

Calgary



# Centre City Plan Refresh

## Transportation Brief

## About this Brief

This brief summarizes inputs collected and reviewed related to transportation in the centre city as part of the Centre City Plan Refresh project. This brief presents some preliminary ideas and proposals for Plan content based on the process to date. A detailed internal review of the ideas and proposals included within this brief is ongoing prior to the release of a formal draft Plan.

Through the project work to update the *Centre City Plan* there have been multiple inputs to consider. These inputs include:

- a review of the existing 2007 *Centre City Plan* to identify which information should remain in the Plan and be updated and which information should be removed;
- a review of related City of Calgary policy, guideline and strategy documents;
- input collected from various departments throughout The City;
- results of the Strategic Foresight process;
- stakeholder and public engagement that was compiled into a *What We Heard Report*;
- results from the Downtown Economic Summit that was held on 2017 March 2; and
- a review of best practice research.

All this information was used to compile several briefs relating to a variety of topics. Each brief starts with an overview of the topic, which includes a description and statistics. Then, through analysis of the inputs, key elements for transportation in the centre city were compiled. These elements include outcomes, goals, and challenges. All these elements informed topics for discussion in a workshop held May 29, 2019. Additional questions will be resolved prior to the new draft of the *Centre City Plan*. The workshop provided an opportunity for stakeholders to The City's goals for transportation in the centre city and prioritize initiatives to achieve those goals.

After the workshop, a *What We Heard Report* was prepared and this brief was updated with a summary of findings. This brief has also been reviewed and updated with more recent information. This brief will inform transportation content for the updated *Centre City Plan*.

## Project overview

In 2007, based on extensive citizen input, City Council adopted the [Centre City Plan](#), a vision document that describes what the Centre City could look like in 30 years. The Centre City Plan is a coordinated strategy document that pulls together the vision for the Centre City along with strategies and actions relating to land use planning, economic, cultural, and social development, and governance. With the approval of the adoption of the Centre City Plan (CPC2007-049), it included a recommendation for regular monitoring and reporting. In January 2017 the Centre City Plan was identified as one of 28 Council policies to be amended. It's time to review and refresh the original Centre City Plan.

Calgary's Centre City is the area south of the Bow River (including Prince's Island Park) from 17th Avenue Southwest and 14th Street Southwest, to the Elbow River. It also includes Downtown, Eau Claire, West End, West Connaught, Connaught Centre, Victoria Crossing Centre, East Victoria Crossing, East Village, Chinatown and Stampede Park area. (A map is contained in the Centre City Plan, 2007.)

The purpose of this refresh project is to affirm the current plan's vision and principles; reassess the big-picture direction for the Centre City; identify actions to realize the vision; update the information in the Plan to align with other city policies; and eliminate overlap with other documents.

Engagement was approached with the understanding that the plan need not be re-written; rather it will be updated or, "refreshed", to reflect the current thinking within the Centre City. An update to the Centre City Plan is an opportunity to refocus Calgary's energy and reinvigorate a commitment to success in the Centre City. For more information, see [Calgary.ca/centrecityplan](http://Calgary.ca/centrecityplan).

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## Overview of Transportation in the Centre City

Connectivity is essential for a strong Centre City. People, goods, and information should be able to move into, around, and through the Centre City safely and conveniently. The Centre City is the epicenter of Calgary’s transportation network and can experience congestion and conflict to a higher degree than anywhere else in the city. Council has approved strategies and infrastructure improvements for different modes, but their intersection at specific priority locations needs to be carefully considered.

These mode-specific strategies and the Centre City Guidebook offer an opportunity for many of the Centre City Plan’s higher-level policies to be removed from the Plan and addressed through the other documents. Streetscape master plans being prepared by Urban Strategies should direct consistent urban design.

Beyond design interventions, the Centre City Plan is a chance to examine the fundamental strategy of how we plan transportation in our city’s busiest area. Are we prepared for shifting demand? Does our current network support downtown vitality? What kinds of changes would we need to consider in order to make our Centre City the urban node of the future?

## Analysis

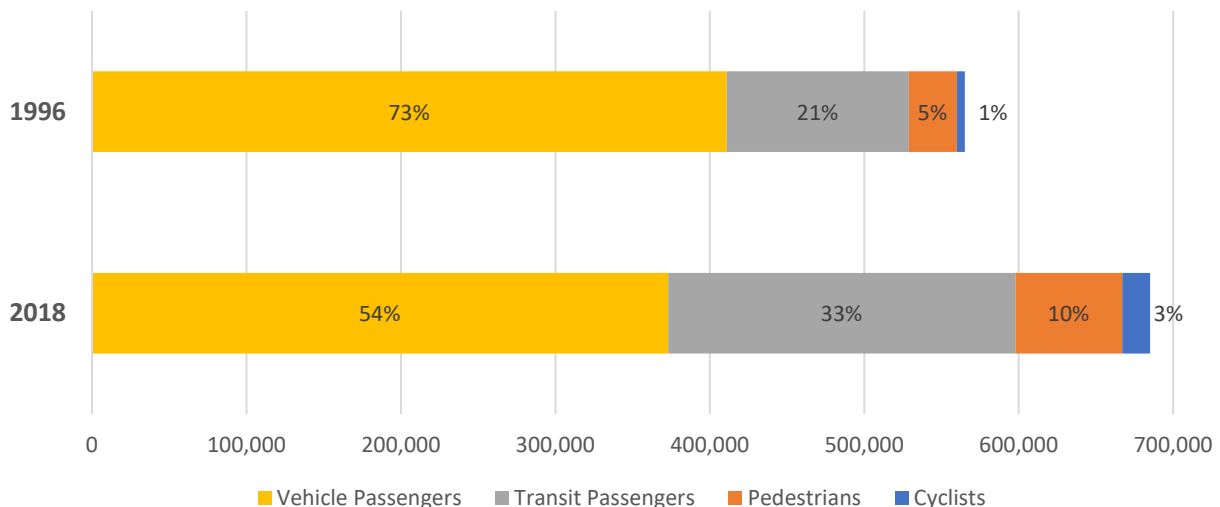
### Mode Split

From 1996 to 2018, the total number of recorded trips into the Central Business District increased by 21 per cent. As transportation demand has increased, it has also shifted. The annual May cordon count reveals that:

- Pedestrian traffic has increased 123 per cent;
- Transit ridership has increased by 91 per cent;
- Cycling ridership has increased by 252 per cent; and
- The number of vehicular occupants has decreased by -9 per cent.

