Year Historic Trend - State Rental Car Surcharge Revenues

The following line graph illustrates the 10-year rental car surcharge revenue trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Revenue

Fuel Tax Revenue

Highway fuel taxes constitute the oldest continuous source of dedicated transportation revenue in the state. Beginning in 1972, counties were permitted to enact fuel taxes in addition to the state's levy by imposing additional local option taxes of their own on highway fuels.

The tables below show the amount of fuel tax revenue collected in the area from FY 2006/07 through FY 2010/11:

Local Option Fuel Tax Collected	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$ 39,400,025	\$ 39,751,701	\$ 37,692,890	\$ 38,081,933	\$ 37,547,771
Osceola County	\$ 12,821,486	\$ 11,611,576	\$ 11,353,879	\$ 11,251,428	\$ 11,095,826
Seminole County	\$ 14,732,030	\$ 14,400,918	\$ 13,716,686	\$ 13,561,878	\$ 13,386,080
Three-County Total	\$ 66,953,541	\$ 65,764,195	\$ 62,763,455	\$ 62,895,239	\$ 62,029,677

Source: Florida Department of Revenue

Note: Local option collection data includes 9th cent diesel fuel tax levies.

10-Year Historic Trend - Local Option Fuel Tax Revenue

The following line graph illustrates the 10-year local option fuel tax revenue trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Revenue

Toll Transactions and Revenues

Up until 2008, there was a steady increase in the amount of annual toll transactions and revenues collected on the toll roads in the Orlando Metropolitan Area. In February 2009, the Orlando-Orange County Expressway Authority Board of Directors unanimously approved to increase the toll rate by 25-cents system-wide. In addition to the toll increase, the board adopted a toll rate indexing policy to keep up with demand and economic conditions.

The tables below show the amount of toll transactions and toll revenues collected in the area from FY 2006/07 through FY 2010/11:

Toll Transactions	2006/07	2007/08	2008/09	2009/10	2010/11
SR 408	138,327,000	138,932,000	131,280,000	126,829,000	128,035,000
SR 417	148,011,000	149,948,000	136,298,000	129,158,618	131,295,000
SR 429	27,539,000	31,537,000	30,028,000	30,259,655	31,712,000
SR 528	69,991,000	70,266,000	64,043,000	64,628,313	67,941,000
SR 414	-	-	632,000	5,292,000	6,608,000
Fla.'s Turnpike (SR 91)	45,287,000	44,205,000	41,126,000	42,329,099	42,023,000
Osceola Pkwy.	7,908,000	7,682,000	6,813,048	6,494,456	6,897,764
Total Transactions	437,063,000	442,570,000	410,220,048	404,991,141	414,511,764

Toll Revenues	2006/07	2007/08	2008/09	2009/10	2010/11
SR 408	\$ 86,503,000	\$ 86,093,000	\$ 88,304,000	\$108,705,000	\$110,020,000
SR 417	\$108,523,000	\$109,759,000	\$103,790,000	\$114,587,793	\$115,856,000
SR 429	\$ 20,741,000	\$ 23,920,000	\$ 23,691,000	\$ 28,340,362	\$ 29,659,000
SR 528	\$ 56,403,000	\$ 56,209,000	\$ 52,566,000	\$ 61,120,599	\$ 63,811,000
SR 414	-	-	\$ 554,000	\$ 4,225,000	\$ 5,180,000
Fla.'s Turnpike (SR 91)	\$ 33,511,000	\$ 32,508,000	\$ 29,956,000	\$ 30,893,296	\$ 30,765,000
Osceola Pkwy.	\$ 11,440,000	\$ 11,021,000	\$ 10,445,716	\$ 10,698,909	\$ 11,263,662
Total Revenues	\$317,121,000	\$319,510,000	\$ 309, 306, 716	\$358,570,959	\$366,554,662

Source: Florida's Turnpike Enterprise, Orlando-Orange County Expressway Authority, Osceola County Public Works Note: Partial Year of Revenue Collection on SR 414 in FY 2008/09.

10-Year Historic Trend - Toll Transactions and Revenues

The following line graph illustrates the 10-year toll transaction and revenue trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida's Turnpike Enterprise, Orlando-Orange County Expressway Authority, Osceola County Public Works

Transportation Funding

The total amounts of federal, state and local funds that have been programmed for all phases and types of improvements from preliminary engineering to the addition of new capacity to routine maintenance for highway, transit, aviation, and bicycle and pedestrian improvements from FY 2006/07 through FY 2010/11 are shown in the following tables. The amount of funding programmed for transportation improvements does not necessarily increase every year, but fluctuates from year to year depending on when the funding allocations for various improvements are scheduled.

