Performance Measure Summary - Tulsa OK

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
Urban Area Information						
Population (1000s)	745	745	750	755	750	745
Rank	59	59	59	59	59	59
Commuters (1000s)	399	399	405	408	404	402
Daily Vehicle-Miles of Travel (1000s)						
Freeway	6,766	7,395	8,562	8,541	8,597	8,314
Arterial Streets	7,466	8,160	8,149	8,090	7,976	7,618
Cost Components						
Value of Time (\$/hour)	20.17	19.14	18.71	18.12	17.91	17.69
Commercial Cost (\$/hour)	55.24	49.49	54.71	52.14	50.20	46.87
Gasoline (\$/gallon)	2.07	2.36	2.64	2.14	1.98	2.11
Diesel (\$/gallon)	2.44	2.67	3.02	2.29	2.06	2.27
System Performance	2020	2019	2018	2017	2016	2015
Congested Travel (% of peak VMT)				12.1		
Congested System (% of lane-miles)				7.0		
Congested Time (number of "Rush Hours")				0.9		
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	5,491	8,317	8,862	9,940	9,883	9,750
Rank	56	63	60	53	53	53
Fuel per Peak Auto Commuter (gallons)	10	15	15	17	17	17
Rank	59	91	86	68	68	65
Annual Delay						
Total Delay (1000s of person-hours)	14,440	21,870	24,360	25,228	24,618	23,868
Rank	52	60	55	53	53	53
Delay per Auto Commuter (pers-hrs)	27	41	45	46	44	42
Rank	42	75	54	47	53	61
Travel Time Index	1.08	1.13	1.14	1.15	1.15	1.15
Rank	44	83	76	69	69	67
Commuter Stress Index	1.08	1.14	1.15	1.16		
Rank	58	86	80	72		
Freeway Planning Time Index (95th Pctile)		1.26	1.25	1.28		
Rank		77	76	75		
Congestion Cost						
Total Cost (\$ millions)	325	469	526	536	514	492
Rank	52	62	55	54	54	54
Cost per Auto Commuter (\$)	479	692	762	772	759	733
Rank	68	91	81	73	73	70
Truck Congestion						
Annual Person-Hours of Delay (000)	774	1,021	1,038	1,060	1,034	1,002
Rank	51	58	57	53	54	54
Annual Gallons of Wasted Fuel (000)	1,355	1,787	1,893	2,009	1,998	1,971
Rank	51	59	56	52	52	52
Annual Congestion Cost (\$ million)	41	50 59	57	56	52 54	48
Rank	51	59	57	53	54	54
Annual Greenhouse Gases (CO2) Produced	55.046	02.675			I	
Excess Due to Congestion (tons)	55,246	83,675				
Rank Due to All Travel (tone)	56	2 018 806				
Due to All Travel (tons) Rank	1,927,194	2,918,896 61				
] 34	01				
Truck Annual Greenhouse Gases (CO2) Produced	14.026	10.702		1	I	
Excess Due to Truck Congestion (tons)	14,936	19,702				
Rank Due to Travel (tone)	502 191	60				
Due to Truck Travel (tons)	502,181	662,434				
Rank	53	61				

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

Inventory Measures	2014	2013	2012	2011	2010	2009
Urban Area Information						
Population (1000s)	745	730	720	715	710	700
Rank	58	59	59	60	60	60
Commuters (1000s)	402	384	379	376	372	365
Daily Vehicle-Miles of Travel (1000s)						
Freeway	8,047	7,886	7,440	7,634	7,581	7,300
Arterial Streets	9,073	8,985	8,160	8,197	8,140	8,820
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)	3.21	3.35	3.33	3.26	2.55	2.11
Diesel (\$/gallon)	3.43	3.66	3.75	3.53	2.76	2.32
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)	9,675	9,560	9,208	9,106	8,837	8,734
Rank	53	53	53	53	54	54
Fuel per Peak Auto Commuter (gallons)	16	17	16	15	15	14
Rank	70	64	69	74	73	71
Annual Delay						
Total Delay (1000s of person-hours)	23,270	22,583	21,355	20,922	20,116	19,694
Rank	53	53	53	53	54	53
Delay per Auto Commuter (pers-hrs)	40	39	37	35	35	35
Rank	63	63	69	74	71	68
Travel Time Index	1.15	1.15	1.16	1.16	1.16	1.16
Rank	68	68	57	56	54	55
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	489	467	436	423	388	370
Rank	54	53	53	53	53	53
Cost per Auto Commuter (\$)	710	696	667	673	668	666
Rank	70	71	74	72	73	71
Truck Congestion						
Annual Person-Hours of Delay (000)	977	948	897	879	845	827
Rank	54	53	54	53	54	53
Annual Gallons of Wasted Fuel (000)	1,956	1,933	1,861	1,840	1,787	1,766
Rank	52	52	53	52	54	54
Annual Congestion Cost (\$ million)	48	44	40	43	38	36
Rank	53	53	54	53	53	53
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.

