

Calgary



# Plus 15 Policy

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# Executive summary

Since the construction of the first Plus 15 bridge in 1969, the Plus 15 network has grown to 86 bridges and over 16 kilometres of elevated, weather-protected walkways in downtown Calgary. The development of the Plus 15 network has been guided by the 1984 +15 Policy. It is a unique part of Calgary's downtown landscape that connects people to work, amenities and recreation. It also supports the real estate sector and the downtown economy and enables mass movement of pedestrians.

Plus 15 bridges located over City road right-of-ways are built by the development industry in exchange for bonus density and are owned by The City following construction completion. Plus 15 bridges are connected by Plus 15 walkways (protected by public easement areas) within private properties. The Plus 15 network is managed by The City of Calgary and extends from 8th Street S.W. to 3rd Street S.E. and 2nd Avenue S.W. to 10th Avenue S.W.

The Plus 15 Policy identifies Council direction on the future development, operations and long-term asset management of the Plus 15 network.

The purpose of the Plus 15 Policy is to provide guidance on:

- Initiation of new Plus 15 links.
- Performance requirements for new Plus 15 links and renewal of existing Plus 15 links.
- Asset management to protect the Plus 15 network.
- Plus 15 network improvements.
- Programming opportunities.
- Plus 15 Fund collection and purpose.

In support of the Plus 15 Policy, studies, plans and strategies were developed using collected data and information from public engagements. Public engagement was undertaken from 2017 to 2019 to understand stakeholder needs, expectations and future vision for the network. From this collected information, the Plus 15 Network Study, Plus 15 Safety and Security Plan, Plus 15 Asset Management Plan, Plus 15 Funding Strategy and Plus 15 Network Design Guidelines were developed.

The Plus 15 Policy replaces the 1984 +15 Policy and supplements the Land Use Bylaw. This Council Policy applies to sites within the Plus 15 boundary in downtown Calgary. Where there is a conflict between the Plus 15 Policy and policy in a statutory plan or Land Use Bylaw, the statutory plan and bylaw shall supersede this policy. In the case where the Plus 15 Policy is in conflict with policies in a non-statutory plan, this policy shall supersede.



# 1. Overview

## 1.1 Context

The landscape of Calgary is changing as it adapts to the new economy and will continue to evolve with the adoption of Calgary's Greater Downtown Plan: Roadmap to Reinvention. Parts of downtown that were once predominantly commercial are seeing increased residential and mixed uses. Travel options into the downtown are also shifting with access to varied transportation options including cycle tracks, light rail transit, bus rapid transit, bike, car and electric scooter sharing. Communities bordering downtown have also increased pedestrian access into downtown and the Plus 15 network with improvements to the pedestrian realm.

To guide the Plus 15 Policy, vision and mission statements were established in March 2018 by stakeholders including community associations, property owners, special interest groups and City departments.

### 1.2 Vision

A vibrant, animated, seamless network of destinations and experiences that is embraced by the citizens of Calgary.

### 1.3 Mission

A convenient and environmentally controlled manner of connecting people to places and to each other.

## 1.4 Public engagement

Public engagement was undertaken from 2017 to 2019 to gather information on user expectations and operational requirements. Two online questionnaires, four pop-up sessions and a total of 18 stakeholder meetings were held.

Plus 15 challenges identified from public engagement included inconsistent operational hours, poor wayfinding, lack of connections to destinations, inconsistent accessibility, social disorder, lack of clarity on operational responsibilities and removing activity from the street.

Top user requirements included:

- More Plus 15 connections to destinations.
- Unified operating hours.
- Mobile wayfinding tools to navigate the Plus 15 network.
- Longer opening hours.
- Improved wayfinding infrastructure.

Top operational opportunities included:

- Revised hours of operation to mitigate property damage and vagrancy.
- Communication.
- Clarity on maintenance responsibilities.
- Clarity on security and enforcement responsibilities.

## 1.5 Policy purpose

The Plus 15 Policy identifies Council direction on the future development, operations and long-term asset management of the Plus 15 network. The purpose of the Plus 15 Policy is to provide guidance on:

- Initiation of new Plus 15 links.
- Plus 15 bridge design.
- Performance requirements for new Plus 15 links and renewal of existing Plus 15 links.
- Asset management to protect the Plus 15 network.
- Plus 15 network improvements.
- Programming opportunities.
- Plus 15 Fund collection and purpose.

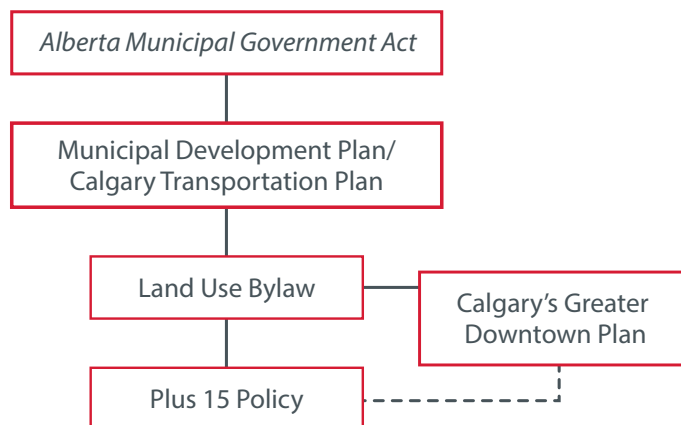
## 1.6 Hierarchy of policies and plans

The Plus 15 Policy replaces the 1984 +15 Policy and supplements the Land Use Bylaw. This Council Policy applies to sites within the Plus 15 boundary in downtown Calgary. Where there is a conflict between the Plus 15 Policy and policy in a statutory plan or Land Use Bylaw, the statutory plan and bylaw shall supersede this policy. In the case where the Plus 15 Policy is in conflict with policies in a non-statutory plan, this policy shall supersede.

