

# Circle Boulevard Pavement Rehabilitation Project

## Criteria to be Used to Evaluate Lane Reduction

The following is a list of the criteria we will be using to review performance of the Circle Boulevard lane reduction pilot project, comparing pre- and post- project data.

### Circle Boulevard vehicle travel speeds

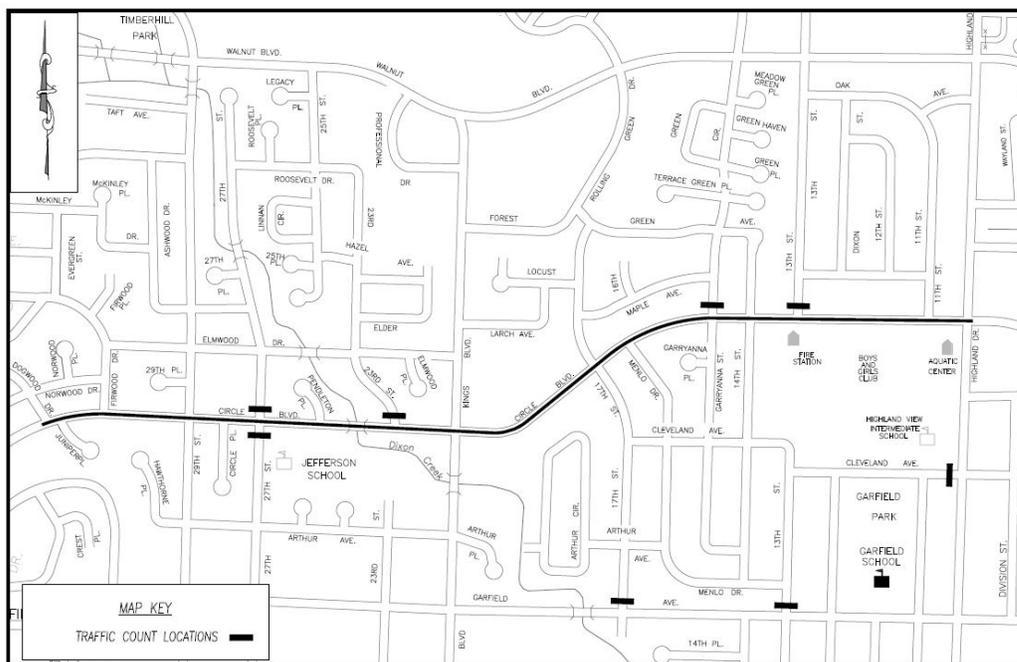
Vehicle speed data was collected last year (pre-pandemic) and will be compared to vehicle speeds after implementation of the lane reduction to characterize its effect.

### Travel volumes on Circle (bicycle, pedestrian, vehicle)

Bicycle, pedestrian, and vehicle traffic volumes were counted along Circle last year (pre-pandemic) and will be compared to counts taken after the lane reduction to determine if there is a discernable increase or decrease to any of the modes of travel.

### Vehicle travel volumes on selected neighborhood streets

Vehicle counts have been gathered at selected locations on local, neighborhood streets. These counts were taken post-pandemic, and are not considered typical. They will be adjusted using a factor developed by comparing pre- and post-pandemic counts on Circle Boulevard to bring them in line with what would have been expected without the pandemic influence. These adjusted counts will be compared to counts taken after the lane reduction to determine if there is an increase in cut-through traffic on neighborhood streets. The graphic below identifies the locations to be monitored.



### **Corridor intersection performance**

The performance of the following Circle intersections has been measured (pre-pandemic) using volume to capacity ratios (v/c):

- Highland Boulevard
- 13<sup>th</sup> Street
- Garryanna Street
- 17<sup>th</sup> Street
- Kings Boulevard
- 27<sup>th</sup> Street
- 29<sup>th</sup> Street

The v/c ratio compares the actual volumes that pass through an intersection, or particular vehicle lane, to its capacity. A v/c of 1.0 indicates that an intersection has reached capacity. The v/c at these intersections ranged from .08 to .78. The v/c will be recalculated after the restriping plan is implemented to identify any unexpected impacts on the efficiency of vehicle travel through these intersections.

### **Fire Department response times**

The Fire Department currently tracks response times for every call received. Post lane reduction response times will be compared to pre-reduction times to determine if there is an impact.

### **Corridor crashes**

During the course of the pilot project, staff will keep track of each accident along the corridor as soon as reports are available, in order to determine if there is any connection to the modified lane layout. We have crash data for all the intersections along this corridor over a 10-year period from 2009 thru 2018. While the pilot project duration is not long enough to compare historic crash rates to those after the lane reduction, a longer term monitoring of the effects of the lane reduction on crash rates could be undertaken.

### **Corvallis Transit Service**

CTS bus service will be monitored for any impacts the lane reduction might have on bus schedules.

### **Community Input**

Staff will keep a record of ongoing comments and concerns expressed by the community as an indicator of the overall level of acceptance of the lane reduction by users. This includes input from the Boys and Girls Club and School District whose operations generate large traffic volumes on Circle Boulevard.

The above listed criteria will be used to determine the success, or not, of the lane reduction. We do not have hard and fast acceptable limits for any of the items we will be monitoring. Positive and negative impacts will need to be considered in terms of their magnitude, and weighed against the cumulative impacts for all of the listed criteria. Depending on the outcome, upon completion of the pilot project,

the lane reduction will either be maintained in its original layout or modified to address issues that have come to light, or the street returned to its original configuration.

Staff anticipates completion of the Circle Boulevard Repaving Project and associated restriping this fall. Once traffic patterns, which will have been influence by construction and the change in lane configuration, stabilize, post-lane reduction data measurements will be taken. Although currently planned for the spring of 2021, it is possible that if traffic patterns have not returned to something close to pre-pandemic levels, and the system appears to be operating in an acceptable fashion, the pilot project could be extended and measurements retaken when traffic volumes return to something closer to historic levels.

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