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TECHNICAL MEMORANDUM

October 24, 2024 Project# 27003.041

To: Teresa Penninger, Oregon Department of Transportation

From: Kristine Connolly, PE, Michael Ruiz-Leon, PE, Nick Foster, AICP, RSP[1]

Project: I-84 Exit 159 Tower Road IAMP

Subject: Policy Review

This memorandum documents a review of existing plans, strategies, and codes applicable to the Interstate 84 (I-84) Exit 159 Tower Road Interchange Area Management Plan (IAMP). The review explains the relationship and identifies any potential conflicts with the transportation system planning in the area and the project. The documents reviewed establish transportation standards, targets, and guidelines with which the IAMP shall be consistent. The findings and recommendation of the IAMP process will be incorporated into Morrow County's Transportation System Plan pending County adoption and Oregon Transportation Commission (OTC) approval.

Table 1 lists the documents reviewed, and their project relevance to the Exit 159 Tower Road IAMP.

Table 1. Plans and Policies Reviewed

Document	Project Relevance
Federal and State	
FHWA Access to Interstate System Policy	The IAMP will include an operation and safety analysis based on the required contents provided under the Federal Highway Administration (FHWA) Access to System Policy. The Oregon Department of Transportation (ODOT) is responsible for the submission of any new or revised access point requests to the applicable FHWA Division office for review.
2024-2027 Statewide Transportation Improvement Program	The current Statewide Transportation Improvement Program (STIP) includes projects within the study area. The I-84: Columbia River Hwy Culverts Phase 2 (Key 21757) includes the repair and replacement of culverts spanning the I-84 study area. The I-84: from I-5 to the Idaho border (Key 22740) includes the installation of National Electric Vehicle Infrastructure (NEVI) fast charging stations every 50 miles along the I-84 study area. The I-84: Tower Road - Stanfield (Key 22517) includes design and construction to resurface pavement and bridges along the I-84 study area.
ODOT Title VI Guidance	The IAMP will address Title VI and Environmental justice populations to ensure the plan is consistent with the ODOT Title VI Guidelines. Title VI and Environmental Justice populations will be identified and considered in the alternatives development.
ODOT IAMP Guidelines	The project team will use the IAMP Guidelines in the development of the project, with strong consideration for the identified implementation measures.
Oregon Transportation Plan	Consistent with a central Oregon Transportation Plan (OTP) policy, the IAMP will seek to maximize the performance of the existing local transportation system using technology and system management before considering larger and costlier additions to the system and consider the goals of the Oregon Highway Plan (OHP) in the plan development.
Transportation Planning Rule (OAR 660-012)	The I-84 Exit 159 Tower Road IAMP project will follow guidance provided in the Transportation Planning Rule (TPR) for transportation roadway projects such as an IAMP.

Document	Project Relevance
Access Management Rule (OAR 734-051)	Analysis for the Policy Review and project recommendations will need to reflect state requirements for state facilities. The Plan will comply with, or move in the direction of compliance with, access management and spacing standards on I-84. Implementation measures that will be developed for the Plan may entail amendments to County Code to ensure local development requirements are consistent with state access management requirements as well as reflect recommendations for safety and access management.
Oregon Highway Plan	OHP policies provide guidance related to the accessibility, mobility, and function of state highways. The IAMP will consider policies in the OHP to guide proposed improvements, modifications, or local policies that could affect any of the state facilities in the study area. The IAMP is being developed in coordination with ODOT so that projects, policies, and regulations proposed as part of the Plan will be consistent with the standards and targets established in the OHP related to safety, access, and mobility.
Oregon Bicycle and Pedestrian Plan	The policies and design guidance in the Oregon Bicycle and Pedestrian Plan (OBPP) apply to state highway facilities in the study area. State policy and design guidance will be considered in evaluating and planning for bicycle and pedestrian system elements for the project.
Oregon State Rail Plan	The planning process will consider the needs of freight movement by rail within the project area through the development of the IAMP because of the nearby presence of the Union Pacific Railroad line to the north of the study area interchange.
Oregon Freight Plan	Maintaining and enhancing efficiency of the truck and freight system in the study area will be an integral part of the IAMP. The public advisory committee will include members that represent freight interests. Additionally, the project will include planned outreach activities to freight users.
Oregon Public Transportation Plan	The Policy Review will consider the needs of the transit system in Morrow County, while developing recommendations considering public transportation facilities.
Oregon Aviation Plan	The planning process will consider the needs of movement by air travel within the project area through the development of the IAMP because of the nearby presence of the Boardman Airport to the south of the study interchange.
Oregon Transportation Safety Action Plan	The Oregon Transportation Safety Action Plan (TSAP) will be used as a resource while preparing the Policy Review. The project will inform the identification of transportation improvements that improve safety for all road users.
Local	
Morrow County Comprehensive Plan	The IAMP will be consistent with goals and policies listed in the County's Comprehensive Plan.
Morrow County Zoning Ordinance	Recommendations from the IAMP process will be formed with consideration of land use and development policies. The IAMP may recommend changes to the ordinance.
Morrow County Airport Overlay Zone	The IAMP process will be formed with the consideration of the Boardman Airport overlay zone and its relevant land use and development policies.
Morrow County Public Works Standards	The IAMP study area includes rural arterial, rural collector, and rural gravel roads. As the study progresses, the public works standards will be considered for new or replaced roadways.
Morrow County Transportation System Plan	Roadway and land development within the IAMP study area will follow the Transportation System Plan (TSP) policies outlined in this memorandum. The development outlined in the Roadway System Plan affects the connectivity of roads within the IAMP study area to major roads and highways within the County.
Morrow County Capital Improvement Plan	In the medium priority category, the TSP calls for improvements to the I-84/Tower Road Interchange and Tower Road itself. Improvements recommended in the IAMP may influence the County's future Capital Improvement Plan (CIP).

