



To: Becky Taylor and Sasha Vartanian, Lane County
From: Derek Abe, Grace Stainback, and Amelia Adams, Alta Planning + Design
Date: September 30, 2021
Re: Lane County Bicycle Master Plan Policies and Implementation Action Recommendations FINAL

Introduction

This memorandum presents recommended policies and implementation actions to support the Lane County Bicycle Master Plan (BMP). These recommendations were informed by the Plan’s Guiding Framework, existing conditions analysis, and public input process to date. The recommendations will be further refined into an implementation strategy for the Plan including an expanded chapter of recommended practices and programs.

The first section of the memo presents the Vision, Goals, and Objectives that are included in the LCBMP Guiding Framework. The intention is to use these as a touchstone to evaluate whether the recommendations address the initial vision for this Plan. The next section presents recommended amendments to the existing policies contained in the Lane County Transportation System Plan (TSP), to reflect the inclusion of the BMP. The final section outlines recommended implementation actions to support the BMP.

Several recommendations in this memorandum refer to the Lane County Bicycle Network. In this context, the Lane County Bicycle Network refers to the combination of existing and proposed facilities to accommodate bicyclists’ network identified through this planning process. While the majority of the Lane County Bicycle Network consists of on-street facilities on County-owned roads, in some cases the network includes connections on off-street facilities and on-street facilities on other road networks.

Revisiting the Lane County Bicycle Master Plan Guiding Framework

This section presents the Vision, Goals, and Objectives that are included in the LCBMP Guiding Framework. The intention is to use these as a touchstone to evaluate whether the recommendations address the initial vision for this Plan.

Vision

Bicycling is a viable regional transportation option throughout Lane County for people of all ages and abilities, linking communities to destinations and services, and connecting where we live, work, and play.

GOAL 1: Safety and Comfort

Objective 1.1: Identify a bicycle network on County roads that prioritizes safety and comfort for people biking, and addresses existing problem areas or substandard facilities.

Objective 1.2: Prioritize the improvement and construction of bicycle facilities that are safe and comfortable for all ages and abilities when feasible.

Objective 1.3: Establish minimum design standards for all arterial and collector roads to enable comfortable bicycle travel, and identify potential alternative solutions where on-street facilities are not feasible.



Objective 1.4: Align public agencies under common goals and foster a collective responsibility for safety through education, encouragement, and traffic safety programs.

Objective 1.5: Identify potential actions and/or other agencies for advancing public issues and preferences on bicycling outside County roads.

GOAL 2: Regional Connectivity

Objective 2.1: Establish regional bicycle corridors that facilitate connection between urban and rural areas.

Objective 2.2: Identify gaps in the County’s bicycling network, and prioritize “all ages and abilities” route connections that serve community destinations including schools, employment areas, recreational facilities and transit.

Objective 2.3: Consider connectivity to regional recreational cycling routes, including unpaved gravel routes and trails.

Objective 2.4: Develop an interconnected multi-modal system that serves existing networks including transit, state and local bicycle facilities and trail systems.

GOAL 3: Equitable & Inclusive Access

Objective 3.1: Create a Bicycle Master Plan that reflects broad representative engagement throughout the County.

Objective 3.2: Prioritize the needs of transportation disadvantaged communities with limited access to transportation options.

Objective 3.3: Identify and clearly articulate bicycle routes in the network that serve people biking at all levels of comfort and ability.

GOAL 4: Economic Vitality

Objective 4.1: Provide opportunities for low-cost active transportation to jobs, especially for people without other transportation options, such as access to a private vehicle.

Objective 4.2: Identify opportunities to support bicycle-related tourism including regional partnerships and improving network connections that serve the needs of recreational long-distance cycling.

Objective 4.3: Invest in amenities that attract bicycle tourism and recreation, including wayfinding, bike parking, campsites, and bicycle related businesses and services.

Objective 4.4: Support bicycle-related economic development in areas where those investments can provide multiple benefits for local residents, with a focus on transportation-disadvantaged residents specifically.