Central Business District Cordon Count  
1996-2018

Source: Transportation Planning





Overall, these numbers reveal that while vehicular traffic used to account for three quarters of all transportation demand in the Centre City, it has fallen to approximately one half of total demand. The combined number of transit riders, pedestrians, and cyclists has more than doubled.

Stage 1 of the Green Line is scheduled to begin service in 2026 with demand of 60,000 passengers per day across all fourteen of its stations. The Green Line planning team has conducted studies showing that the four new downtown stations are expected to accommodate daily ridership of:

- 2 Avenue SW – 10,250
- 7 Avenue SW – 49,500
- Centre Street S – 3,600
- 4 Street SE – 3,900

These riders will become pedestrians upon disembarking from the train and spread out through the Centre City. How can our mode-specific strategies ensure safe and efficient transportation in these multi-modal areas? Transportation demand is expected to continue shifting away from single-occupancy vehicles, at least in the short and medium term. Are these trends consistent with our long-term goals?

## Calgary Transportation Plan

The 2009 CTP looks at how the entire network functions across the city and region. Its goals are closely tied to those of the Municipal Development Plan and are meant to reinforce and be reinforced by land use policies that disperse population and employment growth into Main Streets and Activity Centres.

The seven stated goals of the CTP are:

1. Align transportation planning and infrastructure investment with city and regional land use directions and implementation strategies.
2. Promote safety for all transportation system users.
3. Provide affordable mobility and universal access for all.
4. Enable public transit, walking and cycling as the preferred mobility choices for more people.
5. Promote economic development by ensuring the efficient movement of workers and goods.
6. Advance environmental sustainability.
7. Ensure transportation infrastructure is well managed.

The CTP also includes preliminary road classifications which seek to prioritize modes based on the role each street should play in the broader network. These road classifications have since been further expanded upon in the Complete Streets Guide. This document provides guidance when considering retrofitting streets in alignment with the CTP street classification. The goals above are meant to apply city-wide; the CTP and Complete Streets Guide defer to the 2010 Centre City Mobility Plan for specific guidance in the Centre City.

The CTP is currently being reviewed through 2019-2020, with the goal of further integration with the Municipal Development Plan.

## Centre City Mobility Plan

The Centre City Mobility Plan classifies each roadway in the Centre City as an Arterial, Urban Boulevard, or Residential street. Further urban design classifications are meant to effect a specific character through pedestrian realm design. The interrelation of modal networks is intended to conform to the palette of street cross-sections as defined in the CTP and Complete Streets Guide.

Most east-west avenues located north of the CPR tracks are classified as “arterial”, given that they are high-speed one-way streets meant to facilitate auto traffic to and from surrounding skeletal expressways. Service standards for pedestrians and cyclists on these roads are variable and are lower priority than service standards for transit riders, goods, and vehicles.

4<sup>th</sup> and 6<sup>th</sup> Avenues are classified as “arterial” but are also listed as being “pedestrian corridors”, despite the stated goal of arterials to permit lower-quality standards for pedestrian traffic. It is unclear how these conflicting priorities are to be reconciled.

Most north-south streets are classified as “urban boulevard”, upon which walking, cycling, and transit are to be accommodated with high standards. Auto traffic can be accommodated to a lower service standard on these roads.

Quieter roadways in Beltline, Chinatown, Downtown West, Eau Claire, and East Village are classified as “residential” and are intended to be quieter, more pleasant streets designed to support pedestrians and cyclists.

The cycling network has only been partially implemented, but the long-term network plan does not include a comprehensive east-west connector. The transit network demonstrates effective coverage of the Centre City with transit service particularly with regard to the proposed Green Line.

## Main Streets

Calgary’s Municipal Development Plan (MDP) identifies 24 important corridors throughout the city’s established areas. While many of these streets are currently designed to prioritize traffic flow, the MDP envisions a more balanced design for the future where higher densities and mixed land uses promote more local mobility. Rather than dividing communities, they will be redeveloped to serve as vibrant cores of pedestrian and retail activity.

The Centre City is bordered on the west and south by two important corridors – 14 Street SW and 17 Avenue SW. These two Main Streets are not currently being planned; however 14 Street is currently listed as being a higher priority for planning work. The level of policy guidance required for these two Main Streets is still being determined, particularly in light of the upcoming review of the Beltline Area Redevelopment Plan.

Other north-south streets within the Centre City have or will soon undergo streetscape improvement planning (Macleod Trail SE, 1 Street SW, 4 Street SW, 8 Street SW, 11 Street SW). Funding for the planning and implementation of these redesigns comes from a different source than the Main Streets program.

## Pathways & Bikeways Plan

The city-wide Pathways & Bikeways Plan is currently being updated and is intended to be presented to committee Q3 2019. The Phase 1 “What We Heard” report contains multiple references to the ease of travelling to and through downtown, but identifies some difficult connections to specific communities outside of the Centre City, particularly via the Nose Creek valley.

For the purposes of the Centre City Plan, the Pathways & Bikeways Plan would ideally identify missing links and next steps for implementation of the Centre City cycling network. This could allow for discussion about how best to implement the full network operationally. Areas with high cycling connectivity may be identified as desirable locations for new-economy businesses.

## Plus15 Policy

A defining part of the Centre City’s pedestrian network is the +15 system, allowing for greater connectivity between buildings and throughout the downtown core. Now under the stewardship of Roads, the +15 Policy is being updated to reflect missing links, current conditions, funding models, and operational challenges facing the network.

The Centre City Plan is an opportunity to review how the +15 system interacts with other mobility networks and explore ways of creating a better urban environment where the system interfaces with the built environment – both private and public.

## Route Ahead

The City's 2013 transit strategy identifies three key pillars: improving the customer experience, fully planning and instituting a comprehensive network, and financing the business unit's capital and operational expenses. A major strategic goal is to provide transit service that supports nearby land uses.

