Performance Measure Summary - Charleston-North Charleston SC

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)	645	645	640	630	620	610
Rank	65	65	65	66	68	68
Commuters (1000s)	325	325	319	314	309	304
Daily Vehicle-Miles of Travel (1000s)						
Freeway	4,079	4,434	4,291	4,398	4,314	4,055
Arterial Streets	6,783	7,373	7,263	6,998	6,799	6,281
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)	2.08	2.33	2.59	2.09	1.96	1.98
Diesel (\$/gallon)	2.60	2.79	3.49	2.33	2.10	2.33
System Performance	2020	2019	2018	2017	2016	2015
Congested Travel (% of peak VMT)				28.0		
Congested System (% of lane-miles)				2.2		
Congested Time (number of "Rush Hours")				3.6		
Annual Excess Fuel Consumed						
Total Fuel (1000 gallons)	4,149	9,369	9,123	8,782	8,684	8,543
Rank	67	57	57	60	59	60
Fuel per Peak Auto Commuter (gallons)	10	23	22	22	21	21
Rank	59	33	37	32	37	36
Annual Delay						
Total Delay (1000s of person-hours)	10,973	24,780	22,351	21,087	20,555	20,047
Rank	62	56	58	58	58	58
Delay per Auto Commuter (pers-hrs)	26	58	53	51	50	48
Rank	47	27	32	34	33	35
Travel Time Index	1.07	1.24	1.24	1.23	1.23	1.23
Rank	57	28	27	30	29	29
Commuter Stress Index	1.08	1.31	1.34	1.29		
Rank	58	26	17	26		
Freeway Planning Time Index (95th Pctile)		1.80	1.87	1.75		
Rank		26	20	27		
Congestion Cost						
Total Cost (\$ millions)	242	525	483	449	430	413
Rank	63	56	58	58	58	58
Cost per Auto Commuter (\$)	521	1,131	1,060	1,000	980	951
Rank	55	33	36	39	38	38
Truck Congestion						
Annual Person-Hours of Delay (000)	399	891	875	886	863	842
Rank	76	62	61	61	1.504	1.500
Annual Gallons of Wasted Fuel (000)	750	1,676	1,666	1,612	1,594	1,568
Rank	74	61	60	60	60	60
Annual Congestion Cost (\$ million) Rank	21 75	44 63	49 61	47 61	44 60	40 60
	/3	03	01	01	00	00
Annual Greenhouse Gases (CO2) Produced	41 272	02 421		1	I	
Excess Due to Congestion (tons) Rank	41,373	93,431 57				
Nank Due to All Travel (tons)	948,710	2,142,425				
Rank	948,710	2,142,423	 			 -
	63	70				
Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons)	0 242	10 /15		1	I	
Rank	8,243	18,415 61				
Nank Due to Truck Travel (tons)	177,244	395,952	 			
Rank	85	78	 			
TWIIN		70				

