### Summary

Alternative A has the widest ROW, which would correspondingly impact the most property although at this stage it is not possible to quantitatively assess property impacts.

For Alternative A - Access to major development areas is provided only at widely spaced signalized intersections, limiting access opportunities to development adjacent to the corridor. However, there is excellent access to businesses that front onto the Frontage Street. At the same time, the wide ROW would result in a greater distance for pedestrians to cross the street, although the boulevards and medians would provide an opportunity to establish pedestrian refuges at intersections.

Alternatives B-E all provide greater opportunity for access to adjacent developments as the locations signalized intersections are not constrained/determined by the Frontage Street operations. Provides good pedestrian access to street fronting buildings by including on-street parking, and sufficient vehicular access at intersections.

Alternative B does not provide pedestrian access for frontage businesses, as there is no-on street parking.

Alternatives C and E provide good pedestrian access to street fronting buildings because they include on-street parking, and sufficient vehicular access at intersections.

Alternative D would provide greater vehicular access, similar to C and E, however pedestrian access to/from the on-street parking would be hindered by the bike lane and multi-use trail. It also has a slightly wider ROW than B, C and E.

The other aspect of access is the consideration of new future/ new cross-section development from Wonderland Road. The possibility of new future accesses will depend on access management policies and related to traffic operations on the future 6-lane Wonderland Road and will likely be subject to site-specific reviews, supported by the appropriate traffic studies.

Access Management was the highest ranked criteria by members of the public at PIC 1. Therefore, Alternatives B, C, and E considered slightly and slightly preferred over Alternative D.
1.2 Community Effects

**D - Impacts to cemeteries, schools, places of worship, unique community features**

- There are no cemeteries, schools or places of worship located along Wonderland Road between Southdale Road and Highway 402.

**D - Nuisance Impacts**

- Qualitative assessment of nuisance impacts (e.g., visual/aesthetic, noise etc.) considering the number of sensitive receptors (e.g., residences, schools etc.) within 500 m of the alignment (500 m in chosen because this is the distance at which any change to sound level become imperceptible)

- The assessment of nuisance impacts relative to sensitive receptors will be refined based on the road widening alternatives.

**F - Impacts on community activity/mobility and access**

- Overall, mobility within the corridor (e.g., City of London South West area) will be improved with the new road widening improvements.
- Provides good opportunities for developing community character and for localized mobility; however, the wide ROW is seen as a hindrance to pedestrian movement/mobility across the broader corridor.

**F - Impacts on community character**

- Heritage street parking will contribute to the community character through increased interaction between streetscape and built form.
- Off-street commuter bike lanes are consistent with city cycling policies and Cycling Master Plan recommendations and in providing opportunities for commuter cyclists. Links to the recreational cycling network are provided at two nodes: near Dingham Creek and near the Bradley Avenue extension.
- Off-street parking will contribute to the community character through increased interaction between streetscape and built form.
- On-street commuter bike lanes are consistent with city cycling policies and Cycling Master Plan recommendations and in providing opportunities for commuter cyclists. Links to the recreational cycling network are provided at two nodes: near Dingham Creek and near the Bradley Avenue extension.

**F - Impacts to recreational features**

- There are no existing municipal parks or recreational trails that will be impacted by the road cross-section alternatives. All alternatives support active transportation and will improve access to nearby parks and trails.
- Off-street two-way bike path is not consistent with Cycling Master Plan recommendations with respect to location and two-way travel.
- Off-street parking will contribute to the community character through increased interaction between streetscape and built form.
- On-street commuter bike lanes are consistent with city cycling policies and Cycling Master Plan recommendations and in providing opportunities for commuter cyclists. Links to the recreational cycling network are provided at two nodes: near Dingham Creek and near the Bradley Avenue extension.
- Off-street parking will contribute to the community character through increased interaction between streetscape and built form.
- Off-street two-way bike path is not consistent with Cycling Master Plan recommendations with respect to location and two-way travel.

**SUMMARY**

Alternative A provides good opportunities for developing community character and for localized mobility; however, the wide ROW is seen as a hindrance to pedestrian movement/mobility across the broader corridor.

Alternative B does not provide good community mobility or character, as there would be no interaction between the street and street fronting buildings with no on-street parking.