Interstate (I-4)	2006/07	2007/08	2008/09	2009/10	2010/11
Three-County Total	\$108,786,000	\$ 89,128,000	\$106,195,000	\$ 44,071,000	\$ 56,652,000

Turnpike and Other Toll	2006/07	2007/08	2008/09	2009/10	2010/11
Three-County Total	\$213,618,000	\$198,656,000	\$123,745,000	\$ 33,812,000	\$ 34,678,000

Note: Includes Turnpike Mainline and all other State allocated toll road related improvements.

State Highway System	2006/07	2007/08	2008/09	2009/10	2010/11	
Orange County	\$ 71,005,000	\$109,055,000	\$120,720,000	\$ 65,085,000	\$101,547,000	
Osceola County	\$ 12,037,000	\$ 17,463,000	\$ 20,656,000	\$ 16,238,000	\$ 15,985,000	
Seminole County	\$ 57,993,000	\$ 87,120,000	\$ 47,934,000	\$ 46,269,000	\$ 59,632,000	
Three-County Total	\$141,035,000	\$213,638,000	\$189,310,000	\$127,592,000	\$177,164,000	

Source: Florida Department of Transportation (10-Year Gaming Report)

Off State Highway System	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$102,808,000	\$ 43,444,000	\$ 47,722,000	\$ 17,059,000	\$ 5,589,000
Osceola County	\$ 2,505,000	\$ 31,060,000	\$ 27,000	\$ 16,390,000	\$ 14,260,000
Seminole County	\$ 449,000	\$ 2,147,000	\$ 1,417,000	\$ 4,774,000	\$ 7,456,000
Three-County Total	\$105,762,000	\$ 76,651,000	\$ 49,166,000	\$ 38,223,000	\$ 27,305,000
Off State & Fed. System	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$570,123,000	\$592,534,000	\$539,752,000	\$298,848,000	\$321,778,000
Osceola County	\$ 58,315,000	\$ 56,747,000	\$ 26,302,000	\$ 43,576,000	\$ 38,525,000
Seminole County	\$ 7,038,000	\$ 1,379,000	\$ 691,000	\$ 46,000	\$ 6,340,000
Three-County Total	\$635,476,000	\$650,660,000	\$566,745,000	\$342,470,000	\$366,643,000
Non-System Specific	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$ 2,140,000	\$ 3,307,000	\$ 2,855,000	\$ 2,129,000	\$ 2,356,000
Osceola County	\$ 86,000	\$ 92,000	\$ 148,000	\$ 148,000	\$ 103,000
Seminole County	\$ 226,000	\$ 233,000	\$ 256,000	\$ 257,000	\$ 314,000
Three-County Total	\$ 2,452,000	\$ 3,632,000	\$ 3,259,000	\$ 2,534,000	\$ 2,773,000

Multi-Modal Facilities	2006/07	2007/08	2008/09	2009/10	2010/11
Three-County Total	\$ 10,030,000	\$ -	\$ 6,874,000	\$ 240,000	\$ -

Bicycle & Pedestrian	2006/07	2007/02	2008/00	2000/10	2010/11
Capital Funding	2000/07	2007708	2008/07	2007/10	2010/11
Orange County	\$ 7,454,000	\$ 4,201,000	\$ 5,739,389	\$ 4,089,000	\$ 3,463,000
Osceola County	\$ 3,303,000	\$ 571,000	\$ 580,324	\$ 2,031,000	\$ 959,000
Seminole County	\$ 16,543,000	\$ 11,126,000	\$ 6,327,675	\$ 692,000	\$ 8,249,000
Three-County Total	\$ 27,300,000	\$ 15,898,000	\$ 12,647,388	\$ 6,812,000	\$ 12,671,000

Source: Florida Department of Transportation (10-Year Gaming Report)

Note: Bicycle lanes and sidewalks are often included as components of highway projects. Such facilities are not reflected in the bicycle and pedestrian funding figures shown for Orange, Osceola and Seminole Counties, which only represent stand-alone bikeway or pedestrian projects. This category of funding is a subset of State Highway System, Off-State Highway System, and Off-State and Federal System funding; not an addition to.

10-Year Historic Trend - Bicycle and Pedestrian Capital Funding

The following line graph illustrates the 10-year bicycle and pedestrian capital funding trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation (10-Year Gaming Report) *Note:* Fluctuation in Bicycle and Pedestrian Funding corresponds to the programming of large construction projects.

