

# Performance Measure Summary - Jackson MS

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 Jackson MS

Inventory Measures	2017	2016	2015	2014	2013	2012
<b>Urban Area Information</b>						
Population (1000s)	365	365	360	360	360	360
Rank	91	91	91	91	90	88
Commuters (1000s)	196	196	194	193	193	193
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	5,039	5,189	5,056	4,628	4,597	4,600
Arterial Streets	6,377	6,383	6,521	6,489	6,309	6,470
<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)	2.10	1.97	2.02	3.06	3.30	3.31
Diesel (\$/gallon)	2.31	2.09	2.30	3.45	3.72	3.73
System Performance	2017	2016	2015	2014	2013	2012
<b>Congested Travel (% of peak VMT)</b>	8.3	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	5.4	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	0.6	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	3,697	3,631	3,589	3,541	3,484	3,441
Rank	88	89	87	87	89	88
Fuel per Peak Auto Commuter (gallons)	13	13	13	13	13	13
Rank	93	92	92	88	89	87
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	10,999	10,651	10,437	10,121	9,782	9,575
Rank	83	82	82	82	82	82
Delay per Auto Commuter (pers-hrs)	42	41	41	40	39	38
Rank	67	68	63	63	63	65
<b>Travel Time Index</b>						
Rank	1.13	1.13	1.13	1.13	1.13	1.13
Rank	83	83	83	86	87	85
<b>Commuter Stress Index</b>						
Rank	1.14	--	--	--	--	--
Rank	86	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	1.17	--	--	--	--	--
Rank	94	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	220	210	202	199	190	183
Rank	83	83	82	82	82	82
Cost per Auto Commuter (\$)	684	668	652	629	612	607
Rank	82	82	80	80	80	78
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	462	447	438	425	411	402
Rank	83	82	82	82	82	82
Annual Gallons of Wasted Fuel (000)	784	770	761	751	739	729
Rank	88	89	87	87	89	88
Annual Congestion Cost (\$ million)	23	21	20	19	18	17
Rank	83	83	82	83	82	82

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

# Mobility Data for Jackson MS

Inventory Measures	2011	2010	2009	2008	2007	2006
<b>Urban Area Information</b>						
Population (1000s)	355	355	355	350	350	350
Rank	88	88	87	88	88	87
Commuters (1000s)	190	189	188	185	184	183
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,664	4,620	4,717	4,755	4,870	4,925
Arterial Streets	6,501	6,440	6,150	6,200	6,090	5,970
<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)	3.21	2.58	2.16	3.34	2.86	2.55
Diesel (\$/gallon)	3.54	2.81	2.38	4.00	3.17	2.69
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)	3,398	3,344	3,187	3,305	3,276	3,268
Rank	89	89	89	88	88	86
Fuel per Peak Auto Commuter (gallons)	13	13	12	13	13	13
Rank	84	84	83	84	85	81
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	9,284	8,971	8,389	8,285	8,214	8,193
Rank	82	82	82	82	82	82
Delay per Auto Commuter (pers-hrs)	37	36	35	35	35	35
Rank	66	64	68	66	69	62
<b>Travel Time Index</b>						
Rank	84	89	89	86	85	82
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	176	163	149	151	143	138
Rank	82	82	82	83	82	82
Cost per Auto Commuter (\$)	610	604	575	563	583	594
Rank	77	77	82	80	82	80
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	390	377	352	348	345	344
Rank	82	82	82	82	82	82
Annual Gallons of Wasted Fuel (000)	720	709	676	701	695	693
Rank	89	89	89	88	88	86
Annual Congestion Cost (\$ million)	18	16	15	15	14	13
Rank	82	82	82	83	82	82

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

# Mobility Data for Jackson MS

Inventory Measures	2005	2004	2003	2002	2001	2000
<b>Urban Area Information</b>						
Population (1000s)	350	350	350	350	345	345
Rank	86	86	85	83	82	81
Commuters (1000s)	182	181	180	177	172	169
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,565	4,555	4,325	4,240	4,090	3,905
Arterial Streets	5,810	5,700	5,385	5,200	5,050	4,930
<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)	2.10	1.85	1.45	1.32	1.45	1.53
Diesel (\$/gallon)	2.37	1.83	1.40	1.27	1.41	1.39
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)	3,200	3,065	2,883	2,679	2,437	2,141
Rank	86	86	85	86	88	87
Fuel per Peak Auto Commuter (gallons)	14	14	13	13	13	10
Rank	75	71	74	71	63	80
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	8,023	7,685	7,228	6,716	6,108	5,368
Rank	82	81	81	82	82	82
Delay per Auto Commuter (pers-hrs)	34	33	32	30	29	26
Rank	67	69	69	79	79	81
<b>Travel Time Index</b>						
Rank	1.12	1.12	1.11	1.11	1.10	1.09
Rank	86	84	87	84	88	92
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	130	119	108	98	88	75
Rank	82	81	81	82	82	82
Cost per Auto Commuter (\$)	602	599	577	547	504	457
Rank	78	75	77	79	80	84
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	337	323	304	282	257	225
Rank	82	81	81	82	82	82
Annual Gallons of Wasted Fuel (000)	678	650	611	568	517	454
Rank	86	86	85	86	88	87
Annual Congestion Cost (\$ million)	12	11	10	9	8	7
Rank	82	81	80	79	81	81

