2025 Comprehensive Plan Update

Multimodal Level of Service Standards

Council Work Session

June 25, 2025

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AGENDA

- Recent changes to GMA
- New Transportation Element Requirements
- MMLOS Standards
- Current Standards
- Level of Traffic Stress
- Recommended MMLOS Standards
- Potential Outcomes
- Next Steps

Recent Changes to GMA

- **HB 1181 (2023)**
  - In addition to requiring a new Climate Element, significant changes were made to the required Transportation Element
- **GMA's Transportation Goal**
  - Encourage efficient multimodal transportation systems that **will reduce greenhouse gas emissions and per capita vehicle miles traveled,** and are based on regional priorities and coordinated with county and city comprehensive plans.
- **New GMA Definitions**
  - Active Transportation
  - Active Transportation Facilities
  - Environmental Justice
  - Transportation System

New Transportation Element Requirements

- **Active transportation**
  - Inventory of all local active transportation facilities
  - Shift from just “bicycle and pedestrian” to include other travel options
- **Multimodal Level of Service (MMLOS) Standards**
  - Standards for active transportation facilities
- **Forecast of multimodal transportation demand to inform development of the transportation element**
  - Greater emphasis on safety
  - “Priority must be given to facilities with the greatest multimodal safety benefit to each category of roadway users”
- **Identification of needs to equitably meet current and future demand**
- **ADA Transition Plan**
- **Concurrency and additional strategies for mitigation**

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Multimodal Level of Service (MMLOS) Standards

- **MMLOS standards are performance metrics that serve as a tool to:**
  - Assess the adequacy of the transportation system (e.g., sidewalks, bicycle lanes, vehicle travel, etc.)
  - Identify current and future transportation improvement projects (e.g. Capital Facilities Plan)
  - Set priorities and track progress over time
- **MMLOS standards are required for:**
  - Locally-owned arterials (County)
  - Locally and regionally operated transit routes (C-TRAN)
  - State-owned or operated transit routes (WSDOT)
  - Active transportation facilities (County)

Current LOS Standards

- **Transportation Concurrency Management System (CCC 40.350.020)**
  - Roadway segments: Volume-to-capacity (v/c) ratio < 0.90
    - Example: A Principal Arterial has a single direction capacity of 1,800 vehicles per hour. 0.90 v/c ratio = 1,620 trips
  - Signalized Intersection: two (2) cycle lengths or two hundred forty (240) seconds of delay
  - Unsignalized Intersection: LOS E if warrants are met / LOS D if not met

LEVEL OF SERVICE	V/C RATIO	AVERAGE CONTROL DELAY (SECOND/VEHICLE)		DESCRIPTION
		SIGNALIZED INTERSECTION	UNSIGNALIZED INTERSECTION	
A	<0.3	0 - 10	0 – 10	Free Flow, minimal delays
B	0.3 - 0.5	10 - 20	10 – 15	Stable Flow, slight delays
C	0.5 -0.7	20 - 35	15 – 25	Stable Flow, acceptable delays
D	0.7 -0.9	35 - 55	25 – 35	Approaching Unstable, tolerable delays
E	1	55 - 80	35 – 50	Unstable, significant delays
F	>1	> 80	> 50	Forced Flow, excessive delays