Alternative C does not provide good community mobility or character, as there would be no interaction between the street and street fronting buildings with no on-street parking.
<table>
<thead>
<tr>
<th>Factor Group/Criteria</th>
<th>Measures</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
<th>Alternative D</th>
<th>Alternative E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 Agricultural Resources</td>
<td></td>
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</tr>
<tr>
<td>Impacts to Agricultural Recreational Use</td>
<td>Visits to agricultural operations (including road access, ability to accommodate movement farm equipment, maintenance of operable field areas)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>All alternatives introduce recreational features for the corridor. Alternatives B and C provide sidewalks and on-street parking. Alternative D provides a multi-use trail as an additional recreational feature. However, this is above and beyond what has been identified for the corridor in terms of active transportation requirements and may result in additional potential for conflicts between cyclists and pedestrians accessing retail/commercial and parking areas. Alternative E's 2-way bike path separated from the roadway, reducing potential for conflict with parked cars in off-peak.</td>
<td></td>
</tr>
<tr>
<td>Area of agricultural lands impacted</td>
<td>Impacts to prime agricultural soils (Areas of Class 1-3 soils impacted)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>All alternatives may have some impact on agricultural access due to the raised median design. Mitigation measures or alternative access strategies may be developed for specific sites when road widening alternatives are contemplated.</td>
<td></td>
</tr>
<tr>
<td>SUMMARY</td>
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<tr>
<td></td>
<td>All of the alternatives have the potential to impact lands currently under agricultural production and agricultural operations. It is noted that the Wonderland Road South corridor from Southdale Road to Highway 402 is within the Urban Growth Boundary with remaining agricultural areas intended to transition to urban land use.</td>
<td></td>
<td></td>
<td></td>
<td>Therefore, Alternatives C is preferred.</td>
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<tr>
<td>2.2 Context Support</td>
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</tr>
<tr>
<td>Land Use Designation/Context</td>
<td>Compatibility with the existing planning policies as well as planned land use context along the corridor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>All alternatives are consistent with the City's Official Plan, the urban design policies of the Southwest Area Plan (2012), and the transportation policies of the City of London 2030 Transportation Master Plan.</td>
<td></td>
</tr>
<tr>
<td>Planned Building Scale and Orientation</td>
<td>Compatibility with the size, density and height of future buildings along the corridor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>All alternatives are consistent with the City’s Official Plan, the urban design policies of the Southwest Area Plan (2012), and the transportation policies of the City of London 2030 Transportation Master Plan.</td>
<td></td>
</tr>
</tbody>
</table>
### 2.2 Street Vibrancy

**SUMMARY**

Alternative A is preferred, as it fully conforms to the SWAP land use and context and urban design policies. Alternatives C, D and E also support urban design policies and would support planned land use and development.

Alternative B is the least preferred, as it does not provide for on-street parking that would encourage business frontage, which is a key part of the urban design policies.

Alternatives C, D, and E are similar in conformity to the urban design policies; however, C is slightly better as it provides equal opportunity on both sides of the road to establish a high-quality streetscape.

Therefore, Alternative A is preferred.

#### Factor Group/Criteria

<table>
<thead>
<tr>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Street Animation</td>
</tr>
<tr>
<td>- Park/Open Space</td>
</tr>
<tr>
<td>- Boulevard Treatment</td>
</tr>
</tbody>
</table>

#### Alternative A

- **5-Lane Including Frontage Street + Bike Lanes**
- **ROW = 54.6 m**
- Additional sidewalks provided on each side of roadway.
- Majority of existing street trees will require removal.
- Opportunity for street trees on both sides of roadway to increase pedestrian physical comfort, and define streetscape edge.
- All alternatives have a 5 m centre landscaped median.
- 60.5% ROW dedicated to public realm uses.
- Streetlight fixtures, traffic control poles, boulevards, - way dedicated to public realm uses.
- Opportunity for on-street parking.

#### Alternative B

- **5-Lane + Bike Lanes**
- **ROW = 42.0 m**
- Comparatively narrow boulevards.
- Majority of existing street trees will require removal.
- Opportunity for street trees on both sides of roadway to increase pedestrian physical comfort, and define streetscape edge.
- All alternatives have a 5 m centre landscaped median.
- 51% ROW dedicated to public realm uses.
- Off-peak parking provides increased interaction between streetscape and built form, encourage pedestrians onto the sidewalk and contributing to street animation.
- Potential for conflicts among bike lanes, multi-use path, and multi-use path on east side may detract from public realm uses.

