



TECHNICAL MEMORANDUM #1

DATE: December 1, 2022

TO: Rick Williams | ODOT

FROM: John Bosket, PE and Joel McCarroll, PE | DKS Associates

SUBJECT: US 20 Bend Facility Plan
Plans and Policy Review

Project #22140-000

This memorandum summarizes plans, policies, targets, and standards applicable to the US 20 Bend Facility Plan. There are a number of state, regional, and local documents containing policies and regulations relevant to developing a plan for transportation improvements in the segment of US 20 from 3rd Street to the Powell Butte Highway. Relevant policies, projects, and design elements will need to be considered in the development of the US 20 Bend Facility Plan and, where appropriate, the Plan will identify where adopted plans should be amended to reflect new recommendations to ensure consistency.

Table 1 provides a list of the planning documents and policies that were reviewed and indicates how each is relevant to planning for transportation improvements and the US 20 Bend Facility Plan, using three general categories:

- *Policies*: Indicates that the document contains policies which will need to be reflected and inform the Plan.
- *Design standards*: Indicates that the document includes design standards for transportation facilities (e.g., street cross sections).
- *Project list*: Indicates that the document includes a list of specific planned projects which may be located in the study area and should be incorporated or considered in the development of the Plan.

TABLE 1: PLANS AND POLICY REVIEW

DOCUMENT	PURPOSE AND SUMMARY	POLICIES	DESIGN STANDARDS	PROJECT LIST	RELEVANCE/ACTION ITEMS
<p>OREGON STATEWIDE PLANNING GOALS</p> <p>The Statewide Planning Goals set a framework for planning in Oregon. Each goal has policies and guidelines related to their objective. The goals most relevant to the facility plan are:</p> <ul style="list-style-type: none"> • Goal 1, Citizen Involvement • Goal 2, Land Use Planning • Goal 6, Air, Water and Land Resources Quality • Goal 9, Economic Development • Goal 11, Public Facilities Planning • Goal 12, Transportation • Goal 14, Urbanization 	<p>X</p>				<ul style="list-style-type: none"> • Goal 1. Public involvement activities for the facility plan will be guided by and assessed according to Goal 1. • Goal 2. Existing and future land use needs will influence recommended transportation improvements; plan recommendations will be coordinated and considered for their effect on future use and operations in the study area according to Goal 2. • Goal 6. The facility plan will consider the protection of air, water, and land resources in the vicinity of the highway segment. • Goal 9. The facility plan will demonstrate the ways in which the preferred alternative selected for future improvements to the corridor supports this goal and the economic development policies adopted in the Bend and Deschutes County Comprehensive Plans. • Goal 11. Consideration of standards for existing and future public facilities will be included in the development of the facility plan. • Goal 12. State transportation policy will guide the facility plan objectives, design, and development. Goal 12 policies are implemented by the Transportation Planning Rule (OAR 660-012). • Goal 14. Part of the corridor is located outside of the Bend urban growth boundary (UGB). The project will consider growth expectations, including growth in City expansion areas, and related agreements between the City of Bend and Deschutes County.
<p>TRANSPORTATION PLANNING RULE (OAR 660-012)</p> <p>The Transportation Planning Rule (TPR) implements Statewide Planning Goal 12. The TPR provides the connection between local development codes and access management, coordinated land use review procedures, and other standards, allowances, and requirements to protect road operations and safety. Key sections are:</p> <ul style="list-style-type: none"> • Section -0045 – Describes the requirements for local governments to amend land use regulations to implement their Transportation System Plans (TSP) to ensure consistency with applicable federal and state requirements. • Section -0060 – Describes what may be relied upon as a planned improvement, for purposes of determining whether an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation significantly effects an existing or planned transportation facility. • Section -0065 – Describes transportation improvements, facilities, and services permitted on rural lands. Realignment of existing roads and new access roads and collectors within a built or committed exception area, or in other areas where the function of the road is to reduce local access to, or local traffic on, a state highway. • Section -0070 – Describes the process and requirements for transportation facilities and improvements on rural lands that do not meet -0065 requirements, therefore requiring a goal exception. 	<p>X</p>				<p>Preferred facility plan improvements may entail local policy and code amendments to ensure consistency with the plan recommendations; code amendments must comply with TPR Section -0045. Improvements included in an adopted facility plan are considered planned improvements for purposes of complying with Section -0060.</p> <p>Any new access roads or collectors that are proposed outside of the UGB must be limited to two travel lanes to be consistent with the TPR. A Goal 12 Goal Exception is not expected to be necessary for improvements within the study area.</p>

