

# SOLUTIONS OVERVIEW

## BIKING SOLUTIONS



Photo: Kittelson and Associates, Inc.

### BIKING ON OR 34

OR 34 already has standard bike lanes (striped bike lanes with no vertical or horizontal separation) within the study area, but protected bike lanes (striped bike lanes with vertical and horizontal separation) are needed to get to a low-stress bike facility based on the traffic speeds and volumes. Although it will not provide a completely low-stress facility, OR 34 can be restriped to provide buffered bike lanes (striped bike lanes with horizontal separation) in the near-term.

### BIKING ON U.S. 20

Public and City input, including considerations around parking utilization and traffic volumes, led the project team to **focus on improving routes parallel to U.S. 20** south of OR 34 instead of reorganizing Main Street and Santiam Highway to provide bike facilities. Both 5<sup>th</sup> Street and Grove Street already have some bike facilities—but both need some changes to provide a more connected, comfortable network to support biking off of the highway. To support these parallel routes, bike connections need to be made to the highway, as well as on some connecting city streets.

Low parking utilization on Park Street provides space that may be repurposed to provide a buffered or protected bike lane. Consolidating parking and adding the bike lane can encourage slower speeds more appropriate for the downtown environment while providing a bike connection.

Figure 10 provides key considerations and recommendations for bicycle facilities to support the goals of this project in Lebanon, and Figure 12 provides the parking implications. Figure 11 provides the full map of proposed bike facilities. These consider the recommended bike treatment based on the FHWA Bikeway Design Guide and ODOT Highway Design Manual as well as constraints like pinch points and space feasibility. Based on the guidance identified above, speeds and volumes on Park Street, for example, would necessitate a protected bike facility throughout, but the narrowing of the roadway doesn't allow for bike lane protection through road reconfiguration north of Ash Street without creating a new freight pinch point. Figure 11 therefore only shows a protected/buffered bike lane south of Ash Street on Park Street.