#### Alternative C

- **5-Lane + Off-Peak Parking + Bike Lanes**
- **ROW = 43.5 m**
- Comparatively narrow boulevards.
- Majority of existing street trees will require removal.
- Opportunity for street trees on both sides of roadway to increase pedestrian physical comfort, and define streetscape edge.
- All alternatives have a 5 m centre landscaped median.
- 49% ROW dedicated to public realm uses.
- Off-peak parking provides increased interaction between streetscape and built form, encourage pedestrians onto the sidewalk and contributing to street animation.
- Potential for conflicts among bike lanes, multi-use path, and multi-use path on east side may detract from public realm uses.

#### Alternative D

- **5-Lane + Off-Peak Parking + 2-Way Bike Path**
- **ROW = 42.0 m**
- Comparatively narrow boulevards.
- Majority of existing street trees will require removal.
- Opportunity for street trees on both sides of roadway to increase pedestrian physical comfort, and define streetscape edge.
- All alternatives have a 5 m centre landscaped median.
- 51% ROW dedicated to public realm uses.
- Off-peak parking provides increased interaction between streetscape and built form, encourage pedestrians onto the sidewalk and contributing to street animation.
- Potential for conflicts among bike lanes, multi-use path, and multi-use path on east side may detract from public realm uses.

#### Alternative E

- **5-Lane + Off-Peak Parking**
- **ROW = 42.0 m**
- Comparatively narrow boulevards.
- Majority of existing street trees will require removal.
- Opportunity for street trees on both sides of roadway to increase pedestrian physical comfort, and define streetscape edge.
- All alternatives have a 5 m centre landscaped median.
## Factor Group/Criteria

### Factor Group: Local Identity

<table>
<thead>
<tr>
<th>Measures</th>
<th>Alternative A</th>
<th>Alternative B</th>
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<th>Alternative D</th>
<th>Alternative E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures</td>
<td>6-Lane including Frontage Street + Bike Lanes, ROW = 54.6 m</td>
<td>6-Lane + Bike Lanes, ROW = 42.0 m</td>
<td>6-Lane + Off-Peak Parking + Bike Lanes, ROW = 42.0 m</td>
<td>6-Lane + Off-Peak Parking + Multi-Use Trail, ROW = 43.5 m</td>
<td>6-Lane + Off-Peak Parking + 2-Way Bike Path, ROW = 42.0 m</td>
</tr>
</tbody>
</table>

#### 2.3 Local Identity

**a) Gateway Landscape**

- Qualitative assessment of gateway treatments.
- Provides the most opportunity for a gateway treatment based on the uniqueness of the Frontage Street cross-section.
- Provides ample opportunity to establish an integrated landscape with natural and urban elements.
- Good opportunity for gateway treatments with wide landscaped boulevards and pedestrian facilities, but not to the same level as Alternative A.
- Does not provide an opportunity to establish a balanced gateway landscape, as there is no boulevard, and therefore no opportunity to plant street trees or establish a street furnishings zone on one side of the cross-section.
- Good opportunity for gateway treatments with wide landscaped boulevards and pedestrian facilities, but not to the same level as Alternative A.

**b) Sense of Belonging**

- Qualitative and quantitative assessment that consider the value of integrated landscape, cultural and heritage resources which visually retain/enhance the local characteristics.
- All alternatives have similar potential for integrated landscape, cultural and heritage resources to visually retain/enhance the local characteristics.

### SUMMARY

- Alternative A provides the most potential for gateway treatments.
- Alternatives B, C and E all provide good potential for gateway treatments, and integrated landscapes, but not as much as Alternative A.
- Alternative D provides poor opportunity for a balanced gateway landscape as it does not have a boulevard on one side.
- Therefore, Alternative A is preferred.

## Factor Group: Cultural Environment

### a) Impacts to Built Heritage Features / Cultural Heritage Landscapes

- Number of heritage buildings and/or cultural heritage landscapes displaced or disrupted or adjacent to the alignment.
- No listed or designated built heritage features occur between Southdale Road and Highway 402.
- 1 residence of cultural heritage interest is located on the east side of Wonderland Road, south of Dingman Drive.
- 5 cultural heritage landscapes have been identified along Wonderland Road South between Southdale Road and Highway 402.
- Number of displaced or disrupted heritage buildings or landscapes to be determined during the analysis of widening alternatives, following this evaluation for the preferred cross-section.