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<p>STATE COORDINATION RULES (OAR 731-15)</p>	<p>The provisions of OAR 731-015 establish the procedures for the Oregon Department of Transportation (ODOT) to implement the requirements of the State Agency Coordination Program when undertaking activities which significantly impact land use. The program assures that ODOT land use programs are in compliance with the statewide planning goals and are consistent with applicable comprehensive plans.</p> <p>This transportation facility plan is subject to State Coordination rules per OAR 731-015-0025(3). Section -0065 describes required coordination for adopting final facility plans. Procedural requirements for ODOT include, but are not limited to:</p> <ul style="list-style-type: none"> • Notify all affected cities, counties, and metropolitan planning associations (MPO); • Provide findings for the adopted final facility plans; • Provide adopted plan and findings to DLCD, to affected MPOs, cities, counties, state and federal agencies, special districts and to others who request to receive a copy. <p>The section also described the process to resolve conflicts with statewide planning goals.</p>	X			<p>Developing the facility plan will require coordination with affected cities, counties, and MPOs. For the US 20 Bend Facility Plan this includes involvement by the City of Bend, Deschutes County, and the Bend MPO. The project includes tasks and strategies addressing communication with the affected jurisdictions during plan development.</p>
<p>CLIMATE FRIENDLY AND EQUITABLE COMMUNITIES' RULEMAKING (OAR-660-008, 660-012, OAR 660-044)</p>	<p>On July 21, 2022, the Land Conservation and Development Commission adopted rules that apply to Oregon's metropolitan areas requiring those communities to change their local transportation and land use plans to do more to ensure Oregonians have more safe, comfortable ways to get around and don't have to drive long distances just to meet their daily needs. The rules also aim to improve equity and help community transportation, housing, and planning serve all Oregonians, particularly those traditionally underserved and discriminated against. The main components of these new rules address:</p> <ul style="list-style-type: none"> • Equitable Mapping, Engagement, and Decision-Making • Climate-Friendly Areas (where residents, workers, and visitors can meet most of their daily needs without having to drive) • Parking Reform • Electric Vehicle Charging Readiness • Planning for a Future of Transportation Options • Planning to Meet Climate Goals • Community Engagement 	X			<p>Local governments within metropolitan areas, including Bend, are responsible for implementing the rules. However, this is largely expected to take effect when communities conduct their next major Transportation System Plan (TSP) update. The rules state that most TSPs should be updated by December 31, 2029.</p> <p>The land use components of the rules have specific deadlines. Communities are asked to study potential Climate-Friendly Areas by December 31, 2023, and adopt Areas by December 31, 2024. Parking reform is scheduled to happen in two phases - the first at the end of 2022, and the second by June 30, 2023.</p> <p>The US 20 Bend Facility Plan is anticipated to be adopted as an amendment to Bend's TSP. However, this would be a very minor amendment compared to the breadth of the full TSP and would not qualify as a major TSP update. Furthermore, this planning process is scheduled to be completed in the summer of 2023, which is ahead of when much of the above referenced work on various components of the new rules is expected to be completed. Therefore, the new Climate-Friendly and Equitable Communities rules are not anticipated to directly apply to this project. That said, the City's current TSP does include goals related to equity, transportation options, and greenhouse gas reduction and the outcomes of this project are expected to be consistent with the spirit of the new rules.</p>

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<p>OREGON TRANSPORTATION PLAN (2006, UPDATE JANUARY 2023)</p>	<p>The Oregon Transportation Plan (OTP) is a comprehensive plan that addresses the future transportation needs of the State of Oregon through the year 2030. The primary function of the OTP is to establish goals, policies, strategies, and initiatives that guide the development of the State’s transportation modal plans, such as the Oregon Highway Plan and Oregon Bicycle and Pedestrian Plan. The OTP emphasizes several key initiatives for implementation, which are:</p> <ul style="list-style-type: none"> • Maintaining and maximizing the assets in place; • Optimizing the performance of the existing system through technology; • Integrating transportation, land use, economic development and the environment; • Integrating the transportation system across jurisdictions, ownerships and modes; • Creating sustainable funding; and • Investing in strategic capacity enhancements. 	X			<p>The OTP sets policy that directs the State to maximize performance of the existing transportation system-- for example, through the use of technology and system management--before considering larger and costlier additions to the system. Pursuant to the OTP, this Plan will need to implement the OTP and the applicable modal/topic plan goals, policies, implementation, and broad investment scenarios. Its development must provide opportunities for public review in accordance with the State Agency Coordination Program and federal requirements.</p>
<p>STATE MODAL AND TOPIC PLANS (BICYCLE AND PEDESTRIAN, RAIL, FREIGHT, PUBLIC TRANSPORTATION, TRANSPORTATION OPTIONS AND TRANSPORTATION SAFETY ACTION PLAN)</p>	<p>Mode and topic plans are statewide plans that are part of the Oregon Transportation Plan. These plans refine and apply OTP policy to specific modes and guide state, regional, and local investment decisions for the parts of the transportation system that they address.</p>	X			<p>The policies in each modal plan must be implemented into the facility plan taking into consideration the appropriateness of context in which they may apply.</p>

