

## **Traffic and Design Details**

## <u>What is "peak hour" traffic, and are improvements being made to address</u> this brief time period?

The peak hour of traffic is defined as the highest hour of the day. The day used to determine this highest hour is the  $50^{\text{th}}$  highest day of the year. This  $50^{\text{th}}$  day represents an average weekday, so facilities don't need to be designed for unusual circumstances such as the weekend recreational / tourist traffic, Thanksgiving weekend shopping, and special events. The peak hour of the US 24 Corridor is expected to occur during a typical weekday evening in February or October.

The duration of the existing peak period varies through the corridor, but on average is approximately three hours, and is expect to be between five and six hours in 2030. The hours immediately before and after the current peak hour conditions (the highest hour of traffic demand during the day) is currently between 80 and 90 percent of the peak, and expected to be close to the peak hour in the future.

## Are tourists factored into the traffic counts?

The peak hour reflects a day and time that may include some tourist related traffic, but the majority of the peak hour is made up of work commuters. The peak hour typically also includes several types of trips, such as shopping, school, and recreation. There are approximately 50-60 hours during the year in which the number of vehicles traveling on this section of US 24 in an hour will be greater than the projected peak hour volume. However, the improvements will not be designed to accommodate these extreme volume conditions. The improvements will be designed to accommodate the typical weekday peak hour.

## How wide would the road be in these alternatives?

The Expressway and Freeway alternatives include additional lanes to accommodate the projected traffic in 2030. The following chart shows the current and potential widths of the roadway corridor, depending on the alternative and the location in the corridor. Widths include shoulders and medians and are measured from the edges of the hard surface.

| 31 <sup>st</sup> St. to east Manitou Ave. exit  |   |
|---|---|
| Current Width   | Approx. 90 feet                         |
| Freeway Width   | 100 to 160 feet                         |
| Expressway Width  | 150 feet                                |
| <u>Near 31<sup>st</sup> St.</u><br>Current Width<br>Freeway Width<br>Expressway Width             | Approx. 90 feet<br>100 feet<br>150 feet |
| 8 <sup>th</sup> St. to 21 <sup>st</sup> St.<br>Current Width<br>Freeway Width<br>Expressway Width | Approx. 90 feet<br>130 feet<br>170 feet |

\_4

The existing right-of-way owned by CDOT ranges from 120 feet, between 21st - 26th streets to 480 feet at Ridge Rd.