TECHNICAL MEMORANDUM #1

PLANNING CONTEXT AND BACKGROUND

Date: June 28, 2024

To: Oregon Department of Transportation, Region 3

From: David Evans and Associates, Inc.

Subject: I-5 Exits 124/125 Interchange Area Management Plan & Garden Valley Corridor Plan

1 PROJECT OVERVIEW

Interstate 5 (I-5) Exits 124 and 125 and their cross streets have experienced increased traffic volumes, congestion, crashes, and delays. Previous planning studies have noted existing and future planning year deficiencies at interchanges 124, 125 and the Garden Valley Boulevard corridor in Roseburg, Oregon.

I-5 is the principal facility for local and regional traffic in the Roseburg/Douglas County area, and Garden Valley Boulevard serves as a primary east-west connection to I-5 through Roseburg. The purpose of this planning process is to better understand constraints of these roadways and provide an opportunity for the Oregon Department of Transportation (ODOT) and the City of Roseburg ("City") to work collaboratively to find solutions and land use/policy actions needed to balance and manage transportation and land use challenges over time. The process will result in two separate plans: the I-5 Exits 124 and 125 Interchange Area Management Plan (IAMP) and the Garden Valley Corridor Plan (GVCP).

1.1 PURPOSE AND INTRODUCTION

This memorandum summarizes the project purpose, problem statement and study area. It also provides planning context and background through a review of plans and policies related to the 124 and 125 interchanges and the Garden Valley Corridor (GVC), including establishing the urban context as defined by the ODOT Highway Design Manual (HDM). Finally, this memorandum presents the project goals, objectives, and evaluation criteria that will ultimately be used to evaluate potential concepts developed as part of this planning process.

1.2 PROBLEM STATEMENT

1.2.1 I-5, Exits 124 and 125 Interchange Area Management Plan (IAMP)

I-5 Exits 124 and 125 are separate interchanges, but functionally linked. I-5 between interchange 124 and 125 is a heavily utilized route for local trips within Roseburg, a result of limited north-south connectivity between the W Harvard Avenue/OR 138 and Garden Valley Boulevard corridors. There are also topographical constraints and existing developments that inhibit the creation of a continuous parallel arterial/collector grid pattern, leading to further reliance on I-5 for local trips. Consequently, I-5 sees

higher peak-hour traffic volumes and reduced capacity at the ramp terminals than if there were a more connected system of parallel local routes. Both interchanges also have geometric and access spacing issues that contribute to the congestion and safety concerns. These include:

- Limited acceleration and merging distances on I-5 on the northbound loop on-ramps at both interchanges.
- Limited sight distance and acceleration distance along the southbound on-ramps at the 124 and 125 interchanges.
- Three locations where ramp terminals connect directly across from public streets. At the 125 interchange, the northbound off-ramp is across from Mulholland Drive. At the 124 interchange, the northbound off-ramp is across from Roseburg High School's main access and the southbound on and off-ramps are across from Bellows Street. This access spacing and interchange design is inconsistent with Federal Highway Administration (FHWA) and ODOT guidelines and results in the use of I-5 for local trips.
- Access spacing along both W Harvard Avenue and Garden Valley Boulevard.
- Crossing concerns for bicycle and pedestrian movements at both interchanges due to the design of free-flowing on-ramps.

1.2.2 Garden Valley Corridor Plan (GVCP)

Garden Valley Boulevard serves as an integral part of Roseburg's transportation system due to its connection to I-5, NW Stewart Parkway and NE Stephens Street, as well as major commercial developments, medical and governmental resources for Roseburg and surrounding communities. Stewart Park, Veterans Administration, Roseburg Memorial Gardens, Gaddis Park and the South Umpqua River prevent an alternate major, full-length transportation route, reinforcing the importance of the corridor. There is a prevalence of driveways and streets that do not currently meet access spacing standards, exacerbating safety and congestion concerns. Through the interchange and east of I-5, Garden Valley Boulevard lacks formal bicycle facilities due to limited right-of-way.

1.3 STUDY AREA

To help define the extent of the land use and transportation review for this study effort, a study area has been drafted as depicted in Figure 1. As the figure shows, the study area has been drawn to include those areas within the vicinity of the two interchanges that have or are expected to have a direct impact on the daily function of the 124 and 125 interchanges, as well as the Garden Valley corridor.

This study area includes two distinct subareas for detailed operational and access analysis:

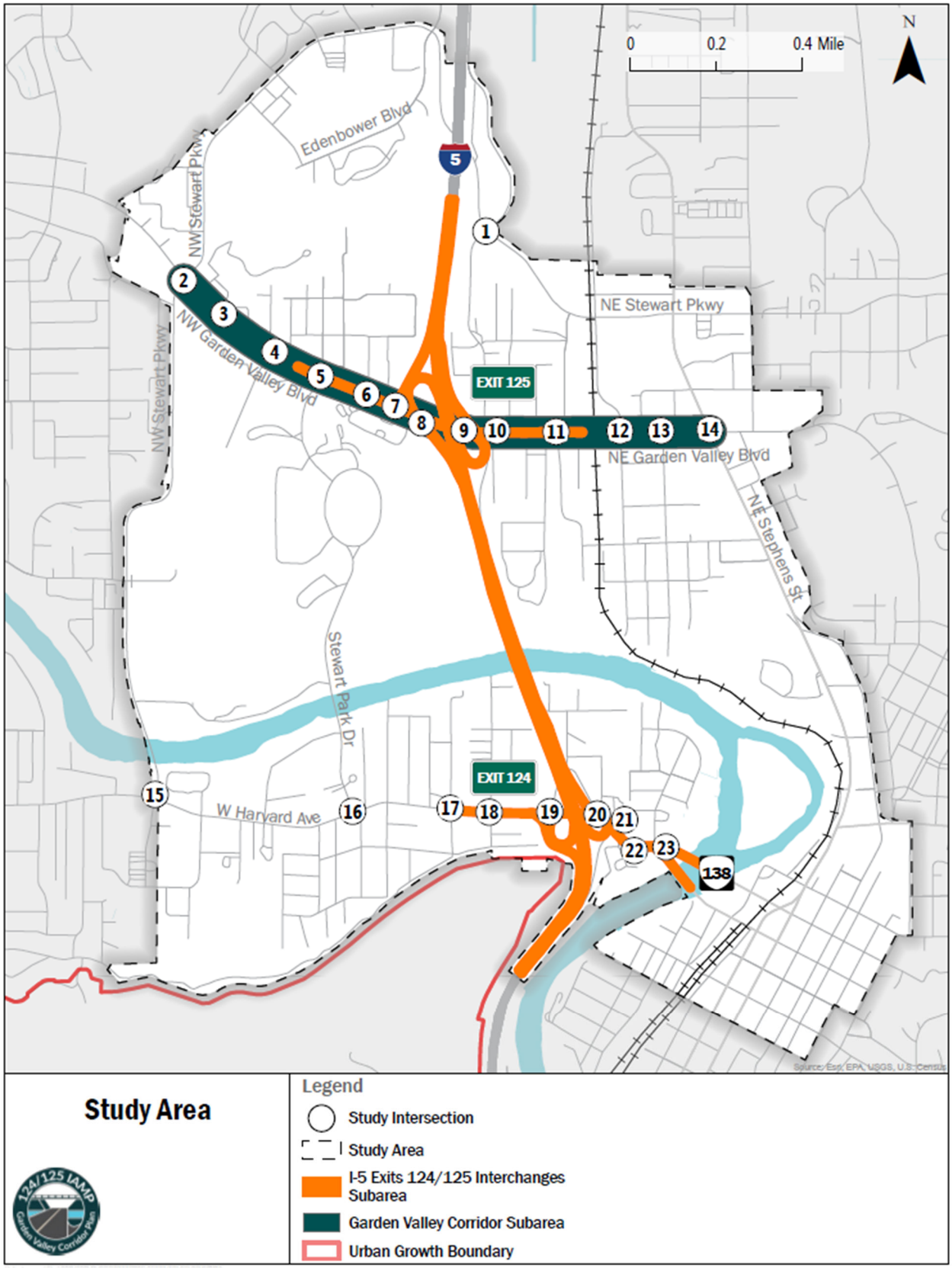
- I-5 Exits 124/125 Interchange Subarea: Includes roadways/driveways within a 1/4-mile of the ramp terminals along W Harvard and Garden Valley Blvd and includes the merge, diverge and weaving area of the I-5 mainline.
- Garden Valley Corridor (GVC) Subarea: Garden Valley Boulevard between Stewart Parkway and Stephens Street, including 12 intersections with Garden Valley Boulevard.

