
3. PROJECT RELATIONSHIP TO REGIONAL PLANS AND PROGRAMS

3.1 Overview and Key Findings

This section of the technical report discusses the proposed project's relationship to applicable transportation-oriented plans and programs.

Key findings from this section include the following:

- The Sunrise Expressway (I-205 to Rock Creek Junction) is consistent with applicable adopted state, regional, and local transportation plans. The proposed project is specifically recommended in, or consistent with, the Metro RTP and the Clackamas County Transportation System Plan (TSP).
- The Transportation, Traffic and Safety Report prepared for the 1993 Sunrise Corridor Draft Environmental Impact Statement (EIS) identified its first goal as providing an east-west transportation facility from I-205/Highway 212 to Rock Creek Junction to meet existing and future capacity and safety needs for statewide, regional, and local traffic.

3.2 Transportation Document Review

This section of the technical report discusses the Sunrise Project's relationship to applicable transportation-oriented regional plans and programs. The following materials were reviewed:

- Statewide Land-Use Planning Program
- Oregon Highway Plan (OHP), 1999
- Oregon Transportation Plan (OTP), 2006
- ODOT Highway Design Manual (HDM)
- Metro Regional Transportation Plan (RTP)
- Clackamas County Transportation System Plan (TSP)
- Transportation, Traffic and Safety Report prepared for the 1993 Sunrise Corridor Draft EIS (DEIS)
- Reports completed or current studies for other projects in the Sunrise Expressway vicinity including:
 - Sunnyside/I-205 Interchange and Sunnybrook Extension Final EIS
 - Clackamas Regional Center Area Transportation System Plan
 - Powell/Foster Corridor Transportation Plan – Phase 1
 - Pleasant Valley Concept Plan
 - Damascus/Boring Concept Planning
 - South Corridor Project
 - Rock Creek Industrial Areas Study
 - Harmony Road EIS

The review of the items listed above and summaries provided in the following section focus on goals, policies, design guidelines, criteria, and other considerations applicable to the Sunrise Expressway.

Pertinent information from some of these sources also includes transportation improvement projects, and programs and services related to transportation demand management (TDM) and transportation system management (TSM).

In addition to the information provided in this section of the report, the memo dated June 11, 2004 prepared by Metro that summarizes RTP policies, including TDM, TSM, transit, and value pricing elements applicable to the Sunrise Expressway, is available in **Appendix A**.

3.2.1 Statewide Land-Use Planning Program

Oregon has developed a statewide program for land-use planning, the foundation of which is a set of 19 statewide planning goals that outline the state's policies on land use and related topics. Local comprehensive plans implements the 19 statewide goals. Each city and county adopts a Comprehensive Plan and the ordinances necessary to implement the plan, which in turn must be consistent with the goals.

The state land use process also regulates urbanization. An Urban Growth Boundary (UGB) is established around each urban area in the state. Land inside a UGB is available for urban development and supported by public services and utilities. Whereas during the previous Sunrise Project DEIS, much of the land in the study area was outside the UGB, in December 2002 a UGB expansion brought most of the previously rural lands in the land use study area into the UGB. This inclusion provides greater opportunity for development of a transportation facility such as the Sunrise Project.

Passage of Measure 37 in 2004 challenged the statewide planning system by allowing claims for compensation on properties affected by previous land use decisions. The long term impacts of Measure 37 on Oregon land use system are, at the moment, still unclear.

3.2.2 Oregon Highway Plan

ODOT's 1999 Oregon Highway Plan (OHP) defines policies and investment strategies for Oregon's state highway system for the next 20 years, is a component of and further refines the goals and policies of the Oregon Transportation Plan.

The OHP establishes long-range policies and investment strategies for the state highway system that emphasize the following:

1. the efficient management of the highway system to increase safety and extend highway capacity;
2. the development of partnerships with other agencies and local governments; and
3. the use of new techniques to improve road safety and capacity.

In turn, the policies

1. link land use and transportation;
2. set standards for highway performance and access management; and
3. emphasize the connections among state highways and local roads; bicycle and pedestrian routes; and transit, rail, and air transportation systems.

