I-5 Exit 127 (North Roseburg)
Interchange Area Management Plan
Douglas County, Oregon

DRAFT Technical Memorandum #7
Interchange Management Actions

Prepared for

Oregon Department of Transportation, Region 3
3500 NW Stewart Parkway
Roseburg, Oregon 97470

Prepared by

David Evans and Associates, Inc.
2100 SW River Parkway
Portland, Oregon

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7. INTERCHANGE MANAGEMENT ACTIONS

An integral part of the IAMP process is providing an action plan to protect the function of the interchange and its influence area. This memorandum explores a set of measures under the heading "management actions" that could be employed at or near I-5 Exit 127. It is a companion to *Technical Memorandum #5: Preferred Alternative*, which identifies the system improvements needed to meet forecast demand, and *Technical Memorandum #6: Access Management Plan*. While some actions are also discussed in these other documents, additional options that do not require infrastructure improvements are presented here.

7.1. Potential Management Actions

Management actions, as applied to Interchange Area Management Plans (IAMPs) are intended to preserve the capacity of an interchange for as long as possible. The toolkit of potential management actions includes four overarching elements:

- **Local System Improvements** that enhance the local street network to disperse trips and reduce congestion near an interchange
- **Transportation Demand Management Strategies** that provide travel options to reduce the number of trips or vehicles on the road
- **Transportation System Management Measures** that improve system efficiency and reduce delays
- **Land Use and Development Strategies** that guide land use development to result in fewer trips in the interchange area

Many management actions are most applicable when applied throughout a region or in a large urban area. Nonetheless, a positive impact may be produced even if the action is limited to the I-5 Exit 127 study area. The management tools with potential to preserve capacity at I-5 Exit 127 are described below. The discussion includes a brief description, a qualitative assessment of applicability and potential benefits, a summary of the actions that would be required to implement them, a qualitative assessment of potential adverse impacts, and identification of the implementing agency.

7.1.1. Benefits of Management Actions at I-5 Exit 127

I-5 Exit 127 has potential for traffic growth between the ramp terminals as well as on and off of Interstate 5 (I-5). Roadway improvements have been identified to address area growth which requires an investment by ODOT and the City of Roseburg. As such, a plan to assist these agencies with the long-term transportation system management in the area around the interchange is critical.

As described in the *Technical Memorandum #3: Future Baseline Traffic Conditions*, only one of the study area intersections would not meet operational standards during the PM peak hour with the forecasts developed from the 2035 travel demand forecasting model.

Management actions have the potential to reduce the total traffic at the interchange and manage the rate of growth. These actions can extend the life of the interchange and provide for incremental implementation of additional I-5 Exit 127 area improvements, allowing individual components to be funded and built when needed. Given the funding constraints and statewide demand for both interchange and local system improvements, it could take many years to develop a funding package and construct any additional improvements recommended in the IAMP.

7.2. Local System Improvements

Local system improvements relate to enhancing the effectiveness of the local street network to provide circulation and access for the community near the interchange without relying solely on the interchange or its approach roadways.

7.2.1. General Description

Local system improvements can include enhancing the local street network, developing an access management plan, and considering alternative mobility standards. These actions are described below followed by a summary of their application for IAMP 127.

Enhancing the Local Street Network

A robust and well-connected local street network provides many benefits to the surrounding area. Local street networks are critical to providing access to property and they also distribute traffic over a number of streets rather than concentrating trips on just a few arterial roadways thus ensuring sufficient capacity for development to occur. As a local roadway network is developed to support property development, traffic circulation can be enhanced by limiting the use of cul-de-sacs and requiring new streets to connect with existing streets.

An enhanced local street network also dovetails with access management on higher volume roadways. By providing access to properties, the local street network also reduces the need to provide direct property access on major roadways, such as state highways and arterial streets. As a result, the local network can improve overall traffic flow and safety of the transportation system.

Access Management

Access management is a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways. Access management strategies are designed to extend the operational life of the interchange by reducing congestion, improving traffic flow, reducing crashes, and reducing conflicting vehicle movements. Access management techniques are discussed in *Technical Memorandum #6, Access Management Plan*, and include:

- ***Access Spacing***: By increasing the distance between traffic signals and other public roadway connections, flow of traffic on major arterials can be improved. This also reduces congestion and improves air quality for heavily traveled corridors.

