Cooper Mountain Transportation Study and the Washington County Transportation Futures Study

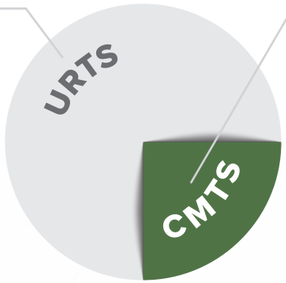
While the Cooper Mountain Transportation Study indicates that most traffic through the study area will continue to use the 175th Avenue corridor, the Washington County Transportation Futures Study (WCTFS) analysis found that more traffic will eventually use the Grabhorn Road and Clark Hill Road/Cornelius Pass Road routes. The WCTFS analysis took a longer-term view and anticipated higher residential and employment growth in the Hillsboro area (e.g. South Hillsboro and North Hillsboro Industrial area), resulting in a higher proportion of traffic using the western routes. Future development patterns may mean that, in the long term, a higher share of traffic will use the "around the mountain" route than the CMTS modeling currently indicates.

Next steps

Project engineering feasibility analysis, including cost estimating, will be conducted as part of the Urban Reserves Transportation Study (URTS). URTS is funded by a Metro 2040 Planning and Development Grant to study the cumulative effects of future urban reserve development (which is mostly in a "crescent" along the west and north side of the County) on the county transportation system (see figure below).

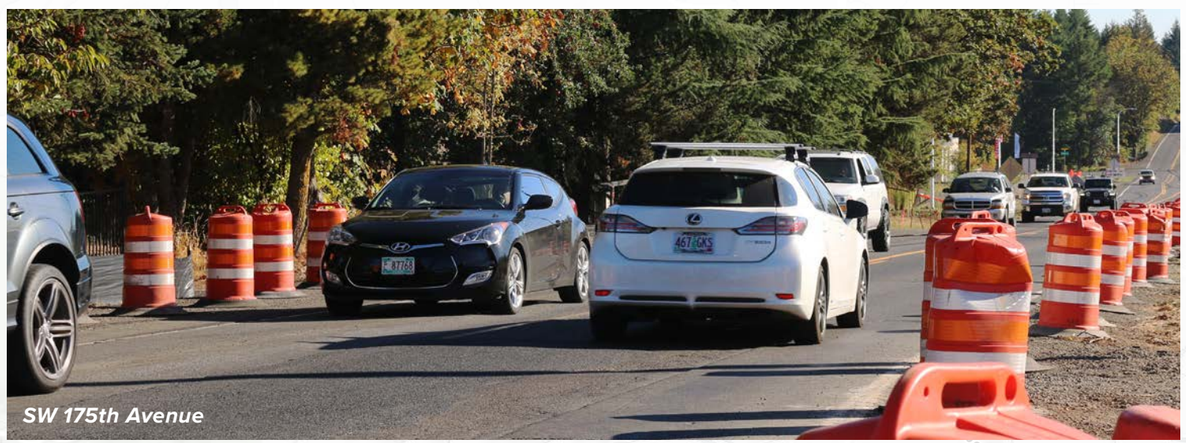
URTS:

- Multimodal transportation planning
- Roadway capacity and access management needs
- Engineering feasibility
- Infrastructure funding template



CMTS:

- Mobility and safety in Cooper Mountain area
- Long-term roadway network options
- Prioritized project list
- Transportation System Plan amendments
- Willamette Water Supply Program coordination


SW 175th Avenue

Washington County Oregon

DEPARTMENT OF
LAND USE & TRANSPORTATION

Handout 2

The Cooper Mountain Transportation Study project team completed transportation modeling for the three initial improvement concepts: Around the Mountain, 175th Corridor, and Kitchen Sink (see **www.coopermountaintransportation.com** for more information about the concepts). The preliminary findings indicate that the Kitchen Sink improvement package concept will have the best outcomes for the study area.

In particular, the Kitchen Sink improvement package:

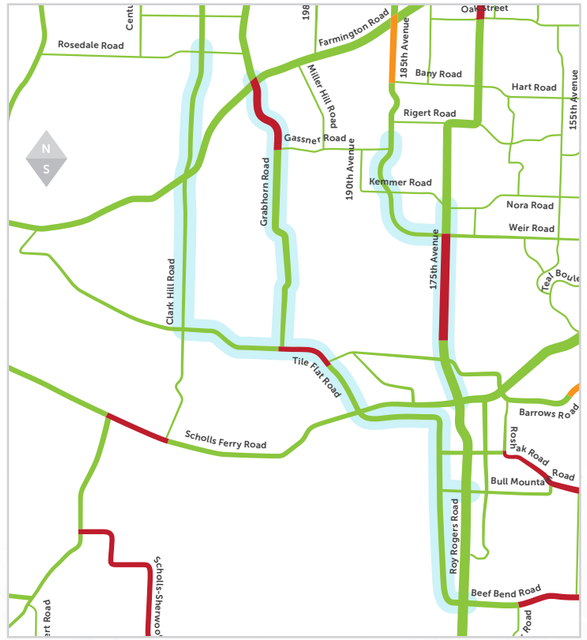
- Provides the most congestion relief and multimodal solutions.
- Adds capacity, parallel routes and helps reduce congestion, particularly in the Roy Rogers Road/Scholls Ferry Road/175th Avenue intersection area.