The Sunrise Corridor was originally intended to meet the goals of the Access Oregon Highway program by connecting economic centers in the state (in this case, Southeast Portland-Clackamas County, Mount

Hood, and Central Oregon) and improving travel time, capacity, and safety conditions. ODOT has previously designated the Sunrise Project as a Corridor of Statewide Importance.

More recently, policy direction contained in the 1999 Oregon Highway Plan outline guidelines that will need to be addressed in the evaluation of the Sunrise Project alternatives. Goal 1 of the Oregon Highway Plan is to maintain and improve the safe and efficient movement of people and goods, and contribute to the health of Oregon's local, regional, and statewide economies and livability of its communities. Two components of OHP Goal 1, Land Use and Transportation (Policy 1B) and Major Improvements (Policy 1G), apply to the Sunrise Project process.

Policy 1B -- Land Use and Transportation:

The overall goal and focus of the Land Use and Transportation Policy are to connect land use and transportation in a way that achieves long-term objectives for the state highway and the local community. The policy:

- Emphasizes development patterns that maintain state highways for regional and intercity mobility outside communities;
- Enables highways through certain communities to be built to different standards that emphasize easy pedestrian and automobile movements; and
- Requires the classification of high speed, high volume highways as Expressways.

Policy 1G: Major Improvements Policy

The Major Improvements Policy calls for improving system efficiency and management before adding capacity through new lanes, new highways or bypasses. It recognizes that road construction is very expensive and funding is very limited and directs ODOT and local jurisdictions to exhaust all measures in their efforts to protect and improve the efficiency of the existing highway system before adding new highway facilities.

There are two completed analyses document which show that Policy 1G.1 has been met.

Each is briefly described as follows:

- **Technical Memo 2, Sunrise Project SDEIS, I-205 to Rock Creek Junction, Alternatives and Options Not Recommended for Further Study in the SDEIS.** This memo was prepared for CETAS, discusses the issue of adding capacity to existing OR 212/224 and recommends that this option should not be forwarded to the SDEIS.
- Two separate categories of alternatives were documented in the Technical Memo 2 as follows:
 - Alternatives Proposed in 1993 DEIS/1998 FEIS (not adopted) That Did Not Meet the Purpose and Need of the Project or the Goals and Objectives:
 - Overall Alignment Alternative: Widen/Upgrade Existing Highway 212/224
 - Alignment across Mt. Talbert
 - More Westerly Crossing of Camp Withycombe
 - Enhanced Transit, Transportation Demand Management (TDM), Transportation System Management (TSM)

- Options Proposed at the 2004 Public Design Workshops Not Recommended for Further Study in the SDEIS
 - 1996 Design (Modified) (I-205 Interchange Area)
 - Maintain Lawnfield Road Area Access (Lawnfield Area)
 - Half Interchange (Mid-Point Area)
 - Move Existing OR 212/224 to the North (135th Avenue to Rock Creek Area)
 - Southern Alignment (135th Avenue to Rock Creek Area)
 - On Top of the Bluff (135th Avenue to Rock Creek Area)
- **Sunrise Corridor Project, Evaluation of Transit/TDM Alternative, December 21, 2005.** A special model run conducted by Metro in 1995 demonstrated that enhanced TDM/TSM/Transit improvements would not, by themselves, address congestion issues in the Sunrise Corridor.

These findings document that adding capacity to existing facilities is insufficient to address congestion, and managing existing facilities with TDM/TSM/transit measures is also insufficient. Therefore, the need to add capacity with a new facility is reasonable because implementing other measures of higher priority would not achieve the goals for a safe and efficient transportation system.

