Performance Measure Summary - Atlanta GA

There are several inventory and performance measures listed in the pages of this Urban Area Report for the years from 1982 to 2020. 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 2020 (estimated at \$20.17 per hour of person travel and \$55.24 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.

Annual Greenhouse Gases (CO2) Produced -Tons of CO2 produced from all vehicle travel.

Excess Greenhouse Gases (CO2) Produced due to Congestion-Tons of CO2 produced due to congested portion of travel. The excess CO2 is a subset of the total CO2 produced.

	Inventory Measures	2020	2019	2018	2017	2016	2015
Rank	Urban Area Information						
Rank 8 8 9 9 9 9 2,9 2,245 2,125 2,120 2,1		5,150	5,150	5,025	4,900	4,750	4,600
Daily Vehicle-Miles of Travel (1000s) Freeway		8	8		9	9	9
Treeway	Commuters (1000s)	2,417	2,417	2,359	2,300	2,225	2,120
Treeway	Daily Vehicle-Miles of Travel (1000s)						
Cost Components		49,227	56,583	53,287	55,427	53,580	52,495
Malle of Time (Shour)				l I		I	49,889
Malle of Time (Shour)	Cost Components						
Commercial Cost (\$\text{shour})	•	20.17	19.14	18.71	18.12	17.91	17.69
Gaseline (Sgallon) 2.19 2.50 2.77 2.24 2.12 2.19 Dissel (Sigallon) 207 2.09 2.016 2.00 2.01 System Performance 2020 2.019 2.018 2.017 2.016 2.01 Congested Travel (% of peak VMT)		55.24	49.49	54.71	52.14	50.20	46.87
Dissel (Sygallon) 2.70 2.94 3.16 2.50 2.00 2.01 2		2.19	2.56	2.77		I	
Congested Travel (% of peak VMT)		2.79	2.94	3.16	2.50	2.30	2.50
Congested System (% of lane-miles) —	System Performance	2020	2019	2018	2017	2016	2015
Congested Time (number of "Rush Hours") —	Congested Travel (% of peak VMT)				3.0		
Annual Excess Fuel Consumed 57,820 121,952 118,470 116,874 115,840 Total Fuel (1000 gallons) 57,820 121,952 1118,470 116,874 4	Congested System (% of lane-miles)				19.6		
Total Fuel (1000 gallons)	Congested Time (number of "Rush Hours")				4.6		
Total Fuel (1000 gallons)	Annual Excess Fuel Consumed						
Rank 5 4 2 2 2 2 2 2 9 9 9 12 2 2 2 2 1 2 3 <td>Total Fuel (1000 gallons)</td> <td>57,820</td> <td>121,952</td> <td>118,470</td> <td>116,874</td> <td>116,412</td> <td>115,840</td>	Total Fuel (1000 gallons)	57,820	121,952	118,470	116,874	116,412	115,840
Rank 9 10 9 7 9 12 Annual Delay 109,475 230,899 227,847 217,405 215,384 212,509 Rank 9 8 8 9 9 9 8 8 9 9 9 9 8 8 9 9 9 9 9 9 8 8 9 8 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2			4	4	4	4	4
Namual Delay Total Delay (1000s of person-hours)	Fuel per Peak Auto Commuter (gallons)	15	31	31	31	30	28
Total Delay (1000s of person-hours)	Rank	9	10	9	7	9	12
Total Delay (1000s of person-hours)	Annual Delay						
Rank 9 8 8 9 9 9 9 9 9 9	·	109,475	230,899	227,847	217,405	215,384	212,509
Rank 12 7 8 8 9 Travel Time Index 1.10 1.30 1.31 1.30 1.28 1.27 Rank 29 17 17 18 19 20 Commuter Stress Index 3.11 1.40 1.37 1.36 Rank 31 13 16 16 16 Freeway Planning Time Index (95th Petile) 2.00 2.09 2.10 Rank 15 10 12 Rank 9 8 8 9 8 8 Congestion Cost 2,477 5,057 5,043 4,726 4,605 4,479 Rank 9 8 8 8 9 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8				·			
