

Performance Measure Summary - Very Large Areas - Average

There are several inventory and performance measures listed in the pages of this Urban Area Report for the years from 1982 to 2010. 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 Report 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 a 20-minute free-flow trip takes 26 minutes in the peak.

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 the per-mile congestion 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 overnight speeds in the INRIX speed database. They are used as the national comparison thresholds. Other speed values may be appropriate for urban project evaluations or sub-regions studies.

Excess Fuel Consumed – Increased fuel consumption due to travel in congested conditions rather than free-flow conditions.

Public Transportation – Regular route service from all public transportation providers in an urban area.

Operations Treatments – Freeway incident management, freeway ramp metering, arterial street signal coordination and arterial street access management.

Congestion Cost – Value of travel delay for 2010 (estimated at \$16.30 per hour of person travel and \$88.12 per hour of truck time) and excess gasoline consumption (passenger vehicles) and diesel (trucks) 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). The annual change in miles traveled and lane-miles, therefore, includes both new travel and roads due to growth and travel and roads that were previously in areas designated as rural.

Number of Rush Hours – Time when the road system might have congestion.

The Mobility Data for Very Large Areas - Average

Inventory Measures	2010	2009	2008	2007	2006	2005
Urban Area Information						
Population (1000s)	6,103	6,035	5,982	5,934	5,888	5,842
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	3,267	3,221	3,180	3,148	3,116	3,075
Commuters (1000s)	2,780	2,739	2,704	2,677	2,650	2,616
Freeway						
Daily Vehicle-Miles of Travel (1000s)	53,020	52,535	53,162	54,226	53,963	53,646
Lane-Miles	2,975	2,956	2,956	2,939	2,916	2,883
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	49,095	48,643	49,267	50,099	50,193	49,788
Lane-Miles	9,316	9,260	9,260	9,191	9,123	9,012
Public Transportation						
Annual Psgr-Miles of Travel (millions)	2,765.4	2,784.0	2,894.3	2,812.9	2,677.6	2,548.7
Annual Unlinked Psgr Trips (millions)	516.5	519.9	540.5	525.9	490.6	481.7
Cost Components						
Value of Time (\$/hour)	16.30	16.01	16.10	15.47	15.06	14.58
Commercial Cost (\$/hour)	88.12	89.75	81.52	82.56	80.43	78.05
Gasoline (\$/gallon)	2.83	2.38	3.56	3.10	2.74	2.40
Diesel (\$/gallon)	3.07	2.67	4.29	3.51	2.95	2.65
System Performance	2010	2009	2008	2007	2006	2005
Congested Travel (% of peak VMT)	76	75	73	75	75	75
Congested System (% of lane-miles)	56	56	54	55	56	56
Congested Time (number of "Rush Hours")	5.99	6.03	6.22	6.94	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	90,718	87,215	85,142	100,687	103,281	103,243
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	25	25	24	29	29	30
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	187,872	185,499	178,562	204,759	210,999	211,097
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	52	52	51	59	60	60
Rank	--	--	--	--	--	--
Travel Time Index						
Rank	1.27	1.26	1.26	1.31	1.32	1.32
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	1.38	1.37	1.37	1.46	--	--
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	895	900	806	929	--	--
Rank	206,375	203,581	200,825	198,107	--	--
Congestion Cost						
Total Cost (\$ millions)	3,981	3,874	3,755	4,161	4,126	3,950
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	1,083	1,065	1,071	1,195	1,560	1,503
Rank	--	--	--	--	--	--

Note: Zeros in the table reflect values less than 0.5.