Rail & Transit	2006/07		2007/08		2008/09		2009/10		2010/11
Three-County Total	\$119,468,000	\$1	59,750,000	\$1	91,249,000	\$1	36,509,000	\$1	34,382,000
Trans. Disadvantaged	2006/07		2007/08		2008/09		2009/10		2010/11
Three-County Total	\$ 2,614,000	\$	2,946,000	\$	3,062,000	\$	2,873,000	\$	3,025,000
Source: Florida Department of Transportation (10-Year Gamming Report)									

LYNX O&M Funding	2006/07	2007/08	2008/09	2009/10	2010/11
O&M Funds Expended	\$ 96,495,827	\$109,884,726	\$105,871,405	\$105,711,041	\$109,464,228

Source: National Transit Database, Central Florida Regional Transportation Authority d.b.a. LYNX

10-Year Historic Trend - Transit (LYNX) O&M Funding

The following line graph illustrates the 10-year transit operations and maintenance funding trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: National Transit Database, Central Florida Regional Transportation Authority d.b.a. LYNX

Aviation	2006/07	2007/08	2008/09	2009/10	2010/11
Orange County	\$ 23,354,000	\$ 37,414,000	\$ 23,450,000	\$ 15,238,000	\$ 27,991,000
Osceola County	\$ 1,666,000	\$ 1,765,000	\$ 1,058,000	\$ 1,213,000	\$ 350,000
Seminole County	\$ 14,716,000	\$ 12,088,000	\$ 8,987,000	\$ 15,021,000	\$ 14,490,000
Three-County Total	\$ 39,736,000	\$ 51,267,000	\$ 33,495,000	\$ 31,472,000	\$ 42,831,000

10-Year Historic Trend - Aviation Funding

The following line graph illustrates the 10-year airport capital funding trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation (10-Year Gaming Report)

Grand Total: Funding by Mode	2006/07	2007/08	2008/09	2009/10	2010/11
Highway & Roads	\$1,207,129,000	\$1,232,365,000	\$1,038,420,000	\$ 588,702,000	\$ 665,215,000
Rail & Transit	\$ 122,082,000	\$ 162,696,000	\$ 191,252,062	\$ 139,382,000	\$ 137,407,000
Aviation	\$ 39,736,000	\$ 51,267,000	\$ 33,495,000	\$ 31,472,000	\$ 42,831,000
Multi-Modal	\$ 10,030,000	\$-	\$ 6,874,000	\$ 240,000	\$ -
Three-County Total	\$1,378,977,000	\$1,446,328,000	\$1,270,041,062	\$ 759,796,000	\$ 845,453,000

Source: Florida Department of Transportation (10-Year Gaming Report)

<u>5-Year Historic Trend - Grand Total Transportation Funding</u> The following line graph illustrates the 5-year grand total transportation funding trend for Orange, Osceola, and Seminole Counties - the Orlando Urban Area.



Source: Florida Department of Transportation (10-Year Gaming Report)

Appendix A

2006-2010 Traffic Counts

Introduction

This report contains 24-hour bi-directional traffic counts for various locations in Orange, Seminole, and Osceola Counties from 2006 through 2010. The counts are listed alphabetically. A set of maps showing the traffic count locations is also provided. FDOT's traffic counts are averaged for each year and most are rounded to the nearest five hundred.

Methodology

This report was prepared by the MetroPlan Orlando staff. The data for this report was provided by the Florida Department of Transportation (FDOT), and the Traffic Engineering Departments of Orange, Seminole, and Osceola Counties. If further information is desired, these agencies can be reached at the following telephone numbers:

MetroPlan Orlando	407-481-5672 ext. 324
Florida Dept. of Transportation	1-800-780-7102
Orange County	407-836-7890
Osceola County	407-343-2600
Seminole County	407-665-5677