Supplemental documents were developed in conjunction with the Plus 15 Policy using collected data and information from public engagements. They are:

- **Plus 15 Network Study** – A study that reviews the Plus 15 Boundary, hours of operation, wayfinding, accessibility, programming and missing Plus 15 links.
- **Plus 15 Safety and Security Plan** – A framework that outlines priority actions and requirements to ensure a coordinated approach to security throughout the Plus 15 network.
- **Plus 15 Asset Management Plan** – A plan for long term preservation and management of the Plus 15 network.
- **Plus 15 Funding Strategy** – A strategy of short and long term sustainable funding opportunities.
- **Plus 15 Design Guidelines** – A guideline that provides design and performance requirements for new construction and the renewal of Plus 15 network components.

Figure 1: Hierarchy of policies and plans



## 2. Plus 15 network

The Plus 15 network is located within downtown Calgary and includes a total of 86 City-owned bridges and over 16 kilometres of elevated walkway. The majority of the network is weather-protected with 81 climate-controlled bridges and five open-air structures. It supplements the sidewalk network by providing an alternate weather-protected pedestrian network.

Plus 15 bridges are connected by publicly accessible walkways (protected by public easement areas) within the second floor of private properties. The second floor is called the Plus 15 level and the name, Plus 15, was derived from the bridges being approximately 15 feet above the roadway.

### 2.1 Plus 15 network components

The Plus 15 network is comprised of several components and shown schematically in Figure 2.

#### 2.1.1 Plus 15 network

The Plus 15 network is an elevated, weather-protected, public pedestrian walkway network located in Calgary's downtown. The Plus 15 network is comprised of Plus 15 bridges, Plus 15 connectors, Plus 15 open-air structures, Plus 15 walkways, Plus 15 level access and public easement areas.

#### 2.1.2 Plus 15 links

Plus 15 links include Plus 15 bridges, Plus 15 bridge connectors, Plus 15 walkways and Plus 15 level access.

#### 2.1.3 Plus 15 bridges

Plus 15 bridges are weather-protected and environmentally-controlled structures located approximately 15 feet above a roadway, light rail transit track or public lane. The City of Calgary owns Plus 15 bridges over the road right-of-way, light rail transit right-of-way and public lanes.

#### 2.1.4 Plus 15 bridge connectors

Plus 15 bridge connectors are a portion of the Plus 15 bridge that are located within private property (from the edge of the property line to the property façade). This portion of the bridge is owned by the property owner.

#### 2.1.5 Plus 15 walkways

Plus 15 walkways are protected public easement areas located at the Plus 15 level within private and public properties enabling public passage through the Plus 15 network.

#### 2.1.6 Plus 15 level access

Plus 15 level access include public easement areas, publicly accessible stairs, ramps, escalators and elevators within a property which enable access from street level to the Plus 15 level and Plus 15 network. Plus 15 level is typically the second floor of the property where the Plus 15 bridges and walkways are located.

### **2.1.7 Plus 15 open-air structures**

Plus 15 open-air structures are bridges or elevated walkways not weather-protected and/or environmentally-controlled. These structures were constructed prior to the adoption of the 1984 +15 Policy but are part of the current Plus 15 network.

### **2.1.8 Plus 15 bridge structural supports**

Plus 15 bridge structural supports are engineered substructure elements that support existing or future Plus 15 bridges and Plus 15 bridge connectors.

### **2.1.9 Public easement areas**

Public easement areas grant public access to interior and exterior public areas within properties. They are located on the street level and the Plus 15 level. All new developments within the Plus 15 boundary must provide for public access through easements regardless of property use.

### **2.1.10 Plus 15 security infrastructure**

Plus 15 security infrastructure includes physical and electronic devices on Plus 15 links for access control, detection and reporting.

### **2.1.11 Plus 15 bridge maintenance**

Plus 15 bridge maintenance is carried out on a routine basis during the life of the Plus 15 link to ensure it is safe and comfortable for public use. It includes, but is not limited to, cleaning, washing, servicing of electrical and mechanical systems, vandalism removal, the remedy of any maintenance defects and Plus 15 bridge renewal.

### **2.1.12 Plus 15 bridge renewal**

Plus 15 bridge renewal, which falls under Plus 15 bridge maintenance, includes, but is not limited to, repair, rehabilitation and replacement of any or all components to ensure the infrastructure meets or exceeds its intended design life.

### **2.1.13 Plus 15 wayfinding**

Plus 15 wayfinding includes physical and digital infrastructure that facilitates pedestrian navigation through the Plus 15 network including, but not limited to, signage, maps, and digital applications.

