



## TECHNICAL MEMORANDUM #3.1

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**Date:** August 5, 2010 Project #: 10213.0  
**To:** Project Management Team and Policy Advisory Committee  
**From:** Dan Seeman, Phill Worth and Marc Butorac, P.E.  
**Project:** 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan  
**Subject:** Technical Memo 3.1: Review of Adopted Plans and Policies

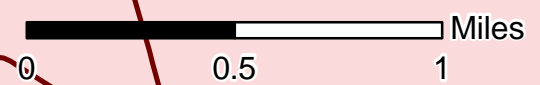
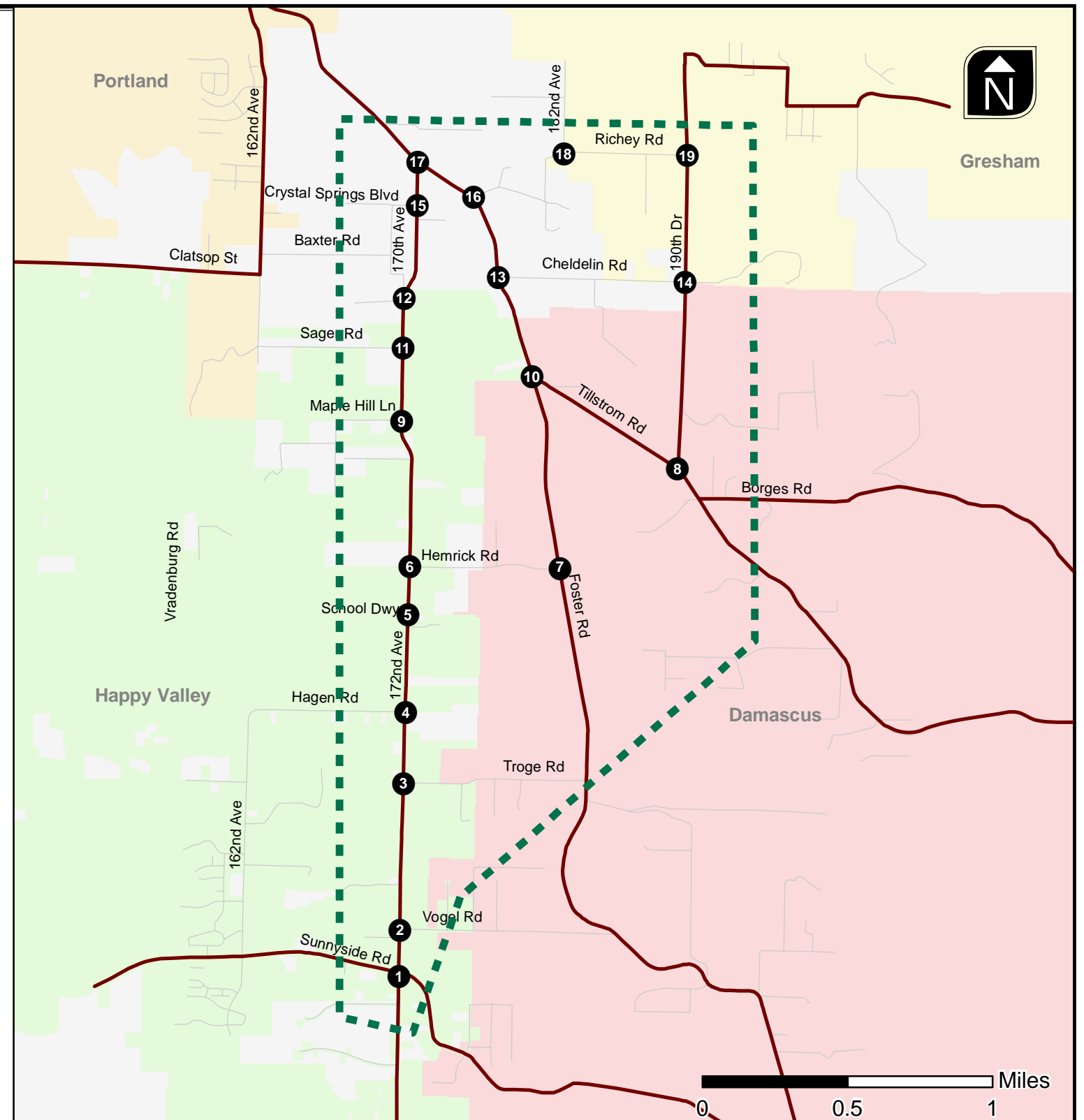
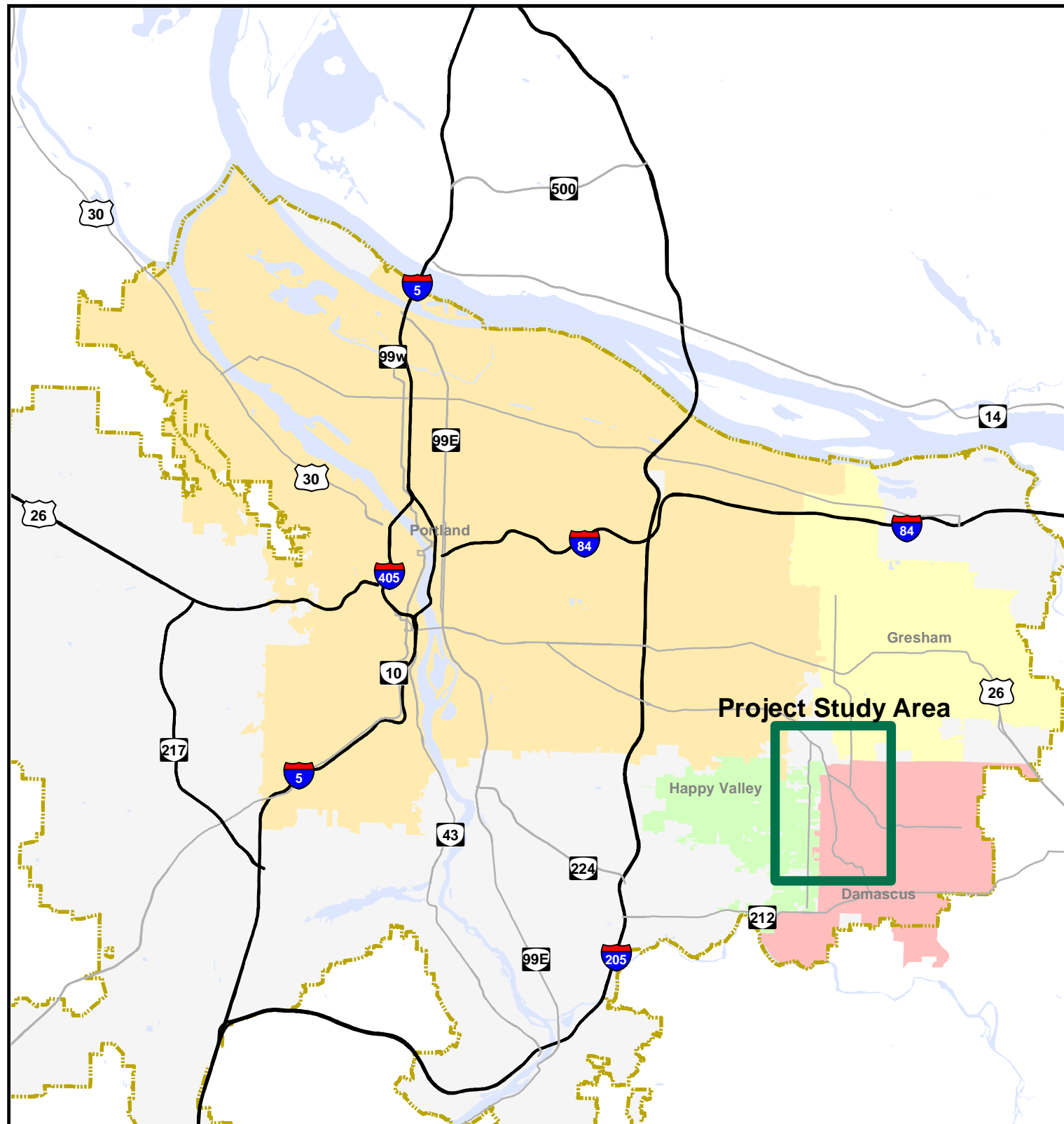
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### INTRODUCTION

