

# Performance Measure Summary - Baton Rouge LA

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 Baton Rouge LA

Inventory Measures	2017	2016	2015	2014	2013	2012
<b>Urban Area Information</b>						
Population (1000s)	640	640	635	630	615	610
Rank	65	65	65	65	67	67
Commuters (1000s)	347	345	342	338	323	320
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	5,711	5,743	5,503	5,108	4,922	4,745
Arterial Streets	8,514	8,715	8,673	8,229	8,388	8,300
<b>Cost Components</b>						
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)	2.16	1.99	2.07	3.14	3.34	3.35
Diesel (\$/gallon)	2.32	2.13	2.35	3.48	3.75	3.74
System Performance	2017	2016	2015	2014	2013	2012
<b>Congested Travel (% of peak VMT)</b>	24.6	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	14.8	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	3.4	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	12,679	12,540	12,374	12,098	11,528	10,969
Rank	48	48	48	48	49	50
Fuel per Peak Auto Commuter (gallons)	25	25	25	25	23	22
Rank	20	16	15	15	17	21
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	28,362	27,852	27,246	26,174	24,500	22,891
Rank	50	50	50	50	52	52
Delay per Auto Commuter (pers-hrs)	58	56	55	52	50	48
Rank	24	27	24	28	28	29
<b>Travel Time Index</b>						
Rank	1.23	1.23	1.23	1.22	1.22	1.21
Rank	30	29	29	33	31	34
<b>Commuter Stress Index</b>						
Rank	1.26	--	--	--	--	--
Rank	31	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	1.84	--	--	--	--	--
Rank	22	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	575	555	535	525	485	447
Rank	50	50	50	50	52	52
Cost per Auto Commuter (\$)	1,107	1,095	1,065	1,017	960	908
Rank	28	26	25	25	30	31
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	1,191	1,170	1,144	1,099	1,029	961
Rank	50	50	50	50	52	52
Annual Gallons of Wasted Fuel (000)	2,688	2,659	2,623	2,565	2,444	2,325
Rank	48	48	48	48	49	50
Annual Congestion Cost (\$ million)	61	57	53	52	46	42
Rank	50	50	50	50	52	52

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

# Mobility Data for Baton Rouge LA

Inventory Measures	2011	2010	2009	2008	2007	2006
<b>Urban Area Information</b>						
Population (1000s)	605	600	595	590	585	570
Rank	68	68	68	68	67	67
Commuters (1000s)	317	313	309	306	301	292
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,858	4,714	4,500	4,350	4,280	4,190
Arterial Streets	8,012	7,973	7,800	7,700	7,675	7,505
<b>Cost Components</b>						
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)	3.28	2.61	2.17	3.35	2.92	2.56
Diesel (\$/gallon)	3.56	2.84	2.46	4.04	3.28	2.74
System Performance	2011	2010	2009	2008	2007	2006
<b>Congested Travel (% of peak VMT)</b>	--	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	--	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	--	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	10,723	10,665	10,079	10,114	9,687	9,167
Rank	50	52	52	52	53	53
Fuel per Peak Auto Commuter (gallons)	21	22	19	20	20	23
Rank	25	20	27	31	28	14
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	22,378	21,849	20,263	19,364	18,548	17,551
Rank	52	52	52	54	55	55
Delay per Auto Commuter (pers-hrs)	47	46	43	40	39	38
Rank	28	26	31	38	44	45
<b>Travel Time Index</b>						
Rank	1.21	1.21	1.20	1.20	1.20	1.19
Rank	33	33	36	38	38	39
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	433	403	365	363	331	302
Rank	52	52	52	53	54	55
Cost per Auto Commuter (\$)	918	924	872	826	821	799
Rank	30	29	29	36	41	43
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	940	918	851	813	779	737
Rank	52	52	52	54	55	55
Annual Gallons of Wasted Fuel (000)	2,273	2,261	2,137	2,144	2,054	1,943
Rank	50	52	52	52	53	53
Annual Congestion Cost (\$ million)	45	41	36	38	34	30
Rank	52	52	52	52	53	54

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

# Mobility Data for Baton Rouge LA

Inventory Measures	2005	2004	2003	2002	2001	2000
<b>Urban Area Information</b>						
Population (1000s)	495	485	475	465	460	455
Rank	71	71	72	72	71	71
Commuters (1000s)	252	245	239	231	226	220
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,055	3,830	3,710	3,600	3,460	3,325
Arterial Streets	7,345	7,160	6,800	6,520	6,350	6,100
<b>Cost Components</b>						
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)	2.23	1.87	1.46	1.33	1.43	1.49
Diesel (\$/gallon)	2.40	1.85	1.44	1.31	1.44	1.43
System Performance	2005	2004	2003	2002	2001	2000
<b>Congested Travel (% of peak VMT)</b>	--	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	--	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	--	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	7,188	6,593	6,340	5,978	5,703	5,489
Rank	58	60	61	63	64	63
Fuel per Peak Auto Commuter (gallons)	15	13	13	12	11	11
Rank	64	80	74	78	78	74
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	13,762	12,624	12,138	11,445	10,919	10,509
Rank	62	64	65	68	68	67
Delay per Auto Commuter (pers-hrs)	35	32	32	31	30	29
Rank	59	73	69	72	71	71
<b>Travel Time Index</b>						
Rank	1.17	1.16	1.16	1.16	1.15	1.15
Rank	50	59	56	54	58	56
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	227	199	184	169	159	149
Rank	62	64	65	68	68	67
Cost per Auto Commuter (\$)	645	614	606	584	567	560
Rank	66	70	71	73	73	72
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	578	530	510	481	459	441
Rank	62	64	65	68	68	67
Annual Gallons of Wasted Fuel (000)	1,524	1,398	1,344	1,267	1,209	1,164
Rank	58	60	61	63	64	63
Annual Congestion Cost (\$ million)	22	19	17	15	14	13
Rank	62	63	64	68	67	67