Document	Project Relevance
Morrow County Pedestrian / Bicycle Plan	The IAMP's recommendations for road additions and improvements should include wide shoulders and/or separated paths to encourage pedestrian and bicycle use.
Boardman Airport Master Plan	The planning process will consider the needs of movement by air travel within the project area through the development of the IAMP because of the nearby presence of the Boardman Airport to the south of the study area interchange. The IAMP's recommendations for road additions and improvements will consider access to airport development areas.
Columbia River Heritage Trail Master Plan	The IAMP's recommendations for road additions and improvements will consider the Columbia River Heritage Trail Master Plan as well as bicyclists, pedestrians, and other non-motorized travel in its development.

FEDERAL AND STATE DOCUMENTS

Federal Highway Administration (FHWA) Access to System Policy

The Federal Highway Administration's (FHWA) policy established the federal requirements for new or improved access to the interstate system. The policy states the following:

It is in the national interest to preserve and enhance the Interstate System to meet the needs of the 21st Century by assuring that it provides the highest level of service in terms of safety and mobility. Full control of access along the Interstate mainline and ramps, along with control of access on the crossroad at interchanges, is critical to providing such service. Therefore, the Federal Highway Administration's (FHWA) decision to approve new or revised access points to the Interstate System under Title 23, United States Code (U.S.C.), Section 111, must be supported by substantiated information justifying and documenting that decision. The FHWA's decision to approve a request is dependent on the proposal satisfying and documenting the following requirements.

1) An operational and safety analysis that have proven the proposed access changes does not have "a significant adverse impact on the safety and operation of the Interstate facility" or connected local street network. The area of analysis should at minimum expand from the interstate to the to the nearest major intersection on either side of proposed change in access.

2) The proposed access connects to a public road only and will provide for all traffic movements. The report should demonstrate the proposed change meets the current standards of 23 CFR 625.2(a), 625.4(a)(2), and 655.603(d) and mitigation proposed to compensate for the missing movements, including wayfinding signage, impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc.

Project Relevance: The IAMP will include an operation and safety analysis based on the required contents provided under the FHWA Access to System Policy. The Oregon Department of Transportation (ODOT) is responsible for the submission of any new or revised access point requests to the applicable FHWA Division office for review.

Statewide Transportation Improvement Program

The State Transportation Improvement Program (STIP) is Oregon's capital improvement program for state and regional transportation projects. The STIP includes projects on local, county, state, and federal transportation systems and is required to be updated at least every four years by federal regulations. The ODOT STIP contains projects for four years and is updated every two years. The current STIP is from 2024-2027.

Project Relevance: The current STIP includes projects within the study area. The I-84: Columbia River Hwy Culverts Phase 2 (Key 21757) includes the repair and replacement of culverts spanning the I-84 study area. The I-84: from I-5 to the Idaho border (Key 22740) includes the installation of National Electric Vehicle Infrastructure (NEVI) fast charging stations every 50 miles along the I-84 study area. The I-84: Tower Road - Stanfield (Key 22517) includes design and construction to resurface pavement and bridges along the I-84 study area.

ODOT Title VI Guidelines

Title VI of the Civil Rights Act of 1964 prohibits discrimination or exclusion against groups or individuals based on race, color, national origin, sex, age, and disability in programs that receive federal fundings. Executive Order 12989 requires minority and low-income populations not be disproportionately impacted by federally funded projects.

Title VI Guidance for Transportation Planning was released by the ODOT Transportation Development Division (TDD) in January 2015. The document provides guidance to local, MPOs, and ODOT staff in annual reporting to the FHWA and Federal Transit Administration (FTA) regarding compliance to Title VI guidelines for federally funded projects. The guide provides guidance on addressing the contextual needs of Title VI protected populations and identifying existing and future Title VI and environmental justice population is required in planning projects. The guide provides a four-phase checklist for transportation planning projects with suggested documenting and reporting.

Project Relevance: The IAMP will address Title VI and Environmental justice populations to ensure the plan is consistent with the ODOT Title VI Guidelines. Title VI and Environmental Justice populations will be identified and considered in the alternatives development.

ODOT IAMP Guidelines

The IAMP Guidelines updated by ODOT in April 2013 provide guidance in the preparation of IAMPs. The guidelines serve as an educational and consistency tool, providing background regarding the elements, intended outcomes, and how to meet expectations and objectives with IAMPs. The guidelines have the following sections:

- Overview
- IAMP contents and level of analysis
- Timing
- IAMP process
- Relationship of ODOT and local governments

- Relationship to NEPA
- Schedule, cost and funding

As part of the "IAMP Process," the guidelines provide a typical process flow chart containing the typical needed elements in the IAMP and identifies ODOT, local government, and/or project management team action and potential public workshops. The typical elements are identified in the following sections:

- IAMP Definition, Background, and Authority
- Existing Conditions Inventory and Data Analysis
- Future Conditions Analysis
- Alternatives Development and Analysis
- Interchange Area Management Plan
- Adoption and Implementation

Project Relevance: The project team will use the IAMP Guidelines in the development of the project, with strong consideration for the identified implementation measures.

Oregon Transportation Plan

The Oregon Transportation Plan (OTP) is the state's long-range multi-modal transportation plan that addresses the future transportation needs of the State of Oregon through the year 2050. The primary function of the OTP is to establish goals, policies, strategies, and initiatives that are translated into a series of modal plans, such as the Oregon Highway Plan. The OTP considers all modes of Oregon's transportation system, including Oregon's airports, bicycle and pedestrian facilities, highways and roadways, pipelines, ports and waterway facilities, public transportation, and railroads. It assesses state, regional, and local public and private transportation facilities. In addition, the OTP provides the framework for prioritizing transportation improvements based on varied future revenue conditions, but it does not identify specific projects for development.

