Santa Fe/ Mineral Alternative Comparison Summary Continuous Flow Intersection vs. Quadrant Roadway Intersection

Traffic Operation Improvements

Both the Continuous Flow Intersection (CFI) and Quadrant Roadway (QR) alternatives can accommodate 60% more traffic than the existing configuration. Both alternatives will be significantly impacted by the Evergreen development. The additional capacity provided by both alternatives may negate the need for grade-separation for a considerable length of time, i.e. until bottlenecks elsewhere are removed and/or the remainder of the corridor is grade-separated.

Bicycle/Pedestrian Flow

CFIs are typically considered less pedestrian-friendly than a traditional intersection or a QR. The QR would provide a signalized crossing for some RTD patrons and the main intersection would be relatively friendly as a two-phase intersection. Additional traffic through the RTD property may be inconsistent with future redevelopment plans.

Right-of-Way Requirements

The CFI likely requires a sliver of right-of-way acquisition from RTD and the Evergreen property along Santa Fe. The QR alternative would require constructing a roadway through the RTD property, requiring right-of-way, and a loss of approximately 30 parking spaces (of the 1,080 total), which may or may not be feasibly replaced. The bus loop may need to be reconfigured to accommodate the widened roadway approaching Santa Fe.

Property Owner Coordination

The CFI requires minimal coordination, as minimal impacts would be expected to the RTD lot and Evergreen property. The QR alternative would require more coordination between the City and RTD, as significant right-of-way would be shifted to the City's ownership.

Construction Impacts

The CFI would require significant reconstruction along Santa Fe Drive, impacting traffic during the construction process. The QR alternative would require minimal construction along Santa Fe Drive, with the exception of pavement overlay, restriping, and installation of a new traffic signal.

Cost

The QR alternative is expected to cost less than the CFI, with costs of approximately \$8 million and \$12 million, respectively.

Future Adaptability

The QR configuration will make future construction significantly easier and less expensive and will reduce construction related traffic delays compared to a conventional intersection. The CFI will make future construction much more complicated and expensive and will likely increase traffic delays compared to a conventional intersection.

Overall

Overall, the CFI may be the better option if it is the ultimate solution, especially if there is a major development (not a given) in the SW quadrant. The QR may be the better option as a long term interim solution.