1.3.1 IAMP Management Area

It is important to note that for the purposes of an IAMP, there is a study area and a management area. The eventual management area of the IAMP will typically be smaller than the study area and should encompass at least the ¼-mile distance from the interchange along the crossroad.[1] The I-5 Exits 124/125 interchange subarea described above and shown in Figure 1 is anticipated to be the extents of the IAMP management area.

[1] Interchange Access Management Plan Guidelines, ODOT, April 2013.

FIGURE 1. STUDY AREA



2 PLAN AND POLICY REVIEW

As described in the Introduction, this review summarizes key regulatory documents and identifies how they are relevant to this planning process. Table 1 provides a review of state documents and Table 2 (starting page 8) provides a review of local documents.

TABLE 1. STATE PLANS AND POLICIES

PLAN OR POLICY	OVERVIEW	PROJECT RELEVANCE
Oregon Transportation Plan (OTP), 2023	• The Oregon Transportation Plan (OTP) is the state's multimodal transportation plan that assesses the needs of airports, bicycle and pedestrian facilities, highways and roadways, pipelines, ports and waterway facilities, public transportation, and railroads. • The purpose of the OTP is to define the long-range transportation policy for the movement of people and goods across the state and set the framework for policies and strategies to 2050. • The OTP provides a framework for prioritizing transportation improvements to address the challenges Oregon faces based on various revenue conditions. • This plan offers guidance for state, regional, local, and private transportation facilities. • Transportation improvements involving the state system must be consistent with applicable OTP goals and policies and. The OTP's goals include: ○ 6.1 Economic and Community Vitality ○ 6.2 Social Equity ○ 6.3 Mobility ○ 6.4 Stewardship of Public Resources ○ 6.5 Safety ○ 6.6 Sustainability and Climate Action.	• Consistent with updated OTP goals, this planning process will include a focus on safety, sustainability, and stewardship of public resources. ○ These plans will reflect the City of Roseburg's commitment to safety by: making improvements in safety outcomes a goal of these plans; recognizing relationships between safety and equity; and leveraging data and technology for the purpose of safety. ○ This planning process will explore ways to incorporate sustainability and stewardship of public resources for a more resilient and adaptive transportation system. • The OTP strongly supports a transportation system with travel options that are easy to use, cost-effective, and accessible to all potential users, including the transportation-disadvantaged. • Findings of compatibility with relevant OTP goals will be used in reviewing and adopting these plans.
Oregon Highway Plan (OHP), last amended 2023 (*comprehensive update in progress*)	• The OHP is a modal plan of the OTP[2] that defines policies and investment strategies for Oregon's state highway system. • Policies in the OHP emphasize: the efficient management of the highway system to increase safety and to extend highway capacity; partnerships with other agencies and local governments; and the use of new techniques to improve road safety and capacity. • OHP policies also link land use and transportation, set standards for highway performance and access management, and emphasize the relationship between state highways and local road, bicycle, pedestrian, transit, rail, and air systems. • The OHP was last updated in 2023. The previous update (2015) incorporated amendments from 2006 through May 2015, including:; (1) mobility standards revisions; (2) access management revisions; (3) tolling and pricing policy amendment; (4) expressway classifications revisions; and (5) state highway freight system policy revisions and adoption of the rule on reduction of vehicle carrying capacity. • An update of the OHP is beginning in 2024 to help implement the 2023 OTP as it applies to the roadway/highway system.[3]	• The following policies are relevant to this project: ○ Policy 1A – State Highway Classification System ▪ I-5: Interstate, National Highway System, National Network (Federally Designated Freight Route), Freight Route (State), Reduction Review Route ▪ OR 138: Regional State Highway, National Highway System, Reduction Review Route ○ Policy 1G – Major Improvements ○ Policy 2B – Off-System Improvements ○ Policy 2F – Traffic Safety ○ Policy 3A – Classification and Spacing Standards (see the Access Management Rule review below) ○ Policy 4A – Efficiency of Freight Movement (see the Oregon Freight Plan and ORS 366.215 reviews below)
Oregon Freight Plan (OFP), 2023	• The OFP is a modal plan of the OTP that guides the movement of goods and commodities on the state highway system and for other modes, including aviation, rail, and marine. • The OFP is a 25-year vision that identifies current freight-related issues and recommends policy, funding/investment, and operational/institutional strategies. • The plan addresses federal compliance with the federal FAST Act and Infrastructure and Jobs Act.	• I-5 is a state- and federally designated freight route and a Reduction Review Route (RRR). OR 138 is not a designated freight route but is an RRR. • See analysis of ORS 366.215 in review below regarding RRRs.
Oregon Bicycle and Pedestrian Plan (OBPP), 2016	• The OBPP is a modal plan of the OTP that provides policies and implementation strategies intended to enhance access, mobility, and safety for cyclists and pedestrians. • The OBPP includes bicycle and pedestrian designs and standards that are intended for state highways and can be used to guide other facilities.	• Consider the goals and policies of OBPP in the selection of projects. • Consider OBPP designs and standards for projects proposed in these plans.
Oregon Public Transportation Plan (OPTP), 2018	• The OPTP is a modal plan of the OTP that provides guidance regarding the development of public transportation systems. • It is intended to support the development of a comprehensive, interconnected, safe, and reliable public transportation system statewide. • The OPTP includes goals, policies, and strategies to inform and guide public transportation decisions for jurisdictions, the state, and public transportation providers, and partners.	• The OPTP provides high-level guidance for public transportation decisions. The local transit master plan (see review below) provides more targeted guidance.