Urban Area Information Population (1000s) Rank Commuters (1000s) Daily Vehicle-Miles of Travel (1000s) Freeway Arterial Streets Cost Components	690 60 359	680 60	675 60	675	670	670
Population (1000s) Rank Commuters (1000s) Daily Vehicle-Miles of Travel (1000s) Freeway Arterial Streets Cost Components	60 359	60	I		670	670
Rank Commuters (1000s) Daily Vehicle-Miles of Travel (1000s) Freeway Arterial Streets Cost Components	60 359	60	I			0/0
Commuters (1000s) Daily Vehicle-Miles of Travel (1000s) Freeway Arterial Streets Cost Components	359	- 1		59	59	58
Daily Vehicle-Miles of Travel (1000s) Freeway Arterial Streets Cost Components		352	347	345	340	338
Freeway Arterial Streets Cost Components						
Arterial Streets Cost Components	7,140	7,140	7,015	6,960	6,935	7,025
Cost Components	9,000	10,000	10,330	10,000	9,615	9,335
-	7,000	10,000	10,550	10,000	7,015	7,333
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)	3.31	2.87	2.51	2.19	1.77	1.42
Diesel (\$/gallon)	3.98	3.22	2.73	2.19	1.77	1.42
•	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)	9,282	8,882	8,591	8,111	7,736	7,553
Rank	53	53	53	54	54	54
Fuel per Peak Auto Commuter (gallons)	16	17	17	16	15	16
Rank	68	61	56	58	65	49
Annual Delay						
Total Delay (1000s of person-hours)	19,933	19,073	18,448	17,418	16,613	16,219
Rank	51	52	53	53	54	54
Delay per Auto Commuter (pers-hrs)	32	32	32	32	33	33
Rank	77	77	77	75	69	65
Travel Time Index	1.16	1.17	1.17	1.16	1.15	1.15
Rank	61	54	51	57	64	62
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	389	355	331	300	274	258
Rank	51	52	52	53	54	54
Cost per Auto Commuter (\$)	667	663	660	644	635	636
Rank	67	72	72	74	73	72
	07	12	12	/4	73	12
Truck Congestion	927	001		733	(00	CO1
Annual Person-Hours of Delay (000)	837	801	775	732	698	681
Rank	53	53	54	54	56	56
Annual Gallons of Wasted Fuel (000)	1,876	1,795	1,736	1,640	1,564	1,527
Rank	52	54	54	56	56	56
Annual Congestion Cost (\$ million)	39	35	32	29	26	24
Rank	53	54	54	54	54	54
Annual Greenhouse Gases (CO2) Produced				1	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	2002	2001	2000	1999	1998	1997
Urban Area Information						
Population (1000s)	665	665	660	655	655	650
Rank	56	56	55	56	56	54
Commuters (1000s)	332	328	321	315	311	304
Daily Vehicle-Miles of Travel (1000s)						
Freeway	6,850	6,700	6,500	6,300	6,100	5,900
Arterial Streets	8,825	8,590	8,365	8,135	8,050	7,900
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)	1.27	1.31	1.48	1.03	1.00	1.08
Diesel (\$/gallon)	1.21	1.39	1.38	1.00	1.03	1.13
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)	6,982	6,720	6,556	6,316	6,191	5,820
Rank	55	55	55	55	53	53
Fuel per Peak Auto Commuter (gallons)	15	14	13	13	14	13
Rank	53	54	56	51	31	38
Annual Delay						
Total Delay (1000s of person-hours)	14,993	14,430	14,079	13,563	13,294	12,497
Rank	56	56	54	53	52	52
Delay per Auto Commuter (pers-hrs)	33	33	34	34	33	32
Rank	59	58	49	45	46	47
Travel Time Index	1.14	1.13	1.13	1.13	1.13	1.12
Rank	68	73	72	70	63	67
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	232	220	210	193	185	172
Rank	56	56	54	53	52	52
Cost per Auto Commuter (\$)	600	585	588	585	589	560
Rank	75	76	74	68	64	63
Truck Congestion						
Annual Person-Hours of Delay (000)	630	606	591	570	558	525
Rank	58	58	57	56	52	52
Annual Gallons of Wasted Fuel (000)	1,411	1,359	1,325	1,277	1,251	1,177
Rank	57	57	56	54	54	50
Annual Congestion Cost (\$ million)	21	20 55	19	17 54	16	15
Rank	57	33	55	54	52	52
Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Congestion (tons)						
Rank						
Due to All Travel (tons) Rank	 	 				
Truck Annual Greenhouse Gases (CO2) Produced				1	I	
Excess Due to Truck Congestion (tons)						
Rank Due to Travel (Travel (tons)						
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	İ					
Population (1000s)	650	645	645	640	640	635
Rank	54	53	50	51	50	50
Commuters (1000s)	301	295	291	285	282	276
Daily Vehicle-Miles of Travel (1000s)						
Freeway	5,800	5,515	5,265	5,265	4,855	4,430
Arterial Streets	7,700	7,520	7,380	7,200	7,120	7,150
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)	1.21	1.06	0.97	1.05	1.03	1.05
Diesel (\$/gallon)	1.27	1.11	1.01	1.09	1.08	1.10
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)	5,440	5,091	4,871	4,747	4,393	3,903
Rank	54	5,091	53	52	4,393	52
Fuel per Peak Auto Commuter (gallons)	12	10	10	11	10	9
Rank	38	52	45	22	24	27
Annual Delay	30	32	13		21	27
Total Delay (1000s of person-hours)	11,682	10,933	10,459	10,194	9,434	8,381
Rank	50	51	51	50	50	51
Delay per Auto Commuter (pers-hrs)	30	28	27	27	25	23
Rank	49	52	51	45	45	49
Travel Time Index			1.11			1.09
Rank	1.12	1.11		1.11	1.10	
Commuter Stress Index	65	66	60	52	58	61
Rank			 			
Freeway Planning Time Index (95th Pctile)			 			
Rank						
Congestion Cost	+					
Total Cost (\$ millions)	158	143	133	127	114	99
Rank	50	51	51	50	50	51
Cost per Auto Commuter (\$)	535	517	508	512	487	445
Rank	64	62	60	52	53	57
Truck Congestion		- 02		32	55	37
Annual Person-Hours of Delay (000)	491	459	439	428	396	352
Rank	52	52	52	51	50	51
Annual Gallons of Wasted Fuel (000)	1,099	1,029	985	959	888	789
Rank	52	52	51	50	50	49
Annual Congestion Cost (\$ million)	14	13	12	12	11	9
Rank	52	52	52	49	49	51
Annual Greenhouse Gases (CO2) Produced	1 32			.,	.,	
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		 				
IXAIIK						

