

Reasonable Alternatives (Tier 2) Screening Matrix

| Alternative | Impact | No-Build | Traditional Widening | Express Toll Lanes |
|---|-------------|-------------------------------------|---|---|
| PURPOSE AND NEED CRITERIA | | | | |
| Improve Safety | | | | |
| Reduction in number and severity of Congestion-Related Crashes | Achievement | | | |
| Improve Bicycle and Pedestrian Safety at Crossroad Arterials | Achievement | | | |
| Reduce Congestion | | | | |
| Change in Travel Level of Service (Percent of Corridor with Substantial Congestion) | Achievement | 28% | 19% | 13%* |
| Change in Travel Speed (Average Daily Speed) | Achievement | 50 | 58 | 58 |
| Change in Corridor Person Throughput (Total People) | Achievement | 161,980 | 178,000 | 176,220 |
| Promote Sustainability | | | | |
| Change in Roadway & Bridge Condition | Achievement | | | |
| Change in Travel Time Reliability | Achievement | | | |
| Support Environmental Sustainability | Achievement | | | |
| Provide Flexible Choices | | | | |
| Long-term Corridor Operations Flexibility and Adaptability | Achievement | | | |
| Access and Connectivity to Bicycle & Pedestrian Facilities | Achievement | | | |
| Reliability for Transit Riders | Achievement | | | |
| Support Local and Regional Growth | | | | |
| Compatibility with Local Planning | Achievement | | | |
| Compatibility with Regional Planning | Achievement | | | |
| Employment Equity | Achievement | | | |
| NATURAL AND HUMAN ENVIRONMENT CRITERIA | | | | |
| Parks (Acres) | Impact | 0 | 10.03 | 5.62 |
| Bike Routes and Trails (Feet) | Impact | 0 | Bike Routes: 4,002 Trails: 10,812 | Bike Routes: 3,992 Trails: 7,600 |
| Community Facility Impacts | Impact | 0 | 0 | |
| Environmental Justice - Low Income and Minority Population Impacts | Impact | None | 7 Low-income Population block groups; 14 Minority block groups | 7 Low-income block groups; 14 Minority block groups |
| Noise Impacts | Impact | TBD | TBD | TBD |
| Wetland Impacts (Acres) | Impact | None | 0.65 | 0.65 |
| Floodplain Impacts-Floodway and 100 Yr Floodplain (Acres) | Impact | None | Floodway: 15.24 100 Yr Floodplain: 22.53 Total: 37.77 | Floodway: 15.09 100 Yr Floodplain: 22.03 Total: 37.12 |
| Stream Impacts (Feet) | Impact | None | 9,447 | 9,274 |
| Potential T&E Species Habitat Impacts (Acres) | Impact | None | None | None |
| Hazardous Material Impacts (Sites) | Impact | None | 1 | 1 |
| Cultural and Historic Sites Impacts | Impact | None | 0 NRHP Listings 5 Survey Sites | 0 NRHP Listings 5 Survey Sites |
| Air Quality, Emissions and Energy Impacts (Metric tons of CO ₂) | Impact | 33,573 | 33,589 | 33,570 |
| Indirect and Cumulative Impacts | Impact | | | |
| ENGINEERING AND COST CRITERIA | | | | |
| Roadway and Interchange Geometrics | Achievement | | | |
| Right-of-Way Impacts (Acres) | Impact | None | ROW: 21.46 Temp Easements: 11.70 Drainage Easements: 0.44 | ROW: 19.29 Temp Easements: 8.49 Drainage Easements: 0.44 |
| Residential or Business Displacements | Impact | None | 2 - Residential 1 - Commercial 1 - Private Tennis Court | 2 - Residential |
| Timing of Construction | Impact | N/A | | |
| Ease of Phasing, Maintenance of Traffic, and Constructability | Impact | N/A | | |
| Estimated Construction Costs (Inflated to year of construction) | Impact | None | \$745 Million | \$655 Million |
| Estimated Life-Cycle Costs (30 Years)(2021 Dollars) | Impact | Hard Infrastructure - \$132 Million | Hard Infrastructure - \$51 Million | Hard Infrastructure - \$43 Million Toll Infrastructure - \$27 Million^ |
| Funding Confidence | Impact | | | |
| Public and Stakeholder Input Criteria | Achievement | None | | |

* ETL Alternative does not include Auxiliary Lanes in LOS determination
^ Non-Tax dedicated funding source