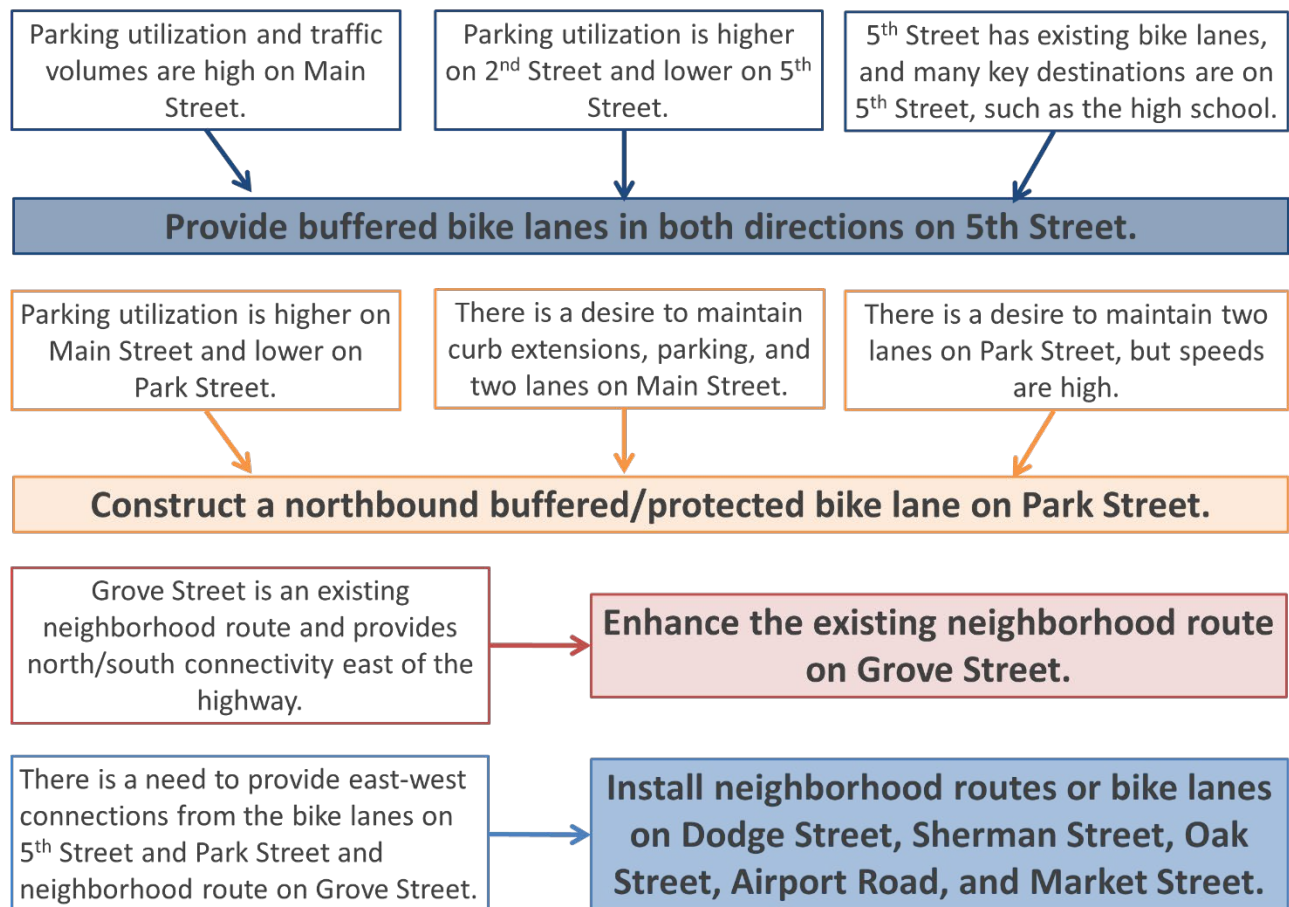
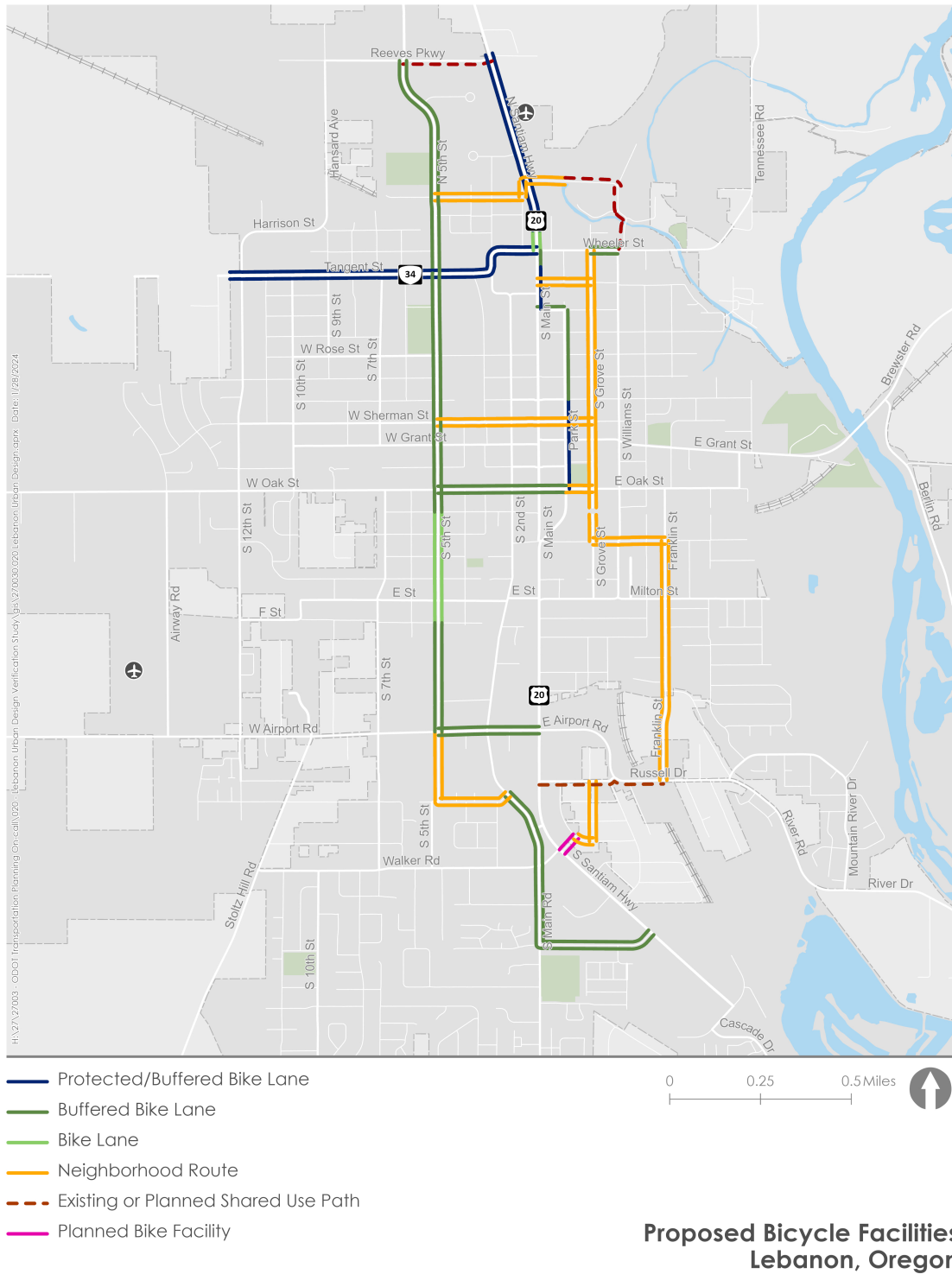