However, there are constraints with the Kitchen Sink package:

- It includes the most projects, many of which will have topographic, environmental, land use and construction challenges.
- Congestion, particularly on portions of 170th, 175th and 185th avenues, as well as and Grabhorn and Tile Flat roads, will still be problematic as the region grows and traffic increases.

Expected PM peak hour congested areas

Assumes medium growth land use and all TSP and Kitchen Sink improvements completed



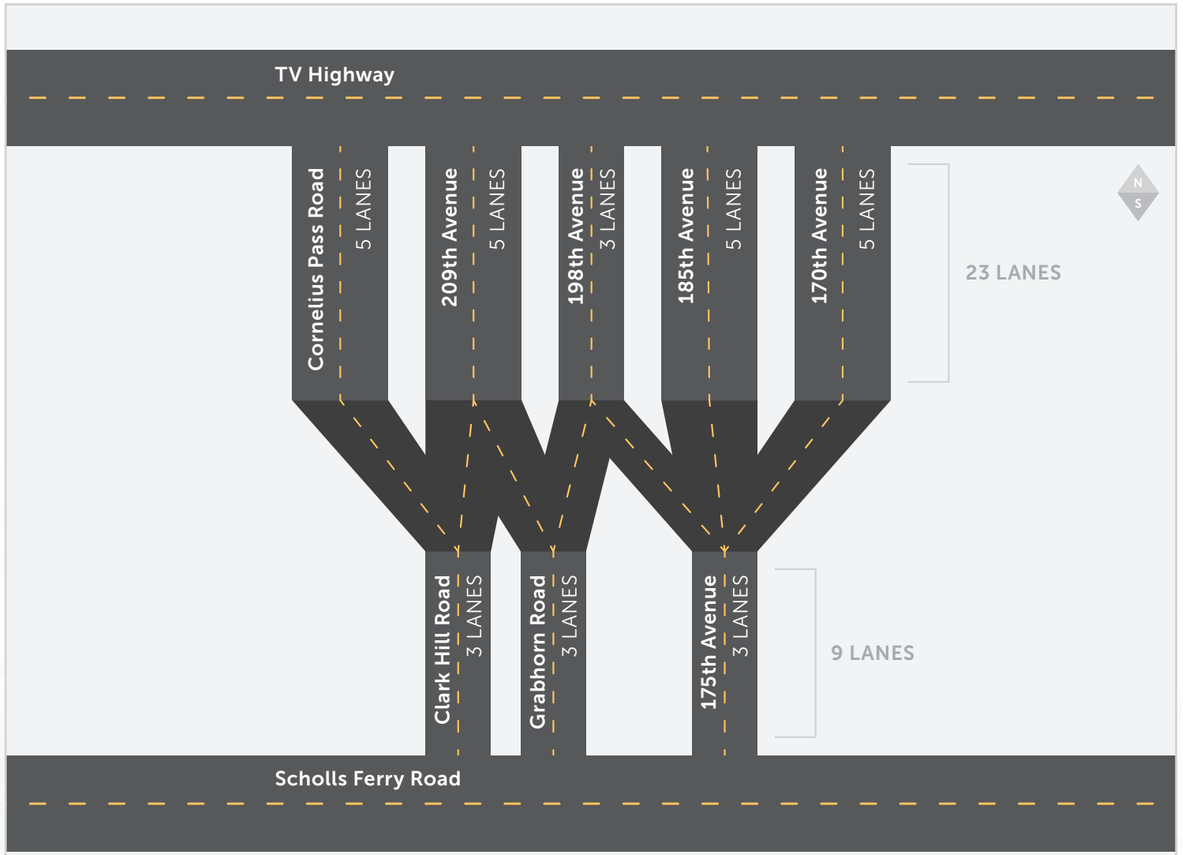
Not a cure-all

The Kitchen Sink improvements will help help mitigate, rather than solve, the congestion issues in the 175th Avenue corridor. Traffic analysis indicates that even with all Kitchen Sink concept improvements completed, about half of area travelers will continue to prefer 175th Avenue over Grabhorn and Clark Hill roads. More traffic will use the western routes (to Grabhorn and Clark Hill roads) in the future as additional residential and employment development occurs in the South Hillsboro and North Hillsboro Industrial area.