Because the Centre City has always been Calgary's core, our transportation and primary transit networks have evolved radially in order to best facilitate downtown commuting. With the upcoming addition of two more radial LRT lines (north central and southeast) and another radial BRT line to the southwest, the Centre City's importance as an employment and transportation hub will be further reinforced.

## Cycling Strategy

The 2011 Cycling Strategy lays out three pillars for creating a bicycle-friendly city – plan, design, and build; operate and maintain; and educate and promote. The outcome of this strategy is a list of actions and is designed to get more people cycling, provide more bicycle-oriented infrastructure, increase cycling safety, and increase Calgarians' satisfaction with cycling. The chief outcome of all this work has been a network of on-street bike lanes in the Centre City, increased connections to surrounding neighbourhoods and regional pathways, and greater integration of cycling and transit.

## Step Forward

The City's pedestrian strategy aims to create a safe and supportive urban environment where more Calgarians can choose to walk to meet their daily needs. With the intention of reducing pedestrian casualties and fatalities, the strategy proposed actions in the short- (2 years), medium- (5 years), and long-term (6+ years) meant to make Calgary a more walkable city.

While part of the concept of walkability is making connections direct and safe, another aspect is that the places being walked to, from, and through must be interesting and human-scaled. The pedestrian strategy focuses on making sure that networks are complete and linkages are safe as they can be. The planning department may have an opportunity to create better places through tactical urbanism at select locations. This will reinforce the investments that have been made in pedestrian safety and produce a better pedestrian environment overall.

## Goods Movement Strategy

The 2018 Goods Movement Strategy aims to facilitate the movement of freight around Calgary, helping to bolster our competitive advantage in the fields of logistics and warehousing. A significant challenge to the movement of goods around the city is that of traffic congestion - unlike people, who can freely choose another form of mobility, cargo must be shipped on our roadways.

The entire Centre City is listed as an Unrestricted Truck Route Area, meaning that large vehicles should be expected on any road at any time. Major routes are identified to assist drivers with finding the most appropriate roads: 9 Avenue S, 12 Avenue S, and 17 Avenue S for east-west travel; and 14 Street SW, 10 Street SW, 8 Street SW, 4 Street SW, 1 Street SW, 1 Street SE, and Macleod Trail for north-south travel through the Centre City.

Protecting truck routes through the Centre City will help to support large shipments of goods and construction vehicles, but may not be enough to accommodate the growing stresses caused by increasing e-commerce shipments and pick-up/drop-off zones for local couriers.

Two strategic directions have implications for the Centre City: enhancing last-kilometre delivery, and developing flexible plans to adapt to a changing future. The first supports short-term actions such as reviewing and increasing the amount of on-street loading zones, whether through specific allowed times or by promoting greater use of alleys. The second suggests a cautious approach to regulation and infrastructure as the timing and scale of future challenges is unknown.

## Calgary Parking Policies

The City recently updated the Downtown Parking Strategy to provide more flexibility to the cash-in-lieu program. Whereas previously developers could provide up to 50 per cent of their required parking on-site and pay for public parking facilities for the remainder, the Strategy now requires developers to provide between 50 and 100 per cent of the required parking on-site and gives the option to provide offsets through transportation demand management contributions.

Through this, The City is no longer obligated to construct public parking facilities. Developers now have the option of constructing anywhere between 50 per cent and 100 per cent of the required parking on-site, meaning they are solely responsible for forecasting future parking demand and accommodating it within their development.

Cash contributions in lieu of on-site required parking will now go to fund a broader set of measures aimed at making mobility to and through the Centre City more sustainable.

## The Future of Transportation

The widespread adoption of autonomous vehicles could be the greatest disruption to civic life since the invention of the automobile. It is expected that adoption of the technology will happen very quickly, similar to the smartphone, however the date at which the transition will begin is not known. Optimistic projections suggest it could begin within the next five years, however more pessimistic projections suggest that technological and operational challenges may result in slow uptake that will not begin until the latter half of the 2020s.

Other future trends that warrant consideration in the Centre City are the rise of e-scooters and shared bicycles, which could add demands for space in both the sidewalk and roadway.

## One Calgary

The City of Calgary's four-year budget for 2019-2022 is a service-based plan for municipal governance. It identifies the priorities of Calgarians, City Council, and City Administration and associated metrics for measuring success in service delivery.

The theme of transportation has clearly been stated by citizens as being key to our city's quality of life: Calgary must be a city that moves well. One Calgary's Citizen Priorities include "a city that moves", which aims to increase the proportion of residents and jobs within 400 metres of the primary transit network, and to decrease the number of casualties occurring.

This priority guides the following Council Directives:

- M1: Safe transportation. To be implemented through the Safer Mobility Plan, investments in safety at problematic intersections, additional peace officers on transit, better street light outage response, and encouragement of safe user behaviour.
- M2: All options for mobility should be desirable. To be implemented through Step Forward, the Safer Mobility Plan, snow and ice control, improved transit service, and enhanced system efficiency through innovation and technology.
- M3: Partner with other entities to improve our network. To be implemented through optimized use of existing technologies and exploration of new ones, and evaluate integration of public and specialized transit through P3s.
- M4: Develop and implement solutions that increase safety and reduce congestion. To be implemented through better monitoring and response to incidents, improved on-street parking management, mobile payment for transit, and pursuit of low-cost high-benefit solutions.



To implement these directives, City Administration provides the following services directly related to transportation in the Centre City:

## Parking

The goal of Calgary's parking service is to facilitate movement and access to businesses, services, and homes. Because parking is a finite resource, this service ensures that parking is made available where it is most beneficial, facilitating the movement of people and goods throughout the city.

An important trend for Centre City parking has been the economic recession, which caused job losses and an associated decrease in parking demand. Whether this demand returns and how quickly technological progress affects the need for parking are critical considerations for how this service is managed in the future.

## Public Transit

The transit service line provides a network of train and bus transportation to move people safely, reliably, and affordably. With an upcoming shortage of capital for major investments other than the Green Line, the budget prioritizes increasing safety for transit customers and innovative service delivery.

