**TO:** MAYOR & COUNCILLORS

**FROM:** GENERAL MANAGER ENGINEERING

**SUBJECT:** **NEW SIDEWALKS PROGRAM REFINEMENT – PRIORITY PROJECTS**

**PURPOSE:** To seek approval on the new sidewalks program refinement and the priority sidewalk projects.

## RECOMMENDATION

**THAT** the prioritization framework, as outlined in Section 3.1 of the report titled "New Sidewalks Program Refinement – Priority Projects" dated February 25, 2025, be approved; and

**THAT** staff be directed to proceed with the priority sidewalk projects, as outlined in Section 3.4 of this report.

## EXECUTIVE SUMMARY

At the Council meeting on November 4, 2024, Council provided comments and questions on the New Sidewalk Program. Staff have conducted a thorough review of the New Sidewalks Program and refined the technical prioritization framework approach. Following the framework refinement, staff have identified and confirmed through site visits the top 10 priority sidewalk projects for implementation.

## 1.0 POLICY SECTION

The New Sidewalks Program supports the City of Burnaby's Corporate Strategic Plan and goals for a safe, connected, healthy, and dynamic community. This initiative is aligned with Council-adopted goals, policies, and targets within Burnaby's Transportation Plan and the City's Climate Action Framework that support a sustainable, safe, and accessible transportation system.

## 2.0 BACKGROUND

On November 4, 2024, the report titled "New Sidewalks Program Overview" dated October 10, 2024, of the Transportation Committee meeting was submitted to Council for information. During this meeting, Council raised questions and comments on the prioritization framework metrics, including proximity to commercial areas, destination density, network connectivity, and walking mode-share for the general public, as well as consideration for elementary and secondary school students. Based on Council's feedback, staff have re-assessed the New Sidewalks Program (the Program), which

included a refinement to the prioritization framework metrics. Some of the changes include adjustments to how commercial density is defined, the separation of proximity to elementary schools and secondary schools as separate metrics, and the incorporation of the latest travel mode-share data from the Burnaby Household Travel Benchmark Survey completed in 2024. This report also summarizes the recommended priority sidewalk projects for implementation, as well as further details on how the final prioritization scores were calculated.

## 3.0 GENERAL INFORMATION

### 3.1 Prioritization Framework Refinement

Following a comprehensive review of the Program's prioritization framework, the evaluation metrics have been refined, and additional metrics are introduced to support a strategic and data-driven approach to improving the pedestrian network. The refined Program considers pedestrian walkability that further aligns with city priorities while also meeting the diverse needs of the community. The following is a general summary of the Program's evaluation metrics:

#### 3.1.1 Proximity to Elementary Schools

Referencing data from the BC Ministry of Education, this metric evaluates the distance between a block and the nearest elementary school property (including private schools). Higher scores are given to locations that are closer to elementary schools, which prioritize sidewalk needs that serve elementary school students supporting the safety of vulnerable pedestrians.

#### 3.1.2 Proximity to Secondary Schools

Referencing data from the BC Ministry of Education, this is a new metric that is similar to the elementary school proximity. It evaluates the distance between a block and the nearest secondary school property (including private schools). Higher scores are given to locations that are closer to secondary schools, which prioritize sidewalk needs that serve secondary school students supporting the safety of vulnerable pedestrians.

#### 3.1.3 Proximity to Senior Care Homes

Referencing data from Fraser Health, this metric evaluates the distance between a block and the nearest senior care home. Higher scores are given to locations that are closer to senior care homes, which prioritize sidewalks that could serve the needs of this user group. This is a new metric to highlight the walking needs of seniors and to support the safety of vulnerable pedestrians.

#### 3.1.4 Proximity to Daycares

Referencing data from Fraser Health, this metric evaluates the distance between a block and the nearest daycare. Higher scores are given to locations that are closer to daycares, which prioritize sidewalks that serve families with young

children. This is a new metric to support the safety of walking for families with young children around daycare facilities.

### 3.1.5 Proximity to Transit

Referencing data from TransLink, this metric evaluates the distance between a block and the nearest bus stop or SkyTrain station. Higher scores are given to locations that are closer to transit services, which prioritize sidewalks that support first- and last-mile connections for transit users. Locations that are nearby to SkyTrain stations and bus stops on the Frequent Transit Network (FTN) receive comparatively higher scores than locations close to local bus stops to reflect the higher ridership on these routes. This metric has been refined to accurately reflect the "first- and last-mile" walking connections to bus stops or SkyTrain stations.

### 3.1.6 Proximity to Parks and Civic Facilities

Referencing the City's GIS database, this metric evaluates the distance between a block and the nearest park or civic facilities that are publicly accessible. Higher scores are given to locations that services the above public facilities. This metric supports the safety of active transportation users accessing parks and/or civic facilities.

### 3.1.7 Commercial Density

Referencing the City's business licence data, this metric evaluates the number of registered businesses within 800m (approximately a 10-minute walk) of a block. Only businesses that contain a storefront for customers are considered. Higher scores are given to locations that have more businesses nearby. This metric has been refined to better reflect the concentration of businesses and the likelihood of these areas to experience higher volumes of pedestrians.

### 3.1.8 Population Density

Referencing the 2021 census data from Statistics Canada, this metric evaluates the population density of the surrounding area where a block is located. Higher scores are given to locations in areas of higher population density. If a block is located between two census dissemination areas, the higher population density value is used. This is a new metric to support areas that are expected to have a higher volume of pedestrians.