Station ID #	Road Name	Location	2006	2007	2008	2009	2010	Reporting Enity
004	Airport Blvd.	S of SR 46	11,518	11,770	9,154	5,476	5,198	Seminole
181	Americana Blvd.	E of John Young Parkway	28,983	14,442	19,944	19,139	13,417	Orange
148	Apopka-Vineland Rd.	S of Conroy Windermere Rd.	32,510	30,037	29,065	27,065	NC	Orange
411	Apopka-Vineland Rd.	N of Sand Lake Rd.	27,610	27,281	29,589	26,201	NC	Orange
7101	Apopka-Vineland Rd.	N of Silver Star Rd.	10,982	12,658	12,116	11,821	12,736	Orange
017	Bear Lake Rd.	S of SR 436	12,500	12,647	12,371	10,014	8,422	Seminole
392	Bennett Rd.	S of Maguire Blvd.	13,168	11,706	10,441	10,737	9,495	Orange
479	Boggy Creek Rd.	W of Boggy Creek Rd. E.	21,391	22,853	22,182	NC	22,700	Osceola
206	Boggy Creek Rd.	N of Osceola Co. Line	23,074	21,774	20,530	21,440	NC	Orange
456	Buenaventura Blvd.	S of Osceola Pkwy.	30,846	30,586	30,188	29,006	26,434	Osceola
376	Bumby Ave.	N of Curry Ford Rd.	10,636	9,678	10,181	10,875	9,702	Orange
7097	Bumby Ave.	S of SR 50	23,389	21,335	21,521	21,004	20,672	Orange
309	Carroll St.	W of John Young Pkwy.	16,045	15,287	15,811	16,141	16,265	Osceola
034	Central Pkwy.	W of Palm Springs Dr.	24,101	23,899	22,321	22,743	20,052	Seminole
032	Central Pkwy.	E of Montgomery Rd.	30,986	20,732	NC	19,917	12,677	Seminole
345	Central Florida Pkwy.	W of International Dr.	22,913	22,696	22,004	22,315	21,263	Orange
64	Clarcona-Ocoee Rd.	E of Hiawassee Rd.	24,629	25,812	19,135	23,682	21,628	Orange
60	Clarcona-Ocoee Rd.	W of Pine Hills Rd.	26,103	25,348	24,347	23,620	23,758	Orange
337	Conroy-Windermere Rd.	E of Dr. Phillips Blvd.	43,401	41,075	43,640	34,479	NC	Orange
6022	Conroy-Windermere Rd.	E of Kirkman Rd.	40,633	36,272	36,432	36,470	35,665	Orange
0030	Conway Rd.	N of Hoffner Rd.	32,000	33,500	32,500	30,500	30,500	FDOT / Orange
0076	Conway Rd.	S of Curry Ford Rd.	32,500	30,000	28,553	30,000	27,000	FDOT / Orange
0549	Conway Rd.	S of Lake Underhill Rd.	25,000	25,000	24,129	24,000	23,000	FDOT / Orange
6073	Corrine Dr.	E of Winter Park Rd.	16,529	21,897	20,535	30,378	17,182	Orange
041	Country Club Rd.	S of Lake Mary Blvd.	12,127	12,321	12,627	11,475	12,005	Seminole
054	County Road 419	E of Lockwood Rd.	32,092	41,896	31,923	31,752	30,127	Seminole
061	County Road 427	W of Bryant St.	14,734	18,684	18,057	18,299	17,893	Seminole
066	County Road 427	N of American Way	20,172	25,969	26,130	23,193	23,327	Seminole
5215	Crystal Lake Dr.	N of South St.	16,963	17,890	22,679	20,025	17,700	Orange
416	Curry Ford Rd.	W of Dean Rd.	24,916	28,857	41,489	42,517	NC	Orange
0492	Curry Ford Rd.	E of SR 436	34,500	37,000	37,000	32,000	35,000	FDOT / Orange
0491	Curry Ford Rd.	E of Conway Rd.	33,000	34,500	32,500	31,000	32,500	FDOT / Orange
491	Curry Ford Rd.	E of Bumby Ave.	30,333	15,145	18,176	16,635	15,982	Orange
222	Cypress Pkwy.	E of Marigold Ave.	31,478	28,334	50,832	22,958	48,424	Osceola
276	Dean Rd.	S of Lake Underhill Rd.	17,775	18,599	17,776	18,526	NC	Orange
258	Dean Rd.	N of SR 50	25,306	24,587	25,488	24,994	24,897	Orange
074	Dean Rd.	S of SR 426	NC	17,302	16,102	13,957	17,454	Seminole
084	Dodd Rd.	S of Red Bug Lake Rd.	10,683	12,419	11,970	12,018	11,992	Seminole
086	Dog Track Rd.	W of US 17/92	23,512	21,419	19,267	14,368	18,443	Seminole
087	Douglas Rd.	S of SR 434	13,290	13,288	13,747	11,820	12,330	Seminole
089	Douglas Rd.	N of SR 436	18,944	21,087	19,226	14,439	16,052	Seminole

