

Performance Measure Summary - Cape Coral FL

There are several inventory and performance measures listed in the pages of this Urban Area Report for the years from 1982 to 2017. There is no single performance measure that experts agree "says it all". A few key points should be recognized by users of the Urban Mobility Scorecard data.

Use the trends - The multi-year performance measures are better indicators, in most cases, than any single year. Examining a few measures over many years reduces the chance that data variations or the estimating procedures may have caused a "spike" in any single year. (5 years is 5 times better than 1 year.)

Use several measures - Each performance measure illustrates a different element of congestion. (The view is more interesting from atop several measures.)

Compare to similar regions - Congestion analyses that compare areas with similar characteristics (for example, population, growth rate, road and public transportation system design) are usually more insightful than comparisons of different regions. (Los Angeles is not Peoria.)

Compare ranking changes and performance measure values - In some performance measures, a small change in the value may cause a significant change in rank from one year to the next. This is the case when there are several regions with nearly the same value. (15 hours is only 1 hour more than 14 hours.)

Consider the scope of improvement options - Any improvement project in a corridor within most of the regions will only have a modest effect on the regional congestion level. (To have an effect on areawide congestion, there must be significant change in the system or service.)

Performance Measures and Definition of Terms

Travel Time Index - A measure of congestion that focuses on each trip and each mile of travel. It is calculated as the ratio of travel time in the peak period to travel time in free-flow. A value of 1.30 indicates that a 20-minute free-flow trip takes 26 minutes in the peak.

Planning Time Index - A travel time reliability measure that represents the total travel time that should be planned for a trip. Computed with the 95th percentile travel time it represents the amount of time that should be planned for a commute trip to be late for only 1 day a month. If it is computed with the 80th percentile travel time it represents the amount of time that should be planned for a trip to be late for only 1 day a week. A PTI of 2.00 means that for a 20-minute trip in light traffic, 40 minutes should be planned.

Peak Commuters - Number of travelers who begin a trip during the morning or evening peak travel periods (6 to 10 a.m. and 3 to 7 p.m.). "Commuters" are private vehicle users unless specifically noted.

Annual Delay per Commuter - A yearly sum of all the per-trip delays for those persons who travel in the peak period (6 to 10 a.m. and 3 to 7 p.m.). This measure illustrates the effect of traffic slowdowns as well as the length of each trip.

Total Delay - The overall size of the congestion problem. Measured by the total travel time above that needed to complete a trip at free-flow speeds. The ranking of total delay usually follows the population ranking (larger regions usually have more delay).

Free-Flow Speeds - These values are derived from time periods with lighter traffic volumes in the INRIX speed database. They are used as the national comparison thresholds. Other speed thresholds may be appropriate for urban project evaluations or sub-region studies.

Excess Fuel Consumed - Increased fuel consumption due to travel in congested conditions rather than free-flow conditions.

Congestion Cost - Value of travel delay for 2017 (estimated at \$18.29 per hour of person travel and \$59.94 per hour of truck time) and excess fuel consumption estimated using state average cost per gallon.

Urban Area - The developed area (population density more than 1,000 persons per square mile) within a metropolitan region. The urban area boundaries change frequently (every year for most growing areas), so increases include both new growth and development that was previously in areas designated as rural.

Number of Rush Hours - Time when the road system might have congestion.