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<p>1999 OREGON HIGHWAY PLAN (AS AMENDED MAY 2015)</p>	<p>The Oregon Highway Plan (OHP) is a modal plan of the OTP that guides ODOT’s Highway Division in planning, operations, and financing. Several key policies which will inform the facility plan are:</p> <ul style="list-style-type: none"> • Policy 1A: State Highway Classification System. Classifies state highways into four levels of importance. • Policy 1B: Land Use and Transportation. Describes how ODOT will work with local governments and others to link land use and transportation in transportation plans. • Policy 1C: State Highway Freight System. Describes the State Highway Freight System to design an efficient and reliable system for freight. It also designates “Reduction Review Routes.” • Policy 1F: Highway Mobility Policy. Sets mobility targets for the state highway system. • Policy 1G: Major Improvements. Establishes policies for maintaining performance and improving safety on the highway system. • Policy 2B: Off-System Improvements. The policy recognizes that the state may provide financial assistance to local jurisdictions if the improvements provide a cost-effective means of improving operations of the state highway system. • Policy 3A: Classification and Spacing Standards. Designates access spacing standards for state highways, found in Appendix C of the OHP. 	X	X		<p>US 20 from 3rd Street to Powell Butte Highway is currently classified as a highway of statewide significance and as a freight route on the National Highway System.</p> <p>Appendix C of the OHP lists spacing standards for statewide highways, which regulates US 20.</p> <p>It is expected that the Plan will comply with safety, access, and mobility targets found in the OHP; findings of compliance will support Oregon Transportation Commission adoption of the Plan as an amendment to the OHP. It is expected that an alternative to the mobility targets will be required for some intersections. If adopted, it will be one of the many special facility plans that have amended the OHP over the years.</p>

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<p>OREGON HIGHWAY DESIGN MANUAL (2023)</p> <p>The Highway Design Manual (HDM) includes ODOT standards and procedures for the location and design of new construction, major reconstruction, and resurfacing, restoration, or rehabilitation (3R) projects. The manual is used for all projects that are located on state highways. Design standards for state highways are dependent on the highway’s functional classification and the project type.</p> <p>Part 100, 200 and 300 of the HDM have completely incorporated the material from the Blueprint for Urban Design (BUD). The BUD encompassed the revised ODOT urban design criteria. It follows federal guidelines and principles utilizing a performance based, context sensitive, practical design approach to provide flexibility where warranted to produce appropriate designs to accommodate all modes of transportation affecting all urban roadway users. The Blueprint for Urban Design provided information and criteria to aid project teams to make appropriate choices when developing final project designs to meet established project goals and create the expected outcomes. Every urban project has unique opportunities and the six urban contexts portrayed in the Blueprint for Urban Design, along with their respective design criteria, will allow project teams to better align ODOTs transportation needs with local community aspirations.</p> <p>The following chapters address design standards, guidelines, and processes for State Highways.</p> <ul style="list-style-type: none"> • Part 100 - Design Policies and Procedures • Part 200 - Geometric Design and Context • Part 300 - Cross Section Elements • Part 400 - Roadside Design • Part 500 - Intersection Design • Part 600 - Interchanges and Grade Separations • Part 700 - Public Transportation and Guidelines • Part 800 - Pedestrian Design • Part 900 - Bikeway Design • Part 1000 - Design Exceptions 	<p>X</p>	<p>X</p>		<p>The Plan alternatives will be developed to be consistent with the applicable HDM Standards. Any proposed bicycle or pedestrian improvements associated with the preferred alternatives will also need to be consistent with the HDM.</p> <p>Note that HDM mobility thresholds are generally more restrictive than the OHP mobility targets to ensure a useful design life for the improvement being made; however, there is a design exception process that allows variation from the HDM when appropriate.</p> <p>In addition to the standards listed in the HDM, there are many other ODOT design guides and policies that may be applicable to the project, such as the ODOT Traffic Manual, Traffic Signal Policy and Guidelines, Traffic Line Manual, and ODOT Statewide Operations and TSMO Plans. Such documents will also be considered where appropriate.</p>	
<p>ACCESS MANAGEMENT RULE (OAR 734-051)</p> <p>Oregon Administrative Rule (OAR) 734-051 defines the State’s role in managing access to highway facilities in order to maintain functional use and safety and to preserve public investment. The rule includes spacing standards for varying types of state roadways and criteria for granting right of access and approach locations onto state highway facilities. The Rule attempts to balance the safety and mobility needs of travelers along state highways with the access needs of property and business owners. Key sections of the Access Management Rule for the US 20 Bend Facility Plan are:</p> <ul style="list-style-type: none"> • OAR 734-051-4020 (Standards and Criteria for Approval of Private Approaches) • OAR 734-051-7010 (Access Management in Highway Facility Plans) 	<p>X</p>	<p>X</p>		<p>The Plan must comply with Division 51 spacing standards (see OHP Appendix C, Table 14 Access Management Spacing Standards for Statewide Highways with Annual Average Daily Traffic (AADT) of More Than 5,000 Vehicles). It must also comply with the applicable criteria for facility plans, which includes the acknowledgement of property impacts in the evaluation of preferred alternatives.</p> <p>Specifically, the Plan must comply with OAR 734-051-7010, which describes considerations that must be given to property impacts associated with changes in access when developing a Facility Plan, requirements for developing the key principles and methodology that describe how decisions related to access will be made, and requirements for involving property owners in the process.</p>	
<p>REDUCTION IN CAPACITY (ORS 366.215 AND OAR 731-012-0100)</p> <p>ORS 366.215 states the Oregon Transportation Commission may not permanently reduce the vehicle-carrying capacity of an identified freight route. Specific exceptions to this prohibition are allowed by statute. OAR 731-012-0010 defines terms and identifies a review process for the implementation of ORS 336.215.</p>	<p>X</p>			<p>Because US 20 is designated as a Reduction Review Route, the Plan must demonstrate that the vehicle-carrying capacity (e.g., ability to accommodate over-dimension freight) of US 20 would not be reduced with the proposed improvements in place.</p>	