The Mobility Data for Very Large Areas - Average

Inventory Measures	2004	2003	2002	2001	2000	1999
Urban Area Information						
Population (1000s)	5,793	5,731	5,660	5,592	5,521	5,430
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	3,031	2,981	2,913	2,834	2,755	2,669
Commuters (1000s)	2,578	2,535	2,477	2,410	2,342	2,270
Freeway						
Daily Vehicle-Miles of Travel (1000s)	53,052	51,770	50,143	48,795	47,482	46,217
Lane-Miles	2,857	2,817	2,764	2,716	2,669	2,639
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	49,140	47,875	46,917	45,610	44,742	43,683
Lane-Miles	8,833	8,646	8,458	8,298	8,137	7,995
Public Transportation						
Annual Psgr-Miles of Travel (millions)	2,536.6	2,482.7	2,490.4	2,519.0	2,439.2	2,325.5
Annual Unlinked Psgr Trips (millions)	467.1	463.8	469.3	467.7	448.8	437.3
Cost Components						
Value of Time (\$/hour)	14.10	13.73	13.43	13.22	12.85	12.43
Commercial Cost (\$/hour)	74.17	72.23	70.86	71.38	70.47	66.76
Gasoline (\$/gallon)	2.06	1.59	1.48	1.67	1.61	1.27
Diesel (\$/gallon)	2.08	1.64	1.45	1.64	1.59	1.27
System Performance	2004	2003	2002	2001	2000	1999
Congested Travel (% of peak VMT)	75	73	72	71	70	69
Congested System (% of lane-miles)	56	55	55	53	52	52
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	98,906	93,188	89,224	83,465	79,492	76,977
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	29	27	27	26	25	24
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	200,706	189,484	181,087	169,786	162,498	156,574
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	58	55	54	52	50	49
Rank	--	--	--	--	--	--
Travel Time Index	1.31	1.30	1.29	1.28	1.27	1.27
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	--	--	--	--	--	--
Truck Commodity Value (\$ millions)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	3,557	3,206	2,986	2,788	2,602	2,373
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	1,373	1,255	1,196	1,135	1,073	991
Rank	--	--	--	--	--	--

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

The Mobility Data for Very Large Areas - Average

Inventory Measures	1998	1997	1996	1995	1994	1993
Urban Area Information						
Population (1000s)	5,362	5,279	5,217	5,146	5,089	5,045
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	2,595	2,516	2,448	2,378	2,315	2,262
Commuters (1000s)	2,207	2,139	2,080	2,019	1,965	1,920
Freeway						
Daily Vehicle-Miles of Travel (1000s)	44,900	43,468	42,425	41,283	39,925	38,912
Lane-Miles	2,611	2,574	2,547	2,526	2,497	2,450
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	42,554	42,002	41,074	40,060	39,153	37,963
Lane-Miles	7,888	7,773	7,662	7,574	7,462	7,357
Public Transportation						
Annual Psgr-Miles of Travel (millions)	2,243.0	2,143.9	2,113.3	2,047.6	1,984.0	1,888.3
Annual Unlinked Psgr Trips (millions)	414.4	404.8	385.5	379.8	384.7	375.1
Cost Components						
Value of Time (\$/hour)	12.17	11.98	11.71	11.37	11.06	10.78
Commercial Cost (\$/hour)	65.76	66.83	66.20	64.27	62.23	60.84
Gasoline (\$/gallon)	1.14	1.26	1.27	1.22	1.10	1.16
Diesel (\$/gallon)	1.24	1.35	1.32	1.27	1.14	1.21
System Performance	1998	1997	1996	1995	1994	1993
Congested Travel (% of peak VMT)	67	66	64	63	60	60
Congested System (% of lane-miles)	51	50	49	49	48	48
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	72,535	69,448	66,338	62,140	57,802	56,890
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	23	23	22	21	20	20
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	147,006	141,857	135,496	127,564	120,432	117,914
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	47	46	45	43	41	41
Rank	--	--	--	--	--	--
Travel Time Index	1.26	1.25	1.24	1.23	1.22	1.23
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	--	--	--	--	--	--
Truck Commodity Value (\$ millions)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	2,172	2,091	1,965	1,791	1,632	1,563
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	922	904	866	805	747	728
Rank	--	--	--	--	--	--

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The Mobility Data for Very Large Areas - Average

