

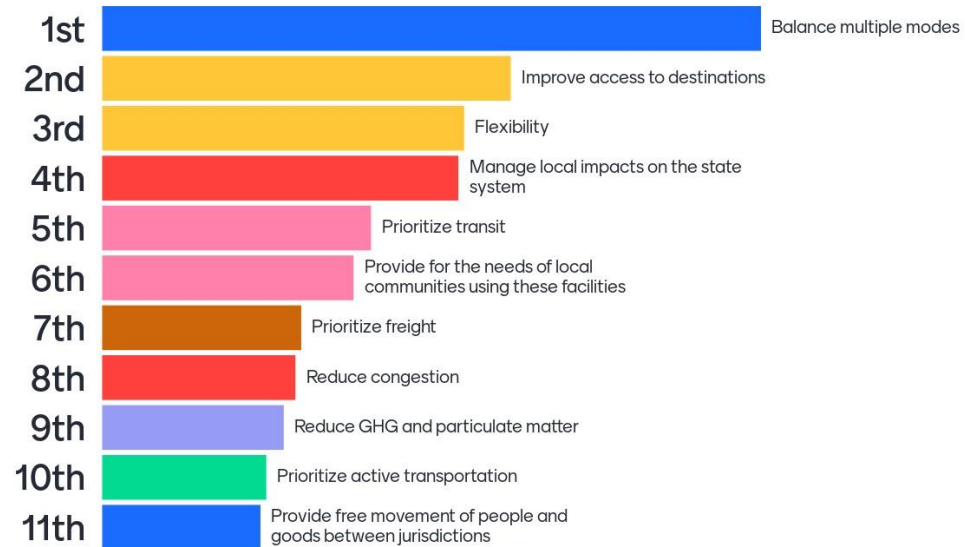
Multimodal Level of Service



March 18, 2024

Steering Committee - Prioritized Objectives

What are the most important objectives we want to achieve with a level of service standard update?



Steering Committee - Balancing Competing Tensions

If you had to choose, how would you balance these:



Current alternatives in draft HSP

- Context-based multimodal LOS, which puts vehicle mobility on par with other modes, and uses a safe systems approach,
- VMT-based approach, which adopts VMT reduction as the primary assessment metric for each project; or
- A hybrid combination of the above two alternatives.

<https://wsdot.wa.gov/sites/default/files/2023-11/HSP-2024Update-PublicReviewDraft.pdf>

VMT reduction proviso; final report

GHG emission and VMT do not conform to geographic boundaries. Strategies should be at the regional or plan level and not project level. Similarly, there was support for plan-level evaluation (e.g., RTP), but not for project-level evaluation. (p.28)

<https://wsdot.wa.gov/sites/default/files/2023-06/VMT-Targets-Final-Report-June2023.pdf>

WSDOT | Vehicle Miles Traveled (VMT) Targets –Final Report | June 2023



VEHICLE MILES TRAVELED (VMT) TARGETS – FINAL REPORT

June 2023

Roger Millar, Secretary of Transportation
Norene Pen, Interim Director of Multimodal Planning and Data Division

What WSDOT already does:

		Land-Use Context			
		Rural	Suburban	Urban	Urban Core
Roadway Type	Freeways				
	Principal Arterial				
	Minor Arterial				
	Collector				
	Local				

<p>Motor Vehicles Incl. Freight</p> High Medium Low	<p>Bicycles</p> High Medium Low	<p>Pedestrians</p> High Medium Low	<p> Transit compatibility not shown because it varies by route (compatibility can't be determined based on roadway type and land-use context)</p>
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Factor	Criteria
Land Use	Land uses within ½ mi of roadway
Density	Housing units / acre
Density	Jobs / acre
Density	Intersections per sq. mi.
Density	Typical building height
Setback	Typical building setback
Setback	Parking (on street or off street)

Ch. 1102 Context determination

<https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/design-manual>

Potential path forward

- Modify Context and Modal Accommodation Report to MMLOS
 - Not an index
 - Could include VMT as an additional measure
- Measures
 - Motor vehicles / freight: LOS
 - Additional consideration for freight
 - Ped/Bike: Level of Traffic Stress
 - Transit: Frequent Service level or another index, access, or any of the others Public Transportation already has available.