Station ID #	Road Name	Location	2006	2007	2008	2009	2010	Reporting Enity
5211	Edgewater Dr.	N of Fairbanks Ave.	27,000	26,500	23,500	24,500	23,000	FDOT / Orange
5218	Edgewater Dr.	N of Lee Rd.	35,000	35,000	32,000	32,500	31,500	FDOT / Orange
5177	Edgewater Dr.	N of Maury Rd.	19,440	23,760	21,551	22,947	21,246	Orange
46	Edgewater Dr.	W of Clarcona-Ocoee Rd.	11,828	11,174	10,391	9,372	NC	Orange
7056	Edgewater Dr.	W of Forest City Rd.	29,454	27,860	35,648	38,421	NC	Orange
5072	Fairbanks Ave.	W of Orange Ave.	24,000	25,500	23,000	11,600	23,500	FDOT / Orange
0435	Fairbanks Ave.	W of US 17/92	35,500	33,000	33,000	33,000	31,000	FDOT / Orange
112	Fernwood Blvd.	E of US 17/92	6,489	7,701	7,264	6,412	5,831	Seminole
44	Forest City Rd.	N of Edgewater Dr.	56,814	21,737	21,969	20,015	NC	Orange
42	Forest City Rd.	S of Seminole Co. Line	25,569	25,177	27,131	24,573	NC	Orange
235	Forsyth Rd.	S of Aloma Ave.	20,764	15,564	14,958	15,136	14,740	Orange
278	Goldenrod Rd.	N of East-West Expy.	45,483	41,665	37,865	36,948	NC	Orange
0031	Goldenrod Rd.	N of Narcoossee Rd.	10,500	10,800	10,700	10,500	10,600	FDOT / Orange
0577	Goldenrod Rd.	N of Curry Ford Rd.	42,000	44,000	40,500	42,000	37,500	FDOT / Orange
0036	Goldenrod Rd.	N of SR 50	34,500	31,500	30,000	27,500	29,000	FDOT / Orange
0590	Goldenrod Rd.	N of University Blvd.	24,000	23,000	21,500	21,500	24,000	FDOT / Orange
1066	Good Homes Rd.	S of SR 50	19,128	25,165	23,598	21,482	20,874	Orange
242	Hall Rd.	N of University Blvd.	18,341	17,600	17,280	16,954	NC	Orange
95	Hiawassee Rd.	N of SR 50	35,273	35,092	33,300	31,982	30,458	Orange
149.5	Hiawassee Rd.	N of Conroy Rd.	34,655	29,523	33,951	31,963	NC	Orange
1029	Hiawassee Rd.	S of Old Winter Garden Rd.	35,648	36,402	37,514	36,414	NC	Orange
94	Hiawassee Rd.	S of Silver Star Rd.	38,375	35,684	34,327	34,420	NC	Orange
0326	Hoffner Ave.	NW of Goldenrod Rd.	14,600	16,400	15,400	1,700	17,300	FDOT / Orange
0522	Hoffner Ave.	W of SR 436	19,600	22,000	21,500	20,500	20,300	FDOT / Orange
124	Howell Branch Rd.	E of Orange Co. Line	32,791	31,548	27,653	23,116	NC	Seminole
125	Howell Branch Rd.	W of SR 436	45,376	30,563	24,586	21,876	NC	Seminole
132	Hunt Club Blvd.	N of Sand Lake Rd.	14,208	15,927	13,977	14,432	9,520	Seminole
1048	International Dr.	E of Kirkman Rd.	20,340	21,544	24,792	16,685	NC	Orange
425	International Dr.	S of Sand Lake Rd.	28,466	29,729	25,147	24,112	NC	Orange
1069	International Dr.	N of SR 417	17,758	22,224	22,048	15,852	17,576	Orange
347	International Dr.	E of SR 535	27,507	13,676	31,184	30,412	NC	Orange
71	International Dr.	S of Beachline Expy.	20,367	20,676	20,439	19,735	NC	Orange
364	Kaley Ave.	E of Orange Ave.	10,543	10,829	9,748	9,856	10,145	Orange
6085	Kaley Ave.	E of I-4	17,757	21,563	21,805	21,245	20,978	Orange
434	Kennedy Blvd.	W of Lake Destiny Rd.	15,870	15,522	19,996	19,633	13,889	Orange
135	Lake Emma Rd.	S of Lake Mary Blvd.	NC	34,416	31,814	29,654	28,518	Seminole
142	Lake Howell Rd.	N of Howell Branch Rd.	16,243	15,261	14,906	11,120	13,164	Seminole
148	Lake Mary Blvd.	E of Lake Emma Rd.	55,147	50,764	55,340	49,436	43,055	Seminole
150	Lake Mary Blvd.	W of Country Club Rd.	64,672	48,052	46,821	NC	NC	Seminole
266	Lake Underhill Rd.	W of Alafaya Tr.	28,159	27,619	29,423	35,847	29,410	Orange
277	Lake Underhill Rd.	E of Dean Rd.	25,579	26,169	24,749	26,199	NC	Orange
280	Lake Underhill Rd.	E of Goldenrod Rd.	24,715	20,794	23,297	24,438	23,587	Orange
388	Lake Underhill Rd.	E of SR 436	26,273	24,090	19,467	19,809	NC	Orange