Because of Calgary's unicity form, transit plays an important role in shuttling workers to and from the Centre City. Once up and running, the Green Line will create new mobility patterns downtown, however during construction local residents, workers, and businesses may experience significant disruption.

## Sidewalks & Pathways

In a dense area like the Centre City, the ability for pedestrians and cyclists to safely walk and bicycle is critically important. While the majority of travel to the Centre City is through automobile or transit, many of those commuters will become pedestrians at the end of their trip. Council has directed a focus on making walking and cycling more attractive, and for better snow and ice clearing.

Changing behaviours, citizen expectations, and transportation technologies are resulting in increased competition for road space and budget. The 2019-2022 budget provides some funding for lifecycle maintenance of sidewalks and +15 bridges, but focuses primarily on safety improvements in the Centre City.

## Specialized Transit / Taxi, Limousine & Vehicles-for-Hire

Calgarians should have equitable access to transportation, particularly within the Centre City with its high concentration of employment, education, and health institutions. Customers of this service line may have fewer transportation options, assumptions are shifting, and demand is rising.

New technologies and business models such as transportation network companies are changing how on-demand transportation can be delivered. The transit budget proposes to focus on optimizing customer experience and explore integration with new technologies rather than investing in lifecycle replacements. The livery budget proposes to preserve a level playing field while ensuring growth readiness.

## Streets

The Centre City's streets provide key connections that allow Calgarians to drive, cycle, and ride to their destinations. They provide critical access for emergency services, rights-of-way for underground and overhead utilities, and space for on-street parking that supports businesses, residential users, and delivery of goods.

Similar to the sidewalks and pathways service, increasingly diverse demands on road space are forced to compete with traditional operations. Citizens have very low tolerance for poor traffic flow and road maintenance. This budget proposes to focus on improving efficiency and supporting growth rather than on big-ticket spending and investing in lifecycle replacements.

## Key elements for Transportation

### Alignment with Centre City Plan Principles

The intent of the Centre City Plan is to strengthen the Centre City in accordance with eight fundamental principles. Four of the eight principles relate to transportation are:

- Principle 1: Build livable, inclusive and connected neighbourhoods
- Principle 2: Put pedestrians first
- Principle 3: Create great streets, places and buildings – for people

### Key Outcomes over the next 10 to 20 years

These are suggested outcomes for the Centre City over the next ten to twenty years and possible metrics to measure their success.

1. Enhance the modal split trending away from the single-occupant automobile.
  - a. Proportion of trips taken on foot
  - b. Proportion of trips taken by bicycle / device
  - c. Proportion of trips taken on transit
  - d. Proportion of trips taken in an automobile
2. Excellent transit service and station experience.
  - a. Transit satisfaction
  - b. Active frontages adjacent to stations
  - c. Number of place-making interventions at stations
3. Efficient transportation networks for all modes.
  - a. Vehicle congestion
  - b. Short-stay parking / loading zone availability
  - c. Kilometres of installed cycle track
  - d. Emergency response times
4. Safe, vibrant public realm.
  - a. Number of collisions
  - b. Length of stay in pedestrian realm
  - c. Number of place-making interventions