### **2.1.14 Placemaking**

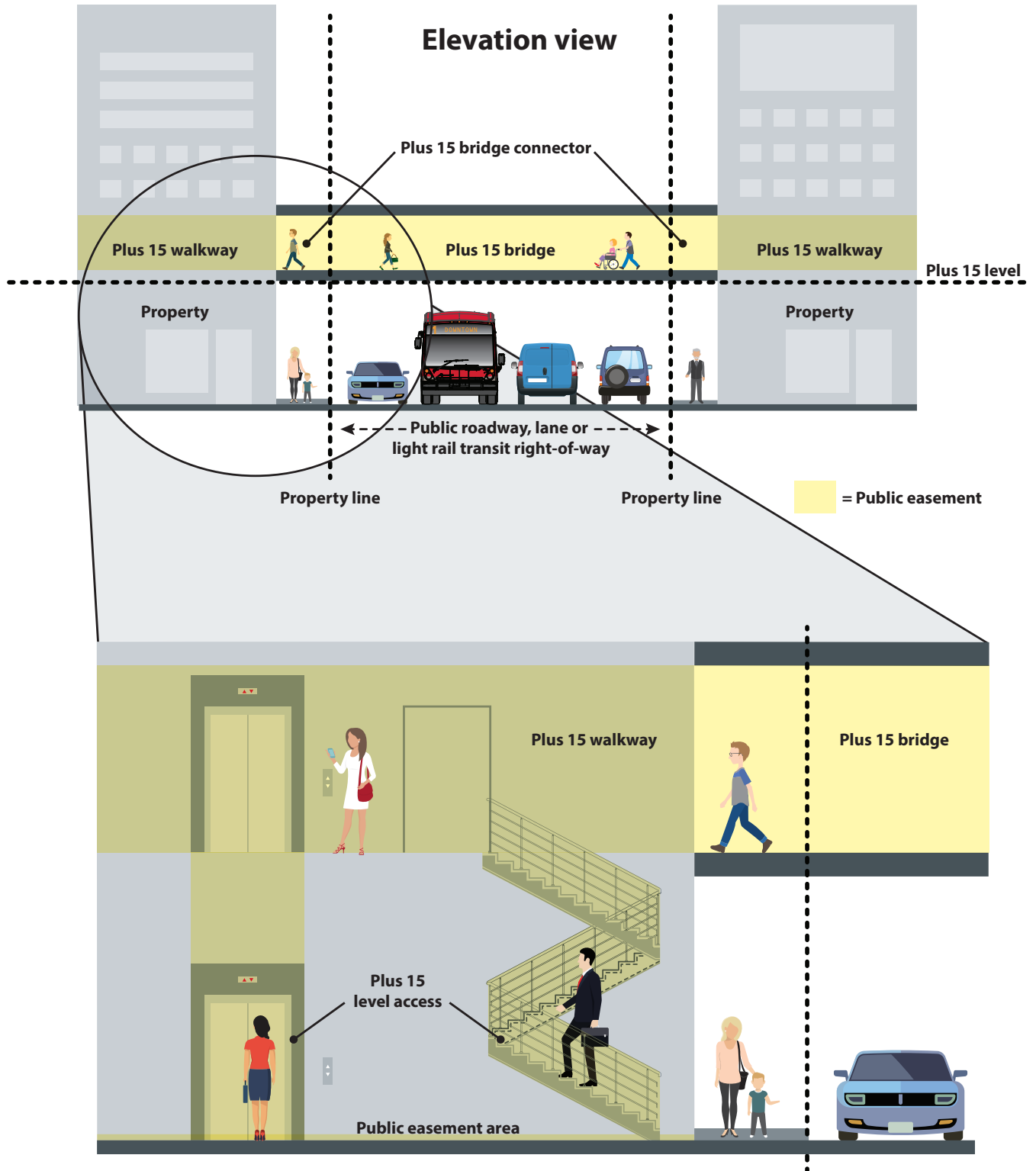
Placemaking is a transformative approach to using public space by creating vibrant spaces to enhance the user experience.

### **2.1.15 Property owners**

Property owners and their designated property managers own and operate buildings in downtown Calgary.



Figure 2: Typical network component layout



## 3. Plus 15 network development

### 3.1. Plus 15 network objective

The objective of the Plus 15 network is to provide convenient, safe and universally accessible pedestrian connections to:

- Transportation options such as light rail transit, bus rapid transit, bus stops, cycle tracks and parking.
- Residential and commercial buildings.
- Businesses and amenities within downtown such as retail, restaurants, hotels, professional services and meeting spaces.
- Entertainment, cultural landmarks, parks and public spaces.

### 3.2 Plus 15 boundary

The Plus 15 boundary shown in Figure 3 defines the area in downtown where the Plus 15 network may be developed and where the Plus 15 Policy applies.

#### 3.2.1 Developments within the Plus 15 boundary

##### 3.2.1.1 Plus 15 Fund contribution

Subject to the Land Use Bylaw, new developments above the base density in a land use district within the Plus 15 boundary must provide financial contributions to the Plus 15 Fund in order to receive a bonus density incentive.

##### 3.2.1.2 Plus 15 bridges

New developments within the Plus 15 boundary are eligible to receive a bonus density incentive for providing Plus 15 bridges associated with the new development.

##### 3.2.1.3 Plus 15 level access and walkways

New developments within the Plus 15 boundary shall make provisions to connect into the Plus 15 network regardless of use (residential or commercial) and shall provide public easement areas for Plus 15 level access and Plus 15 walkways.