Figure 10: Key Considerations for Bike Solutions Supporting U.S. 20



**Figure 11: Proposed Bicycle Facilities**

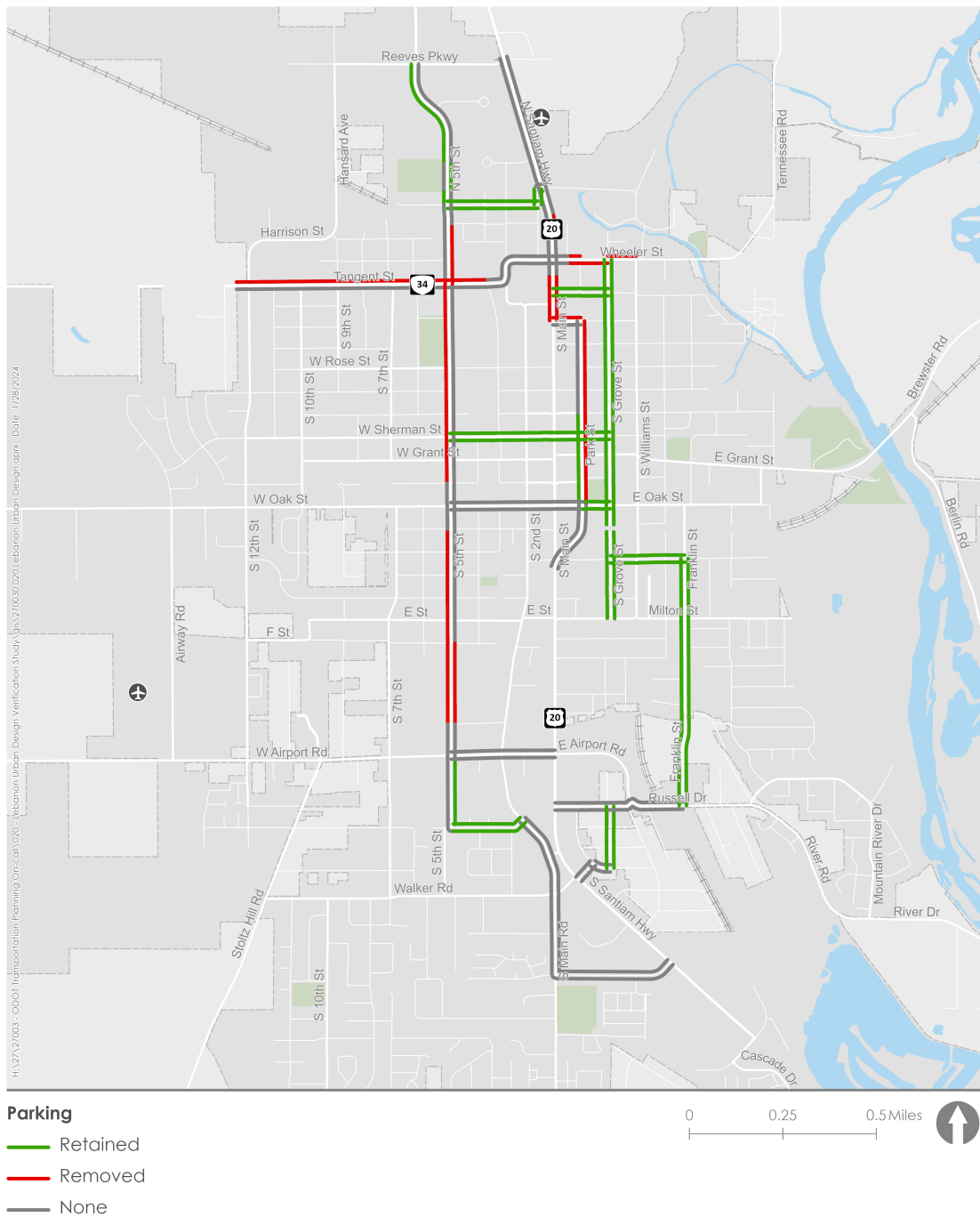


Figure 12: Proposed Parking Changes

## PEDESTRIAN SOLUTIONS

While sidewalk additions were not identified as a key near-term need through this project because of existing sidewalks, enhanced crossings were identified as a need. The team identified targeted locations to provide crossing enhancements to make it easier and safer to walk and bike across the highways in Lebanon. Many past walking and biking crashes involved people walking and biking at non-enhanced crossing locations, and providing enhancements can create visibility to indicate to drivers that someone is crossing at that location.