- ***Driveway Spacing***: Fewer driveways spaced further apart could allow for more orderly merging of traffic and present fewer challenges to drivers.
- ***Turning Lanes:*** Dedicated left- and right-turn lanes, and indirect left-turns and U-turns could be considered to keep through-traffic flowing.
- ***Median Treatments:*** Two-way left-turn lanes and non-traversable, raised medians are examples of some of the most effective means to regulate access and reduce crashes.

The Oregon Highway Plan (OHP) spacing standards are 1,320 feet (¼ mile) from the interchange for a full access (with or without a traffic signal). In fully developed urban areas, limited access (right-in/right-out) access may be permitted 750 feet from the interchange off ramps or before the interchange on ramps.

Establish Lower Mobility Standards

The majority of the management action tools consider modifications to demand (controlling growth) or providing/modifying roadway capacity. This action is focused on policy and creates a lower mobility standard (higher acceptable v/c ratio standard) to acknowledge physical and financial constraints at the interchange. It provides for increased congestion in accordance with the existing adopted local land use plan and becomes part of the OHP.

7.2.2. Applicable Actions, Benefits, and Implementation Issues for IAMP 127

Elevated above I-5 at Interchange 127, Edenbower Boulevard is not a state facility. However, ODOT does have jurisdiction of the section of roadway between Broad Street and just west of Aviation Drive. The jurisdiction of the roadway in the remainder of the study area is the City of Roseburg.

The City of Roseburg TSP identifies some long-range (16-20 years) improvements that would expand the roadway network outside of the existing UGB but there are no other network connections in the vicinity of I-5 Exit 127. However, the City can continue to expand the local street network and maintain connectivity to support future development and provide a variety of local circulation options. A robust and well-connected local street network provides options for local travel around the city without reliance on the freeway system for local travel. Although topography, the freeway, the rail line, and the airport limit circulation options in the vicinity of I-5 Exit 127, local road improvements can create connections that relieve traffic demand on Edenbower Boulevard help maximize the life of I-5 Exit 127.

The preferred alternative includes a project to provide additional capacity at the Stewart Parkway/ Edenbower Boulevard intersection. The project would add a second eastbound left-turn lane from Stewart Parkway to Edenbower Boulevard, which would be widened to include a second northbound receiving lane.

An access management plan for Edenbower Boulevard was developed in Technical Memorandum #6. This plan includes conditions that trigger the need to implement access management measures in the IMSA. These include:

- Applications for land use changes or development are submitted
- Future roadway improvements move into design and construction
- Safety and/or operational problems arise

One project, the capacity improvements at the Stewart Parkway/Edenbower Boulevard intersection, would trigger consideration of access modifications to maintain safe operating conditions with the dual left-turn lanes on Stewart Parkway and the northbound merge lane on Edenbower Boulevard. Access management may come under review with other projects, such as the extension of left- or right-turn lanes on Edenbower Boulevard and on Stephens Street.

Under the current economic environment and physical/environmental constraints, alternative mobility standards do not appear to be necessary and will not be pursued at this time.

7.3. Transportation Demand Management Strategies

Transportation Demand Management (TDM) strategies are designed to reduce vehicle demand, especially for commuter trips in the peak periods.

7.3.1. General Description

Typically, TDM strategies include provision of services or facilities intended to shift travelers to different modes, to non-peak times, or by trip elimination choices, such as telecommuting. TDM strategies are most effective in areas with high concentrations of employment and where a robust transit system exists. Generally, the strategies are easiest to implement where there are large employers or where a transportation management association (TMA) has been established to pool the efforts of many smaller employers.

TDM Strategies that Shift Modes

The following strategies are designed to offer choices and encourage people to commute in a way other than driving alone, resulting in fewer vehicles on the road during the peak periods.

Carpool Programs: This strategy encourages and supports commuters to share the ride with other commuters who live and work in the same general area. Carpools may receive preferential parking, or incentives such as a small stipend, reduced parking rate or coupons. Carpools enjoy the benefit of a reduced commute cost because the price of gasoline and parking is typically shared.

Vanpool Programs: This strategy involves providing vans for groups to use for commuting. These can be employer sponsored vans, private vans, or agency sponsored vans. Vanpools can be arranged for large employers, or for locations where several employers are located in close proximity.

Transit: Transit can be a cost saving and stress-reducing alternative to commuting by personal automobile. In order for transit to be a reliable alternative to personal automobiles, transit service should be offered approximately every 30 minutes and extend

beyond the peak periods. Transit commuters need to have confidence that they will be able to get home if they need to leave work early or stay late.