[2] Modal and topic plans are part of the OTP. As ODOT's website states: "These plans refine and apply OTP policy to specific modes or topics and guide state, regional, and local investment decisions for the parts of the transportation system that they address." (https://www.oregon.gov/odot/Planning/Pages/Plans.aspx)

[3] The updated OHP is not expected to be ready for adoption until sometime in 2027 (per https://www.oregon.gov/odot/planning/pages/oregon-highway-plan-update.aspx); thus, it will not be ready in time to have direct bearing on this project. However, it is generally important to keep in mind and to note that it is intended to be system-user-focused with an emphasis on climate, equity, and safety- the same emphasis as the OTP. It is expected that significant effort will be put into particular needs such as updating mobility policy and supporting newer initiatives such as Climate Friendly and Equitable Communities.

TABLE 1. STATE PLANS AND POLICIES

PLAN OR POLICY	OVERVIEW	PROJECT RELEVANCE
Oregon Transportation Options Plan (OTOP), 2015	• The OTOP is a topic plan[4] of the OTP that establishes policies, strategies, and programs promoting efficient use of existing transportation system investments, with the intention of reducing single-occupancy vehicle (SOV) travel. • OTOP transportation options and strategies provide resources and information to support jurisdictions to improve opportunities for walking, biking, transit, telecommuting, and other travel options.	• Consider OTOP policies, strategies, and programs related to safety, accessibility, multimodal options, mobility, environmental and public health, land use and transportation, and community resiliency in developing policies and projects for these plans. • Consider information and other resources from the OTOP and its strategies to support recommendations developed for these plans where involve transportation options.
Transportation Safety Action Plan (TSAP), 2021	• The TSAP is a topic plan of the OTP that establishes goals, policies, and strategies intended to eliminate transportation deaths and life-changing injuries. • The plan presents a set of actions to promote transportation safety.	• The TSAP Emphasis Area framework may assist in identifying and classifying safety issues in these plans' study area.
Oregon Resilience Plan (ORP), 2013	• The Oregon Resilience Plan (ORP) identifies critical state facilities and needed improvements to prepare for the Cascadia earthquake. • The ORP assumes the Roseburg Regional Airport will survive an earthquake or tsunami event (ORP Figure 5.18). The airport can be reached from Exit 125 (in the study area) or Exit 127. • I-5 is considered a part of the highway backbone system. The ORP states that it is the most vital route for post-earthquake recovery.	• Consider access to critical resilience facilities – I-5 and the airport – in developing plan recommendations.

OAR 734-051 (Highway Approaches, Access Control, Spacing Standards, and Medians)	• OAR 734-051 governs the permitting, management, and standards of approaches to state highways to ensure safe and efficient operation of the state highways.
	• OAR 734-051 policies address the following:
	  ○ How to bring existing and future approaches into compliance with access spacing standards, and ensure the safe and efficient operation of the highway;
	  ○ The purpose and components of an access management plan; and
	  ○ Requirements regarding mitigation, modification, and closure of existing approaches as part of project development.
		• Section -0125 of OAR 734-015 establishes interchange management area access spacing standards.
		• It also specifies elements that are to be included in Interchange Area Plans (IAMPs), such as short-, medium-, and long-range actions to improve and maintain safe and efficient roadway operations within the interchange area.
		• It is expected that ODOT, as part of this project, will engage in access management consistent with this Access Management Rule.

OAR 731-015 (State Agency Coordination)	• OAR 731-015 establishes procedures for ODOT to implement provisions of the State Agency Coordination program. They assure that ODOT land use programs are carried out in compliance with statewide goals and compatible with acknowledged local comprehensive plans as required by ORS 197.180 and OAR 660, Divisions 30 and 31. • Except in the case of minor amendments, ODOT shall involve the Department of Land Conservation and Development (DLCD) and affected metropolitan planning organizations (MPOs), cities, counties, state, and federal agencies, special districts and other interested parties in the development or amendment of a facility plan.	• This project will require coordination across local and state agencies including, but not limited to: ODOT, DLCD, City of Roseburg, and the Umpqua Public Transportation District.
OAR Chapter 660, Division 12 (Transportation Planning Rule, TPR)	• Statewide Planning Goal 12(Transportation) requires cities, counties, MPOs, and ODOT to provide and encourage a safe, convenient, and economic transportation system. This is accomplished through the 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 a number of requirements governing transportation planning and project development, some of which are relevant to this planning process.	• Amendments of Roseburg policies and Land Use and Development Regulations may be needed to implement and ensure consistency with plan recommendations. Code amendments must comply with TPR Section -0045. • Improvements included in these plans, when adopted, will be considered planned improvements for purposes of complying with TPR Section -0060. • State rules implementing Goal 12 do not regulate access management. ODOT adopted OAR 734-051 to address access management (see review above).
ORS 366.215 (Freight Routes – Vehicle Carrying Capacity)	• ORS 366.215 prohibits the Oregon Transportation Commission (OTC) and local jurisdictions from permanently reducing vehicle-carrying capacity on routes designated as Reduction Review Routes. • Exceptions may be made if reductions are necessary for safety, access, and/or the state's best interest, and freight is not unreasonably impeded.	• This rule allows the OTC to select, establish, lay out, locate, alter, change, or realign state highways, if determined to be needed through this planning process. • Depending on recommendations proposed by these plans for I-5 and OR 138, Roseburg may need to engage in an RRR review or exception process overseen by the state.