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

Inventory Measures	2014	2013	2012	2011	2010	2009	
Urban Area Information							
Population (1000s)	600	590	570	550	535	515	
Rank	69	70	71	74	74	75	
Commuters (1000s)	298	298	288	278	269	258	
Daily Vehicle-Miles of Travel (1000s)							
Freeway	3,797	3,822	3,705	3,754	3,677	3,610	
Arterial Streets	5,993	5,968	5,995	6,021	5,897	5,900	
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)	3.00	3.23	3.27	3.14	2.56	2.12	
Diesel (\$/gallon)	3.43	3.70	3.72	3.53	2.80	2.39	
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)	8,498	8,463	8,362	8,167	7,855	7,691	
Rank	59	59	58	58	60	59	
Fuel per Peak Auto Commuter (gallons)	20	20	20	20	18	18	
Rank	38	37	33	32	46	34	
Annual Delay							
Total Delay (1000s of person-hours)	19,768	19,514	18,939	18,166	17,149	16,478	
Rank	58	58	58	58	58	59	
Delay per Auto Commuter (pers-hrs)	47	46	47	46	45	45	
Rank	34	34	33	30	30	25	
Travel Time Index	1.23	1.22	1.23	1.23	1.23	1.23	
Rank	30	31	31	28	28	29	
Commuter Stress Index							
Rank							
Freeway Planning Time Index (95th Pctile)							
Rank							
Congestion Cost							
Total Cost (\$ millions)	415	404	387	367	332	311	
Rank	58	58	58	58	60	60	
Cost per Auto Commuter (\$)	932	931	915	904	881	864	
Rank	38	36	36	36	39	42	
Truck Congestion							
Annual Person-Hours of Delay (000)	830	820	795	763	720	692	
Rank	59	59	58	58	60	60	
Annual Gallons of Wasted Fuel (000)	1,560	1,553	1,535	1,499	1,441	1,411	
Rank	58	58	58	59	59	59	
Annual Congestion Cost (\$ million)	40	37	35	37	33	30	
Rank	59	58	58	59	59	59	
Annual Greenhouse Gases (CO2) Produced							
Excess Due to Congestion (tons)							
Rank							
Due to All Travel (tons)							
Rank							
Truck Annual Greenhouse Gases (CO2) Produced							
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	2008	2007	2006	2005	2004	2003
Urban Area Information						
Population (1000s)	500	495	490	485	480	470
Rank	75	75	74	73	72	73
Commuters (1000s)	250	246	242	238	234	228
Daily Vehicle-Miles of Travel (1000s)						
Freeway	3,595	3,645	3,610	3,475	3,230	3,130
Arterial Streets	5,900	6,170	6,040	5,820	5,775	5,700
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)	3.30	2.82	2.49	2.19	1.83	1.39
Diesel (\$/gallon)	4.00	3.20	2.68	2.35	1.84	1.42
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)	7,706	7,351	7,025	6,679	6,480	6,250
Rank	59	60	60	59	59	57
Fuel per Peak Auto Commuter (gallons)	19	18	17	16	16	16
Rank	37	49	56	58	56	49
Annual Delay						
Total Delay (1000s of person-hours)	15,724	15,001	14,336	13,629	13,222	12,753
Rank	59	59	59	59	59	59
Delay per Auto Commuter (pers-hrs)	44	43	41	40	39	39
Rank	28	31	34	38	39	37
Travel Time Index	1.24	1.23	1.23	1.22	1.22	1.21
Rank	28	31	31	32	32	32
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	308	280	258	236	219	203
Rank	60	59	60	59	59	59
Cost per Auto Commuter (\$)	813	807	792	780	784	776
Rank	43	47	47	49	48	49
Truck Congestion						
Annual Person-Hours of Delay (000)	660	630	602	572	555	536
Rank	60	60	60	61	61	61
Annual Gallons of Wasted Fuel (000)	1,415	1,349	1,289	1,226	1,190	1,147
Rank	60	60	60	61	60	61
Annual Congestion Cost (\$ million)	31	27	25	22	20	19
Rank	59	60	60	61	61	60
Annual Greenhouse Gases (CO2) Produced						
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.