Bicycling: Many people choose to commute by bicycle for health, stress-reduction, and environmental reasons. The provision of safe and convenient bicycle facilities have long been recognized as one of the key prerequisites for increased bicycling for transportation purposes. Conversely, the absence of good, safe bicycle facilities discourages all but the most dedicated cyclists from using this mode for transportation. In addition, the provision of showers, clothing storage, and safe, secure bicycle parking is recommended.

Walking: When people live close to work, they may have the option to walk. Some do so for health reasons, stress reduction, and for the connection they feel with their community when they do so. Most transit riders are also walkers for some portion of their commute. Safe walking facilities such as sidewalks and separated paths are important features to incorporate in projects to encourage walking.

TDM Strategies that Shift Trips to Non-Peak Periods

Employers can have a significant impact on reducing peak hour trips by reducing the number of employees who are expected to arrive during the morning peak (approximately 7 am to 9 am) and depart during the evening peak (approximately 4 pm to 6 pm). Methods to reduce peak hour arrivals and departures include offering flexible work schedules, and shifting work schedules.

Flexible Work Schedules: An example of a flexible work schedule might require employees to be present during core hours of 9:30 to 3:30, and allowing arrivals and departures around that time while maintaining an 8 hour work day. Another example involves working fewer days per week, such as working 4-10s (four ten-hour days), with one day off.

Off-Peak Shifts: An example of an off-peak shift might be having a work day start at 6 am and end at 2 pm. Another shift might start at 2 pm and end at 9 pm. This is a common practice in industry because it allows for multiple shifts in a 24-hour period.

TDM Strategy that Eliminates Trips

One TDM strategy can eliminate trips altogether.

Telecommuting: This strategy allows employees to work from home for some portion of or all of their work. Telecommuting is gaining popularity and acceptance and is available to more professions as a result of improvements in technology. Various office functions including technical support, call center operations, and order processing are increasingly being conducted using telecommuting and dispersed workers. Employers who offer telecommuting are able to market it as a benefit, and telecommuting often results in cost savings to the employer because of reduced office space and equipment requirements.

7.3.2. Applicable Actions, Benefits, and Implementation Issues for IAMP 127

Goals and policies from the State and the City of Roseburg contain provisions that embrace TDM measures. Urban areas with populations over 25,000 are required by the Oregon

Transportation Planning Rule (TPR) to address TDM. Although the City of Roseburg population is below 25,000, the urban area that also includes the Green Urban Unincorporated Area (UUA) and the City of Winston does exceed 25,000.

The City of Roseburg TSP includes a variety of goal and objectives that are directly or indirectly related to TDM:

> **Objective 1A**: Manage projected travel demand consistent with community, land use, environmental, economic, and livability goals.
>
> **Objective 2F:** The City shall every 3 to 5 years use the walkability and bikeability checklists as a tool to help determine how walkable and bikeable Roseburg is, and where improvements are needed.
>
> **Objective 2G:** In order to improve the health of Roseburg's citizens and reduce the dependence on automobiles for all travel, developments or improvement plans will promote walking or cycling for many trips.
>
> **Objective 3A:** Facilitate development or redevelopment on sites that are best supported by the overall transportation system and that reduce motor vehicle dependency by promoting walking, bicycling, and transit. This may include altering land use patterns through changes to type, density, and design.
>
> **Objective 4E**: Undertake efforts to reduce per capita vehicle miles traveled (VMT) and single occupancy vehicle (SOV) demand through transportation demand management (TDM) strategies.
>
> **Goal 5. Balanced Transportation System:** Facilitate the development of bus stops, bike lanes, sidewalks, and multi-use paths in the Roseburg UGB to provide more transportation options for Roseburg residents and visitors. (This goal includes 12 supporting objectives.)

The Douglas County TSP also has some goals and objectives that support implementing TDM measures in the region. Although the TSP does not specifically address TDM in its transportation goals, it does include the following objective under its transportation policies related to energy conservation and reduce reliance on the automobile:

> **Objective C**: To encourage energy conservation through promotion of means other than the private automobile for transportation.

The Douglas County TSP also has a goal and supporting policies and objectives specifically related to bicycle transportation:

> **Bicycle Transportation Goal:** To provide a safe, convenient, and efficient bikeway network for Douglas County which addresses both transportation concerns and recreation needs.