The team identified likely crossing enhancement locations based on public input, crash history, field observations, access to key destinations, and target crossing spacing recommendations from the ODOT Highway Design Manual. The type of crossing recommended is based on the speeds, number of lanes, and volumes of adjacent vehicles. Generally, as speeds, volume of motor vehicles, and number of travel lanes to cross increase, the greater the visibility of the enhancement should be.

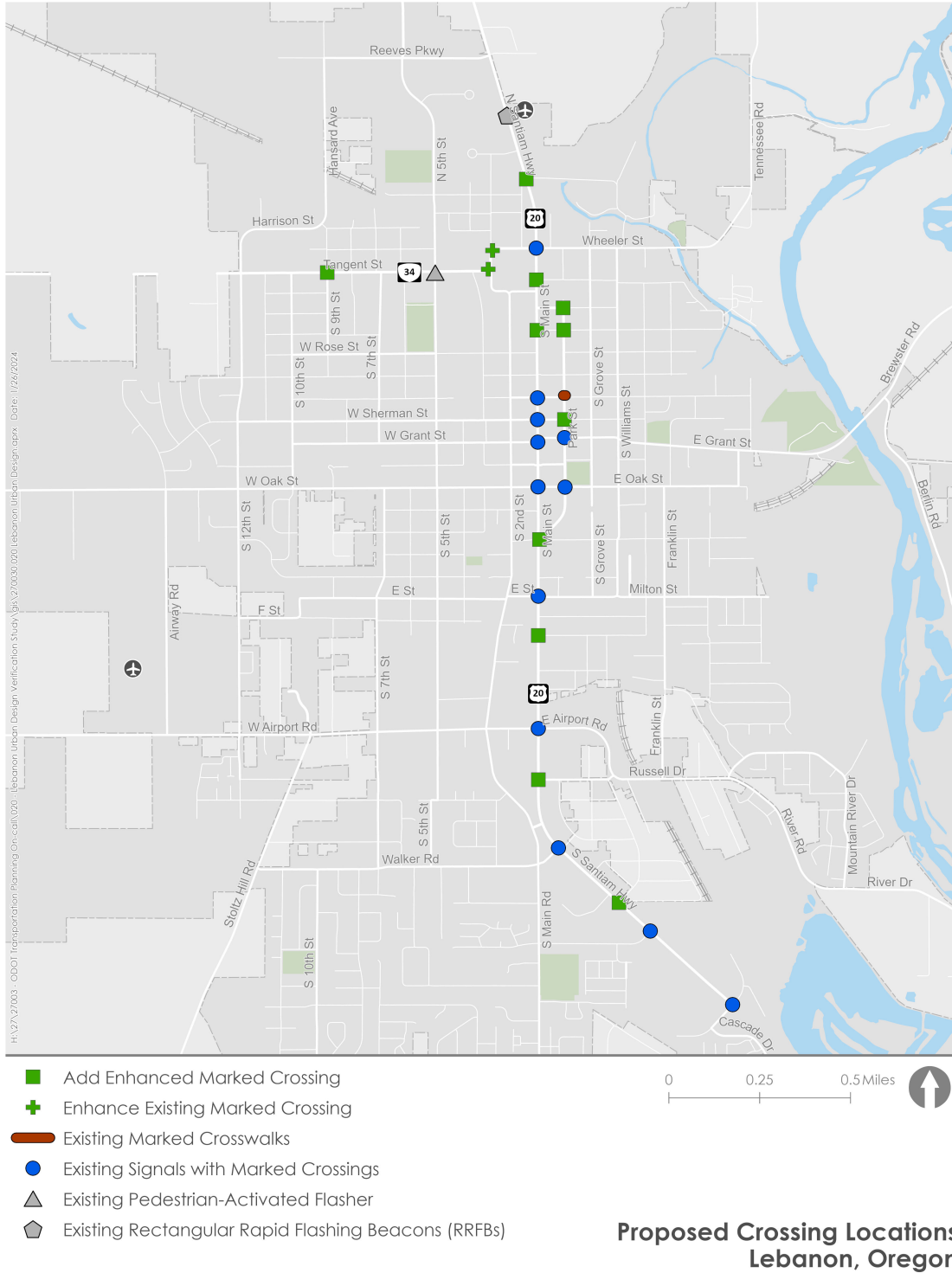


Figure 13: Recommended Crossings