The OTP provides broad policy guidance and sets six overarching goals for the state.[1] Through these goals and associated policies and strategies, the OTP emphasizes:

- Improving opportunity and livability for all people who live, work, and recreate in Oregon.
- Improve access to safe and affordable transportation for all users.
- Create a resilient multimodal transportation system.
- Invest public resources using open, data-driven decision-making processes.
- Maintain a safe transportation system for all users and modes.
- Minimize transportation climate change impacts.

The Implementation and Investment Strategies section of the OTP describes the implementation process and how state multimodal, modal/topic plans, regional and local transportation system plans (TSPs), and master plans will further refine the OTP's broad policies and investment levels. Local TSPs can further OTP implementation by defining standards, instituting performance measures, and requiring that operational

[1] The six goals are Goal 1 – Economic and Community Vitality; Goal 2 – Social Equity; Goal 3 – Mobility; Goal 4 – Stewardship of Public Resources; Goal 5 – Safety; and Goal 6 – Sustainability and Climate Action.

strategies be developed. Additionally, this section of the OTP provides investment frameworks and key initiatives to be consulted in developing TSP projects and implementation measures.

Project Relevance: Consistent with a central OTP policy, the IAMP will seek to maximize the performance of the existing local transportation system using technology and system management before considering larger and costlier additions to the system and consider the goals of the Oregon Highway Plan (OHP) in the plan development.

Transportation Planning Rule (OAR 660-012)

OAR 660-012, also known as the TPR, implements Statewide Planning Goal 12: Transportation. The TPR contains numerous requirements governing transportation planning and project development. In addition to guiding local plan development, the TPR requires local governments to perform an enhanced review of select roadway projects, such as the Policy Review.

Compliance with OAR 660-012-0830 requires local governments to initiate an authorization process through action of the governing body, designate the project limits and characteristics of the proposed facility, designate a facility impact area and determine affected jurisdictions, conduct an engagement-focused equity analysis of the proposed facility, develop a public involvement strategy, conduct an alternatives review as provided, choose to move forward with an authorization report, complete an authorization report, and publish the authorization report.

Project Relevance: The I-84 Exit 159 Tower Road IAMP project will follow guidance provided in the TPR for transportation roadway projects such as an IAMP.

Access Management Rule (OAR 734-051)

OAR 734-051 defines the state's role in managing access to highway facilities to maintain functional use and safety and to preserve public investment. OAR 734-051 sets access management spacing standards for driveways and intersections on the state highway system as well as spacing standards for interchanges and approaches in interchange areas. The spacing standards for driveways and intersections are based on the state highway classification and differ depending on posted speed and average daily traffic volume. In contrast, the spacing standards for interchanges is based on the configuration of the crossroad (two-lane versus multi-lane) and the category of the mainline (freeway versus expressways or state highways) and differ depending on the type of area (fully developed urban, urban, or rural) and/or speed of the mainline. Information provided in Tables 7 or 8 (See OAR 734-051-4020) apply to potential future interchange improvements.

Project Relevance: Analysis for the Policy Review and project recommendations will need to reflect state requirements for state facilities. The Plan will comply with, or move in the direction of compliance with, access management and spacing standards on I-84. Implementation measures that will be developed for the Plan may entail amendments to County Code to ensure local development requirements are consistent with state access management requirements as well as reflect recommendations for safety and access management.

Oregon Highway Plan

The Oregon Highway Plan (OHP) is a modal plan of the OTP that guides planning, operations, and financing for the Oregon Department of Transportation (ODOT) Highway Division. Policies in the OHP emphasize the efficient management of the highway system to increase safety and to extend highway capacity, to establish partnerships with other agencies and local governments, and to use new techniques to improve road safety and capacity. These 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 following policies are relevant to the IAMP process.

POLICY 1A: STATE HIGHWAY CLASSIFICATION SYSTEM

The OHP classifies the state highway system into four levels of importance: Interstate, Statewide, Regional, and District. ODOT uses this classification system to guide management and investment decisions regarding state highway facilities. The system guides the development of the facility plans, as well as ODOT's review of local plan and zoning amendments, highway project selection, design and development, and facility management decisions including road approach permits.

The Columbia River Highway (I-84) is an interstate in the state classification system. The purpose and management objectives of these highways are provided in Policy 1A and summarized below.

- Interstate Highways typically provide connections to major cities, regions of the state, and other states. A secondary function in urban areas is to provide connections for regional trips within the metropolitan area. The Interstate Highways are major freight routes, and their objective is to provide mobility. The management objective is to provide safe and efficient high-speed continuous-flow operation in urban and rural areas.

POLICY 1C: STATE HIGHWAY FREIGHT SYSTEM

The primary purpose of the State Highway Freight System is to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight system. This freight system, which is made up of the Interstate highways and select Statewide, Regional, and District highways, includes routes that carry significant tonnage of freight by truck and that serve as the primary Interstate and intrastate highway freight connection to ports, intermodal terminals, and urban areas. Highways included in this designation have higher highway mobility standards than other Statewide highways. I-84 is on the state highway freight system.

POLICY 1F: HIGHWAY MOBILITY STANDARDS ACCESS MANAGEMENT POLICY

Policy 1F sets mobility standards for ensuring a reliable and acceptable level of mobility on the state highway system. The standards are used to assess system needs as part of long-range, comprehensive planning for transportation projects, during development review, and to demonstrate compliance with the Transportation Planning Rule. Significant amendments to Policy 1F were adopted in 2011 to address concerns that state transportation policy and requirements have led to unintended consequences and

inhibited economic development. Policy 1F now provides a clearer policy framework for considering measures other than volume-to-capacity (v/c) ratios for evaluating mobility performance.

Table 2 presents mobility targets for the state facilities in the project area. As indicated above, I-84 is classified as an Interstate Highway and designated freight route within the study area and is outside the City of Boardman's urban growth boundary. The v/c ratio target for the interchange study intersections is 0.70.