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<p>ORS 366.514 (BIKE BILL)</p>	<p>The law requires that reasonable amounts of State Highway Funds be expended by the Department of Transportation, counties, and cities to provide walkways and bikeways. Reasonable amounts are related to the need for bikeways and walkways; if there is a need, the governing jurisdiction shall expend a reasonable amount to construct the needed facilities.</p> <p>The law requires the Department of Transportation, counties, and cities to provide walkways and bikeways on all roadway construction, reconstruction, or relocation projects. The funding source or amount are not the determining factors; what is important is that pedestrian and bicycle facilities be provided as part of road improvements.</p>	X			<p>Improvements recommended in the Plan must include walkways and bikeways in all transportation corridors.</p>
<p>DESCHUTES COUNTY COMPREHENSIVE PLAN AND TRANSPORTATION SYSTEM PLAN</p>	<p>The purpose of the Deschutes County Comprehensive Plan is to provide a blueprint for land use conservation and development. This is accomplished through goals and policies that tell a cohesive story of where and how development should occur and what places should remain undeveloped. The Plan provides a legal framework for establishing more specific land use actions and regulations such as zoning. The goals and policies are based on existing conditions and trends, community values and the statewide planning system. It should be noted that Deschutes County anticipates updating the Comprehensive Plan in Fall 2021.</p> <p>The Transportation System Plan (TSP) provides a roadmap to meet the needs of air, automobile, bicycle, freight, pedestrian, rail, transit, and other modes of transportation in the County. The TSP includes policies, standards, and projects for the County transportation system. Chapter 5.3 discusses planned improvements and policies related to functional classifications, proposed road network, performance standards, and more. Chapter 5.5 has bike and pedestrian requirements and route selections. Chapter 6 discusses the transportation finance plan.</p>	X	X	X	<p>The policies, standards, and projects in the TSP will be considered in the development of the Plan. Before OTC adoption as an amendment to the OHP, the facility plan will need to be adopted as an amendment to the Deschutes County TSP; therefore, it will need to be found consistent with or modify the standards and policies in the TSP.</p> <p>Proposed projects listed in the County TSP, Chapter 5, in the vicinity of the segment include:</p> <ul style="list-style-type: none"> • A roundabout at the intersection of Butler Market Rd./Powell Butte Hwy. • A roundabout at the intersection of US 20 and Ward/Hamby (Constructed in 2022) • A roundabout at the intersection of US 20 at Powell Butte Highway. • A roundabout at Neff Rd./Alfalfa Market Rd. and Powell Butte Highway (Constructed) • Reconstruct/Pave Rickard Road from Groff to US 20 (Constructed) • Widen/Overlay Bear Creek from Bend City Limits to US 20 • Reconstruct/Pave Bozeman Trail from Chisholm Train to Rickard • US 20 Providence to Hamby – Add Travel lanes