Travel demand and the “funnel effect”

The expected future congestion makes sense when you consider how the road system is laid out. Urban areas have more roads to support urban-level development, while rural roads are more dispersed. The roadway network in the Cooper Mountain study area creates a “funnel effect” as several multilane urban roads in the north part of the study area merge into fewer rural roads within the study area with fewer available lanes. The result is that 23 lanes of traffic funnel down to nine lanes (see figure below).*

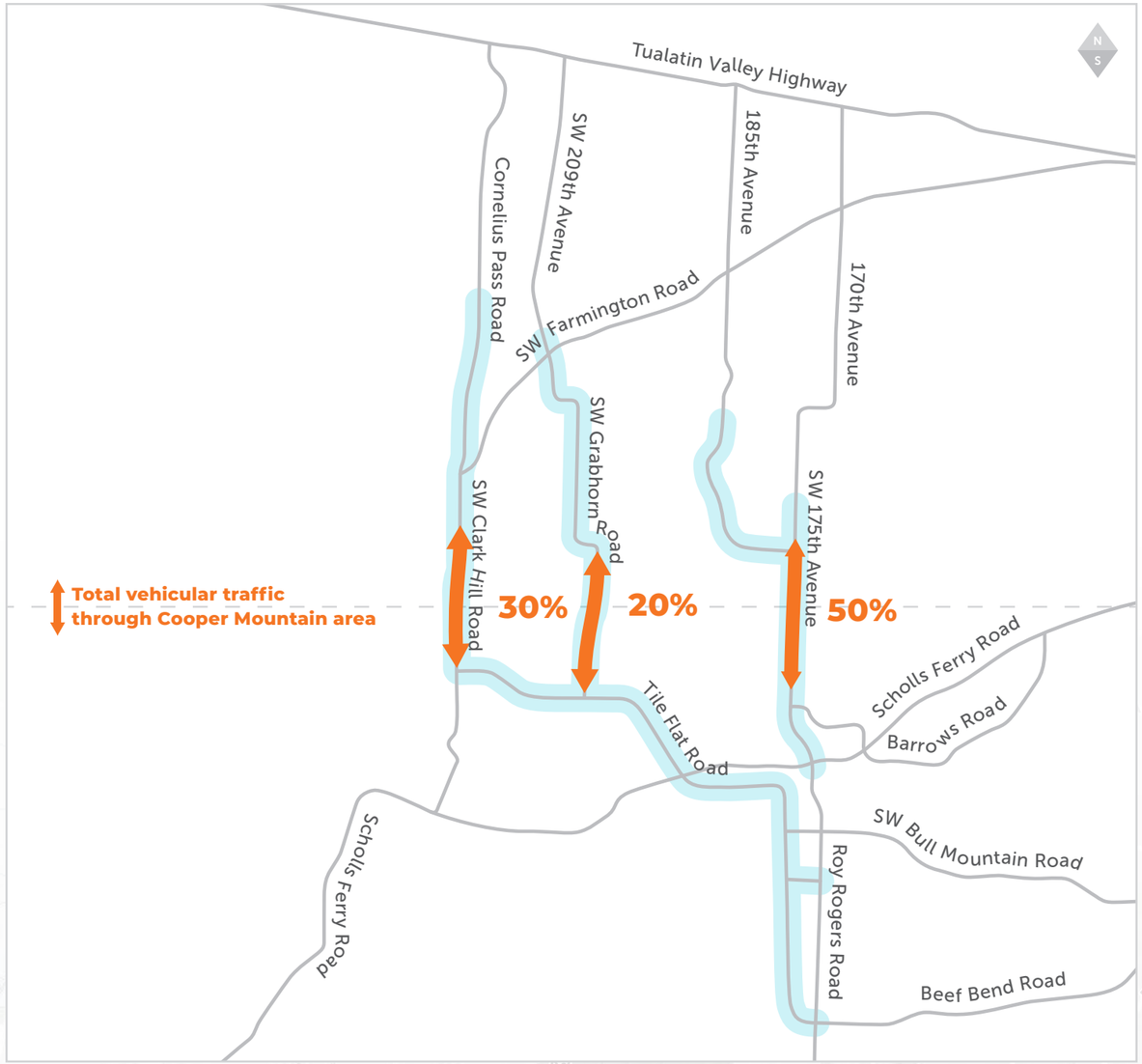
Funnel effect



* This analysis assumes the future Kitchen Sink improvements are completed.

Cooper Mountain area roadway usage

PM peak period vehicle trips assuming future medium land use growth and all TSP and Kitchen Sink improvements completed



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