##### 3.2.1.4 Plus 15 network future components

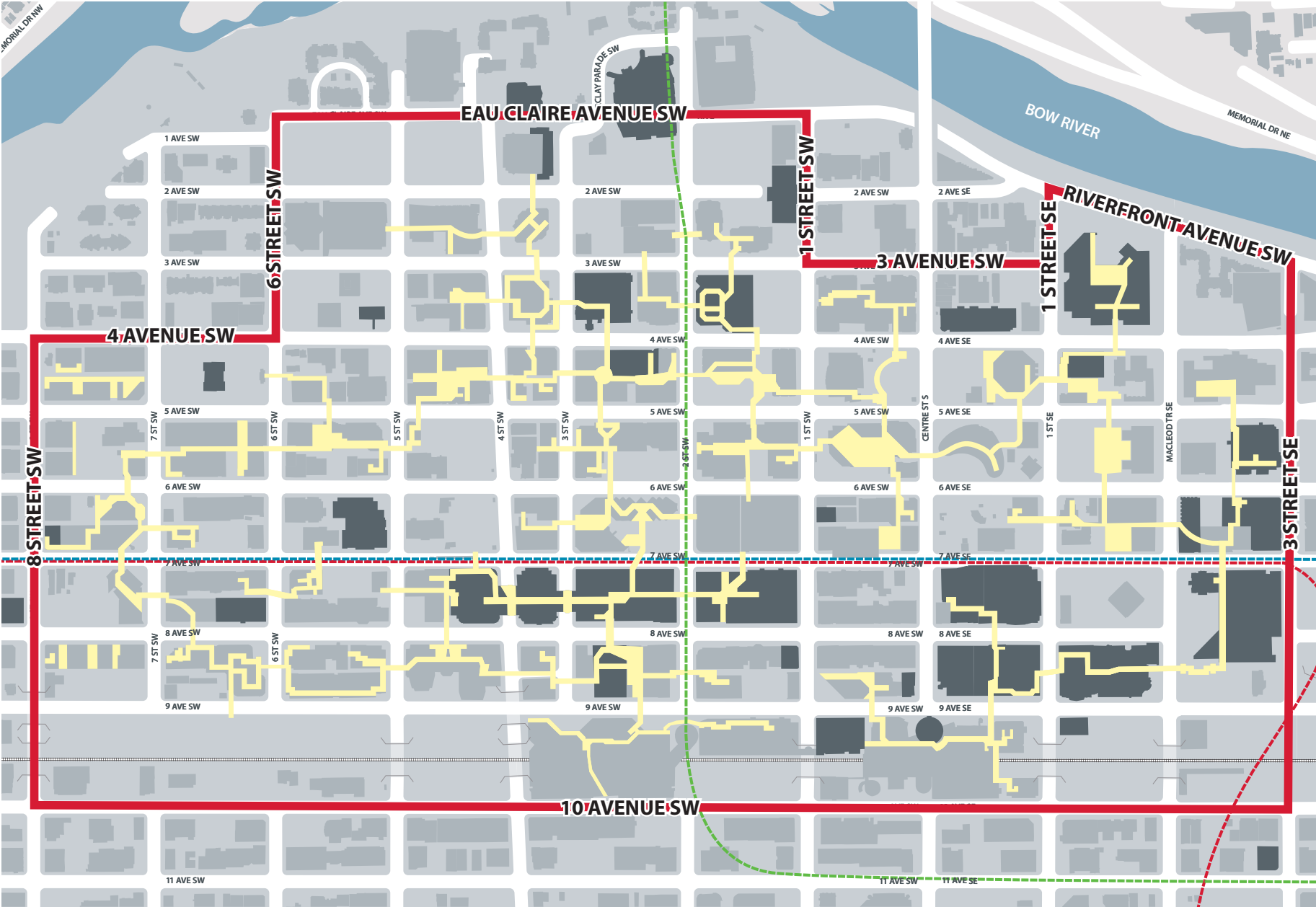
Additional Plus 15 network components may be required, depending on the context of the site. These may include, but not limited to, the construction or future construction of:

- Plus 15 bridge supports
- Plus 15 bridges connectors
- Plus 15 bridges
- Plus 15 level access

#### 3.2.2 Plus 15 links outside the Plus 15 boundary

New developments outside of the Plus 15 boundary proposing a Plus 15 link will not be accepted by The City. Exceptions may be considered where value to the overall Plus 15 network can be demonstrated such as public benefit and alignment with Calgary's Greater Downtown Plan. However these new developments will not be eligible for bonus incentives outlined in the Land Use Bylaw.

Figure 3: Plus 15 boundary



Legend

- Plus 15 boundary
- Red line LRT
- Blue line LRT
- Green line alignment
- Plus 15 network

### **3.3 Plus 15 link initiation criteria**

All new Plus 15 bridges and walkways proposed within the Plus 15 boundary will be assessed against the following criteria:

- Connections to transportation modes – This includes, but is not limited to, connection to present and future light rail transit, bus rapid transit, bus stops, cycle tracks and parking.
- User demand – Measured or projected pedestrian volumes from existing properties and future developments.
- Travel time and distance reduction – Effectiveness at reducing distance and time travelled within the Plus 15 network.
- Feasibility and constructability – This includes, but is not limited to, length of Plus 15 links, number of property impacts, type of properties affected and land availability.
- Aesthetics – This includes impacts to landmarks, the visual identities or character of adjacent properties.
- Minimized street level impacts – This includes impacts to at-grade businesses, pedestrian corridors and overall street vibrancy.
- Alignment with Council policies and plans – This includes policies and plans within downtown and bordering communities.

#### **3.3.1 Developer initiated Plus 15 links**

Developers who elect to provide a new Plus 15 bridge are required to connect to the Plus 15 network. In accordance with the Land Use Bylaw, new Plus 15 bridges delivered as part of new development are eligible to receive additional density for a proposed property.

All new Plus 15 bridges must meet the requirements outlined in this Policy, the Plus 15 network Design Guidelines and the Land Use Bylaw.

In cases where new Plus 15 bridges are provided between existing properties, bonus density provisions in the Land Use Bylaw are not applicable.

#### **3.3.2 City initiated Plus 15 links**

The City may elect to build or contribute funding to a new Plus 15 link identified as a missing Plus 15 link in the Plus 15 Network Study.



## **3.4 Plus 15 development agreements**

A Plus 15 Development Agreement with The City, entered into during the Development Permit process, is required where a new Plus 15 link is constructed.