GOAL 5: Environment and Quality of Life

Objective 5.1: Encourage active, non-polluting transportation options as affordable, convenient, healthy, and safe options for travel around Lane County.

Objective 5.2: Explore opportunities to protect and enhance the local environment, minimize environmental impacts and conserve resources as part of transportation improvement projects.

Objective 5.3: Pursue programs, practices and partnerships that expose people to the natural environment in Lane County, fostering environmental stewardship, education, and awareness.



GOAL 6: Feasibility

Objective 6.1: Balance long-term mobility objectives with low-cost, short-term improvements that will pave the way for larger projects.

Objective 6.2: Address the mobility and safety needs of people biking when planning and constructing roadway improvements, to enhance efficiency and promote project outcomes. Balance the need for controlling long-term pavement maintenance costs with providing improved road surfaces for biking.

Objective 6.3: Identify and prioritize routes that are already identified in state and local plans, facilitate inter-jurisdictional partnerships, and position this plan to take advantage of existing funding opportunities and planning processes.

Objective 6.4: Articulate the statewide need for increased funding for bicycle infrastructure and routine maintenance to roads that support cycling. Work with local, regional, and state agencies and elected officials to leverage state funding for bicycle transportation projects and road maintenance in Lane County.

Proposed Lane County TSP Policy Amendments

This section presents recommended amendments to the existing policies contained in the Lane County Transportation System Plan (TSP). The TSP Goals and Policies are included in full below. Proposed amendments are included in **bold underlined text**. In cases where the proposed policy language differs greatly from the existing policy, the existing policy language that is recommended for removal follows in *~~italic strikethrough~~*.

GOAL 1: SAFETY

Eliminate fatalities and reduce severe-injury collisions on Lane County's transportation system.

Policy 1-a: Participate in the National Strategy on Highway Safety – Towards Zero Deaths (TZD) program.

Policy 1-b: Ensure safety is a top priority in making decisions for the Capital Improvement Program and for transportation facility operations, maintenance, and repair.

Policy 1-c: Align County departments, external safety groups, and other public agencies toward common transportation safety goals.

Proposed New Policy 1-d: Consider contributing factors in fatal, severe-injury, bicycle, and pedestrian crashes, consistent with the Transportation Safety Action Plan. Prioritize safety improvements using contributing factor interventions, on crashes located on the Lane County Bicycle Network and within transportation disadvantaged communities.

GOAL 2: ECONOMIC VITALITY

Provide a reliable transportation system that enhances the economic health of Lane County.

Policy 2-a: Support specifically targeted transportation investments, industries and employment sectors.

Policy 2-b: Realize the economic benefits that walking, biking, public transportation, and other active transportation investments can provide to Lane County.



Policy 2-c: Recognize the importance of resource-related uses such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities for the harvesting and marketing of agriculture and forest products.

GOAL 3: NATURAL ENVIRONMENT

Create and maintain a transportation system that first avoids, then minimizes, and finally mitigates impacts to the natural environment.

Policy 3-a: Support strategies in the Oregon Sustainable Transportation Initiative (OSTI) to encourage the reduction of greenhouse gases (GHG) such as building infrastructure that facilitates and supports bicycling or walking, supporting increased public transportation services, deploying intelligent transportation systems, and planning for efficient freight traffic movement.

Policy 3-b: Identify, avoid, and or mitigate potential adverse ecological, scenic, historic, cultural, economic, social, and health impacts of transportation improvement projects.

Policy 3-c: Explore opportunities to protect and enhance the local environment and conserve resources as part of transportation improvement projects.

GOAL 4: EQUITY & ACCESSIBILITY

Provide safe and efficient access to destinations and populations within Lane County.

Policy 4-a: Accommodate all transportation modes, including walking, biking, transit, and driving private and commercial vehicles, consistent with adopted road design standards.