Table 2. V/C Ratio Targets for Peak Hour Operating Conditions (OHP Table 6)

VOLUME TO CAPACITY RATIO TARGETS OUTSIDE METRO[17A, B, C, D]							
Highway Category	**Inside Urban Growth Boundary**					**Outside Urban Growth Boundary**	
	STA[E]	**MPO**	**Non-MPO Outside of STAs where non-freeway posted speed <= 35 mph, or a Designated UBA**	**Non-MPO outside of STAs where non-freeway speed > 35 mph but < 45 mph**	**Non-MPO where non-freeway speed limit >= 45 mph**	**Unincorporated Communities[F]**	**Rural Lands**
Interstate Highways	N/A	0.85	N/A	N/A	0.80	0.70	0.70
Statewide Expressways	N/A	0.85	0.85	0.80	0.80	0.70	0.70
Freight Route on a Statewide Highway	0.90	0.85	0.85	0.80	0.80	0.70	0.70
Statewide (not a Freight Route)	0.95	0.90	0.90	0.85	0.80	0.75	0.70
Freight Route on a regional or District Highway	0.95	0.90	0.90	0.85	0.85	0.75	0.70
Expressway on a Regional or District Highway	N/A	0.90	N/A	0.85	0.85	0.75	0.70
Regional Highways	1.0	0.95	0.90	0.85	0.85	0.75	0.70
District/Local Interest Roads	1.0	0.95	0.95	0.90	0.90	0.80	0.75

[A] Unless the Oregon Transportation Commission has adopted an alternative mobility target for the impacted facility, the mobility targets in Tables 6 are considered standards for purposes of determining compliance with OAR 660-012, the Transportation Planning Rule.

[B] For the purposes of this policy, the peak hour shall be the 30th highest annual hour. This approximates weekday peak hour traffic in larger urban areas. Alternatives to the 30th highest annual hour may be considered and established through alternative mobility target processes.

[C] Highway design requirements are addressed in the Highway Design Manual (HDM).

[D] See Action 1F.1 for additional technical details.

[E] Interstates and Expressways shall not be identified as Special Transportation Areas.

[F] For unincorporated communities inside MPO boundaries, MPO mobility targets shall apply.

POLICY 1G: MAJOR IMPROVEMENTS

This policy requires maintaining performance and improving safety on the highway system by improving efficiency and management on the existing roadway network before adding capacity. The state's highest priority is to preserve the functionality of the existing highway system. Tools that are employed to improve the function of the state highway system include access management, transportation demand management, traffic operations modifications, and changes to local land use designations or development regulations.

After existing system preservation, the second priority is to make minor improvements to existing highway facilities, such as making improvements to the local street network to minimize local trips on the state facility. The third priority is to make major roadway improvements such as adding lanes to increase capacity on existing roadways. As part of this process, ODOT will work with Morrow County and other stakeholders to determine appropriate strategies and tools that can be implemented at the local level that are consistent with this policy.

POLICY 2B: OFF-SYSTEM IMPROVEMENTS

This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system. As part of this process, ODOT will work with the Morrow County and other stakeholders to identify improvements to the local road system that support the planned increases in rail activity and that will help preserve capacity and ensure the long-term efficient and effective operation of high functional class facilities.

POLICY 2G: RAIL AND HIGHWAY COMPATIBILITY

This policy seeks to increase safety and transportation efficiency through the reduction and prevention of conflicts between railroad and highway users. Actions include eliminating crossings at grade wherever possible; designing highway projects to avoid or reduce rail crossings at grade; cooperating with railroads and local governments to target resources that increase safety through automated devices and enforcement at specific crossings; coordinating highway design, construction, resurfacing and traffic signals affecting rail crossings with the ODOT Rail Division and the railroads; and addressing pedestrian and bicycle access issues and design concerns when designing grade-separated crossings.

POLICY 3A: CLASSIFICATION AND SPACING STANDARDS

This policy seeks to manage the location, spacing, and type of road intersections on state highways in a manner that ensures the safe and efficient operation of state highways consistent with their highway classification. Action 3A.2 calls for spacing standards to be established for state highways based on highway classification, type of area, and posted speed. Tables in OHP Appendix C present access spacing standards that consider urban and rural highway classification, traffic volumes, speed, safety, and operational needs. The access management spacing standards established in the OHP are implemented by OAR 734, Division 51, and are addressed earlier in this technical memorandum.

POLICY 4A: EFFICIENCY OF FREIGHT MOVEMENT

This policy emphasizes the need to maintain and improve the efficiency of freight movement on the state highway system. It seeks to balance the needs of long distance and through-freight movements with local transportation needs on highway facilities in both urban and rural areas. As indicated above, I-84 is a designated freight route.

Project Relevance: OHP policies provide guidance related to the accessibility, mobility, and function of state highways. The IAMP will consider policies in the OHP to guide proposed improvements, modifications, or local policies that could affect any of the state facilities in the study area. The IAMP is being developed in coordination with ODOT so that projects, policies, and regulations proposed as part of the Plan will be consistent with the standards and targets established in the OHP related to safety, access, and mobility.

Oregon Pedestrian and Bicycle Plan

The intent of the Oregon Bicycle and Pedestrian Plan (OBPP) is to create a policy foundation that supports decision-making for walking and biking investments, strategies, and programs that help to develop an interconnected, robust, efficient, and safe transportation system. The OBPP establishes the role of walking and biking as essential modes of travel within the context of the entire transportation system and recognizes the benefit of these modes to the people and places in Oregon.

The OBPP provides direction for what needs to be achieved, including 20 policies and associated strategies designed to help develop, sustain, and improve walking and biking networks. It identifies nine goals based upon the broader goals of the OTP that reflect statewide values and desired accomplishments relating to walking and biking:

- Goal 1: Safety
- Goal 2: Accessibility and Connectivity
- Goal 3: Mobility and Efficiency
- Goal 4: Community and Economic Vitality
- Goal 5: Equity
- Goal 6: Health
- Goal 7: Sustainability
- Goal 8: Strategic Investment
- Goal 9: Coordination, Cooperation, and Collaboration

The OBPP also provides background information related to state and federal law, funding opportunities, and implementation strategies proposed by ODOT to improve bicycle and pedestrian transportation. It outlines the role that local jurisdictions play in the implementation of the OBPP, including the development of local pedestrian and bicycle plans as stand-alone documents within TSPs.