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

# Mobility Data for Jackson MS

Inventory Measures	1999	1998	1997	1996	1995	1994
<b>Urban Area Information</b>						
Population (1000s)	340	340	340	340	335	335
Rank	81	81	80	80	79	79
Commuters (1000s)	164	162	159	157	152	150
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	3,865	3,745	3,655	3,535	3,395	3,205
Arterial Streets	4,870	4,715	4,630	4,560	4,475	4,400
<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)	1.07	1.02	1.14	1.24	1.15	1.03
Diesel (\$/gallon)	1.04	1.07	1.18	1.31	1.21	1.08
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)	1,868	1,664	1,652	1,398	1,304	1,155
Rank	90	91	88	91	90	90
Fuel per Peak Auto Commuter (gallons)	9	7	8	6	7	5
Rank	85	87	79	85	77	88
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	4,683	4,172	4,142	3,505	3,270	2,895
Rank	84	85	84	86	86	87
Delay per Auto Commuter (pers-hrs)	23	21	21	18	17	15
Rank	87	89	86	89	89	91
<b>Travel Time Index</b>						
Rank	1.08	1.07	1.07	1.06	1.06	1.05
Rank	96	97	94	97	93	96
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	63	55	54	45	40	35
Rank	84	85	83	86	86	87
Cost per Auto Commuter (\$)	409	377	381	327	315	286
Rank	86	85	83	89	87	90
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	197	175	174	147	137	122
Rank	84	85	84	86	86	87
Annual Gallons of Wasted Fuel (000)	396	353	350	296	277	245
Rank	90	91	88	91	90	90
Annual Congestion Cost (\$ million)	5	5	5	4	4	3
Rank	84	84	79	82	79	85

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

## Mobility Data for Jackson MS

Inventory Measures	1993	1992	1991	1990	1989	1988
<b>Urban Area Information</b>						
Population (1000s)	335	335	330	330	330	325
Rank	78	78	76	76	74	75
Commuters (1000s)	148	146	141	139	138	135
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	3,095	3,000	2,835	2,660	2,500	2,395
Arterial Streets	4,320	4,240	4,150	4,000	3,915	3,820
<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)	1.06	1.06	1.10	1.15	1.10	1.02
Diesel (\$/gallon)	1.12	1.15	1.20	1.04	1.05	0.97
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)	1,053	918	837	605	535	519
Rank	91	90	90	91	91	91
Fuel per Peak Auto Commuter (gallons)	6	4	6	3	2	2
Rank	76	87	67	90	90	87
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	2,639	2,302	2,099	1,517	1,342	1,301
Rank	86	89	90	92	92	90
Delay per Auto Commuter (pers-hrs)	14	12	11	8	7	7
Rank	90	91	92	95	97	95
<b>Travel Time Index</b>						
Rank	1.05	1.04	1.04	1.03	1.03	1.02
Rank	93	97	94	96	95	98
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	31	26	23	16	14	13
Rank	85	90	90	92	91	90
Cost per Auto Commuter (\$)	272	241	231	170	166	157
Rank	88	90	88	95	94	94
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	111	97	88	64	56	55
Rank	86	89	90	92	92	90
Annual Gallons of Wasted Fuel (000)	223	195	177	128	113	110
Rank	91	90	90	91	91	91
Annual Congestion Cost (\$ million)	3	2	2	2	1	1
Rank	82	90	85	83	91	90

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

# Mobility Data for Jackson MS

Inventory Measures	1987	1986	1985	1984	1983	1982
<b>Urban Area Information</b>						
Population (1000s)	320	315	310	305	300	300
Rank	75	75	75	75	75	75
Commuters (1000s)	132	128	126	123	120	118
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,320	2,275	2,230	2,180	2,100	2,025
Arterial Streets	3,750	3,660	3,600	3,520	3,470	3,400
<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)	1.02	0.99	1.30	1.31	1.34	1.41
Diesel (\$/gallon)	0.97	0.95	1.24	1.25	1.28	1.34
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)	499	474	465	445	422	415
Rank	90	90	90	89	88	88
Fuel per Peak Auto Commuter (gallons)	2	2	2	2	2	1
Rank	86	84	84	79	69	82
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	1,251	1,189	1,166	1,115	1,058	1,040
Rank	89	88	87	86	86	84
Delay per Auto Commuter (pers-hrs)	7	7	7	7	7	7
Rank	94	94	92	90	85	82
<b>Travel Time Index</b>						
Rank	96	96	96	96	90	90
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	12	11	11	10	9	9
Rank	88	87	87	86	84	82
Cost per Auto Commuter (\$)	159	159	155	157	161	157
Rank	93	93	90	86	84	84
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	53	50	49	47	44	44
Rank	89	88	87	86	86	84
Annual Gallons of Wasted Fuel (000)	106	101	99	94	90	88
Rank	90	90	90	89	88	88
Annual Congestion Cost (\$ million)	1	1	1	1	1	1
Rank	87	84	83	81	78	75

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