

MINUTES OF THE REGULAR MEETING OF COUNCIL HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14th STREET, NORTH VANCOUVER, BC, ON MONDAY, JANUARY 27, 2014.

REPORTS OF COMMITTEES, COUNCIL REPRESENTATIVES AND STAFF

16. All Ages and Abilities (AAA) Bicycle Network for the City of North Vancouver – File: 8480-01

Report: Transportation Planner, Engineering, Parks and Environment, January 22, 2014

The Manager, Transportation and the Transportation Planner provided a presentation and responded to questions of Council.

Moved by Councillor Keating, seconded by Councillor Buchanan

THAT the report of the Transportation Planner, Engineering, Parks and Environment, dated January 22, 2014, entitled “All Ages and Abilities (AAA) Bicycle Network for the City of North Vancouver,” be deferred until all members of Council are present.

CARRIED UNANIMOUSLY, by members remaining



To: Iona Bonamis, Transportation Planner, Engineering, Parks and Environment
From: Karla Graham, City Clerk
Re: All Ages and Abilities (AAA) Bicycle Network for the City of North Vancouver
Date: January 31, 2014
File: 8480-01

E-MAILED

City Council, at its regular meeting of Monday, January 27, 2014, unanimously endorsed the following resolution:

"THAT the report of the Transportation Planner, Engineering, Parks and Environment, dated January 22, 2014, entitled "All Ages and Abilities (AAA) Bicycle Network for the City of North Vancouver," be deferred until all members of Council are present."

Karla Graham, MMC
City Clerk

(Electronic version of report posted on www.cnv.org/city_hall/council_meetings/council_meeting_agenda)

cc D. Mitic, Manager, Transportation



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| Section Manager | Division Manager | Director | CAO |

The Corporation of **THE CITY OF NORTH VANCOUVER**
ENGINEERING, PARKS & ENVIRONMENT DEPARTMENT

REPORT

To: Mayor D.R. Mussatto and Members of Council

From: Iona Bonamis, Transportation Planner

SUBJECT: ALL AGES AND ABILITIES (AAA) BICYCLE NETWORK FOR THE CITY OF NORTH VANCOUVER

Date: January 22, 2014 File No: 8480-01

The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.

RECOMMENDATION:

PURSUANT to the report of the Transportation Planner, dated January 22, 2014, entitled "All Ages and Abilities (AAA) Bicycle Network for the City of North Vancouver";

THAT Option 4 be endorsed as the long-term vision for the City's AAA bicycle network;

THAT AAA bicycle projects as recommended in this report be brought forward in future 10-year financial plans for Council's consideration;

AND THAT this report be forwarded to the Integrated Transportation Committee (ITC) and HUB for their information.

ATTACHMENTS:

1. Examples of AAA Bicycle Facilities
2. Status Quo – Existing/Planned Facilities that could Meet AAA Standards in Current 10-Year Capital Plan
3. Option 1 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards

4. Option 2 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via Local Roads
5. Option 3 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via More Direct Routes
6. Option 4 – Recommended Long-Term AAA Bicycle Network Vision

PURPOSE:

The purpose of this report is to seek Council support to adopt an “All Ages and Abilities” (AAA) bicycle network vision as described in Option 4 of this report.

BACKGROUND:

At the regular Council meeting on October 7, 2013, Council endorsed the following resolution:

PURSUANT to the report of the Transportation Planner, dated September 18, 2013, entitled “All Ages and Abilities (AAA) Bicycle Facilities”;

THAT staff be directed to identify key north/south and east/west corridors suitable for All Ages and Abilities (AAA) bicycle facilities to form a backbone for the City’s bicycle network for Council’s consideration;

AND THAT staff report back on the financial implications;

AND THAT this report be forwarded to the Integrated Transportation Committee for their information and comment.

This report presents the AAA bicycle network vision recommended by staff, based on feedback from stakeholders and staff’s analysis. If this vision is adopted, the City would continue implementing the North Vancouver Bicycle Master Plan (BMP) (e.g., commuter routes, painted bike lanes, etc. where appropriate), and this AAA bicycle network would add a layer of higher quality bicycle facilities to the BMP to serve a larger population.

DISCUSSION:

In 2008, the City adopted its Long-Term Transportation Plan. This plan outlined actions to create a sustainable transportation system that creates a vibrant, diverse and highly liveable community, provides safe, efficient, and accessible movement of people, and supports active transportation, namely walking, cycling and transit. To accomplish these goals, the Transportation Plan set out several plans, including a bicycle plan, which identified bicycle support strategies and design principles.

In 2012, the North Vancouver Bicycle Master Plan was updated to better reflect current needs and identify priority locations for bike improvements. The guiding principles of the plan included building a bicycle network to accommodate cyclists of all skill levels, riding for all purposes, and providing a continuous network of pathways by providing space for cyclists on roadways wherever possible and off-street pathways to complement on-street bike facilities. The final bicycle network that was adopted enabled all residents to be within 300 metres of a bicycle facility.

As bicycle facility planning has evolved, the target audience has also evolved. Today, there is a focus to make cycling comfortable and attractive for a broader array of users such as children and seniors, and to provide AAA or “all ages and abilities” bicycle facilities.

Types of AAA Bicycle Facilities

The primary types of AAA bicycle facilities are described below. For each facility type, high-level per-kilometre cost estimates have been provided. It should be noted, however, that actual costs would depend on the infrastructure upgrades required. Some facilities, such as Chesterfield, could also be built or upgraded in phases.

AAA bicycle facility types (photo examples of facility types are included in Attachment 1):

- Neighbourhood bikeways (or bicycle boulevards) along quiet local roads:
 - Treatments required typically include traffic calming measures, signage and pavement markings (for example bike stencils for shared vehicle/bicycle facilities), and potential intersection treatments.
 - Cost is approximately \$50,000 per kilometre for local roads, and \$300,000 per kilometre for collector roads, not including major intersection upgrades.
- Off-street bike-only paths and multi-use paths:
 - While these facilities are often preferred by cyclists, the possibility of conflict along these paths increases with increased bike and foot traffic, and with increased speeds. However, these facilities can be used to build up the cycling population, and over time, some of these multi-use paths could be redesigned to separate cyclists from pedestrians and other AAA bicycle facilities could be built.
 - A significant amount of space is required for these facility types.
 - Cost is approximately \$1 million per kilometre, not including major road work, utility relocation, or overpasses.
- Separated bike lanes (or cycle tracks) on arterial roads.
 - These facilities could require the removal of parking or travel lanes, curb relocation, conversion to a one-way street, or the use of the boulevard space if it is available. Alternatively, two parallel streets, each with a one-direction AAA bicycle facility, could be used to provide two-way access for

cyclists. For example, 13th Street could serve cyclists traveling in one direction and 14th Street could serve cyclists traveling in the other direction.