ODOT Highway Design Manual (HDM), 2024	• The Highway Design Manual (HDM) provides uniform standards and procedures for the design, construction, resurfacing, restoration, and rehabilitation of the state's highways.
	• Originally developed in 2020 as a standalone document, the Blueprint for Urban Design (BUD) has now been incorporated into the HDM. The BUD establishes design standards for urban transportation facilities, including vehicle and multimodal facilities.
	• With incorporation of the BUD, the HDM now includes the six urban contexts that were established to provide design flexibility. The key urban design concepts introduced by the BUD include:
	  ○ Urban context
	  ○ Flexibility
	  ○ Performance-based, practical design
	  ○ Protection for pedestrians and bicyclists
	  ○ Design documentation
		• Any proposed modifications to I-5, the interchange ramps, and OR 138 must conform to the roadway design standards in the HDM.
		• Consult BUD elements incorporated into the HDM and coordinate with ODOT regarding potential design flexibility and alternative roadway standards, if needed to implement recommendations from this planning process. While the BUD urban design guidance doesn't apply to the freeway mainline or ramps, it does apply along the crossroad between, and leading up to, the ramp terminals and urban contextual design can be applied to the local road network.

ODOT's Interchange Area Management Plan Guidelines	• The Interchange Area Management Plan Guidelines are designed to assist ODOT planners, local jurisdictions, and the consultant community in the preparation of IAMPs. • These guidelines establish the overall process for creating a long-term master plan for a highway interchange. • The guidelines also outline the basic elements of an IAMP, the level of detail, and the role of state and local agencies.	• The process to develop the Exits 124/125 IAMP and recommendations proposed in the plan should be consistent with IAMP guidelines.

[4] See Footnote 2 regarding modal and topic plans.

TABLE 1. STATE PLANS AND POLICIES

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Oregon Statewide Planning Goals	• Oregon has 19 Statewide Planning Goals that establish a broad land use and policy framework for jurisdictions to follow.
	• The City's Comprehensive Plan has been acknowledged as consistent with these goals; the Comprehensive Plan and Land Use and Development Regulations implement these goals on the local level. Applicable goals include:
	  ○ Statewide Planning Goal 2 and OAR 660, Division 4: 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. One of statewide planning goals that play a key role in management planning for the interchange areas
	  ○ Statewide Planning Goal 11 and OAR 660, Division 11: Requires cities to plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Requires that urban and rural development be "guided and supported by types and levels of urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable, and rural areas to be served."
	• OAR 660-012 (the TPR) implements Statewide Planning Goal 12. (See review above.)
		• Project recommendations will need to conform with applicable goals, including Citizen Involvement (Goal 1), Land Use Planning (Goal 2), Natural Resources (Goal 5), Air and Water Quality (Goal 6), Economic Development (Goal 9), Housing (Goal 10), Public Facilities and Services (Goal 11), Energy Conservation (Goal 13), and Urbanization (Goal 14).
		• The City will need to demonstrate that conformance in its staff report for the adoption of any land use, Comprehensive Plan, or other regulations.

2024-2027 Statewide Transportation Improvement Program (STIP)	• The STIP is a four-year programming and funding document for transportation projects and programs on state and regional transportation systems.
	• The STIP includes state- and federally funded projects that have approved funding and are expected to be undertaken during the upcoming four-year period.
		• The STIP projects in the study area include:
		  ○ Stewart Park Dr: South Umpqua River Bridge, Key: 22020
		  ○ Signal improvement: Stewart Pkwy and Harvey, Key 22900
		• 2024-2027 STIP projects will be constrained in the travel model as relied-upon improvements to aid the traveling public.
		• Any projects that had previously applied for STIP funding could be included as a plan project; they could seek 2027-2030 STIP eligibility or explore other funding sources.

Interstate 5 Bottleneck Corridor Segment Plan	• The study area for the plan includes I-5 interchanges 119 through 129 along I-5, therefore including the study area for this planning process.
	• Existing and future conditions analysis found that there is not a recurring bottleneck issue on the I-5 mainline travel lanes.
	• There are hotspots within the I-5 study area that exceed capacity during peak periods in the future year, located at interchange ramp merge and diverge points.
	• The following describes key operational challenges identified along the study corridor:
	  ○ Lack of Adequate Shoulders
	  ○ Winston-Green Commuter Pattern
	  ○ Topographical Constraints Restricting Regional Connectivity
	  ○ Southbound Congestion
	  ○ Interchange Ramp Geometric Challenges
		• These plans should consider the findings and recommendations from this I-5 plan.
		• Specific recommendations pertaining to the study area for these plans include:
		  ○ I-5 Southbound Auxiliary Lane (interchange 125 to 124) - Widen I-5 southbound to include an auxiliary lane between interchange 125 on-ramp and interchange 124 off-ramp.
		  ○ Shoulder Widening - Widen or restripe I-5 to add shoulders where feasible.
		  ○ Exit 125 Southbound - Ramp Meters Install ramp meters for southbound on-ramps at Exit 125. (Specific design/ implementation details and impacts to be determined as part of the Exit 125 IAMP.)
		  ○ Exit 124 Northbound/ Southbound Ramp Meters – Install ramp meters for northbound and southbound onramps at Exit 124. (Specific design/implementation details and impacts to be determined as part of the Exit 124 IAMP.)
		  ○ Exit 124 Southbound Geometric Modifications – Reconfigure southbound on-ramp at Exit 124 to reduce friction with mainline. (Specific design/implementation details and impacts to be determined as part of the Exit 124 IAMP.)

Exits 124/125 IAMP (2013, not adopted)	• The goal of the 124/125 IAMP was to establish short-term and long-term goals to improve safety and operations within the IAMP management area, which is entirely within the Roseburg Urban Growth Boundary (UGB). • OHP Policy 3C requires that improvements necessary to support the recommendations of the IAMP are either identified in the local comprehensive plan and committed with an identified funding source or are already in place. • Such improvements may include road networks, channelization, medians, and access control.	• The project should draw on the 2013 plan for ideas about recommendations, including projects and performance standards.
FHWA Interstate Access Policy	• The FHWA's Policy on Access to the Interstate System provides the requirements for the justification and documentation necessary to substantiate any proposed changes in access to the Interstate System. • All new or modified points of access on the interstate system must be approved by FHWA and developed in accordance with federal laws and regulations.	• The IAMP will need to include an operational and safety analysis for any proposed change in access. • Analysis should conclude no significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, and ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. • Expands analysis/inventory to I-5 interchanges 123 and 127.