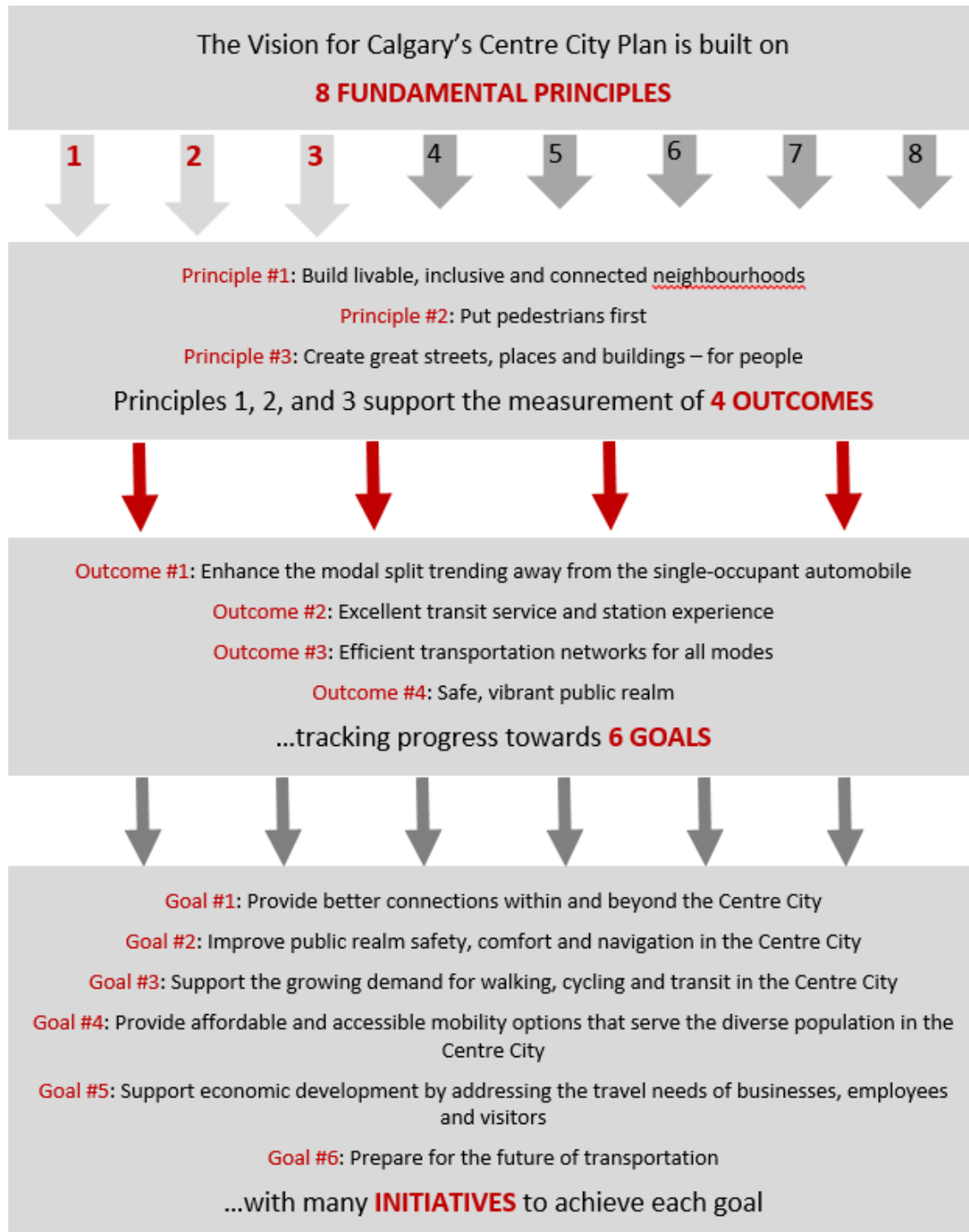
### Key Goals

The following six goals are specific to the Centre City to achieve the key outcomes listed above. These goals are based on an analysis of all the inputs and information gathered relating to this topic in the Centre City. See the **Goals and Initiatives Overview** section in **Appendix C** at the end of this document to see how these goals were crafted. They have been amended slightly since the Transportation Workshop on May 29, 2019.

1. Provide better connections within and beyond the Centre City.
2. Improve public realm safety, comfort and navigation in the Centre City.
3. Support the growing demand for walking, cycling and transit in the Centre City.
4. Provide affordable and accessible mobility options that serve the diverse population in the Centre City.
5. Support economic development by addressing the travel needs of businesses, employees and visitors.
6. Prepare for the future of transportation.

The vision for the Centre City was established in the 2007 Centre City Plan with eight fundamental principles to support that vision. The current vision and principles are under review, but still valid for the purposes of evaluating outcomes and goals. Relating to the topic of transportation, three principles apply. The figure below (Figure 2) shows the relationship between the principles, outcomes, and goals.

Figure 2: Hierarchy of Principles, Outcomes, Goals and Initiatives



## Key Challenges and Opportunities

The following are key challenges related to Transportation in the Centre City:

1. Utility of one-way streets, particularly in Beltline
2. Lack of public awareness of parking capacity during evenings and weekends
3. Vehicle efficiency vs. pedestrian/cycling/transit safety and comfort
4. Uncertainty over roll-out of future mobility technology
5. Preserving infrastructure needed for short and medium-term demand while still preparing for long-term demand
6. Long-term role of CPR corridor

## Summary of workshop findings

A Transportation Workshop was held on May 29, 2019. The Workshop provided an opportunity for stakeholders to discuss The City's goals for Transportation in the Centre City and prioritize initiatives to achieve those goals. After the Workshop, a *What We Heard Report* was prepared for the Transportation Workshop and below is a summary of the findings from that workshop.

- Downtown travel demand is changing, but there is still limited capacity on our roads and most trips happen in private vehicles. Our overall goal should be to reduce vehicle presence while still making downtown an attractive place to get in and around. Good downtowns focus on pedestrians, but walking and cycling are highly dependent on the weather, season, and time of day.
- Transit stops should be looked at as a multi-modal activity centre where passengers switch modes. People want to use whatever space will help them reach their destinations – capitalize on pedestrian-heavy areas for a better public realm, which often depends on having fewer vehicles.
- Make downtown a destination for more people at different times by providing safe infrastructure for mobility by whichever means each person prefers.
- One barrier to an integrated mobility network is that different apps and tickets are needed to pay for various fares. A fully integrated mobility payment system could allow for seamless transitions between public transit and private mobility-as-a-service providers.
- As new businesses increase demand for short-stay, pick-up and drop-off parking, the changing role of automobiles needs to be addressed, both as they are today and as a precursor to fully autonomous vehicles in the future.
- The future is entirely uncertain, so look at making operational changes or pilot small changes that can be easily reversed in the future. Our road rights-of-way are a limited resource that should not be given away without careful consideration.



## Rationale for goals and priority actions

During the Transportation workshop on May 29, 2019 there were discussions regarding the viability of the proposed goals along with prioritization of related actions. The case for each goal along with its highest-priority actions are as follows:

### Goal 1: Provide better connections within and beyond the Centre City

The Centre City's economic and cultural importance for Calgary is made possible by efficient transportation networks. These networks must carefully balance the mobility demands of people travelling by different modes. While all modes of transportation are important, some need greater attention and investment in order to complete and improve their dedicated networks.

While transit and automobile have historically been the most-used modes and will continue to be in the future, there are limited opportunities for additional infrastructure dedicated solely to their use. More cost-effective ways of facilitating connectivity are to increase the safety and comfort for cyclists in the Centre City, allow for easier movement between the Centre City and communities immediately adjacent, and to increase the number of north-south connections from the Bow River all the way to 17 Avenue South.

#### Priority actions:

- Improve east-west cycling connections. Expand and connect cycle tracks;
- Consider the technical feasibility and financial merit of burying the southwest LRT line adjacent to Stampede Park and south of 25 Avenue;
- Improve horizontal and vertical linkages to better provide connections between the sidewalk and +15 system;
- Accommodate pedestrian/bicycle movements in future plans for 14 Street / Bow Trail interchange;
- Design and deliver 17 Avenue extension;
- Consider pedestrian and bicycle opportunities over the CPR tracks at 9 Street SW and improve north-south pedestrian and bicycle movement along 14 Street SW;
- Improve connections to the cycle track network from the pathway system and neighbouring communities by building or improving on-street bikeways;
- Establish stronger cycling connections to the Bow riverfront along 1 Street SW and 5 and 6 Avenues, and along 8 Street SW and 8 Avenue SW;
- Review the role and function of the rights-of-way within the Centre City; and
- Expansion of bus and LRT operations.

### Goal 2: Improve public realm safety, comfort and navigation in the Centre City

As Calgarians move, they move through a combination of public and private spaces. The City promotes high-quality private space through development application review, and promotes high-quality public spaces by investing directly in the city's public realm. Our streets and sidewalks are how people get where they want to go – we should ensure that their journey is as easy, safe and enjoyable as it can be.