Plus 15 Development Agreements outline requirements, roles and responsibilities for:

- Maintenance
- Plus 15 bridge replacements
- Remedies for maintenance defaults
- Remedies for third party damage
- Security monitoring and enforcement
- Security infrastructure
- Communications
- Wayfinding
- Programming

## **3.5. Plus 15 network design**

### **3.5.1 Plus 15 bridge design principles**

Plus 15 bridges are an integral part of Calgary's public realm and contribute to both the connectivity and legibility of downtown Calgary. Plus 15 bridges shall be designed to add value to the public realm and to downtown through:

- High quality design of all bridges, finishes and associated elements.
- Design and finishes that ensure bridges are integrated and complement the architecture of adjacent buildings through form, transparency, lighting and material selection.
- Design approach where signature designs may be warranted at key landmark or gateway locations (as per Calgary's Greater Downtown Plan). Other locations may require a more subtle design approach. The design approach will be determined at time of application.
- Interior design, finishes and lighting which contribute to the pedestrian experience while facilitating universal accessibility, wayfinding, programming, comfort and safety with integrated security infrastructure.
- Connectivity, both physically and visually, between the network and the at-grade public realm.
- Enhanced sidewalk conditions below Plus 15 bridges including employing lighting to ensure safety and improved vibrancy through creative bridge soffit designs and finishes.
- The display or integration of public art within, on or below bridges and within walkways.

### **3.5.2 Plus 15 design guidelines**

Plus 15 Design Guidelines provide design criteria and performance requirements for the design of new Plus 15 links and the renewal of existing Plus 15 links and related network components. The design of new Plus 15 bridges are evaluated by The City as part of the development permit process.

### **3.5.2 Plus 15 regulatory bulletins**

Regulatory bulletins are issued with every code cycle and address code requirements specific to the Plus 15 network.

## 4. Plus 15 network operations

### 4.1 Condition assessment program

Routine condition assessments are required to monitor the condition of Plus 15 network components and identify renewal requirements.

Detailed condition assessments shall be conducted on a five-year basis by The City of Calgary. Visual inspections shall be conducted on a biennial basis by The City of Calgary and/or the property owner. Visual inspections conducted by the property owner shall be provided to The City for information.

Detailed condition assessments and visual inspections will be provided to the property owners to action.

### 4.2 Maintenance

Plus 15 network components shall be maintained by the property owner on a routine basis during the life of the Plus 15 link to ensure it is safe and comfortable for public use. Maintenance includes the renewal of Plus 15 network components.

Any defect identified in the condition assessments shall be remedied by the property owner to the satisfaction of The City of Calgary.

Detailed maintenance requirements and responsibilities are outlined in the Plus 15 Development Agreement.

### 4.3 Safety and security

To ensure the Plus 15 network is safe and secure for the public, a coordinated approach is required. The Plus 15 Safety and Security Plan is a framework that aims to increase information sharing among property security professionals that are part of the Plus 15 network, standardize security infrastructure and enforcement and increase awareness of resources available for engaging with vulnerable populations. This plan applies to the Plus 15 network operations for existing and new Plus 15 links.

### 4.4 Security

Security is required to ensure safety and protection of the public. It includes patrols, enforcement and monitoring and shall be provided by the property owner for Plus 15 links to the satisfaction of The City of Calgary.

Property owner and manager rights to security enforcement are outlined in the Plus 15 Development Agreement.

### 4.5 Standard hours

Standard Plus 15 operating hours are:

- Monday to Friday: Open from 6 a.m. to 9 p.m.
- Saturday, Sunday and statutory holidays: Open from 9 a.m. to 7 p.m.

## **4.6 Changes to standard hours**

### **4.6.1 Permanent changes to hours**

Plus 15 links may open earlier or close later than the standard hours permanently.

### **4.6.2 Temporary changes to hours**

Plus 15 links may:

- Open earlier or close later than the standard hours.
- Open later or close earlier than the standard hours.
- Be closed.

The City of Calgary will evaluate temporary changes to hours based on:

- Start and end time of the closure.
- Closure duration.
- Location within the Plus 15 network.
- Impact to pedestrian movement.
- Suitability under the building code.

### **4.6.3 Approval process**

All requests for permanent or temporary changes to hours shall be approved at the discretion of The City of Calgary.

Temporary or permanent signage is required to notify the public of any changes to the standard hours. All signage will be provided by the property owner.

A pedestrian detour plan shall be required for approved Plus 15 link closures.

## **4.7 Acceptable Plus 15 network uses**

The Plus 15 network supports pedestrian movement throughout downtown for citizens of all ages and abilities. Acceptable uses within the Plus 15 network include walking, the use of devices or service animals to support people with disabilities, baby carriages or a wheeled device for carrying a child.

## **4.8 Programming**

The Plus 15 network may be programmed with placemaking activities that are accessible to the public. Programming requests will be evaluated on a case-by-case basis and shall be approved at the discretion of The City of Calgary. Evaluation criteria may include, but not be limited to, start and end time of the event, event duration, location within the Plus 15 network, impact to pedestrian movement, pedestrian detour route and suitability under the building code.

## **4.9 Busking**

Busking involves a person or group who provides entertainment performances for the public in exchange for money. Busking is not permitted within the Plus 15 network except where approved by The City of Calgary.

## 5. Plus 15 network improvements

The Plus 15 network has developed over the past 50 years which has resulted in a network built to varying design standards. To ensure the Plus 15 network is user-friendly and inclusive of people of all ages and abilities, improvements related to accessibility, wayfinding and security have been identified in the Plus 15 Network Study.

## 6. Plus 15 fund

### 6.1 Overview

The Plus 15 Fund contains financial contributions required by all new developments within the Plus 15 boundary that receive a floor area ratio greater than the base density, in accordance with the Land Use Bylaw. The financial contribution is collected under the authority of the Land Use Bylaw rules through a Development Permit.