- Cost is approximately \$300,000 to \$1.5 million per kilometre, depending on the design and not including major intersection upgrades. For example, removing parking and/or travel lanes, as opposed to relocating curbs, would significantly reduce costs. However, this would have more significant traffic implications. As well, relocating curbs to accommodate bicycle facilities could affect pedestrian space.

For neighbourhood bikeways and separated bike lanes, on average, major intersection upgrades (e.g. upgrades requiring new signals) are estimated to cost up to \$200,000 per intersection.

Existing and Planned Facilities that Meet AAA Standards

In developing a AAA bicycle network, staff first reviewed bicycle routes and greenways that are either implemented or planned for implementation in the City's current 10-year Capital Plan that could meet AAA standards (in some cases, further enhancements such as intersection upgrades would need to be made). These are shown in Attachment 2. These facilities include the completed and future sections of the Spirit Trail and Green Necklace, the separated bike lane on Larson Road, the 4th Street Bikeway, the recently completed northbound multi-use path on Forbes Avenue, and the future multi-use path on West 3rd Street (2nd Street to Forbes). The facilities that are planned over the next 10 years that could meet AAA standards mainly consist of greenways (Spirit Trail, Green Necklace, and the Upper Levels Trail) and the total budget for both bicycle route and greenway projects included in the 10-year plan is approximately \$13 million.

Considering the significant investment the City is making in these projects, staff recommend that the existing and planned bicycle and greenway projects form the backbone on which to build the AAA bicycle network vision. The largest component of these routes are multi-use paths, and although there is a higher potential for conflict with an increased number of pedestrians and cyclists, building on this network will allow us to attract more cyclists and build up the bicycle user group. Over time, to prevent crowding and conflicts between users on multi-use paths, some of these multi-use paths could be redesigned to separate cyclists from pedestrians, and other AAA bicycle facilities could be considered.

Options Examined

Building on the existing and planned bicycle facilities that could meet AAA standards, the following four options have been developed and examined by staff:

- Option 1 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards

- Option 2 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via Local Roads
- Option 3 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via More Direct Routes
- Option 4 – Recommended Long-Term AAA Bicycle Network Vision

It is important to note that specific designs have not yet been selected for the corridors identified in the options, and that the cost estimates provided are at a very high level, based on per-kilometre cost estimates.

Option 1 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards

Option 1 is shown in Attachment 3. It focuses on filling in gaps along the existing and planned bike routes and greenways that could meet AAA standards, and aims to make the best use of available resources.

When completed, this option would add approximately 4 kilometres of AAA bicycle facilities to the current 10-year Capital Plan and enable all residents to be within 470 metres of a AAA bicycle facility. Using the per-kilometre costs described earlier, to provide these new facilities, the total additional cost over the current 10-year Capital Plan allocation of \$13 million for the planned facilities is estimated to be \$3 to \$6 million.

Option 2 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via Local Roads

Option 2, which is shown in Attachment 4, builds on Option 1. It offers more connections between key destinations such as commercial centres, schools, civic facilities, parks, and recreational centres, using low traffic, local roads. It also includes two key north/south and one east/west AAA bike routes - including Jones/Mahon, St. Andrew's, and 14th Street.

When completed, this option would add approximately 10 kilometres of AAA bicycle facilities to the current 10-year Capital Plan and enable all residents to be within 440 metres of a AAA bicycle facility. The total additional cost to implement this option over the current 10-year Capital Plan allocation of \$13 million for the planned facilities is estimated to be \$4 to \$8 million.

Option 3 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards, and Connect Major Destinations via More Direct Routes

Option 3, shown in Attachment 5, also builds upon Option 1. However, compared to Option 2, it offers more direct connections between key destinations, particularly to the Central Lonsdale Town Centre. This is accomplished by introducing more AAA facilities on arterial roads, including Chesterfield Avenue and 13th Street, which would serve as one of the key north/south and east/west AAA bike routes respectively, Queensbury south of E. Keith Road, and E. Keith Road (further discussion with the District would be required for E. Keith Road). It also includes a pedestrian/bicycle overpass over Highway 1 near Loutet Park.

When completed, this option would add approximately 14 kilometres of AAA bicycle facilities to the current 10-year Capital Plan and would enable all residents to be within 440 metres of a AAA bicycle facility. The total additional cost to implement this option over the current 10-year Capital Plan allocation of \$13 million for the planned facilities is estimated to be \$9 to \$20 million.

Option 4 – Recommended Long-Term AAA Bicycle Network Vision

Option 4, shown in Attachment 6, is a modified version of Option 3 and was developed based on comments received from ITC and HUB (see further below), as well as staff's evaluation results. It includes AAA facilities on some arterial roads including Chesterfield Avenue, Queensbury south of E. Keith Road, and E. Keith Road, and some AAA facilities on local roads, including 14th Street, St. David's, and Jones/Mahon. After discussions with ITC and HUB, staff decided to focus our efforts on 14th Street instead of 13th Street as one of the key east/west corridors despite connectivity challenges through the City core (e.g. Lions Gate Hospital), as it is a quieter road with lower traffic volumes and provides more connections to key destinations. It is also important to note that while Chesterfield is an important north/south corridor, there are already plans to provide a north/south connection along Jones in the short term. As such, this option would extend the Jones/Mahon connection to the SeaBus first, and then complete AAA bike facilities on Chesterfield in the longer term.

When completed, this option would add approximately 15 kilometres of AAA bike facilities to the current 10-year Capital Plan and would enable all residents to be within 440 metres of a AAA bicycle facility. The total additional cost to implement this option over the current 10-year Capital Plan allocation of \$13 million for the planned facilities is estimated to be \$9 to \$18 million.

Comparison of Options

Table 1 summarizes the main differences between the four options. Overall, Options 3 and 4 are higher in cost. At the same time, they provide more direct connections to key destinations, include more kilometres of AAA bicycle facilities, are better integrated with the draft OCP land use plan, and are expected to lead to a higher increase in the use of the bicycle network by cyclists.

Table 1: Comparison of Options

| | Option 1 | Option 2 | Option 3 | Option 4 |
|---|--------------------|--------------------|---------------------|---------------------|
| Kilometres of AAA Facilities Added to Current 10-Year Capital Plan | 4 | 10 | 14 | 15 |
| % Key Destinations Served | 85% | 90% | 93% | 93% |
| Total Cost (High-Level Planning Estimates) (in addition to what has been included in 10-Year Capital Plan) | \$3 to \$6 million | \$4 to \$8 million | \$9 to \$20 million | \$9 to \$18 million |
| Directness between Key Destinations (e.g. Central Lonsdale to SeaBus) | Low | Medium | High | High |
| Support for Draft OCP Land Use Plan | Low | Medium | High | High |
| Expected Increase in Use by Cyclists | Medium | Medium | High | High |
| Maximum Distance to Access AAA Bicycle Facility | 470 m | 440 m | 440 m | 440 m |
| Level of Traffic Impacts (e.g. parking removal, commercial driveways impacted, road width constraints, etc.) | Medium | Medium | Medium-High | Medium-High |

Feedback from the Integrated Transportation Committee and HUB

The first three options described above were presented to the Integrated Transportation Committee (ITC) and HUB's North Shore Committee earlier in January. The feedback received from these two stakeholder groups is summarized below.

