

SUMMARY REPORT: DOWNTOWN ACTIVE TRANSPORTATION NETWORK

Options for Consideration

This section provides three potential network options for active transportation corridors in the Downtown. Two of the three network options are very similar in that they propose a formal Downtown network, while the third option proposes no dedicated network. Prior to analyzing the options, some context is required to provide additional perspective.

In developing potential network options, Downtown streets were assessed using several factors:

- Connectivity;
- Safety of the active transportation facilities;
- Potential conflicts between all street users including pedestrians, cyclists and motor vehicles;
- Potential impacts to motor vehicle level of service and travel time; and
- Potential impacts to other street uses such as transit stops and parking spaces.

Given that context, each of the subsequent options have been evaluated primarily by using the technical criteria outlined above. In addition to technical criteria, stakeholder and community input was used to inform the process. Where possible, each option is also evaluated on how well it supports the City's strategic objectives, Growth Plan principles, and sustainability principles.

Option 1: Establish Network on 3rd Avenue, 19th Street, and 23rd Street

This option proposes that City Council endorse the Downtown Active Transportation Network of 3rd Avenue, 19th Street, and 23rd Street. According to public engagement results, this network configuration was preferred by 78 of the 100 people who chose to indicate a preference for a north-south Downtown active transportation corridor.

The estimated cost to proceed with detailed design work of the Downtown network is \$400,000. The capital investment for construction of the Downtown Active Transportation Network is estimated at \$3.7 million, which includes enhanced pedestrian facilities, improvements to the public realm and dedicated cycling facilities.

Advantages:

Supports the recommendations in the Growth Plan, the Active Transportation Plan and the Street Design Policy.

Builds upon previous streetscaping investments to improve pedestrian infrastructure along 3rd Avenue.

Potential to maximize investments in existing cycling infrastructure.

Addresses connections for the active transportation network beyond Downtown with excellent connectivity and smooth transitions north and south of the study area.

Provides cyclists with a continuous network of dedicated cycling facilities on busy, high-traffic Downtown streets.

Improves the level of safety for vulnerable road users.

Cyclists, pedestrians and drivers are familiar with the cycling facility on 23rd Street.

3rd Avenue has a consistent right-of-way width, allowing for a single configuration, design and operation through the length of the facility.

The presence of a centre median on 3rd Avenue between 20th Street and 22nd Street reduces the number of conflict points improving the safety of the street.

Existing land use and built form along 3rd Avenue produces a pedestrian-oriented development pattern that supports all modes of transportation.

3rd Avenue has a significant amount of street-level activity due to more storefronts, which can be more attractive for pedestrians and cyclists.

3rd Avenue has lower Annual Average Daily Traffic than 4th Avenue.

Parking is not impacted on 19th Street.

Vehicle Level of Service (LOS) is not impacted on 19th Street or 23rd Street.

Disadvantages:

Cyclists, pedestrians and drivers are not familiar with a cycling facility on 3rd Avenue or 19th Street.

Parking is impacted on 23rd Street and 3rd Avenue (approximately 13 spaces and 54 spaces respectively).

At peak hour, vehicle level of service at 3rd Avenue and 20th Street is reduced from LOS B to LOS C.

Prior investment in cycling facilities on 4th Avenue is lost due to relocation to 3rd Avenue.

Option 2: Establish 4th Avenue, 19th Street, and 23rd Street

This option is very similar to Option 1, but with one important difference. It uses 4th Avenue as the north-south corridor of the network but keeps 23rd Street and 19th Street as the east-west corridors. According to public engagement results, 4th Avenue was preferred by 22 of the 100 people who chose to indicate a preference for a north-south Downtown active transportation corridor.

Like Option 1, the estimated cost to proceed with detailed design work of the Downtown network is \$400,000. The capital investment for construction of the Downtown Active Transportation Network is estimated at \$3.7 million which includes enhanced pedestrian facilities, improvements to the public realm and dedicated cycling facilities.

Advantages:

Supports the recommendations in the Growth Plan, the Active Transportation Plan and the Street Design Policy.

Improves the level of safety for vulnerable road users.

Provides cyclists with a network of dedicated cycling facilities on busy, high-traffic Downtown streets.

Cyclists, pedestrians and drivers are familiar with the cycling facilities on 4th Avenue and 23rd Street.

4th Avenue is fairly central to Downtown providing decent network coverage.

Parking is not impacted on 19th Street.

Vehicle level of service is not impacted on 19th Street or 23rd Street.

Disadvantages:

Cyclists, pedestrians and drivers are not familiar with a cycling facility on 19th Street.

4th Avenue has an inconsistent right-of-way width, requiring the design and operation of the street to change through the length of the corridor.

On 4th Avenue, there are challenges connecting beyond Downtown at key intersections such as at 25th Street and at the Broadway Bridge.

4th Avenue does not have a centre median to restrict turning movements from driveways increasing the opportunity for conflicts.

Parking is impacted on 23rd Street and 4th Avenue (approximately 13 spaces and 58 spaces respectively).

4th Avenue has a higher Annual Average Daily Traffic than 3rd Avenue.

At peak hour, vehicle level of service along 4th Avenue at 20th Street, 21st Street, and 22nd Street is reduced from LOS B to LOS C.

Option 3: No Formal Downtown Network

This option proposes no formal Downtown Active Transportation Network and thus, the removal of the existing protected bike lanes on 23rd Street and 4th Avenue. Specifically, this option eliminates dedicated facilities for cyclists through Downtown and would require cyclists to share the travel lane with vehicles.

Advantages:

Restores previous parking volumes along 4th Avenue and 23rd Street (increase of approximately 42 spaces).

Facilitates slight improvements to vehicle level of service.

Lowers demand on driver attention at conflict points.

Disadvantages:

Does not support the recommendations in the Growth Plan, the Active Transportation Plan or the Street Design Policy.

Does not provide cyclists with a network of dedicated cycling facilities on busy, high-traffic Downtown streets.

Does not provide enhanced facilities for active transportation users through the Downtown.

Lowers the level of safety for vulnerable road users.

Loss of prior investments made in 23rd Street and 4th Avenue.

RECOMMENDATION

The Administration recommends that City Council adopt Option 1, and establish the Downtown Active Transportation Network along 3rd Avenue, 19th Street, and 23rd Street.

RATIONALE

Option 1 tends to generate the most advantages for a Downtown Active Transportation Network. More specifically, and considering the technical network analysis that was conducted, a Downtown Active Transportation Network of 3rd Avenue, 23rd Street, and 19th Street is intended to maximize investments in existing active transportation infrastructure, and provide a continuous network of facilities on busy, high-traffic Downtown streets.

Moreover, the proposed recommendation minimizes the various trade-offs that emerge between the variety of users and functions that these Downtown streets serve. For example, the recommended network integrates the active transportation plan into other Downtown initiatives including Bus Rapid Transit. As a result, its design provides the most optimal approach in achieving a balance for all users (motorists, cyclists, and pedestrians) in the Downtown.