Station ID #	Road Name	Location	2006	2007	2008	2009	2010	Reporting Enity
419	Landstar Blvd.	N of Osceola Co. Line	33,036	27,554	26,710	25,383	22,443	Orange
6040	L.B. McLeod Rd.	E of Kirkman Rd.	23,822	22,359	21,771	20,474	NC	Orange
0503	Lee Rd.	W of I-4	48,000	45,000	51,500	39,500	50,000	FDOT / Orange
0638	Lee Rd.	E of Orange Blossom Tr.	38,000	39,000	36,000	38,000	35,500	FDOT / Orange
0519	Lee Rd.	W of US 17/92	40,000	40,000	37,500	36,000	36,000	FDOT / Orange
-	Longwood Hills Rd.	E of Rangeline Rd.	17,816	17,213	17,165	NC	NC	Seminole
391	Maguire Blvd.	W of Bennett Rd.	19,814	13,642	14,007	14,073	14,456	Orange
6080	Maguire Blvd.	S of SR 50	19,637	17,513	19,738	18,876	20,337	Orange
7074	Maguire Rd.	S of Gotha Rd.	12,733	11,163	10,479	10,486	10,098	Orange
6063	Maitland Ave.	N of Maitland Blvd.	30,492	24,979	23,174	23,098	24,533	Orange
-	Maitland Ave.	N of Orange Co. Line	21,604	20,227	NC	NC	NC	Seminole
-	Maitland Ave.	S of SR 436	19,275	21,810	NC	NC	NC	Seminole
0591	Maitland Blvd.	W of I-4	80,500	87,500	73,500	79,500	72,000	FDOT / Orange
0643	Maitland Blvd.	E of Forest City Rd.	50,000	48,000	43,500	43,000	48,000	FDOT / Orange
0579	Maitland Blvd.	W of US 17/92	32,000	25,500	32,000	30,500	27,000	FDOT / Orange
0578	Maitland Blvd.	W of Maitland Ave.	59,000	54,500	51,000	54,000	54,000	FDOT / Orange
88	Mercy Dr.	S of Silver Star Rd.	13,799	5,460	5,082	11,746	7,203	Orange
366	Michigan Ave.	W of Bumby Ave.	34,124	32,355	32,604	26,008	25,300	Orange
190	Michigan Ave.	W of Orange Ave.	36,247	37,310	36,549	34,960	NC	Orange
0437	Mills Ave.	S of Orange Ave.	29,500	27,500	26,000	24,500	26,000	FDOT / Orange
5051	Mills Ave.	N of SR 50	29,000	28,000	27,500	25,500	27,500	FDOT / Orange
181	Mitchell Hammock Rd.	E of SR 426	41,755	37,353	38,519	38,742	38,734	Seminole
186	Montgomery Rd.	N of SR 436	18,790	18,488	17,972	17,758	9,640	Seminole
289	Narcoossee Rd.	S of Goldenrod Rd.	20,428	17,976	18,256	18,586	NC	Orange
6031	Oak Ridge Rd.	W of John Young Pkwy.	33,915	25,772	31,402	30,582	29,832	Orange
100	Old Winter Garden Rd.	W of Kirkman Rd.	29,133	24,626	24,491	26,773	NC	Orange
0655	Orange Blossom Tr.	N of Osceola Co. Line	26,000	28,000	31,000	32,000	33,000	FDOT / Orange
0656	Orange Blossom Tr.	S of Hunters Creek Blvd.	30,000	32,500	36,000	34,500	38,000	FDOT / Orange
0657	Orange Blossom Tr.	N of Wetherbee Rd.	46,500	48,500	53,000	51,000	52,500	FDOT / Orange
6018	Orange Blossom Tr.	S of Central Florida Pkwy.	51,049	43,879	42,930	44,897	NC	Orange
0558	Orange Blossom Tr.	S of Taft-Vineland Rd.	46,000	45,500	45,000	43,000	47,000	FDOT / Orange
0123	Orange Blossom Tr.	N of Beachline Expy.	74,000	71,500	75,000	70,000	71,000	FDOT / Orange
0511	Orange Blossom Tr.	N of Sand Lake Rd.	59,000	58,500	53,000	53,000	50,000	FDOT / Orange
5004	Orange Blossom Tr.	S of Old Winter Garden Rd.	35,000	35,500	33,000	29,500	32,500	FDOT / Orange
186	Orange Blossom Tr.	S of Holden Ave.	59,242	62,822	61,822	60,551	NC	Orange
359	Orange Blossom Tr.	S of Kaley Ave.	42,535	32,421	31,208	28,806	NC	Orange
5007	Orange Blossom Tr.	S of SR 50	26,500	26,000	21,500	27,000	21,500	FDOT / Orange
0544	Orange Blossom Tr.	N of SR 50	30,500	28,500	26,500	27,500	25,000	FDOT / Orange
0443	Orange Blossom Tr.	S of Princeton St.	30,000	28,500	26,500	27,500	25,500	FDOT / Orange
0259	Orange Blossom Tr.	N of Silver Star Rd.	32,000	30,500	27,500	27,500	25,500	FDOT / Orange
0105	Orange Blossom Tr.	N of Clarcona-Ocoee Rd.	34,500	31,000	32,500	27,500	29,500	FDOT / Orange
0480	Orange Blossom Tr.	S of Seminole Co. Line	33,000	28,500	34,500	26,000	26,000	FDOT / Orange
0294	Orange Blossom Tr.	SE of SR 436	27,000	35,500	33,500	34,000	30,000	FDOT / Orange
209	Oxford Rd.	S of SR 436	12,635	9,992	9,638	9,387	7,705	Seminole