Subject to the Land Use Bylaw all new developments in the Plus 15 boundary above the base density must provide a financial contribution to the Plus 15 Fund in accordance with this Policy and the Land Use Bylaw.

### 6.2 Purpose

The purpose of the Plus 15 Fund ensures continual improvement and protection of the Plus 15 network. Uses may include, but are not limited to:

- Design and construction of missing Plus 15 links.
- Design and construction of accessibility improvements.
- Design and construction of wayfinding improvements.
- Design and construction of security infrastructure improvements.
- Design and construction of safety improvements to protect the public and property.
- Design and construction of Plus 15 network renewals.
- Design and construction of emergency repairs.
- Detailed and visual condition assessments.

### 6.3 Criteria for use

The City of Calgary shall recommend funding for projects from the Plus 15 Fund in accordance with the purposes listed in Section 6.2. Council approval of Plus 15 Fund expenditure will follow The City of Calgary's budgeting process.



## 6.4 Contribution calculation

The Plus 15 Fund financial contribution is intended to equitably distribute the Plus 15 network costs of protecting, supporting and improving the Plus 15 network between property owners downtown.

The calculation assigns the level of the financial contribution for new development based on the proportion of the block taken up by the site. This calculation is referenced in CR20 Part 13, Division 3 of the Land Use Bylaw.

$$X = C \times \left( \frac{SA}{BA} \right)$$

Where: X = Amount of Plus 15 Fund contribution required

C = Total project cost to design and construct a typical Plus 15 bridge and bridge connector

SA = Site area of the development

BA = Block area where the development is located (property line to property line excluding any City owned lanes running through the block)

## 6.5 Estimate of Plus 15 bridge and bridge connector project cost

Total project cost to design and construct a typical Plus 15 bridge and bridge connector (reference Section 6.4) will be updated by The City of Calgary and reported every two years to the City's Executive Leadership Team.

## 6.6 Fund holding

Financial contributions to the Plus 15 Fund are held in an interest-bearing account and interest received is treated as part of the Plus 15 Fund.

## 6.7 Additional revenue sources

### 6.7.1 Commercial use of public easement area

Commercial use of public easement areas within buildings in the Plus 15 network may be considered by The City of Calgary. Requests are reviewed and consider type of use, encroachment into the public easement area and the ability to maintain a minimum clear walking width of 4.5 metres. Approval is required by The City of Calgary and once approval is granted, a legal agreement is required and an annual fee is charged for use of the public easement area as outlined in the Plus 15 Funding Strategy.

### 6.7.2 Using Plus 15 bridges for private events

The use of Plus 15 bridges for private events may be considered by The City of Calgary. Private event requests shall be approved by The City of Calgary and will be evaluated based on start and end times of the event, event duration, location within the Plus 15 network, impact to pedestrian movement through the Plus 15 network, pedestrian detour route and suitability under the building code.

Valid insurance will be required and fees will be charged for the space used. Fee calculation and collection are outlined in the Plus 15 Funding Strategy.

### 6.7.3 Commercial uses within the span of a Plus 15 bridge

Commercial uses are not permitted within Plus 15 bridges.





# Appendix A: Value of the Plus 15 network

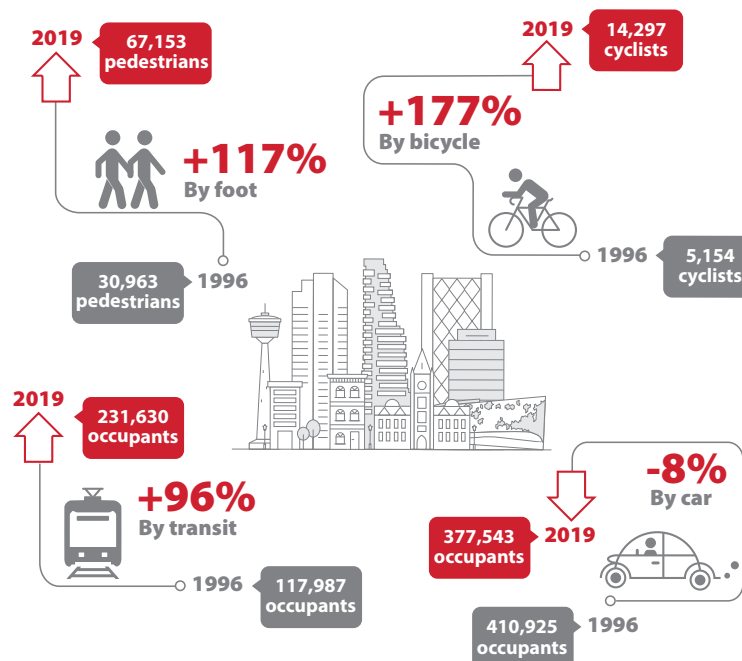
## Downtown economy

The Plus 15 network has a direct impact on the downtown economy. Businesses rely on the pedestrian traffic for business generation which in turn attracts businesses to lease commercial space. Plus 15 connectivity has become a priority for tenants looking to lease vacant space and building owners have indicated that being connected to the Plus 15 network can directly affect their ability to lease their buildings. To remain competitive in the current real estate market, building owners continue to connect into the Plus 15 network to meet tenant requirements. Building owners see connection to the Plus 15 network as an enhancement to the long-term value of their property. Small business opportunities also exist within the Plus 15 network like shoe shine stations commonly observed in the network.

## Movement and mobility

There has been significant increase in daily walking trips into and exiting downtown from approximately 31,000 in 1996 to over 67,000 by 2019 (+117%). Similarly, cycling trips (+177%) and trips by transit (+96%) have also seen substantial increases over the last 23 years in the downtown Central Business District alone (Figure 4). These trends reflect a noteworthy transition away from auto use and towards more sustainable transportation options.