### b) Impact to archaeological resources

- Number of archaeological known sites within the right-of-way.
- No Registered sites within a km of the study corridor.
- 31 registered sites within 1 km of the study corridor.
- All undisturbed areas within the corridor are considered to have high potential for locating archaeological materials.
- Previously disturbed areas and areas requiring additional archaeological assessment have been delineated and will be incorporated into the analysis of widening alternatives, following this evaluation for the preferred cross-section.

### SUMMARY

- All Alternatives have similar potential impacts to cultural heritage landscapes, a residence of potential heritage interest, and potential archaeological resources.
- Therefore, all alternatives are considered similar.
4.1. Aquatic Ecosystem

**Potential Impacts to Fish and Fish Habitat**

Qualitative and quantitative assessment that considers the magnitude (number and nature of potential impacts), significance and sensitivity of fisheries and aquatic habitat using, as indicators; fish habitat (>100m based on the presence and density of: interior wildlife habitat and landscape connectivity encroachment, loss), significance and sensitivity considering the magnitude (area in ha) and potential to avoid or mitigate impacts. 

**Provincially Significant Wetlands, other evaluated communities (based on provincial flora Species at Risk, known SAR), known Ss as well as, potential to avoid or mitigate impacts.**

**Qualitative and quantitative assessment for example, Areas of Natural and Scientific or mitigate impacts.**

**Summary**

All Alternatives have minor potential impacts to fish and fish habitat which will be fully defined for the assessment of road widening alternatives. Alternate D may be slightly less preferred only because it may result in longer watercourse crossings, however, this could be mitigated through design. Therefore, Alternatives B, C, D and E are considered similar and preferable to Alternative A.

4.2. Terrestrial Ecosystems

**Potential Impacts to Designated Features**

Qualitative and quantitative assessment considering the magnitude (number of crossing) and nature of potential impacts (fragmentation, encroachment, loss) as well as, potential to avoid or mitigate impacts. Designated features include, for example. Areas of Natural and Scientific Interest (ANS) and Environmentally Significant Areas (ESAs).

**Natural vegetation features are more prominent south of Wonderland Road and consist of upland forest, wetlands, thickener and meadow vegetation communities some of which are identified as the Assiniboine Flora as being unaltered or flagged for Environmental review.**

Based on the expanded right-of-way requirements associated with the all Alternatives it is anticipated that there may be some encroachment into adjacent designated natural features. However, the exact location and the magnitude of this impact cannot be assessed at this stage. These aspects will be assessed with the road widening alternatives. Furthermore, there may be design mitigation measures to avoid or minimize these potential impacts that can only be determined in the next stage of the assessment process.

**Potential Impacts to Vegetation**

**Potential Impacts to Wildlife Habitats and Linkages**

**Based on the expanded right-of-way requirements associated with the all Alternatives it is anticipated that there may be some encroachment into adjacent designated natural features. However, the exact location and the magnitude of this impact cannot be assessed at this stage. These aspects will be assessed with the road widening alternatives. Furthermore, there may be design mitigation measures to avoid or minimize these potential impacts that can only be determined in the next stage of the assessment process.**

**Based on the expanded right-of-way requirements associated with the all Alternatives it is anticipated that there may be some encroachment into adjacent designated natural features. However, the exact location and the magnitude of this impact cannot be assessed at this stage. These aspects will be assessed with the road widening alternatives. Furthermore, there may be design mitigation measures to avoid or minimize these potential impacts that can only be determined in the next stage of the assessment process.**
### Factor Group/Criteria

<table>
<thead>
<tr>
<th>Measures</th>
<th>Alternative A</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ROW = 54.6 m</td>
<td>ROW = 42.0 m</td>
<td>ROW = 42.0 m</td>
<td>ROW = 42.0 m</td>
<td>ROW = 43.5 m</td>
<td>ROW = 42.0 m</td>
</tr>
</tbody>
</table>

#### Summary

- All Alternatives have minor potential impacts to terrestrial resources which will be fully defined for the assessment of road widening alternatives.
- Alternative A may be slightly less preferred only because it may result in incrementally greater impacts, however, this could be mitigated through design.
- Therefore, Alternatives B, C, D, and E are alternatives are considered similar and preferable to Alternative A.

### Natural Heritage

'Natural Heritage' was the second highest ranked criteria by members of the public at PIC 1. The assessment and evaluation of widening alternatives will provide a complete analysis of the magnitude and significance of potential impacts as well as identified potential design mitigation, as appropriate.

### 4.3 Surface Water and Groundwater

#### a) Drainage and Stormwater Management

- Qualitative assessment of the ability to meet storm design (flood conveyance) requirements to avoid adverse impacts to adjacent properties and ensure that major and minor flows are conveyed - To be determined during the analysis of widening alternatives.

