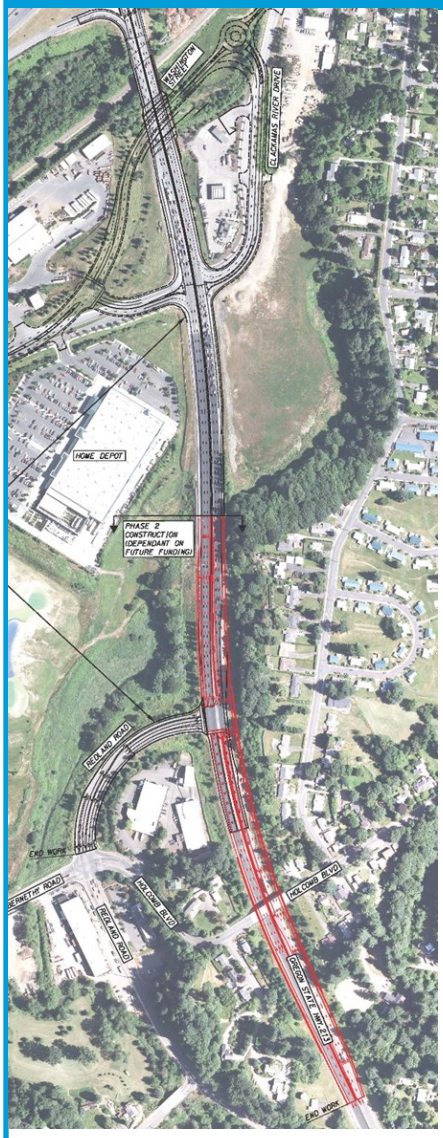
Hwy 213 Corridor

Alternative Mobility Targets

December 2017



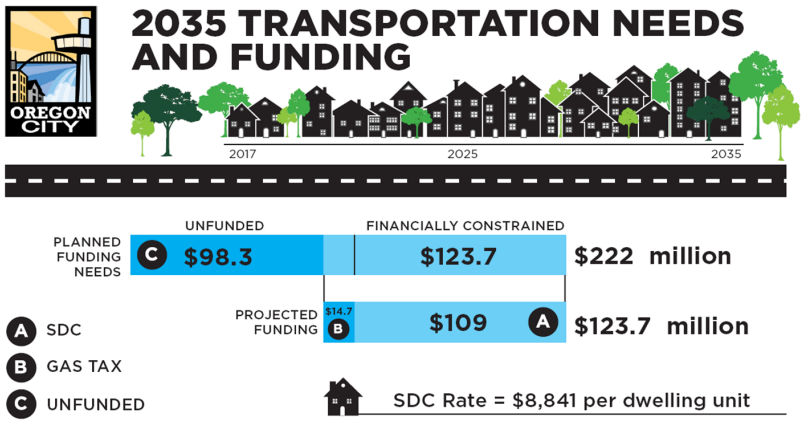
The 2013 Oregon City Transportation System Plan (TSP) determined that the Hwy 213 Corridor, which includes the Redland Road & Beavercreek Road intersections, would not meet Oregon Highway Plan Mobility Targets in 2035. Staff created a Community Advisory Group (CAG) and a Technical Advisory Group (TAG) to provide meaningful advice & guidance to inform staff, Planning Commission & City Commission as we work to identify any financially feasible improvements to meet the current targets, or if alternative mobility targets will be necessary.

Mobility Targets

Mobility, or congestion, may be measured and regulated in a variety of ways. Volume to Capacity (v/c) ratio compares roadway demand (volumes) to roadway supply (capacity), and is a measure that reflects mobility and quality of travel.