*This memorandum provides an overview of the plan and policy documents that affect the land use and transportation systems in the vicinity of the 172<sup>nd</sup>/190<sup>th</sup> corridor in Clackamas County, Oregon (see Figure 3.1-1, Project Study Area). Definitions are given for the corridor study area and the designated land uses in the corridor and the plans, policies, and regulatory documents that govern the area are summarized. The regulatory context involves state, regional, county, and local levels of governance that directly impact transportation planning in the area. Therefore, this memorandum provides a policy framework for the corridor planning process and identifies any policy or regulation amendments that may need to be made to implement the corridor plan.*

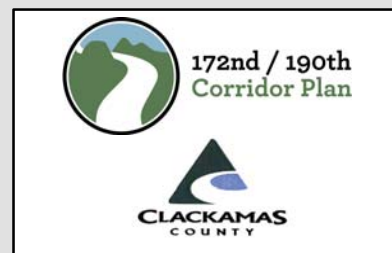
### Background

The land surrounding the 172<sup>nd</sup>/190<sup>th</sup> Corridor was recently added to the Portland Metropolitan Urban Growth Boundary (part in 1998 and the remainder in 2002) and is planned for urban development at an average density of at least 10 units per net buildable acre for the residential areas. There also are planned commercial and employment areas within the City of Damascus. Some of this development has already begun to occur. As the transportation system exists today, SE 172<sup>nd</sup> Avenue and SE 190<sup>th</sup> Drive lack the needed continuity and capacity to serve future traffic demand created by this anticipated urban growth. There are limited locations where this type of connection/facility can occur due to topographic constraints and existing urban buildout. Planning efforts thus far reveal that there are no other physically viable, cost-effective north-south routes in this portion of the county. Thus, the purpose of this corridor plan is to identify and assess transportation system improvements needed to serve future north-south traffic demand that will come with the build-out of developable land in Happy Valley, Damascus, and Gresham, and to accommodate regional growth.



- Study Intersections
- Arterial Streets
- Minor Street
- ▭ Metro Urban Growth Boundary
- - - Project Study Area

**Site Vicinity Map and Project Study Area**



**Figure  
3.1-1**

H:\PROJECTS\172nd Ave Sunnyside Rd Alter. Design\existing conditions\Site Vic.mxd

## Project Study Area (PSA) Description

Figure 1 defines the Project Study Area (PSA). The southern half of the study area is defined to include land within approximately 300 feet of 172<sup>nd</sup> Avenue, in recognition that this section (between Sunnyside Road and about Hemrick Road) will follow the existing 172<sup>nd</sup> corridor. The north section of the study area is a rectangle defined to include an area in which the transition between 172<sup>nd</sup> Avenue (to the south) and 190<sup>th</sup> Drive (at about the Clackamas County boundary) may be constructed. The PSA can be described as the area in which land uses may have an affect on the design and function of the corridor. There are two jurisdictions within which lands in the study area lie: the cities of Happy Valley and Damascus. In addition, lands just outside the study area are within the jurisdiction of Clackamas County, Multnomah County and the City of Gresham. Figure 1 shows these jurisdictional boundaries.

## REGULATORY FRAMEWORK

### *Documents Reviewed*

The type of planning documents that provide the regulatory framework for this planning effort are described below, followed by summaries of individual plan and policy documents.

The *Statewide Planning Goals* express the state's policies on land use and related topics such as economic development, public facilities, and transportation. Oregon's statewide goals are achieved through local comprehensive planning. State law requires each city and county to adopt a comprehensive plan and the zoning and land-division ordinances needed to put the plan into effect. These local comprehensive plans must be consistent with the Statewide Planning Goals. Plans are reviewed for such consistency by the state's Land Conservation and Development Commission (LCDC). When LCDC officially approves a local government's plan, it becomes the controlling document for land use in the area covered by that plan.

The *Transportation Planning Rule (TPR)* requires that land use plans and the transportation system plan are consistent with one another. It requires cities, counties, and the state to adopt transportation system plans that integrate land use and transportation planning.

Consideration was given about review of the *Oregon Highway Plan* and the *Oregon Transportation Plan* in this document, and it was decided that these two documents are not relevant because the project does not connect to an ODOT facility. Thus, these two documents were not reviewed.

All transportation plans developed within the Portland metropolitan area are required to be consistent with the *Regional Transportation Plan (RTP)*, developed by the Metro Regional Government (Metro). The RTP includes goals and policies that integrate land use and transportation planning, identifies needed improvements to the transportation system, and defines the cost-feasible set of improvements the region intends to fund and implement over the next 20+ years.

For local governments, the *comprehensive plan documents* contain objectives and policies that are intended to guide growth and development over a 20-year planning horizon. They are based on the specific qualities and characteristics of the community and reflect local plans and needs for future improvements. The comprehensive plans are intended to be consistent with the Statewide Planning Goals and the RTP. The city and county Transportation System Plans (TSPs), the transportation element of the local comprehensive plans, contain policies relating to the multimodal transportation system and outline planned transportation improvements, regardless of jurisdiction or funding source.

The following transportation and land use plans were reviewed for policies and regulations applicable to the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan, as shown in Table 1.

**Table 1      Applicable Plans and Policy Documents**

Plan / Policy Document .....	Page Number
<b>State</b>	
Oregon Statewide Planning Goals (2010).....	<a href="#">5</a>
-      Goal 1 Public Involvement.....	<a href="#">5</a>
-      Goal 2 Land Use Planning .....	<a href="#">5</a>
-      Goal 5 Natural Resources, Scenic and Historical Areas, and Open Spaces .....	<a href="#">6</a>
-      Goal 6 Air, Water and Land Resources Quality .....	<a href="#">6</a>
-      Goal 7 Areas Subject to Natural Hazards.....	<a href="#">6</a>
-      Goal 8 Recreational Needs .....	<a href="#">7</a>
-      Goal 9 Economic Development .....	<a href="#">7</a>
-      Goal 12 Transportation and Oregon Administrative Rule 660, Division 12 (TPR) .....	<a href="#">7</a>
<b>Regional</b>	
-      Metro Regional 2040 Growth Concept (Metro, December 1995) .....	<a href="#">8</a>
-      Metro Regional Transportation Plan Update (Metro, March 2010) .....	<a href="#">10</a>
-      Metro Powell/Foster Corridor Transportation Plan (Metro November 2003) .....	<a href="#">12</a>
-      Wildlife Crossings.....	<a href="#">13</a>
-      Creating Livable Streets.....	<a href="#">13</a>
<b>Local</b>	
Clackamas County	
-      Clackamas County Comprehensive Plan (Land Use Element) .....	<a href="#">14</a>
-      Clackamas County Transportation System Plan.....	<a href="#">15</a>
-      Sunrise Corridor EIS (draft) .....	<a href="#">18</a>
Cities	
-      City of Happy Valley Comprehensive Plan (Land Use Element) .....	<a href="#">19</a>
-      City of Happy Valley Transportation System Plan .....	<a href="#">20</a>
-      City of Damascus Comprehensive Plan (draft) (Land Use Element) .....	<a href="#">21</a>
-      City of Damascus Transportation System Plan (draft) .....	<a href="#">23</a>
-      City of Gresham Transportation System Plan.....	<a href="#">23</a>

## STATE OF OREGON

### ***Statewide Planning Goals***

The State of Oregon has 12 planning goals, eight of which are relevant to consider during this planning process. Those with influence on this process are summarized below.

