

# Performance Measure Summary - Albuquerque NM

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 Albuquerque NM

Inventory Measures	2017	2016	2015	2014	2013	2012
<b>Urban Area Information</b>						
Population (1000s)	760	760	755	755	745	740
Rank	58	58	57	57	57	57
Commuters (1000s)	383	383	380	380	359	360
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	5,547	5,587	5,590	5,500	4,818	5,025
Arterial Streets	7,760	7,829	7,869	7,887	7,584	7,220
<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)	2.25	2.08	2.39	3.20	3.42	3.24
Diesel (\$/gallon)	2.42	2.19	2.44	3.57	3.84	3.89
System Performance	2017	2016	2015	2014	2013	2012
<b>Congested Travel (% of peak VMT)</b>	18.2	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	1.3	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	2.4	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	10,629	10,509	10,374	10,272	10,148	10,032
Rank	53	53	53	53	53	53
Fuel per Peak Auto Commuter (gallons)	20	20	20	19	19	19
Rank	47	47	42	47	45	42
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	23,302	22,741	22,255	21,652	21,013	20,398
Rank	56	56	56	56	57	56
Delay per Auto Commuter (pers-hrs)	44	44	43	41	41	40
Rank	59	53	55	59	52	55
<b>Travel Time Index</b>						
Rank	1.20	1.19	1.19	1.18	1.19	1.19
Rank	39	40	39	40	39	39
<b>Commuter Stress Index</b>						
Rank	1.21	--	--	--	--	--
Rank	41	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	1.46	--	--	--	--	--
Rank	47	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	474	454	440	436	418	399
Rank	56	56	56	56	56	56
Cost per Auto Commuter (\$)	936	921	895	866	843	822
Rank	40	40	39	39	39	40
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	979	955	935	909	883	857
Rank	56	56	56	56	56	56
Annual Gallons of Wasted Fuel (000)	2,253	2,228	2,199	2,178	2,151	2,127
Rank	53	53	53	53	53	53
Annual Congestion Cost (\$ million)	50	47	44	44	40	38
Rank	56	56	55	55	55	55

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

# Mobility Data for Albuquerque NM

Inventory Measures	2011	2010	2009	2008	2007	2006
<b>Urban Area Information</b>						
Population (1000s)	740	740	725	710	705	700
Rank	57	57	56	57	57	57
Commuters (1000s)	364	370	366	357	353	348
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	5,469	5,326	5,150	4,925	4,875	4,750
Arterial Streets	7,627	7,566	7,500	7,460	7,470	7,445
<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)	3.31	2.71	2.32	3.43	3.24	2.65
Diesel (\$/gallon)	3.69	2.94	2.55	4.14	3.61	2.91
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)	9,930	9,795	9,811	9,971	10,076	9,959
Rank	53	53	53	53	52	52
Fuel per Peak Auto Commuter (gallons)	19	18	19	19	19	19
Rank	40	46	27	37	40	36
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	19,820	19,368	19,034	18,601	18,797	18,577
Rank	56	56	56	56	54	53
Delay per Auto Commuter (pers-hrs)	39	37	37	38	38	38
Rank	54	58	57	47	48	45
<b>Travel Time Index</b>						
Rank	40	39	41	53	56	53
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	385	359	344	350	339	321
Rank	56	56	55	55	52	52
Cost per Auto Commuter (\$)	823	831	824	795	822	821
Rank	40	40	40	41	40	39
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	832	813	799	781	789	780
Rank	56	56	56	56	54	53
Annual Gallons of Wasted Fuel (000)	2,105	2,077	2,080	2,114	2,136	2,111
Rank	53	53	53	53	52	52
Annual Congestion Cost (\$ million)	40	36	35	37	35	32
Rank	55	55	53	54	52	52

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

# Mobility Data for Albuquerque NM

Inventory Measures	2005	2004	2003	2002	2001	2000
<b>Urban Area Information</b>						
Population (1000s)	695	685	675	655	670	660
Rank	57	57	57	59	55	55
Commuters (1000s)	343	337	330	317	319	311
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,665	4,515	4,285	4,100	3,980	3,875
Arterial Streets	7,335	7,240	7,050	6,785	6,670	6,600
<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)	2.36	1.92	1.52	1.37	1.55	1.52
Diesel (\$/gallon)	2.56	2.00	1.51	1.34	1.61	1.48
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)	9,938	9,759	9,599	9,505	9,419	9,331
Rank	51	51	51	48	47	46
Fuel per Peak Auto Commuter (gallons)	19	18	18	18	18	18
Rank	34	38	30	27	23	16
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	18,538	18,204	17,907	17,730	17,571	17,406
Rank	52	52	52	51	50	49
Delay per Auto Commuter (pers-hrs)	39	39	39	40	39	39
Rank	43	39	37	30	32	30
<b>Travel Time Index</b>						
Rank	1.17	1.17	1.17	1.18	1.17	1.17
Rank	50	47	45	37	38	37
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	308	288	272	262	258	248
Rank	52	52	52	51	50	49
Cost per Auto Commuter (\$)	819	761	725	650	611	588
Rank	41	44	52	62	64	63
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	779	765	752	745	738	731
Rank	52	52	52	51	50	49
Annual Gallons of Wasted Fuel (000)	2,107	2,069	2,035	2,015	1,997	1,978
Rank	51	51	51	48	47	46
Annual Congestion Cost (\$ million)	30	28	25	24	24	22
Rank	52	52	51	51	49	49

