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TECHNICAL MEMORANDUM

February 19, 2025 Project# 29489.0

To: Chris Meyers and Lynn Schroder, Cit of West Linn

From: Matt Bell, Kittelson & Asscoaites, Inc.

CC: Matt Hastie and Brandon Crawford, MIG

RE: OR 43 Land Use and Neighborhood Connectivity Plan

INTRODUCTION

The OR 43 Land Use and Neighborhood Connectivity Plan aims to enhance multimodal transportation options by building upon existing plans, community input, and design concepts to create a safe, accessible, and well-connected network. This memorandum outlines the background, transportation facilities, and recommended enhancements that inform the plan's multimodal recommendations. Key sources shaping these recommendations include the West Linn Transportation System Plan, the OR 43 Conceptual Design Plan, the Robinwood and Bolton Neighborhood Plans, and recent community input. By integrating these elements, the plan seeks to improve pedestrian, bicycle, and transit infrastructure while addressing community priorities and long-term transportation needs along the OR 43 corridor. The Neighborhood Connectivity Plan is a component of the larger West Linn Vision43 Corridor project, and the recommended transportation improvements will supplement land use and zoning recommendations that are addressed in a separate task.

BACKGROUND

The multimodal recommendations in the Neighborhood Connectivity Plan build upon existing plans, community input, and design concepts to ensure a cohesive and well-integrated transportation network. This background section provides an overview of key planning efforts that informed the recommendations, including the West Linn Transportation System Plan, the OR 43 Conceptual Design Plan, the Robinwood and Bolton Neighborhood Plans, and recent public engagement findings. Together, these elements highlight existing conditions, identify transportation needs, and establish a framework for future improvements along the OR 43 corridor.

Transportation System Plan

The West Linn Transportation System Plan (TSP) is a long-range planning document that identifies the transportation facilities and services needed to support growth within the City over a 20-year period. The TSP provides guidance for operating and improving all elements of the multimodal transportation system, including the pedestrian, bicycle, transit, and motor vehicle facilities along the OR 43 corridor and within surrounding neighborhoods. The TSP documents existing transportation facilities and services, identifies gaps, deficiencies, and future needs, and identifies transportation system projects to address the needs. The TSP includes several projects within the overall study area and focus areas of this planning effort. Most projects aim to improve connectivity along higher classification streets, such as arterials, collectors,

and neighborhood routes, while others aim to improve access to key destinations, such as schools, parks, and commercial centers. These projects, along with other elements of the TSP, were considered and incorporated into the multimodal recommendations for the Neighborhood Connectivity Plan.

OR 43 Conceptual Design Plan

The OR 43 Conceptual Design Plan establishes typical cross sections for the OR 43 corridor, prioritizing safety, accessibility, and multimodal connectivity. Key features include grade-separated bicycle facilities, continuous sidewalks on both sides of the street, and a two-way left-turn lane to improve access and traffic flow. The plan also incorporates operational and traffic control enhancements, such as redesigned, consolidated, and signalized intersections to improve safety and efficiency. Transit improvements are integrated throughout, including new bus pullouts and better park & ride access to accommodate future transit demand. Additionally, the plan presents detailed design concepts for each corridor segment, integrating the typical cross sections with intersection control and design treatments, and transit elements. The design plan aims to provide continuous bicycle and pedestrian facilities, enhance access to transit facilities and services, and improve traffic flow along the corridor. The recommendations outlined in the OR 43 Conceptual Design Plan were considered and incorporated into the multimodal recommendations for the Neighborhood Connectivity Plan.

Robinwood and Bolton Neighborhood Plans

The Robinwood Neighborhood Plan was adopted in May 2008 and outlines the goals, policies, and action measures of the neighborhood. The goals emphasize the desire for Willamette Drive to have superior transportation facilities for all travel modes, for Willamette Drive to serve as the main street of the Robinwood Neighborhood, and to preserve the character of the existing residential neighborhoods by providing appropriate pedestrian facilities and using pedestrian shortcuts to connect existing streets. The goals also emphasize the need for enhanced crossings on Willamette Drive and for the use of shared-use paths in lieu of sidewalks on roadways with constraints.