Inventory Measures	1992	1991	1990	1989	1988	1987
Urban Area Information						
Population (1000s)	4,992	4,948	4,875	4,823	4,762	4,688
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	2,204	2,152	2,087	2,047	2,002	1,953
Commuters (1000s)	1,870	1,825	1,770	1,734	1,696	1,654
Freeway						
Daily Vehicle-Miles of Travel (1000s)	37,844	36,708	36,066	34,959	33,196	31,479
Lane-Miles	2,387	2,319	2,272	2,226	2,179	2,135
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	36,822	35,650	34,998	34,165	33,396	32,182
Lane-Miles	7,270	7,172	7,078	6,983	6,894	6,716
Public Transportation						
Annual Psgr-Miles of Travel (millions)	1,968.1	2,037.1	2,069.7	2,114.4	2,039.3	1,910.7
Annual Unlinked Psgr Trips (millions)	392.4	398.5	413.0	425.8	404.2	412.0
Cost Components						
Value of Time (\$/hour)	10.47	10.17	9.75	9.25	8.83	8.48
Commercial Cost (\$/hour)	59.01	57.31	55.03	52.81	50.04	48.53
Gasoline (\$/gallon)	1.19	1.13	1.11	1.11	1.02	1.03
Diesel (\$/gallon)	1.20	1.27	1.14	1.08	0.99	1.01
System Performance	1992	1991	1990	1989	1988	1987
Congested Travel (% of peak VMT)	60	60	60	58	56	52
Congested System (% of lane-miles)	48	48	48	47	46	44
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	56,406	53,998	53,590	50,959	46,397	39,856
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	20	20	20	19	18	16
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	116,759	111,450	111,764	107,335	98,876	84,779
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	41	40	41	40	38	33
Rank	--	--	--	--	--	--
Travel Time Index						
	1.23	1.23	1.24	1.23	1.22	1.19
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	--	--	--	--	--	--
Truck Commodity Value (\$ millions)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	1,506	1,393	1,342	1,225	1,071	886
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	712	667	660	612	545	459
Rank	--	--	--	--	--	--

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The Mobility Data for Very Large Areas - Average

Inventory Measures	1986	1985	1984	1983	1982
Urban Area Information					
Population (1000s)	4,623	4,528	4,443	4,409	4,378
Rank	--	--	--	--	--
Peak Travelers (1000s)	1,908	1,850	1,799	1,769	1,739
Commuters (1000s)	1,615	1,564	1,519	1,492	1,465
Freeway					
Daily Vehicle-Miles of Travel (1000s)	29,556	27,710	26,239	24,862	23,593
Lane-Miles	2,094	2,057	2,034	2,004	1,941
Arterial Streets					
Daily Vehicle-Miles of Travel (1000s)	31,344	30,166	29,195	28,523	27,855
Lane-Miles	6,682	6,581	6,490	6,415	6,356
Public Transportation					
Annual Psgr-Miles of Travel (millions)	1,913.3	2,016.7	1,973.6	1,973.6	1,973.6
Annual Unlinked Psgr Trips (millions)	414.0	438.8	456.3	456.3	456.3
Cost Components					
Value of Time (\$/hour)	8.18	8.03	7.75	7.43	7.20
Commercial Cost (\$/hour)	46.57	47.83	46.47	44.23	43.08
Gasoline (\$/gallon)	1.00	1.31	1.33	1.36	1.42
Diesel (\$/gallon)	0.97	1.27	1.28	1.31	1.38
System Performance	1986	1985	1984	1983	1982
Congested Travel (% of peak VMT)	48	44	40	38	37
Congested System (% of lane-miles)	42	40	37	36	36
Congested Time (number of "Rush Hours")	--	--	--	--	--
Annual Excess Fuel Consumed					
Total Fuel (1000 gallons)	34,482	29,309	24,694	22,066	20,972
Rank	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	14	12	10	9	9
Rank	--	--	--	--	--
Annual Delay					
Total Delay (1000s of person-hours)	74,631	64,598	54,378	49,137	46,526
Rank	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	29	26	22	20	19
Rank	--	--	--	--	--
Travel Time Index	1.17	1.15	1.13	1.12	1.12
Rank	--	--	--	--	--
Commuter Stress Index					
Rank	--	--	--	--	--
Truck Congestion Cost (\$ millions)					
Rank	--	--	--	--	--
Truck Commodity Value (\$ millions)					
Rank	--	--	--	--	--
Congestion Cost					
Total Cost (\$ millions)	753	663	542	472	438
Rank	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	393	353	297	260	244
Rank	--	--	--	--	--

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**Benefits from Public Transportation Service and Operations Strategies in
Very Large Areas - Average**