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

Inventory Measures	1990	1989	1988	1987	1986	1985
Urban Area Information						
Population (1000s)	630	625	605	580	565	550
Rank	50	50	52	51	51	52
Commuters (1000s)	270	266	255	243	235	227
Daily Vehicle-Miles of Travel (1000s)						
Freeway	4,465	4,520	4,485	4,300	4,200	4,150
Arterial Streets	7,135	7,205	6,915	6,900	6,800	6,745
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)	1.11	1.06	0.98	0.98	0.96	1.25
Diesel (\$/gallon)	1.09	0.98	0.90	0.90	0.88	1.15
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)	3,577	3,322	3,169	2,917	2,614	2,323
Rank	51	51	50	47	48	49
Fuel per Peak Auto Commuter (gallons)	8	7	7	7	6	5
Rank	35	39	27	22	28	32
Annual Delay						
Total Delay (1000s of person-hours)	7,681	7,133	6,805	6,265	5,614	4,989
Rank	51	51	49	46	47	46
Delay per Auto Commuter (pers-hrs)	21	20	20	19	18	16
Rank	52	48	44	43	42	45
Travel Time Index	1.08	1.08	1.08	1.07	1.07	1.06
Rank	62	55	49	54	49	53
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	88	77	71	63	54	48
Rank	51	51	49	45	46	46
Cost per Auto Commuter (\$)	425	418	418	402	381	342
Rank	58	57	54	52	54	55
Truck Congestion						
Annual Person-Hours of Delay (000)	323	300	286	263	236	210
Rank	50	50	47	47	47	47
Annual Gallons of Wasted Fuel (000)	723	671	641	590	528	470
Rank	47	47	47	45	47	47
Annual Congestion Cost (\$ million)	9	8	7	7	6	5
Rank	48	47	46	46	46	46
Annual Greenhouse Gases (CO2) Produced					ı	
Excess Due to Congestion (tons)						
Rank						
Due to All Travel (tons)						
Rank						
Truck Annual Greenhouse Gases (CO2) Produced					1	
Excess Due to Truck Congestion (tons)						
Rank						
Due to Truck Travel (tons)						
Rank						