- Qualitative assessment of the ability to meet SWM criteria set out in the subwatershed studies to appropriately manage surface water quality and quantity stormwater (includes consideration of various SWM infrastructure required) - To be determined during the analysis of widening alternatives. Additional property requirements for SWM treatment will be identified in that assessment.

- Additional property requirements for SWM treatment will be identified in that assessment.

#### b) Potential Impacts to Groundwater

- Most of the corridor is located within a known Groundwater Recharge Area. All road cross-section concepts are the same in this regard.

- Number of private wells within the right-of-way, based on MOE well records - To be determined during the analysis of widening alternatives following this evaluation for the preferred cross-section.

#### Summary

- At this stage, all Alternatives B, C, D, and E are considered similar and preferable to Alternative A. Potential impacts to surface water and groundwater will be determined during the assessment of road design alternatives.
Familiarity of drivers with the cross-section configuration

- Some level of confusion for drivers with Frontage Street; drivers must use slip access to enter and exit Frontage Street.
- Left and right turn lanes will be provided at intersections as appropriate.
- Separated intersection design to accommodate on-street cycling.
- Intersection spacing is similar for all alternatives.

Familiarity of drivers with the cross-section configuration

- Some level of confusion for drivers with off-peak parking lane and on-street bike lane.
- Special intersection design to accommodate on-street cycling.
- Intersection spacing is similar for all alternatives.

Impact of accesses and entrances on traffic operations

- The raised centre median effectively reduces accesses and entrances to right-turns.
- The raised centre median effectively reduces accesses and entrances to right-turns.
- All alternatives support transit operations.

Effect of changes to emergency access/routes

- All alternatives are compatible with the existing and planned municipal road network.

Emergency Services

- Minor changes to emergency access to properties as a result of the change in cross-section and centre median.

Network Connectivity

- All alternatives are compatible with the existing and planned municipal road network.

Comparison of existing and planned adjacent municipal road networks.

- All alternatives are compatible with the existing and planned municipal road network.

Table 2: Transportation and Traffic Operations

<table>
<thead>
<tr>
<th>Factor Group/Criteria</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
<th>Alternative D</th>
<th>Alternative E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future road capacity – Impacts on traffic operations</td>
<td>- Provides high vehicle capacity during peak and off-peak periods.</td>
<td>- Provides high vehicle capacity during peak and off-peak periods.</td>
<td>- Provides high vehicle capacity during peak and off-peak periods.</td>
<td>- Provides high vehicle capacity during peak and off-peak periods.</td>
<td>- Provides high vehicle capacity during peak and off-peak periods.</td>
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<tr>
<td>- Capacity reduced by 1/3 during off-peak hours, potentially would provide poor level of service.</td>
<td>- Capacity reduced by 1/3 during off-peak hours, potentially would provide poor level of service.</td>
<td>- Capacity reduced by 1/3 during off-peak hours, potentially would provide poor level of service.</td>
<td>- Capacity reduced by 1/3 during off-peak hours, potentially would provide poor level of service.</td>
<td>- Capacity reduced by 1/3 during off-peak hours, potentially would provide poor level of service.</td>
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<td></td>
<td>- Number of lanes was the third highest rated criteria by members of the public in MC.</td>
<td>- Number of lanes was the third highest rated criteria by members of the public in MC.</td>
<td>- Number of lanes was the third highest rated criteria by members of the public in MC.</td>
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<tr>
<td>Impacts on transit operations</td>
<td>- No impact on transit operations.</td>
<td>- No impact on transit operations.</td>
<td>- No impact on transit operations.</td>
<td>- No impact on transit operations.</td>
<td>- No impact on transit operations.</td>
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<td></td>
<td>- Transit would require additional lane changes during off-peak parking periods, which could impact the transit operations.</td>
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</tr>
<tr>
<td>Impacts on cyclist</td>
<td>- No obstruction to cyclist in bike lane.</td>
<td>- No obstruction to cyclist in bike lane.</td>
<td>- No obstruction to cyclist in bike lane.</td>
<td>- No obstruction to cyclist in bike lane.</td>
<td>- No obstruction to cyclist in bike lane.</td>
</tr>
<tr>
<td></td>
<td>- Bike lanes are located off road and separated from cars and buses, therefore provides safer operations to cyclists.</td>
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<tr>
<td></td>
<td>- Bike lane.</td>
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<td>- Bike lane.</td>
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<td></td>
<td>- Bike lane.</td>
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<tr>
<td>Impacts of accesses and entrances on traffic operations</td>
<td>- The raised centre median effectively reduces accesses and entrances to right-turns.</td>
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</tr>
<tr>
<td>Geometry and Safety</td>
<td>- Standard cross-section configuration with 6 travel lanes and bike lanes, very familiar for drivers.</td>
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<td>- Standard cross-section configuration with 6 travel lanes and bike lanes, very familiar for drivers.</td>
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<td>- Standard cross-section configuration with 6 travel lanes and bike lanes, very familiar for drivers.</td>
</tr>
<tr>
<td>Traffic Operations</td>
<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
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<td></td>
<td>- Supports Alternative Modes of Travel</td>
<td>- Supports Alternative Modes of Travel</td>
<td>- Supports Alternative Modes of Travel</td>
<td>- Supports Alternative Modes of Travel</td>
<td>- Supports Alternative Modes of Travel</td>
</tr>
<tr>
<td></td>
<td>- Supports pedestrian and circulation cycling with sidewalks and on-street bike lanes.</td>
<td>- Supports pedestrian and circulation cycling with sidewalks and on-street bike lanes.</td>
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<td></td>
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<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
<td>- All alternatives support transit operations.</td>
</tr>
</tbody>
</table>