The Bolton Neighborhood Plan was adopted in April 2006 and outlines the goals, policies, and action measures of the neighborhood as well as partners for implementation and methods for action measures. Like the Robinwood Plan, it includes goals related to Willamette Drive and goals that seek to preserve, maintain, protect, and enhance the character of the neighborhood, especially near the neighborhood center, Bolton Central Village, and natural areas. The goals emphasize the need for safe crossings on Willamette Drive and West A Street, safe pedestrian routes along streets that parallel Willamette Drive, and appropriate pedestrian connections between key neighborhood streets.

Community Input

The West Linn community provided input on transportation infrastructure needs at multiple community events that were held in 2024 as a part of the Vision43 project. Participants were given color-coded stickers with symbols representing different elements of the transportation system, including pedestrian crossings, sidewalk or pathway improvements, bicycle facility improvements, and public transportation. Participants placed the stickers on large-scale maps of the focus areas to visually indicate where improvements are needed. A significant number of stickers were placed along the OR 43 corridor and

within surrounding neighborhoods, highlighting the community's priorities for new infrastructure. The locations identified for enhanced pedestrian crossings, as well as other pedestrian, bicycle, and transit needs, were then cross-referenced with the TSP and the OR 43 Conceptual Design Plan. This input helped shape the recommended multimodal enhancements described below, ensuring that proposed projects align with both community needs and previously established plans.

TRANSPORTATION FACILITIES

Pedestrian Facilities

Pedestrian facilities are the elements of the transportation system that enable people to walk safely and efficiently between neighborhoods, commerce centers, employment areas, and transit stops. These include facilities for walking along roadways (e.g., sidewalks, mixed-use shoulders, and shared-use paths) and for crossing roadways (e.g., crosswalks, crossing beacons, pedestrian refuge islands). Each plays an important role in developing a comprehensive pedestrian system. The following provides a summary of the types of facilities identified in the Neighborhood Connectivity Plan to address pedestrian needs.

SIDEWALKS

Sidewalks are paved pedestrian pathways located adjacent to roads, designed to provide safe and accessible spaces for people walking and using mobility devices. Sidewalks may be curb-tight or separated from adjacent street traffic by landscape strips, bike lanes, and/or on-street parking. Sidewalks provide an important means of mobility for people with disabilities, families with strollers, and others who prefer improved walking surfaces over unimproved roadsides.

The City's street design standards currently require 6-foot sidewalks on arterials, collectors, neighborhood routes, and local streets; 10 to 12-foot sidewalks are required along arterials and 8-foot sidewalks are required along collectors and neighborhood routes in commercial zones. The City's standards also require 5-foot landscape strips on arterials and 6-foot landscape strips on collectors, neighborhood routes, and local streets. The City's standards along OR 43 are primarily guided by the OR 43 Conceptual Design Plan.

MIXED-USE SHOULDERS

Mixed-use shoulders are roadway shoulders designed to accommodate people walking, biking, and rolling. They are most effective on low-volume streets where adding sidewalks or separate bicycle facilities is not feasible due to topographical or environmental constraints. While they provide a cost-effective alternative to dedicated pedestrian and bicycle infrastructure, additional safety measures, such as signage or pavement markings, may be needed to improve visibility and alert drivers. Mixed-use shoulders may be used on an interim basis, until funding for the full treatment is available, or they may be the preferred treatment along a particular corridor.

The City's street design standards do not include mixed-use shoulders; however, the TSP includes a few projects that aim to provide mixed-use shoulders as interim treatments along key corridors.

SHARED-USE PATH

Shared-use paths are paved, off-street facilities designed for use by pedestrians, bicyclists, and other non-motorized travelers. Typically separated from roadways, these paths provide a safe and comfortable space for recreation and transportation, accommodating a variety of users, including people walking, biking, and rolling. Shared-use paths are commonly found along greenways, parks, and transportation corridors, offering key connections between neighborhoods, schools, businesses, and other destinations. They provide a comfortable and accessible option for people of all ages and abilities.