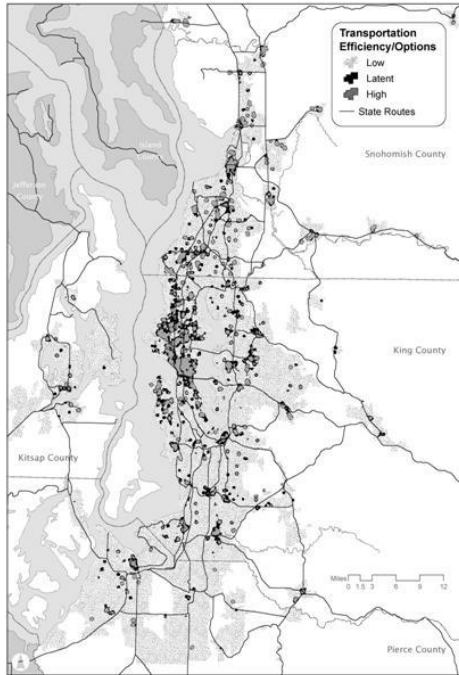
AASHTO designations

Green Book 1-6	Rural			Urban						
SmartCode ITE/CNU (2008/2009)	Natural	Rural		Suburban			General Urban	Urban Center	Urban Core	Special District
Massachusetts (2006)	Rural Natural	Rural Developed	Rural Village	Low Density	Town Center	High Density	Urban Residential	Urban Park	Commercial Business District	
Pennsylvania/New Jersey (2008)	Rural			Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core	
California (2006)	Natural	Developing	Rural Main Street	Suburban Low Density	Suburban High Density	Urban Low Density		Urban High Density		
Florida (2017)	Natural	Rural	Rural Town	Suburban Residential	Suburban Commercial	Urban General	Urban Center	Urban Core	Special District	
Minnesota (2018)	Natural	Rural	Rural Crossroad	Suburban Residential	Suburban Commercial	Urban Residential	Urban Commercial	Urban Core	Industrial Warehouse	
Green Book 7/ NCHRP 855 (2010)	Rural		Rural Town	Suburban			Urban		Urban Core	
Oregon (2019)	Rural Community			Suburban Fringe	Suburban Residential Corridor	Suburban Commercial Corridor	Urban Mix		Downtown/Commercial Business District	
Washington (2019)	Rural			Suburban			Urban		Urban Core	
AASHTO TCGD (2019)	Rural & Natural Areas		Rural Town	Suburban			Urban		Urban Core	Industrial, Warehouse, or Port
Maryland (2019)	Rural	Traditional Town Center	Suburban		Suburban Activity Center		Urban Center	Urban Core		
Pennsylvania (2020)	Rural	Rural Town	Suburban			Urban		Urban Core		
NCHRP 15-72 (2021)	Rural	Rural Town	Suburban			Urban		Urban Core	Special Context	



Other Washington efforts

TELUMI



TELUMI: Transportation Efficient Land-Use Mapping Index
 Composite Map of the Urban Growth Boundary of the central Puget Sound
 Urban Form Lab
 University of Washington
 Research Sponsored by the Washington State Department of Transportation

PSRC



King County



- T1:
Natural
Zone
- T2A:
Agricultural
Production
Zone
- T2B:
Rural
Zone
- T2C:
Rural
Center
Zone
- T3:
Urban
Medium
Zone
- T4:
Urban
High
Zone
- T5:
Urban
Center
Zone
- T6:
Urban
Core
Zone
- SD:
Special
District
Zones

https://kingcounty.gov/~media/depts/permitting-environmental-review/dper/documents/growth-management/comprehensive-plan-2010/d_frameworktransect.ashx?a=an

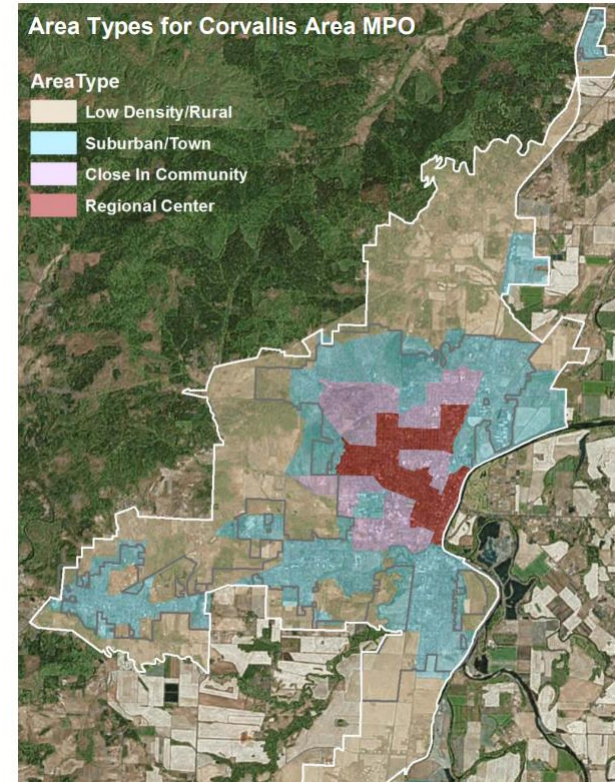
Oregon Place Types

		Destination Accessibility			
		High	Med	Low	Very Low
Design	High	Regional Center	Close in Community	Suburban/Town	
	Med				
	Low Very Low				
Density	Very Low	Low Density/Rural			

https://www.oregon.gov/odot/climate/Documents/PlaceType_Flyer.pdf

<https://www.arcgis.com/home/webmap/viewer.html?webmap=85702ffb346f4b8db5b7bddf05c6e0e1&extent=-125.4726,40.5731,-115.9035,47.0185>

<https://epa.maps.arcgis.com/home/webmap/viewer.html?webmap=137d4e512249480c980e00807562da10>



Next steps

- Definition of locations and mapping (ongoing)
 - Continue with four types within the transect?
 - Some criteria easier than others for automated state-wide map.
 - Agreement on cutoff between locations.
- Technical Advisory Group
- Return to you (and others)