Overall, Option 3 was the most well-received and supported option by ITC and HUB. As a result, Option 3 was modified to include these stakeholders' comments and is presented in this report as the recommended option or Option 4.

Integrated Transportation Committee

At their regular meeting on January 8, 2014, the Integrated Transportation Committee discussed the above-mentioned proposal, and the Committee unanimously endorsed the following resolution:

THAT THE Integrated Transportation Committee has reviewed the All Ages and Abilities (AAA) Bike Network scenarios as presented and strongly supports the development of a AAA bike network in the City;

AND THAT the Committee prefers Scenario B2 (Option 3), which provides more direct options and critical connections to the Central Lonsdale town centre.

FURTHERMORE the Committee recommends that the City consider:

- Flexibility and creativity on arterial space allocations to accommodate AAA bike facilities;
- Opportunities through social marketing initiatives to educate the existing motor vehicle driver base on how to share the road with cyclists;
- In general, multiuser paths are much less desirable as AAA bike facilities due to potential conflicts with pedestrians as cyclist and/or pedestrian volumes increase over time;
- Where possible choose one way single directional bike paths;
- Be prepared to create more cyclist-only facilities/spaces through more aggressive traffic calming;
- Prioritise the gaps, particularly those connecting the central core, specifically the east-west connection (either 14th or 13th Street), and the Chesterfield corridor;
- Explore new and expand existing partnerships, including funding and education, to optimise cross-sectoral benefits.

HUB's North Shore Committee

Following a presentation by City staff on January 9, 2014 regarding a AAA bicycle network for the City, the HUB's North Shore Committee members provided the following comments:

- Where feasible, use local roads instead of arterial roads as they are quieter and less costly to implement to meet AAA standards. Consider that due to the noise many people who do not ride now are much more averse to riding next to busy traffic, even when separated by a barrier.
- Use arterial roads where local roads do not provide direct connections between important destinations, such as the Central Lonsdale Town Centre.
- In high density areas (Lower Lonsdale, Central Lonsdale) AAA routes should be separated bike paths, not multi-use paths, to reduce user conflict and to increase the safety of all users.
- It is important to provide AAA bike connections to school entrances, and to provide separated bike facilities at schools where possible, as these streets become congested during peak drop-off and pick-up periods.
- Specific routes that are preferred include:
 - 3rd Street between Mackay and Marine, and between Kennard and St. Queensbury
 - Chesterfield
 - Queensbury between Keith and the Spirit Trail
 - E. Keith Road

- Some members preferred 14th Street, while others preferred 13th Street.
- Routes through isolated areas (large parks, forest, etc.) may not meet AAA standards.

RECOMMENDATION:

Based on the feedback received and staff's analysis, staff recommend adopting Option 4 as the long-term AAA bicycle network vision for the City. This option provides more direct connections between key destinations and uses arterial roads to accomplish these connections where necessary, but also uses lower volume, quieter roads where possible so that they are able to attract a broader array of users.

The implementation of this option would require significant financial resources and its implementation over the next 10 years would require almost doubling the current 10-year transportation budget from \$20 million to \$29-38 million. As such, staff recommend that this option be endorsed as the long-term AAA bicycle network vision, to be accomplished beyond the 10-year period, subject to funding availability. This network vision will also assist staff in acquiring the required road rights-of-way through re-developments to secure space for AAA facilities on the routes included in this vision.

As the City would continue to implement the Bicycle Master Plan, these AAA bike facilities would be supported by other facilities such as conventional painted bike lanes and marked shared roadways. In the longer term, City staff would also have discussions with staff from the District of North Vancouver to explore opportunities to extend these AAA facilities so that they continue on within the District.

In 2017/2018, as part of the regular 5-year North Vancouver Bicycle Master Plan updates, the AAA bicycle network long-term vision would be revisited with the broader public.

Prioritization of AAA Bike Projects

To make this long-term vision a reality while making the best use of available resources, the following prioritization plan is recommended:

- Complete the planned bicycle routes and greenways as included in the current 10-year plan.
- Fill in the gaps along the existing and planned facilities as identified in Option 1 and ensure that they meet AAA standards.
- Complete the bicycle facility projects identified in Option 4 that are included in the 10-year Capital Plan, but whose current design plans would not meet AAA standards and for which additional funding resources would be required. These include routes such as St. Andrew's between Esplanade and 23rd Street, and 17th Street between Jones and Rufus.

- Complete the key east/west connection along West Keith Road/14th Street.
- Complete the key north/south connection along Chesterfield in the long-term, and in the short-term, the connection along the Jones greenway section via Mahon and Esplanade to the SeaBus.
- Complete the other routes included in Option 4, as opportunities arise to coordinate with the other street projects, re-developments, or other funding opportunities.

It should be noted that traffic calming plans would be integrated with the implementation of AAA bicycle facilities. Also, in the future, other AAA bicycle projects could be identified as conditions change or level of use change on the bike facilities that have been built.

FINANCIAL IMPLICATIONS:

The high-level cost estimate to implement Option 4 over the long term is \$9 to \$18 million. This would be in addition to the current \$13 million included in the 10-year Capital Plan to accomplish planned bicycle route (\$1 million) and greenway (\$12 million) projects that could meet AAA standards.

Considering the significant investment required to implement Option 4, staff anticipate that most projects would be accomplished beyond the 10-year plan. If Option 4 is supported by Council, starting with the 2015-2024 Financial Planning process, staff would include some of AAA bicycle projects for Council's consideration. In addition, staff would seek funding opportunities through land re-development projects, development cost charges, and senior level governments.

INTER-DEPARTMENTAL IMPLICATIONS:

This report has been reviewed and endorsed by the Civic Projects Team on January 21, 2014.

CORPORATE PLAN AND/OR POLICY IMPLICATIONS:

The report's recommendation supports the Official Community Plan transportation, land use and environmental goals and objectives to:

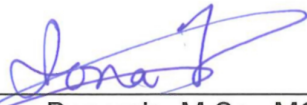
- Encourage use of variety of transportation choices such as cycling and walking;
- Provide effective and accessible transportation and mobility opportunities;
- Encourage the community to adapt to a sustainable lifestyle; and
- Reduce greenhouse gas emissions via encouraging use of transportation alternatives including walking and cycling.

It also supports the Transportation Plan to reduce barriers to cycling via improving conditions for cyclists. Furthermore, it supports the first goal of the Bicycle Master Plan – to establish a bicycle network that strengthens community connections and improves safety. It also follows the guiding principles of the Bicycle Master Plan, which include providing a bicycle network that accommodates all cyclists, incorporates different types of bicycle facilities, and includes crossing treatments to maximize safety for cyclists.