Operations Strategies	2010	2009	2008	2007
Freeway Ramp Metering				
Percent of Roadway Miles	35	35	35	35
Annual Delay Reduction (1000 hours)	2,244	2,207	2,113	2,689
Freeway Incident Management				
Cameras				
Percent of Roadway Miles	59	59	59	59
Service Patrols				
Percent of Roadway Miles	82	81	82	82
Annual Delay Reduction (1000 hours)	6,796	6,695	6,663	7,834
Arterial Signal Coordination				
Percent of Roadway Miles	66	66	66	67
Annual Delay Reduction (1000 hours)	923	910	868	1,003
Arterial Access Management				
Percent of Roadway Miles	37	37	37	38
Annual Delay Reduction (1000 hours)	3,314	3,271	3,052	3,584
HOV Lanes				
Daily Passenger-miles of travel (1000s)	1,269	1,260	1,274	1,238
HOV User Delay Savings	2,359	2,313	2,202	2,623
Added Congestion if Operations Treatments were Discontinued				
Annual Delay Reduction (1000 hours)	15,636	15,397	14,899	17,733
Annual Delay Saved per Peak Auto Commuter (hrs)	6	6	6	7
Annual Congestion Cost Savings (\$million)	330	360	360	410
Public Transportation Service	2010	2009	2008	2007
Existing Service				
Annual Passenger-miles of travel (million)	2,765	2,784	2,894	2,813
Unlinked Passenger Trips (million)	516	520	541	526
Added Congestion if Public Transportation Service were Discontinued				
Annual Increase				
Delay (1000 hours)	45,381	44,732	45,730	51,040
Delay per Peak Auto Commuter (hours)	16	16	16	19
Congestion Cost (\$million)	960	1,071	1,126	1,196

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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*).

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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 the per-mile congestion 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 overnight speeds in the INRIX speed database. They are used as the national comparison thresholds. Other speed values may be appropriate for urban project evaluations or sub-regions studies.

Excess Fuel Consumed – Increased fuel consumption due to travel in congested conditions rather than free-flow conditions.

Public Transportation – Regular route service from all public transportation providers in an urban area.

Operations Treatments – Freeway incident management, freeway ramp metering, arterial street signal coordination and arterial street access management.

Congestion Cost – Value of travel delay for 2010 (estimated at \$16.30 per hour of person travel and \$88.12 per hour of truck time) and excess gasoline consumption (passenger vehicles) and diesel (trucks) 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). The annual change in miles traveled and lane-miles, therefore, includes both new travel and roads due to growth and travel and roads that were previously in areas designated as rural.

Number of Rush Hours – Time when the road system might have congestion.

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Urban Area Information						
Population (1000s)	91,550	90,520	89,725	89,005	88,320	87,630
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	49,004	48,319	47,706	47,216	46,735	46,124
Commuters (1000s)	41,696	41,092	40,564	40,158	39,748	39,235
Freeway						
Daily Vehicle-Miles of Travel (1000s)	795,301	788,028	797,425	813,385	809,445	804,690
Lane-Miles	44,624	44,340	44,340	44,090	43,745	43,250
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	736,423	729,642	739,000	751,490	752,900	746,820
Lane-Miles	139,746	138,895	138,895	137,870	136,845	135,185
Public Transportation						
Annual Psgr-Miles of Travel (millions)	41,480.7	41,760.5	43,414.6	42,192.8	40,164.5	38,230.6
Annual Unlinked Psgr Trips (millions)	7,746.7	7,799.0	8,107.9	7,887.9	7,359.4	7,225.1
Cost Components						
Value of Time (\$/hour)	16.30	16.01	16.10	15.47	15.06	14.58
Commercial Cost (\$/hour)	88.12	89.75	81.52	82.56	80.43	78.05
Gasoline (\$/gallon)	2.83	2.38	3.56	3.10	2.74	2.40
Diesel (\$/gallon)	3.07	2.67	4.29	3.51	2.95	2.65
System Performance	2010	2009	2008	2007	2006	2005
Congested Travel (% of peak VMT)	76	75	73	75	75	75
Congested System (% of lane-miles)	56	56	54	55	56	56
Congested Time (number of "Rush Hours")	5.99	6.03	6.22	6.94	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	1,360,769	1,308,230	1,277,132	1,510,299	1,549,222	1,548,652
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	25	25	24	29	29	30
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	2,818,079	2,782,488	2,678,436	3,071,387	3,164,985	3,166,457
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	52	52	51	59	60	60
Rank	--	--	--	--	--	--
Travel Time Index						
	1.27	1.26	1.26	1.31	1.32	1.32
Rank	--	--	--	--	--	--
Commuter Stress Index						
	1.38	1.37	1.37	1.46	--	--
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
	13,428	13,493	12,095	13,932	--	--
Truck Commodity Value (\$ millions)						
	3,095,623	3,053,718	3,012,380	2,971,601	--	--
Congestion Cost						
Total Cost (\$ millions)	59,711	58,115	56,328	62,408	61,891	59,257
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	1,083	1,065	1,071	1,195	1,560	1,503
Rank	--	--	--	--	--	--