Implementing TDM strategies is most successful when there are incentives and when making the switch to a non-personal-auto mode of travel is relatively simple, particularly for intermediate to long distance trips. Establishment of Transportation Management Associations (TMA) are useful because a TMA typically takes on the responsibility of promoting TDM programs, organizing carpool and vanpool programs, obtaining grants, distributing incentives,

and working with transit agencies to provide additional transit service and/or reduced cost transit passes. Roseburg does not currently have a TMA established.

The bicycle and pedestrian system is fairly complete within the interchange management study area (IMSA). The recommended improvements discussed in *Technical Memorandum #5: Preferred Alternative* includes a pedestrian crossing improvement at the I-5 northbound ramp terminal to augment the existing system.

7.4. Transportation System Management Measures

Transportation System Management (TSM) measures are designed to make maximum use of existing transportation facilities.

7.4.1. General Description

TSM measures typically include:

- Traffic engineering measures that improve the operations and efficiency of streets and intersections
- System monitoring and traveler information systems (e.g., ITS systems, variable message signs, etc.) including incident management systems (e.g., incident response and recovery teams)
- Facility management systems (e.g., ramp meters, special use lanes, signal priority for special users such as transit).

These strategies are described below.

Traffic Engineering Measures

Traffic engineering measures such as signal timing changes, provision of turn lanes, turn restrictions, and restricting on-street parking to increase the number of travel lanes without road widening are included in this category. These traffic engineering measures are routinely included as part of the traffic analyses used in conjunction with the design process for intersection and roadway projects. Optimizing traffic signal operations, for example, is performed by the traffic engineer before specifying the number of lanes and queue storage requirements for the intersection design.

Such measures must consider all movements at an intersection, including side-street traffic, main street traffic, transit, bicycles, and pedestrians. Competing priorities can arise between modes and directions of traffic and both county and state policy and objectives must be considered when setting priorities. For example, additional turn lanes may reduce delay at intersections for automobiles, but increase the crossing distance for pedestrians, making their crossing less safe. Or, turn movement restrictions may increase throughput on a roadway, but reduce access to business. Decisions regarding access restrictions especially require involvement and input from the community.

System Monitoring and Traveler Information Systems

System monitoring employs Intelligent Transportation Systems (ITS) technologies that enable jurisdictions to monitor traffic, respond to traffic crashes and vehicle breakdowns more quickly, and communicate with the travelers in real time. System monitoring requires deployment of infrastructure like a Traffic Operations Center (TOC) with video and closed circuit TV, and surveillance cameras, detection equipment and traffic sensors on highways to improve the capability of agencies to keep track of the transportation system on a real time basis. This system monitoring capability allows the operators in a TOC to dynamically adjust signal timing, dispatch emergency vehicles, and provide information to the motorists.

The real time traffic information can be shared with travelers in a variety of ways, by variable message signs, highway advisory radio, 5-1-1 Traveler Phone Information, web sites, and specialized warning systems (such as fog warnings), to let them make their own decisions about when to drive and what route to choose.

Facility Management Measures

Facilities can be managed to improve the performance of the street and highway system or provide operational advantages for specific users. Facility management measures are tied into the system monitoring and traveler information systems discussed above and can be used to benefit users of alternative modes of transportation and TDM programs discussed in the previous section of this memorandum.

Ramp Meters: Ramp meters, which are used on the on-ramps to freeways and other limited access highways, can be used for two different purposes. First, ramp meters can discourage drivers from using freeways to bypass congestion on local roads. Second, when traffic demand is high, ramp metering can adjust the metering rate such that the density on the freeway remains below the critical value, thereby increasing flow or preventing traffic breakdown of the freeway mainline. Its benefits can be reaped when the traffic flows are neither too light (in which case metering is not needed) nor too high (in which breakdown will happen anyway). Ramp meters increase travel times and meter the rate of flow entering the highway. In its simplest application, ramp meters set minimum intervals between vehicles entering the freeway from the ramp with a fixed-time signal.

Preferential lanes: This measure involves the reservation of a travel lane for a preferred group such as high occupancy vehicles and transit. It is often used at ramp meter locations, allowing transit to bypass waiting vehicles and providing travel time savings and reliability for transit.

Traffic Signal Priority: This measure is used primarily for transit in regions that experience significant congestion and delay at intersections. In general, prioritization allows transit to receive a green light for a few seconds before other vehicles so that it can advance ahead of a queue, or it can hold a light green for a few seconds longer to allow a bus to get through a signal before it turns red.