STRATEGIC PLAN IMPLICATIONS:

The report recommendation supports the C2 and C3 community goals in the City's Strategic Plan to "To protect and maintain the new and the existing infrastructure" and "to enhance community safety".

RESPECTFULLY SUBMITTED:



Iona Bonamis, M.Sc., MCIP
Transportation Planner

Attachment 1

Examples of AAA Bicycle Facilities



Off-street bike-only paths



Neighbourhood bikeways on local roads



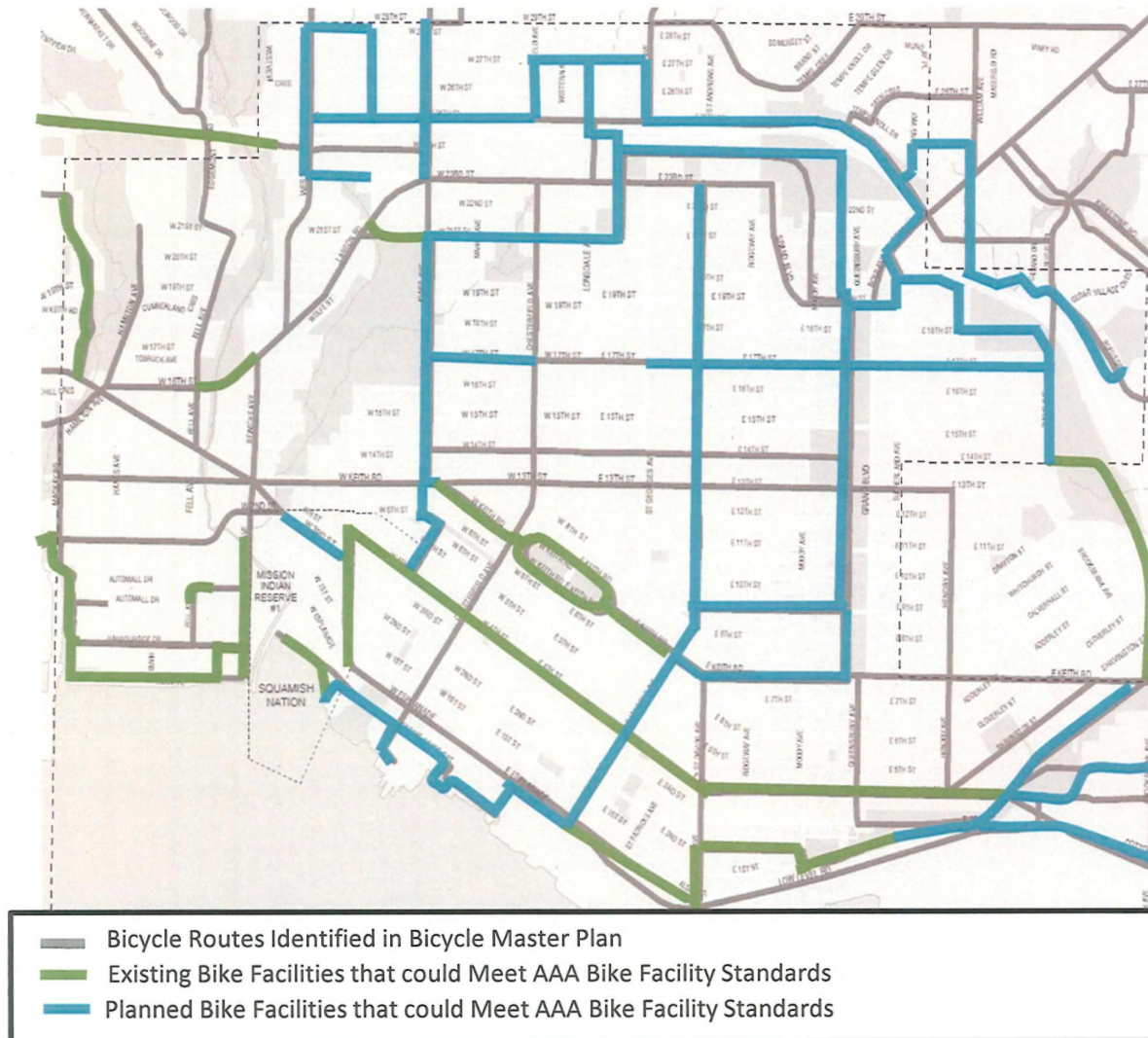
Separated bike lanes on arterial roads



Multi-use paths

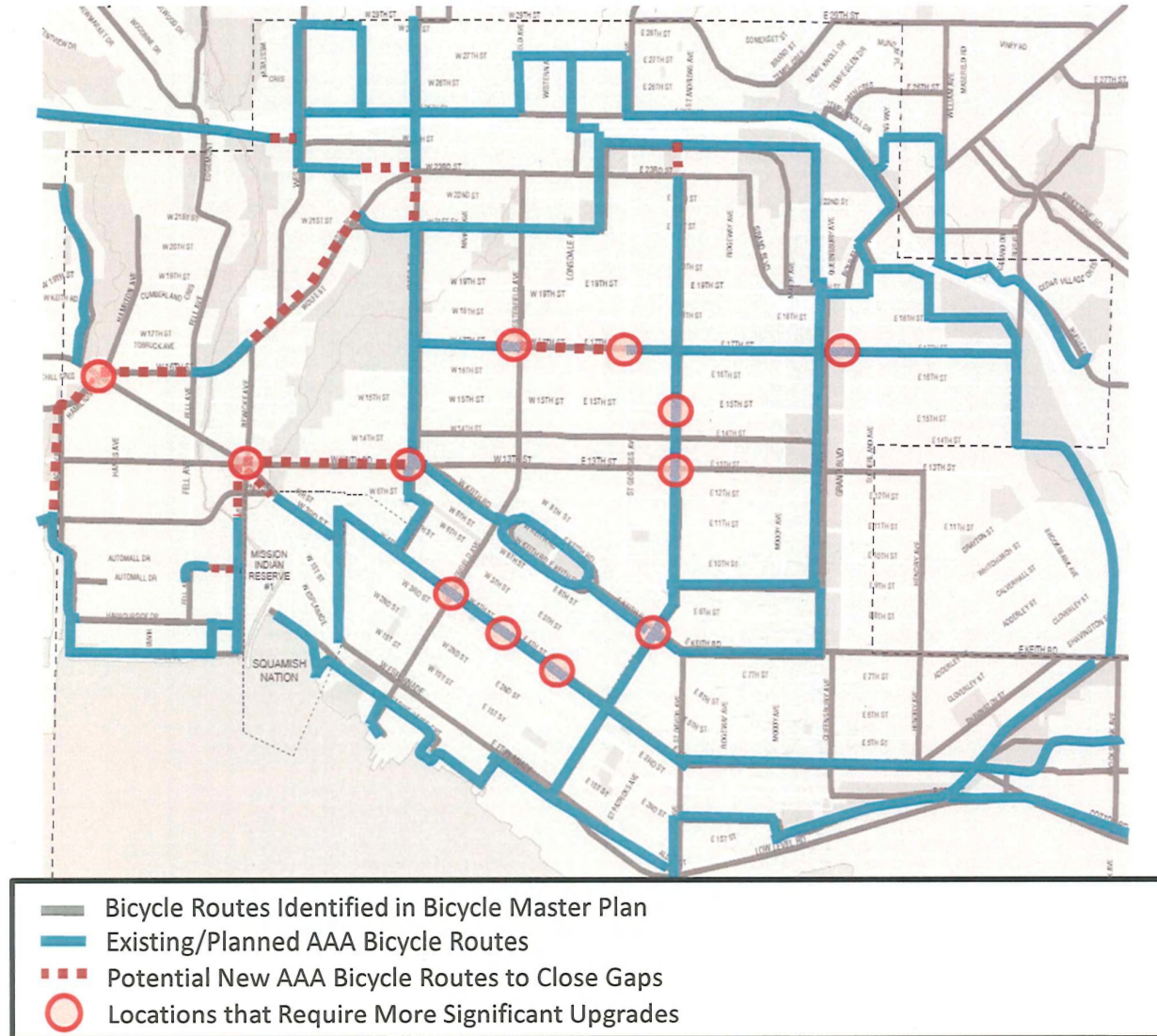
Attachment 2

Status Quo: Existing/Planned Facilities that could Meet AAA Standards in Current 10-Year Capital Plan



Attachment 3

Option 1 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards



Option 2 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards + Connect Major Destinations via Local Roads



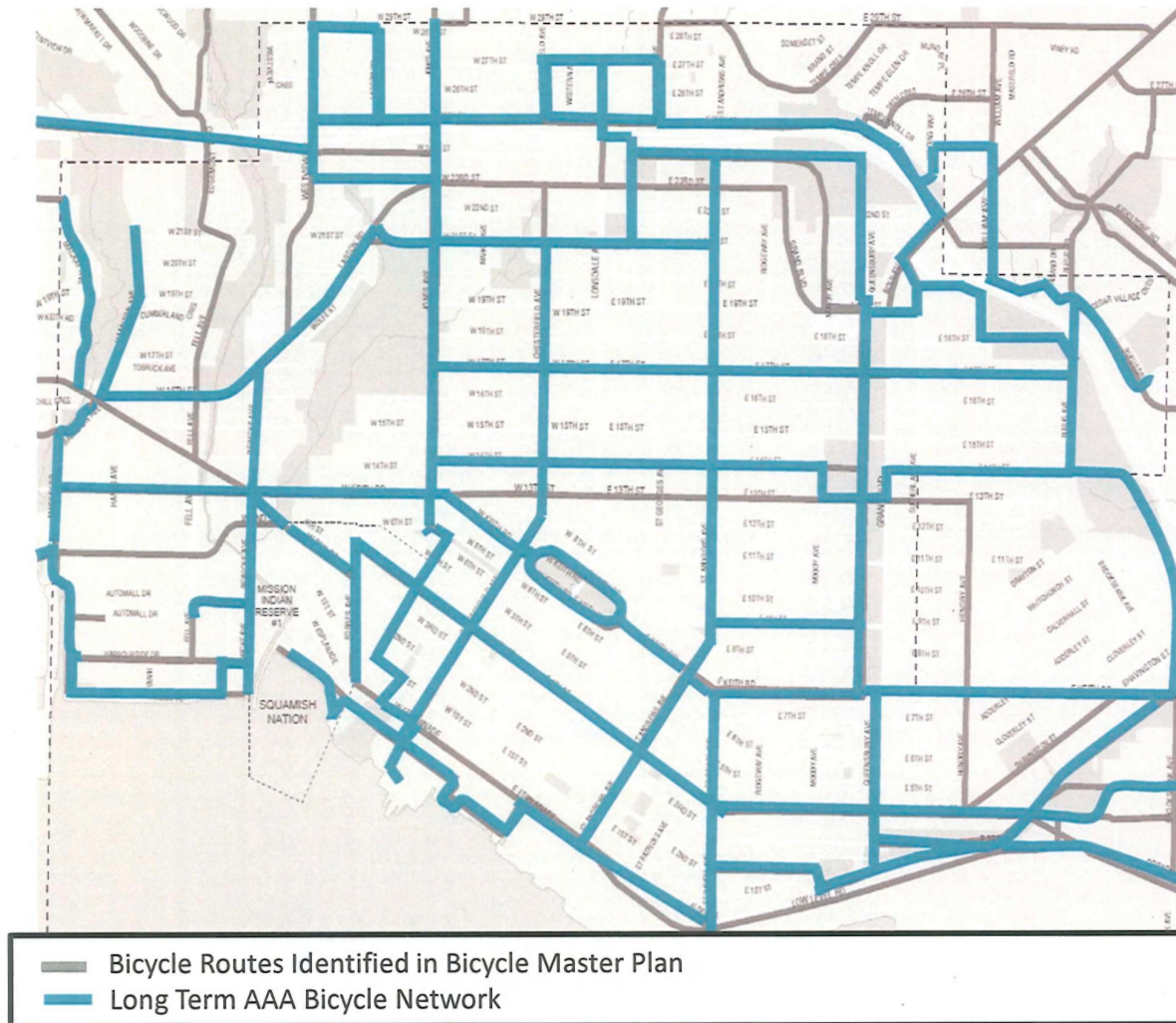
Attachment 5

Option 3 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards + Connect Major Destinations via More Direct Routes



Attachment 6

Option 4 – Recommended Long-Term AAA Bicycle Network Vision



All Ages and Abilities (AAA) Bike Network for City of North Vancouver



Council Meeting, January 27, 2014

Bicycle Planning Now



- Focus on broader array of people – children, youth, seniors, commuters
- AAA bike network would add another layer of higher quality bike facilities to Bike Master Plan.
- City would still proceed with implementing BMP (i.e., commuter routes, painted bike lanes, etc. where appropriate)

What are AAA Bike Facilities? Neighbourhood Bikeways on Local Roads



- Traffic calming measures required
- Potential intersection treatments to divert traffic to busier streets or help cyclists cross arterials



- Lower costs
 - \$50,000/km for local roads, \$300,000/km for collectors, before intersection treatments
 - Up to \$200,000 for major intersection upgrades

What are AAA Bike Facilities? Separated Bike Lanes on Arterials



- Could require removal of parking or travel lane, curb relocation, conversion to one-way street, or use of boulevard space
- Could use two parallel streets and have a one-direction AAA facility on each – example 13th and 14th streets
- Bi-directional bike lanes involve more complex intersection upgrades and have more significant impact on local traffic
- Higher costs
 - \$300,000 to \$1.5 million/km depending on design, before intersection treatments
 - Up to \$200,000 for major intersection upgrades