TABLE 2. LOCAL PLANS AND POLICIES

PLAN, POLICY, OR ORDINANCE	OVERVIEW	PROJECT RELEVANCE
Roseburg Comprehensive Plan	• The Roseburg Comprehensive Plan is a long-range guide for land use in the City's UGB consistent with Statewide Planning Goals. • The Roseburg Comprehensive Plan Transportation Element references the TSP for all transportation-related goals and policies.	• The outcomes of this planning project will need to be consistent with the Comprehensive Plan, the City's overarching policy document. • Amendments to Comprehensive Plan transportation policies (whether in this Comprehensive Plan and/or the TSP) may also be needed in order to implement and be consistent with recommendations from this planning process.
City of Roseburg Transportation System Plan, Volumes I & II (2019)	• The City of Roseburg TSP establishes the City's goals, policies, and action strategies for developing and improving the transportation system within the City's UGB. • I-5 is an ODOT facility and classified as an interstate and Garden Valley Corridor is a City of Roseburg facility classified as a major arterial. • Roadways under ODOT's jurisdiction (I-5 and OR 138) are subject to design standards in ODOT's Highway Design Manual.	• The outcome of this project will aim to be consistent with applicable TSP goals and policies. Specific goals and policies that this project could advance include: ○ Goal 1: Provide a comfortable, reliable, and accessible transportation system that ensures safety and mobility for all members of the community. ▪ Enhance safety by prioritizing and mitigating high collision locations within Roseburg. ○ Goal 2: Create an integrated multimodal transportation system that enhances community livability. ▪ Coordinate transportation and land use decision-making to maximize the effectiveness of Roseburg's transportation system. ▪ Design access points along major arterials to reduce conflicts among vehicles and other modes. • Amendments to Comprehensive Plan transportation policies (whether in the Comprehensive Plan and/or the TSP) may be needed in order to implement and be consistent with recommendations from this planning process.
City of Roseburg Transportation System Plan – Pedestrian and Bicycle Plan (2019) City of Roseburg Bike Routes Plan (2023)	• The plan provides policy guidance for improvements to the bicycle and pedestrian system in the city. • In terms of infrastructure, the plans address on-road bicycle facilities, sidewalks, and paths. Proposed system improvements are categorized as short-term, medium-term, and long-term.	• Future infrastructure improvements and recommendations in the IAMP and corridor plan should reflect or be consistent with improvements recommended in these plans. • An overview of improvements in the TSP Pedestrian and Bicycle Plan found in the IAMP and corridor plan study area includes: ○ New Bike Connection – Duck Pond Street to I-5 Multi-Use Path (cycle track in Garden Valley Boulevard right-of-way or through VA campus) ○ Garden Valley Boulevard Shared-Use Sidewalks ○ W Harvard Avene Shared-Use Sidewalk ○ Duck Pond Trail Wayfinding and Connections on Existing Infrastructure ○ South Umpqua River Sharrow Connections through Downtown ○ Mosher Avenue Bike Facility and Railroad Crossing Improvements • An overview of improvements in the Bike Routes Plan found in the IAMP and corridor plan study area includes: ○ Neighborhood connection between W Harvard Avenue and River Front Park on Umpqua Street ○ Path on south side of Garden Valley Boulevard between Duck Pond Street and I-5 path ○ Widened sidewalk on Garden Valley Boulevard between NW Mulholland Drive and NE Stephens to provide enough space to bike and walk ○ Bike facilities (separated bike lanes) on I-5 overpass in the event that the overpass is reconstructed ○ New bicycle boulevard treatments on Kendall Street and Frear Street to close the gap in the I-5 path near the high school and county fairgrounds ○ High school to County Fairgrounds path connection to close the gap in the I-5 path near the fairgrounds (path on the east side of I-5 in ODOT right-of-way) ○ Neighborhood connection through private property at the northeast corner of the high school

TABLE 2. LOCAL PLANS AND POLICIES

PLAN, POLICY, OR ORDINANCE	OVERVIEW	PROJECT RELEVANCE
UPTD Transit Master Plan (2022)	• The Umpqua Public Transportation District (UPTD) Transit Master Plan provides long-range planning guidance for operating and expanding transit service in the region. • Use passenger count data to identify high priority stops, build out stop amenities, and walking and biking connections.	• Existing transit routes along the I-5 and Garden Valley Blvd Corridor include: ○ UTrans Redline ○ UTrans Sutherlin Blueline ○ CCAT Roseburg Express ○ Lane to Douglas Connector • Future improvements and design concepts in these plans should reflect the existing transit services and planned service enhancements in the study area. Design alternatives in these plans should include consideration for increased route frequency. This planning process could also begin help to address transit system bottleneck points and collaborate with UPTD to identify high-priority stops to build out with amenities and bike/pedestrian connections. • The transit plan identifies areas of support needed to implement transit upgrades in Roseburg. This project could potentially support these areas: ○ Use vehicle location data to identify bottleneck points ○ Work within the city to implement transit signal priority ○ Other improvements to enhance transit • Service improvement recommendations that potentially relate to the study area include: Wolf Creek Modifications; a potential route from Roseburg to Wolf Creek. This route overlaps with Route 99. Potential new stops in Downtown Roseburg and on W Harvard Avenue.
City of Roseburg Parks Master Plan (2008)	• The Parks Master Plan focuses on four key areas: ○ Existing Parks and Facilities ○ Greenways and Natural Areas ○ Park Partnership ○ Local Park Access • The Planning Framework introduced in the plan focuses on providing an interconnected system, enhancing community wellness, maximizing resources, and providing diverse options.	• The parks plan recommends developing the City's bike and pedestrian network; enhancing facilities for these modes within the study area could advance these objectives. • This project will consider recommended improvements in the Parks Master Plan to develop bicycle/pedestrian, transit, and automobile connections. Examples of recommended improvements include: ○ Stewart Park – Regional, popular park. Continue improvements per master plan (2000). ○ Duck Pond – Part of Stewart Park. Improve trails. ○ River Front Park – A variety of recommendations including widening pathways. ○ Gaddis Park – Mainly a sports park at the time of the plan. Recommended improvements to make it a more comprehensive community park, including better trail access points. ○ New neighborhood park (NP-3) north of Garden Valley east of I-5. Acquire, master plan, and develop. ○ Riverside Park – Recommendations including connection trail improvements. ○ Pedestrian/bike paths – A series of existing and proposed paths shown in the plan maps.
Roseburg Downtown Master Plan (1999)	• The Roseburg Downtown Master Plan (July 1999) addresses improvements to the downtown area, including design standards, transportation issues, pedestrian uses, and land use improvements. • The plan identifies key transportation issues that pertain to the freeway system. • The plan recommends efficient entry portals downtown, connection with the South Umpqua River, improved signage leading to downtown from I-5, and converting several downtown streets to two-way.	• Future improvements in the IAMP and corridor plan should be consistent with the Downtown Master Plan and incorporate relevant projects, although with consideration for the older date of the plan. • A few transportation-related recommendations from the Downtown Plan found in this project's study area include: ○ Convert downtown streets to two-way with some exceptions ○ Retain the southbound Pine Street/northbound Stephens Street couplet ○ Retain the eastbound Oak Street/westbound Washington Street couplet ○ Retain the southbound Jackson Street/northbound Main Street couplet
City of Roseburg Capital Improvement Plan (2021 – 2026)	• The City of Roseburg 2021 - 2026 Capital Improvement Plan (CIP), adopted in April 2021, programs the funding and construction of significant capital projects for the next five years. • The CIP addresses parks, bike trail, sidewalk/streetlight/traffic signal, transportation, airport, urban renewal, City facility/building replacement, storm drainage, and water projects. • Several of these categories other than transportation – like parks, bike trails, airport, and urban renewal – include transportation-related projects.	• Projects identified in the CIP will be considered when design solutions and improvements are formulated and evaluated as part of this planning process. • An outcome of this planning process will be to identify additional infrastructure needs and prioritize projects that will be incorporated in the CIP when it is next updated, particularly projects which are eligible for URA funds. • The following are funded and programmed projects in the transportation element of the CIP that may have bearing in this project's study area: ○ Project 1: Systemic Intersection Improvements ○ Project 2: Systemic Bike/Ped Improvements ○ Pavement Management Plan ○ HBR – ODOT Bridge Replacement Matches • Note: The CIP also includes the "Garden Valley Blvd. Corridor Study," which is the basis for the Garden Valley Corridor Plan element of this project.