#### **Statewide Planning Goal 1: Citizen Involvement**

Goal 1, Citizen Involvement, requires those jurisdictions that prepare, adopt, and maintain comprehensive plans to provide the “opportunity for citizens to be involved in all phases of the planning process.” According to the goal, “the planning process” includes preparation of plans and implementation measures, adoption of plans and implementation measures, and minor and major amendments to adopted plans. Technical information associated with the planning process must be available to citizens in an understandable form; accessible means for providing feedback must also be available.

*Developing and adopting the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan will involve meetings of a Project Management Team (PMT) and Public Advisory Committee (PAC). The PAC will consist of key property owners, business owners, and interested citizens who may have a vested interest in the planning project. The PAC will provide local input into the process, using their knowledge of the area and issues related to the interchange to guide the project. In addition, four public workshops and an open house will be held during various stages to provide information and updates on the corridor planning process. The required City of Damascus, City of Happy Valley, and Clackamas County public hearings for adoption of the corridor plan will also provide opportunity for public comment (i.e., Technical Memorandum #2.1 will address Public Involvement Program). It is expected that these public involvement activities will satisfy the purpose and intent of Goal 1.*

#### **Statewide Planning Goal 2: Land Use Planning**

Goal 2, Land Use Planning, requires that a land use planning process and policy framework be established as a basis for all decisions and actions relating to the use of land. Goal 2 is important for three reasons as discussed below.

First, Goal 2 requires planning coordination between those local governments and state agencies “which have programs, land ownerships, or responsibilities within the area included in the plan.” For the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan, Goal 2 will require that Clackamas County coordinate with the Cities of Happy Valley and Damascus, which have planning authority over the land in the corridor. Coordination is particularly important because land use decisions in the vicinity of the corridor could affect its future use and operation. In addition, the County will coordinate with the City of Gresham to ensure that any potential impacts to the Pleasant Valley area are properly identified throughout the process. As a result, all three cities have representation on the PMT and PAC.

A second important element of Goal 2 is that land use decisions and actions must be supported by an "adequate factual base." This requirement applies to both legislative and quasi-judicial land use actions and requires that such actions be supported by "substantial evidence." In essence, it requires that there be evidence that a reasonable person would find to be adequate to support findings of fact that a land use action complies with the applicable review standards.

Third, Goal 2 requires that the corridor plan and actions be "consistent with the comprehensive plans of cities and counties and regional plans adopted under Oregon Revised Statute (ORS) Chapter 268." This provision is important because elements of the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan will need to be consistent with the locally adopted TSPs. *To meet this state requirement, the corridor plan may include recommendations for amendments to the cities' and counties' TSPs.*

### **Statewide Planning Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces**

The purpose of Goal 5, Natural Resources, Scenic and Historic Areas, and Open Spaces, is to "protect natural resources and conserve scenic and historic areas and open spaces." This goal requires local governments to inventory natural and cultural resources in their jurisdictions and to develop and adopt programs to conserve and protect them. Among the resources to be inventoried are: riparian corridors, wetlands, federal Wild and Scenic Rivers, state Scenic Waterways, groundwater resources, wildlife habitat, natural areas, wilderness areas, open spaces, scenic views and sites, mineral and aggregate resource areas, energy sources, and historic and cultural areas.

*Goal 5 resources on land in the study area will need to be identified in the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan study area (i.e., Technical Memorandum #5.1 will address Natural Resources). Improvements proposed in the corridor must comply with this goal and city and county policies and programs accordingly.*

### **Statewide Planning Goal 6: Air, Water and Land Use Resources Quality**

Jurisdictions must comply with state and federal environmental agency regulations. Goal 6, Air, Water and Land Resources Quality, calls for jurisdictions to "maintain and improve the quality of the air, water and land resources of the state." Waste and process discharges within a jurisdiction may not exceed the carrying capacity of the local air shed and water shed in the long-term, nor degrade the quality or otherwise threaten the availability of the air shed and water shed services.

*This goal and corresponding policies in the county and city comprehensive plans must be taken into account in developing and selecting alternatives for the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan.*

### **Statewide Planning Goal 7: Areas Subject to Natural Hazards**

Goal 7, Areas Subject to Natural Hazards, was adopted to "protect people and property from natural hazards." The goal requires local jurisdictions to adopt comprehensive plans, including inventories, policies, and implementation measures, for identifying natural hazard areas and prohibiting or limiting development in these areas. Although local jurisdictions may define

others, the goal defines natural hazard areas as those subject to floods (both coastal and riparian), landslides, earthquakes and related events, and wildfires.

*Similar to Goal 5 resources, natural hazards will need to be identified in the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan study area (i.e., Technical Memorandum #5.1 will address Natural Resources). Improvements proposed in the corridor plan must comply with this goal and the local jurisdictions' policies and programs accordingly.*

### **Statewide Planning Goal 8: Recreational Needs**

Goal 8, Recreational Needs, was adopted to “satisfy the recreational needs of the citizens of the state and visitors, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.” The goal requires that local governments conduct comprehensive recreational planning by identifying recreational needs, planning for facilities in sufficient quantities and locations to meet these needs, and working with private companies and other partners in meeting these needs.

*The 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan should strive to avoid impacting existing and planned parks and recreational areas or otherwise minimize the impacts to an acceptable level.*

### **Statewide Planning Goal 9: Economic Development**

The intent of Goal 9, Economic Development, is to “provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon’s citizens.” Local comprehensive plans and policies must support this goal and should include an assessment of existing economic conditions and comparative advantages along with policies addressing economic development and development opportunities. Plans must also identify an adequate supply of sites with characteristics suitable for a variety of employment and economic development, and limit development around identified industrial sites to that which is compatible with uses allowed on the sites. The goal suggests implementation measures such as tax incentives and disincentives, preferential assessments, land use regulations, capital improvement planning and programming, and fee or partial fee acquisition.

*The 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan must demonstrate the ways in which the preferred alternative supports this goal and the economic development policies adopted in the city and county comprehensive plans. The cities of Damascus and Happy Valley have identified lands in the corridor for future employment development. Transportation analysis performed for the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan will rely on existing land use designations (i.e. planned land uses). Agencies must agree on acceptable assumptions for the Damascus area, due to the lack of an adopted Comprehensive Plan for that City. Future plans for intensification of land uses in the area that may require re-zoning will depend on the transportation and land use implementation measures adopted as part of the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan, and will need to comply in particular with Goal 12 and the Transportation Planning Rule (TPR) so that employment development in the area can occur in a way that protects the capacity and safe function of the corridor and any relevant future transportation investments.*

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## Statewide Planning Goal 12: Transportation

Statewide Planning Goal 12, Transportation, requires cities, counties, metropolitan planning organizations, and ODOT to provide and encourage a safe, convenient, and economic transportation system. This is accomplished through development of transportation system plans (TSPs) based on inventories of local, regional, and state transportation needs.

Goal 12 is implemented through **OAR 660, Division 12**, the Transportation Planning Rule (TPR). The TPR contains numerous requirements governing transportation planning and project development, several of which are relevant to planning new roadway improvements.

The TPR requires local governments to adopt land use regulations consistent with state and federal requirements "to protect transportation facilities, corridors and sites for their identified functions (OAR 660-012-0045(2))." This policy is achieved through a variety of measures, including:

- Access control measures which are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;
- Standards to protect future operations of roads;
- A process for coordinated review of future land use decisions affecting transportation facilities, corridors or sites;
- A process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors or sites;
- Regulations to provide notice to ODOT of land use applications that require public hearings, involve land divisions, or affect private access to roads; and,
- Regulations assuring that amendments to land use designations, densities and design standards are consistent with the functions, capacities and performance standards of facilities identified in the relevant TSP. (See also OAR 660-012-0060.)

LCDC's rules implementing Goal 12 do not regulate access management. Access on the corridor will need to comply with Clackamas County Access Management standards.

