

## **APPENDIX A**

### **LOS ANGELES METRO AREA**

#### **COST TO LOS ANGELES MOTORISTS OF INADEQUATE ROADS**

**TRIP estimates that Los Angeles roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions, cost the average Los Angeles driver \$2,462 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 Los Angeles area \$746 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 Los Angeles area costs the average motorist in the region \$1,480 annually in lost time and wasted fuel.
- Traffic accidents and fatalities in which roadway characteristics were likely a contributing factor cost each Los Angeles area driver an average of \$236 annually, including medical costs, lost economic and household productivity, property damage and travel delays.

#### **ROAD CONDITIONS**

**Among all large cities (500,000 population or greater), the Los Angeles urban area has the highest percentage of pavements in poor condition in the nation. Nearly two-thirds of the area's major roads are rated in poor condition.**

- A total of 92 percent of major roads in the Los Angeles area are in poor or mediocre condition, costing area drivers nearly \$750 each year in extra vehicle operating costs.
- Sixty-four percent of major roads in the Los Angeles urban area are rated in poor condition, the highest percentage in the nation among cities with at least 500,000 population. An additional 28 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 three percent of major roads in the Los Angeles 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 Los Angeles area, which are not scheduled for repair through the end of 2009.

**Chart 1. Most deteriorated sections of state roadways in the Los Angeles metro area.**

Rank	Route	From	To	Miles	ADT
1	Route 5	Route 39 (Beach Blvd.), Buena Park	LA County Line, Buena Park	1.5	221,000
2	Highland Ave.	Route 2 / Santa Monica Blvd., LA	Franklin Ave., LA	1.3	52,000
3	Santa Monica Blvd./Alvarado St.	La Brea Ave. to Route 101, LA	Glendale Blvd., LA	3	64,477
4	Santa Monica Blvd.	Centinela Ave., LA	Route 405, LA	1.4	68,000
5	Venice Blvd.	Route 1, LA	Sawtelle Blvd., LA	2.1	39,000
6	Route 1	Third St., Hermosa Beach	Fiji Way, Marina del Rey	9.9	57,006
7	Route 405	Studebaker Rd., near Orange Co. Line, Long Beach	Rinaldi St., near Route 118, LA	47.6	262,000
8	Route 5	Whittier Blvd., LA	Glendale Blvd., LA	6.5	238,000
9	Route 405	Route 22, Seal Beach	Los Angeles County Line, Seal Beach	3.2	327,111
10	Route 47	Gaffey St., LA	End of the Schuyler Heim Bridge near Rt 103, LA	4.2	51,461
11	Route 164	Garvey Ave., South El Monte	Marshall St., Rosemead	1.1	47,032
13	Route 10	Baldwin Ave., El Monte	Route 605, Baldwin Park	3.1	235,000
14	Route 39	Adams Ave., Huntington Beach	Heil Ave., Huntington Beach	3.7	46,268
15	Route 55	Finley Ave., Newport Beach	19th St., Costa Mesa	2.1	43,000
16	Route 90	Harbor Blvd. (Route 72), Fullerton	Valencia Ave. (Route 142), Brea	4.8	46,321
18	Route 1	E. Anaheim St., Long Beach	Route 107, Torrance	13.3	29,000
19	Route 91	Los Angeles County Line, La Palma	Imperial Highway (Route 90), Anaheim	12.6	236,000
20	Route 710	Imperial Highway, Lynwood	Valley Blvd., Alhambra	10.8	234,000
21	Route 110	9th St. and Gaffey St., LA	Route 1, LA	4.1	49,291
22	Route 10	Route 710, East LA	Del Mar Ave., San Gabriel	4.8	236,000

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

## **BRIDGE CONDITIONS**

**Approximately one third of bridges and overpasses in the Los Angeles area are structurally deficient or functionally obsolete.**