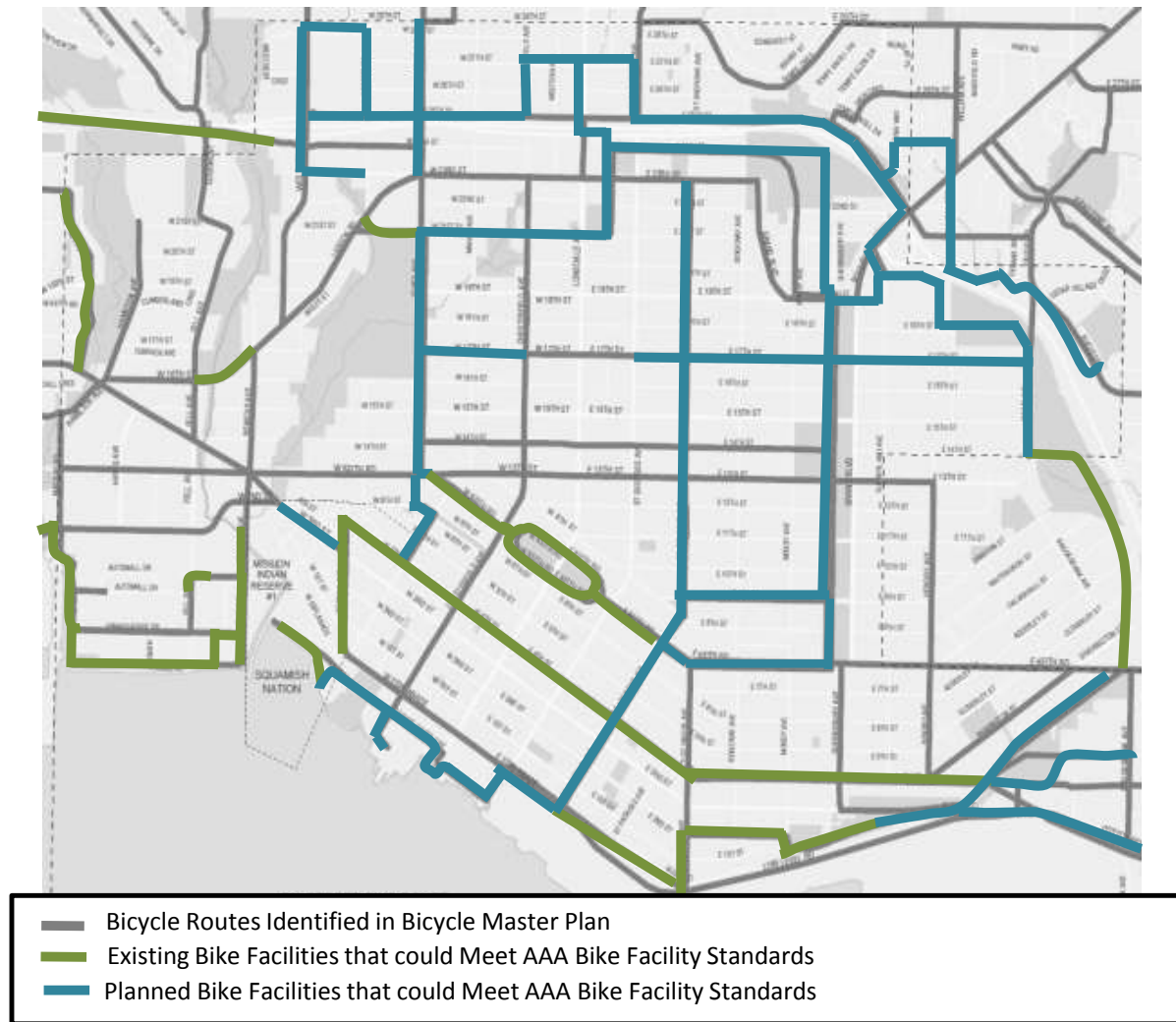
What are AAA Bike Facilities? Off-Street Bike Only Paths and Multi-Use Paths



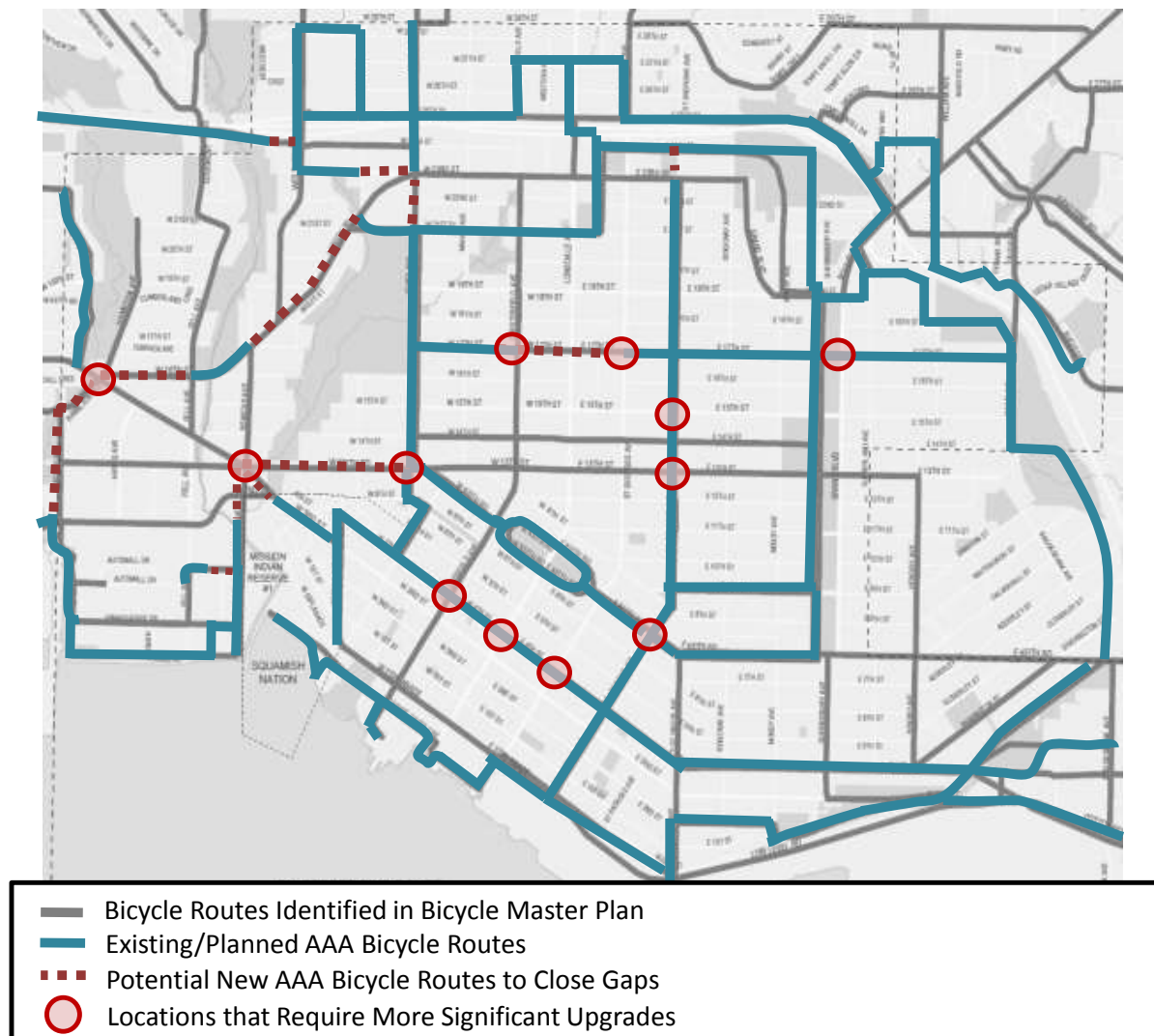
- Significant amount of space required and cost involved - \$1 million/km, not including overpasses, utility work, or major road work
- Preferred by many cyclists, but multi-use paths can have safety issues with higher bike and pedestrian volumes.
- Can be used to build up cycling population and some could be redesigned to separate pedestrians and cyclists