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

# Mobility Data for Albuquerque NM

Inventory Measures	1999	1998	1997	1996	1995	1994
<b>Urban Area Information</b>						
Population (1000s)	660	660	650	645	620	595
Rank	55	54	54	55	56	57
Commuters (1000s)	307	303	295	289	274	260
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	3,825	3,720	3,585	3,505	3,255	3,100
Arterial Streets	6,500	6,500	6,650	6,490	6,425	6,335
<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)	1.20	1.12	1.25	1.31	1.23	1.18
Diesel (\$/gallon)	1.20	1.18	1.29	1.31	1.23	1.17
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)	9,206	8,673	7,926	7,091	6,300	5,671
Rank	44	44	44	45	47	48
Fuel per Peak Auto Commuter (gallons)	18	18	17	15	13	12
Rank	12	10	9	13	19	21
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	17,173	16,178	14,785	13,228	11,751	10,579
Rank	49	48	49	50	51	51
Delay per Auto Commuter (pers-hrs)	39	37	35	31	29	28
Rank	27	31	36	46	48	48
<b>Travel Time Index</b>						
Rank	1.17	1.16	1.15	1.14	1.13	1.12
Rank	36	36	41	45	47	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)	234	216	195	171	148	129
Rank	49	48	49	50	51	51
Cost per Auto Commuter (\$)	542	525	465	448	435	427
Rank	72	71	73	74	74	72
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	721	679	621	556	494	444
Rank	49	48	49	50	51	51
Annual Gallons of Wasted Fuel (000)	1,952	1,839	1,680	1,503	1,335	1,202
Rank	44	44	44	45	47	48
Annual Congestion Cost (\$ million)	21	19	18	16	14	12
Rank	47	47	46	47	50	51

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

# Mobility Data for Albuquerque NM

Inventory Measures	1993	1992	1991	1990	1989	1988
<b>Urban Area Information</b>						
Population (1000s)	580	570	560	545	530	520
Rank	58	57	56	56	56	56
Commuters (1000s)	250	243	235	226	218	212
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,940	2,670	2,480	2,430	2,310	2,225
Arterial Streets	6,300	6,275	6,150	6,100	6,050	5,900
<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)	1.21	1.20	1.10	1.11	1.15	1.06
Diesel (\$/gallon)	1.20	1.15	1.14	1.05	0.99	0.91
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)	5,218	4,540	4,225	3,849	3,586	3,267
Rank	48	50	50	50	49	48
Fuel per Peak Auto Commuter (gallons)	11	10	9	8	8	6
Rank	22	24	27	35	26	45
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	9,734	8,468	7,882	7,179	6,689	6,094
Rank	52	52	52	53	52	54
Delay per Auto Commuter (pers-hrs)	26	24	22	21	20	19
Rank	49	53	53	52	48	49
<b>Travel Time Index</b>						
Rank	44	59	51	56	48	48
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	117	99	89	78	70	61
Rank	52	52	52	53	52	52
Cost per Auto Commuter (\$)	399	401	391	385	334	325
Rank	73	66	63	61	68	68
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	409	356	331	302	281	256
Rank	52	52	52	53	52	54
Annual Gallons of Wasted Fuel (000)	1,106	962	896	816	760	693
Rank	48	50	50	50	49	48
Annual Congestion Cost (\$ million)	11	9	9	8	7	6
Rank	51	52	51	51	51	52

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

# Mobility Data for Albuquerque NM

Inventory Measures	1987	1986	1985	1984	1983	1982
<b>Urban Area Information</b>						
Population (1000s)	505	495	485	480	480	470
Rank	58	58	59	58	59	59
Commuters (1000s)	204	199	194	190	189	183
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,100	1,980	1,865	1,870	1,885	1,735
Arterial Streets	5,750	5,650	5,500	5,400	5,200	5,000
<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)	1.06	1.04	1.36	1.37	1.41	1.47
Diesel (\$/gallon)	0.91	0.89	1.17	1.18	1.21	1.26
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)	3,119	3,004	2,696	2,658	2,496	2,249
Rank	47	44	45	42	42	43
Fuel per Peak Auto Commuter (gallons)	6	7	5	5	6	4
Rank	32	21	32	27	13	19
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	5,819	5,603	5,030	4,958	4,656	4,194
Rank	49	48	46	46	46	46
Delay per Auto Commuter (pers-hrs)	19	19	17	17	16	15
Rank	43	35	38	35	33	33
<b>Travel Time Index</b>						
Rank	44	42	39	38	39	35
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	56	52	47	45	41	36
Rank	49	46	46	46	46	46
Cost per Auto Commuter (\$)	291	272	260	224	215	217
Rank	69	68	66	70	69	67
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	244	235	211	208	196	176
Rank	49	48	46	46	46	46
Annual Gallons of Wasted Fuel (000)	661	637	572	563	529	477
Rank	47	44	45	42	42	43
Annual Congestion Cost (\$ million)	6	6	5	5	5	4
Rank	47	45	46	46	43	44

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