As we prepare for the economy of the future, we find that our current public realm does not support the type of urban lifestyle expected by employers and workers in new industries. Both the public and private realm need to work in concert to do more than the bare minimum of permit foot traffic. Improvements should focus on making certain streets and spaces “sticky” and allowing for a higher standard of urban experience than Calgary has historically provided. Tactical place-making should seek to create moments of surprise and joy that attract and retain pedestrians.

## Priority actions:

- Use the appropriate materials to provide an attractive and safe pedestrian/bicycle infrastructure.
- Support tree planting projects on major pedestrian corridors and encourage innovative tree planting techniques to ensure long-term tree health. Coordinate tree planting and utilities through the Centre City Integrated Action Committee.
- Fund the green triangle, give this plan teeth - (identify mode priorities)
- Discourage the cluttering of the pedestrian zone, especially the main pedestrian paths, with street furniture, commercial signage, etc.
- Ensure linkages are well-designed and use high-quality materials and construction standards. This may include: durable materials such as granite and stone to lengthen infrastructure life cycle, permeable paving to minimize storm-water run-off, the use of solar energy to provide power where required (e.g. signage, lighting, etc.), the use of alternative eco-friendly paving materials that can be recycled, repaired or replaced with minimum energy consumption, and sustainable urban forestry practices.
- Alleys - Encourage an appropriate design (lighting, access, materials) and operations (cleanliness, maintenance) of all alleys throughout the Centre City, and further ensure that new buildings provide a safe alley environment by providing special design attention to: the building interface with the alley; pedestrian entrances; loading docks and ramps; and garbage access.

## **Goal 3: Support the growing demand for walking, cycling and transit in the Centre City**

While downtown has a relatively high proportion of the city's total jobs, recent changes to the economy have produced high job losses downtown, reducing its share of citywide jobs to 20 per cent from 25 per cent. The long-term outlook for those specific jobs returning is bleak, meaning Calgary needs to reposition its real estate offerings to capitalize on growth opportunities. One of those opportunities is supporting a more youthful, urban lifestyle that supports new tech companies, which necessarily means more employees living closer to downtown and walking or cycling from the inner city rather than driving from the suburbs.

The locations chosen by recent startups suggest that inner-city main streets may be desirable due to their proximity to residential development, eclectic mix of retail and office space, and easy cycling and transit connections. If these areas become the hubs for new businesses, connectivity to the Centre City will still be important as a way of connecting new residents and employees to the city's premier cultural and entertainment amenities.

## Priority actions:

- No traffic on Stephen Avenue (even after 6:00 pm).
- Improve LRT stations downtown as a hub - good entrance features - transit-oriented experience - increased activities.
- More consistency with cycling structure -> on the road? On the sidewalk?
- Integrate all development along 2 Street SW with the future LRT station and transit and pedestrian/bicycle movements along 2 Street SW. See Concept 23: Bicycle Network and Concept 24: Transit Network.
- Establish and develop sPARKS as flexible and eco-friendly places/connections that complement neighbourhood centre activities and create places for localized civic celebrations and events.
- Build cycle tracks, wider sidewalks. Fund a vision zero policy. Make driving inconvenient.

## **Goal 4: Provide affordable and accessible mobility options that serve the diverse population in the Centre City**

Transportation planning in the Centre City is often a choice between supporting the primary mode of travel used by most Calgarians, and recognizing that other travel modes may be more efficient, equitable or cost effective. Our official position is to ensure balance between mobility options, where sufficient space is granted for each mode and users of each mode have respect for the importance of the others. Functionally, this means broadening opportunities for mobility.

Calgary's transportation networks need to serve different users with different needs. People may require lower barriers to entry to help them overcome economic or physical challenges. They may simply have different preferences for mobility that are at just as valid as those of the majority. The Centre City needs to accommodate all of these different needs in a way that works for each mode and does not unduly burden users of other modes.

### Priority actions:

- Free / subsidized transit in inner city; bigger free fare zone (incl Sunnyside / Zoo / Stampede)
- Change the definition of pedestrian to include people on wheels, or with strollers, wheelchairs, mobility devices.
- Improve / expand parking facilities at LRT stations / surrounding neighbourhoods - Yes, but where? Not appropriate at all stations
- North-south access for cyclists compatible with pedestrians
- Run trains at night / overnight and feeder routes - Extend free fare zone to Stampede - late night ridership
- Multi-modal Access Plan (Master Plan)

## **Goal 5: Support economic development by addressing the travel needs of businesses, employees and visitors**

The oil price crash of 2014 and subsequent job losses have had a significant impact on Calgary. While the Centre City is ground zero for some of the recession's strongest impacts, the commercial tax shift has resulted in a widespread loss of economic confidence and competitiveness. Reviving the city's economy means attracting new businesses, workers, ideas, and energy. While other goals focus on attracting new residents to the downtown core, this goal emphasizes making sure that the Centre City works for the businesses that choose to locate there. Employees should be able to get to work easily, pick-up and drop-off of clients and goods should be seamless and convenient, and business travelers need to be able to easily get between downtown and the airport.

Calgary's proximity to the mountains, importance as a sports hub, high quality of life and high level of international immigration mean that tourism is an important economic sector. The Centre City serves not only Calgary's residents and workers, but also those who visit from elsewhere in Alberta, Canada, or the rest of the world. The specific travel needs of tourists must be taken into consideration, including easy navigation, safe pedestrian and transit infrastructure connecting distinct destination areas, and exposure to Calgary's high quality of life to entice them to stay.

### Priority actions:

- Collaborate with Tourism Calgary and other stakeholders to attract and leverage world-class events and festivals.
- Create a cross-corporate working group to support CED and the Mayor's Office in attracting companies to specific sites in Calgary's downtown by developing transportation improvement plans, particularly to create active mode connections between those sites and nearby amenities. Consider partially funding those improvements through short term allocation of new revenue.

- Work with festivals and entertainment groups to encourage Transit as a preferred method of access.
- Work with Calgary Metropolitan Region to undertake a regional economic forecast that analyzes how employment locations and concentrations are expected to shift over the next 20 years.