TABLE 2. LOCAL PLANS AND POLICIES

PLAN, POLICY, OR ORDINANCE	OVERVIEW	PROJECT RELEVANCE
Roseburg Code of Ordinances (Land Use and Development Regulations) – 12.06.020 Public Improvement Requirements.	• The Roseburg Land Use and Development Regulations implement the long-range land use vision embodied in the Comprehensive Plan and TSP. • They regulate uses within the city and establishes standards for development and land divisions.	• Key existing development standards relevant to this project are summarized below. o 12.06.020.A. Driveways must be spaced min. 500' apart (arterial streets) and should be on the lowest classified street adjacent to the parcel. o 12.06.020.B.2. *"Permits for access to State highways shall be subject to review and approval by the Oregon Department of Transportation (ODOT), except when ODOT has delegated this responsibility to the City. In that case, the City shall determine whether access is granted based on ODOT and City adopted standards."* o 12.06.020.C. Traffic Impact Study. *"A Traffic Impact Study shall be required based on anticipated negative significant traffic and safety impacts projected to be caused by the proposed development as determined by the Community Development Director after a recommendation from the Public Works Director."* o 12.06.020.D and 12.06.020.E regulate intersection design; and sidewalks, curbs, gutters, and storm drainage, respectively. • Projects or improvements recommended in this planning process will need to be consistent with applicable standards, or may be subject to applicable variance and exception procedures. • Amendments to Land Use and Development Regulations may be needed in order to implement and be consistent with recommendations from this planning process.
Garden Valley Corridor Study (1992)	• The Garden Valley Corridor Study develops an overall transportation strategy to provide enhanced transportation services in a topographically constrained area. • The three primary overarching goals are to: 1) Enhance existing transportation services on Garden Valley Blvd, 2) Provide a long-range plan for accommodating traffic volumes (through 2010) on Garden Valley Blvd, and 3) Minimize any adverse social and environmental impacts associates with the project.	• The Study recommended several projects along the corridor for consideration by City governing bodies. • Most of the recommended projects relate to signal timing and access management. Since the Study was published in 1992, a few of the access management (raised median) recommendations have been completed but the larger traffic control and circulation projects have not. • The GVCP and IAMP may consider remaining projects during alternatives development and evaluation.

3 CONTEXT

3.1 FUNCTION OF THE INTERCHANGES AND GARDEN VALLEY CORRIDOR

In order to protect the function of the transportation network and the state and city's investment in the interchange subareas and Garden Valley Boulevard, the IAMP and GVCP must establish the intended functions of the interchanges and corridor within the context of the local, regional, and statewide transportation network.

3.1.1 Interchanges

Interchanges 124 and 125 are urban interchanges serving Roseburg. Through the interchange subarea, I-5 is classified by ODOT as an urban Interstate Highway and is further designated as a state freight route, reduction review route, high clearance route and part of the National Highway System (NHS). The 124 and 125 interchanges are two of the four interchanges that serve the City of Roseburg. Interchange 124 links I-5 to the W Harvard Avenue and OR 138 corridors while interchange 125 connects to Garden Valley Boulevard.

W Harvard Avenue and OR 138 are part of the 124 interchange and are a major east-west connector through the City of Roseburg, serving a mix of commercial and residential uses. W Harvard Avenue is designated as an arterial and is operated by the City of Roseburg to the west of the I-5 southbound off-ramp. To the east, W Harvard Avenue is also OR 138 and a designated NHS route, which is operated by ODOT. Garden Valley Boulevard is part of the 125 interchange and GVCP subarea and is described in further detail in section 3.1.2 below.

The primary functions of I-5 are to provide safe and efficient, high-speed and high-volume traffic movement, inter-regional mobility, facilitate efficient and reliable interstate and regional truck movement, while providing adequate vertical clearance for oversize loads.

3.1.2 Garden Valley Corridor

Garden Valley Boulevard is an important east-west corridor within Roseburg, providing access to a number of retail and professional businesses in close proximity to I-5 interchange 125. It is classified as an urban minor arterial west of the southbound off-ramp and as an urban principal arterial to the east until it intersects with Stephens Street. Between the interchange 125 southbound ramp terminal and Stephens Street, Garden Valley Boulevard is designated as a non-state NHS route. This designation subjects the road to specific design standards. Garden Valley Boulevard serves local, regional and interstate through traffic accessing commercial businesses and critical government and medical services, including the Veterans Affairs Health Care Facility.

3.2 URBAN DESIGN CONTEXT

ODOT's HDM establishes a framework for determining the urban context along state roadways. The HDM's approach to context-sensitive design should be considered when planning and designing state roadway improvements, as well as modifications to existing roadways. Identifying the context helps to understand the relative need of each type of users and the "intensity of use" that can be expected within each urban context. Table 3 summarizes the six types of land use contexts as described in the HDM.

