

# Performance Measure Summary - Oxnard CA

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 Oxnard CA

Inventory Measures	2017	2016	2015	2014	2013	2012
<b>Urban Area Information</b>						
Population (1000s)	385	380	375	370	365	360
Rank	88	88	88	89	88	88
Commuters (1000s)	194	191	188	185	186	183
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	2,091	2,091	2,018	2,059	2,018	7,060
Arterial Streets	3,145	3,137	3,009	3,107	3,197	6,365
<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)	2.96	2.78	3.18	3.63	3.89	3.89
Diesel (\$/gallon)	2.95	2.68	2.86	3.85	4.12	4.20
System Performance	2017	2016	2015	2014	2013	2012
<b>Congested Travel (% of peak VMT)</b>	26.1	--	--	--	--	--
<b>Congested System (% of lane-miles)</b>	15.4	--	--	--	--	--
<b>Congested Time (number of "Rush Hours")</b>	4.0	--	--	--	--	--
<b>Annual Excess Fuel Consumed</b>						
Total Fuel (1000 gallons)	2,880	2,805	2,696	2,585	2,523	2,498
Rank	96	95	95	95	95	95
Fuel per Peak Auto Commuter (gallons)	11	11	10	10	9	9
Rank	97	97	97	97	97	97
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	9,548	9,170	8,662	8,161	7,897	7,678
Rank	87	89	89	89	89	89
Delay per Auto Commuter (pers-hrs)	34	34	32	31	29	28
Rank	91	90	90	90	90	90
<b>Travel Time Index</b>						
Rank	1.16	1.16	1.16	1.16	1.16	1.16
Rank	61	61	60	61	58	60
<b>Commuter Stress Index</b>						
Rank	1.21	--	--	--	--	--
Rank	41	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	1.60	--	--	--	--	--
Rank	39	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	193	182	170	161	154	147
Rank	87	89	89	89	89	89
Cost per Auto Commuter (\$)	709	687	645	603	590	582
Rank	78	80	82	82	84	83
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	401	385	364	343	332	322
Rank	87	89	89	89	89	89
Annual Gallons of Wasted Fuel (000)	611	595	571	548	535	530
Rank	96	95	95	95	95	95
Annual Congestion Cost (\$ million)	20	19	17	16	14	13
Rank	87	86	87	88	90	90

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

# Mobility Data for Oxnard CA

Inventory Measures	2011	2010	2009	2008	2007	2006
<b>Urban Area Information</b>						
Population (1000s)	355	350	345	340	335	330
Rank	88	89	90	90	90	90
Commuters (1000s)	180	177	174	171	167	164
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	7,015	6,956	6,958	7,035	7,125	7,135
Arterial Streets	6,324	6,271	6,236	6,305	6,310	5,860
<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)	3.51	3.05	2.61	3.84	3.24	2.88
Diesel (\$/gallon)	4.02	3.20	2.71	4.39	3.60	3.17
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)	2,444	2,335	2,230	2,225	2,502	2,632
Rank	95	96	96	96	95	93
Fuel per Peak Auto Commuter (gallons)	8	8	7	6	8	9
Rank	97	97	97	99	97	96
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	7,376	6,981	6,542	6,218	6,992	7,355
Rank	88	89	89	89	87	85
Delay per Auto Commuter (pers-hrs)	26	26	24	23	25	27
Rank	91	91	91	93	91	88
<b>Travel Time Index</b>						
Rank	1.15	1.15	1.15	1.15	1.15	1.16
Rank	70	68	71	72	72	62
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	140	127	116	114	122	124
Rank	89	89	89	91	87	86
Cost per Auto Commuter (\$)	579	564	539	504	591	639
Rank	83	88	89	90	81	69
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	310	293	275	261	294	309
Rank	88	89	89	89	87	85
Annual Gallons of Wasted Fuel (000)	518	495	473	472	530	558
Rank	95	96	96	96	95	93
Annual Congestion Cost (\$ million)	14	13	11	11	12	12
Rank	89	87	89	93	87	85

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

# Mobility Data for Oxnard CA

Inventory Measures	2005	2004	2003	2002	2001	2000
<b>Urban Area Information</b>						
Population (1000s)	325	320	310	300	295	290
Rank	90	91	91	91	91	91
Commuters (1000s)	160	157	151	145	141	136
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	7,125	7,000	6,900	6,750	6,625	6,375
Arterial Streets	5,600	5,250	5,000	4,800	4,545	4,435
<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)	2.62	2.28	1.78	1.66	1.93	1.72
Diesel (\$/gallon)	2.93	2.27	1.79	1.58	1.78	1.68
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)	2,403	2,202	2,089	1,981	1,806	1,627
Rank	94	94	94	94	94	94
Fuel per Peak Auto Commuter (gallons)	9	7	7	7	7	5
Rank	96	96	95	95	93	97
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	6,713	6,153	5,837	5,536	5,046	4,546
Rank	87	86	86	85	86	87
Delay per Auto Commuter (pers-hrs)	25	23	23	23	21	20
Rank	90	92	92	92	92	92
<b>Travel Time Index</b>						
Rank	1.15	1.14	1.13	1.13	1.12	1.11
Rank	71	74	76	75	78	80
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	109	96	88	81	73	64
Rank	87	86	86	85	86	87
Cost per Auto Commuter (\$)	604	572	553	543	501	459
Rank	76	82	82	80	81	82
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	282	258	245	233	212	191
Rank	87	86	86	85	86	87
Annual Gallons of Wasted Fuel (000)	509	467	443	420	383	345
Rank	94	94	94	94	94	94
Annual Congestion Cost (\$ million)	11	9	8	7	7	6
Rank	83	86	85	85	84	85

