

APPENDIX D

SAN DIEGO METRO AREA

COST TO SAN DIEGO MOTORISTS OF INADEQUATE ROADS

TRIP estimates that San Diego roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions, cost the average San Diego driver \$2,050 annually in the cost of traffic crashes, additional vehicle operating costs and congestion-related delays.

- Driving on roads in need of repair costs the average motorist in the San Diego region \$664 annually in extra vehicle operating costs. These costs include accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.
- Traffic congestion in the San Diego area costs the average motorist in the region \$1,081 annually in lost time and wasted fuel.
- Traffic accidents and fatalities in which roadway characteristics were likely a contributing factor cost each San Diego area driver an average of \$305 annually, including medical costs, lost economic and household productivity, property damage and travel delays.

ROAD CONDITIONS

A total of 84 percent of major roads in the San Diego area are in poor or mediocre condition, costing area drivers nearly \$700 each year in extra vehicle operating costs.

- Fifty-three percent of major roads in the San Diego urban area are rated in poor condition, the seventh highest percentage in the nation among cities with at least 500,000 population. An additional 31 percent of the area's major roads are in mediocre condition. This includes Interstates, highways, connecting urban arterials, and key urban streets that are maintained by state, county or municipal governments.
- Roads rated in poor condition often have significant rutting, potholes or other visible signs of deterioration. Roads in poor condition typically need to be resurfaced or reconstructed. Roads rated in mediocre condition show signs of significant wear and may also have some visible pavement distress. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Just 10 percent of major roads in the San Diego area are in good condition. A desirable goal for state and local organizations responsible for road maintenance is to keep 75 percent of major roads in good condition.
- The following is a list of the most deteriorated sections of state roadways in the San Diego area, which are not scheduled for repair through the end of 2009.

Chart 1. Most deteriorated sections of state roadways in the San Diego metro area.

Rank	Route Name	From	To	Miles	ADT	IRI
1	Route 75	South of Tulagi Rd., Coronado	Route 5, San Diego	5.5	24,000	191
2	Route 78	Lincoln Pkwy & Broadway, Escondido	San Diego Wild Animal Park, San Diego	5.6	51,425	177
3	Route 94	Route 54, San Diego County	School, San Diego County	1.5	64,000	165
4	Route 5	Mexico Border	Sassafras St., San Diego	17.7	124,000	160
5	Route 75	Route 5, near Imperial Beach	Delaware St., Imperial Beach	1.8	72,000	160
6	Route 905	Oro Vista Rd. west of Route 5, San Diego	Otay Mesa Rd. east of Route 805, San Diego	3.7	23,700	153

Source: Caltrans response to TRIP survey. (ADT = Average Daily Traffic)

BRIDGE CONDITIONS

Twenty percent of bridges and overpasses in the San Diego area are structurally deficient or functionally obsolete.

- Seven percent (90) of the 1,232 bridges in the San Diego area are rated as structurally deficient, showing significant deterioration to decks and other major components.
- Thirteen percent (156) of the 1,232 bridges in the San Diego area are functionally obsolete. These bridges no longer meet modern design standards for safety features such as lane widths or alignment with connecting roads or are no longer adequate for the volume of traffic being carried.
- Bridge deficiencies have an impact on mobility and safety. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid these bridges. Narrow bridge lanes, inadequate clearances and poorly aligned bridge approaches reduce traffic safety. Redirected trips lengthen travel time, waste fuel and reduce the efficiency of the local economy.
- The following is a list of the most structurally deficient bridges in the San Diego area, carrying at least 5,000 vehicles per day. Bridges are assigned an overall sufficiency rating between one and 100, with deficient bridges receiving a lower score. Individual components of the bridge, including the deck, super-structure and sub-structure are also assigned a rating between one and nine, with a lower score indicating a greater level of deficiency.

Chart 2. Bridges in the San Diego metro area with the lowest sufficiency rating.