## REGIONAL PLANNING DOCUMENTS

### *The Region 2040 Growth Concept*

The Region 2040 Growth Concept, originally adopted in December of 1995, continues to provide visionary guidance to regional and local land use and transportation planning. Periodic amendments have been made to the Concept over the past 15 years, in response to needs and innovations that have been discovered and found to be consistent with the overall vision. The Concept defines desired patterns of organizing and accommodating growth by establishing types and scales of places (centers), arrangements of uses (neighborhoods, employment, industrial, station communities, etc.), and a transportation framework (corridors, throughways, main streets, passenger and freight rail, etc.) to achieve broad-reaching goals for regional sustainability.

The Concept Plan identifies 172<sup>nd</sup> Avenue as a **Regional Corridor** that is predominantly lined with **Employment Areas**, followed by **Industrial Areas**, **Outer Neighborhoods**, and **Regionally Significant Industrial Areas**. The northern end of the Corridor connects into the **Pleasant Valley Town Center**, at Foster Road (also listed as a Regional Corridor). The southern end connects to Highway 212, which is shown as a **Potential Regional Throughway**.

**Regional Corridors** are described as “major streets that serve as key transportation routes for people and goods. Examples of corridors include the Tualatin Valley Highway and 185th Avenue in Washington County, Powell Boulevard in Portland and Gresham and McLoughlin Boulevard in Clackamas County. Corridors are served extensively by transit.” A summary description of all **Industrial Areas** states that they serve “as hubs for regional commerce, industrial land and freight facilities for truck, marine, air and rail cargo provide the ability to generate and move goods in and out of the region. Access to these areas is centered on rail, the regional freeway system and key roadway connections. Keeping these connections strong is critical to maintaining a healthy regional economy.” Finally, the **Town Center** is described as providing “localized services to tens of thousands of people within a two- to three-mile radius. Examples include small city centers such as Lake Oswego, Tualatin, West Linn, Forest Grove and Milwaukie and large neighborhood centers such as Hillsdale, St. Johns, Cedar Mill and Aloha. One-to three-story buildings for employment and housing are characteristic. Town centers have a strong sense of community identity and are well served by transit.”

*The Region 2040 Growth Concept anticipates urbanization of the area served by the 172<sup>nd</sup>/190<sup>th</sup> corridor, because it is located within the Regional Urban Growth Boundary. Metro, as the agency responsible for oversight of Concept Plan implementation, closely coordinates with agencies having local land use control to ensure effective coordination of land use and transportation planning. As a result, Metro has a representative that will sit on the project management team.*

*Agencies with direct land use authority along the 172<sup>nd</sup>/190<sup>th</sup> corridor in Clackamas County include the County, Happy Valley, and Damascus. The County and Happy Valley have Comprehensive Plans and Transportation System Plans that are coordinated and consistent with the Region 2040 Growth Concept. The City of Damascus has yet to adopt a Comprehensive Plan. Until this adoption is completed,*

*the County's Comprehensive Plan appears to be the prevailing land use plan for the area outside of Happy Valley. Similarly, the City of Damascus' Transportation System Plan is still being developed; therefore, the County's TSP serves as the guidance document for transportation facilities within the City's urban boundary.*

### **Regional Transportation Plan Update (Metro, March 2010)**

Metro's Regional Transportation Plan (RTP) is the most recent transportation plan to be updated that has influence on the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan. The RTP continues many of the same goals, objectives, and policies that have guided regional transportation planning for more than a decade. The Plan acknowledges that changing economic, demographic, funding, and public health issues require new policies, approaches, and strategies in order to meet the region's travel needs and continue building valued communities.

The RTP is now driven by an outcomes-based framework for deciding the appropriate investments to be made to "build communities" and provide "regional mobility." Mobility corridors are the strongest implementing strategy of the RTP, "emphasizing the importance of a comprehensive evaluation of potential solutions to address identified needs." The premise is that these corridors must be equipped to provide the range of facilities and services to meet the travel needs of people and goods traveling within and across local communities and the region and beyond.

The 172<sup>nd</sup>/190<sup>th</sup> corridor is not among the region's 24 mobility corridors, lying between Corridors #8 (Oregon City to Gateway) and #15 (Troutdale/Wood Village/Fairview/Gresham to Damascus). Therefore, the policies of greatest impact to the corridor planning process include the intent to:

- Build a well-connected network of streets
- Improve local and collector street connectivity
- Maximize system operations
- Build the total transit system
- Expand regional and local frequent transit service
- Improve local transit service
- Use a system approach to plan for and manage the freight network
- Protect industrial lands and freight transportation investments
- Build a seamless and interconnected network of bicycle facilities
- Improve bicycle – transit connections
- Build a well-connected network of pedestrian facilities
- Improve pedestrian access to transit
- Use advanced technologies, pricing, and other tools
- Provide comprehensive real-time traveler information to people and businesses
- Improve traffic incident detection and clearance times on the region's transit, arterial, and throughway networks

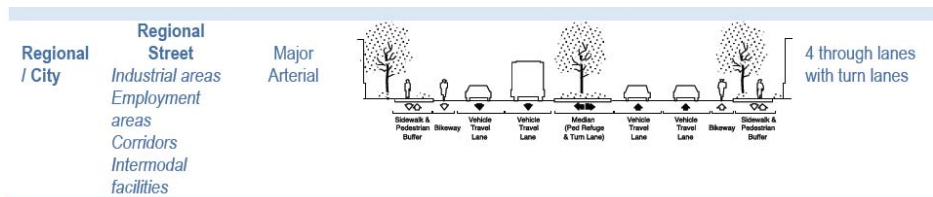
Listed below are several citations from the current RTP that are specific to the 172<sup>nd</sup>/190<sup>th</sup> corridor. These citations provide evidence of how the region intends to meet the policies listed above. The

172<sup>nd</sup>/190<sup>th</sup> corridor serves an important role as a parallel route to two regional mobility corridors. Therefore, it is essential that the corridor be properly sized and equipped.

Page 1-55, Figure 4.5: **Existing Pedestrian System** – The figure shows that 172<sup>nd</sup> Avenue is designated as a “*Transit/mixed-use corridor*” from Sunnyside Road to Foster Road. The corridor is lined with properties designated as “employment, industry, urban center, or other urban area.” Table 2.5 on page 2-18 indicates that for these land-use types the non-drive-alone modal target is between 40 percent and 45 percent. This target reinforces the importance of the corridor being equipped with pedestrian, bicycle, and transit facilities and services that are competitive with automobile travel.

Page 2-28 & 29, Figure 2.10 and Table 2.6: Under the **Regional Design Classifications**, 172<sup>nd</sup> is designated as a **Regional Street**, which is described as having four through lanes with turn lanes. This figure illustrates a future connection from 172<sup>nd</sup> to 190<sup>th</sup> (see Exhibit 1 below).

### Exhibit 1 Typical Regional Street Design



Source: Metro Regional Transportation Plan, March 22, 2010, Regional Design Classifications, page 2-29, Figure 2.10

Page 2-35, Figure 2.12: 172<sup>nd</sup> is designated as a **Major Arterial** on the **Arterial and Throughway Network**, which “are intended to provide general mobility for travel within the region and provide important connections to the throughway system.” They “are designed to accommodate motor vehicle, truck, bicycle, pedestrian, and transit travel.” This figure illustrates a future connection from 172<sup>nd</sup> to 190<sup>th</sup>. Table 2.4 on page 2-17 summarizes the Interim Regional Mobility Policy, setting deficiency thresholds and operating standards for street facilities in specific land use types during morning, mid-day, and evening peak periods. For arterials in Corridors, Industrial Areas, Employment Areas, and on Other Principal Arterial Routes, the tolerable operating standard is level-of-service D (mid-day)/ E (A.M./P.M. first peak hour). Performance below this standard would be considered a deficiency and subject to potential improvement.