Rank 12 7 8 8 9 Travel Time Index 1.10 1.30 1.31 1.30 1.28 1.27 Rank 29 17 17 18 19 20 Commuter Stress Index 1.11 1.40 1.37 1.36 Rank 31 13 16 16 Freeway Planning Time Index (95th Petile) 2.00 2.09 2.10 Rank 15 10 12 Rank 9 8 8 9 8 4,726 4,605 4,479 Rank 9 8 8 9 8 8 9 8 8 Cost per Auto Commuter (\$) 869 1,755 1,814 1,744 1,739 1,707 Rank 8 6 5 5 5 5 5 Truck Congestion	Delay per Auto Commuter (pers-hrs)	37	78	79	77	74	71
Rank 29 17 17 18 19 20 Commuter Stress Index 1.11 1.40 1.37 1.36 Rank 31 1.30 1.6 16 Freeway Planning Time Index (95th Pctile) 2.00 2.09 2.10 Rank 15 10 12 Congestion Cost		12	7	7	8	8	9
Rank 29 17 17 18 19 20 Commuter Stress Index 1.11 1.40 1.37 1.36 Rank 31 1.30 1.6 16 Freeway Planning Time Index (95th Pctile) 3 2.00 2.09 2.10 Rank 15 10 12 Congestion Cost 15 5.043 4.726 4.605 4.479 Rank 9 8 8 9 8 8 9 8 9 7 7 8 7 <t< td=""><td>Travel Time Index</td><td>1.10</td><td>1.30</td><td>1.31</td><td>1.30</td><td>1.28</td><td>1.27</td></t<>	Travel Time Index	1.10	1.30	1.31	1.30	1.28	1.27
Commuter Stress Index 1.11 1.40 1.37 1.36						I	
Rank 31 13 16 16 2.00 2.09 2.10 <td></td> <td> </td> <td></td> <td> </td> <td></td> <td></td> <td></td>							
Rank ————————————————————————————————————	Rank						
Rank — 15 10 12 — — Congestion Cost —	Freeway Planning Time Index (95th Pctile)		2.00	l .	2.10		
Total Cost (\$ millions)	Rank		15	10	12		
Total Cost (\$ millions)	Congestion Cost						
Rank 9 8 8 9 8 8 Cost per Auto Commuter (\$) 869 1,775 1,814 1,744 1,739 1,707 Rank 8 6 5 5 5 5 Truck Congestion 8 7 7 8 7 7 Annual Person-Hours of Delay (000) 4,859 10,674 10,165 9,971 9,878 9,746 Rank 8 7 7 8 7 7 Annual Gallons of Wasted Fuel (000) 7,899 17,354 16,515 16,297 16,233 16,153 Rank 9 7 8 7 </td <td></td> <td>2,477</td> <td>5,057</td> <td>5,043</td> <td>4,726</td> <td>4,605</td> <td>4,479</td>		2,477	5,057	5,043	4,726	4,605	4,479
Rank 8 6 5 5 5 Truck Congestion 4,859 10,674 10,165 9,971 9,878 9,746 Rank 8 7 7 8 7 7 Annual Gallons of Wasted Fuel (000) 7,899 17,354 16,515 16,297 16,233 16,153 Rank 9 7 8 7 7 7 8 8 7 7 7 8 8 7	Rank	9	8	8	9	8	8
Truck Congestion 4,859 10,674 10,165 9,971 9,878 9,746 Rank 8 7 7 8 7 7 Annual Gallons of Wasted Fuel (000) 7,899 17,354 16,515 16,297 16,233 16,153 Rank 9 7 8 8 8 8 8 8 8 8 8 8 8 8 8 465 65 6524 498 465 65 6524 498 465 65 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 7 7 7 8 8 7 7 8 8 8 7 8	Cost per Auto Commuter (\$)	869	1,775	1,814	1,744	1,739	1,707
Annual Person-Hours of Delay (000)	Rank	8	6	5	5	5	5
Rank 8 7 7 8 7 7 Annual Gallons of Wasted Fuel (000) 7,899 17,354 16,515 16,297 16,233 16,153 Rank 9 7 8 8 8 8 8 Annual Congestion Cost (\$ million) 257 521 556 524 498 465 Rank 8 8 7 8 7 7 Annual Greenhouse Gases (CO2) Produced 8 8 7 8 7 7 Rank 5 56,614 1,258,348	Truck Congestion						