Note: Zeros in the table reflect values less than 0.5.

The Mobility Data for Very Large Areas - Sum

Inventory Measures	2004	2003	2002	2001	2000	1999
Urban Area Information						
Population (1000s)	86,895	85,960	84,905	83,880	82,815	81,455
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	45,468	44,714	43,694	42,503	41,321	40,033
Commuters (1000s)	38,672	38,021	37,155	36,144	35,130	34,046
Freeway						
Daily Vehicle-Miles of Travel (1000s)	795,775	776,555	752,150	731,920	712,225	693,250
Lane-Miles	42,850	42,250	41,460	40,740	40,035	39,580
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	737,105	718,125	703,750	684,145	671,130	655,245
Lane-Miles	132,490	129,685	126,875	124,465	122,060	119,930
Public Transportation						
Annual Psgr-Miles of Travel (millions)	38,049.5	37,240.9	37,356.6	37,785.2	36,588.0	34,882.1
Annual Unlinked Psgr Trips (millions)	7,007.0	6,956.8	7,038.8	7,015.1	6,731.6	6,559.7
Cost Components						
Value of Time (\$/hour)	14.10	13.73	13.43	13.22	12.85	12.43
Commercial Cost (\$/hour)	74.17	72.23	70.86	71.38	70.47	66.76
Gasoline (\$/gallon)	2.06	1.59	1.48	1.67	1.61	1.27
Diesel (\$/gallon)	2.08	1.64	1.45	1.64	1.59	1.27
System Performance	2004	2003	2002	2001	2000	1999
Congested Travel (% of peak VMT)	75	73	72	71	70	69
Congested System (% of lane-miles)	56	55	55	53	52	52
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	1,483,590	1,397,819	1,338,359	1,251,970	1,192,384	1,154,654
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	29	27	27	26	25	24
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	3,010,597	2,842,267	2,716,301	2,546,787	2,437,474	2,348,607
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	58	55	54	52	50	49
Rank	--	--	--	--	--	--
Travel Time Index	1.31	1.30	1.29	1.28	1.27	1.27
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	--	--	--	--	--	--
Truck Commodity Value (\$ millions)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	53,347	48,095	44,787	41,825	39,031	35,590
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	1,373	1,255	1,196	1,135	1,073	991
Rank	--	--	--	--	--	--

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

The Mobility Data for Very Large Areas - Sum

Inventory Measures	1998	1997	1996	1995	1994	1993
Urban Area Information						
Population (1000s)	80,430	79,190	78,255	77,190	76,330	75,675
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	38,925	37,739	36,717	35,664	34,726	33,926
Commuters (1000s)	33,098	32,081	31,198	30,285	29,476	28,794
Freeway						
Daily Vehicle-Miles of Travel (1000s)	673,498	652,015	636,370	619,245	598,880	583,685
Lane-Miles	39,170	38,610	38,205	37,885	37,460	36,755
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	638,305	630,025	616,115	600,895	587,300	569,445
Lane-Miles	118,320	116,590	114,930	113,605	111,935	110,350
Public Transportation						
Annual Psgr-Miles of Travel (millions)	33,644.4	32,158.5	31,699.9	30,714.5	29,760.5	28,324.7
Annual Unlinked Psgr Trips (millions)	6,215.5	6,072.4	5,782.1	5,697.5	5,770.9	5,626.5
Cost Components						
Value of Time (\$/hour)	12.17	11.98	11.71	11.37	11.06	10.78
Commercial Cost (\$/hour)	65.76	66.83	66.20	64.27	62.23	60.84
Gasoline (\$/gallon)	1.14	1.26	1.27	1.22	1.10	1.16
Diesel (\$/gallon)	1.24	1.35	1.32	1.27	1.14	1.21
System Performance	1998	1997	1996	1995	1994	1993
Congested Travel (% of peak VMT)	67	66	64	63	60	60
Congested System (% of lane-miles)	51	50	49	49	48	48
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	1,088,019	1,041,720	995,068	932,099	867,037	853,347
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	23	23	22	21	20	20
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	2,205,097	2,127,848	2,032,436	1,913,459	1,806,482	1,768,713
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	47	46	45	43	41	41
Rank	--	--	--	--	--	--
Travel Time Index	1.26	1.25	1.24	1.23	1.22	1.23
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Rank	--	--	--	--	--	--
Truck Commodity Value (\$ millions)						
Rank	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	32,584	31,361	29,468	26,870	24,484	23,444
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	922	904	866	805	747	728
Rank	--	--	--	--	--	--