### 3.1.9 Walking and Transit Mode Share

Referencing the 2021 census data from Statistics Canada and incorporating the 2024 Burnaby Travel Benchmark Survey data, this metric evaluates the walking and transit mode share (the percentage of people who walk or use transit as their primary means of transportation) of the area where a block is located. Higher scores are given to locations in areas of higher walking and transit mode share. If a block is located between two census dissemination areas, the higher walking and transit mode share is used. This metric has been refined to better reflect areas that are expected to have a higher volume of pedestrians.

### 3.1.10 Road Classification

Referencing the City's GIS database, this metric evaluates the road classification of a block. Higher scores are given to blocks with higher road classifications such as primary arterials and collectors. The road classifications are based on the Long Range Burnaby Road Classification Network as outlined in the Burnaby Transportation Plan. This metric is included to support pedestrian safety along streets with relatively high vehicular volumes and speeds.

### 3.1.11 Connectivity

Referencing the City's GIS database, this metric evaluates the potential number of sidewalk connections, based on the number of connecting streets at the intersection, as well as the number of sidewalk connections that currently exist at the end(s) of the block being measured. Higher scores are given to blocks with more sidewalk connections available at its end(s). This metric has been refined to better reflect a wider range of sidewalk connectivity configurations and to support a complete sidewalk network.

### 3.1.12 Network Gap

Referencing the City's GIS database, this metric evaluates the presence of any existing sidewalks on the block being measured. Higher scores are given to blocks that currently do not have any sidewalks. This metric has been refined to better reflect the desired needs of sidewalks per block segment and to support a complete sidewalk network.

## 3.2 Prioritization Score Methodology Refinement

As part of the prioritization framework review, the methodology for calculating the final prioritization score has been refined. While each metric is scored on a scale of 0 to 10 based on their respective criteria breakdown, an additional weighting factor has been applied to the following metrics:

- Proximity to Elementary Schools
- Proximity to Secondary Schools
- Proximity to Senior Care Homes
- Proximity to Daycares

These metrics prioritize the safety of vulnerable pedestrians, and their scores are multiplied by a weighting factor (1.5 – 2.5) before they are assigned to their respective block segments. The weighted sum of all evaluation metrics represents the final prioritization score where higher scores indicate a greater priority for sidewalk installation. The final prioritization scores are categorized into 6 categories (lowest priority, low priority, medium low priority, medium high priority, high priority, and highest priority) and are visually summarized on a map, which can be found in *Attachment 1*.

### 3.3 Equity Considerations

Equity considerations have been integrated across the different evaluation metrics to ensure that it influences all aspects of decision-making. This approach reflects the City's commitment to advancing equity as a foundational principle rather than an isolated objective. The refined evaluation framework represents a more inclusive and balanced prioritization of sidewalk projects that benefits all residents.

### 3.4 Priority Sidewalk Project Selection

Referencing the final scores from the refined technical prioritization framework, the top 10 priority sidewalk projects for implementation through the City's capital program are recommended. The locations for the priority projects have been confirmed through site visits, which assessed the current conditions of the surrounding area, including available public right-of-way, adjacent land use, conflicts with utility, streetlights and street trees, presence of green infrastructure such as stormwater retention ditches and catch basins, on-street parking, and steep terrains. The identified top 10 priority sidewalk projects can be found in the table below with accompanying maps showing the project limit extents in *Attachment 2*:

| Top 10 Priority Sidewalk Projects | Total Linear Kilometres of New Sidewalk to Be Built * |
|---|---|
| 1) Irmin Street/Nelson Elementary and Lyndhurst Elementary | 2.1 kilometres |
| 2) Carleton-Madison-Triumph | 3.7 kilometres |
| 3) Clinton Elementary | 2.0 kilometres |
| 4) Burnaby North Secondary | 2.0 kilometres |
| 5) Edmonds and John Knox Christian Elementary | 2.1 kilometres |
| 6) Marlborough Elementary | 2.0 kilometres |
| 7) South Slope Elementary | 2.0 kilometres |
| 8) Kitchener Elementary | 2.0 kilometres |
| 9) Harwood Park | 2.1 kilometres |
| 10) Capitol Hill, Morley, and Armstrong Elementary | 2.0 kilometres |

*Note: Total linear meters account for new sidewalk along each side of the street.

## 4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

During the planning and conceptual design phase, residents living along the affected block, as well as those living in the surrounding neighbourhood (within 400 meters or approximately a 5-minute walking distance), will be actively engaged to solicit their feedback. As the project advances into the detailed design phase, residents will be re-engaged to provide further inputs. This multi-phased engagement approach ensures that residents are informed and there are various opportunities to provide feedback throughout the planning and design phases, fostering communication and collaboration with the implementation of new sidewalks.

## 5.0 FINANCIAL CONSIDERATIONS

The New Sidewalks Program is funded through the Engineering capital plan.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

## ATTACHMENTS

Attachment 1 – New Sidewalks Program – Final Prioritization Score

Attachment 2 – New Sidewalks Program – Top 10 Priority Sidewalk Projects

## REPORT CONTRIBUTORS

This report was prepared by Po Sun, M.Sc., AICP, Senior Transportation Planner, and reviewed by Kathy Ho, P.Eng., PTOE, Senior Manager, Transportation, and Amy Choh, P.Eng., PMP, Director Engineering, Transportation.