Annual Gallons of Wasted Fuel (000) 7,899 17,354 16,515 16,297 16,233 16,153 Rank 9 7 8 8 8 8 8 8 Annual Congestion Cost (\$ million) 257 521 556 524 498 465 Rank 8 8 7 8 7 7 7 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) 596,614 1,258,348	Annual Person-Hours of Delay (000)	4,859	10,674	10,165	9,971	9,878	9,746
Rank 9 7 8 8 8 8 8 Annual Congestion Cost (\$ million) 257 521 556 524 498 465 Rank 8 8 7 8 7 7 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) 596,614 1,258,348 <t< td=""><td>Rank</td><td>8</td><td>7</td><td>7</td><td>8</td><td>7</td><td>7</td></t<>	Rank	8	7	7	8	7	7
Annual Congestion Cost (\$ million) 257 521 556 524 498 465 Rank 8 8 7 8 7 7 7 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) 596,614 1,258,348	Annual Gallons of Wasted Fuel (000)	7,899	17,354	16,515	16,297	16,233	16,153
Rank 8 8 7 8 7 7 Annual Greenhouse Gases (CO2) Produced 596,614 1,258,348	Rank	9	7	8	8	8	8
Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank 596,614 1,258,348 Due to All Travel (tons) Rank 6 5 Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank 9 9 9 Due to Truck Travel (tons) 1,803,517 3,962,191	Annual Congestion Cost (\$ million)	257	521	556	524	498	465
Excess Due to Congestion (tons) Rank Solve to All Travel (tons) Rank 12,550,530 26,470,956 Rank Excess Due to Truck Congestion (tons) Rank Solve to Truck Travel (tons) 189,272 Rank Solve to Truck Travel (tons) 1,803,517 3,962,191	Rank	8	8	7	8	7	7
Excess Due to Congestion (tons) Rank Solve to All Travel (tons) Rank 12,550,530 26,470,956 Rank Excess Due to Truck Congestion (tons) Rank Solve to Truck Travel (tons) 189,272 Rank Solve to Truck Travel (tons) 1,803,517 3,962,191	Annual Greenhouse Gases (CO2) Produced						
Due to All Travel (tons) 12,550,530 26,470,956 <	Excess Due to Congestion (tons)	596,614	1,258,348				
Rank 6 5 <th< td=""><td>Rank</td><td>5</td><td>4</td><td> </td><td> </td><td> </td><td></td></th<>	Rank	5	4				
Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) 86,153 189,272	Due to All Travel (tons)	12,550,530	26,470,956				
Excess Due to Truck Congestion (tons) 86,153 189,272	Rank	6	5				
Excess Due to Truck Congestion (tons) 86,153 189,272	Truck Annual Greenhouse Gases (CO2) Produced						
Rank Due to Truck Travel (tons) 9 9	· · · ·	86,153	189,272				
		1					
	Due to Truck Travel (tons)	1,803,517	3,962,191				
10 0	Rank	10	6				

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	2014	2013	2012	2011	2010	2009
Urban Area Information						
Population (1000s)	4,500	4,475	4,425	4,360	4,300	4,200
Rank	9	9	9	9	9	10
Commuters (1000s)	2,069	2,077	2,054	2,062	2,053	2,005
Daily Vehicle-Miles of Travel (1000s)						
Freeway	51,367	49,469	50,245	49,501	48,865	47,000
Arterial Streets	45,569	44,233	43,850	43,201	42,646	42,373
Cost Components						
Value of Time (\$/hour)	17.67	17.39	17.14	16.79	16.28	16.01
Commercial Cost (\$/hour)	44.82	41.23	39.66	44.62	42.50	41.83
Gasoline (\$/gallon)	3.18	3.41	3.43	3.20	2.60	2.15
Diesel (\$/gallon)	3.57	3.86	3.86	3.64	2.88	2.46