Development of Options

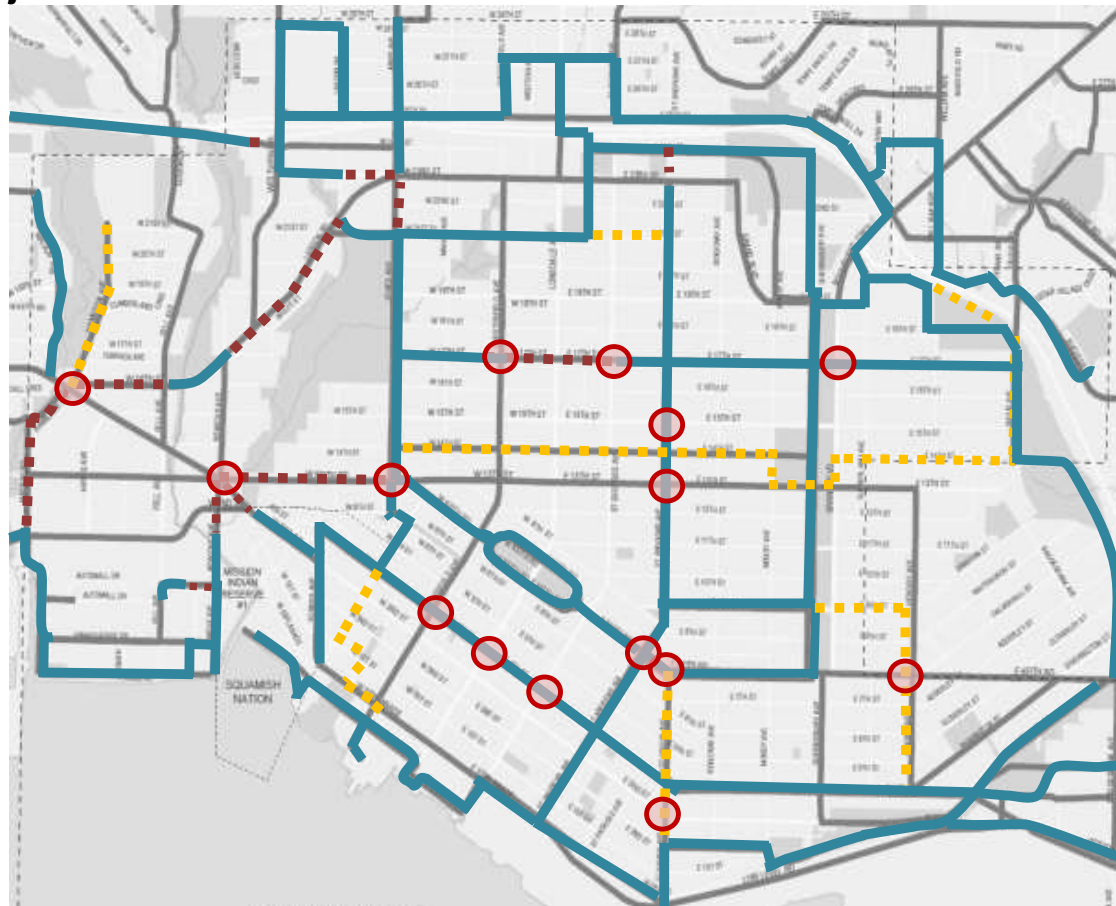


Status Quo: Existing/Planned Facilities that could Meet AAA Standards in Current 10-Year Capital Plan

Option 1 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards

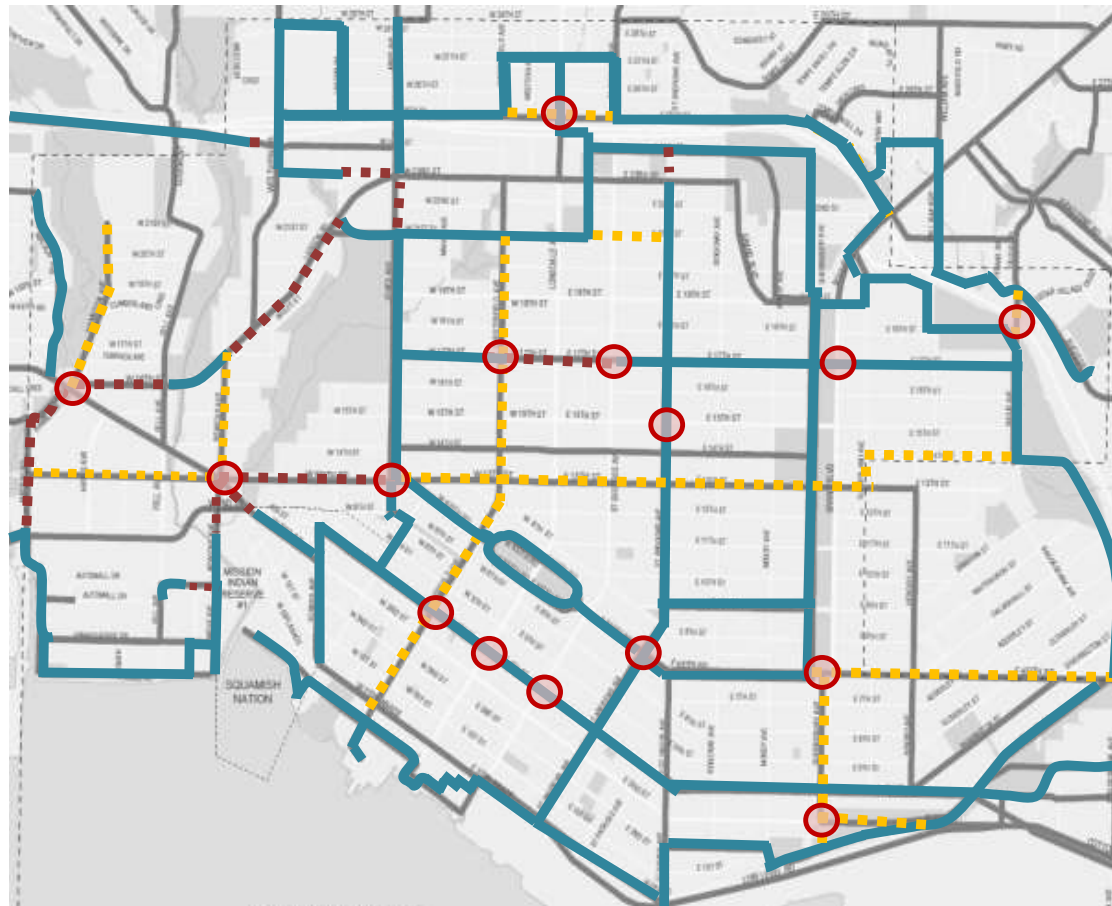


Option 2 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards + Connect Major Destinations via Local Roads