- Nine percent (362) of the 4,217 bridges in the Los Angeles area are rated as structurally deficient, showing significant deterioration to decks and other major components.
- Twenty-seven percent (1,118) of the 4,217 bridges in the Los Angeles 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 Los Angeles 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 Los Angeles 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	SANTA ANITA AVE	El Monte	RIO HONDO	30,700	1959	21.1	4	3	7
2	Route 1	Los Angeles	Texaco Overhead	33,000	1967	22	6	7	2
3	GARVEY AVE	Monterey Park	MABEL AVE	25,570	1934	25.6	3	5	6
4	VALENCIA BLVD	Los Angeles	SANTA CLARA RIVER	29,145	1928	26.7	6	5	7
5	CALIFORNIA INCLINE	Santa Monica	PACIFIC COAST HWY	9,920	1930	34.1	6	5	4
6	HELLMAN AVE	Rosemead	ALHAMBRA WASH	5,200	1936	35.1	7	3	7
7	OCEAN BLVD	Long Beach	ENT. CHANNEL, SPTCO	59,670	1968	43	3	4	7
8	Route 10	Los Angeles	Santa Monica Viaduct "C"	304,000	1959	45	3	5	7
9	Route 1	Santa Monica	Main Street Overcrossing*	13,500	1926	45.3	6	6	7
10	HARBOR BLVD	Fullerton	BREA CREEK CHANNEL	35,000	1930	45.7	4	5	7
11	Route 10	Los Angeles	Santa Monica Viaduct "F"	304,000	1959	46	3	5	7
12	SLAUSON AVE	Bell	LA RIVER	33,400	1942	47	3	5	7
13	GARVEY AVE	Rosemead	RIO HONDO	22,400	1936	47.3	4	5	7
14	Route 710	Commerce	East Yard Overhead	240,000	1954/1967	48	2	5	7
15	FIRESTONE BLVD	Downey	SAN GABRIEL RIVER	53,600	1934	48.9	1	6	7
16	Route 60	Los Angeles	Eastbound 60/5 Separation	95,000	1965	49	4	4	7
17	VALLEY BLVD	El Monte	RIO HONDO	19,800	1956	49.1	5	3	7
18	CERRITOS AVE	Azusa	BIG DALTON WASH	20,300	1961	49.7	7	3	7
19	HOLLY ST	Pasadena	ARROYO BL & ARROYO	7,236	1925	50.3	4	5	6
20	AZUSA LANE	Azusa	LITTLE DALTON WASH	8,300	1970	50.6	6	3	6
21	Route 1	Long Beach	Route 1/103 Separation	31,900	1948	52.1	4	5	7
22	Route 1	Los Angeles	Wilmington Overhead	31,900	1936	52.4	3	5	7
23	WILLOW ST	Long Beach	LOS CERITOS DRAIN	20,900	1954	53.5	4	5	7
24	ANAHEIM STREET	Long Beach	LONG BEACH FREEWAY	30,300	1954	53.6	4	4	7
25	ALAMEDA ST	Compton	COMPTON CREEK	10,000	1937	54	4	5	6

Source: Caltrans response to TRIP survey.

## **CONGESTION**

Among all large cities (500,000 population or greater), the Los Angeles urban area suffers the highest level of **traffic congestion in the country**. **This level of congestion is a growing burden, hampering mobility for individuals and businesses and impeding the region's economic development.**

- In 2007, 81 percent of urban highways in the Los Angeles metro area were congested, carrying traffic volumes that result in significant rush hour delays.
- The average Los Angeles driver loses 70 hours per year due to traffic congestion – the highest rate in the nation according to the Texas Transportation Institute's (TTI) 2009 Annual Urban Mobility Report.

## **TRAFFIC SAFETY**

**Improving safety features on Los Angeles' roads and highways would likely result in a decrease in traffic fatalities in the state.**

- In 2008, 874 people were killed in traffic accidents in the Los Angeles metro area.
- Los Angeles' fatality rate per 100,000 population was 6.8 in 2008. This was lower than the statewide average of 9.3 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 use continues to increase in the Los Angeles area and plays an important role in providing mobility in the region.**

- Public transit provided 2.9 billion passenger miles of travel in the Los Angeles urban area in 2007, an increase of 16 percent since 2002.
- In 2007 the average age of buses in the Los Angeles area was 7.8 years, an increase from 2002, when the average age was 4.9 years. The Federal Transit Administration recommends that buses be replaced after 12 years.
- In 2007 the average age of passenger rail cars in the Los Angeles urban area was 12.2 years, an increase from 2002, when the average age was 7.5 years. The Federal Transit Administration recommends that passenger rail cars be replaced after 35 years.