

Canyon Creek / Boeckman Intersection Design Boeckman Road Corridor Project

December 19, 2022
City of Wilsonville
City Council Work Session

CONSIDERATION

Any concerns with proceeding with a Roundabout as the preferred design treatment for the Canyon Creek/Boeckman intersection?

EXISTING CONDITIONS



INTERSECTION DESIGN

Traffic Signal



Roundabout



OPERATIONS

Measure	Stop Control (Existing)	Traffic Signal	Roundabout
Volume-to-Capacity	1.01	0.67	0.50
Average Delay (sec/veh)	40	12.1	10.9
Level of Service	Е	В	В
Longest Vehicle Queue (ft)	225	125	100

Design Considerations

- Freight
- Emergency Services
- Schools

SAFETY

Boeckman/Canyon Creek

- Highest Crash Intersection
- Signal Increase Crashes

Roundabout Benefits

- 30% Reduction Total Crashes
- 60% Reduction Fatal/Injury
- Slower Speeds
- Less Conflict Points
- Neighborhood Gateway



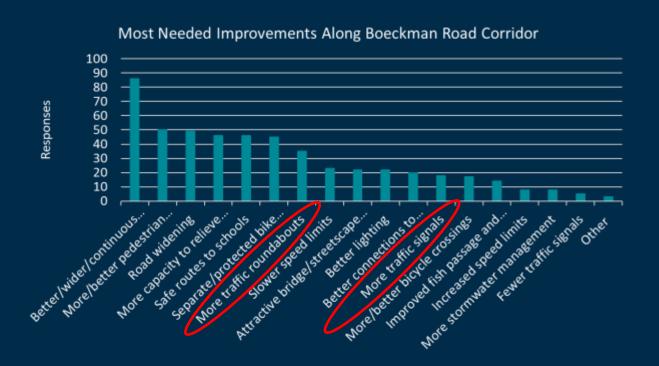
COST

Cost Category	Stop Control (Existing)	Traffic Signal	Roundabout
Initial Construction Cost	\$0	\$1,810,000	\$2,955,000
Life Cycle Cost	\$12,305,000	\$8,270,000	\$7,660,000

- Life Cycle = Maintenance, Delay, Property Damage, Injury
- Replacement costs not included
- Roundabout Construction Funding Available

PUBLIC ENGAGEMENT

- Open Houses Strong Preference for Roundabout
- Emergency Services / Schools
- Property Owner Outreach



RECOMMENDATION

Roundabout Design Recommended

- Less Delay, Longer Term Capacity
- Safer, Slower Speeds
- Lower Life Cycle Cost
- Community Preference

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