

HOW FAR HAS CONGESTION SPREAD?

Traffic congestion affects a broader segment of the transportation system each year. Several dimensions are explored within this report. Congestion has spread to **more cities to more** of the **road system** and **trips** in cities to **more time** during the day and to **more days** of the week in some locations. The detailed speed data from INRIX by hour of the day and day of the week allows for a more detailed analysis of the delay picture.

Conclusions

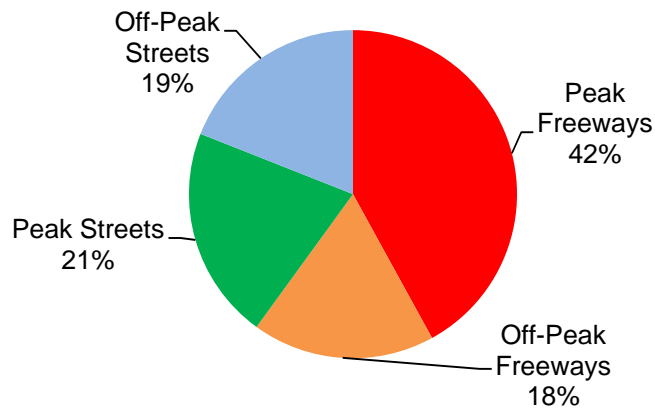
Congestion has spread significantly over the 20 years of the study. A few notable changes from 1982 to 2010 include:

- Two urban areas have a Travel Time Index above 1.30 compared with no areas in 1982.
- Friday has the most congestion of any day of the week.
- 5:00-6:00p.m. has the greatest amount of delay of any hour of the day followed by 4:00-5:00p.m.
- The freeways during the peak periods have the greatest percentage of the total delay.

Congested Travel

Exhibit B-4 shows that the freeway system has the greatest amount of delay as compared to the arterial streets. About 42 percent of the nation's delay occurs on the freeways during the peak periods. Another 18 percent of total delay occurs on the freeways during the other 16 hours of the day. The arterial street system accounts for 40 percent of total delay. There is about twice as much delay on the freeway during the peak periods than on the arterial streets. There is, however, slightly more delay on the arterial street system during the off-peak periods than on the freeways.

Exhibit B-4. Percent of Travel by Road Type



Congested Time

An analysis of the delay by day of the week in Exhibit B-5 shows that delay increases with each weekday. Monday has the least amount of delay (just over 15 percent) of any of the weekdays while Friday has the greatest amount (almost 20 percent). The delay that occurs on Saturday and Sunday do not add up to the delay that occurs on Monday by itself. Sunday has the least amount of delay of any day of the week with about 5 percent.

Exhibit B-5. Percent of Delay by Day of Week

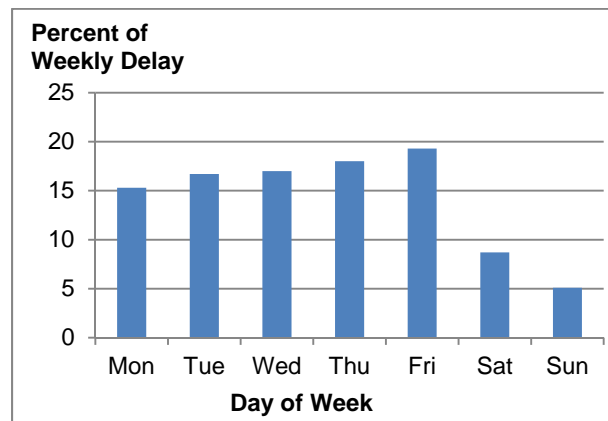


Exhibit B-6 shows the delay by hour of the day. Congestion is worse in the evening peak period than the morning peak period. The 5:00-6:00p.m. hour has the greatest amount of the daily delay with about 14 percent. This one hour has almost as much delay as the two most congested morning peak period hours 7:00-9:00 a.m. There is a significant amount of delay that occurs during the mid-day hours which shows that congestion is not just a peak period problem. The timeframe of midnight to 6:00a.m. is the time with the least amount of delay on the roadways.

Exhibit B-6. Percent of Delay by Time of Day