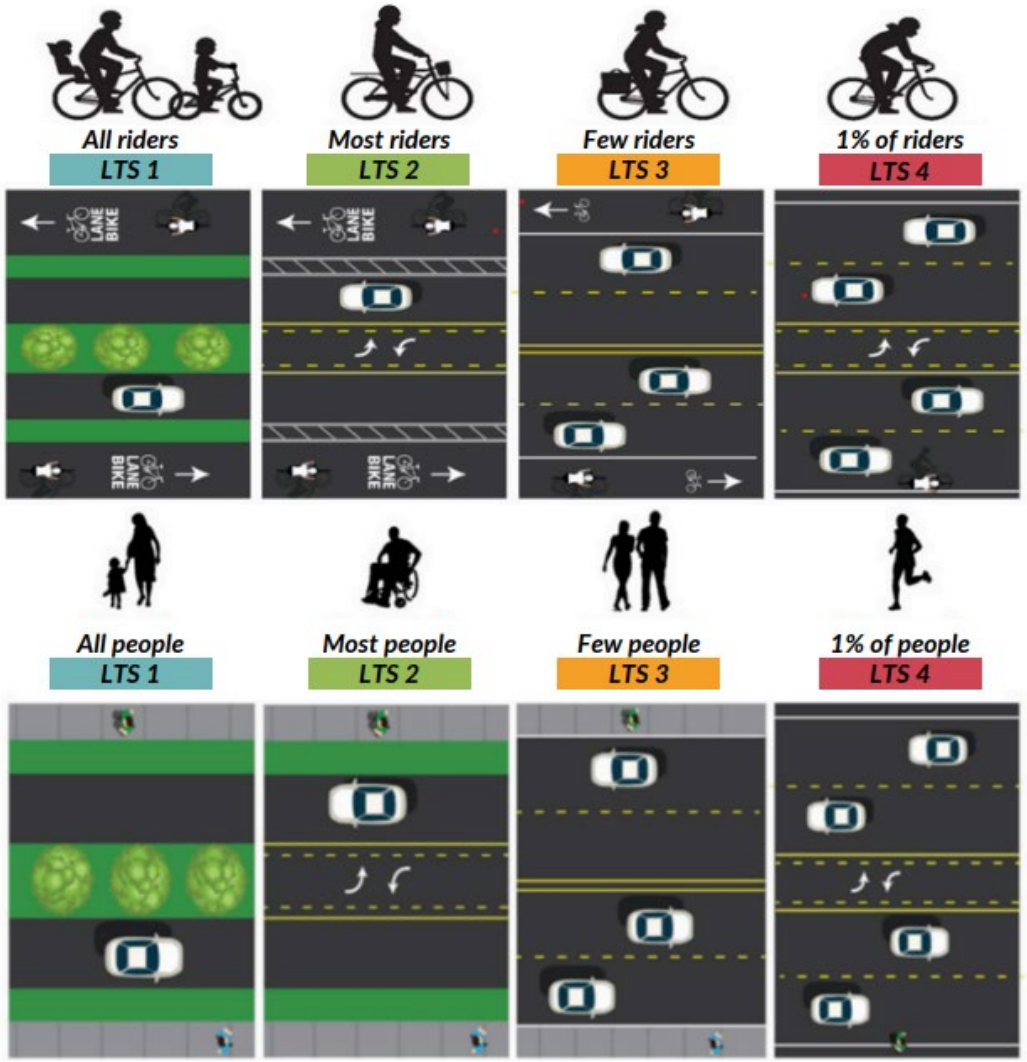
Level of Traffic Stress

- **WSDOT Level of Traffic Stress (LTS)**
  - WSDOT Active Transportation Plan, 2020 and Beyond
  - Complete Streets RCW 47.04.035
- **What is LTS?**
  - Grading system that is based on user comfort and perceived safety (stress level)
    - LTS 1 being the best, and LTS 4 the worst
  - Objective and quantitative assessment of roadway characteristics that affect safety, mobility, and access for active transportation use, such as:
    - Existing Pedestrian/Bicycle Facilities
    - Traffic Volumes
    - Target Traffic Speed
    - Number of Vehicle Lanes

Level of Traffic Stress	Description
1 Lowest	Suitable for all ages and abilities
2 Low	Comfortable for most adults
3 Moderate	Tolerable for enthusiastic and/or confident adult
4 High	Only used by highly confident people

Source: WSDOT Level of Traffic Stress Flyer, August 2023

Level of Traffic Stress



Source: WSDOT Level of Traffic Stress Flyer, August 2023

Recommended MMLOS standards

- **WSDOT Interim Guidance for MMLOS Standards (2024)**
  - Recommends LTS 2 for bicycle and pedestrian facilities across all place types
- **Why LTS as the performance metric?**
  - Simple, easy to understand, and transparent
  - Visualization
  - Flexible and adaptable
  - Consistent with state and regional guidelines and standards
- **Recommended active transportation standard for the county:**
  - LTS 2 or better within the Urban Growth Area (UGA)
  - LTS 3 or better in rural areas outside the UGA that are designated routes on RTC's Regional Active Transportation Network
    - NE 10th Ave and NE 72nd Ave