The Highway Design Manual Parts 800 and 900 are the technical element of the OBPP that guides the design and management of bicycle and pedestrian facilities on state-owned facilities. Part 800 and 900 in the Highway Design Manual provide best practices and design guidelines for bicycle and pedestrian facilities.

Project Relevance: The policies and design guidance in the OBPP apply to state highway facilities in the study area. State policy and design guidance will be considered in evaluating and planning for bicycle and pedestrian system elements for the project.

Oregon Rail Plan

The Oregon State Rail Plan is a state modal plan under the OTP that addresses long-term freight and passenger rail planning in Oregon. The plan provides a comprehensive assessment of the state's rail planning, freight rail, and passenger rail systems. It identifies specific policies concerning rail in the state; establishes a system of integration between freight and passenger elements into the land use and transportation planning process; and calls for cooperation between state, regional, and local jurisdictions in planning for rail.

A Union Pacific Railroad line travels east and west and is located approximately 500 feet to the north of the Tower Road interchange. The crossing is at-grade, includes signs, flashing lights, and gates. The Union Pacific Railroad line is classified as a Class 2A freight line and provides no passenger service.

Project Relevance: The planning process will consider the needs of freight movement by rail within the project area through the development of the IAMP because of the nearby presence of the Union Pacific Railroad line to the north of the study area interchange.

Oregon Freight Plan

The Oregon Freight Plan (OFP) is the modal plan that guides the movement of goods and commodities on the state highway system. Its purpose statement identifies the intent to "improve freight connections to local, Native American, state, regional, national and global markets in order to increase trade-related jobs and income for workers and businesses." The objectives of the plan include prioritizing and facilitating investments in freight facilities (including rail, marine, air, and pipeline infrastructure) and adopting strategies to maintain and improve the freight transportation system.

The plan defines a statewide strategic freight network. I-84 is designated as a strategic corridor among the Columbia River Freight Facilities in the OFP. The following policy and strategic direction provided in the OFP prioritizes preservation of strategic corridors. It also prioritizes improvements to the supply chain through the coordination of freight and system management planning.

- Strategy 1.2: Support freight access to the Strategic Freight System. This includes proactively protecting and preserving corridors designated as strategic.
- Action 1.2.1: Preserve freight facilities included as part of the Strategic Freight System from changes that would significantly reduce the ability of these facilities to operate as efficient components of the freight system unless alternate facilities are identified or a safety-related need arises.
- Strategy 2.4: Coordinate freight improvements and system management plans on corridors comprising the Strategic Freight System with the intent to improve supply chain performance.

Project Relevance: Maintaining and enhancing efficiency of the truck and freight system in the study area will be an integral part of the IAMP. The public advisory committee will include members that represent freight interests. Additionally, the project will include planned outreach activities to freight users.

Oregon Public Transportation Plan

The Oregon Public Transportation Plan (OPTP) provides guidance for ODOT and public transportation agencies regarding the development of public transportation systems. The OPTP is intended to establish a common foundation for local, regional, and state agencies by addressing the following:

- Vision and goals for public transportation
- A policy and strategy framework to inform decision-making
- Possible priorities under different levels of funding for public transportation
- Opportunities and challenges in investment and implementation
- Positioning public transportation as a key part of Oregon's transportation system

The OPTP establishes and is organized into the following 10 goal areas:

1. Mobility – Public Transportation User Experience
2. Accessibility and Connectivity – Getting from Here to There
3. Community Livability and Economic Vitality
4. Equity
5. Health
6. Safety and Security
7. Environmental Sustainability
8. Land Use
9. Strategic Investment
10. Communications, Collaboration and Coordination

While the OPTP does not recommend specific projects or investments, new efforts in planning for transit came with the passage of HB 2017 (Keep Oregon Moving Act) and the establishment of a new dedicated source of funding for expanding public transportation service in Oregon.[2] The Statewide Transportation Improvement Fund (STIF) provides the impetus for coordinating the prioritization of needed infrastructure. The STIF is continuously appropriated to finance investments and improvements in public transportation services and may be used to support the effective planning, deployment, operation, and administration of STIF-funded public transportation programs. The STIF may be also used as the local match for state and federal funds that also provide public transportation service.[3] As of July 2023, STIF was merged into the Special Transportation Fund (STF) program, which provides funding to transit districts across the state.

Project Relevance: The Policy Review will consider the needs of the transit system in Morrow County, while developing recommendations considering public transportation facilities.

Oregon Aviation Plan

The Oregon Aviation Plan (OAP) is a state modal plan under the OTP that addresses a framework for improving the state's airport system and provides guidance on preservation of existing facilities. The plan

[2] https://www.oregon.gov/ODOT/Pages/HB2017.aspx

[3] https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=245662

provides an assessment of economic factors and how they relate to changes in the aviation industry and regions in Oregon. In addition, the OAP provides policy, an inventory of the airport system and surrounding airspace, and outlines implementation and priorities.

The OAP categorizes airports into five categories based on facility, activity, services, geography, and market area. The Boardman Airport is a Category IV airport and is located approximately one mile southeast of Exit 159. Category IV airports are local general aviation airports and serve local air travel needs and special use activities.

Project Relevance: The planning process will consider the needs of movement by air travel within the project area through the development of the IAMP because of the nearby presence of the Boardman Airport to the south of the study area interchange.