Figure 4: Mobility in downtown Calgary – Changes from 1996 to 2019



The City of Calgary's Central Business District (CBD) cordon counts between 1996 and 2019

## Pedestrian volumes

To understand how the mobility shift is supported by the Plus 15 network, pedestrian counts were conducted in February 2018 to assess pedestrian volumes. Most of the counts were nine hour counts carried out across the network over several weekdays. Additional 24-hour counts were conducted in select locations in April 2018.

When compared to the pedestrian counts from 2011, increases in pedestrian usage were observed throughout the network. In 2018, the highest pedestrian volumes, over 20,000 people per day, were at the downtown retail corridor. This corridor consists of the west to east links just north of 8th Avenue from 2nd Street S.W. to 4th Street S.W. Within this corridor, the Plus 15 bridge crossing 2nd Street S.W. between 7th Avenue S.W. and 8th Avenue had the highest pedestrian volume of 32,689 people per day. This is a 142 per cent increase from 13,489 people per day counted the 2011. A heat map showing the differences in peak daily pedestrian volumes is provided in Figure 6.

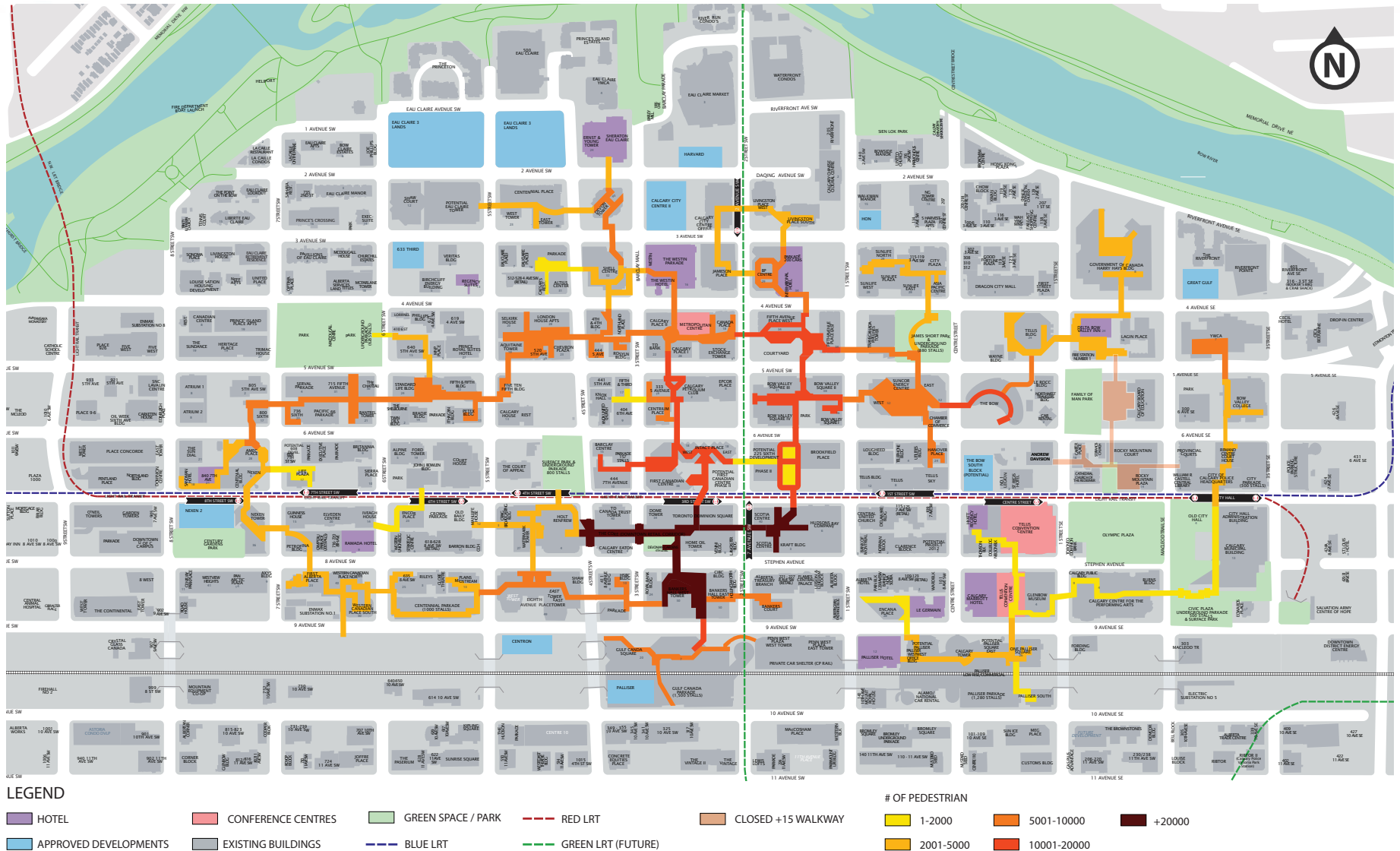
Pedestrian volumes were highest on weekdays during the lunch period (11:45 a.m. – 1:15 p.m.). Pedestrian volumes also rose during the morning (7 – 9:30 a.m.) and afternoon (3 – 6 p.m.) commutes but were much lower than volumes observed during lunchtime. See Figure 5.

**Figure 5: Peak pedestrian volumes on the Plus 15 network (February 2018)**





Figure 6: Plus 15 pedestrian heat map (February 2018)



## Why do people use the Plus 15?

To gain insight into the usage of the Plus 15, an online questionnaire was conducted in March 2018 where over 2,300 citizens responded.