## Goal 6: Prepare for the future of transportation

Technological innovation has fundamentally altered society through the development of the ubiquitous smart phone. New ways of communicating and doing business have led to new startups, innovations, and forms of mobility. The pace of change is continuing and will continue to impact mobility more profoundly by allowing for the widespread introduction of autonomous interconnected vehicles. While the imminent arrival of these vehicles is certain, the time frame for their introduction is far less certain, forecast to occur sometime within the next 10 to 50 years.

With such uncertainty over when such a profound change will arrive, it is prudent that the Centre City not commit to making too many changes too far in advance. We must begin to understand how the precursors to this technology are already affecting change in mobility and parking demand given the prevalence of companies like Uber and food delivery companies. The future will come, and we will need to be adequately prepared.

### Priority actions:

- Obtain travel data for Transportation Network Companies (TNCs) to understand the impacts of increased short-stay and delivery parking demand.
- Autonomous vehicles may require upgrades to signage, road markings, lay-bys and other pieces of infrastructure. Designate priority corridors for potential future upgrades.
- On-street electric vehicle charging to support condo tower tenants
- Dedicated small autonomous buses: like ELA pilot between Zoo and Telus Spark
- Dynamic parking management system with criteria of keeping one parking spot per block.



## Appendix A: Inputs into the refreshed Plan

### Strategic Foresight

Strategic Foresight is a scenario-based methodology that immerses participants in a study of the future by asking them to explore multiple plausible alternatives and identify the challenges and opportunities that may emerge within each.

All four (4) scenarios predict that transportation patterns will shift similarly, with private automobiles continuing to lose mode share (though offset to some degree by autonomous vehicles) to transit, cycling, and walking. The scenarios expect that adoption of autonomous vehicles will occur at roughly the same pace in all four scenarios. In the short term we expect increased uptake of transportation network companies and more frequent delivery of goods, perhaps requiring different amounts and locations of short-stay parking and loading zones.

Planning for the impact of these new forms of mobility should be relatively consistent regardless of Calgary's broader economic or environmental conditions.

The following are some ideas from the Strategic Foresight Process:

- Automobiles are expected to continue losing modal share to transit, cycling, and walking
- Technology expected to have a big impact:
  - Dispersion of employment away from the Centre City
  - Increased usage of ridesharing, transport-as-a-service, Uber, Skip the Dishes, etc.
  - Autonomous vehicles and long-term changes to transportation demand patterns

### Downtown Economic Summit

The Downtown Economic Summit was held on 2017 March 2 and was hosted jointly by The City, CED and CMLC with approximately 160 participants. Throughout the event, participants answered specific questions about Calgary's Centre City, including its current strengths and possibilities to help address vacant office space and job creation. Participants then put the possibilities into priorities and identified tactics to consider moving forward.

The following actions are outlined in Attachment 2 of Report C2017-0344:

- 9. Complete design concepts for:
  - Stephen Avenue Pedestrian Mall
  - 2nd Street SW
  - Barclay Mall (3 Street SW). (Urban Strategy)
- 13. Collaborate with Tourism Calgary and other stakeholders to attract and leverage world class events and festivals. (All)
- 22. Work with festivals and entertainment groups to encourage Transit as a preferred method of access. (Transportation)
- 23. Promote and/or market festivals and events through Transit (e.g. musicians on board, Station activation, cross promotion utilizing various channels). (Transportation)
- 50. Continue to invest in transit, cycling and pedestrian infrastructure to improve access across the Centre City. (Transportation)
- 51. Improve safety, parking, loading, transit and traffic along the cycle track network. (Transportation)
- 52. Support mobility within Centre City through the LRT Free Fare Zone on 7 Avenue.
- 53. Improve access to, and mobility within, Centre City through investments in Transit infrastructure and higher order transit services, including the RouteAhead BRT Program and introducing 4-car train service on the Blue Line LRT.
- 54. Collaborate with Event Organizers to develop a multiuse pass to generate revenue for Calgary Transit and provide a convenient transportation service and access to activities throughout the city.



- 55. Create a cross-corporate working group to support CED and the Mayor's Office in attracting companies to specific sites in Calgary's downtown by developing transportation improvement plans, particularly to create active mode connections between those sites and nearby amenities. Consider partially funding those improvements through short term allocation of new revenue.
- 56. Adjust cycling network through the Beltline to align with the Green Line LRT plans.
- 57. Improve connections to the cycle track network from the pathway system and neighbouring communities by building or improving on-street bikeways.
- 58. Implement a way-finding program to guide Calgarians and visitors to key destinations along bicycle routes.
- 59. Continue to action tactical urbanism projects and facilitate public requests to activate streets as places.
- 60. Help Centre City communities apply and deliver micro-grant projects that improve walkability in partnership with the Federation of Calgary Communities.
- 61. Build and deliver cycle track projects in the East Village and Victoria Park to enhance connectivity and safety.
- 62. Design and deliver 17 Ave Extension.
- 63. Improve existing on-street bike routes to improve comfort and safety and to align with current best practices.
- 64. Improve lighting deficiencies at roadway crossings, under passes, transit stations and high use pathways.
- 65. Review and improve pedestrian facilities (connectivity and accessibility) within 600 m of all current and future Centre City transit station areas.
- 66. Construct missing sidewalk links in the Centre City. Ensure sidewalks have an adequate width, include ramps at crossings and Urban Braille.
- 67. Build mid-block crossings and temporary curb extensions (delineators, paints, flower pots, traffic calming curbs) in high-use areas to promote a safe and enjoyable walking experience.

### External Stakeholder and Public Engagement

The details of engagement for the Centre City Plan Refresh project can be found in the [What We Heard Report](#) online at [Calgary.ca/centrecityplan](http://Calgary.ca/centrecityplan).

Engagement was approached with the understanding that the Centre City Plan need not be re-written; rather it will be updated or, "refreshed", to reflect the current thinking within the Centre City. The targeted audience for this engagement was divided into three primary categories: Key stakeholders, Calgarians interested in the Centre City, and Internal stakeholders. The engagement approach intended to be respectful of the diversity of people living, working and spending time in the Centre City and a number of steps were taken as outlined in the above-mentioned Report.

The following input from the What We Heard Report relates to this topic.

