

Performance Measure Summary - Jacksonville 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 Jacksonville FL

Inventory Measures	2017	2016	2015	2014	2013	2012
Urban Area Information						
Population (1000s)	1,150	1,120	1,105	1,085	1,080	1,075
Rank	41	41	42	43	41	41
Commuters (1000s)	593	578	571	560	569	566
Daily Vehicle-Miles of Travel (1000s)						
Freeway	13,537	12,967	12,377	11,810	11,468	11,535
Arterial Streets	9,625	9,712	9,267	8,895	8,947	8,905
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)	24.1	--	--	--	--	--
Congested System (% of lane-miles)	16.4	--	--	--	--	--
Congested Time (number of "Rush Hours")	3.3	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	11,921	11,788	11,722	11,615	11,478	11,389
Rank	50	50	50	50	50	49
Fuel per Peak Auto Commuter (gallons)	15	15	15	15	15	15
Rank	84	83	83	81	82	78
Annual Delay						
Total Delay (1000s of person-hours)	34,792	33,935	33,457	32,579	31,630	31,106
Rank	45	45	44	44	44	44
Delay per Auto Commuter (pers-hrs)	46	46	44	43	41	41
Rank	47	47	49	49	52	50
Travel Time Index						
Rank	1.19	1.19	1.19	1.18	1.17	1.17
Rank	41	40	39	40	51	50
Commuter Stress Index						
Rank	1.24	--	--	--	--	--
Rank	36	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	1.68	--	--	--	--	--
Rank	32	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	698	670	652	644	616	597
Rank	45	45	45	45	45	44
Cost per Auto Commuter (\$)	893	876	859	833	816	812
Rank	44	44	44	44	45	44
Truck Congestion						
Annual Person-Hours of Delay (000)	1,461	1,425	1,405	1,368	1,328	1,306
Rank	45	45	44	44	44	44
Annual Gallons of Wasted Fuel (000)	2,527	2,499	2,485	2,462	2,433	2,415
Rank	50	50	50	50	50	49
Annual Congestion Cost (\$ million)	73	69	64	63	58	55
Rank	45	45	45	45	45	45

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

Mobility Data for Jacksonville FL

Inventory Measures	2011	2010	2009	2008	2007	2006
Urban Area Information						
Population (1000s)	1,065	1,060	1,055	1,050	1,040	1,015
Rank	41	41	40	39	40	41
Commuters (1000s)	560	555	551	546	537	520
Daily Vehicle-Miles of Travel (1000s)						
Freeway	12,226	12,113	11,900	11,760	12,460	12,420
Arterial Streets	9,360	9,400	9,632	9,680	9,645	9,815
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)	11,028	11,343	11,247	11,793	12,477	12,222
Rank	49	49	48	48	47	47
Fuel per Peak Auto Commuter (gallons)	15	15	14	15	17	17
Rank	74	73	71	75	61	56
Annual Delay						
Total Delay (1000s of person-hours)	29,576	29,864	29,058	29,017	30,699	30,072
Rank	44	43	43	43	41	40
Delay per Auto Commuter (pers-hrs)	39	41	40	40	43	43
Rank	54	42	43	38	31	31
Travel Time Index						
Rank	1.17	1.18	1.18	1.19	1.20	1.20
Rank	45	39	41	40	38	37
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	561	544	517	533	538	509
Rank	45	44	44	43	41	40
Cost per Auto Commuter (\$)	799	831	821	814	895	900
Rank	45	40	41	39	32	30
Truck Congestion						
Annual Person-Hours of Delay (000)	1,242	1,254	1,220	1,219	1,289	1,263
Rank	44	43	43	43	41	40
Annual Gallons of Wasted Fuel (000)	2,338	2,405	2,384	2,500	2,645	2,591
Rank	49	49	48	48	47	47
Annual Congestion Cost (\$ million)	57	54	51	54	53	49
Rank	45	44	44	44	41	41

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

Mobility Data for Jacksonville FL

Inventory Measures	2005	2004	2003	2002	2001	2000
Urban Area Information						
Population (1000s)	990	965	925	905	890	865
Rank	42	42	45	44	43	43
Commuters (1000s)	504	488	466	449	434	416
Daily Vehicle-Miles of Travel (1000s)						
Freeway	11,500	10,825	10,275	9,965	9,750	9,835
Arterial Streets	10,000	9,895	9,275	8,925	8,555	8,565
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)	11,782	10,997	10,364	9,574	9,058	8,579
Rank	47	47	47	47	50	51
Fuel per Peak Auto Commuter (gallons)	17	16	15	14	13	11
Rank	48	56	58	61	63	74
Annual Delay						
Total Delay (1000s of person-hours)	28,990	27,058	25,500	23,556	22,288	21,108
Rank	40	42	43	43	44	45
Delay per Auto Commuter (pers-hrs)	43	41	40	39	38	37
Rank	30	32	32	36	38	37
Travel Time Index						
Rank	1.20	1.19	1.19	1.18	1.17	1.17
Rank	36	37	37	37	38	37
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	472	422	383	345	322	297
Rank	40	43	43	44	45	45
Cost per Auto Commuter (\$)	897	867	839	790	759	739
Rank	31	36	38	40	39	39
Truck Congestion						
Annual Person-Hours of Delay (000)	1,218	1,136	1,071	989	936	887
Rank	40	42	43	43	44	45
Annual Gallons of Wasted Fuel (000)	2,498	2,331	2,197	2,030	1,920	1,819
Rank	47	47	47	47	50	51
Annual Congestion Cost (\$ million)	45	40	35	31	29	26
Rank	40	43	43	44	45	45