Policy 4-b: Provide a multi-modal transportation system that is accessible to all users, improves access to basic needs (e.g., education, employment, food, housing, and medical care) and complies the requirements of the American with Disabilities Act (ADA).

Policy 4-c: Encourage the provision of transportation services to the meet the needs of the transportation disadvantaged such as low-income persons, children, older persons, alter-abled persons, racial and ethnic minorities, and those with limited English proficiency.

GOAL 5: MOBILITY

Promote the efficient and cost-effective movement of people, goods and services by all modes.

Policy 5-a: Maintain and improve roads consistent with their functional classification. Reclassify roads as appropriate to reflect function and use. Make access decisions in a manner consistent with the functional classification of the roadway.

Policy 5-b: Provide an adequate motor vehicle system that serves commercial vehicle/truck traffic to and from the land uses they serve, including freight access to the regional transportation network.

Policy 5-c: Consider the requirements for truck movement when designing all improvements in the public right of way on designated truck routes. Requirements include turn radii, sight distance, lane widths, turn pocket lengths, pavement design, and improvements that reduce freight vehicle impacts to bicyclists and pedestrians.

GOAL 6: CONNECTIVITY

Provide improved and new transportation connections within and between developed and developing areas.



Policy 6-a: Encourage safe and convenient pedestrian and bicycle connections between residential uses and adjacent activity centers, including transit facilities and commercial, employment, civic/institutional, and recreation uses.

Policy 6-b: Consider opportunities to purchase land for extensions of right-of-way where connectivity is needed.

Policy 6-c: Encourage the off-street trail networks to be integrated with on-street pedestrian and bicycle facilities. **Promote the development of county-wide recreational routes of regional significance, such as the Connect Lane bicycle routes identified in the East Lane County Bicycle Tourism Studio.**

GOAL 7: ACTIVE TRANSPORTATION AND PUBLIC HEALTH

Create a built environment that encourages healthy, safe, comfortable and convenient active transportation options that are viable for all users.

Policy 7-a: Consider and balance the needs of different trip purposes (recreation vs transportation) and different types of users (“strong and fearless” vs all ages and abilities). When feasible, prioritize the improvement and construction of facilities on the Lane County Bicycle Network that are safe and comfortable for all ages and abilities. *Develop a Bicycle and Pedestrian Master Plan to guide bicycle and pedestrian projects and programs to promote and support bicycle and pedestrian travel in unincorporated areas of Lane County.*

Policy 7-b: Support creation of regional bicycle and pedestrian corridors to facilitate safe travel between and within urban and rural communities in Lane County.

Policy 7-c: Coordinate with Lane County Department of Health and Human Services to recognize, promote, and track the public health benefits of active transportation.

GOAL 8: COORDINATION

Implement the Transportation System Plan by working with the public, community groups, transit providers, cities and other government agencies.

Policy 8-a: Ensure the following guidelines are used in making decisions about transportation improvements and services where inconsistencies exist between jurisdictional plans and standards. Decisions about road improvements may follow different guidelines upon agreement of the elected officials of the involved jurisdictions or their designees, or if other recorded inter-jurisdictional agreements exist that supersede these guidelines.

- (i) Improvements to a state highway, state transportation system plans and design standards will apply;
- (ii) Improvements to a transportation facility outside of an urban growth boundary, the County TSP and design standards will apply;
- (iii) Improvements to a transportation facility within an urban growth boundary, the City TSP and applicable road design standards will apply.
- (iv) Improvements to an intersection or roads in more than one jurisdiction’s ownership or control, the TSP goals and road design standards of the agency having ultimate maintenance responsibility will apply.

Policy 8-b: Develop criteria with cities and ODOT to resolve conflicts and transfer roads to the appropriate jurisdiction, particularly as urban unincorporated areas are annexed and urban expansion occurs.

Policy 8-c: Participate in regional and state technical and policy decision making processes, such as the Central Lane Area Commission on Transportation.



GOAL 9: FUNDING

Seek adequate and reliable funding for transportation.