Page 2-42, Figure 2.15: 172<sup>nd</sup> is designated as a **Regional Bus** facility on the **Regional Transit Network**, connecting the Pleasant Valley Town Center to the Damascus Town Center and the Clackamas Regional Center. Regional bus facilities provide “bus service that operates on arterial streets with typical frequencies of 15 minutes during most of the day. Stops are generally spaced every 750 to 1,000 feet. Transit preferential treatments and passenger infrastructure such as bus shelters, special lighting, transit signal priority, and curb extensions are appropriate at some locations such as those with high ridership.”

Page 2-60, Figure 2.20: 172<sup>nd</sup> is designated as a **Road Connector**, on the **Regional Freight Network**, connecting lands designated along the corridor as employment and industry to OR 212 to the south and US 26 and I-84 to the north, via a new connection to 190<sup>th</sup>/182<sup>nd</sup>/181<sup>st</sup>. A road connector is defined as a “designated freight route that connects freight facilities or freight generation areas to a main roadway route.” This figure illustrates a future connection from 172<sup>nd</sup> to 190<sup>th</sup>.

Page 2-65, Figure 2.22: 172<sup>nd</sup> is designated as a **Community Bikeway** on the **Regional Bicycle Network**. Community Bikeways “typically follow arterial streets (and) should be designed using a flexible ‘toolbox’ of bikeway designs, including bike lanes, cycle tracks (physically separated bicycle lanes), shoulder bikeways, shared roadway/wide outside lanes and bicycle priority treatments (e.g. bicycle boulevards).” This figure illustrates the 172<sup>nd</sup> to 190<sup>th</sup> connection.

Page 2-74, Figure 2.25: 172<sup>nd</sup> is designated as a **(Transit) Mixed-use Corridor** on the **Regional Pedestrian Network**. Mixed-use Corridors “are priority areas for pedestrian improvements ... located along good-quality transit lines.” “These corridors should be designated to promote pedestrian travel with such features as wide sidewalks with buffering from adjacent motor vehicle traffic, street crossings at a minimum of 530 feet, special crossing amenities at some locations, special lighting, benches, bus shelters, awnings, and street trees.”

Page 4-95 & 98: The area served by the 172<sup>nd</sup>/190<sup>th</sup> corridor is noted for its north-south and east-west arterial network gaps. The expectation is established that infrastructure investments in this area will overcome these gaps within the next five to ten years.

Page 5-26 & 5-27, Figure 5.4 & 5.5: Segments of 172<sup>nd</sup> Avenue are shown to *not* meet the Interim Mobility Policy of the RTP during the year 2035 no-build midday and the PM peak conditions.

Page 5-30 & 5-31, Figure 5.8 & 5.9: 172<sup>nd</sup> Avenue is shown to meet the Mobility Policy of the RTP during the PM peak under 2035 “Federal Priorities” and “RTP Investment Pool” conditions. This is accomplished, in part, by a plan to provide a continuous facility with five lanes from OR 212 to Foster Road.

*The RTP can be summarized as recommending that the 172<sup>nd</sup>/190<sup>th</sup> corridor be connected and equipped with pedestrian, bicycle, and transit facilities and services that are competitive with automobile travel. Further, the corridor should efficiently serve freight movements and safely and reliably move people and goods between adjacent land uses and to connect with other regional and interstate facilities.*

*[NOTE: In the 2000 Metro RTP update, there was a comparative evaluation of 172<sup>nd</sup> Avenue versus Foster Road as the primary connection to OR 212. The evaluation concluded that, primarily due to more easily traversable topography, SE 172<sup>nd</sup> Avenue would provide more direct access to planned industrial areas along OR 212, and would be more centrally-located to the Pleasant Valley/Damascus area. Twenty-year forecasts revealed that Foster Road would be congested even if widened to five lanes, and it currently exhibits safety problems that would likely be exacerbated with increased volumes. Another key advantage is that 172<sup>nd</sup> Avenue could provide the missing link to the OR 212-to-US 26 connection via the 190<sup>th</sup>-181<sup>st</sup> corridor in Multnomah County.]*

### ***Powell/Foster Corridor Transportation Plan (Metro, November 2003)***

Metro undertook this study in the fall of 2002 “to define and preliminarily evaluate an initial range of multi-modal alternatives that will accommodate the 2020 corridor travel demand in a way that supports the 2040 Concept Plan. The Cities of Portland and Gresham, Multnomah and Clackamas counties, ODOT and TriMet partnered with Metro in this planning effort.” The Phase I Corridor Transportation Plan produced recommendations for several segments of each street facility. *Recommendations include widening Foster Road to four lanes from SE 122<sup>nd</sup> Avenue to Barbara Welch Road. A Phase II study is also recommended to evaluate the need and feasibility of widening the corridor beyond Barbara Welch Road and constructing a new SE 174<sup>th</sup> Avenue to provide additional north-south minor arterial capacity between Powell Boulevard and Foster Road. The need for this additional capacity is due to anticipated growth in the Pleasant Valley/Damascus area and the topographic limitations of the existing Jenne Road corridor. The Phase I Plan goes on to support the designation of Foster Road as Rapid Bus, with the commensurate transit improvements to the corridor, and to recommend “improvements to north-south transit service connecting the Columbia Corridor with Pleasant Valley, Damascus, and the Clackamas Regional Center and routes connecting Gresham with Pleasant Valley and Damascus.”*

### ***Wildlife Crossings (Metro, August 2009)***

This document provides recommendations to help ensure that Portland area roadways allow for the greatest possible movement of native fish and wildlife for the conservation of these species, while ensuring the safety of the motoring public. This document recommends identifying wildlife and natural resources, respecting their mobility corridors, and recommending measures to ensure the conservation of these species. This document includes *recommendations* (not *standards*) that guide the design. *Best management practices should be employed for wildlife crossings of the 172<sup>nd</sup>/190<sup>th</sup> corridor. Practices will preferably separate wildlife crossings of the roadway, or where at-grade crossings exist, will provide safety measures to protect wildlife.*

### ***Creating Livable Streets (Metro, June 2002)***

This is a handbook that “provides regional street design guidelines [not standards] that support the goals adopted in the 2040 Growth Concept and the Regional Transportation Plan.” These goals “seek to promote community livability by providing safe options for travel in the region and by considering the traffic function of a street in conjunction with other modes of travel and the character of the surrounding community.” The guidelines “are intended to encourage engineers and street designers to consider design elements beyond the minimum requirements, and to integrate streets more closely with planned land uses.” The design guidelines address right-of-way width, street and lane width, medians, bicycle lanes, pedestrian treatments, street connectivity, street trees, on-street parking, street lighting, building orientation, and “green” street treatments. *These guidelines should be considered in the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan. See Exhibit 2 from the handbook, which illustrates a typical cross-section for a regional street design type.*



## **Clackamas County Transportation System Plan (2002)**

The Clackamas County TSP guides the management of existing transportation facilities and the design and implementation of future facilities in Clackamas County for the next 20 years. The TSP constitutes the transportation element of the county's Comprehensive Plan and satisfies the requirements of the Oregon Transportation Planning Rule (TPR) (OAR 660-12-045). It identifies transportation projects for implementation under a Clackamas County Capital Improvement Program (CIP) and inclusion in the Oregon Department of Transportation (ODOT) Statewide Transportation Improvement Program (STIP).

*The TSP specifies that SE 172<sup>nd</sup> Avenue is a:*

- *Minor arterial*
- *Regional street*
- *Proposed bikeway*

*The TSP also specifies that 172<sup>nd</sup> Avenue from Sunnyside Road to Clatsop Street shall be improved to a four-lane standard with left turn lanes. The TSP does not specify a cross-connection from 172<sup>nd</sup> to 190<sup>th</sup>, and strictly addresses 172<sup>nd</sup> to be improved in its current alignment from Sunnyside Road to Clatsop Street.*

*The Clackamas County TSP includes the following transportation goals that should be adhered to in planning the 172<sup>nd</sup>/190<sup>th</sup> Corridor.*

### **GENERAL TRANSPORTATION GOALS**

- Create a safe, efficient and effective transportation system -- with multiple modes -- that balances the needs of the economy, protection of the environment, conservation of natural resources, and protection of neighborhoods.
- Work in partnership with neighboring and affected agencies in transportation planning to ensure effective and efficient results.
- Prepare a financial plan to fund the projects included in the Capital Improvement Plan (CIP).
- Use all financial means possible and take the lead in developing new funding sources to construct needed projects.
- Work to maximize dollar return from state, regional and federal sources for County transportation projects.
- Schedule transportation system improvements to coincide with the needs of new development.