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

# Mobility Data for Oxnard CA

Inventory Measures	1999	1998	1997	1996	1995	1994
<b>Urban Area Information</b>						
Population (1000s)	285	285	280	280	275	270
Rank	91	90	90	88	88	88
Commuters (1000s)	132	131	127	125	121	118
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	6,275	6,080	5,950	5,930	5,850	5,795
Arterial Streets	4,460	4,380	4,320	4,295	4,160	4,080
<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)	1.59	1.27	1.40	1.21	1.27	1.16
Diesel (\$/gallon)	1.50	1.39	1.51	1.24	1.31	1.19
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)	1,483	1,412	1,274	1,171	1,038	960
Rank	94	94	94	94	94	94
Fuel per Peak Auto Commuter (gallons)	5	6	4	5	3	4
Rank	94	91	94	91	94	91
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	4,144	3,944	3,559	3,273	2,899	2,682
Rank	88	87	87	87	89	90
Delay per Auto Commuter (pers-hrs)	18	17	16	15	14	13
Rank	93	93	94	93	94	94
<b>Travel Time Index</b>						
Rank	1.11	1.10	1.09	1.09	1.08	1.08
Rank	78	80	83	79	84	80
<b>Commuter Stress Index</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Freeway Planning Time Index (95th Pctile)</b>						
Rank	--	--	--	--	--	--
Rank	--	--	--	--	--	--
<b>Congestion Cost</b>						
Total Cost (\$ millions)	56	52	46	42	36	32
Rank	88	86	88	87	89	92
Cost per Auto Commuter (\$)	432	422	384	367	333	313
Rank	83	81	81	82	85	85
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	174	166	149	137	122	113
Rank	88	86	87	87	89	90
Annual Gallons of Wasted Fuel (000)	314	299	270	248	220	204
Rank	94	94	94	94	94	94
Annual Congestion Cost (\$ million)	5	5	4	4	3	3
Rank	84	84	86	82	88	85

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

# Mobility Data for Oxnard CA

Inventory Measures	1993	1992	1991	1990	1989	1988
<b>Urban Area Information</b>						
Population (1000s)	265	260	255	250	245	240
Rank	88	88	88	87	87	87
Commuters (1000s)	114	111	107	104	101	98
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	5,390	5,305	5,200	5,120	5,040	4,925
Arterial Streets	4,070	4,060	4,055	4,170	4,010	3,815
<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)	1.23	1.28	1.11	1.14	1.14	1.05
Diesel (\$/gallon)	1.26	1.25	1.25	1.19	1.09	1.01
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)	792	714	614	556	491	452
Rank	94	94	94	93	94	94
Fuel per Peak Auto Commuter (gallons)	3	2	2	2	2	1
Rank	90	95	94	93	90	94
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	2,214	1,996	1,716	1,553	1,373	1,262
Rank	93	92	92	91	91	92
Delay per Auto Commuter (pers-hrs)	11	10	9	8	8	7
Rank	95	95	96	95	95	95
<b>Travel Time Index</b>						
Rank	1.06	1.06	1.05	1.05	1.04	1.04
Rank	90	89	92	90	93	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)	26	23	19	17	14	12
Rank	93	92	92	91	91	92
Cost per Auto Commuter (\$)	267	250	228	212	192	192
Rank	89	88	90	89	89	89
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	93	84	72	65	58	53
Rank	93	92	92	91	91	92
Annual Gallons of Wasted Fuel (000)	168	151	130	118	104	96
Rank	94	94	94	92	94	94
Annual Congestion Cost (\$ million)	2	2	2	2	1	1
Rank	92	90	85	83	91	90

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

# Mobility Data for Oxnard CA

Inventory Measures	1987	1986	1985	1984	1983	1982
<b>Urban Area Information</b>						
Population (1000s)	235	230	225	220	215	210
Rank	87	87	87	87	87	86
Commuters (1000s)	95	92	90	87	84	82
<b>Daily Vehicle-Miles of Travel (1000s)</b>						
Freeway	4,745	4,425	4,110	3,595	3,370	3,005
Arterial Streets	3,560	3,420	3,215	3,110	3,000	2,905
<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)	1.05	1.03	1.35	1.36	1.39	1.46
Diesel (\$/gallon)	1.01	0.99	1.29	1.31	1.34	1.40
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)	445	357	297	250	206	155
Rank	93	94	96	96	97	98
Fuel per Peak Auto Commuter (gallons)	1	1	1	1	1	1
Rank	93	91	90	87	86	82
<b>Annual Delay</b>						
Total Delay (1000s of person-hours)	1,243	998	830	699	576	433
Rank	90	93	95	95	95	96
Delay per Auto Commuter (pers-hrs)	7	6	5	4	4	3
Rank	94	97	97	98	98	98
<b>Travel Time Index</b>						
Rank	89	85	91	85	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	9	8	6	5	4
Rank	88	91	93	95	95	94
Cost per Auto Commuter (\$)	187	167	133	110	115	86
Rank	90	90	92	96	94	96
<b>Truck Congestion</b>						
Annual Person-Hours of Delay (000)	52	42	35	29	24	18
Rank	90	93	95	95	95	96
Annual Gallons of Wasted Fuel (000)	94	76	63	53	44	33
Rank	93	94	96	96	97	98
Annual Congestion Cost (\$ million)	1	1	1	1	1	-
Rank	87	84	83	81	78	95

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