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<p>CITY OF BEND COMPREHENSIVE PLAN AND TRANSPORTATION SYSTEM PLAN</p> <p>Bend’s Transportation System Plan (TSP) describes the City’s transportation policies and investment priorities to address its needs and fulfill its visions for an economically vital, healthy, and equitable community. To support how people and goods move within and through the city and complement Bend’s land use and growth management strategies, the TSP establishes a system of transportation facilities, programs, and policies that will guide transportation infrastructure development over the next 20 years. The TSP is the transportation element of Bend’s Comprehensive Plan. Key chapters of the TSP regarding facility plan decisions are:</p> <ul style="list-style-type: none"> • <i>Chapter 2: Goals, Policies & Actions:</i> This chapter of the TSP defines the desired outcomes from the TSP. The Goals shaped and guided development of the policies, actions, projects, and programs in the TSP and guide its projects and programs. The public policies in the TSP form the long-term foundation for the City of Bend’s transportation system. They provide a consistent course of action to move the community toward the goals of the TSP. These policies are used to evaluate any proposed changes to the Bend Development Code and Bend Comprehensive Plan, of which the TSP is an element, and other regulatory documents. • <i>Chapter 5: Transportation Projects & Programs.</i> This chapter of the TSP provides an overview of a set of coordinated transportation investments that address transportation needs within the City of Bend over the next 20 years, including planning level cost estimates. <p>The Bend Comprehensive Plan includes goals and policies that provide a framework for decisions to ensure they are consistent with the physical characteristics, goals, and resources of the community. The extensive document provides adopted goals and policies regarding land use and transportation, which establish a framework upon which the City bases its decisions and actions. Key chapters of the Comprehensive Plan regarding facility plan decisions are:</p> <ul style="list-style-type: none"> • <i>Chapter 7: Transportation Systems.</i> This chapter provides objectives and policies for transportation in the community. Policy 7-11 requires the City and County to coordinate their TSPs to encourage continuity in roadway classification design standards outside the UGB and in the urban reserve. For roadways located in the urban reserve areas, Bend must seek approval from the County for the improvement of facilities to meet urban standards (Policy 7-15). Further, transportation facilities currently located on rural lands (outside UGBs) may not be constructed to an urban standard until the area is brought into the UGB (Policy 7-16). • <i>Chapter 11: Growth Management.</i> This chapter addresses urban development within the Urban Growth Boundary and includes opportunity areas to promote efficient use of existing land. This is discussed in more detail below. 	X		X	<p>The Plan should be consistent with goals and polices of the Comprehensive Plan, especially those related to transportation and urbanization objectives for the study area.</p> <p>The transportation policies stress the importance of bicycle and pedestrian infrastructure, including construction of bike lanes and sidewalks on arterials and major collectors. They also establish the Bend trail system locations, which are governed by the Bend Urban Area Bicycle and Pedestrian System Plan. The importance of and approach to access control is also found in Comprehensive Plan policies. In accordance with Comprehensive Plan policies road, bicycle, and pedestrian projects in urban reserve areas are governed by the County’s road and street standards, and the standards are coordinated between the two jurisdictions.</p> <p>Ultimately, the Plan would be adopted as a TSP amendment; the TSP is the transportation element of the Comprehensive Plan. If City goals and policies are not consistent with recommended Plan implementation measures, additions or amendments to the Comprehensive Plan may be prepared and proposed as a part of the Plan adoption.</p> <p>Projects within the study area include:</p> <ul style="list-style-type: none"> • Implementation of the Deschutes County ITS Plan includes traffic signal coordination on US 20. • Olney and 8th Avenue Intersection Improvement • Revere Avenue/8th Street Intersection Improvement • East-West High-Capacity Transit (HCT) • Mobility Hubs including Hawthorne Station • Construct a roundabout at Pettigrew and Bear Creek • Greenwood Avenue /2nd – Pedestrian Bicycle Crossing Improvement • Midtown Bicycle and Pedestrian Crossings and Crossing Study (Includes Greenwood Sidewalk widening • Bear Creek Safe Routes to School Larkspur Trail to Coyner Trail • Bear Creek Road to Cessna Avenue to east UGB, shared use path • Norton Avenue: NE 6th to NE 12th Street Neighborhood Greenway • Neff Road to Big Sky Park: Shared Use Path • 27th Street: US 20 to Reed Market: Shared Use Path • Revere Avenue/4th Street Intersection Improvement • Olney Avenue/4th Street Intersection Improvement • US 20 (Greenwood/8th) Pedestrian/Bicycle Improvement • 15th Street Corridor Safety and Capacity Improvements (US 20 to Reed Market including roundabout at Wilson) • 27th Street Arterial Corridor Upgrade from Bear Creek to Ferguson Road • Hawthorne Avenue/3rd Street Intersection Improvement • US 20 Operation Improvements from 15th Street to UGB 	