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## ROADWAY GOALS

The generalized goals for transportation are made specific for certain facilities, such as 172<sup>nd</sup> Avenue:

- Create and maintain a safe, continuous County-wide road system, that accommodates movement by all travel modes;
- Meet the future transportation demands of the County; and,
- Complement the transportation networks of cities, other counties, and the state.

## POLICIES

Policies specific to the issues being addressed by the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan are summarized below.

### *Efficiency and Finance*

1.0 Consider strategies for using the existing road system and its capacity most efficiently before building new roads or adding new capacity to existing roads. Transportation System Management techniques are a set of strategies that shall be used to make roadways operate more efficiently. Transportation System Management (TSM) strategies include:

- Access Management
- Alternative/Modified Standards (Performance and/or Design Standards)
- Intelligent Transportation System (ITS) applications
- Operational Improvements
- Parking Standards

4.0 Preserve as much as possible the efficient function of the regional roadway system in development of any new roads.

6.0 Coordinate with the Oregon Department of Transportation (ODOT) in implementing the Oregon Transportation Plan (OTP), Oregon Highway Plan (OHP), Statewide Transportation Improvement Program (STIP), and with other state, local and regional jurisdictions in their roadway planning efforts.

### *Needed Roadway Improvements*

7.0 Fund and build the roadway improvement projects needed to accommodate and appropriately manage future traffic demands for the next 20 years.

8.0 Maintain a current and complete 5-year Capital Improvement Program. It shall contain needed future transportation projects in priority order, with estimated costs and assigned responsibility for funding. It should be updated and adopted periodically by the Board of County Commissioners.

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### ***Functional Classifications and Roadway Standards***

9.0 Designate and develop roadways according to their functional classifications and guidelines, while allowing flexibility to accommodate characteristics of terrain, scenic qualities, and existing development.

11.0 Limit zone change approvals to those that will not require a roadway as planned in the Capital Improvement Plan to be redesigned or increased to a higher functional classification in order to maintain the minimum acceptable performance evaluation Level-of-Service standard.

12.0 The County shall consider the Regional Street Design Type Guidelines, when designing new county roads or redesigning existing county roads prior to construction or reconstruction.

13.0 Design arterials and collectors to allow safe and convenient passage of buses in urban areas and, where necessary, rural areas.

### ***Access Standards***

14.0 Plan and control access onto roads within the County, for urban areas and according to the American Association of State Highway and Transportation Officials (AASHTO) guidelines for rural areas, for both new and existing uses. Access standards need to be applied in a flexible manner that maintains reasonable access to property when access cannot be denied.

### ***Improvements to Serve Development***

17.0 Require implementation of a local street network for undeveloped sites. Existing streets shall be extended to provide a direct, connected street system.

18.0 Developers of new developments and land divisions that will require construction of new streets shall provide the County with a conceptual street plan map and street cross sections responding to the other requirements of this section, and full street connections at intervals of no more than 530 feet. Exceptions may be made when a full street connection is prevented by barriers such as topography, railroads, freeways, pre-existing development or environmental constraints such as streams and wetlands.

19.0 Before an exception is granted to the above requirement, it shall be determined if, at a minimum, an accessway for pedestrians, bicyclists or emergency vehicles may be constructed at intervals of 330 feet. Those accessways shall be constructed unless prevented by barriers or environmental constraints.

22.0 Encourage a relationship between land use and roadways that decreases average trip length.

23.0 Discourage through trips on local, connector and collector roadways.

### ***Operating Standards***

27.0 Evaluate capacity needs for regional roadways within Metro's boundaries using the Regional Motor Vehicle Performance Measures. The use of these measures is limited to network analysis,

and priorities for funding through Metro; they are not for designing individual road improvements.

28.0 All arterials and collectors not in Regional Centers shall be evaluated for performance to Level-of-Service (LOS) "D" as the acceptable operating standard, except as established below. All capital construction shall be designed to achieve LOS "D" or better.

a. Review of high-employment developments shall use a performance evaluation operating standard of LOS "E".

b. Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of LOS "E".

29.0 Limit zone change approvals to those that will not reduce the Level of Service of a roadway as planned in the Capital Improvement Plan below the minimum acceptable performance evaluation Level-of-Service standard.

### ***Building Roads***

34.0 Consider all transportation modes when building new roads or widening existing roads to maximize efficiency and safety for all users of the road.

*[NOTE: The County plans to initiate an update of its' TSP within the next year; therefore, it is likely that the 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan will be culminating prior to the adoption of the new County TSP.]*

### ***Sunrise Corridor Draft Environmental Impact Statement***

The Sunrise Corridor was proposed as a new highway corridor that would provide a direct connection between I-205 and U.S. 26, the Mount Hood Highway. Two separate sections of highway have been discussed over the years: Unit 1, which would connect I-205 with Rock Creek Junction (the junction of Highways 212 and 224) to the east; and Unit 2, which would continue from Rock Creek Junction to U.S. 26.

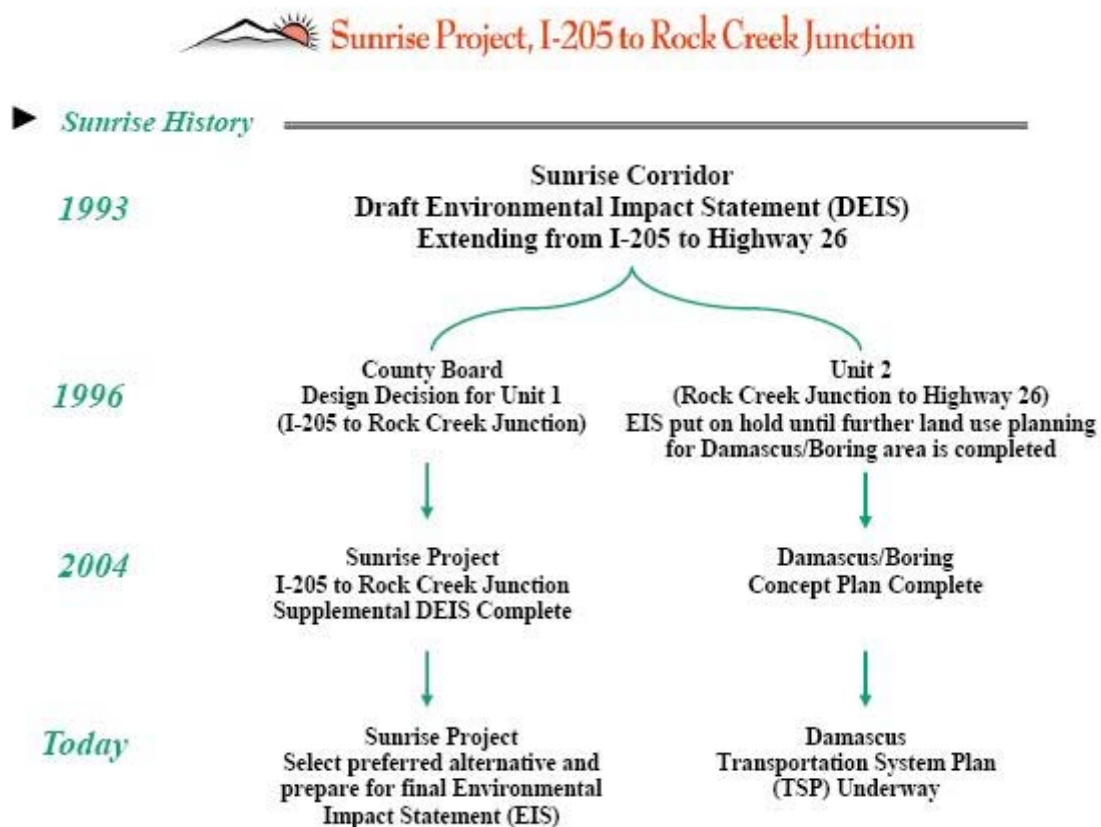
In the late 1980s, Clackamas County, the Oregon Department of Transportation (ODOT) and other public stakeholders began a process to identify the best location for this highway. In 1993, a Draft Environmental Impact Statement (DEIS) was issued, and in 1996 the Clackamas County Board of Commissioners approved a conceptual alignment for Unit 1 of the highway.