The Sunrise Project was underway and need established before the 1999 OHP was adopted. The following documents provide the history of the previous work on the Sunrise Project:

- 1988: The Sunrise Project was added to the State Transportation Improvement Program as an Access Oregon Highway project.
- 1993: ODOT released the Draft Environmental Impact Statement and held public hearing for Sunrise Corridor Unit 1, I-205 to 172nd Avenue.
- 1996: The Clackamas County Board of Commissioners approved the preferred alternative, which consists of the central alignment within the Lawnfield/Mather Road area and the southern alignment around Damascus.
- 1998: ODOT completed Final Environmental Impact Statement on Sunrise Unit 1, but decided to halt work on the project, lacking funds for construction.

Additionally, the project is included in the following County, Metro, and State transportation planning documents:

- Clackamas County's Transportation Plan
- Metro's RTP Financially Constrained Projects
- The 1999 OHP (p. 214) as a designated Freight Route on the NHS. It is reasonable to assume that a Sunrise Corridor facility would be designated OR 212/224 and become the Freight Route, and that the existing OR 212/224 would be transferred to Clackamas County's jurisdiction.

3.2.3 Oregon Transportation Plan

The Oregon Transportation Plan (OTP), adopted in 1992 and updated in 1999 and 2006, is the state's 20-year multimodal plan for the statewide transportation system. The plan includes policies for bicycle and pedestrian facilities, public transportation, highways, waterways, airports, and railroads. It considers private and public facilities and the local, regional, and state elements of the system. The OTP is the guiding document for the state modal plans and local transportation system plans.

3.2.4 ODOT Highway Design Manual

The current edition (2003) of the ODOT Highway Design Manual provides uniform standards and procedures for the location and design of projects located on state highways, including modernization (new construction/reconstruction [4-R]) actions like the Sunrise Expressway.

Chapter 8.0, Urban Highway Design (Non-Freeway), of the HDM provides general design guidance for expressways and addresses design speed, pedestrians, shoulders/bike lanes, parking, access management, median, lane widths, intersections and exceptions. More specific information is provided in other chapters of the HDM. General information applicable to urban expressways from Chapter 8.0 of the HDM is provided below.

Design Speed

Most urban expressways should be designed based upon a 55-mph design speed or higher. In more restrictive urban environments, a 50-mph design speed may be more appropriate. A 45-mph design speed may be considered only in highly constrained areas and retrofit situations.

Pedestrians

On some lower speed expressways, or along expressways in urbanized areas, pedestrians may be accommodated adjacent to the roadway. The preferred method is a 6-foot-wide sidewalk and a buffer strip of at least 8 feet in width (as narrow as 4 feet under constrained conditions). Curbside sidewalks should be avoided.

Shoulders/Bike Lanes

Expressways must include an adequate shoulder. A minimum 8-foot right-side shoulder should be used where no roadside barriers are used, and it should include an additional 2-foot shy (or buffer) distance from the face of a roadside barrier. The shoulder can accommodate bicycle traffic in most situations, but bicyclists may be better accommodated on a multi-use path on some higher speed and higher volume expressways.

Parking

Expressways should not provide on-street parking.

Access Management

No private property access is allowed where the property has alternative access. Existing private accesses and public road connections that do not meet the HDM spacing standards should be eliminated

when possible during project development. If possible, full access rights should be purchased along the length of the expressway, with breaks allowed only at public roads that meet the spacing standards.

Median

Expressways must include a median treatment, and a (non traversable) 12-foot wide raised curb median with two 4-foot left side shoulders type is generally preferred for urban expressways. In areas with restricted right-of-way, a concrete barrier should be considered. Concrete barriers should be avoided in areas where pedestrian crossings or at-grade median openings may be expected.

Lane Widths

All travel lane widths should be 12 feet on urban expressways. Left-turn lanes should include a 12-foot lane with a 4-foot traffic separator.

Intersections

Connections can be either at-grade intersections or grade-separated and must meet the design standards provided in Chapter 9 of the HDM.

Exceptions

Cost, terrain, and other constraints may necessitate design below the HDM standards. Exceptions must be minimized and appropriate design exception must be justified and obtained through the process described in HDM Chapter 13.