TABLE 3. ODOT URBAN CONTEXT MATRIX

LAND USE CONTEXT	**BUILDING SETBACKS** DISTANCE FROM THE BUILDING TO THE PROPERTY LINE	**BUILDING ORIENTATION** BUILDINGS WITH FRONT DOORS THAT CAN BE ACCESSED FROM THE SIDEWALK ALONG A PEDESTRIAN PATH	**LAND USE** EXISTING OR FUTURE MIX OF LAND USES	**BUILDING COVERAGE** PERCENT OF AREA ADJACENT TO RIGHT-OF-WAY WITH BUILDINGS, AS OPPOSED TO PARKING, LANDSCAPE, OR OTHER USES	**PARKING** LOCATION OF PARKING IN RELATION TO THE BUILDINGS ALONG THE RIGHT-OF-WAY	**BLOCK SIZE** AVERAGE SIZE OF BLOCKS ADJACENT TO THE RIGHT-OF-WAY
TRADITIONAL DOWNTOWN / CENTRAL BUSINESS DISTRICT	Shallow/None	Yes	Mixed (Residential, Commercial, Park/Recreation)	High	On-street/garage/shared in back	Small, consistent block structure
URBAN MIX	Shallow	Some	Commercial fronting, residential behind or above	Medium	Mostly off-street/Single row in front/In back/On side	Small to medium blocks
COMMERCIAL CORRIDOR	Medium to Large	Sparse	Commercial, Institutional, Industrial	Low	Off-street/In front	Large blocks, not well defined
RESIDENTIAL CORRIDOR	Shallow	Some	Residential	Medium	Varies	Small to medium blocks
SUBURBAN FRINGE	Varies	Varies	Varied, interspersed development	Low	Varies	Large blocks, not well defined
RURAL COMMUNITY	Shallow/None	Some	Mixed (Residential, Commercial, Institutional, Park/Recreation)	Medium	Single row in front/In back/On side	Small to medium blocks

Source: ODOT HDM (2024), Table 200-5.

3.2.1 Recommended Urban Contexts

The recommended urban context for W Harvard Avenue and the Garden Valley Corridor is provided below. These recommendations are based on a review of the existing corridors and local plans including the Roseburg TSP, the Comprehensive Plan and Zoning Designations, and the future desired land use along the corridor.

The following urban context are recommended for W Harvard Avenue and Garden Valley Boulevard within the study area:

- Garden Valley Boulevard from NW Stewart Parkway to NE Stephens St: **Commercial Corridor**
- W Harvard Avenue from the I-5 southbound off-ramp to W Madrone St: **Urban Mix**
- W Harvard Avenue from W Harrison St to W Bellows St: **Commercial Corridor**

Modal Considerations

The importance of the user type in connection to varying land use contexts as identified in the HDM is outlined in Table 4. It is important to review the user needs as it will likely influence performance-based design decision framework recommendations.

TABLE 4. GENERAL MODAL CONSIDERATIONS IN DIFFERENT URBAN CONTEXTS

LAND USE CONTEXT	MOTORIST	FREIGHT	TRANSIT	BICYCLIST	PEDESTRIAN
Traditional Downtown/CBD	Low	Low	High	High	High
Urban Mix	Medium	Low	High	High	High
Commercial Corridor	High	High	High	Medium	Medium
Residential Corridor	Medium	Medium	Low	Medium	Medium
Suburban Fringe	High	High	Varies	Low	Low
Rural Community	Medium	Medium	Varies	High	High

High: Highest level facility should be considered and prioritized with other modal treatments.
Medium: Design elements should be considered; trade-offs may exist based on desired outcomes and user needs.
Low: Incorporate design elements as space permits.

Source: ODOT HDM (2024)

Urban Context Design Guidance

The design considerations based on the guidance provided in the ODOT HDM is described below.

Commercial Corridor:
"Multimodal access to destinations must be balanced with vehicle and freight throughput. Vehicle speeds are typically 30 to 35 mph, depending on the roadway function. Medians facilitate access to commercial destinations. Demand for transit service is moderate to high due to the prevalence of commercial land use. Bicycle and pedestrian connections to transit are emphasized as part of the bicycle network. Boarding and alighting occur at the curbside. Preferred bicycle and pedestrian facilities are separated from travel lanes by a buffer."

Urban Mix:
"To best serve all users, vehicle speeds are typically 25 to 30 mph, and higher levels of congestion are acceptable. Transit stops should be placed in proximity to origins and destinations. Bicycle and pedestrian facilities should be relatively wide and comfortable to serve anticipated users. Where low speeds cannot be achieved, practitioners must consider a buffer between travel lanes and bicycle and pedestrian facilities. Curbside uses are important and may include loading/unloading, parking (vehicles, bicycles, etc.), and other uses. Landscaping and street trees, following ODOT placement and spacing guidelines, are appropriate in this context."

Recommended Roadway Characteristics by Context

The existing conditions along the two corridors and the recommended urban context, as described in the HDM, are compared in Table 5.

TABLE 5. DESIGNING BASED ON THE RECOMMENDED URBAN CONTEXT

URBAN CONTEXT	TARGET SPEED (MPH)	MEDIAN	BICYCLE FACILITY	SIDEWALK	TARGET PEDESTRIAN CROSSING SPACING RANGE (FT)	ON-STREET PARKING
Commercial Corridor	30 – 35	Typically used for safety/ operational management	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks, with space for transit stations	500 – 1,000	Not applicable
Urban Mix	25 – 30	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters)	250-550 (1-2 blocks)	Consider on-street parking if space allows
Existing Conditions						
Garden Valley Blvd (NW Stewart Pkwy to NE Stephens St)	30	Two-Way Left-Turn Lane	Bike Lane (west of I-5)	Continuous unbuffered sidewalks, minimal space for transit stations	Varies	None
W Harvard Ave (I-5 SB Off-Ramp to W Madrone St)	30	Two-Way Left-Turn Lane	Bike Lane	Continuous unbuffered sidewalks, minimal space for transit stations	Varies	None

Source: ODOT HDM (2024), Google Street View

4 GOALS, OBJECTIVES & EVALUATION CRITERIA

Goals and objectives reflect the vision for the project and should be consistent with applicable local, regional, state, and federal plans and policies. Goals provide direction for where a jurisdiction would like to go; corresponding objectives provide more detail on how to achieve the goal or desired specific outcomes related to the goal.

The goals and objectives for the IAMP and GVCP build on previous planning efforts and are used to create an evaluation framework to help prioritize projects developed through this planning process. Although there are similarities between the desired outcomes for the IAMP and GVCP, each plan has its own unique set of goals, objectives and evaluation criteria to account for applicable statewide or local policies.

The evaluation framework is an extension of the goals and objectives and provides a consistent method to aid in identifying the highest priority projects. For this effort, projects will be evaluated using a qualitative method. The proposed evaluation criteria are based on the proposed goals and objectives. A qualitative process using the evaluation criteria will be used to evaluate alternatives and prioritize projects developed through the transportation system plan update. The rating method used to evaluate the alternatives is described below.