Station ID #	Road Name	Location	2006	2007	2008	2009	2010	Reporting Enity
214	Palm Springs Dr.	N of SR 436	26,115	24,598	25,795	20,212	21,673	Seminole
330	Piedmont-Wekiva Rd.	S of SR 436	27,719	29,155	33,197	26,416	26,838	Orange
61	Pine Hills Rd.	S of Clarcona-Ocoee Rd.	26,120	25,266	23,897	23,724	22,871	Orange
82	Pine Hills Rd.	N of Silver Star Rd.	35,824	31,993	32,851	35,739	28,956	Orange
407	Pine Hills Rd.	N of SR 50	38,392	34,560	32,757	31,206	32,422	Orange
205	Pleasant Hill Rd.	S of US 17/92	46,692	48,376	46,611	49,141	48,923	Osceola
160	Poinciana Blvd.	S of US 192	31,671	NC	30,473	26,697	27,480	Osceola
80	Powers Dr.	N of Silver Star Rd.	15,526	13,273	13,407	14,657	13,073	Orange
0601	Princeton St.	W of Orange Blossom Tr.	16,600	16,200	15,100	14,700	14,200	FDOT / Orange
5216	Princeton St.	E of Orange Blossom Tr.	15,500	15,200	16,700	14,900	13,500	FDOT / Orange
6039	Raleigh St.	E of Kirkman Rd.	14,227	14,308	14,822	15,015	15,920	Orange
227	Red Bug Lake Rd.	E of SR 436	40,000	39,004	36,649	34,907	35,826	Seminole
229	Red Bug Lake Rd.	E of Tuskawilla Rd.	39,689	43,727	36,649	42,096	38,734	Seminole
5047	Robinson St.	E of Bumby Ave.	12,200	10,200	11,300	12,500	11,100	FDOT / Orange
5046	Robinson St.	E of Mills Ave.	15,300	15,200	15,200	14,200	14,700	FDOT / Orange
7047	Robinson St.	E of Summerlin Ave.	16,608	16,413	16,163	14,099	28,000	Orange
21	Rock Springs Rd.	S of Welch Rd.	22,849	24,644	24,798	21,649	23,588	Orange
260	Rouse Rd.	N of SR 50	21,077	15,547	14,965	16,258	17,971	Orange
155	Sand Lake Rd.	E of Apopka-Vineland Rd.	27,084	30,357	29,248	28,558	29,154	Orange
0541	Sand Lake Rd.	W of Florida's Turnpike	44,500	44,500	51,000	42,000	46,000	FDOT / Orange
0453	Sand Lake Rd.	E of I-4	40,000	40,500	38,500	38,500	38,500	FDOT / Orange
0644	Sand Lake Rd.	W of John Young Pkwy.	50,000	50,000	46,500	45,000	48,500	FDOT / Orange
0403	Sand Lake Rd.	E of Orange Ave.	44,500	46,000	44,500	43,500	42,000	FDOT / Orange
242	Sand Lake Rd.	W of SR 434	7,501	16,395	16,168	14,019	14,611	Seminole
245	Sanford Ave.	S of SR 46	25,330	18,309	16,894	17,131	16,330	Seminole
0568	Silver Star Rd.	W of Apopka-Vineland Rd.	26,000	24,500	25,500	25,500	25,500	FDOT / Orange
5120	Silver Star Rd.	E of CR 437	13,600	16,500	16,000	15,000	14,000	FDOT / Orange
0089	Silver Star Rd.	W of SR 429	17,500	17,800	17,200	17,800	16,500	FDOT / Orange
77	Silver Star Rd.	E of Clarke Rd.	21,922	21,776	22,990	25,619	NC	Orange
0606	Silver Star Rd.	W of Princeton Ave.	42,000	43,000	41,000	38,000	38,500	FDOT / Orange
0057	Silver Star Rd.	E of Mercy Dr.	17,200	17,900	14,700	14,400	13,300	FDOT / Orange
0055	Silver Star Rd.	W of Orange Blossom Tr.	9,500	9,100	8,000	9,700	7,000	FDOT / Orange
0058	Silver Star Rd.	W of Powers Dr.	41,000	45,500	42,500	41,500	42,500	FDOT / Orange
5172	South St.	W of Crystal Lake Dr.	8,000	8,800	7,300	7,600	8,300	FDOT / Orange
263	S.R. 46	W of Orange Blvd.	20,366	26,927	NC	27,570	26,610	Seminole
265	S.R. 46	E of I-4	26,999	40,420	38,530	36,276	35,925	Seminole
262	S.R. 46	W of Orange Blvd.	17,851	23,475	22,743	21,435	22,726	Seminole
270	S.R. 46	E of Sanford Ave.	20,282	22,595	25,604	22,510	20,244	Seminole
278	S.R. 419	NW of SR 434	18,955	12,886	15,995	15,845	NC	Seminole
279	S.R. 419	SE of US 17/92	17,802	18,562	17,085	15,286	16,506	Seminole
1009	S.R. 520	SE of SR 50	14,500	15,500	14,300	14,800	15,800	FDOT / Orange
0312	S.R. 535	S of Orange Co. Line	44,000	45,500	47,000	42,000	34,500	FDOT / Osceola
0630	S.R. 535	SE of I-4	51,000	39,500	43,500	45,000	39,000	FDOT / Orange