3.2.5 Metro RTP

The Regional Transportation Plan is a 20-year blueprint for the Portland metropolitan region's transportation system. The RTP defines regional policies that all cities, county, TriMet, Oregon Department of Transportation and Port of Portland transportation plans must follow. The plan addresses the impacts of future growth on our transportation system and identifies transportation projects and programs throughout the region for the next 20 years to implement the region's 2040 Growth Concept.

The Regional Transportation Plan was developed to include separate layers of planned projects and programs that respond to differing federal, state and regional planning mandates. These layers are:

- The preferred system, which responds to regional planning policies, adopted as part of the 2040 Growth Concept and Regional Framework Plan.
- The financially constrained system, which responds to federal planning requirements and is based on a financial forecast of limited funding over the 20-year plan period.
- The priority system, which responds to state planning requirements and assumes that substantial new revenue must be identified in order to provide an adequate transportation system over the 20-year plan period

The Sunrise Corridor is shown on Metro's RTP: Regional Motor Vehicle System (Figure 1.13) and: Regional Street Design System (Figure 1.4) as a Highway and on Regional Freight System as a Main Roadway Route (Figure 1.18).

The following is a list of the RTP (2004) references to the elements for the Sunrise Project delineated in Appendix of the RTP.

- 5003 Sunrise Highway – Unit 1, Phase 2, 122nd Avenue to Rock Creek - 2004-09
- 5004 Sunrise Highway R-O-W Preservation, Rock Creek to 257th - 2004-09
- 5021 Highway 224 Extension Construct new four-lane highway and reconstruct Highway 212/122nd Avenue interchange - 2010 – 15
- 5024 Sunrise Project Supplemental EIS, I-205 to Rock Creek - 2004 – 09
- 5034 Sunrise Highway R-O-W Preservation, I-205 to Rock Creek - 2004 – 09
- 5212 Sunrise Highway Unit 1, Phase 2 PE 135th Avenue to 172nd Avenue - 2004-09
- 5213 Sunrise Highway Unit 1, Phase 2 R-O-W Preservation - 2004-09

3.2.6 Clackamas County Transportation System Plan (TSP)

Clackamas County's Comprehensive Plan and its accompanying Zoning Development Ordinance (ZDO) has been acknowledged by LCDC. The ZDO designates new roads as an allowed use all zoning designations except for the areas currently designated Agricultural. There are three parcels outside the UGB in the land use study area that are planned and zoned as EFU land. These parcels are located south of the Clackamas River and are not impacted by any of the Sunrise Project alternatives.

Eight parcels (approximately 146 acres total) on the north side of the river in the east part of the study area are currently zoned EFU as an interim zoning designation. The December 2002 expansion of the metropolitan area UGB brought them into the urban area. These parcels have mostly been annexed into the City of Happy Valley.

The County's Comprehensive Plan identifies the Sunrise Project as a component of the Clackamas County 20 Year Capital Improvement Needs (Table V-1). The functional class of the facility is designated as on Expressway / Freeway on Map V-2a (Urban Functional Class Map). The Regional Street Design Type Map (Map V-3) designates the Sunrise Project as a Highway. A Highway is defined as usually containing 4-6 travel lanes which are generally divided with an impassable median with left-turn refuges may be provided at signalized intersections. Bike lanes should be provided, sidewalks should be provided within the urban area.

Existing Clackamas County Zoning

The Sunrise Project is proposed in an area that is planned and zoned by Clackamas County. In Zone D, the cities of Happy Valley and Damascus have recently annexed areas and have not yet completed their own Comprehensive Plan and Zoning designations. Clackamas County's designations apply until the cities complete their work.

The county has zoned the land use study area to be about one-third industrial and office designations (1,558 acres or 37%) and about 7% retail (305 acres). Residential designations make up most of the remainder. There is some rural, agricultural and future urban zoning in the eastern parts of the study area, and several sites zoned for open space are scattered throughout the study area. Table A-5 in the appendix summarizes zoning in the study area by Analysis Zone. Figure 16 illustrates the County's current zoning designations in the land use

study area. Existing land uses and zoning by analysis zone were described in above by analysis zone.