Sidewalks

Mixed-use Shoulder

Shared-Use Path

CROSSWALKS

Crosswalks enable people to safely and efficiently cross streets and other transportation facilities. Planning for appropriate crosswalks requires balancing vehicular mobility needs with providing crossing locations along the desired routes of pedestrians. Enhanced crosswalk treatments include geometric features such as curb extensions and raised median islands with pedestrian refuges as well as signing and striping, flashing beacons, signals, countdown heads, and leading pedestrian intervals. Many of these treatments can be applied simultaneously to further alert drivers of the presence of pedestrians in the roadway.

ODOT's Traffic Manual provides direction and guidance on crosswalks located on the state highway system, such as OR 43. The manual provides guidance on where crosswalks may be located and what types of treatments may be considered based on the physical and operational characteristics of the roadway. The manual also provides guidance on the process and required approvals for modifying an existing crosswalk and installing a new crosswalk. The process involves a detailed engineering study that documents the evaluation, design, and recommendation of the crossing locations and treatments.

Enhanced Crosswalk

Enhanced Crosswalks with RFFB

Pedestrian Signal

Bicycle Facilities

Bicycle facilities are the elements of the transportation system that enable people to travel safely and efficiently between residential neighborhoods and destinations in the city and the surrounding area by bike. These include facilities for biking along roadways (e.g. shared bikeways, on-street bike lanes, and separated bike lanes) and for crossing roadways (e.g., enhanced bike crossings). These also include end-of-trip facilities (e.g. bike parking, bike hubs, tune-up stations, changing rooms, and showers at worksites); however, most of these facilities are addressed through the development code. Each facility plays an important role in developing a comprehensive bicycle system. The following provides a summary of the types of facilities identified in the Neighborhood Connectivity Plan to address bicycle needs.

SHARED BIKEWAYS

Shared bikeways are streets where bicycles and motor vehicles share the same travel lane without a dedicated bike lane. Shared bikeways are typically used on lower-speed, lower-volume streets and can include shared-lane pavement markings (sharrows) to indicate the preferred positioning for cyclists and to remind drivers to expect bicycle traffic. Additionally, they may be designated as shared bikeways with signage to reinforce their function as a bicycle-friendly route. These treatments improve visibility and wayfinding for cyclists while promoting safer interactions between all road users.

The City's street design standards currently assume that all neighborhood routes without bike lanes and all local streets are shared bikeways. The TSP includes several projects that aim to provide shared-lane pavement markings and/or sign as interim treatments along key corridors.

ADVISORY BIKE LANES/SHOULDERS

Advisory bike lanes, also known as advisory shoulders, are dashed bike lanes that provide space for bicyclists on roads with lower traffic volumes and constrained widths. Unlike conventional bike lanes, they do not have a centerline, allowing motor vehicles to temporarily use the bike lane space when necessary to pass oncoming traffic. This design encourages slower speeds and increases flexibility for all users while prioritizing space for cyclists and pedestrians. Advisory bike lanes/shoulders are not an approved treatment in the Manual on Uniform Traffic Control Devices MUTCD). However, the City could request authorization from the Federal Highway Administration (FHWA) to test the treatment on an interim basis.

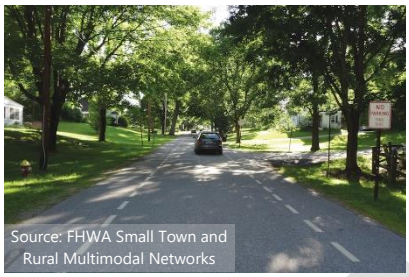
BIKE LANES

Bike lanes are designated travel lanes for bicycles, typically marked with pavement striping, bike symbols, and signage. They provide a dedicated space for cyclists, improving safety and predictability for all road users. Bike lanes are usually located adjacent to vehicle travel lanes and may include buffers for additional separation from traffic. They are best suited for streets with moderate vehicle speeds and volumes, offering a balanced approach to accommodating cyclists while maintaining roadway capacity.