Mobility Data for Cape Coral FL

Inventory Measures	2017	2016	2015	2014	2013	2012
Urban Area Information						
Population (1000s)	595	585	575	570	545	520
Rank	72	73	73	73	75	75
Commuters (1000s)	304	298	293	290	282	269
Daily Vehicle-Miles of Travel (1000s)						
Freeway	2,249	2,193	2,016	1,856	1,768	1,730
Arterial Streets	7,672	7,650	7,342	7,118	5,808	5,860
Cost Components						
Value of Time (\$/hour)	18.12	17.91	17.69	17.67	17.39	17.14
Commercial Cost (\$/hour)	52.14	50.20	46.87	44.82	41.23	39.66
Gasoline (\$/gallon)	2.28	2.12	2.23	3.27	3.47	3.50
Diesel (\$/gallon)	2.48	2.31	2.55	3.60	3.90	3.87
System Performance	2017	2016	2015	2014	2013	2012
Congested Travel (% of peak VMT)	16.5	--	--	--	--	--
Congested System (% of lane-miles)	12.1	--	--	--	--	--
Congested Time (number of "Rush Hours")	1.2	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	5,762	5,689	5,550	5,444	5,309	5,268
Rank	78	78	78	77	78	77
Fuel per Peak Auto Commuter (gallons)	14	14	14	13	13	13
Rank	90	90	87	88	89	87
Annual Delay						
Total Delay (1000s of person-hours)	15,733	15,308	14,679	14,274	13,799	13,449
Rank	73	73	76	75	75	73
Delay per Auto Commuter (pers-hrs)	37	36	36	35	35	36
Rank	86	86	82	80	79	72
Travel Time Index						
Rank	1.17	1.17	1.17	1.18	1.18	1.18
Rank	49	49	49	40	41	40
Commuter Stress Index						
Rank	1.21	--	--	--	--	--
Rank	41	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	1.33	--	--	--	--	--
Rank	66	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	317	303	287	283	270	259
Rank	73	74	76	76	76	75
Cost per Auto Commuter (\$)	736	720	687	664	648	640
Rank	71	73	74	74	75	73
Truck Congestion						
Annual Person-Hours of Delay (000)	661	643	617	600	580	565
Rank	73	73	75	75	75	73
Annual Gallons of Wasted Fuel (000)	1,222	1,206	1,177	1,154	1,126	1,117
Rank	78	78	78	77	78	77
Annual Congestion Cost (\$ million)	33	31	28	28	25	24
Rank	74	73	76	76	76	75

* Note: Zeroes in the table reflect values less than 0.5.

Mobility Data for Cape Coral FL

Inventory Measures	2011	2010	2009	2008	2007	2006
Urban Area Information						
Population (1000s)	505	490	475	465	460	440
Rank	78	78	78	78	78	79
Commuters (1000s)	261	252	244	238	234	222
Daily Vehicle-Miles of Travel (1000s)						
Freeway	1,793	1,763	1,700	1,645	1,845	1,900
Arterial Streets	5,879	5,780	5,900	5,965	6,155	5,950
Cost Components						
Value of Time (\$/hour)	16.79	16.28	16.01	16.07	15.47	15.06
Commercial Cost (\$/hour)	44.62	42.50	41.83	40.77	39.30	37.88
Gasoline (\$/gallon)	3.24	2.74	2.33	3.47	2.98	2.66
Diesel (\$/gallon)	3.65	2.96	2.59	4.15	3.36	2.85
System Performance	2011	2010	2009	2008	2007	2006
Congested Travel (% of peak VMT)	--	--	--	--	--	--
Congested System (% of lane-miles)	--	--	--	--	--	--
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	5,227	5,222	5,132	5,569	5,357	4,704
Rank	77	77	77	77	77	78
Fuel per Peak Auto Commuter (gallons)	13	13	12	15	15	12
Rank	84	84	83	75	73	86
Annual Delay						
Total Delay (1000s of person-hours)	13,103	12,851	12,395	12,808	12,321	10,820
Rank	73	73	73	72	73	76
Delay per Auto Commuter (pers-hrs)	36	36	36	38	37	34
Rank	69	64	61	47	54	69
Travel Time Index						
Rank	1.19	1.10	1.20	1.22	1.21	1.20
Rank	39	98	36	34	36	37
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	250	235	221	237	217	184
Rank	73	73	73	72	73	76
Cost per Auto Commuter (\$)	645	652	640	655	655	590
Rank	71	69	68	62	66	81
Truck Congestion						
Annual Person-Hours of Delay (000)	550	540	521	538	517	454
Rank	73	73	73	72	73	76
Annual Gallons of Wasted Fuel (000)	1,108	1,107	1,088	1,181	1,136	997
Rank	77	77	77	77	77	78
Annual Congestion Cost (\$ million)	26	23	22	24	22	18
Rank	73	73	73	73	72	74

* Note: Zeroes in the table reflect values less than 0.5.