Station ID #	Road Name	Location	2006	2007	2008	2009	2010	Reporting Enity
0603	S.R. 536	W of I-4	52,000	58,000	54,500	55,000	62,500	FDOT / Orange
0595	S.R. 536	W of SR 535	30,500	39,000	32,500	34,000	39,500	FDOT / Orange
167	Taft-Vineland Rd.	E of Orange Blossom Tr.	20,744	20,777	20,507	17,041	22,247	Orange
151	Turkey Lake Rd.	S of Conroy-Windermere Rd.	20,819	19,717	21,619	19,703	19,719	Orange
152	Turkey Lake Rd.	N of Sand Lake Rd.	23,964	29,144	24,355	23,794	23,446	Orange
329	Tuskawilla Rd.	N of E. Lake Dr.	29,715	25,524	26,256	26,837	26,123	Seminole
332	Tuskawilla Rd.	S of Red Bug Lake Rd.	33,596	29,849	31,788	30,260	29,156	Seminole
333	Tuskawilla Rd.	N of SR 426	NC	27,230	28,443	27,551	NC	Seminole
255	University Blvd.	W of Alafaya Tr.	53,732	55,296	55,476	50,051	52,552	Orange
251	University Blvd.	E of Dean Rd.	63,979	63,551	62,324	60,015	59,969	Orange
241	University Blvd.	E of Goldenrod Rd.	53,825	42,584	41,589	39,445	37,568	Orange
6079	University Blvd.	E of Econlockhatchee Tr.	51,741	51,451	49,772	47,632	46,941	Orange
357	Wekiva Springs Rd.	NW of SR 434	30,456	28,251	34,615	23,614	25,899	Seminole
355	Wekiva Springs Rd.	E of Hunt Club Blvd.	24,805	22,811	21,399	23,179	19,717	Seminole
25	Wekiva Springs Rd.	N of SR 436	25,362	18,655	24,414	23,909	NC	Orange
524	Winter GdnVineland Rd.	W of I-4	44,554	47,146	43,831	42,687	NC	Orange
6010	Winter GdnVineland Rd.	W of Apopka-Vineland Rd.	21,758	24,574	24,152	22,860	NC	Orange
1033	Wymore Rd.	N of Lee Rd.	12,870	12,382	12,029	10,781	NC	Orange
367	Wymore Rd.	S of Westmonte Dr.	14,775	14,142	14,446	13,325	13,424	Seminole

Appendix B

2011 Ozone Monthly Reporting

These charts show the highest monthly eight-hour average ozone readings for 2011 for each monitoring station operated by the Florida Department of Environmental Protection in the Orlando Metropolitan Area. The Environmental Protection Agency (EPA) standard for ozone is 75 parts per billion (ppb) averaged over any eight-hour period.

An area will be considered as nonattainment (not meeting the standard) if the average of the annual fourth-highest ozone readings at any monitoring station, for any three-year period, equals or exceeds the 75 parts per billion standard. The Orlando Metropolitan Area is currently considered to be in attainment for ozone.

If additional information is desired, the EPA can be reached at the following telephone number:

Florida Dept. of Environmental Protection 407-894-7555









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