7.4.2. Applicable Actions, Benefits, and Implementation Issues for IAMP 127

A number of transportation system management measures were evaluated in *Technical Memorandum #4 – Alternative Analysis and Technical Memorandum #5: Preferred Alternative.* Concepts considered included signal optimization and coordination, changes in traffic control, right-turn-on-red restrictions, restriping, pedestrian connections, and extensions of turn lanes needed to address future operational deficiencies.

The following TSM improvements are recommended in the preferred alternative:

- Edenbower Boulevard/Aviation Drive: Extend westbound right-turn bay (low priority triggered by queuing/safety)
- Edenbower Boulevard/Stephens Street: Extend left-turn bays (medium priority triggered by queuing/safety)
- Northbound Ramp Terminal: Improve north side pedestrian crossing (high to medium priority based on existing deficiency)
- Northbound Ramp Terminal: Install traffic signal for off-ramp (low priority triggered by signal warrants)
- Edenbower Boulevard: Implement signal coordination from Stephens Street to southbound ramp terminal (high to medium priority triggered by queuing)
- Edenbower Boulevard: Implement a posted speed reduction (medium priority triggered by a speed study and safety)
- Edenbower Boulevard at Stewart Parkway: Address sight distance restriction by restricting right-turn-on-red movements on the northbound approach (medium priority triggered by safety or in concert with intersection improvements)

Facility management measures, such as ramp meters, preferential lanes, and signal priority, will not likely be considered at I-5 Exit 127 in the short term since freeway congestion is not expected to be a concern in 2035. If I-5 should become congested in the future, metering of interchange ramp terminals through Roseburg may become necessary.

7.5. Land Use and Development Strategies

Several potential land use and development strategies are available with the potential to directly or indirectly influence the transportation impacts of future development.

7.5.1. General Description

Some potential land use and development strategies include:

- Using trip budgets or trip caps to directly manage traffic impacts of developments;
- Retaining the current Comprehensive Plan designations and land use zoning

These strategies are described below.

Directly Manage Traffic from Development

The practice of limiting trips, or placing "trip caps" or "trip budgets" involves permitting development projects based on the number of trips each will generate, in the context of development within a specified area. These programs can provide a measure of flexibility for developers while limiting the total impact of development. A development that did not use all the allowable traffic generation potential might be able to pass on its unused traffic potential to an adjacent development that could be allowed to generate more traffic. As long as the total traffic generation from the area remained within limits, the interchange operations would be protected.

Trip Caps: A trip cap program is implemented when capacity at the interchange is limited. By establishing the maximum number of trips that can be accommodated at the interchange, more strategic development decisions can be made.

Trip Budgets: A trip budget program may be implemented when a reasonable build out growth scenario can be accommodated at the interchange. The trip budget allocates trips over time in support of long-term economic goals.

Retain Current Comprehensive Plan and Land Development Ordinance Designations and Regulations

Transportation modeling draws guidance from comprehensive plans, but requires making assumptions about the type, intensity and location of development that can occur within each zone. Changes to the current land use zoning could dramatically affect the number of trips generated, trip patterns, and traffic volumes at intersections and the interchange. As a result, traffic operations at the interchange may approach capacity more rapidly than anticipated, shortening the life of the updated interchange and hastening the need for costly investments for additional interchange improvements.

Vehicle trip generation associated with potential future growth in the region could cause traffic operations at I-5 Exit 127 to exceed ODOT mobility standards within the 20-year planning horizon. The intensity, timing and location of actual development may result in more congestion than is estimated by the model.

ODOT is relying on the currently adopted plans, policies, designations and codes to ensure that the land uses remain supportive of the function of the interchange. This management strategy is essentially a reaffirmation by the City of Roseburg and Douglas County that their Comprehensive Plans and TSPs remain valid or, if changes are needed, the TPR requirements will be met and the City or County will notify ODOT and jointly undertake an evaluation of impacts to the interchange. The Transportation Planning Rule (TPR) provides specifications on what must be addressed by agencies when seeking a comprehensive plan amendment or rezoning. *Technical Memorandum 1: Definition and Background, Appendix A – Review of Plans and Policies* and *Technical Memorandum 2: Existing Conditions Analysis* cite the standards that the IAMP relies on for consistency and implementation and associates them with the applicable IAMP sections. Specifically, these are:

- City of Roseburg Urban Area Comprehensive Plan and Map (posted March 2011)
- City of Roseburg Transportation System Plan (2006)
- City of Roseburg Land Use and Development Ordinance (2013)
- Douglas County Comprehensive Plan and Map (2010)
- Douglas County Transportation System Plan (1998, amended through 2012)
- Douglas County Land Use and Development Ordinance (2010)

7.5.2. Applicable Actions, Benefits, and Implementation Issues for IAMP 127

Technical Memorandum #:3 Future Baseline Traffic Conditions evaluated the future baseline condition consistent with the currently approved City of Roseburg and Douglas County population growth forecasts and the current Roseburg and Douglas County zoning.

With the uses permitted under current zoning and current population forecasts, the ramp terminals would not be near or exceed OHP mobility standards in 2035. A change in the zoning and development in the area or more rapid population growth could increase demand at the interchange ramps up which, in turn, could potentially lead to congestion and failing traffic operations at the interchange.

Implementing a “trip budget” program for the I-5 Exit 127 study area would be a specific solution that would help protect the function of the interchange and keep intersections operating acceptably. By limiting the total traffic in the study area, the community could be reasonably assured that a preferred interchange concept could operate well for a period of at least 20 years.

Implementing a “trip cap” or “trip budget” program could also be tied to various intermediate phases of the interchange and other infrastructure improvements. Trip caps might specify what total development would be allowed prior to modifying one or the other of the interchange ramps under the preferred concept. Under this “trip cap” or “trip budget” approach, transportation improvements would be tied with the development necessitating them.

Although analysis based on current zoning and population forecasts does not indicate that the I-5 Exit 127 is likely to become congested over the next 20 years, a trip budget could be considered to simply ensure that transportation infrastructure keeps pace with and supports development, which in turn, supports the useful life of the interchange.

7.6. Summary of Recommended Actions

Vehicle trip generation associated with anticipated future growth in the region is not expected to cause traffic operations at I-5 Exit 127 to exceed ODOT mobility standards prior to the 20-year planning horizon. However, the intensity, timing and location of actual development may result in more congestion than is estimated by the model. Therefore, several actions are

recommended to maintain and preserve the capacity of the interchange and key area intersections.

Recommended actions include:

City of Roseburg: Continue to expand the local street network and maintain connectivity to support future development and provide a variety of local circulation options. A robust and well-connected local street network provides options for local travel around the city without reliance on the freeway system for local travel. Although topography, the freeway, the rail line, and the airport limit circulation options in the vicinity of I-5 Exit 127, local road improvements can create connections that relieve traffic demand on Edenbower Boulevard help maximize the life of I-5 Exit 127.

ODOT and City of Roseburg: Adopt an Access Management Plan for the I-5 Exit 127 area. Adoption of the access management plan is critical to the long-term safe and efficient operations of the interchange.

City of Roseburg and Douglas County: Implement Transportation Demand Management strategies in cooperation with other jurisdictions within the urban area. TDM strategies that encourage the use of carpools, vanpools, bicycling and walking should be continued. Creation of a Transportation Management Association (TMA) should be considered to promote travel options, coordinate shared rides, obtain grants, advocate for transit service, and provide incentives to participants. The City of Roseburg and Douglas County may wish to establish a mechanism by which employers of a certain size are required to participate in a TMA, or provide incentives to employers who choose to participate in a TMA.

ODOT and City of Roseburg: Implement Transportation System Management measures to improve efficiency and maintain safety. Signal interconnection, coordination, and optimization should be included when future signals (I-5 Northbound Off-Ramp) are designed and constructed. The recommended improvements in *Technical Memorandum #5: Preferred Alternative* and *Technical Memorandum #6: Access Management Plan* include TSM measures such as signal optimization and coordination, changes in traffic control, right-turn-on-red restrictions, restriping, pedestrian enhancements, and extensions of turn lanes needed to address future operational deficiencies.

City of Roseburg: Retain, through adoption of the IAMP, current adopted Comprehensive Plan and Land Development Ordinance designations and regulations to ensure that the land uses within the IAMP study area remain supportive of the function of the interchange. The IAMP assumes that, within the study area the Roseburg will maintain their:

- Current land use designations with current uses and densities
- Plan and code amendment processes
- Requirements for traffic impact studies
- Processes for notification to ODOT regarding land use actions that may affect state transportation facilities