Mobility Data for Cape Coral FL

Inventory Measures	2005	2004	2003	2002	2001	2000
Urban Area Information						
Population (1000s)	410	390	370	345	325	305
Rank	81	81	81	84	86	89
Commuters (1000s)	206	195	184	169	157	145
Daily Vehicle-Miles of Travel (1000s)						
Freeway	1,875	1,795	1,500	1,300	1,100	950
Arterial Streets	5,600	5,325	5,100	4,800	4,500	4,300
Cost Components						
Value of Time (\$/hour)	14.58	14.10	13.73	13.43	13.22	12.85
Commercial Cost (\$/hour)	36.51	35.19	33.92	32.69	31.51	30.38
Gasoline (\$/gallon)	2.34	1.99	1.53	1.41	1.51	1.54
Diesel (\$/gallon)	2.53	2.01	1.61	1.41	1.58	1.55
System Performance	2005	2004	2003	2002	2001	2000
Congested Travel (% of peak VMT)	--	--	--	--	--	--
Congested System (% of lane-miles)	--	--	--	--	--	--
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	4,192	3,863	3,568	3,236	2,909	2,628
Rank	79	79	80	80	81	82
Fuel per Peak Auto Commuter (gallons)	11	10	10	9	8	7
Rank	88	90	89	91	92	91
Annual Delay						
Total Delay (1000s of person-hours)	9,643	8,885	8,206	7,442	6,691	6,045
Rank	78	78	77	78	79	80
Delay per Auto Commuter (pers-hrs)	33	32	31	31	30	29
Rank	71	73	75	72	71	71
Travel Time Index						
Rank	1.19	1.18	1.18	1.17	1.17	1.16
Rank	38	38	38	41	38	45
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	158	139	124	109	97	85
Rank	77	78	77	77	79	80
Cost per Auto Commuter (\$)	542	517	494	457	416	388
Rank	87	89	89	89	89	89
Truck Congestion						
Annual Person-Hours of Delay (000)	405	373	345	313	281	254
Rank	78	78	77	78	79	80
Annual Gallons of Wasted Fuel (000)	889	819	756	686	617	557
Rank	79	79	80	80	81	82
Annual Congestion Cost (\$ million)	15	13	11	10	9	8
Rank	77	77	77	77	77	77

* Note: Zeroes in the table reflect values less than 0.5.

Mobility Data for Cape Coral FL

Inventory Measures	1999	1998	1997	1996	1995	1994
Urban Area Information						
Population (1000s)	295	285	270	265	260	255
Rank	90	90	91	91	90	90
Commuters (1000s)	138	131	122	118	114	110
Daily Vehicle-Miles of Travel (1000s)						
Freeway	850	700	550	400	350	340
Arterial Streets	4,100	3,900	3,650	3,595	3,465	3,100
Cost Components						
Value of Time (\$/hour)	12.43	12.17	11.98	11.71	11.37	11.06
Commercial Cost (\$/hour)	29.28	28.89	28.50	28.12	27.75	27.38
Gasoline (\$/gallon)	1.14	1.07	1.17	1.30	1.20	1.08
Diesel (\$/gallon)	1.19	1.20	1.27	1.40	1.30	1.17
System Performance	1999	1998	1997	1996	1995	1994
Congested Travel (% of peak VMT)	--	--	--	--	--	--
Congested System (% of lane-miles)	--	--	--	--	--	--
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	2,383	2,107	1,948	1,778	1,680	1,494
Rank	82	84	84	83	82	84
Fuel per Peak Auto Commuter (gallons)	7	5	5	4	4	4
Rank	90	93	92	92	90	91
Annual Delay						
Total Delay (1000s of person-hours)	5,481	4,845	4,479	4,089	3,865	3,437
Rank	80	80	81	79	79	81
Delay per Auto Commuter (pers-hrs)	27	25	25	23	23	21
Rank	74	76	73	74	73	75
Travel Time Index						
Rank	1.15	1.14	1.14	1.13	1.13	1.12
Rank	52	55	47	50	47	51
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	74	64	58	52	48	42
Rank	80	80	81	80	79	80
Cost per Auto Commuter (\$)	361	325	305	287	280	256
Rank	91	92	93	91	91	92
Truck Congestion						
Annual Person-Hours of Delay (000)	230	203	188	172	162	144
Rank	80	80	81	79	79	81
Annual Gallons of Wasted Fuel (000)	505	447	413	377	356	317
Rank	82	84	84	83	82	84
Annual Congestion Cost (\$ million)	7	6	5	5	4	4
Rank	77	77	79	79	79	79

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Mobility Data for Cape Coral FL