Policy 9-a: Prioritize improvements within statutory road fund limitations, to access ways, paths, or trails where trail or route improvements help complete a regional planned facility or make connections to an existing or planned facility within an incorporated city within the County.

Policy 9-b: Strive to distribute funding so that it is proportionally balanced between the various needs of the community including modal and geographic considerations.

Policy 9-c: Seek funding sources, such as the following:

- Facilitate the formation of Local Improvement (special assessment) Districts to address transportation improvement needs on sub-standard transportation facilities.
- Consider additional sources and strategies, such as a local option gas tax or vehicle registration fee, to ensure necessary funding is available to meet County transportation needs.
- Work with local, regional, and state agencies and elected officials to leverage and increase state funding for transportation improvement projects in Lane County.
- Evaluate existing transportation related funding agreements with incorporated cities, and make necessary amendments to allocate an appropriate share of system development charges (SDCs) to the County.
- **Develop a system for identification and tracking of new and recurring funding sources for bicycle and pedestrian infrastructure and programs including SRTS, Community Paths, bikeshare services for small communities, etc.**

GOAL 10: MAINTENANCE AND PRESERVATION

Adequately maintain and preserve Lane County’s transportation facilities.

Policy 10-a: Ensure operations, maintenance, repair, and preservation of County transportation facilities, which include roads, bridges, sidewalks, and bike facilities, are the priority of the Road Fund and are routinely carried out to protect the public investment in, and to ensure adequate functioning of the County transportation system.

Policy 10-b: Balance the need for controlling long-term pavement maintenance costs with consideration for providing improved road surfaces for bicycling in road maintenance decisions. **When feasible, prioritize maintenance to road surfaces identified on the Lane County Bicycle Network.**

Policy 10-c: Look for opportunities to reduce maintenance costs through cooperative partnerships with other agencies and private enterprises.

Implementation Action Recommendations Matrix

Table 1 presents recommended implementation actions to support the Lane County Bicycle Master Plan. In addition to each strategy recommendation, the table includes the following elements:

- LCBMP Objectives Fulfilled - Lists each Guiding Framework Objective fulfilled by a given implementation action. All objectives are fulfilled by at least one action.



- Existing Policy Nexus - Identifies recommendations that are reinforced by a policy in an existing plan. For the purposes of this exercise, the project team included the following plans: the Oregon Bicycle and Pedestrian Plan (OBPP), the Lane County Transportation System Plan (LCTSP), the Lane County Transportation Safety Action Plan (LCTSAP), and the East Lane County Bicycle Tourism Studio (ELCBTS).
- Implementing Partners – Indicates whether the recommendation is internally-oriented (meaning that Lane County is solely responsible for implementation actions) or lists the implementation partners.
- Notes/Considerations/Examples – Adds context, considerations, or identifies additional practice or program examples.



Table 1. Lane County Bicycle Master Plan Implementation Action Recommendations

Action	Implementing Partners	Notes/Considerations/Examples
1. Establish typical design standards to clearly identify urban/rural transition zones on County Roads.	Internal	Some roads will require greater or lesser accommodation for all modes, based on the surrounding land use context, and will vary in application throughout the County. Consult ODOT’s Blueprint for Urban Design (BUD) for guidance based on ODOT-designated urban, suburban and rural contexts.
2. Coordinate with partner agencies to identify alternative connections where on-street facilities are not feasible on County roads, and support them in their planning processes. Recommend the Parks Division create a Trails Plan addressing regional trail connectivity between parklands.	Oregon Department of Transportation (ODOT), Willamalane Park and Recreation District, local jurisdictions, National Forest Service (NFS), Bureau of Land Management (BLM)	This planning process identified need for improvements on networks outside of the County-owned street network, and demonstrated that all Lane County bicycling networks are interdependent. The County should use this Plan as a platform to communicate the need for continued planning and coordination with project partners in regards to their own planning processes to support biking. Consider a proposed bicycle facility’s importance in providing access to the Lane County Bicycle Network when recommending bicycle facilities on other networks for implementation.
3. Consider forest roads and gravel roads as opportunities for Lane County Bicycle Network development.	NFS, BLM, Willamalane Park and Recreation District, Travel Lane County	Work with partner agencies to encourage access, enhance routes and close network gaps on gravel and forest roads identified in the Lane County Bicycle Network.
4. Identify opportunities to enhance connections to off-road, recreational bicycling routes outside of the Lane County Bicycle Network, while clearly communicating the intended users for such routes.	NFS, BLM, Willamalane Park and Recreation District, Travel Lane County	See proposed amendment to TSP Policy 6-c. Specific actions include: <ul style="list-style-type: none"> • Partner with agencies that administer forest roads and park lands to encourage public access for walking and biking. • Identify opportunities to re-purpose right-of-way, including haul roads and abandoned rail lines, for off-road cycling



