## **Conclusions from the Study**

The existing bypasses are varied. Some are four-lane urban expressways; others are on two-lane rural highways. Four were built in the 1950s; two were completed within the past two years. Fourteen are all or partially within urban growth boundaries; only the Noti-Veneta and Blue River Bypasses are completely outside urban growth boundaries. They all appear to be fulfilling their purposes. They have diverted traffic from downtowns and appear to be increasing safety. All but the Noti-Veneta Bypass have crash rates less than the state average for 1998-2000.

These bypass routes may increase safety by moving traffic from congested highways with numerous accesses and conflict points to a new alignment with fewer access points and less congestion. This likely results in an overall reduction in the frequency of crashes; however, there may be an increase in severity of crashes that do occur because of the increased speed. Since most crashes typically occur at intersections along the bypass, appropriate design techniques should be used to maintain safe operations, especially where the new alignment meets the old one.

Development appears to be proceeding according to the local comprehensive plan and within the urban growth boundaries. It is difficult, given the scope of this analysis, to tell whether the plans anticipated the bypasses and included appropriate land uses or the bypasses affected the kinds of development or the development would have occurred with or without the bypasses. However, development is impacting traffic flow at the termini of several bypasses.

Generally, the through traffic movements have been maintained through access control. Half of the bypasses are Expressways often with complete access purchase and/or access via interchanges and major arterials. The average access spacing on nine of the 16 existing bypasses exceed the spacing standards for their highway classification for speeds of 55 mph.

Three of those where the average spacing is less than applicable spacing standards have been constructed within the past 10 years; however, the number of approaches on these bypasses has not increased since construction. One of these is the north

Forest Grove Bypass where ODOT acquired a local street with a number of private approaches that have become part of the bypass. In instances like this, ODOT needs to work with the local government and affected property owners to make the bypass work using access control where necessary. Though the Access Management Bonding Fund, ODOT is purchasing accesses where there are a number of private approaches, notably on the McMinnville Bypass and at the termini of the Bend Bypass. Additionally, reservations of access were not researched as part of this study. There may be existing reservations of access where no approach exists today. These are locations where a property owner may request an approach in the future, and the requested approach may not meet current spacing standards. The analysis points out that all access points, including reservations of access, need to be managed.

This Bypass Study verifies the importance of supporting bypass facilities through land use planning and of acquiring and maintaining access control. In several cases, ODOT has had to spend money to maintain facilities for through movements in the absence of a clear project purpose and need statement that supported regional and long-distance movements rather than access to local uses. Clearer direction and agreement with local governments on land use patterns at the ends of the bypasses could prevent future traffic flow problems.

Experiences with moving through traffic in Bend show that the following techniques would be helpful in protecting through movements in other areas:

- A clear purpose and need project statement, including clear direction regarding local trips,
- Use of access control to protect the mobility purpose of the bypass,
- Public road spacing designed to maintain the long-term function of the highway,
- Coordinated development review of private and public development actions, and
- Cooperative city, county and ODOT long-range planning of the transportation system, including measures that maintain the function of the bypass such as good local street networks and planning for the bypass endpoints.