Inventory Measures	2002	2001	2000	1999	1998	1997
Urban Area Information						
Population (1000s)	465	460	455	440	435	430
Rank	72	71	71	71	70	70
Commuters (1000s)	223	218	212	203	198	193
Daily Vehicle-Miles of Travel (1000s)						
Freeway	3,000	2,865	2,815	2,700	2,615	2,475
Arterial Streets	5,600	5,500	5,375	5,250	5,175	5,075
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)	1.25	1.38	1.41	1.00	0.97	1.07
Diesel (\$/gallon)	1.26	1.39	1.37	1.01	1.05	1.16
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)	5,931	5,729	5,588	5,209	4,918	4,769
Rank	59	59	58	59	59	59
Fuel per Peak Auto Commuter (gallons)	14	13	14	13	12	11
Rank	61	63	50	51	53	54
Annual Delay						
Total Delay (1000s of person-hours)	12,103	11,691	11,402	10,630	10,035	9,732
Rank	60	58	58	60	60	59
Delay per Auto Commuter (pers-hrs)	37	37	37	36	34	34
Rank	42	40	37	37	40	38
Travel Time Index	1.21	1.20	1.20	1.20	1.19	1.19
Rank	31	32	29	26	27	26
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	187	179	170	151	140	134
Rank	59	59	58	60	60	59
Cost per Auto Commuter (\$)	751	735	737	710	686	675
Rank	49	50	48	50	48	42
Truck Congestion						
Annual Person-Hours of Delay (000)	508	491	479	446	421	409
Rank	62	61	1 026	61	61	62
Annual Gallons of Wasted Fuel (000)	1,088	1,052	1,026	956	903	875
Rank	62	62	62	62	62	62
Annual Congestion Cost (\$ million) Rank	17 60	16 61	15 60	13 61	12 62	12 60
	00	01	00	01	02	00
Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Congestion (tons) Rank						
Nank Due to All Travel (tons)						
Rank						 -
Truck Annual Greenhouse Gases (CO2) Produced				1	I	
Excess Due to Truck Congestion (tons)						
Rank Due to Truck 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						
Population (1000s)	425	425	420	415	410	400
Rank	70	70	70	70	70	70
Commuters (1000s)	189	187	182	178	173	167
Daily Vehicle-Miles of Travel (1000s)						
Freeway	2,405	2,350	2,260	2,140	2,050	1,950
Arterial Streets	5,000	4,925	4,850	4,720	4,660	4,500
Cost Components	3,000	1,723	1,020	1,720	1,000	1,500
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)	1.16	1.07	0.95	1.00	1.00	1.06
Diesel (\$/gallon)	1.16	1.16	1.03	1.08	1.00	1.15
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)	4,601	4,372	4,144	3,810	3,548	3,274
Rank	58	57	56	56	57	57
Fuel per Peak Auto Commuter (gallons)	12	11	11	10	9	9
Rank	38	41	37	38	45	27
Annual Delay						
Total Delay (1000s of person-hours)	9,389	8,921	8,455	7,775	7,239	6,680
Rank	58	58	56	55	55	56
Delay per Auto Commuter (pers-hrs)	33	32	31	29	28	26
Rank	38	34	31	33	32	37
Travel Time Index	1.18	1.18	1.17	1.16	1.15	1.14
Rank	26	26	26	26	27	29
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	127	117	108	97	88	79
Rank	58	57	55	55	56	56
Cost per Auto Commuter (\$)	666	652	635	603	579	547
Rank	37	34	33	34	33	36
	31	34	33	J 1	33	30
Truck Congestion	201	375	355	225	204	201
Annual Person-Hours of Delay (000)	394	375	355	327	304	281
Rank	60	58	57	57 700	57	56
Annual Gallons of Wasted Fuel (000)	844	803	760	700	651	601
Rank	61	59	59	58	57	58
Annual Congestion Cost (\$ million)	11	11	10	9	8	8
Rank	60	55	55	55	57	54
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)						

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

Inventory Measures	1990	1989	1988	1987	1986	1985
Urban Area Information						
Population (1000s)	395	390	385	375	370	360
Rank	70	70	70	70	69	69
Commuters (1000s)	163	159	156	151	148	143
Daily Vehicle-Miles of Travel (1000s)						
Freeway	1,900	1,705	1,685	1,570	1,360	1,340
Arterial Streets	4,380	4,260	4,125	4,000	3,865	3,800
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)	1.03	1.08	1.00	1.00	0.98	1.28
Diesel (\$/gallon)	1.04	1.00	0.92	0.92	0.90	1.18
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)	3,033	2,837	2,643	2,393	2,260	2,008
Rank	57	55	55	55	54	54
Fuel per Peak Auto Commuter (gallons)	7	8	7	6	6	5
Rank	50	26	27	32	28	32
Annual Delay						
Total Delay (1000s of person-hours)	6,188	5,788	5,392	4,883	4,611	4,096
Rank	55	55	54	56	54	54
Delay per Auto Commuter (pers-hrs)	25	24	23	21	20	19
Rank	35	29	28	31	32	30
Travel Time Index	1.14	1.13	1.12	1.12	1.11	1.10
Rank	26	28	28	27	27	27
Commuter Stress Index						
Rank						
Freeway Planning Time Index (95th Pctile)						
Rank						
Congestion Cost						
Total Cost (\$ millions)	71	63	56	49	45	40
Rank	55	55	54	56	54	53
Cost per Auto Commuter (\$)	532	528	518	488	482	432
Rank	35	32	31	31	29	32
Truck Congestion						
Annual Person-Hours of Delay (000)	260	243	226	205	194	172
Rank	56	56	56	56	53	55
Annual Gallons of Wasted Fuel (000)	557	520	485	439	415	369
Rank	58	58	55	55	54	56
Annual Congestion Cost (\$ million) Rank	7 54	6 55	6 52	5 54	5 51	53
	34	33	32	34	31	33
Annual Greenhouse Gases (CO2) Produced					I	
Excess Due to Congestion (tons) Rank						
Nank Due to All Travel (tons)	 					
Rank						 -
Truck Annual Greenhouse Gases (CO2) Produced				1	I	
Excess Due to Truck Congestion (tons) Rank						
Rank Due to Truck Travel (tons)	 					
Rank	 					
Naiik						