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

The Mobility Data for Very Large Areas - Sum

Inventory Measures	1992	1991	1990	1989	1988	1987
Urban Area Information						
Population (1000s)	74,882	74,225	73,130	72,340	71,435	70,320
Rank	--	--	--	--	--	--
Peak Travelers (1000s)	33,055	32,276	31,308	30,698	30,034	29,298
Commuters (1000s)	28,050	27,381	26,543	26,015	25,441	24,809
Freeway						
Daily Vehicle-Miles of Travel (1000s)	567,655	550,625	540,990	524,380	497,935	472,180
Lane-Miles	35,810	34,790	34,080	33,395	32,690	32,025
Arterial Streets						
Daily Vehicle-Miles of Travel (1000s)	552,325	534,745	524,965	512,470	500,945	482,735
Lane-Miles	109,050	107,575	106,175	104,740	103,410	100,740
Public Transportation						
Annual Psgr-Miles of Travel (millions)	29,521.4	30,556.4	31,045.6	31,715.2	30,588.9	28,660.6
Annual Unlinked Psgr Trips (millions)	5,885.9	5,977.8	6,194.8	6,387.0	6,063.4	6,180.3
Cost Components						
Value of Time (\$/hour)	10.47	10.17	9.75	9.25	8.83	8.48
Commercial Cost (\$/hour)	59.01	57.31	55.03	52.81	50.04	48.53
Gasoline (\$/gallon)	1.19	1.13	1.11	1.11	1.02	1.03
Diesel (\$/gallon)	1.20	1.27	1.14	1.08	0.99	1.01
System Performance	1992	1991	1990	1989	1988	1987
Congested Travel (% of peak VMT)	60	60	60	58	56	52
Congested System (% of lane-miles)	48	48	48	47	46	44
Congested Time (number of "Rush Hours")	--	--	--	--	--	--
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	846,090	809,972	803,856	764,388	695,956	597,839
Rank	--	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	20	20	20	19	18	16
Rank	--	--	--	--	--	--
Annual Delay						
Total Delay (1000s of person-hours)	1,751,379	1,671,750	1,676,461	1,610,018	1,483,139	1,271,688
Rank	--	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	41	40	41	40	38	33
Rank	--	--	--	--	--	--
Travel Time Index						
	1.23	1.23	1.24	1.23	1.22	1.19
Rank	--	--	--	--	--	--
Commuter Stress Index						
Rank	--	--	--	--	--	--
Truck Congestion Cost (\$ millions)						
Truck Commodity Value (\$ millions)	--	--	--	--	--	--
Congestion Cost						
Total Cost (\$ millions)	22,595	20,902	20,136	18,372	16,064	13,290
Rank	--	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	712	667	660	612	545	459
Rank	--	--	--	--	--	--