Oregon Transportation Safety Action Plan

The Oregon Transportation Safety Action Plan (TSAP) provides long-term goals, policies, and strategies and near-term actions to eliminate transportation-related deaths and life-changing injuries. The TSAP addresses all modes on public roads in Oregon. Over the long term, the goals of the TSAP are as follows:

- **Safety Culture** – Transform public attitudes to recognize all transportation system users have the responsibility for other people's safety in addition to their own; build a culture among employees and agency partners to integrate safety considerations into all responsibilities.
- **Infrastructure** – Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.
- **Healthy, Livable Communities** – Plan, design, and implement safe systems. Support enforcement and emergency medical services to improve the safety and livability of communities, including improved health outcomes.
- **Technology** – Plan, prepare for, and implement technologies (existing and new) that can affect transportation safety for all users.
- **Collaborate and Communicate** – Create and support a collaborative environment for transportation system providers and public and private stakeholders to work together to eliminate fatalities and serious injury crashes.
- **Strategic Investments** – Target safety funding for effective engineering, emergency response, law enforcement, and education priorities.

The plan provides an overview of how the TSAP is intended to be used and the roles and responsibilities of various transportation agencies and levels of government. It identifies actions that jurisdictions can take to increase transportation safety, such as adopting a Safe Communities Program, which is a collaborative partnership with the National Highway Traffic Safety Administration, ODOT, and other local partners to promote safety. Safe Routes to School is another popular locally initiated program that may be supported by grant funding that targets safety improvements to encourage walking and biking to school.

The TSAP provides near-term actions for improving safety that can be used by all jurisdictions responsible for maintaining and improving transportation systems. Actions that a county can undertake to accomplish the plan's goals include:

- Evaluate local spot-specific and systemic safety needs; develop plans and programs to address needs.
- Collaborate with the state, metropolitan planning organizations (MPO), and stakeholder partners to educate the public about tribal, county, and city transportation safety-related behavioral issues.
- Integrate safety programming, planning, and policy into local planning.
- Develop coalitions with enforcement and emergency service providers to target and improve specific community needs.
- Use the TSAP as a resource for local goals, policies, strategies, and actions.

The updated TSAP Chapter 6 addresses near-term implementation focus areas for achieving the plan's goals, policies, and strategies. Organized by Emphasis Area, actions that jurisdictions can undertake are listed below.

SPEEDING ACTIONS

- Establish target speeds consistent with facility design, safety goals, context, users, and land use.

INTERSECTION ACTIONS

- Implement hot spot and systemic intersection safety improvements consistent with the updated Intersection Safety Implementation Plan.
- Implement intersection design treatments to reduce conflicts between all users, increase awareness, and improve compliance.
- Implement access management on high-volume roads and/or around intersections to reduce the number and severity of crashes.
- Improve visibility of vehicles and pedestrians and bicycles along corridors and at intersections with lighting and unobstructed sightlines.

ROADWAY DEPARTURE

- Design and implement cost-effective hotspot and systemic roadway departure improvements addressing risk factors associated with lane departure and run-off-road crashes on state and local facilities.

PEDESTRIAN AND BICYCLIST ACTIONS

- Prioritize safety investments on identified high-crash and high-risk pedestrian locations per National Cooperative Highway Research Program 20-44(13) methodology, including transit corridors, school areas, multi-lane roads, urban state highways, and other high-risk areas.
- Design for appropriate road capacity to reduce crosswalk length and crosswalk conflicts and utilize proven safety countermeasures such as road reconfigurations where appropriate.
- Design and construct corridors and facilities for pedestrians and bicyclists consistent with the ODOT Highway Design Manual (Part 800 and Part 900), based on land use and provide appropriate, safe pedestrian crossings along corridors to accommodate pedestrian needs.

- Prioritize multi-modal safety investments in areas with a high concentration of historically underserved communities, such as low income and black, indigenous, and people of color (BIPOC) communities.

Project Relevance: The Oregon TSAP will be used as a resource while preparing the Policy Review. The project will inform the identification of transportation improvements that improve safety for all road users.

LOCAL DOCUMENTS

Morrow County Comprehensive Plan

The Morrow County Comprehensive Plan was adopted in 1986. The following sections have been updated since the original plan has been adopted:

- Natural Resources Element (Goal 5): Updated in 2013
- Natural Hazards Element (Goal 7): Updated in 2016
- Recreation Element (Goal 8): Updated in 2007 and 2011
- Transportation Element (Goal 12): Updated in 2012, minor amendment in 2022
- Urbanization Element (Goal 14): Updated in 2015
- Review and Revision Process: Updated in 2013

The Morrow County Comprehensive Plan presents the goals and policies that guide development within the County. The plan includes elements related to citizen involvement, natural features, community services, economic development, housing and population, land use and urbanization.

Per the Comprehensive Plan zoning the project area zoning are as follows. To the north of I-84 Exit 159 Tower Road Interchange is General Industrial (MG) zoning, and to the south is Tourist Commercial (TC), Space Age Industrial (SAI), Airport Light Industrial (ALI), and Air/Industrial Park (AI) as per Figure 1.