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

Urban Area Information Population (1000s) 530 510 500 Ramk 53 55 54 Commuters (1000s) 217 207 201 Daily Chick-Miles of Travel (1000s) 3,990 3,545 5,500 4,490 Freeway Arterial Streets 6,525 5,520 4,490 Cost Components 2 23,44 23,63 23,31 Value of Time (Shour) 2,75 7,43 7,20 Commercial Cost (Schour) 23,94 23,63 23,31 Gasoline (Sgallon) 11,7 1,30 1,35 Discal (Sgallon) 12,7 1,30 1,35 Discal (Sgallon) 1,16 1,19 1,25 System Performance 1984 1983 1982 Congested Time (momber of "Rush Hours") - - - Congested Travel (% of peak VMT) - - - Congested Travel (% of peak VMT) - - - Congested Travel (% of peak VMT) - - - <th>Inventory Measures</th> <th>1984</th> <th>1983</th> <th>1982</th>	Inventory Measures	1984	1983	1982
Rank	Urban Area Information			
Rank		530	510	500
Daily Vehicle-Miles of Travel (1000s) Freeway 3,990 3,545 3,500 Arterial Streets 6,525 5,520 4,490 Cost Components		53	55	54
Freeway Arterial Streets 3,990 3,545 3,500 4,800 Cost Components Value of Time (S/hour) 7,75 7,43 7,20 Commercial Cost (S/hour) 23,94 23,63 23,131 Gasoline (S/gallon) 1,16 1,19 1,25 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) — — — — Congested System (% of Iane-miles) —	Commuters (1000s)	217	207	201
Freeway Arterial Streets 3,990 3,545 3,500 4,800 Cost Components Value of Time (S/hour) 7,75 7,43 7,20 Commercial Cost (S/hour) 23,94 23,63 23,131 Gasoline (S/gallon) 1,16 1,19 1,25 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) — — — — Congested System (% of Iane-miles) —	Daily Vehicle-Miles of Travel (1000s)			
Arterial Streets		3,990	3,545	3,500
National Prime (Shour) 7.75 7.43 7.20 7.2	-			
Value of Time (S/hour) 7.75 7.43 7.20 Commercial Cost (S/hour) 23.94 23.63 23.31 Gasoline (S/gallon) 1.27 1.30 1.35 Diesel (S/gallon) 1.16 1.19 1.25 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) - - - Congested Time (number of "Rush Hours") - - - Annual Excess Fuel Consumed - - - - Total Fuel (1000 gallons) 2,162 1,928 1,715 8 4 4 2 2 8 1,715 8 4 4 2 2 8 1,715 8 4 4 2 2 1,828 1,715 8 4 4 2 2 8 1,715 8 4 4 2 2 8 1,715 8 4 4 2 2 8 1,715 8 4 4 2	Cost Components			
Commercial Cost (S/hour) 23.94 23.63 23.31 Casoline (S/gallon) 1.17 1.30 1.35 Diesel (S/gallon) 1.16 1.19 1.25 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) Congested System (% of lane-miles)	-	7.75	7.43	7.20
Gasoline (S/gallon) 1.27 1.30 1.35 1.25	· · ·	23.94	23.63	23.31
Diesel (Sgallon)	` ´		1.30	1.35
Congested Travel (% of peak VMT)		1.16	1.19	1.25
Congested System (% of lane-miles) Congested Time (number of "Rush Hours") Annual Excess Fuel Consumed Total Fuel (1000 gallons) 2,162 1,928 1,715 Rank 48 49 50 Fuel per Peak Auto Commuter (gallons) 4 4 4 2 Rank 41 35 55 Annual Delay 4,642 4,139 3,682 Rank 46 47 47 Delay per Auto Commuter (pers-hrs) 16 15 13 Rank 41 40 44 Tavel Time Index 1.06 1.06 1.05 Rank 50 45 51 Commuter Stress Index Rank Freeway Planning Time Index (95th Petile) Rank Freeway Planning Time Index (95th Petile	System Performance	1984	1983	1982
Congested System (% of lane-miles) Congested Time (number of "Rush Hours") Annual Excess Fuel Consumed Total Fuel (1000 gallons) 2,162 1,928 1,715 Rank 48 49 50 Fuel per Peak Auto Commuter (gallons) 4 4 4 2 Rank 41 35 55 Annual Delay 4,642 4,139 3,682 Rank 46 47 47 Delay per Auto Commuter (pers-hrs) 16 15 13 Rank 41 40 44 Tavel Time Index 1.06 1.06 1.05 Rank 50 45 51 Commuter Stress Index Rank Freeway Planning Time Index (95th Petile) Rank Freeway Planning Time Index (95th Petile	Congested Travel (% of peak VMT)			
Congested Time (number of "Rush Hours") — — — Annual Excess Fuel Consumed 2,162 1,928 1,715 Rank 48 49 50 Fuel per Peak Auto Commuter (gallons) 4 44 2 Rank 41 35 55 Annual Delay 4,642 4,139 3,682 Rank 46 47 47 Delay per Auto Commuter (pers-hrs) 16 15 13 Rank 41 40 44 Total Delay (1000s of person-hours) 4,642 4,139 3,682 Rank 46 47 47 Delay per Auto Commuter (pers-hrs) 16 15 13 Rank 41 40 44 Truel Time Index 1,06 1,05 1,05 Rank 50 45 51 Commuter Stress Index				