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

# Mobility Data for Baton Rouge LA

Inventory Measures	1999	1998	1997	1996	1995	1994
<b>Urban Area Information</b>						
Population (1000s)	445	430	420	415	410	405
Rank	70	71	71	71	71	71
Commuters (1000s)	213	203	196	191	187	182
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	3,210	3,100	3,000	2,890	2,750	2,635
Arterial Streets	5,850	5,660	5,495	5,300	5,110	4,980
<b>Cost Components</b>						
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)	1.08	1.04	1.17	1.22	1.16	1.06
Diesel (\$/gallon)	1.07	1.12	1.23	1.29	1.23	1.13
System Performance	1999	1998	1997	1996	1995	1994
<b>Congested Travel (% of peak VMT)</b>	--	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	--	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	--	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	5,227	4,873	4,520	4,185	3,939	3,679
Rank	61	62	62	63	63	63
Fuel per Peak Auto Commuter (gallons)	11	10	10	9	9	8
Rank	72	73	66	69	59	65
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	10,008	9,331	8,655	8,013	7,541	7,044
Rank	67	66	68	69	68	68
Delay per Auto Commuter (pers-hrs)	29	29	28	26	25	24
Rank	67	64	63	67	65	65
<b>Travel Time Index</b>						
Rank	1.15	1.14	1.14	1.13	1.12	1.12
Rank	52	55	47	50	59	51
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	136	124	114	103	94	86
Rank	67	66	67	69	68	68
Cost per Auto Commuter (\$)	550	525	493	469	453	435
Rank	71	71	70	70	70	69
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	420	392	364	337	317	296
Rank	67	66	67	69	68	68
Annual Gallons of Wasted Fuel (000)	1,108	1,033	958	887	835	780
Rank	61	62	62	63	63	63
Annual Congestion Cost (\$ million)	12	11	10	9	9	8
Rank	66	66	66	69	64	64

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

# Mobility Data for Baton Rouge LA

Inventory Measures	1993	1992	1991	1990	1989	1988
<b>Urban Area Information</b>						
Population (1000s)	395	380	370	350	350	350
Rank	71	72	72	73	73	72
Commuters (1000s)	175	167	160	150	148	147
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,520	2,400	2,365	2,305	2,125	2,190
Arterial Streets	4,800	4,550	4,315	4,095	3,985	3,730
<b>Cost Components</b>						
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)	1.12	1.12	1.12	1.08	1.09	1.01
Diesel (\$/gallon)	1.18	1.20	1.21	1.08	1.00	0.92
System Performance	1993	1992	1991	1990	1989	1988
<b>Congested Travel (% of peak VMT)</b>	--	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	--	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	--	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	3,386	3,094	2,911	2,672	2,619	2,529
Rank	64	63	63	63	61	60
Fuel per Peak Auto Commuter (gallons)	8	6	7	5	5	5
Rank	58	69	57	72	63	58
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	6,483	5,924	5,573	5,116	5,015	4,843
Rank	69	68	66	66	61	61
Delay per Auto Commuter (pers-hrs)	23	22	21	21	20	20
Rank	64	62	61	52	48	44
<b>Travel Time Index</b>						
Rank	1.11	1.11	1.10	1.10	1.10	1.10
Rank	54	49	51	46	43	40
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	77	69	63	56	52	48
Rank	69	67	66	66	61	59
Cost per Auto Commuter (\$)	411	390	375	360	377	385
Rank	70	67	67	67	60	56
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	272	249	234	215	211	203
Rank	69	67	66	66	61	60
Annual Gallons of Wasted Fuel (000)	718	656	617	566	555	536
Rank	64	63	63	63	61	60
Annual Congestion Cost (\$ million)	7	7	6	6	5	5
Rank	67	63	64	59	60	58

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

# Mobility Data for Baton Rouge LA

Inventory Measures	1987	1986	1985	1984	1983	1982
<b>Urban Area Information</b>						
Population (1000s)	350	350	350	350	350	350
Rank	72	72	71	70	69	68
Commuters (1000s)	146	145	144	143	142	140
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,165	2,120	2,085	2,050	2,015	2,000
Arterial Streets	3,635	3,590	3,740	3,630	3,505	3,450
<b>Cost Components</b>						
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)	1.10	0.98	1.29	1.30	1.33	1.39
Diesel (\$/gallon)	0.92	0.90	1.18	1.19	1.22	1.28
System Performance	1987	1986	1985	1984	1983	1982
<b>Congested Travel (% of peak VMT)</b>	--	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	--	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	--	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	2,351	2,251	2,061	1,795	1,504	1,488
Rank	60	57	54	57	61	57
Fuel per Peak Auto Commuter (gallons)	5	5	5	5	3	3
Rank	48	40	32	27	46	34
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	4,501	4,309	3,947	3,436	2,879	2,849
Rank	61	60	59	61	64	62
Delay per Auto Commuter (pers-hrs)	18	18	16	14	12	12
Rank	48	42	45	48	51	47
<b>Travel Time Index</b>						
Rank	40	38	39	42	46	43
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	43	40	37	31	25	24
Rank	60	60	58	60	62	61
Cost per Auto Commuter (\$)	371	367	342	307	277	273
Rank	55	51	49	52	56	50
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	189	181	166	144	121	120
Rank	60	60	58	61	64	61
Annual Gallons of Wasted Fuel (000)	498	477	437	380	319	315
Rank	60	57	54	57	61	57
Annual Congestion Cost (\$ million)	5	4	4	3	3	3
Rank	56	58	55	61	55	52

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