Summary

Alternative B provides the highest vehicle capacity during peak and off-peak periods, and provides familiarity and safe operations for all road users. Alternative B has reduced vehicle capacity during off-peak hours. Furthermore, during off-peak hours, where parking is allowed, there is an added safety concern between the parked cars and on-street cyclists. Therefore, Alternative B is preferred as it provides the highest capacity for all periods, has a familiar cross-section for drivers and cyclists, and supports alternative modes of transportation.
Factor Group/Criteria | Measures | Alternative A | Alternative B | Alternative C | Alternative D | Alternative E
---|---|---|---|---|---|---
**3.2 Technical Considerations** | | | | | | |
A | Impacts To Or Conflicts With Utilities | All alternatives result in similar impacts to utilities except that Alternative A has a slightly higher potential for conflicts with existing and local utilities due to a wider ROW. | | | | |
B | Constructability Issues | All alternatives result in similar constructability issues. | | | | |
C | Maintenance Operations | All alternatives result in similar maintenance operations. | | | | |
D | Construction Cost | Estimated construction cost of road improvements | | | | |
- Pavement width including bike lanes is 29.6 m. | High construction cost compared with other alternatives. | Pavement width including bike lanes is 25.6 m. | Low construction cost compared with other alternatives. | Pavement width including bike lanes is 27.0 m. | Medium construction cost compared with other alternatives. | Pavement width including bike lanes is 27.0 m. | Additional cost for 3.5 multi-use trail in place of sidewalk. | Medium-construction cost compared with other alternatives, with the addition of the multi-use trial. | Pavement width is 21.4 m. | Low construction cost compared with other alternatives. | Pavement width is 21.4 m. | Additional cost for 3.0 m off-street bike path. | Low construction cost compared with other alternatives. |

**SUMMARY** | | | | | | |
All alternatives have similar impacts with utilities. Alternative A has a slightly higher potential for conflicts with existing and local utilities due to a wider ROW. All alternatives have similar constructability and staging. Based on the pavement widths, Alternative B and E would have the low construction costs; although Alternative E has a smaller roadway pavement width, it has additional cost for the off-road paved bike path. Alternative A has the widest pavement widths, and construction costs. Therefore, Alternatives B, C, D and E are preferred.

**OVERALL SUMMARY** | | | | | | |
Based on all of the discussions summarized above, the Project Team decided that Alternative C: 6-Lane + Off-Peak Parking + Bike Lanes, is the overall preferred cross-section concept because:
It has the minimum ROW requirement and therefore the least amount of property required (and least footprint impact).
It includes opportunities for on-street parking that is a critical aspect to street vibrancy, animation and access to adjacent businesses.
It will not limit mid-block access to the extent that Alternative A would (although mid-block access opportunities are still subject to access policies and development-specific traffic impact assessment).
It has sidewalks on both sides of the road, providing the best opportunities for landscaping, and related community character, gateway treatments.
The placement of commuter bicycle lanes has less potential to disrupt pedestrians than Alternative D and E, and it accommodates peak traffic volumes.