

Highway 199 Expressway Upgrade Project Project Description

March 1, 2005

Project Background

Highway 199, also known as Redwood Highway, is a five-lane, east/west highway that is designated as an expressway from SW Tussey Lane (MP 0.20) to Applegate River Bridge (MP 6.92) (1999 Oregon Highway Plan). The Oregon Highway Plan (OHP) defines an expressway as a highway that provides for safe and efficient high speed and high volume traffic movements. The primary function of an expressway is for interurban travel and connections to ports and major recreation areas with minimal interruptions. Private access is discouraged and public access is highly controlled.

Highway 199 is an important highway for travelers wishing to move east and west between Interstate 5 and US 101 (Oregon Coast Highway). Highway 199 provides access to major recreational destinations such as the Siskiyou National Forest, Kalmiopsis Wilderness, Six Rivers National Forest, and the Oregon and California Coast.

In urban and interurban areas of Grants Pass, residential and commercial development along Highway 199 has increased. Grants Pass, the second largest city in Southern Oregon, has experienced a high population growth rate, averaging 2.8 percent annual increase from 1993 to 2004. Over the last ten years the population of Grants Pass has increased by 34 percent. The current population of Grants Pass is 24,790¹.

With the increase in population comes an increase in traffic. Traffic west of Dowell Road is growing at a rate of 1.5 to 2 percent per year. The current average daily traffic (ADT) within the corridor ranges from 12,000 to 38,000.

There are two different types of vehicle users on Highway 199 between SW Tussey Lane and Midway Avenue, those categorized as through users and those categorized as local users. Through users are those persons that would be traveling through Grants Pass to the next city or further. Through users utilize the facility as an expressway and benefit from high speeds, few traffic signals, and few conflicts with other vehicles. Local users are typically persons that live locally, and use the facility for short trips, such as to the hospital or a local business located next to the highway. Local users often make more turning movements onto and off of the highway which then puts local use in conflict with through users and increases the number of accidents.

Problems and Concerns

For the past decade, Highway 199 from its intersection with SW Tussey Lane (MP 0.20) to its intersection with Midway Avenue (MP 4.44) has experienced a crash rate that is

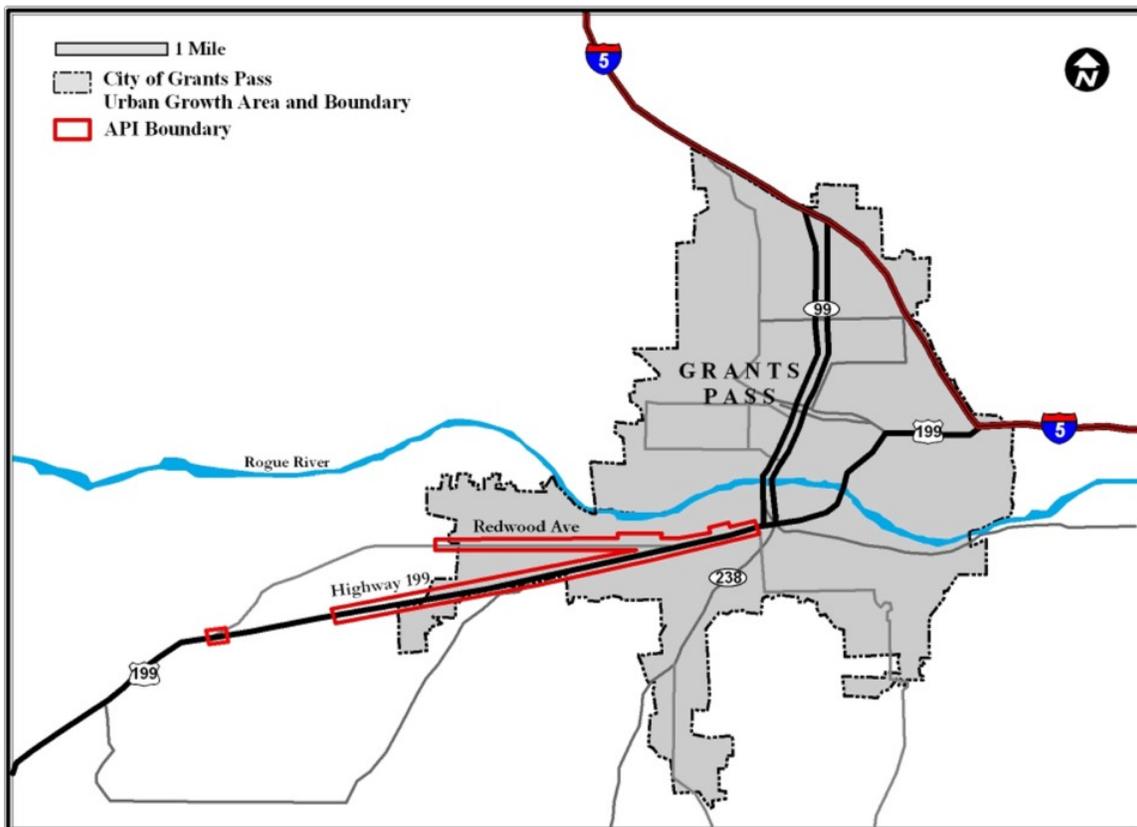
¹ City of Grants Pass. Building and Safety Division. January 26, 2005. <http://www.ci.grants-pass.or.us/building.htm>