From the online questionnaire, the responses received were:

- During poor weather over 51 per cent of respondents indicate they use the network more than ten times per week.
- The Plus 15 network is utilized more heavily during the day with 43 per cent of respondents indicating that they never use the network on evenings or weekends.
- Three per cent of respondents indicated a preference to use the sidewalk rather than the Plus 15 network.

From the online questionnaire, the top five reasons the Plus 15 is used is because it:

- Is weather-protected
- Provides access to work
- Makes it easier to cross streets
- Provides access to shopping and restaurants
- Provides faster and more direct travel routes.

The Plus 15 network enables walking, even during severe weather, and allows for mass movement of people through the downtown. During the high demand times, the Plus 15 network provides access to food, retail and other amenities. During the morning and afternoon peak periods, the Plus 15 network connects people to many transportation options like light rail transit, bus rapid transit, buses, parkades and cycling routes.

As observed in other major cities, secondary pedestrian networks like the Plus 15 network move large volumes of people during the morning, lunchtime and afternoon peak periods within downtown.

## Public safety and accessibility

The Plus 15 network provides a safe travel choice for pedestrians by eliminating conflicts between pedestrians, vehicles/cyclists. In the winter months where outdoor sidewalks may be covered with slush, ice and snow, it enables safe, reliable, all weather travel for users of all ages and abilities.

## Access to cultural district and tourism

The Plus 15 also supports the cultural district with connections from Arts Commons and the Glenbow Museum to underground parking in adjacent buildings. It provides safe, convenient, weather-protected access to the cultural district and helps to draw citizens and tourists downtown to experience arts, culture and our city.

Additionally, school-aged children are often observed in the Plus 15 for an educational excursion. The network has proven capacity to move school groups safely and efficiently.

## Social connections

The Plus 15 network is a place where social connections occur. When the Plus 15 was being conceived, one underlying benefit was that it would make downtown more humane. The Plus 15 has become a networking hub where people often “run” into each other. It is a space that allows people to connect and interact with one another.

## Arts and vistas

Due to its unique views, the Plus 15 has become a popular destination for different artistic endeavors like photography and sketching. Photographers are drawn to the Plus 15 due to its elevated view throughout the downtown in a weather-protected environment. Sketching clubs have also met in the Plus 15 network in order to capture the unique views.

**Figure 9: Sketches at the Plus 15 level created by Rod Zillman (left) and Belinda Ramscar (right) of Calgary Urban Sketchers**



## Health and wellness

In a winter city like Calgary, maintaining an active lifestyle during the cold winter months can be challenging. With over 16 kilometers of weather-protected and climate-controlled walkways, the Plus 15 network draws in walkers for exercise and recreation. Walking clubs can be found within the Plus 15 year-round due to its safety and predictability. Daycare operators also utilize the Plus 15 network to give young children exercise and a change of scenery.

During public engagement, seniors identified that connectivity to the Plus 15 network was an influencing factor when choosing a place to reside. The Plus 15 network allows people to travel independently throughout downtown, something that may not be possible at the street level.

# Appendix B: Background

## History

The origins of Calgary's Plus 15 network dates to 1963 but the concept was not realized until Urban Renewal Scheme No. 1 in 1965. In 1966, the Plus 15 concept was first introduced in a Planning Department document called "The Future of Downtown Calgary". Public areas on the Plus 15 level were then incorporated into the 1970 Development Control Bylaw (Bylaw 8600).

Harold Hanen, a former City of Calgary Planner, recognized the opportunities of the Plus 15 network for Calgary and championed the system. The first Plus 15 bridge was constructed in 1969 and connects the Westin Hotel to Calgary Place over 4th Avenue S.W. between 2nd and 3rd Street S.W.

## Plus 15 Must Policy

In 1975, an interim policy was developed for the Plus 15 network where Plus 15 Bonus options were replaced with a Plus 15 Must Area. In the Plus 15 Must Area, minimum requirements of the Plus 15 network were to be implemented regardless of bonus utilization and it was directed that The City obtain public easement areas through developments for the Plus 15 network. The intent of the Plus 15 network was to provide grade-separated pedestrian linkages, primarily in the north/south direction to overcome the heavy vehicular volumes in the east/west roadways. It was also thought that the Plus 15 could eventually provide linkages to inner city communities like the Beltline, Victoria Park and Prince's Island.

Operational challenges were also highlighted in the 1975 "Report on The Calgary +15 System". Challenges identified included: easement acquisition, land use requirements, policing, design guidelines, signage and maintenance requirements.

## 1984 +15 Policy

The 1984 +15 Policy was developed to describe the form of Plus 15 development planned for downtown Calgary with a primary focus on the growth and development of the Plus 15 network. Additionally, it supplemented the Land Use Bylaw and provided a basis for development agreements with The City and property owners in the areas of operations and maintenance.

## Calgary's Greater Downtown Plan

Calgary's Greater Downtown Plan: Roadmap to Reinvention sets out the vision, roadmap and commitment to build a thriving, future-focused downtown over the next decade and beyond. Strategic moves include:

- Neighbourhoods for vibrant urban life
- A green network for a healthy environment
- Streets for people
- Transit for all
- Future-proof and innovate for the next generation



Actions for the Plus 15 network include:

- Pilot placemaking opportunities and ways to animate the Plus 15 network, making it a destination.
- Pursue opportunities to proactively construct missing Plus 15 network links, as identified in the Plus 15 Network Study, 2019.
- Modernize wayfinding so street-level access points are easy to identify and navigation within the Plus 15 network is improved.
- Integrate the Plus 15 network with LRT stations and enhance street-level entrances that connect to transit hubs.
- Enhance accessibility within the Plus 15 network so it can be used by citizens of all ages and abilities.