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

Population (1000s)	Inventory Measures	1984	1983	1982
Rank	Urban Area Information			
Rank	Population (1000s)	355	345	340
Daily Vehicle-Miles of Travel (1000s) Freeway		69	70	70
Freeway Arterial Streets 1,130 925 850 Actorial Streets Cost Components 2 3,715 3,665 3,500 Cost Components 7,75 7,43 7,20 Commercial Cost (%hour) 23,94 23,63 23,31 Gasoline (%gallon) 1,19 1,22 1,28 Dissel (%gallon) 1,19 1,22 1,28 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) ————————————————————————————————————	Commuters (1000s)	139	135	131
Freeway Arterial Streets 1,130 925 850 Actorial Streets Cost Components 2 3,715 3,665 3,500 Cost Components 7,75 7,43 7,20 Commercial Cost (%hour) 23,94 23,63 23,31 Gasoline (%gallon) 1,19 1,22 1,28 Dissel (%gallon) 1,19 1,22 1,28 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) ————————————————————————————————————	Daily Vehicle-Miles of Travel (1000s)			
Arterial Streets		1,130	925	850
Cost Components 7.20 7.23 7.20 Value of Time (Srhour) 23.94 23.63 23.31 Gasoline (S/gallon) 1.29 1.32 1.38 Diesel (S/gallon) 1.19 1.22 1.28 System Performance 1984 1983 1982 Congested Travel (% of peak VMT)	·	·	3,665	3,500
Value of Time (Shour) 7.75 7.43 7.20 Commercial Cost (Shour) 23.94 23.63 23.31 Gasoline (Sgallon) 1.19 1.22 1.28 Diesel (Sigallon) 1.19 1.22 1.28 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) - - - Congested Time (number of "Rush Hours") - - - Annual Excess Fuel Consumed - - - - Total Fuel (1000 gallons) 1,880 1,626 1,476 3 Rank 52 53 5 4 3 <td< td=""><td></td><td>,</td><td>,</td><td></td></td<>		,	,	
Commercial Cost (S/hour) 23.94 23.63 23.31 Gasoline (S/gallon) 1.29 1.32 1.38 Diesel (S/gallon) 1.19 1.22 1.32 System Performance 1984 1983 1982 Congested Travel (% of peak VMT) - - - Congested Time (number of "Rush Hours") - - - Congested Time (number of "Rush Hours") - - - Total Puel (1000 gallons) 1,880 1,626 1,476 Rank 52 53 55 Fuel per Peak Auto Commuter (gallons) 5 4 33 Rank 27 35 34 Annual Delay 3,836 3,317 3,012 Rank 53 355 56 Delay per Auto Commuter (pers-hrs) 18 16 15 Rank 30 33 33 Tavel Time Index 1,10 1.09 1.08 Rank 27 28 29 C	•	7 75	7 43	7.20
Gasoline (\$/gallon) 1.29 1.32 1.38 1.98 1.19 1.22 1.28 1.28 1.19 1.22 1.28 1.28 1.19 1.22 1.28 1.28 1.19 1.22 1.28 1.28 1.19 1.22 1.28 1.28 1.19 1.22 1.28 1.28 1.29 1.29 1.20				
Diesel (Sygallon)	` ´			
System Performance			-	
Congested Travel (% of peak VMT)				
Congested System (% of lane-miles) Congested Time (number of "Rush Hours") Annual Excess Fuel Consumed Total Fuel (1000 gallons) 1,880 1,626 1,476 Rank 52 53 55 Fuel per Peak Auto Commuter (gallons) 5 4 3 Rank 27 35 34 Annual Delay 55 56 Delay per Auto Commuter (pers-hrs) 18 16 15 56 Delay per Auto Commuter (pers-hrs) 18 16 15 56 Delay per Auto Commuter (pers-hrs) 18 16 15 56 Delay per Auto Commuter (pers-hrs) 18 16 15 56 Delay per Auto Commuter (pers-hrs) 18 16 15 56 56 Delay per Auto Commuter (pers-hrs) 18 16 15 42 29 29 20 10 10 10 10	•		1703	
Congested Time (number of "Rush Hours") - - - Annual Excess Fuel Consumed 1,880 1,626 1,476 Rank 52 53 55 Puel per Peak Auto Commuter (gallons) 5 4 3 Rank 27 35 34 Annual Delay 3,836 3,317 3,012 Rank 53 55 56 Delay per Auto Commuter (pers-hrs) 18 16 15 Rank 30 33 33 Travel Time Index 1,10 1.09 1.08 Rank 27 28 29 Commuter Stress Index - - - Rank - - - Freeway Planning Time Index (95th Petile) - - - Rank 3 30 27 Rank 3 36 30 27 Rank 3 36 30 27 Rank 3 36 36<				
Annual Excess Fuel Consumed Total Fuel (1000 gallons) 1,880 1,626 1,476 Rank 52 53 55 55 56 34 33 Rank 27 35 34 34 34 34 34 34 34				
Total Fuel (1000 gallons)				
Rank		4 000	4 (2 (4 4= 4
Fuel per Peak Auto Commuter (gallons) Rank 27 35 34 3 3 3 3 3 3 3 3 3				
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Total Delay (1000s of person-hours) 3,836 3,317 3,012 Rank 53 55 56 Delay per Auto Commuter (pers-hrs) 18 16 15 Rank 30 33 33 Travel Time Index 1.10 1.09 1.08 Rank 27 28 29 Commuter Stress Index Rank Rank Rank Rank Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 53 54 55 Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Congestion Cost (\$ million) 34 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 53 54 55 Annual Greenhouse Gases (CO2) Produced Excess Due to 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 Congestion (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank 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 Due to Truck Travel (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Travel (tons) Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Travel (tons) Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Travel (tons) Truck An		27	35	34