		<ul style="list-style-type: none"> Partner with other transportation and economic development agencies/organizations to coordinate and promote the development of county-wide recreational routes of regional significance.
5. Consider other safety interventions, including speed reduction and roadway redesign, when selecting appropriate facility designations on the Lane County Bicycle Network.		The recommended facilities on the Lane County Bicycle Network contained on this Plan are based on current roadway conditions, and are subject to revision over time. Safety and comfort for cyclists may also be enhanced by interventions such as speed reduction or roadway reconfigurations (i.e. road diets) that may inform a change in the recommended facility type.
6. Provide appropriate roadway surface type for bicyclists on newly constructed or reconstructed roadways, including temporary bicycle access during roadway construction or maintenance.	Internal	Considerations include providing a smooth, level path of travel, of generous width, physical separation, and clear instruction/signing through construction zones, and ensuring that on shoulder bikeways, rumble strips/strips and drainage grates are placed so as not to interfere with the bicycle path of travel. It also speaks to maintenance concerns about debris, loose gravel, rutting, etc. in the shoulder/bikeway which can pose a significant challenge for bicyclists.
7. Develop a consistent and intuitive regional wayfinding system on the Lane County Bicycle Network.	ODOT, local jurisdictions, Lane Transit District, Travel Lane County	<p>Establish a regional wayfinding system for bicycle routes and other points of interest throughout the region. After more of the longer distance routes are connected throughout the region, a wayfinding system is recommended to create a cohesive and easy-to-use platform for navigating the regional bicycle route system. The system should be designed so that it is flexible enough to be updated as new projects are completed, Coordinate with ODOT Scenic Bikeways wayfinding system, which already identifies many bikeways in Lane County.</p> <p>See NACTO’s guidance on wayfinding programs: https://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/bike-route-wayfinding-signage-and-markings-system/</p>



<p>8. Consider the implications of e-bikes on medium and long-term Plan implementation.</p>	<p>ODOT, local jurisdictions</p>	<p>There are several considerations, including increased demand for longer-distance bicycling connections, and presence of bicyclists (including those of varying ability) on rural and/or more topographically challenging routes.</p>
<p>9. Improve access to and understanding of emerging technology that supports bicycling including e-bikes, bike share, and multimodal integrated trip planning (Mobility-as-a-Service).</p>	<p>Local jurisdictions, Lane Transit District</p>	<p>The purpose of this action is to expand the availability of emerging technology and shared travel options to smaller cities and neighborhoods in the region, many of whom may have interest in these applications but do not have the capacity to implement them. Lane County could support partner jurisdictions in areas such as determining feasibility of pilot programs such as bike share or promoting commercial services/amenities that support e-bikes.</p>
<p>10. Develop a bicycle count program to measure trip volumes on the Lane County Bicycling Network, and use metrics as a tool to inform both project prioritization and evaluation.</p>	<p>CLMPO</p>	<p>Bicycle facility usage data is needed to strengthen grant requests and influence policy and funding decisions. A lower-cost solution to a bicycle count program can include using Strava’s available metrics to understand trip volume and popular routes. See the Performance Measures section of this Plan for additional guidance.</p>
<p>11. Coordinate with public and private transit providers to leverage opportunities to incorporate options for bicycles, and prioritize projects that improve access to transit and offer first/last mile benefits.</p>	<p>Lane Transit District, Travel Lane County</p>	<p>Use the Demand Analysis prepared as a part of this planning process to inform this Plan, and/or rely on demand metrics provided by transit providers to determine need and prioritization.</p>
<p>12. Use the Equity Analysis metrics and public input provided in support of this Plan to prioritize improvements to the Lane County Bicycle Network in transportation disadvantaged communities.</p>	<p>Internal</p>	<p>See proposed amendment to TSP Policy 1-d, and also the Performance Measures section of this Plan for guidance on tracking this goal.</p>