System Performance	2014	2013	2012	2011	2010	2009
Congested Travel (% of peak VMT)						
Congested System (% of lane-miles)						
Congested Time (number of "Rush Hours")						
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	115,636	114,963	112,397	110,826	109,225	108,243
Rank	4	4	4	4	4	4
Fuel per Peak Auto Commuter (gallons)	27	27	25	24	24	23
Rank	12	12	13	14	13	10
Annual Delay						
Total Delay (1000s of person-hours)	208,509	205,494	197,381	191,148	184,962	178,206
Rank	9	8	9	7	7	7
Delay per Auto Commuter (pers-hrs)	68	66	64	63	60	59
Rank	10	10	8	8	8	7
Travel Time Index	1.25	1.25	1.24	1.23	1.23	1.24
Rank	25	24	25	28	28	24
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	4,499	4,377	4,151	3,973	3,668	3,438
Rank	8	8	8	7	7	7
Cost per Auto Commuter (\$)	1,665	1,658	1,612	1,612	1,609	1,576
Rank	5	5	5	5	5	5
Truck Congestion						
Annual Person-Hours of Delay (000)	9,563	9,425	9,053	8,767	8,483	8,173
Rank	7	6	6	6	7	7
Annual Gallons of Wasted Fuel (000)	16,125	16,031	15,673	15,454	15,231	15,094
Rank	8	8	8	8	8	7
Annual Congestion Cost (\$ million)	457	425	396	421	380	356
Rank	7	7	7	6	7	/
Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Congestion (tons)						
Rank Due to All Travel (tone)						
Due to All Travel (tons) Rank						
Truck Annual Greenhouse Gases (CO2) Produced				1	I	
Excess Due to Truck Congestion (tons)						
Rank Due to Travel (tons)						
Due to Truck Travel (tons)						
Rank						

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	2008	2007	2006	2005	2004	2003
Urban Area Information						
Population (1000s)	4,170	4,130	4,070	4,020	3,980	3,940
Rank	10	10	10	10	11	11
Commuters (1000s)	1,983	1,950	1,907	1,869	1,837	1,804
Daily Vehicle-Miles of Travel (1000s)						
Freeway	46,000	47,830	48,055	49,200	49,000	48,500
Arterial Streets	42,500	44,800	44,630	45,000	44,850	44,000
Cost Components						
Value of Time (\$/hour)	16.07	15.47	15.06	14.58	14.10	13.73
Commercial Cost (\$/hour)	40.77	39.30	37.88	36.51	35.19	33.92
Gasoline (\$/gallon)	3.42	2.92	2.59	2.23	1.83	1.14
Diesel (\$/gallon)	4.12	3.29	2.77	2.40	1.84	1.40
System Performance	2008	2007	2006	2005	2004	2003
Congested Travel (% of peak VMT)						
Congested System (% of lane-miles)						
Congested Time (number of "Rush Hours")						
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	113,005	114,046	112,004	110,324	108,039	105,231
Rank	4	4	4	4	4	4
Fuel per Peak Auto Commuter (gallons)	24	23	23	22	22	21
Rank	9	13	14	15	12	13
Annual Delay						
Total Delay (1000s of person-hours)	177,188	178,820	175,619	172,984	169,402	164,999
Rank	7	8	8	7	7	6
Delay per Auto Commuter (pers-hrs)	56	57	57	57	57	56
Rank	10	10	10	8	7	7
Travel Time Index	1.25	1.26	1.26	1.26	1.25	1.25
Rank	24	24	23	22	23	20
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	3,592	3,440	3,253	3,069	2,866	2,648
Rank	7	7	6	6	6	6
Cost per Auto Commuter (\$)	1,553	1,630	1,643	1,673	1,694	1,695
Rank	5	5	5	5	5	5
Truck Congestion	0.126	0.201	0.055	7.024	7.70	7.565