Level of Traffic Stress	Description
1 Lowest	Suitable for all ages and abilities
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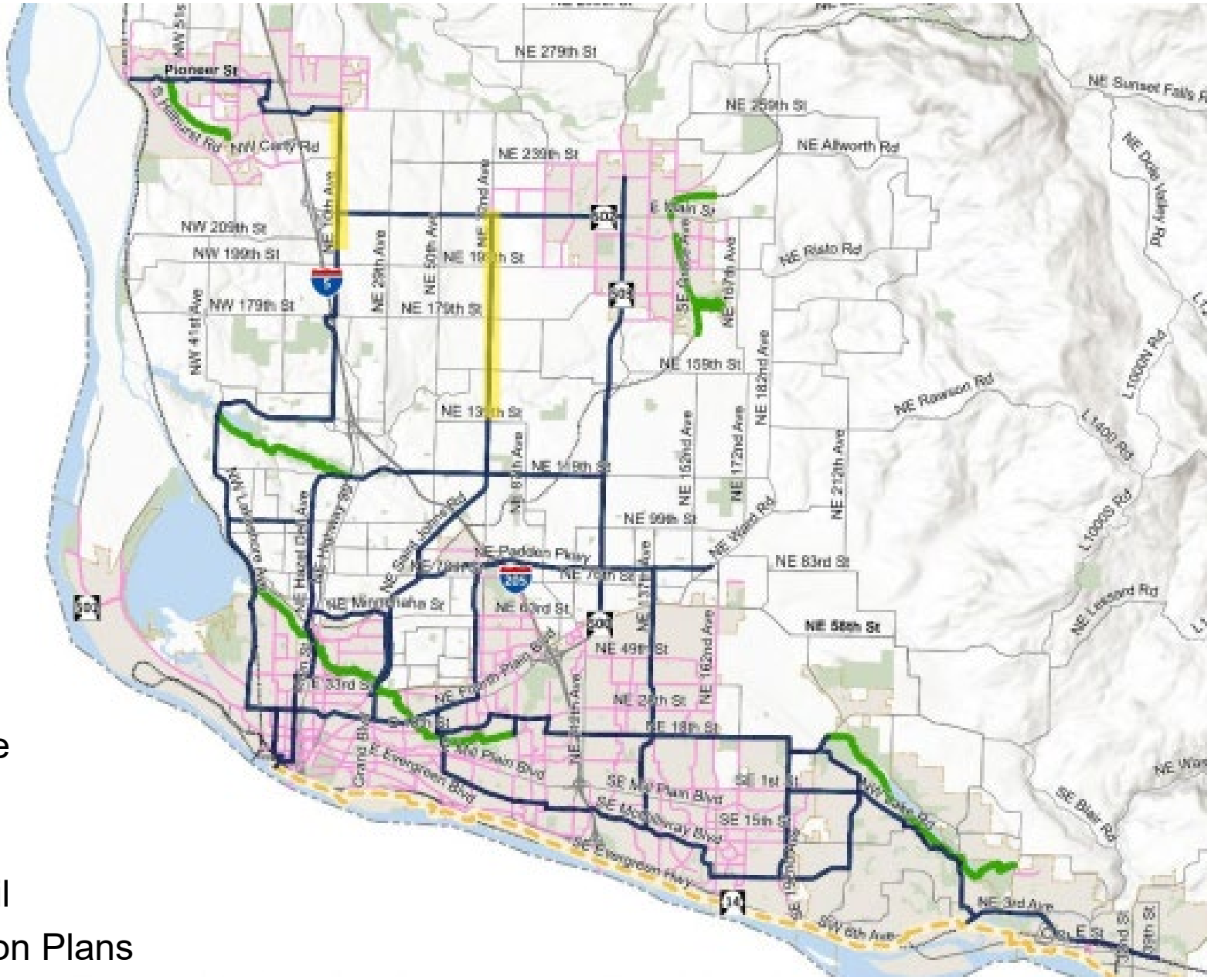

- Proposed Regional Active Transportation Network
- Other Network Trails
- Future Lewis & Clark Trail
- Local Active Transportation Plans

EXAMPLE: NE 40th St.