Rank	Route	City	Route or feature intersected	Daily Traffic	Year built	Sufficiency Rating	Deck Rating	Super-structure Rating	Sub-structure Rating
1	N TORREY PINES RD	Del Mar	MTDB,BNSF RY, & AMTRAK	20,000	1933	19.3	4	4	4
2	CARLSBAD BLVD SB	Carlsbad	LAS ENCINAS CREEK	11,000	1913	34.2	4	4	3
3	HILL ST	Oceanside	SAN LUIS REY RIVER	10,000	1929	50.6	7	4	7
4	CARLSBAD BLVD	Carlsbad	BUENA VISTA CREEK	20,000	1914	53.8	7	4	7
5	EL CAMINO REAL	San Diego	SAN DIEGUITO RIVER	16,000	1940	60.9	4	6	7
6	CAMINO DEL MAR	Del Mar	SAN DIEGUITO RIVER	20,000	1932	61.5	6	4	6
7	FAIRMOUNT AVE	San Diego	ALDINE DRIVE SEPARATION	12,800	1960	65.8	4	7	7
8	FAIRMOUNT AVE	San Diego	ALDINE DRIVE SEPARATION	12,800	1960	65.8	4	7	7
9	MISSION CENTER RD	San Diego	SAN DIEGO RIVER	15,000	1990	66.9	N	N	N
10	MISSION BAY DRIVE	San Diego	SAN DIEGO RIVER	55,000	1950	68.8	3	7	6
11	Route 5	San Diego	S5-N163 Connector Overcross	10,200	1962	70.6	4	6	7
12	VOLTAIRE ST	San Diego	NIMITZ BLVD	13,300	1959	71.3	4	7	6
13	Route 52	San Diego	La Jolla Parkway Viaduct	13,800	1966	72.6	4	6	7
14	Route 163	San Diego	Genesee Avenue Undercross	147,000	1956/1970	73	4	7	7
15	FAMOSA BLVD	San Diego	NIMITZ BLVD	12,500	1959	73.4	4	6	7
16	Route 5	San Diego	Route 5/274 Separation	163,000	1954/1969	74	3	6	7
17	Route 8	El Cajon	Route 8/67 Separation	189,000	1961/1968	74	4	7	7
18	Route 5	San Diego	Grape Street Undercrossing	159,000	1962/1989	75	4	8	6
19	Route 5	San Diego	State Street Undercrossing	159,000	1962/1989	75	4	7	7
20	Route 5	San Diego	India Street Undercrossing	159,000	1962/1989	75	4	7	7
21	Route 67	San Diego Co.	Winter Gardens Overcrossing	15,393	1970	75.1	4	6	7
22	Route 5	San Diego	San Dieguito River	225,000	1964/1994	77	4	7	7
23	Route 163	San Diego	San Diego River	147,000	1946/1970	78	4	7	7
24	Route 5	San Diego	Route 5/15 Separation	164,000	1963/1978	78	4	8	7
25	LA JOLLA VILLAGE D	San Diego	GILMAN DRIVE	50,000	1968	78.2	3	7	6

Source: Caltrans response to TRIP survey.

CONGESTION

Traffic congestion in San Diego is a growing burden, hampering mobility for individuals and businesses impeding the region’s economic development.

- In 2007, 78 percent of urban highways in the San Diego metro area were congested, carrying traffic volumes that result in significant rush hour delays.
- The average San Diego driver loses 52 hours per year due to traffic congestion according to the Texas Transportation Institute’s (TTI) 2009 Annual Urban Mobility Report.

TRAFFIC SAFETY

Improving safety features on San Diego roads and highways would likely result in a decrease in traffic fatalities in the state.

- In 2008, 263 people were killed in traffic accidents in the San Diego metro area.
- San Diego’s fatality rate per 100,000 population was 8.8 in 2008. This was lower than the statewide average of 9.3 and the national rate of 12.3 fatalities per 100,000 population.

- Where appropriate, highway improvements can reduce traffic fatalities and accidents while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.

PUBLIC TRANSIT

Public transit systems in the San Diego area play an important role in providing mobility in the region.

- Public transit provided 380 million passenger miles of travel in the San Diego urban area in 2007.
- In 2007 the average age of buses in the San Diego region was 8.4 years, an increase from an average age of 6.7 years in 2002. The Federal Transit Administration recommends that buses be replaced after 12 years.
- In 2007 the average age of passenger rail cars in the San Diego region was 16 years. The Federal Transit Administration recommends that passenger rail cars be replaced after 35 years.