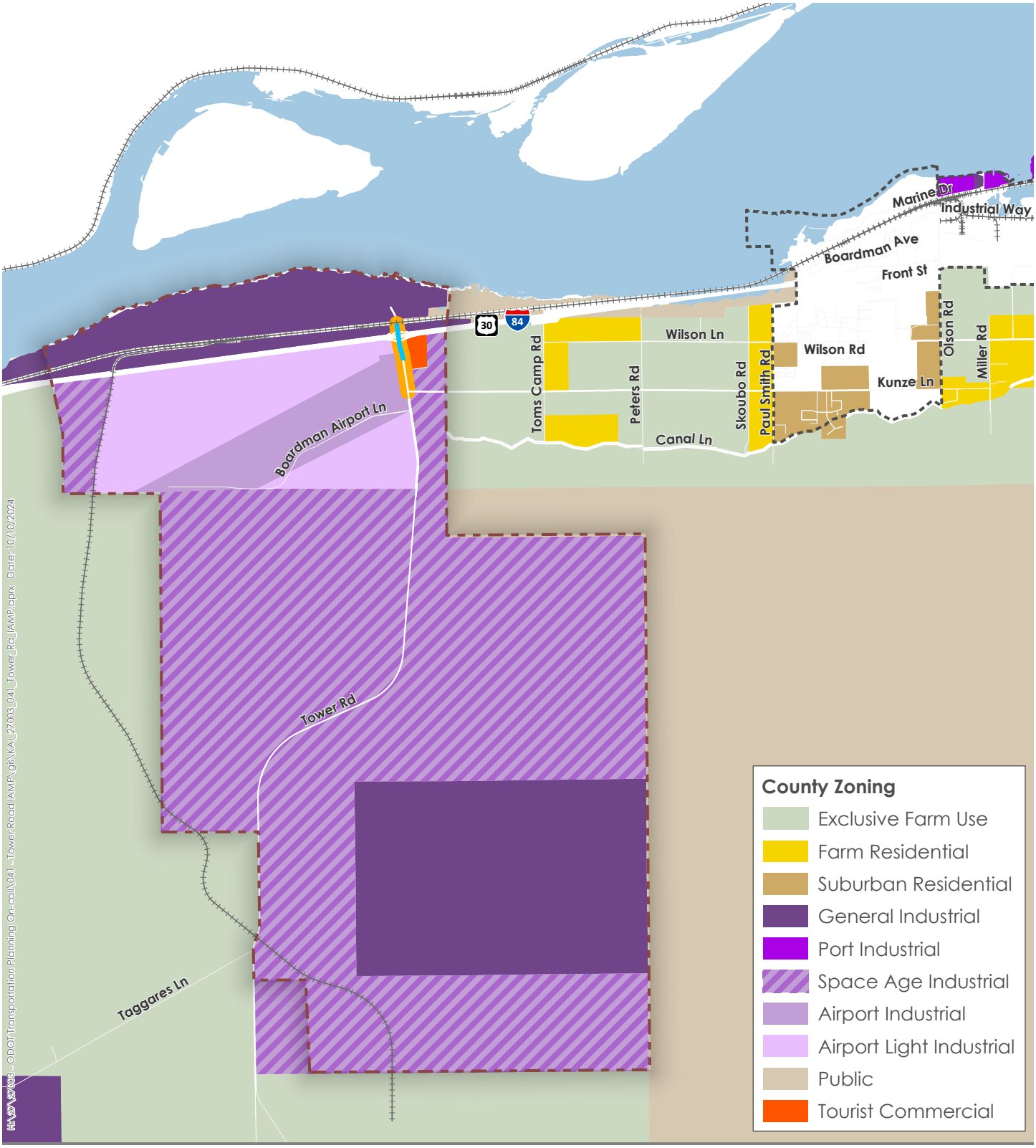

Figure 1

Zoning
Morrow County, Oregon

KITTELSON & ASSOCIATES

Project Relevance: The IAMP will be consistent with goals and policies listed in the County's Comprehensive Plan.

Morrow County Zoning Ordinance

The County's Zoning Ordinance (ORD-2017-4) carries out the County's Comprehensive Plan and regulates all development within the County based on zoning designations and provisions.

The IAMP study area includes the following zones, designated by the corresponding abbreviations:

- M-G – General Industrial
- TC – Tourist Commercial
- SAI – Space Age Industrial
- ALI – Airport Light Industrial
- AI – Air/Industrial Park

Article 3 of the Zoning Ordinance establishes permitted uses and development standards for these zones.

Article 4 establishes policies for all developments in Morrow County, including transportation-related standards. The Article addresses access, sight distance, permit requirements, parking requirements, parking lot standards, standards for transportation improvements, and site plan review guidance. These regulations apply to all public roadways and properties within Morrow County.

Article 4, Section 4.010 establishes access standards for roadways and developments. Access spacing standards found in the code are as follows for roadway access:

- Arterials: 600 ft.
- Collectors: 300 ft.
- Local Streets: 200 ft.

Access spacing standards are as follows for private driveway access:

- Arterials: 300 ft.
- Collectors: 100 ft.
- Local Streets: Access to each lot

Article 7 addresses variances and special permits for non-conforming uses. The Article establishes that the Planning Director or the Planning Commission may authorize dimensional adjustments or variances.

Article 8 addresses amendments to the Ordinance. The code establishes that amendments "may be initiated by the County Court, the County Planning Commission, or by application of a property owner."

Project Relevance: Recommendations from the IAMP process will be formed with consideration of land use and development policies. The IAMP may recommend changes to the ordinance.

Morrow County Airport Overlay Zone

The County's Zoning Ordinance establishes uses and considerations of the Airport Approach (AA) Zone in Section 3.090. The overlay zone is intended to restrict development in the vicinity of the airport. The approach surfaces defined in the Boardman Airport Layout Plan are subject to Section 3.090.

Section 3.090 establishes permitted and conditional uses and development standards for these zones. Additionally, Section 3.090 provides additional requirements for conditions approval for any proposed development within an AA Zone as it relates to setbacks, off-street parking, signs, building heights, and landscaping improvements.

Project Relevance: The IAMP process will be formed with the consideration of the Boardman Airport overlay zone and its relevant land use and development policies.

Morrow County Public Works Standards

The standards for the Morrow County Public Works Department are addressed in Appendix A of the Morrow County Transportation System Plan (TSP). Roadway standards follow "design standards set by the American Association of State Highway and Transportation Officials (AASHTO) and the Oregon Department of Transportation (ODOT)." To reflect the County's needs, the appendix establishes five additional standards:

- Rural Arterial, roadways with higher traffic volumes or along major truck corridors
- Rural Collector, roadways constructed with "second-level standard"
- Rural Access, roadways with lower travel volumes and fewer truck trips
- Rural Gravel, gravel roadways with a wide range of use
- Five-Lane Standard, roadways with high volumes of vehicle traffic

Project Relevance: The IAMP study area includes rural arterial, rural collector, and rural gravel roads. As the study progresses, the public works standards will be considered for new or replaced roadways.