Transportation, Traffic and Safety Report prepared for the Sunrise Corridor DEIS

This technical report, prepared in 1990 for ODOT by TAMS Consultants, Inc., describes transportation problems to be addressed by the Sunrise Corridor – Unit 1 project. The problems to be addressed include:

- Congestion and discontinuity for east-west through traffic
- Congestion for north-south through traffic
- Congestion and safety hazards for local access

Goal 1, the transportation-related goal for the project, was to “provide an east-west transportation facility from I-205/Highway 212 to Rock Creek Junction to meet existing and future capacity and safety needs for statewide, regional, and local traffic.” The transportation-related objectives for Goal 1 were A) to relieve congestion and enhance smooth traffic flow, B) to improve safety, and E) to enhance transit access. Traffic analysis was conducted for the No-Build and build alternatives to evaluate traffic operations on the freeway, ramps, and at key intersections to determine freeway, ramp, and intersection lane and traffic control requirements. Daily and morning (AM) and evening (PM) peak hour forecasts for the 2015 design year were used. Most of the project elements were designed to provide Level of Service (LOS) C operations for the forecasted traffic volumes. LOS D was considered to be acceptable for ramp junctions.

Following completion of the DEIS, ODOT conducted a Major Investment Study in 1998. This study evaluated a broad range of potential solutions to transportation problems including alternatives to highway construction such as transit and congestion management strategies. **Appendix B** summarizes congestion management strategies that are in place, have been considered, or may be considered as applicable.

3.2.7 Rock Creek Industrial Area Study

In 2004 an employment study was conducted for the area between Rock Creek (including its buffer) on the west; Highway 212 on the south; 172nd Ave. on the east; extends beyond Zone D on the north, which had been designated Regionally Significant Industrial Land through a Metro process. The study calculated the employment yields and transportation impacts of two different employment land use scenarios. This study was reviewed and incorporated into the Damascus Boring Concept Plan process.

3.2.8 Reports Completed or Current Studies for Other Projects in the Sunrise Expressway Vicinity

Sunnyside/I-205 Interchange and Sunnybrook Extension Final Environmental Impact Statement

This FEIS, prepared by Clackamas County in 1992, documents the preferred alternative and the impacts and mitigation associated with the alternative that has been constructed. The project includes auxiliary lanes along I-205 to tie into planned improvements at the SE 82nd Avenue/Milwaukie Expressway (Hwy. 224) Interchange in association with the Sunrise Expressway.

Clackamas Regional Center Area Design Plan

The Clackamas Regional Center Design Plan (CRC Plan) is incorporated into the Clackamas County Comprehensive Plan. This plan, contained in Chapter 10, Community Plans and Design Plans, takes precedence in the CRC Plan area where conflicts exist between it and the remainder of the Comprehensive Plan. The transportation policies and actions contained in the CRC Plan are based on findings and recommendations of the Clackamas Regional Center Area Transportation System Plan completed in January 1999. The CRC Plan does not apply policies or actions specific to the Sunrise Expressway, but the CRC Plan area overlaps with the northwest portion of the Sunrise Expressway transportation study area – generally north of Lawnfield Road and the Union Pacific Railroad line, and west of SE 117th Avenue. Policies and actions identified in the CRC Plan have been incorporated into the County's TSP, and actions within the Sunrise Expressway transportation study area are listed in Table 2-1.

Powell/Foster Corridor Transportation Plan – Phase 1

This study was a cooperative effort by Metro, the cities of Portland and Gresham, Multnomah and Clackamas counties, Tri Met, and ODOT. The Metro Council adopted final study recommendations in October 2003. Phase 2 will be completed with the I-84/US 26 Connector Corridor Study that has not yet been scheduled for completion. The year 2020 regional travel demand modeling conducted for the first phase study indicated that both the Sunrise Expressway and a parallel arterial (Clackamas Highway) would be needed to adequately serve the urbanizing areas of Clackamas County, including the Damascus/Boring area. The study recommended transit route and service enhancements, including improvements to north-south bus services connecting to employment areas such as the Clackamas Regional Center and the Pleasant Valley and Damascus town centers. In addition, the study recognized that concept planning for the Damascus area may require further analysis of north-south routes between the Pleasant Valley and Damascus areas, including improvements to SE 172nd Avenue, Foster Road, and SE 242nd Avenue.