The City's street design standards currently require 5-foot bike lanes on collectors and neighborhood routes. Shared bikeways may be used on collectors and neighborhood routes with traffic volumes below 3,000 ADT or on neighborhood routes in constrained environments. However, implementing bike lanes can be challenging on collectors or neighborhood routes where on-street parking is being removed or

repurposed for bike lanes. Residents often rely on these spaces for their own parking needs and for accommodating visitors, which can create resistance to the transition.

Shared Bikeway



Advisory Bike Lanes

Bike Lanes

SEPARATED BIKE FACILITIES

Separated bike facilities, such as cycle tracks, provide a dedicated space for cyclists that is physically separated from motor vehicle traffic and pedestrians. These facilities can be one-way or two-way and are typically separated by curbs, medians, bollards, or landscaped buffers. Cycle tracks enhance safety and comfort for cyclists by reducing conflicts with vehicles and are ideal for higher-speed or high-traffic roadways where standard bike lanes may not provide sufficient protection.

The City's street design standards currently require 7-foot cycle tracks on minor arterials, separated from the roadway by 5-foot landscape strips. Although landscape strips may be removed and/or bike lanes may be utilized in lieu of cycle tracks at the discretion of the City Engineer.


Separated Bike Facility


Separated Bike Facility

RECOMMENDED ENHANCEMENTS

Pedestrian Facilities

The recommended pedestrian facilities primarily consist of mixed-use shoulders to provide connections along streets with no sidewalks or intermittent sidewalks, shared-use paths and trails to provide off-street connections between neighborhoods and activity centers, and crosswalks to provide safe and convenient places for people to cross. Sidewalks are not included in the recommended enhancements because the TSP and OR 43 Conceptual Design Plan include projects that aim to provide sidewalks along many study area roadways, including OR 43. In addition, the TSP provides standard cross sections and guidelines for installing sidewalks when redevelopment occurs.

Figure 1 illustrates the location and type of recommended pedestrian facility enhancements for the Neighborhood Connectivity Plan. Figure 1 also shows the location and type of pedestrian facilities included in the TSP and OR 43 Conceptual Design Plan. As shown, the combination of the projects will provide continuous facilities along several major study area roadways, improving pedestrian access and connectivity along the study corridor and within the focus areas.

Figure 1

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Proposed Pedestrian Facility Enhancement
West Linn, OR

Bicycle Facilities

The recommended bicycle facilities primarily consist of shared bikeways. Bike lanes and separated bike facilities are not included in the recommended enhancements because the TSP and OR 43 Conceptual Design Plan include projects that aim to provide these facilities along many study area roadways, including OR 43. In addition, the TSP provides standard cross sections and guidelines for installing sidewalks when redevelopment occurs. Advisory bike lanes/shoulders are also not included in the recommended enhancements because they are not an approved treatment in the MUTCD; however, as indicated above, the City could request authorization from the FHWA to test the treatment on an interim basis.

Figure 2 illustrates the location and type of recommended bicycle facility enhancements for the Neighborhood Connectivity Plan. Figure 2 also shows the location and type of bicycle facilities included in the TSP and OR 43 Conceptual Design Plan. As shown, the combination of the projects will provide continuous facilities along several major study area roadways, improving bicycle access and connectivity along the study corridor and within the focus areas.