Morrow County Transportation System Plan

The Morrow County TSP establishes transportation needs and policies to support the County's Comprehensive Plan. The TSP prioritizes the development and operations of transportation facilities, along with safe and convenient pedestrian and bicycle circulation.

Transportation goals and policies, adopted as part of the County TSP, apply to the IAMP study area. They include those related to the roadway system, alternative modes, air transportation, and movement of freight and goods.

- **Goal 5** establishes twelve policies to provide a safe, efficient roadway system throughout the county. The following are relevant to the IAMP study area:
  - **Policy 5.1.** Design and construct all new roadways to the county's adopted road design standards, as a minimum.
  - **Policy 5.2.** Preserve the transportation system through regular maintenance.
  - **Policy 5.3.** Use the county's established procedure to set speed limits.

Policy 5.4. Provide roadway channelization (striping, turn lanes) where needed, using American Association of State Highway Officials standards.

Policy 5.5. Use the Manual on Uniform Traffic Control Devices for traffic signal and signing standards.

Policy 5.7. Improve connectivity within the County by identifying and working to improve additional road corridors.

- **Goal 6** establishes seven policies to support alternative modes of transportation through transportation improvements. The following are applicable to the IAMP study area:
  - **Policy 6.1.** Include design features, such as widened shoulder areas, to accommodate bicycles, pedestrians, and equestrians in the county roadway design standards.
  - **Policy 6.5.** Encourage the development of additional transit opportunities for transportation-disadvantaged groups within the county.
  - **Policy 6.6.** Coordinate with ODOT and the cities to construct bicycle and pedestrian improvements in unincorporated areas within urban growth boundaries.
- **Goal 7** establishes six policies to support air transportation needs of Morrow County. The following are applicable to the IAMP study area:
  - **Policy 7.2.** Expand airport facilities as necessary to support future service needs.
  - **Policy 7.3.** Coordinate with the Oregon Department of Aviation when preparing airport planning documents and reviewing proposed land use development in the vicinity of the airport.
  - **Policy 7.6.** Establish appropriate land uses near airports that are compatible with airport noise levels and support airport operations.
- **Goal 8** establishes six policies to promote efficient movement of freight and goods. The following are applicable to the IAMP study area:
  - **Policy 8.1.** Develop a freight and goods mobility strategy in conjunction with the Port of Morrow and others interested in freight and goods movement.
  - **Policy 8.2.** Evaluate roads with weight restrictions and develop an improvement strategy for those that adversely affect freight and goods mobility.
  - **Policy 8.4.** Establish rail crossing standards for county roads.

The policies listed above define the needs of transportation development within the County and within the IAMP study area. These policies will guide the findings of the study by defining standards and goals.

The TSP includes a Roadway System Plan, identifying general standards for improvement and particular roadways on which to focus. One of the roads mentioned is Tower Road. The TSP outlines plans to extend the southern end of the road.

The TSP also includes a Capital improvement Program, a Pedestrian System Plan, and a Bicycle System Plan. These sections address further considerations in transportation improvements. These sections are summarized below.

Project Relevance: Roadway and land development within the IAMP study area will follow the TSP policies outlined above. The development outlined in the Roadway System Plan affects the connectivity of roads within the IAMP study area to major roads and highways within the County.

Morrow County Capital Improvement Plan

The Morrow County TSP includes discussion on a 20-Year Capital Improvement Program (CIP) in Chapter 6. The CIP categorizes projects into High priority (0 to 5 years) and Medium priority (5 to 20 years). This schedule was set based upon a project evaluation where projects with the most perceived "safety, environmental, socioeconomic, land use, or cost benefits were ranked with the highest priority."

Project Relevance: In the medium priority category, the TSP calls for improvements to the I-84/Tower Road Interchange and Tower Road itself. Improvements recommended in the IAMP may influence the County's future CIP.

Morrow County Pedestrian / Bicycle Plan

The Morrow County TSP discusses goals for future pedestrian and bicycle facilities in Chapter 6. The Pedestrian System Plan calls for wider shoulders and reduced block lengths. The Bicycle System Plan also calls for wider shoulders when building or improving roads. In areas with high bicycle use, it recommends separated paths or striped bicycle lanes.

Project Relevance: The IAMP's recommendations for road additions and improvements should include wide shoulders and/or separated paths to encourage pedestrian and bicycle use.

Boardman Airport Layout Plan

The Boardman Airport Layout Plan (ALP) discusses the Boardman airport facilities, identifies existing and long-term needs, and provides updates to the 1986 Airport Master Plan and Airport Layout Plan. The ALP provides an assessment of improvements towards safety, efficiency, economical, and environmental considerations as they relate to the Boardman Airport.

The ALP provides 21 recommendations associated with pavement and facility maintenance, updates to airport boundaries, and coordination efforts. Recommendations associated with roadways include the following:

- Update the airport property boundary to be 881 acres in total
- Short-term improvements should be compatible whenever possible with long-term development to avoid facility relocations
- Airport access road should be relocated away from the east end of the runway to avoid a nonstandard approach
- Airport roadways should extend access to new development areas

Project Relevance: The planning process will consider the needs of movement by air travel within the project area through the development of the IAMP because of the nearby presence of the Boardman Airport to the south of the study area interchange. The IAMP's recommendations for road additions and improvements will consider access to airport development areas.

Columbia River Heritage Trail Master Plan

The Columbia River Heritage Trail spans approximately 25 miles and is a multi-modal trail for bicyclists, pedestrians, and non-motorized travel along the Columbia River. Morrow County is currently in the process of preparing a trail master plan to document and identify improvements for the trail over the next 5-20 years.

Project Relevance: The IAMP's recommendations for road additions and improvements will consider the Columbia River Heritage Trail Master Plan as well as bicyclists, pedestrians, and non-motorized travel in its development.