Highway 199 Expressway Upgrade Project Project Description

March 1, 2005

consistently higher than the statewide average for similar facilities (Figure 1). In fact, in 2004 30 percent of all traffic fatalities within Josephine County happened within the project area on Highway 199, between MP 0.20 and MP 4.44. The character of Highway 199 varies within this area and is described in two segments.

Figure 1. Vicinity Map



MP 0.20 to MP 2.05

From SW Tussey Lane to Dowell Road (MP 2.05) the character varies from fully developed urban to suburban. Speeds are moderate with traffic stopping at several signals. There are many private and public accesses in this segment, which provide right and left turning movements as traffic enters and exits the expressway. The ADT volume varies from nearly 38,000 near Redwood Avenue (MP 0.89) to 22,000 at Dowell Road (MP 2.04).

This section of the highway experiences the highest number of accidents. Although the accidents in this segment tend to be less severe than in the more rural segment, there have still been several accidents resulting in severe injuries and fatalities. Since 1996 there have been four fatalities in this section.

Highway 199 Expressway Upgrade Project Project Description

March 1, 2005

MP 2.05 to MP 4.44

From Dowell Road to Midway Avenue the character of the roadway transitions to a more rural setting. Traffic generally travels at higher speeds on rural roads, ranging between 50 to 55 mph. Also, rural roads have fewer public and private roads or driveways for motorists to turn into creating an environment for vehicles to travel at the higher posted speed limits more safely. The ADT volumes within this segment vary from 22,000 at Dowell Road to about 12,000 at Midway Avenue. This section of highway experiences less accidents, but the severity of the accidents is greater due to the higher speeds. Since 1996, there have been eight fatalities in this segment. Between July 2003 and October 2004 there were five fatalities: two at MP 3.00, two at MP 4.00, and one at Midway Avenue (MP 4.44).

The majority of the severe injury/fatality accidents are related to vehicles making turning movements onto and off of the highway at private or public accesses. As the traffic volume in the corridor has increased over time, the chances of conflicts happening between vehicles increases. Several studies have shown that when volumes reach approximately 22,000 - 25,000 ADT on 5-lane roadways (two travel lanes with a continuous left turn lane), and a lack of access control, they often become unstable and accidents tend to increase at a disproportionately higher rate. Highway 199 is a straightforward example of this scenario.

Potential Solutions

The purpose of this project is to improve safety on the section of Highway 199 Expressway between SW Tussey Lane (MP 0.20) and Midway Avenue (MP 4.44). To improve safety it will be necessary to reduce the potential for conflict between vehicles. There are many ways to accomplish this. Some potential considerations could include:

- Developing an access management plan
- Adding frontage roads
- Using raised medians
- Making improvements to local streets, or
- Applying combination of all off these.

The solution will likely address competing interests: through users versus local users. It is important to recognize the dependence that adjacent (and non-adjacent to some extent) businesses have on the highway and how access to businesses and other services affect the expressway.