Annual Person-Hours of Delay (000)	8,126	8,201	8,055	7,934	7,769	7,567
Rank Annual Gallons of Wasted Fuel (000)	15 758	6 15,903	6 15,618	6 15,384	6 15,065	6 14 674
Rank	15,758	15,903	15,618	15,384	15,065	14,674
Annual Congestion Cost (\$ million)	375	353	328	307	282	259
Rank	6	6	6	6	6	6
Annual Greenhouse Gases (CO2) Produced		0	0	0	0	0
Excess Due to Congestion (tons)						_
Rank				<u></u>		
Due to All Travel (tons)						
Rank						
Truck Annual Greenhouse Gases (CO2) Produced						
Excess Due to Truck Congestion (tons)					[_
Rank						 -
Due to Truck Travel (tons)						
Rank						
- 1391113					-3-	

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	2002	2001	2000	1999	1998	1997
Urban Area Information						
Population (1000s)	3,900	3,850	3,775	3,690	3,575	3,450
Rank	11	11	11	10	10	10
Commuters (1000s)	1,755	1,705	1,645	1,582	1,507	1,430
Daily Vehicle-Miles of Travel (1000s)						
Freeway	47,390	46,150	45,800	44,630	42,000	39,650
Arterial Streets	42,500	41,000	39,750	38,600	37,000	35,900
Cost Components						
Value of Time (\$/hour)	13.43	13.22	12.85	12.43	12.17	11.98
Commercial Cost (\$/hour)	32.69	31.51	30.38	29.28	28.89	28.50
Gasoline (\$/gallon)	1.24	1.39	1.41	0.98	0.93	1.03
Diesel (\$/gallon)	1.24	1.39	1.38	1.02	1.05	1.15
System Performance	2002	2001	2000	1999	1998	1997
Congested Travel (% of peak VMT)						
Congested System (% of lane-miles)						
Congested Time (number of "Rush Hours")						
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	102,446	97,978	93,288	89,572	84,152	77,672
Rank	4	4	4	4	4	4
Fuel per Peak Auto Commuter (gallons)	20	19	18	17	16	14
Rank	15	13	16	17	18	26
Annual Delay						
Total Delay (1000s of person-hours)	160,630	153,625	146,271	140,445	131,948	121,787
Rank	6	6	6	6	7	8
Delay per Auto Commuter (pers-hrs)	55	54	53	53	51	49
Rank	7	7	7	7	7	8
Travel Time Index	1.25	1.25	1.24	1.24	1.24	1.23
Rank	17	17	18	15	12	13
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	2,528	2,393	2,219	2,025	1,862	1,701
Rank	6	6	6	6	6	7
Cost per Auto Commuter (\$)	1,686	1,634	1,598	1,588	1,525	1,430
Rank	5	5	5	5	5	5
Truck Congestion						
Annual Person-Hours of Delay (000)	7,367	7,046	6,709	6,441	6,052	5,586
Rank	6	6	6	6	6	5
Annual Gallons of Wasted Fuel (000)	14,285	13,662	13,008	12,490	11,735	10,831
Rank	7	7	7	6	6	6
Annual Congestion Cost (\$ million)	242	225	208	188	175	160
Rank	6	6	6	6	6	5
Annual Greenhouse Gases (CO2) Produced					1	
Excess Due to Congestion (tons)						
Rank						
Due to All Travel (tons)						
Rank						
Truck Annual Greenhouse Gases (CO2) Produced					, ,	
Excess Due to Truck Congestion (tons)						
Rank						
Due to Truck Travel (tons)						
Rank						

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	1996	1995	1994	1993	1992	1991
Urban Area Information						
Population (1000s)	3,330	3,250	3,150	3,060	2,970	2,900
Rank	10	11	11	11	11	11
Commuters (1000s)	1,360	1,304	1,245	1,190	1,137	1,092
Daily Vehicle-Miles of Travel (1000s)						
Freeway	36,750	35,395	33,840	30,675	27,510	25,970