- **Target Speed: 30**
- **Thru Travel Lanes: 1**
- **AADT: 3209**
- **Existing Facilities:**
  - No bike lane
  - Intermittent sidewalk (no facility/mixed traffic)
- **Current LTS:**
  - Pedestrian LTS: 3
  - Bicycle LTS: 3
- **Possible improvements to achieve LTS 2:**
  - Pedestrian: Attached 5’ sidewalk
  - Bicycle: Conventional 5’ bike lane

EXAMPLE: NE 63rd Street

- **Target Speed: 40**
- **Thru Travel Lanes: 2**
- **AADT: 9751**
- **Existing Facility:**
  - 5-foot convention bike lane
  - Attached sidewalk
- **Current LTS:**
  - Pedestrian LTS: 4
  - Bicycle LTS: 4
- **Possible improvements to achieve LTS 2:**
  - Pedestrian: Sidewalk with Separation
  - Bicycle: Separated Bike Lane

EXAMPLE: HWY 99

- **Target Speed: 40**
- **Thru Travel Lanes: 2**
- **AADT: 17287**
- **Existing Facility:**
  - Buffered bike lane
  - Attached sidewalk
- **Current LTS:**
  - Pedestrian LTS: 4
  - Bicycle LTS: 4
- **Possible improvements to achieve LTS 2:**
  - Pedestrian: Sidewalk with Separation
  - Bicycle: Separated Bike Lane

Existing Level of Traffic Stress

LTS	PEDESTRIAN				BICYCLE			
	Urban		Rural		Urban		Rural	
	Miles	Percent of Road Network	Miles	Percent of Road Network	Miles	Percent of Road Network	Miles	Percent of Road Network
1	10.0	6.7%	0.4	0.2%	0.0	0.0%	0.0	0.0%
2	22.2	14.8%	4.6	1.7%	13.5	9.1%	3.6	1.3%
3	37.2	24.9%	2.7	1.0%	12.1	8.1%	1.6	0.6%
4	80.2	53.6%	263.8	97.1%	122.6	82.7%	266.3	98.1%