Rank 53 55 56 Delay per Auto Commuter (pers-hrs) 18 16 15 Rank 30 33 33 Travel Time Index 1.10 1.09 1.08 Rank 27 28 29 Commuter Stress Index Rank Rank Rank Rank Rank Rank 53 54 54 Congestion Cost Total Cost (\$ millions) 36 30 27 Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 32 36 36 Truck Congestion 345 299 271 Rank 53 54 55 Annual Person-Hours of Delay (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 55 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) Truck 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 Congestion (tons) Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Truck Travel (tons) Rank Truck Travel (tons)	·			
Delay per Auto Commuter (pers-hrs) 18		3,836	3,317	
Rank				
Travel Time Index				
Rank	Rank	30	33	33
Commuter Stress Index Rank Freeway Planning Time Index (95th Pctile) Rank Congestion Cost Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 32 36 36 Truck Congestion Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 Annual Greenhouse Gases (CO2) Produced Excess Due to Congestion (tons) Rank	Travel Time Index	1.10	1.09	1.08
Rank	Rank	27	28	29
Freeway Planning Time Index (95th Pctile)	Commuter Stress Index			
Rank	Rank			
Congestion Cost 36 30 27 Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 32 36 36 Truck Congestion Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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) Rank	Freeway Planning Time Index (95th Pctile)			
Total Cost (\$ millions) 36 30 27 Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 32 36 36 Truck Congestion 32 36 36 Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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) <td>Rank</td> <td></td> <td></td> <td></td>	Rank			
Rank 53 54 54 Cost per Auto Commuter (\$) 419 376 352 Rank 32 36 36 Truck Congestion Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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) Rank Total Congestion (tons) Annual Greenhouse Gases (C	Congestion Cost			
Cost per Auto Commuter (\$)	Total Cost (\$ millions)	36	30	27
Rank 32 36 36 Truck Congestion Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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) <td>Rank</td> <td>53</td> <td>54</td> <td>54</td>	Rank	53	54	54
Truck Congestion 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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)	Cost per Auto Commuter (\$)	419	376	352
Annual Person-Hours of Delay (000) 161 139 127 Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 3 Rank 50 54 50 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 Congestion (tons) Rank	Rank	32	36	36
Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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)	Truck Congestion			
Rank 53 54 55 Annual Gallons of Wasted Fuel (000) 345 299 271 Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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)	Annual Person-Hours of Delay (000)	161	139	127
Rank 53 54 55 Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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)		53	54	55
Annual Congestion Cost (\$ million) 4 3 3 Rank 50 54 50 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 Gallons of Wasted Fuel (000)	345	299	271
Rank 50 54 50 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)	Rank	53	54	55
Annual Greenhouse Gases (CO2) Produced	Annual Congestion Cost (\$ million)	4	3	3
Excess Due to Congestion (tons)	Rank	50	54	50
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)				
Rank Truck Annual Greenhouse Gases (CO2) Produced Excess Due to Truck Congestion (tons) Rank Due to Truck 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)			
Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)	· · ·			
Excess Due to Truck Congestion (tons) Rank Due to Truck Travel (tons)	Truck Annual Greenhouse Gases (CO2) Produced			
Rank Due to Truck Travel (tons)				
Due to Truck Travel (tons)				
	Rank			

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