Transportation Funding

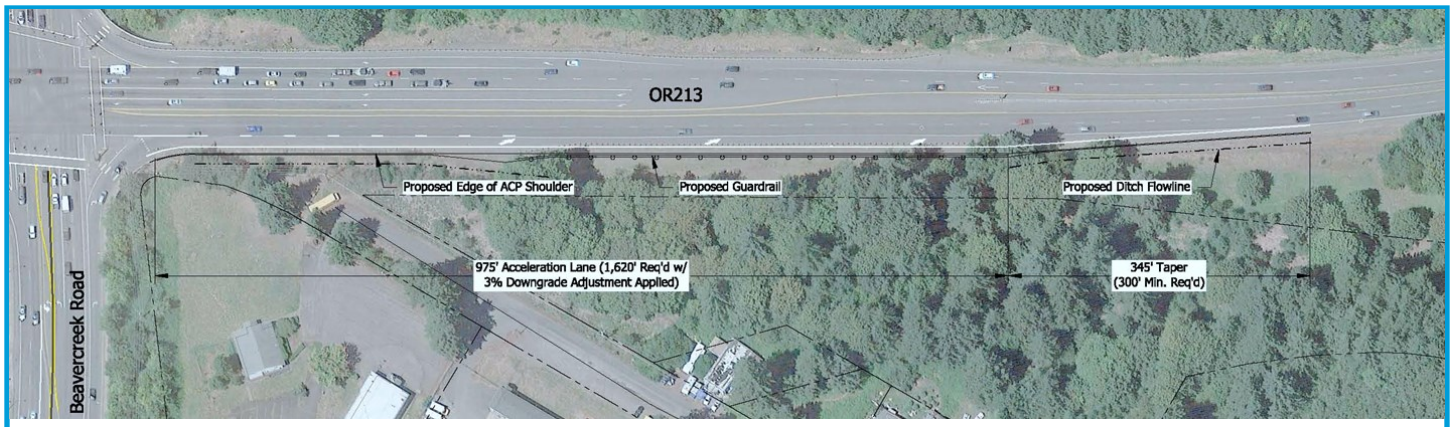
The City is unable to fund major intersection improvements on its own. The City will continue to work with ODOT, and pursue grant funding opportunities as they are available to implement these larger scale projects included in our TSP.



Redland Road

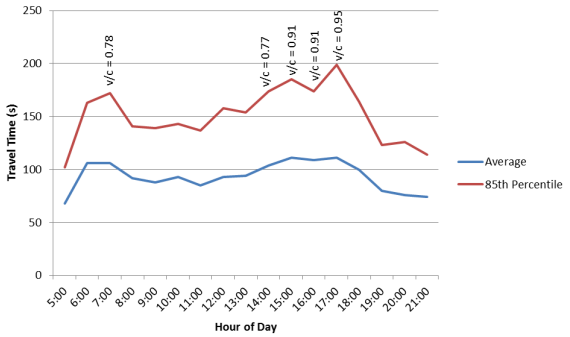
The TSP identified project D79 Redland Road, Jughandle Phase 2 at a cost of ~$10 Million that addresses the long term capacity needs at the intersection. The project adds an additional Northbound Through Lane and an additional Southbound Through Lane. It also lengthens the Northbound Left turn lane to provide more queueing & length to decelerate into the lane. The project is not funded.

	Existing	Proposed*
Redland Road	A maximum v/c ratio of 1.10 shall be maintained during the first and 0.99 during the second highest volume hours of the day.	A maximum v/c ratio of 1.10 shall be maintained during the first & second hours, 1.05 shall be maintained during the third highest volume hour of the day.
*Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.		



Beavercreek Road

The TSP did not include a capacity enhancing project at Beavercreek Road, so the Alternative Mobility Targets project evaluated alternatives for the intersection. This included getting travel time measurements through the intersection to evaluate the variability of traffic conditions throughout the day. This shows that the average time to traverse the intersection is 110 seconds. A full intersection capacity project was deemed not cost feasible.



	Existing	Proposed*
Beavercreek Road	A maximum v/c ratio of 0.99 shall be maintained during the first and second highest volume hours of the day.	A maximum v/c ratio of 1.00 shall be maintained during the first, second and third highest volume hours of the day.
*Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.		

Recommendations

OR213/Beavercreek Road and OR213/Redland Road will exceed current mobility target in TSP horizon year 2035. Alternatives that will meet existing target are not currently cost feasible. Recommended improvements include:

OR213/Beavercreek Road

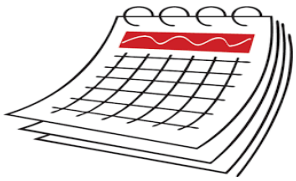
- Construct westbound right-turn merge lane: this project would convert the existing yield controlled right turn to a free flow turn and provide a new merge lane on OR213 northbound. This project will address the AM peak capacity issues and cost approximately $2.7M.
- Infill sidewalk on Beavercreek Road from south of the Coltrane Path to north of Marjorie Lane
- Implement feasible safety improvements as identified in the final report.

If Alternative Mobility Targets are not adopted for the corridor, Oregon City will not be able to approve zone changes consistent with the Beavercreek Concept Plan. Outright permitted development will also be hindered until funding can be secured for long term improvements.

Next Steps

Finalize package for Alternative Mobility Targets and TSP amendments, and get formal recommendations from:

- Transportation Advisory Committee – December 19, 2017
- CAG/TAG Meeting #4 – January 11, 2018
- Planning Commission public hearing – January 22, 2018
- City Commission public hearing – February 7, 2018
- Work with ODOT to advance Alternative Mobility Targets to the Oregon Transportation Commission (OTC) – Spring to Summer 2018



For more information on Alternative Mobility Targets, please check out the project website:
https://www.orcity.org/publicworks/project/ps-16-024