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URBAN GROWTH BOUNDARY PLAN	<p>The City of Bend’s Urban Growth Plan is included in the City of Bend Comprehensive Plan as Chapter 11. The plan includes 10 expansion areas where the City will expand its urban growth boundary and nine opportunity areas for denser urban development.</p>	<p>X</p>			<p>The only expansion area near the corridor is the East Highway 20 property (#11) which is east of 27th Street, south of US 20 and north of Bear Creek.</p> <p>Three other expansion areas are located on 27th Street, but not near the US 20 Corridor. These include Northeast (#10), DSL Property (#12) and The Elbow (#13).</p> <p>Three opportunity areas are near or along the corridor. These include Bend Central District (#1), East Downtown (#2), Inner Hwy./Greenwood 20 (#3).</p> <p>The Bend Central area is addressed in the Bend Central District Multimodal Mixed Use Area Plan. East downtown includes Greenwood from 2nd Street and west. Inner Hwy./Greenwood includes US 20 from 4th to 10th Street.</p> <p>The policies for these areas are found in Chapter 11 of the City of Bend Comprehensive Plan and will need to be addressed in the development of the facility plan.</p>
2040 METROPOLITAN TRANSPORTATION PLAN (MTP)	<p>The MTP includes provisions for meeting the transportation needs of residents over a 20-year planning horizon while addressing transportation issues and making changes that can contribute to improvements in the region's quality of life and economic vitality.</p> <p>The MTP serves as a guide for the management of existing transportation facilities and for the design and implementation of future transportation facilities through the year 2040. The plan is intended to provide the framework and foundation for the transportation future in the metropolitan area. Policies and project descriptions are provided to enable the governments and citizens of the metropolitan area to understand and track projects that will be needed over the next 20 years. As a plan, this document does not provide designs for individual projects. Such details are not within the scope of a metropolitan plan and will be completed on a project-by-project basis with the necessary analysis and community involvement.</p>	<p>X</p>		<p>X</p>	<p>The policies and projects in the MTP will be considered in the development of the Plan. The Plan will incorporate local needs with the pending regional strategies, and coordinate project completion with other affected agencies.</p>
BEND CENTRAL DISTRICT MULTIMODAL MIXED USE AREA PLAN	<p>The plan focuses on establishing a multi-modal mixed-use area in central Bend. The study area is bounded by US 97 (Bend Parkway) on the west, 4th Street on the east, Revere Avenue on the north and the 3rd Street undercrossing of the BNSF Railroad on the south. The study area goals focus on the design of the transportation system that serves all users, creating a mix of land uses and supportive urban design concepts and development of a parking strategy and management plan for the area.</p>	<p>X</p>	<p>X</p>	<p>X</p>	<p>The plan provides recommended treatments on Greenwood between 2nd and 4th, Hawthorne and 3rd and Olney between 2nd and 4th.</p>
STRATEGIC IMPLEMENTATION PLAN FOR WALKING AND BIKING INFRASTRUCTURE (2015-2025)	<p>The City of Bend’s strategy for developing a unified plan for pedestrian and biking transportation through the incremental but systematic deployment of safe and accessible facilities. It places high importance on the use of state-of-the-art design techniques to increase user comfort and perception of safety to support increased biking and walking in targeted areas.</p>	<p>X</p>		<p>X</p>	<p>The plan encourages the development of sidewalks around the Greenwood Community Center in the area bound by 5th, 6th, Greenwood and Kearney. It includes the development of a Bike Boulevard from Juniper Swim to Bend High-Marshall High via 6th Street as well a Bike Boulevard from Bend High to Butler Market via 12th Street. It includes enhanced crossings at Greenwood and 4th and 6th, Hawthorne at 3rd and Neff at Williamson and Purcell.</p>