Inventory Measures	1993	1992	1991	1990	1989	1988
Urban Area Information						
Population (1000s)	250	250	245	245	240	235
Rank	89	89	89	89	88	88
Commuters (1000s)	107	105	101	100	97	94
Daily Vehicle-Miles of Travel (1000s)						
Freeway	335	330	295	270	255	235
Arterial Streets	2,775	2,430	2,205	2,075	2,035	1,975
Cost Components						
Value of Time (\$/hour)	10.78	10.47	10.17	9.75	9.25	8.83
Commercial Cost (\$/hour)	27.02	26.66	26.30	25.95	25.60	25.26
Gasoline (\$/gallon)	1.13	1.12	1.10	1.05	1.08	1.00
Diesel (\$/gallon)	1.22	1.20	1.24	1.11	1.07	0.99
System Performance	1993	1992	1991	1990	1989	1988
Congested Travel (% of peak VMT)	--	--	--	--	--	--
Congested System (% of lane-miles)	--	--	--	--	--	--
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	1,423	1,351	1,254	1,164	1,066	940
Rank	84	84	84	83	84	84
Fuel per Peak Auto Commuter (gallons)	3	3	3	3	3	2
Rank	90	90	90	90	85	87
Annual Delay						
Total Delay (1000s of person-hours)	3,272	3,107	2,884	2,677	2,452	2,162
Rank	80	81	81	81	81	81
Delay per Auto Commuter (pers-hrs)	20	19	19	17	16	15
Rank	74	74	68	70	68	67
Travel Time Index						
Rank	44	49	45	46	48	48
Commuter Stress Index						
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	39	36	32	29	25	21
Rank	80	81	81	81	81	81
Cost per Auto Commuter (\$)	253	243	230	229	219	207
Rank	91	89	89	87	87	87
Truck Congestion						
Annual Person-Hours of Delay (000)	137	130	121	112	103	91
Rank	80	81	81	81	81	81
Annual Gallons of Wasted Fuel (000)	302	286	266	247	226	199
Rank	84	84	84	83	84	84
Annual Congestion Cost (\$ million)	4	3	3	3	3	2
Rank	77	80	80	77	76	80

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Mobility Data for Cape Coral FL

Inventory Measures	1987	1986	1985	1984	1983	1982
Urban Area Information						
Population (1000s)	230	225	215	205	200	195
Rank	88	88	88	88	89	89
Commuters (1000s)	92	89	84	80	77	74
Daily Vehicle-Miles of Travel (1000s)						
Freeway	225	210	205	190	180	170
Arterial Streets	1,810	1,745	1,650	1,590	1,470	1,400
Cost Components						
Value of Time (\$/hour)	8.48	8.18	8.03	7.75	7.43	7.20
Commercial Cost (\$/hour)	24.93	24.60	24.27	23.94	23.63	23.31
Gasoline (\$/gallon)	1.00	0.98	1.28	1.29	1.32	1.38
Diesel (\$/gallon)	0.99	0.97	1.27	1.28	1.31	1.37
System Performance	1987	1986	1985	1984	1983	1982
Congested Travel (% of peak VMT)	--	--	--	--	--	--
Congested System (% of lane-miles)	--	--	--	--	--	--
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	829	775	673	596	566	513
Rank	83	83	83	83	83	83
Fuel per Peak Auto Commuter (gallons)	2	2	2	1	1	1
Rank	86	84	84	87	86	82
Annual Delay						
Total Delay (1000s of person-hours)	1,908	1,782	1,549	1,372	1,302	1,180
Rank	82	82	82	82	80	80
Delay per Auto Commuter (pers-hrs)	13	13	12	11	11	10
Rank	75	64	63	64	56	58
Travel Time Index						
Rank	44	49	48	51	46	43
Commuter Stress Index						
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	18	16	14	12	11	10
Rank	82	82	82	82	80	79
Cost per Auto Commuter (\$)	192	179	158	148	147	135
Rank	87	87	88	87	85	88
Truck Congestion						
Annual Person-Hours of Delay (000)	80	75	65	58	55	50
Rank	82	82	82	82	80	80
Annual Gallons of Wasted Fuel (000)	176	164	143	126	120	109
Rank	83	83	83	83	83	82
Annual Congestion Cost (\$ million)	2	2	2	1	1	1
Rank	79	75	73	81	78	75

* Note: Zeroes in the table reflect values less than 0.5.