Existing Level of Traffic Stress

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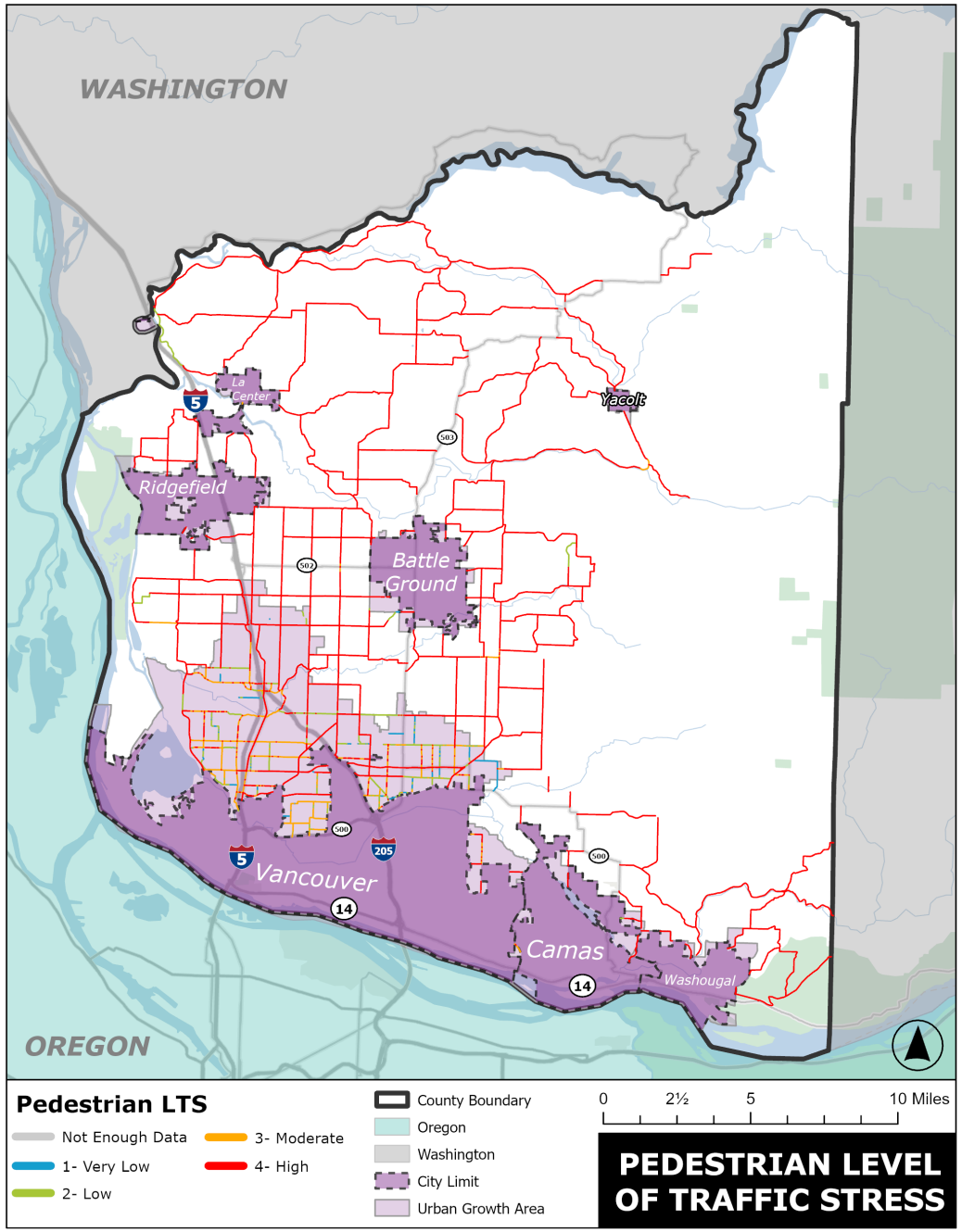
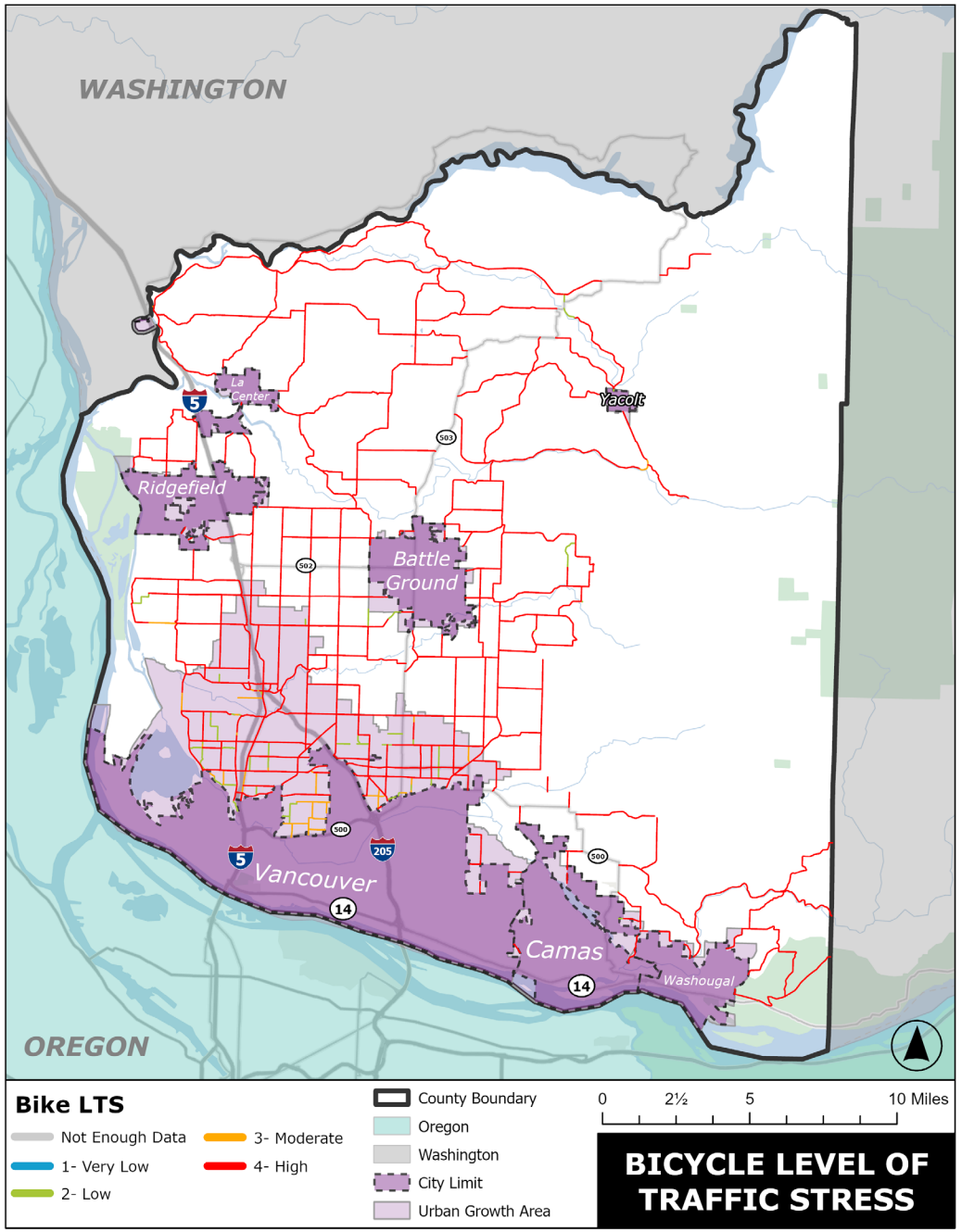
1	10.0	6.7%	0.4	0.2%	0.0	0.0%	0.0	0.0%
2	22.2	14.8%	4.6	1.7%	13.5	9.1%	3.6	1.3%
3	37.2	24.9%	2.7	1.0%	12.1	8.1%	1.6	0.6%
4	80.2	53.6%	263.8	97.1%	122.6	82.7%	266.3	98.1%