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DESCHUTES COUNTY TRANSPORTATION SAFETY ACTION PLAN (TSAP)	<p>The Deschutes County TSAP focuses on the rural areas of the County including the area within the Bend MPO. The simultaneous development of the County and City/MPO TSAPs allowed for coordination between the two jurisdictions and an understanding of City-specific safety performance. The TSAP developed a comprehensive safety program that systematically identifies and prioritizes safety projects and establishes a proactive approach to reducing crashes.</p>	X			<p>Identify and implement safety strategies identified in the TSAP into the facility plan. The Plan should be consistent with goals of the TSAP, especially those related to the study area. Once a specific location is identified for safety treatments, the toolboxes provided in the TSAP can be used to guide the implementation of systemic solutions.</p> <p>The plan recommends a variety of treatments and countermeasures for roadway segment, intersection, speed related and bicycle/pedestrian crashes. Specific locations identified as "Top Sites for Safety Improvement Identified with EPDO Performance Measure" include:</p> <ul style="list-style-type: none"> • US 20/Ward Road/Hamby Road • Bear Creek Road/Ward Road
CITY OF BEND TRANSPORTATION SAFETY ACTION PLAN (TSAP)	<p>The Bend Area TSAP focuses on the area within the Bend UGB. Simultaneously developing the County and City/MPO TSAPs allowed for coordination between the two jurisdictions and an understanding of City- and County-specific safety performance. The TSAP developed a comprehensive safety program that systematically identifies and prioritizes safety projects and establishes a proactive approach to reducing crashes.</p>	X			<p>Identify and implement safety strategies identified in the TSAP into the facility plan. The Plan should be consistent with goals of the TSAP, especially those related to the study area. Once a specific location is identified for safety treatments, the toolboxes provided in the TSAP can be used to guide the implementation of systemic solutions.</p> <p>The plan recommends a variety of treatments and countermeasures for roadway segment, intersection, speed related and bicycle/pedestrian crashes. It includes recommendations for behavioral and enforcement countermeasures. Specific locations identified as "Top Sites for Safety Improvement Identified with EPDO Performance Measure" include:</p> <ul style="list-style-type: none"> • US 20 at 27th Street • US 20 at 8th • Purcell Boulevard & Pettigrew Road & Bear Creek Drive* • NE Third Street & NE Olney Avenue • NE Third Street & NE Franklin Avenue • US 20 & NE Purcell Boulevard • Neff Road & Purcell Boulevard • Ne 15th Street & US 20 • NE Medical Center Drive & NE Neff Road • US 20 & NE 10th Street <p>*This site was reviewed for specific crash characteristics and near-term and long-term countermeasures were developed.</p>

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<p>2021-2024 STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (“STIP”)</p>	<p>The Statewide Transportation Improvement Program (STIP) details the full list of funded projects on ODOT’s facilities.</p>			<p>X</p>	<p>The Plan should assume that funded STIP projects would be completed before the 20-year planning horizon and any improvements recommended as part of the facility plan must be coordinated with those STIP projects. The list below includes the STIP projects in the vicinity of the US 20 corridor (between mile posts 0.51 and 4.85).</p> <ul style="list-style-type: none"> US 20: Empire to Greenwood (3rd Street, Bend) includes funding for design and utility relocation for pavement preservation, ADA upgrades, sidewalks, bike lanes, pedestrian crossing sign and signal upgrades to increase safety for travelers and extend the life of the roads. The project extended along US 20 (Greenwood) from M.P. 0.51 to 2.60 (27th). US 20 Mervin Sampels – Greenwood (3rd Street, Bend): The project completes pavement preservation on Mervin Sampels to Greenwood Ave. The project includes bike lanes and sidewalks, ADA ramps, sign improvements and adding crosswalks and a bus stop. The project includes signal and ADAQ upgrades at the 3rd and Greenwood intersection and pedestrian crossing improvements at the NE 6th Street Intersection (M.P. 0.74 to 0.80). The project is currently under construction. US 20: 3rd Street – 15th Street (M.P. 0.51 to M.P. 2.33): The project replaces existing ADA curb ramps. Upgrades un-signalized intersection signs, constructs new crosswalks with a pedestrian refuge at 4th Street, rehab and construct sidewalks on Greenwood. The project is scheduled for construction in 2023. US 20: Ward/Hamby Intersection (M.P. 3.22 to 3.86): The project installed a roundabout at the intersection. The project is complete. City of Bend Signal Upgrades includes signal and sign improvements at Neff Road/Medical Center Drive and NE Olney Avenue/NE 8th Street. Sisters and Bend Curb Ramps includes ADA upgrades at the following intersections on US 20: NE Arnett Way (M.P. 1.82) NE Axure Drive (M.P. 1.95) NE Dean Swift (M.P. 2.18) NE Purcell Boulevard (M.P. 2.29) NE Windy Knolls Drive (M.P. 2.40) NE 27th Street (M.P. 2.55) NE Benson Way (M.P. 2.65) NE Dalton Street (M.P. 2.80) Bend Mobility Hub Planning: Identify transit mobility hub sites in Bend for Cascade East Transit System. This project includes planning for the installation of a mobility hub.
<p>DESCHUTES COUNTY CAPITAL IMPROVEMENT PLAN (CIP)</p>	<p>The Deschutes County Road CIP summarizes planned and funded improvements for fiscal years 2021-2025. The projects in the CIP include intersection and corridor improvements, major pavement preservation, bridge replacement and rehabilitation, and other project types to modernize, maintain, and increase safety on the County road system. This report includes the summary, justification, scope of work, budget, anticipated schedule, and map for each project.</p>			<p>X</p>	<p>The Plan should assume that funded CIP projects would be completed before the 20-year planning horizon and any improvements recommended as part of the facility plan must be coordinated with those CIP projects. Projects in the study area include:</p> <ul style="list-style-type: none"> Powell Butte Highway/Butler Market Road Roundabout Project
<p>2020-2024 BEND CAPITAL IMPROVEMENT PLAN</p>	<p>The Capital Improvement Program (CIP) identifies infrastructure improvement projects within a 5-year time-period that are necessary to enhance service levels, address existing deficiencies, and provide for future growth. The 5-year CIP is updated annually, along with the biennial budget, and is coordinated with departments within the City.</p>			<p>X</p>	<p>The Plan should assume that funded CIP projects would be completed before the 20-year planning horizon and any improvements recommended as part of the facility plan must be coordinated with those CIP projects. This includes the US 20/Greenwood Sidewalk Improvement and Bicycle Greenways.</p>