Happy Valley Planning Requirements

The land use on lands that are within Happy Valley are governed by the County Comprehensive Plan and Zoning designations until Happy Valley adopts its own comprehensive plan map and zoning designations. Happy Valley is in the process of adopting Comprehensive Plan, TSP, and Code revisions, converting to Happy Valley urban designations. The work plan for this process schedules adoption of plan map, plan text and TSP update in late 2007.

Damascus/Boring Concept Plan

A concept plan was completed in December 2005 for the area that was brought into the Urban Growth Boundary by Metro's December 2002 decision. The Damascus/Boring Concept Plan was a cooperative planning effort to create a Concept Plan and Implementation Strategies for development of approximately 12,000 acres located south of Gresham and east of Happy Valley in Clackamas County. Clackamas County and Metro jointly developed the concept plan, with the participation of Damascus, Happy Valley, ODOT, area citizens, key organizations, service providers and other nearby cities. The concept plan would provide the basis for future comprehensive plan amendments and development code regulations that must be adopted before development can take place.

The Damascus/Boring Concept plan was closely coordinated with the environmental analysis of the Sunrise Projects effort and addressed the general need, modes, function, and location of the proposed Sunrise Parkway. The Damascus/Boring Concept Plan reaffirms that Sunrise Parkway improvements are needed, and identified transportation alternatives to be evaluated through a future DEIS process similar to that already initiated for the Sunrise Project.

The land uses on lands that are within Damascus are governed by County Comprehensive Plan and Zoning designations until Damascus adopts its own comprehensive plan map and zoning designations. Damascus provisionally adopted the Clackamas County ZDO and Comprehensive Plan on January 17, 2005. Damascus is in the process of a Comprehensive Plan, TSP, and Code revision, converting to Damascus urban designations. That process is expected to be completed by 2008.

South Corridor Project

Metro completed a Supplemental Draft EIS (SDEIS) for this project in 2002. The SDEIS supplements the South/North corridor DEIS prepared in 1998 and evaluates alternatives for a high-capacity transit route with complimentary transportation system improvements in the South Corridor of the Portland metro area.

Two light rail projects have been selected to move forward in the corridor. The first project to be constructed, I-205 light rail, would provide a new light rail line between the Gateway district and the Clackamas Town Center along I-205, and connect to downtown Portland with a new light rail route on SW Fifth and Sixth Avenues. The second project, Milwaukie to Portland light rail, would connect Milwaukie and Southeast Portland neighborhoods with the light rail system in downtown Portland. Metro and TriMet have initiated additional design, engineering, and environmental work for the downtown Portland and I-205 portions of the project.

In addition to the light rail alternatives, the SDEIS identifies multiple transportation improvements, including improvements within the Sunrise Expressway transportation study area as assumed under either of the two build alternatives considered. Actions assumed within the Sunrise Expressway study area include:

- Construction of a new four-lane highway from I-205 to Rock Creek Junction
- Widening SE Harmony Road to five lanes between SE 82nd Avenue and Milwaukie Expressway
- Construction of a 300-space, shared-use park-and-ride lot at the New Hope Church east of the Clackamas Town Center on Monterey Avenue

The South Corridor Project is relevant to the Sunrise Expressway because it would increase transportation mode options to the immediate region while encouraging multi-modal travel for residents and employees alike throughout the Clackamas Regional Center. The SDEIS outlines the need for the project due to the following conditions:

- Historical and projected rapid population and employment growth in the corridor, creating an unmet demand for increased travel opportunities and transit capacity
- High levels of existing traffic congestion and travel delay in the corridor and deteriorating travel conditions in the future caused by population and employment growth
- The need for high-quality transit service in the South Corridor to achieve regional and local land use objectives