Annual Excess Fuel Consumed Total Fuel (1000 gallons) 2,162 1,928 1,715 Rank 48 49 50 Fuel per Peak Auto Commuter (gallons) 4 4 2 Rank 41 35 55 55 Annual Delay Total Delay (1000s of person-hours) 4,642 4,139 3,682 Rank 46 47 47 47 47 47 48 48 49 50 47 47 48 48 49 50 48 49 50 48 49 50 47 47 48 48 49 50 48 49 50 49 50 53 55 48 50 6 53 55 50 6 53 50 6 50 50				
Total Fuel (1000 gallons)				
Rank		2 162	1 928	1 715
Fuel per Peak Auto Commuter (gallons)	` ,			
Rank		-	-	
Annual Delay Total Delay (1000s of person-hours) 4,642		•	•	
Total Delay (1000s of person-hours)				
Rank		4 642	4 139	3 682
Delay per Auto Commuter (pers-hrs)				<i>′</i>
Rank		-		
Travel Time Index		-		
Rank				
Commuter Stress Index Rank Freeway Planning Time Index (95th Pctile) Rank Congestion Cost Total Cost (\$ millions) 44 37 33 Rank 46 47 46 Cost per Auto Commuter (\$) 329 306 278 Rank 50 53 54 Truck Congestion Rank 47 47 48 Annual Person-Hours of Delay (000) 195 174 155 Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons)				
Rank				
Freeway Planning Time Index (95th Pctile)				
Rank Congestion Cost Total Cost (\$ millions) 44 37 33 Rank 46 47 46 Cost per Auto Commuter (\$) 329 306 278 Rank 50 53 54 Truck Congestion Annual Person-Hours of Delay (000) 195 174 155 Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced 2 Rank Due to All Travel (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank				
Congestion Cost 44 37 33 Rank 46 47 46 Cost per Auto Commuter (\$) 329 306 278 Rank 50 53 54 Truck Congestion 329 306 278 Annual Person-Hours of Delay (000) 195 174 155 Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Total C				
Total Cost (\$ millions)				
Rank 46 47 46 Cost per Auto Commuter (\$) 329 306 278 Rank 50 53 54 Truck Congestion Annual Person-Hours of Delay (000) 195 174 155 Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Excess Due to Truck Congestion (tons) Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)	S	44	37	33
Cost per Auto Commuter (\$) 329 306 278 Rank 50 53 54 Truck Congestion	· · ·			
Rank 50 53 54				
Truck Congestion 195 174 155 Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 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) Rank Due to Truck Travel (tons)	* * * * * * * * * * * * * * * * * * * *			
Annual Person-Hours of Delay (000) Rank Annual Gallons of Wasted Fuel (000) Annual Gallons of Wasted Fuel (000) Annual Gallons of Wasted Fuel (000) Annual Congestion Cost (\$ million) Annual Congestion Cost (\$ million) Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Annual Greenhouse Gases (CO2) Produced Excess Due to All Travel (tons) Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Travel (tons)	Truck Congestion			
Rank 47 47 48 Annual Gallons of Wasted Fuel (000) 437 390 347 Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)	_	195	174	155
Annual Gallons of Wasted Fuel (000)				
Rank 47 46 48 Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 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) Rank Due to Truck Travel (tons)				
Annual Congestion Cost (\$ million) 5 4 4 Rank 46 47 46 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) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Travel (tons) Rank Rank Rank Truck Annual Greenhouse Gases (CO2) Produced				
Rank 46 47 46 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank Due to All Travel (tons) Rank Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)		5		
Excess Due to Congestion (tons)		46	47	46
Excess Due to Congestion (tons)	Annual Greenhouse Gases (CO2) Produced			
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)				
Due to All Travel (tons)	- ' '			
Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)				
Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)				
Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)				
Rank ————————————————————————————————————				
Due to Truck Travel (tons)				
Numb	Rank			

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