- Most Desirable: The concept addresses the criterion and/or makes substantial improvements in the criteria category. [+1, ●]
- No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria. [0, ◎]
- Least Desirable: The concept does not support the intent of and/or negatively impacts the criteria category. [-1, ○]

4.1 I-5 EXITS 124 AND 125 INTERCHANGE AREA MANAGEMENT PLAN

Goals, objectives and priorities for the interchanges were prepared as part of the 2013 124/125 IAMP planning process (not adopted) through a collaborative process with a Technical Advisory Committee (TAC), Citizen Advisory Committee (CAC), and the public. As stated in Policy 3C of the Oregon Highway Plan, "it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways." The proposed IAMP goals, objectives and evaluation criteria are presented in Table 6 and are informed by previous planning efforts, design context and the plans and policy review.

4.2 GARDEN VALLEY CORRIDOR

The GVCP works together with the IAMP toward developing an appropriate overall transportation strategy for the City's Garden Valley Corridor. The question of focus remains the same from the 1992 study: How does the City provide for enhanced transportation services within a defined geographic corridor while being responsible to existing topographic, political, operational, and socioeconomic constraints? The proposed GVCP goals, objectives and evaluation criteria are presented in Table 7 and are informed by that question, previous planning efforts, design context and the plans and policy review.

TABLE 6. EXITS 124/125 IAMP GOALS, OBJECTIVES AND EVALUATION CRITERIA

IAMP GOALS	OBJECTIVE	EVALUATION CRITERIA
Goal 1: Safety, Mobility and Accessibility Protect the function and operation of the interchanges at 124 and 125 and their intersecting crossroads during the 20-year planning horizon.	• Enhance mobility and accessibility for all transportation modes and users while continuing to preserve the intended function of the interchanges and their cross-streets. • Provide safe and efficient operations between the connecting roadways (and the local street network, if applicable) within the IAMP study area.	• Does the concept comply with the roadway functional classification? • Does the concept meet operational performance measures? • Does the concept move in the direction of meeting access spacing standards? • Does the concept address a documented safety concern? • Does concept meet the guidelines under the HDM based on urban context?
Goal 2: Vibrant Community Create an integrated multimodal transportation system that enhances community livability and prioritizes safety.	• Design access points along Harvard Avenue and the Garden Valley corridor to reduce conflicts among vehicles and other modes. • Reduce level of traffic stress on vulnerable road users. • Address existing safety issues at location with a history of fatal and severe injuries.	• Does the concept provide or improve multimodal connections? • Does the concept reduce the level of stress experienced by vulnerable road users and/or provide them with safe, convenient, and direct routes? • Does the concept address a crash history of fatal/serious-injuries or with vulnerable users?
Goal 3: Transportation Options Provide for a multimodal transportation system that enhances connectivity.	• Develop and maintain bicycle and pedestrian facilities that encourage non-vehicular travel. • Support frequent and reliable transit service for transit stops along the interchange crossroads. • Provide for improved local street connectivity.	• Does the concept provide “active” modal options and reduce reliance on single-occupancy vehicle trips? • Does the concept increase alternatives to traveling through the interchange by vehicle?
4. Economic Vitality Advance regional sustainability by providing a transportation system that improves economic vitality and facilitates the local and regional movement of people, goods, and services.	• Support transportation system management with strategies to improve traffic flow. • Facilitate access to local businesses by all modes of transportation. • Facilitate the through-movement of goods and services along the I-5 corridor.	• Does the concept promote the movement of freight? • Are there right-of-way impacts by the concept that reduce the economic vitality of the area? • Does the concept encourage tourism and/or development of desired land uses and activities?
5. Implementation Provide a sustainable transportation system through responsible stewardship of financial and environmental resources.	• Develop alternatives that consider the surrounding topographical context, environmental impacts, construction cost, and potential phasing strategies. • Encourage preservation of the existing transportation system. • Ensure that the planned land uses are consistent with long-term function of the interchange and the state and local transportation system.	• Does the concept element have the ability to be implemented over time? • To what degree does the concept leverage a positive return on investment?

TABLE 7. GVCP GOALS, OBJECTIVES AND EVALUATION CRITERIA

GVCP GOALS	OBJECTIVE	EVALUATION CRITERIA
Goal 1: Safety, Mobility and Accessibility Provide a comfortable, reliable, and accessible transportation corridor that ensures safety and mobility for all users.	• Enhance mobility and accessibility for all transportation modes while continuing to preserve the intended function of Garden Valley Boulevard. • Provide safe and efficient operations between Garden Valley Boulevard and connecting accesses.	• Does the concept comply with the roadway functional classification? • Does the concept meet operational performance measures? • Does the concept move in the direction of meeting access spacing standards? • Does the concept address a documented safety concern?
Goal 2: Vibrant Community Create an integrated multimodal transportation system that enhances community livability and prioritizes safety.	• Design access points along the Garden Valley corridor to reduce conflicts among vehicles and other modes. • Reduce level of traffic stress on vulnerable road users. • Address existing safety issues at location with a history of fatal and severe injuries.	• Does the concept provide or improve multimodal connections? • Does the concept reduce the level of stress experienced by vulnerable road users and/or provide them with safe, convenient, and direct routes? • Does the concept address a crash history of fatal/serious-injuries or with vulnerable users?
Goal 3: Transportation Options Provide for a multimodal transportation system that enhances connectivity.	• Develop and maintain bicycle and pedestrian facilities that encourage non-vehicular travel. • Support frequent and reliable transit service for transit stops in the Garden Valley corridor. • Provide for improved local street connectivity.	• Does the concept provide “active” modal options and reduce reliance on single-occupancy vehicle trips? • Does the concept increase alternatives to traveling along Garden Valley Boulevard by vehicle?
4. Economic Vitality Advance regional sustainability by providing a transportation system that improves economic vitality and facilitates the local and regional movement of people, goods and services.	• Support transportation system management with strategies to improve traffic flow. • Facilitate access to local businesses by all modes of transportation. • Facilitate the through-movement of goods and services along the Garden Valley corridor.	• Does the concept promote the movement of freight? • Are there right-of-way impacts by the concept that reduce the economic vitality of the area? • Does the concept encourage tourism and/or development of desired land uses and activities?
5. Implementation Provide a sustainable transportation system through responsible stewardship of financial and environmental resources.	• Develop alternatives that consider the surrounding topographical context, environmental impacts, construction cost, and potential phasing strategies. • Encourage preservation of the existing transportation system. • Ensure that the planned land uses are consistent with long-term function of the corridor and the connecting state and local transportation system.	• Does the concept element have the ability to be implemented over time? • To what degree does the concept leverage a positive return on investment?