Arterial Streets	34,400	32,500	31,000	28,500	26,510	25,000
Cost Components						
Value of Time (\$/hour)	11.71	11.37	11.06	10.78	10.47	10.17
Commercial Cost (\$/hour)	28.12	27.75	27.38	27.02	26.66	26.30
Gasoline (\$/gallon)	1.13	1.05	0.94	0.97	0.99	1.00
Diesel (\$/gallon)	1.26	1.17	1.04	1.08	1.11	1.16
System Performance	1996	1995	1994	1993	1992	1991
Congested Travel (% of peak VMT)						
Congested System (% of lane-miles)						
Congested Time (number of "Rush Hours")						
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	71,684	68,153	62,355	57,057	49,747	42,708
Rank	4	4	5	5	6	6
Fuel per Peak Auto Commuter (gallons)	13	13	12	11	10	8
Rank	29	19	21	22	24	45
Annual Delay						
Total Delay (1000s of person-hours)	112,398	106,861	97,770	89,464	78,001	66,965
Rank	8	8	8	8	10	11
Delay per Auto Commuter (pers-hrs)	48	47	45	43	39	35
Rank	8	8	9	9	12	13
Travel Time Index	1.22	1.22	1.21	1.20	1.18	1.16
Rank	15	13	15	15	18	21
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	1,546	1,425	1,265	1,133	963	806
Rank	8	8	8	8	10	11
Cost per Auto Commuter (\$)	1,350	1,325	1,247	1,172	1,054	932
Rank	5	6	7	8	8	10
Truck Congestion						
Annual Person-Hours of Delay (000)	5,155	4,901	4,484	4,103	3,577	3,071
Rank	6	6	7	7	9	10
Annual Gallons of Wasted Fuel (000)	9,996	9,503	8,695	7,956	6,937	5,955
Rank	6	6	7	8	10	11
Annual Congestion Cost (\$ million)	147	138	123	112	96	82
Rank	6	6	7	7	9	11
Annual Greenhouse Gases (CO2) Produced						
Excess Due to Congestion (tons)						
Rank						
Due to All Travel (tons)						
Rank						
Truck Annual Greenhouse Gases (CO2) Produced			I			
Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons)						
Excess Due to Truck Congestion (tons) Rank	 	 	 	 	 	
Excess Due to Truck Congestion (tons)		 		 	 	

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	1990	1989	1988	1987	1986	1985
Urban Area Information						
Population (1000s)	2,840	2,795	2,740	2,680	2,600	2,510
Rank	11	11	11	11	11	11
Commuters (1000s)	1,052	1,028	1,000	969	933	894
Daily Vehicle-Miles of Travel (1000s)						
Freeway	25,260	24,755	23,105	22,965	21,650	19,555
Arterial Streets	23,000	21,900	20,600	19,900	19,280	18,020
Cost Components						
Value of Time (\$/hour)	9.75	9.25	8.83	8.48	8.18	8.03
Commercial Cost (\$/hour)	25.95	25.60	25.26	24.93	24.60	24.27
Gasoline (\$/gallon)	1.01	1.07	0.99	0.99	0.97	1.27
Diesel (\$/gallon)	1.03	0.96	0.89	0.89	0.87	1.14
System Performance	1990	1989	1988	1987	1986	1985
Congested Travel (% of peak VMT)						
Congested System (% of lane-miles)						
Congested Time (number of "Rush Hours")						
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	39,457	37,469	35,051	32,003	27,781	25,298
Rank	6	6	8	8	10	11
Fuel per Peak Auto Commuter (gallons)	7	7	7	7	5	4
Rank	50	39	27	22	40	50
Annual Delay						
Total Delay (1000s of person-hours)	61,868	58,749	54,960	50,181	43,561	39,667
Rank	11	12	12	12	12	12
Delay per Auto Commuter (pers-hrs)	33	32	31	29	26	25
Rank	13	13	13	15	15	14
Travel Time Index	1.15	1.15	1.14	1.13	1.12	1.11