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<p>DESCHUTES COUNTY ITS PLAN</p>	<p>The Deschutes County Intelligent Transportation Systems (ITS) Plan was originally developed in 2005 and updated in 2020</p> <p>The plan was developed to identify innovative tools to address increasing traffic congestion and safety issues that affect traveler mobility within Deschutes County. ITS is defined as a system of “advanced technologies and management techniques to relieve congestion, enhance safety, provide services to travelers, and assist transportation system operators in implementing suitable traffic management strategies.” ITS projects have been instrumental in other ODOT regions by providing lower cost options that improve the safety and efficiency of the transportation network in a relatively short implementation timeframe without major capital infrastructure investment. This plan details a 20-year deployment plan of ITS projects. The investments range from CCTV cameras, variable message or speed limit signs, to count stations and weather stations. A number of these investments have been identified for installation on the US 20 corridor and some of the adjacent roadways.</p> <p>The plan also includes a communication element (Chapter 4) which was previously a stand-alone plan.</p>			X	<p>The themes for the corridor projects were to establish safe and smart conditions along the congested or unsafe segments of the corridor. The ITS infrastructure and equipment needed for these projects fell mainly into the categories of Transportation Operations and Management, Traveler Information, and Data Management and Performance Measures.</p> <p>The following projects listed in the ITS Plan are located in on or near the study area.</p> <ul style="list-style-type: none"> • 3rd Street Safe and Smart Corridor • US 20/Greenwood Safe and Smart Corridor • Purcell Blvd. Fiber Communications • Transit Signal Priority • ATSPM Performance Reporting System
<p>CASCADES EAST TRANSIT MASTER PLAN</p>	<p>The 2040 Cascades East Transit (CET) Transit Master Plan (TMP) outlines a framework for providing transit and related services to Central Oregon for the next 20 years. It will be used by CET to identify new services, further policy discussions, inform how Statewide Transportation Improvement Funds (STIF) transit funds are spent, and monitor future funding needs and opportunities.</p>	X		X	<p>Coordination with CET is required for the provision of transit stop improvements along existing and planned transit routes.</p> <p>Routes 5,6, and 7, which provide service on US 20, are the only fixed-route transit within the study corridor. Routes 5 and 6 use US 20 only from 3rd Street to 5th Street while Route 7 uses US 20 to 27th Street. Many of CET’s intercity and intracity bus routes stop at Hawthorne Station immediately south of the corridor.</p> <p>The plan calls for deemphasizing Hawthorne Station as a Transit Center while continuing to use it as a mobility hub.</p> <p>The plan calls for extending Route 5 to downtown via 3rd Street and having Route 6 serve Hawthorne via 3rd Street then loop through downtown. Route 5 would continue to use the 3rd Street to 5th Street segment of US 20. Route 6 would not use US 20.</p> <p>Route 7 would be extended downtown via Hawthorne Station.</p> <p>The Bend Mid to Long-Term Service Concepts call for a new Route 8 which would use US 20 from 3rd Street to 8th Street.</p> <p>US 20 from 3rd to 27th Street is identified as high-capacity transit corridor with potential high frequency service with headways between 15 and 20 minutes.</p> <p>CET should coordinate with ODOT to provide Transit Signal Priority on US 20.</p>
<p>BEND METRO PARK AND RECREATION DEPARTMENT COMPREHENSIVE PLAN</p>	<p>The Bend Park and Recreation District’s (BPRD) Comprehensive Plan is the guiding document for the next ten years of parks and recreation in Bend. The plan addresses the rapid growth in Bend by planning for more parks, trails, amenities and another indoor recreation facility.</p>	X		X	<p>The following projects have been identified by BPRD and are near the study corridor.</p> <ul style="list-style-type: none"> • Expand Big Sky Park near Neff and Hamby • Litchfield Site – Create a neighborhood park south of US 20 and east of 27th • Hansen to Big Sky Park Trail that would cross US 20 east of 27th • Neff and Hamby Road Crossings • 8th Street Crossing at Juniper Park • Transcanada Trail – that would cross US 20 east of Ward/Hamby • Powerline Train that connects Big Sky Park o the Powerline Trail