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

The Mobility Data for Very Large Areas - Sum

Inventory Measures	1986	1985	1984	1983	1982
Urban Area Information					
Population (1000s)	69,345	67,915	66,650	66,135	65,670
Rank	--	--	--	--	--
Peak Travelers (1000s)	28,623	27,753	26,983	26,539	26,081
Commuters (1000s)	24,225	23,455	22,778	22,385	21,980
Freeway					
Daily Vehicle-Miles of Travel (1000s)	443,345	415,645	393,585	372,930	353,890
Lane-Miles	31,415	30,850	30,515	30,065	29,115
Arterial Streets					
Daily Vehicle-Miles of Travel (1000s)	470,155	452,490	437,925	427,845	417,825
Lane-Miles	100,230	98,715	97,355	96,220	95,345
Public Transportation					
Annual Psgr-Miles of Travel (millions)	28,700.0	30,250.9	29,603.8	29,603.8	29,603.8
Annual Unlinked Psgr Trips (millions)	6,209.9	6,582.2	6,843.8	6,843.8	6,843.8
Cost Components					
Value of Time (\$/hour)	8.18	8.03	7.75	7.43	7.20
Commercial Cost (\$/hour)	46.57	47.83	46.47	44.23	43.08
Gasoline (\$/gallon)	1.00	1.31	1.33	1.36	1.42
Diesel (\$/gallon)	0.97	1.27	1.28	1.31	1.38
System Performance	1986	1985	1984	1983	1982
Congested Travel (% of peak VMT)	48	44	40	38	37
Congested System (% of lane-miles)	42	40	37	36	36
Congested Time (number of "Rush Hours")	--	--	--	--	--
Annual Excess Fuel Consumed					
Total Fuel (1000 gallons)	517,223	439,641	370,405	330,984	314,580
Rank	--	--	--	--	--
Fuel per Peak Auto Commuter (gallons)	14	12	10	9	9
Rank	--	--	--	--	--
Annual Delay					
Total Delay (1000s of person-hours)	1,119,461	968,976	815,671	737,055	697,894
Rank	--	--	--	--	--
Delay per Peak Auto Commuter (pers-hrs)	29	26	22	20	19
Rank	--	--	--	--	--
Travel Time Index	1.17	1.15	1.13	1.12	1.12
Rank	--	--	--	--	--
Commuter Stress Index					
Rank	--	--	--	--	--
Truck Congestion Cost (\$ millions)					
Rank	--	--	--	--	--
Truck Commodity Value (\$ millions)					
Rank	--	--	--	--	--
Congestion Cost					
Total Cost (\$ millions)	11,289	9,952	8,134	7,082	6,575
Rank	--	--	--	--	--
Cost per Peak Auto Commuter (\$)	393	353	297	260	244
Rank	--	--	--	--	--

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

**Benefits from Public Transportation Service and Operations Strategies in
Very Large Areas - Sum**

Operations Strategies	2010	2009	2008	2007
Freeway Ramp Metering				
Percent of Roadway Miles	35	35	35	35
Annual Delay Reduction (1000 hours)	33,667	33,107	31,702	40,341
Freeway Incident Management				
Cameras				
Percent of Roadway Miles	59	59	59	59
Service Patrols				
Percent of Roadway Miles	82	81	82	82
Annual Delay Reduction (1000 hours)	101,935	100,429	99,952	117,509
Arterial Signal Coordination				
Percent of Roadway Miles	66	66	66	67
Annual Delay Reduction (1000 hours)	13,840	13,650	13,016	15,039
Arterial Access Management				
Percent of Roadway Miles	37	37	37	38
Annual Delay Reduction (1000 hours)	49,711	49,069	45,773	53,763
HOV Lanes				
Daily Passenger-miles of travel (1000s)	19,035	18,903	19,105	18,568
HOV User Delay Savings	35,391	34,693	33,035	39,348
Added Congestion if Operations Treatments were Discontinued				
Annual Delay Reduction (1000 hours)	234,544	230,949	223,479	266,000
Annual Delay Saved per Peak Auto Commuter (hrs)	6	6	6	7
Annual Congestion Cost Savings (\$million)	4,948	5,460	5,460	6,160
Public Transportation Service	2010	2009	2008	2007
Existing Service				
Annual Passenger-miles of travel (million)	41,481	41,761	43,415	42,193
Unlinked Passenger Trips (million)	7,747	7,799	8,108	7,888
Added Congestion if Public Transportation Service were Discontinued				
Annual Increase				
Delay (1000 hours)	680,716	670,982	685,943	765,599
Delay per Peak Auto Commuter (hours)	16	16	16	19
Congestion Cost (\$million)	14,402	16,060	16,897	17,935

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