<p>13. Expand bike share to other jurisdictions and areas beyond the Eugene-Springfield metropolitan area.</p>	<p>Local jurisdictions, ODOT, Cascadia Mobility</p>	<p>Bike share systems offer a number of benefits to the cities that choose to invest in them. Benefits can include getting more people on bicycles, improved community health, economic benefits, and synergies with public transit. Well-planned expansion can also lead to ridership increases and increased viability as a transportation option. Sponsorships are used to offset operating costs and private property owners can partner with the siting and installation of stations.</p>
<p>14. Develop bicycle parking requirements and encourage end of trip facilities.</p>	<p>Internal</p>	<p>Examples of support for end of trip facilities include: working with rural communities to develop lower density parking requirements, establishing bike parking requirements at County facilities, or strategizing around centralized rural “Mobility Hubs” with transit providers.</p> <p>Association of Pedestrian and Bicycle and Professionals’ Bicycle Parking Guidelines: http://c.ymcdn.com/sites/www.apbp.org/resource/resmgr/bpg_exec_summary_4-21-10.pdf</p>
<p>15. Develop a Request-a-rack program to address unmet demand for bicycle parking at businesses in unincorporated Lane County.</p>	<p>Local jurisdictions</p>	<p>A “Request-A-Rack” program can help address unmet demand for bicycle parking at existing businesses. City of Tucson Bicycle Parking Distribution Policy: https://www.tucsonaz.gov/files/bicycle/Bike_Rack_Distribution_Policy.pdf</p>
<p>16. Increase local capacity to execute and administer education and encouragement programs throughout Lane County.</p>	<p>Local jurisdictions</p>	<p>Local capacity may refer to County staff and program funding and/or funding provided to local jurisdictions or community organizations.</p>



<p>17. Support and increase the existing capacity of the Lane County Safe Routes to School (SRTS) program.</p>	<p>Lane County</p>	<p>While many schools and communities across the region have successfully engaged in these types of programs in the past, it is recommended that all schools and communities aim to increase the number of elementary and middle school students who safely walk and bike to school. See ODOT SRTS Program resources: https://www.oregon.gov/odot/Programs/Pages/SRTS.aspx</p>
<p>18. Incorporate bikeways into County transportation planning and project development.</p>	<p>Internal</p>	<p>For any development / redevelopment projects involving changes to County roadways, determine if those changes present an opportunity for timely or more cost-efficient implementation of Plan recommendations.</p>
<p>19. Develop an annual or semi-annual maintenance plan for County roads that includes the removal of potential hazards from bike lanes, shoulders and routes such as overgrown vegetation, debris, and snow.</p>	<p>Internal</p>	<p>As the existing system is refined and proposed recommendations are implemented, Lane County should establish a maintenance program and secure additional funding/resources for sweeping, pavement management, and weed abatement and eradication.</p>
<p>20. Develop a system for identification and tracking of new and recurring funding sources for bicycle infrastructure and programs including SRTS, Community Paths, bikeshare services for small communities, etc.</p>	<p>Internal</p>	<p>Up-to-date and easily accessible funding data can help transportation planners and engineers make better and more timely decisions, and be poised to take advantage of opportunities to implement Plan recommendations.</p>