- Bicycle Routes Identified in Bicycle Master Plan
- Existing / Planned AAA Bicycle Routes
- - - Potential New AAA Bicycle Routes to Close Gaps
- - - Additional Facility Improvements to Connect Destinations and Isolated Areas
- Locations that Require More Significant Upgrades

Option 3 – Fill in Gaps Along Existing/Planned Facilities that could Meet AAA Standards + Connect Major Destinations via More Direct Routes

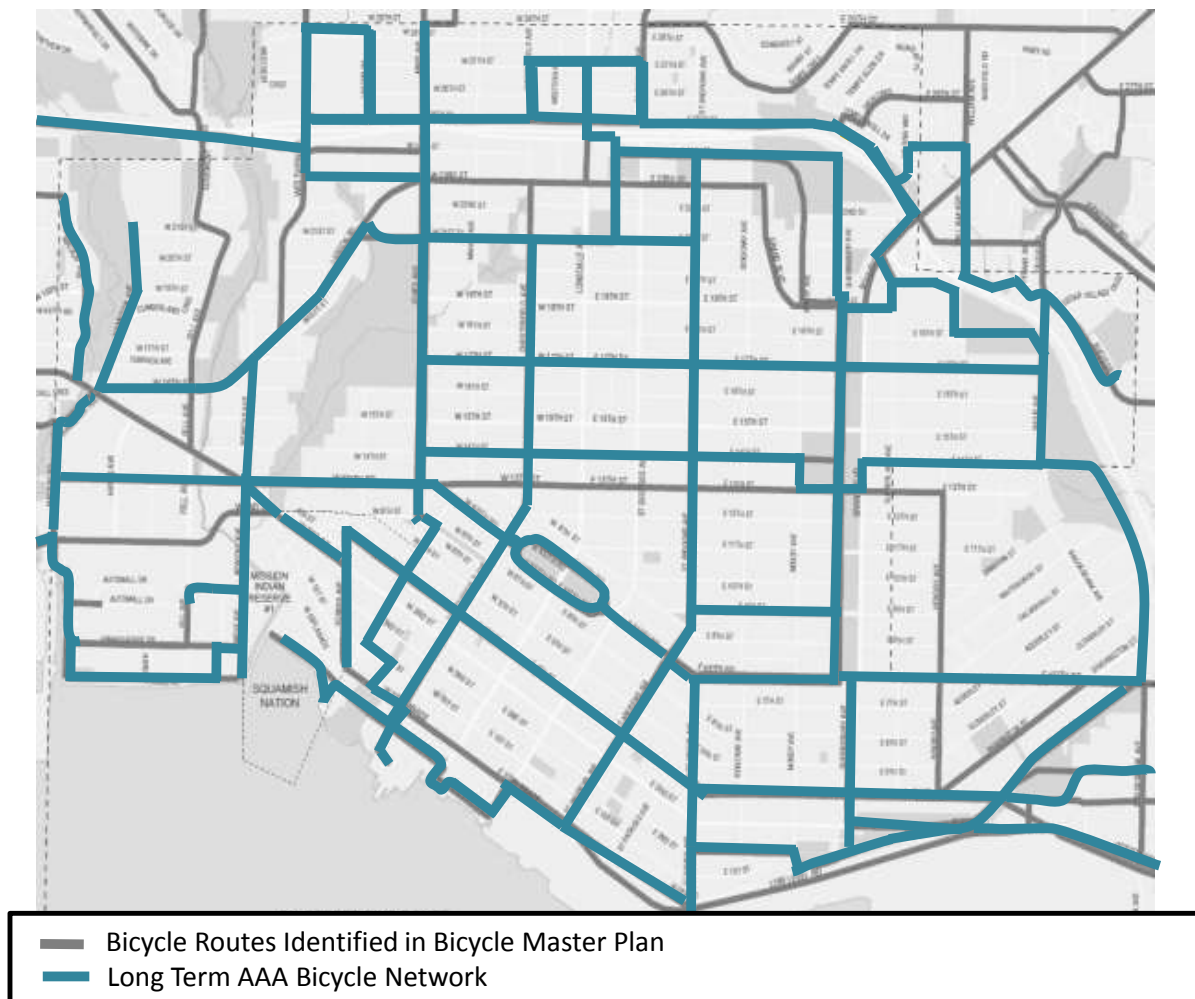


- Bicycle Routes Identified in Bicycle Master Plan
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- - - Potential New AAA Bicycle Routes to Close Gaps
- - - Additional Facility Improvements to Connect Destinations and Isolated Areas
- Locations that Require More Significant Upgrades

Comparison of Options

| | Option 1 | Option 2 | Option 3 |
|---|-----------------|-----------------|------------------|
| Kilometres of AAA Facilities Added to Current Capital Plan | 4 | 11 | 15 |
| % Key destinations served | 85% | 90% | 93% |
| Total Cost (in addition to what has been included in 10-Year Capital Plan) | \$3-\$6 million | \$4-\$8 million | \$9-\$18 million |
| Directness between key destinations (e.g. Central Lonsdale – SeaBus) | Low | Medium | High |
| Support for Draft OCP Land Use Plan | Low | Medium | High |
| Expected increase in use by cyclists | Medium | Medium | High |
| Maximum distance to access AAA bike facility | 470 m | 440 m | 440 m |
| Level of traffic impacts (e.g. parking removal, commercial driveways impacted, road width constraints, etc.) | Medium | Medium | Medium-High |

Option 4 – Recommended Long-Term AAA Bicycle Network Vision



Prioritization of Bike Projects



- Complete planned bicycle routes and greenways in current 10-year plan
- Fill in gaps along existing/planned facilities and ensure AAA standards are met



- Complete bicycle facility projects in recommended AAA bike network and 10-year plan, and provide additional funds to meet AAA standards

Prioritization of Bike Projects



- Complete key east/west connection - West Keith Road/14th Street
- Complete key north/south connection along Chesterfield in long-term, and on Jones/Mahon in the short-term
- Complete other routes in recommended AAA bike network, as opportunities arise to coordinate with other projects

Thank you!