The Federal Highway Administration has determined that the Unit 1 portion of the Sunrise Corridor has its own independent purpose and can be advanced as a separate project, the Sunrise Project, I-205 to Rock Creek Junction, while the area east of Rock Creek Junction undergoes land use planning to identify future transportation needs. Exhibit 3 below shows the history of the project and the chronology of Unit 2 (the section that SE 172<sup>nd</sup> intersects).

As Clackamas County completes the Final EIS for the Sunrise Project, I-205 to Rock Creek Junction, a separate planning process is happening east of Rock Creek Junction to determine land

use patterns and transportation infrastructure needs. In 2005, Metro and Clackamas County completed the *Damascus/Boring Concept Plan* to answer some of these questions. The document that was prepared at that time was entitled the *Damascus/Boring Concept Plan*. The City of Damascus is currently developing a Comprehensive Plan, which will determine how Damascus develops over the next twenty years. The Comprehensive Plan will examine land uses, transportation, and other public services for the new city. Concurrent with the comprehensive land use and transportation plans for Damascus, the City will develop, in coordination with ODOT, a corridor plan for OR 212 from Rock Creek Junction to US 26.

### Exhibit 3: Sunrise Project Chronology



Source: Clackamas County, Spring 2010.

### ***City of Happy Valley Comprehensive Plan (June 2009)***

Policy 56 of the Happy Valley Comprehensive Plan establishes the need for “geographically specific” comprehensive plans, including Rock Creek, Aldridge Road, Rock Creek Mixed Employment, and East Happy Valley Comprehensive Plans. Policy 56C provides the overall

policy framework for the East Happy Valley Comprehensive Plan (EHVCP), which includes the 172<sup>nd</sup> Avenue corridor.

The EHVCP provides for a community that is neighborhood-based, equipped with mixed-use centers, a diverse range of job opportunities, and transit-supportive densities that are situated along transit streets. This area is to be well-connected by multimodal transportation facilities that readily link land uses and natural areas. Industrial and other employment areas will meet the needs of local and sub-regional residents and served by a full range of transportation modes and services. Daily needs of the community are met through retail, commercial, and civic uses that are located within the immediate vicinity. A full range of housing types and costs exist within the area, allowing citizens to “live locally throughout all of life’s stages.”

Policy 56C.4 is specific to the transportation element of the EHVCP, indicating that the system will provide a range of travel options, be coordinated with the land use system, and offer attractive transportation choices. The transportation system is described as safe, cost-effective, aesthetic, feasible, and having minimal impact on natural resources. Arterials and collectors are well-connected and bicycle and pedestrian facilities are interconnected throughout the community. *Special care is to be given to the development pattern along 172<sup>nd</sup> Avenue to “provide a connected and continuous pattern of north-south streets” for parallel travel options on both sides of the corridor. Regional and community transit service will be provided on transit streets, to mixed-use areas, and to areas with transit-supportive densities. Finally, this system will be coordinated and consistent with the City’s overall Transportation System Plan and the systems of Clackamas County and neighboring cities and counties.*

### ***City of Happy Valley Transportation System Plan (June 2009)***

Most of SE 172<sup>nd</sup> Avenue from Sunnyside Road to Foster is within the City of Happy Valley. Accordingly, the City of Happy Valley Transportation System Plan recommends that SE 172<sup>nd</sup> should be redesignated from Minor Arterial to Major Arterial, with a cross-section of five lanes. *In addition, the TSP Action Plan indicates that, by year 2025, SE 172<sup>nd</sup> Avenue should be improved to:*

- *Five lane cross-section with signals or roundabouts at key intersections*
- *Sidewalks, with protected pedestrian crossings at traffic signals*
- *Bike lanes*
- *Transit improvements to facilitate its designation as a regional bus transit corridor*

These improvements are scheduled for implementation by year 2025, and are identified for funding through a Happy Valley/Clackamas County joint Transportation System Development Charges (\$1.31 million in 2004/05) or other federal, state or county sources (\$1.66 million total in 2004/05).

## HAPPY VALLEY TSP GOALS

The Happy Valley TSP also includes the following goals to guide the development of its transportation system:

Goal 1: Livability – Transportation facilities shall be planned, designed and constructed in a manner which enhances the livability of Happy Valley.

Goal 2: Mobility – Transportation facilities shall accommodate commercial, industrial and residential growth and provide access through and around Happy Valley.

Goal 3: Multi-modal Travel – Happy Valley shall strive to achieve a balanced transportation system that reduces the number of trips by single occupant vehicles by meeting the needs of auto, bicycle, pedestrian, and transit and increasing the connectivity for alternate modes.

Goal 4: Safety – Happy Valley shall strive to achieve a safe transportation system by developing street standards, access management policies when constructing streets and by making street maintenance a priority.

Goal 5: Evaluation – Transportation performance measures shall be maintained in the City.

Goal 6: Accessibility – Develop transportation facilities which are accessible to all members of the community.

Goal 7: Cooperation – Implement the Transportation System Plan in a coordinated manner.

Goal 8: Goods Movement – Provide for efficient movement of goods and services.

*The 172<sup>nd</sup>/190<sup>th</sup> Corridor Plan should strive to address these goals in the development of improvements in the corridor.*

### ***Damascus Comprehensive Plan (pending, expected to be adopted in November 2010)***

The City is working through the process of preparing the Comprehensive Plan, having had numerous “coffee klatches” and other public meetings to solicit input. Two alternative land use scenarios have been identified through these efforts that are titled Draft Village Development Plan Map (Alternative A) and Draft Comprehensive Plan Map (Alternative B). Exhibits 4 and 5 illustrate these alternatives. The schedule is to obtain sufficient input to facilitate adoption of a Comprehensive Plan for the City by September 2010. The two alternative plan maps are described below:

#### **The Damascus Village Development Plan Map (Alternative A)**

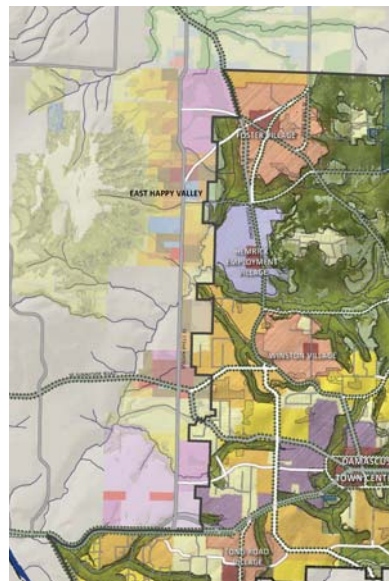
This plan maintains the core areas of the Draft Plan Map that were developed using the Suitability Analysis. The areas designated as the civic center, town center, employment village

and other industrial or employment lands remain as currently mapped. It is believed that this plan better embraces the Core Values as developed by the citizens, while focusing on the protection of the City's significant natural resources and opportunities for economic fairness. The primary focus of the DVD Plan is a village residential approach throughout Damascus. Excluding existing neighborhoods, parcels would be allocated four residential development rights per gross acre. It also requires that all development be clustered on 50 percent of the site at a maximum density of eight dwelling units per net acre. The residential areas may include a variety of housing types as well as schools, small scale services, cafes and markets whether designated as a center or sub-center. The undeveloped portions of these areas would serve pedestrians and bicyclists with interconnected streets, trail systems, community gardens, open space, parks, wildlife corridors and other community facilities. A Transferable Development Rights program would be developed by the City, but negotiations would be between willing and cooperative property owners. The plan promotes increased flexibility and creativity in neighborhood design while protecting natural features and incorporating open space.