Rank	22	20	22	22	25	25
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	717	652	583	514	432	395
Rank	11	12	12	12	12	12
Cost per Auto Commuter (\$)	901	905	888	848	764	708
Rank	10	10	11	12	14	14
Truck Congestion						
Annual Person-Hours of Delay (000)	2,837	2,694	2,521	2,301	1,998	1,819
Rank	11	11 5 225	11	12	12	12
Annual Gallons of Wasted Fuel (000)	5,502	5,225	4,888	4,463	3,874	3,528
Rank	11	11	11	12	12	12
Annual Congestion Cost (\$ million)	74	69	64	57	49	45
Rank	11	11	11	12	12	12
Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Congestion (tons)						
Rank Due to All Travel (tone)						
Due to All Travel (tons) Rank		 	 			
Truck Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Truck Congestion (tons)						
Rank Due to Truck Trough (tome)						
Due to Truck Travel (tons)						
Rank						

^{*} Note: Zeroes in the table reflect values less than 0.5.

Inventory Measures	1984	1983	1982
Urban Area Information			
Population (1000s)	2,430	2,330	2,200
Rank	12	12	12
Commuters (1000s)	859	818	764
Daily Vehicle-Miles of Travel (1000s)			
Freeway	18,230	16,995	14,270
Arterial Streets	17,500	17,000	16,500
Cost Components			
Value of Time (\$/hour)	7.75	7.43	7.20
Commercial Cost (\$/hour)	23.94	23.63	23.31
Gasoline (\$/gallon)	1.28	1.31	1.37
Diesel (\$/gallon)	1.15	1.17	1.23
System Performance	1984	1983	1982
Congested Travel (% of peak VMT)			
Congested System (% of lane-miles)			
Congested Time (number of "Rush Hours")			
Annual Excess Fuel Consumed			
Total Fuel (1000 gallons)	22,621	20,791	19,085
Rank	11	11	11
Fuel per Peak Auto Commuter (gallons)	4	4	4
Rank	41	35	19
Annual Delay			
Total Delay (1000s of person-hours)	35,468	32,600	29,925
Rank	13	13	13
Delay per Auto Commuter (pers-hrs)	23	22	22
Rank	13	13	13
Travel Time Index	1.11	1.10	1.10
Rank	23	23	20
Commuter Stress Index			
Rank			
Freeway Planning Time Index (95th Pctile)			
Rank			
Congestion Cost			
Total Cost (\$ millions)	343	305	274
Rank	12	13	13
Cost per Auto Commuter (\$)	658	632	601
Rank	15	15	15
Truck Congestion			
Annual Person-Hours of Delay (000)	1,627	1,495	1,372
Rank	12	12	12
	3,154	2,899	2,661
Annual Gallons of Wasted Fuel (000)	1 1		13
Annual Gallons of Wasted Fuel (000) Rank	12	13	10
	12 40	13 36	33
Rank			
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced	40	36	33
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons)	40	36	33
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank	40	36	33
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons)	40	36	33
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank	40	36	33
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced	 	36 12	33 12
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Rank	 	36 12	33 12
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced	 	36 12	33 12
Rank Annual Congestion Cost (\$ million) Rank Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons)	 	36 12	33 12

^{*} Note: Zeroes in the table reflect values less than 0.5.