WASHINGTON
La Center
Yacolt
Ridgefield
Battle Ground
Vancouver
Camas
Washougal
OREGON
Pedestrian LTS
Not Enough Data
1- Very Low
2- Low
3- Moderate
4- High
County Boundary
Oregon
Washington
City Limit
Urban Growth Area
0
2½
5
10 Miles
PEDESTRIAN LEVEL OF TRAFFIC STRESS


WASHINGTON
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OREGON
Bike LTS
Not Enough Data
1- Very Low
2- Low
3- Moderate
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County Boundary
Oregon
Washington
City Limit
Urban Growth Area
0
2½
5
10 Miles
BICYCLE LEVEL OF TRAFFIC STRESS

Potential Outcomes

- **New and expanded projects in the CFP with walking and bicycling facilities**
  - Moderate increases for project cost estimates
- **Update to urban roadway design standards**
  - Street and Road Standards (40.350.030)
  - Cross Section Drawings
- **Improves systemic safety from lower speeds and increased physical space separating road users**
- **Encourages people to walk and bike, which help reduces VMT**
- **Advances the vision in the 2010 Bicycle and Pedestrian Master Plan**
  - "… improve Clark County Clark County residents' health, enhance their quality of life, help improve and protect the County's natural resources and be a source of pride to the community."

Next Steps

- **Develop a draft transportation CFP project list**
  - Identify improvement projects from existing conditions
    - Locations
    - Improvement types
    - Planning-level cost estimates
  - Forecast travel demand for 2045
  - Identify improvements projects for future conditions
- **Review draft transportation CFP project list**
  - Financing/funding analysis and discussion (e.g., Capital Facilities Financial Plan)
  - Revisit or adjust land use assumptions and/or MMLOS standards, if needed
- **Finalize CFP project list**
- **Update Traffic Impact Fees (**must be updated within 6 months of adoption**)**

Thank you!

Comments and questions

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