#### Exhibit 4 Damascus Comprehensive Plan Alternatives



Alternative A



Alternative B

Source: Damascus Public Information Announcement, 2010

#### The Draft Comprehensive Plan Map (Alternative B)

This plan builds upon the 2008 Draft Comprehensive Plan Map that was developed with citizen participation through subarea planning meetings and a four-day public design workshop. Over the past nine months, the City Council has worked on refining the map to better illustrate the City's Vision and implement the City's Core Values. The Draft Comprehensive Plan Map illustrates five villages within the City. These villages are 50 to 200 acres in size surrounded by open space. These areas will support local businesses such as grocery stores, restaurants and other small-scale services, often with residential and other uses on the second story. The

residential areas in the villages have a variety of housing types. Villages serve pedestrians and bicyclists with an identifiable center, interconnected streets, open space, parks, schools and other community facilities. This map balances preservation of open space with clustered development and would facilitate Transfer of Development Credits in the buttes residential designation and cluster community overlay. The preferred method of development is through Planned Area Developments.

### ***Damascus Transportation System Plan (pending)***

The City has put the development of a transportation system plan on hold pending the adoption of its Comprehensive Plan. There has been considerable public input on transportation preferences over the course of 2009 and 2010, and the process of transportation forecasting and transportation needs assessment will commence once the comprehensive plan uses are identified and adopted. The TSP is expected to be complete during 2012.

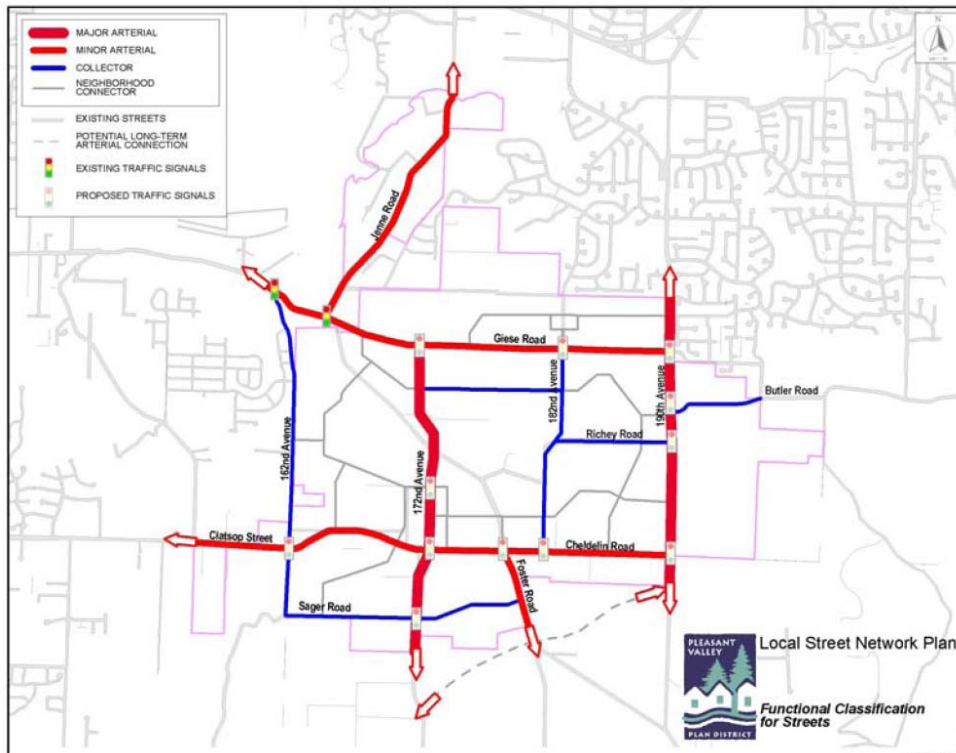
### ***Gresham Transportation System Plan (2009)***

An important element of the Gresham TSP is the Pleasant Valley Community Plan. On May 14, 2002, Metro adopted the Pleasant Valley Concept Plan in conjunction with this area being incorporated into the Urban Growth Boundary. On January 6, 2005, the City of Gresham adopted the Pleasant Valley Community Plan into its TSP. Pleasant Valley is an area at the north edge of Clackamas County portion of the 172<sup>nd</sup> Avenue corridor. *Within this community plan, there is discussion about the possible need for a long-range connection from 172<sup>nd</sup> to 190<sup>th</sup>, likely in conjunction with the urbanization of Damascus. The concept plan map (Figure 1, Pleasant Valley Plan District Plan Map in the Gresham TSP) shows a possible connection (as a dashed line) running northeasterly from 172<sup>nd</sup> somewhere north of Hemrick Road to 190<sup>th</sup> south of Cheldelin Road. Exhibit 5 shows the suggested connection. The following action measures are recommended that relate to the 172<sup>nd</sup>/190<sup>th</sup> corridor:*

- *In the near-term, downgrade the function of Foster Road and Richey Road in the confluence area of Kelley Creek to serve as local access streets;*
- *Design streets to support adjacent land uses, accommodate pedestrians and bicyclists, and include green street design elements;*
- *Realign 172<sup>nd</sup> Avenue as it passes through Kelley Creek ESRA to .... minimize impacts on the creek;*
- *Evaluate the long-term need for an arterial connection between 172<sup>nd</sup> and 190<sup>th</sup> [in response to] future urban growth boundary decisions (i.e. Damascus);*
- *In conjunction with a potential 172<sup>nd</sup>-190<sup>th</sup> connection, redesignate Foster Road to a collector through the Pleasant Valley Town Center; and,*

*Work with TriMet to develop a transit plan for the area.*

### Exhibit 6: Suggested 172<sup>nd</sup>/190 Connection as shown in Pleasant Valley Community Plan, January 6, 2005.



Source: Pleasant Valley District Plan, January 6, 2005, Page 7-42

## CONCLUSION

There is substantial consistency across these planning and policy documents related to land use and transportation in the 172<sup>nd</sup>/190<sup>th</sup> corridor planning area. Urban levels of development are anticipated by all jurisdictions with land use authority, at minimum residential densities of 10 units per net developable acre. A mix of land uses is anticipated that provides housing, services, and employment, along with parks, recreation facilities, and other urban amenities. The mix, density, and arrangement of land uses are expected to be walkable, transit-oriented, and transit-supportive. Industrial and other employment areas are planned that will provide jobs at a sub-regional scale and generate and/or attract freight movements to/from the area. A network of arterials and collectors is planned that includes parallel facilities on both sides of 172<sup>nd</sup> Avenue, along with an interconnected set of pedestrian and bicycle facilities that link neighborhoods to transit facilities and all pedestrian/bicycle generators. Transit service is expected on 172<sup>nd</sup> Avenue and to other transit-supportive places in the planning area. Freight movements are also anticipated on the corridor. Finally, a plan is in place to provide a typical four-lane roadway with left-turn opportunities, along with attractive pedestrian, bicycle, and transit facilities and services.

The fact that the Damascus Comprehensive Plan is not yet adopted creates a coordination issue. The boundary between Happy Valley and Damascus/Clackamas County crisscrosses the 172<sup>nd</sup>/190<sup>th</sup> corridor. Lacking an adopted Damascus Comprehensive Plan, this area falls under the

County's jurisdiction and Comprehensive Plan. The County's Plan does not provide the opportunity for urban densities. Thus, agreements among the decisionmakers must be reached as to the appropriate land use assumptions to be made for the area in question.

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