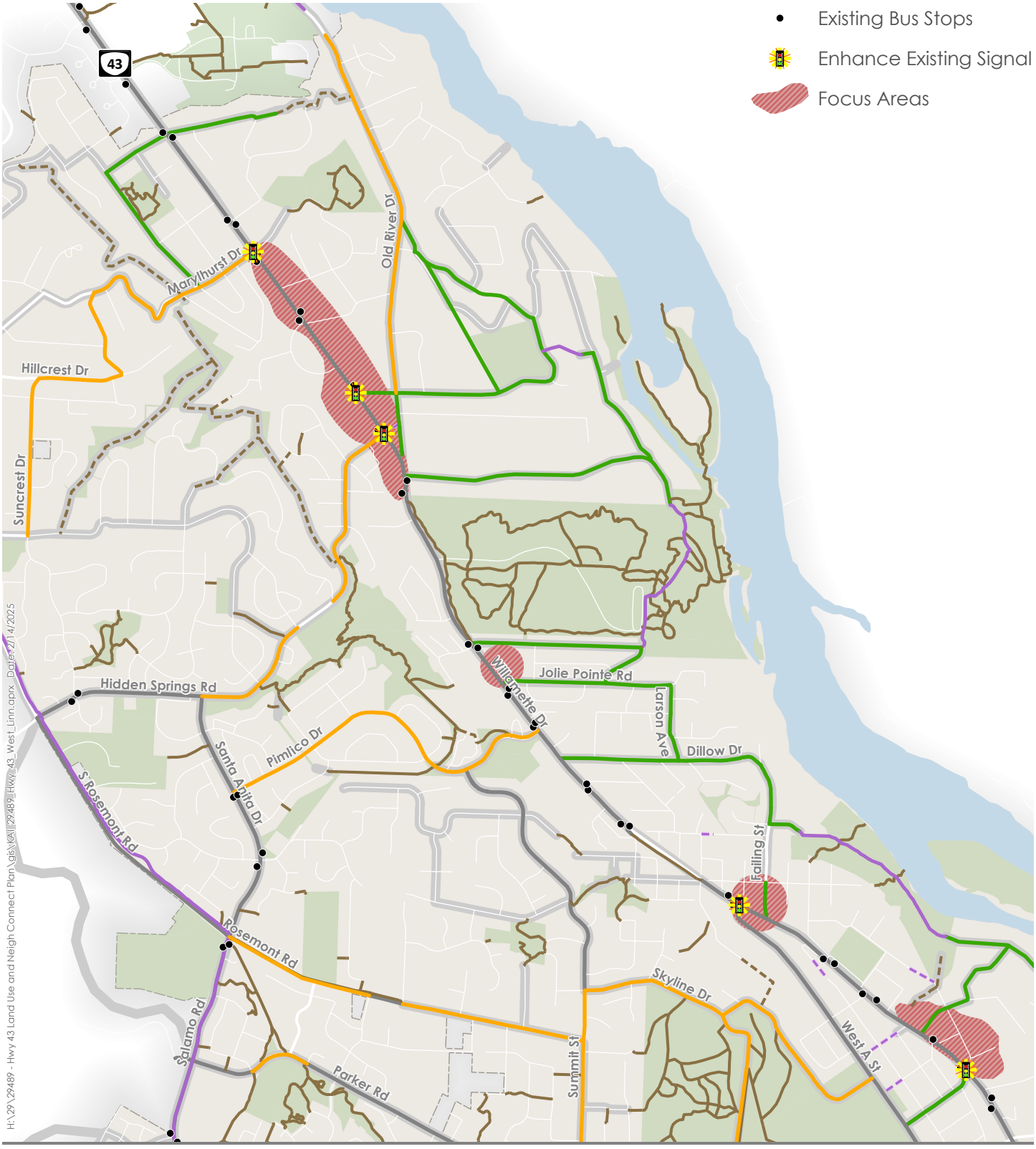

Figure 2

Proposed Bicycle Facility Enhancement
West Linn, OR

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NEXT STEPS

The recommendations included in this memorandum will be reviewed by the project team and Project Work Group to ensure consistency with existing plans, policies, feasibility, and alignment with broader transportation goals. The community will also have the opportunity to review and provide feedback on the proposed enhancements through public engagement efforts. Once reviewed, the final recommendations will be incorporated into the Vision43 Corridor Plan, and ultimately the West Linn Transportation System Plan (TSP), ensuring they are formally adopted and positioned for future funding and implementation. This process will help guide long-term transportation investments that improve connectivity, safety, and accessibility along the OR 43 corridor.