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Mobility Data for Jacksonville FL

Inventory Measures	1999	1998	1997	1996	1995	1994
Urban Area Information						
Population (1000s)	850	840	825	820	805	785
Rank	44	44	45	44	44	44
Commuters (1000s)	401	390	377	369	356	342
Daily Vehicle-Miles of Travel (1000s)						
Freeway	9,355	9,025	8,650	8,150	7,000	6,520
Arterial Streets	8,325	8,425	8,205	8,120	8,200	8,275
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)	8,344	7,804	7,369	7,056	6,177	5,746
Rank	48	48	47	46	49	47
Fuel per Peak Auto Commuter (gallons)	12	11	10	10	9	9
Rank	64	65	66	57	59	56
Annual Delay						
Total Delay (1000s of person-hours)	20,531	19,203	18,132	17,362	15,199	14,137
Rank	41	42	42	38	41	41
Delay per Auto Commuter (pers-hrs)	37	35	34	33	30	29
Rank	35	37	38	38	46	42
Travel Time Index						
Rank	1.17	1.16	1.16	1.16	1.14	1.14
Rank	36	36	36	35	41	38
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	276	253	236	222	189	170
Rank	41	42	42	38	41	41
Cost per Auto Commuter (\$)	744	712	682	668	603	578
Rank	37	34	35	33	40	42
Truck Congestion						
Annual Person-Hours of Delay (000)	862	807	762	729	638	594
Rank	41	42	41	38	41	41
Annual Gallons of Wasted Fuel (000)	1,769	1,655	1,562	1,496	1,310	1,218
Rank	48	48	47	46	49	47
Annual Congestion Cost (\$ million)	24	22	21	20	17	16
Rank	40	42	42	38	41	39

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Mobility Data for Jacksonville FL

Inventory Measures	1993	1992	1991	1990	1989	1988
Urban Area Information						
Population (1000s)	770	760	750	720	715	690
Rank	44	44	44	43	43	44
Commuters (1000s)	330	321	311	294	290	277
Daily Vehicle-Miles of Travel (1000s)						
Freeway	6,065	5,760	5,470	5,375	5,010	5,205
Arterial Streets	8,090	8,080	7,810	7,470	7,280	7,115
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)	5,299	5,001	4,762	4,316	3,999	3,681
Rank	47	46	45	46	45	44
Fuel per Peak Auto Commuter (gallons)	7	7	7	6	5	6
Rank	67	59	57	60	63	45
Annual Delay						
Total Delay (1000s of person-hours)	13,038	12,305	11,716	10,620	9,840	9,058
Rank	41	40	40	40	39	39
Delay per Auto Commuter (pers-hrs)	28	27	26	25	23	22
Rank	40	38	37	35	37	32
Travel Time Index						
Rank	1.13	1.12	1.12	1.12	1.11	1.10
Rank	39	40	38	34	36	40
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	154	141	131	114	101	89
Rank	41	40	40	40	39	39
Cost per Auto Commuter (\$)	546	532	520	494	482	471
Rank	42	42	34	37	37	37
Truck Congestion						
Annual Person-Hours of Delay (000)	548	517	492	446	413	380
Rank	41	40	40	40	39	39
Annual Gallons of Wasted Fuel (000)	1,123	1,060	1,009	915	848	780
Rank	47	46	45	46	45	44
Annual Congestion Cost (\$ million)	14	13	13	11	10	9
Rank	41	40	39	40	39	39

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Mobility Data for Jacksonville FL

Inventory Measures	1987	1986	1985	1984	1983	1982
Urban Area Information						
Population (1000s)	660	650	645	630	620	615
Rank	45	45	45	45	45	45
Commuters (1000s)	263	257	253	246	240	235
Daily Vehicle-Miles of Travel (1000s)						
Freeway	4,715	4,720	4,480	4,505	4,085	3,900
Arterial Streets	6,775	6,710	6,520	6,555	6,565	6,285
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)	3,156	2,997	2,691	2,471	2,289	2,041
Rank	46	45	46	47	44	45
Fuel per Peak Auto Commuter (gallons)	4	4	4	3	3	3
Rank	61	54	50	61	46	34
Annual Delay						
Total Delay (1000s of person-hours)	7,765	7,374	6,622	6,079	5,633	5,022
Rank	40	40	41	41	40	42
Delay per Auto Commuter (pers-hrs)	20	20	18	17	16	14
Rank	36	32	35	35	33	40
Travel Time Index						
Rank	1.09	1.09	1.08	1.08	1.07	1.07
Rank	40	38	39	38	39	35
Commuter Stress Index						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Freeway Planning Time Index (95th Pctile)						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	73	67	60	54	48	42
Rank	40	40	41	41	41	42
Cost per Auto Commuter (\$)	421	412	381	363	351	325
Rank	38	36	37	37	38	39
Truck Congestion						
Annual Person-Hours of Delay (000)	326	310	278	255	237	211
Rank	40	40	41	41	40	42
Annual Gallons of Wasted Fuel (000)	669	635	571	524	485	433
Rank	46	45	46	46	44	45
Annual Congestion Cost (\$ million)	8	7	7	6	6	5
Rank	39	40	39	40	38	40

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