### Values, Aspirations, Concerns

- Mobility, Roads, Connectivity was 3<sup>rd</sup> most important Value, with 47 references out of 200
- Mobility, Roads, Connectivity was 1<sup>st</sup> most important Aspiration, with 88 references out of 126
- Mobility, Roads, Connectivity was 1<sup>st</sup> most important Concern, with 130 references out of 233

## Principles

### Relevance

- Connections to, from, and between neighbourhoods and distinct areas
  - Should include periphery neighbourhoods such as Kensington and Bridgeland. Need high-quality connections between key character areas. Considerate of winter's impact on those connections.
- Pedestrian friendliness and interaction between modes of transportation
  - How one mode is implemented affects others. Safe interactions between cars, bikes, transit, and pedestrians. Prioritize pedestrians but recognize and respect the role of cars. Safer intersections and better crosswalks.
- More pedestrian-only areas
  - Eau Claire, Chinatown and enhanced Stephen Avenue. Places where pedestrians feel safe. Enhances business opportunities and all around vibrancy.

### *Principle 1 – Build livable, inclusive and connected neighbourhoods*

- Common theme – enhance connections between neighbourhoods, including neighbourhoods just outside of Centre City.
  - Need to connect neighbourhoods better – they don't feel connected. Need to consider use of Plus 15 and getting around in Winter. Need to consider periphery neighbourhoods outside of official Centre City boundaries.
- Less common themes
  - Improved transportation options

### *Principle 2 – Put pedestrians first*

- Common themes:
  - Need distinction or balance between transportation modes, and suggestions for improvements.
    - Emphasizing how one mode affects another. Cyclists are different from Pedestrians. Planning for future trends. Commit to prioritizing non-car modes if it's a core part of the vision. Need attractive spaces near Transit to support implementation.
  - Dependent transit improvements and other suggestions
    - New and enhanced transit services such as later hours, better (electronic) payment options, and connections between primary pedestrian areas. Strong Transit supports pedestrian activity.
  - Tactical/implementation comments on principle
    - Sentiment that this has not been funded appropriately – need to invest money if this is a priority. Timing of traffic lights and improved pedestrian crossings for better experience.
  - Safety
    - Limit red light turns. More “scramble intersections”. Need to make walking safe for families and seniors. Safety around Transit areas.
  - More pedestrian-only areas
    - More Stephen-Ave type areas. Suggestions for Chinatown, Eau Claire, and something North-South between river and 17 Ave. S.W.
- Less common themes
  - Importance of cycling and the need to separate cycling from pedestrian areas
  - Need quality, beautification and activation of pedestrian spaces to support walking.



- Accessibility for different groups, specific needs and folks with disabilities
- Parking/driving is still important and must be considered
- Overlaps with other principles/detail about principle wording
- Urban design + architectural considerations such as impact of building shadows and quality lighting
- Required better consideration of winter conditions
- General support and recognition of work done
- Importance of Plus15 network, and a need to activate those spaces and connect them to streets
- Maintain quality sidewalks during construction
- Environmental benefit when walking is prioritized

### ***Principle 3 – Create great streets, places and buildings – for people***

- Common theme – Pedestrian friendliness, infrastructure & streets, roads and pathways - Support for the principle but comments suggest it has not been implemented. Need to prioritize pedestrian appeal e.g. wider sidewalks and car safety. Connections between neighbourhoods. Alleys could be better utilized.
- Less common themes:
  - Expand Plus15 network and Better utilize it (hours/activation)
  - Transit improvements needed to support foot traffic
  - Support for bike infrastructure
  - Accessible and affordable parking

### ***Missing principles & recommendations for new ones***

- Transportation options, accessibility, connectivity – Ensuring quality movement between destination areas. High-quality transit to get people to Centre City from the suburbs. Safe and affordable parking.

## **Big Ideas, Issues and Actions**

### ***Overall Themes - Top***

- Mobility, Roads, and Connectivity-related ideas and issues
  - Improved train service and hours. Ideas around utilizing/repurposing CPR tracks.
  - New bus and streetcar service in Centre City.
  - Parking lots and parking affordability.
  - Underpasses.
  - Connecting major streets and avenues and other connections between destination areas.
  - Enhanced sidewalks.
  - Transportation hubs with enhanced amenities and opportunities with the Green Line.
- Pedestrians, underpasses, pathways and sidewalks
  - Mixed opinion on plus 15s: some feel they are a great asset which should be better utilized while others fear they take activity off the streets.
  - Pedestrian-only streets and pedestrian comfort are emphasized.
  - Quality pathways for getting around.
- CTrain, CTrain Safety and comfort including stations
  - Westbrook LRT safety was mentioned often, though not relevant to this plan.
  - CTrain safety, regarding crime and danger especially at Victoria Park Station.
  - Ideas for station locations.



- Transportation hubs with enhanced amenities around them.
- Cycle tracks and other cycling
  - Mixed opinion on cycle tracks.
  - Ideas for new and expanded tracks.
  - Interactions with cars and bike safety emphasized.

### **Overall Themes – Less Common**

- Snow related ideas and issues
  - Winter walking issues and ideas.
  - Need for more winter activity and amenities.
  - Mobility impacts in winter.
  - Need to plan for being a winter city much of the year.
- Ideas and issues around safety (general)
  - Pedestrian and cyclist safety.
- Specific areas to invest money
  - Bike lanes, though not everyone agrees with this.
  - Transportation, heritage, arts and beautification identified as important areas to invest.

### **Principle 1 – Build livable, inclusive and connected neighbourhoods**

- Top Themes
  - Ideas and issues surrounding public transit and other transportation
    - Ideas to enhance transit affordability.
    - More efficient commuting between CC and outside.
    - Encourage non-car modes.
  - Ideas and issues surrounding incentives, policy and processes
    - Parking-based incentives for retail and residential development.

### **Principle 2 – Put pedestrians first**

- Top Themes
  - Pedestrians, underpasses, sidewalks and Plus 15s
    - Accessibility and expanded definition of pedestrian to include those with strollers, walkers and other needs. Pedestrian safety, including lighting. Suggestions for more dedicated pedestrian areas. Thoughtful use of Plus 15, such as connecting to streets, businesses, and 24-hour use during winter. Cars described as less of a priority but still important.
  - Public transit
    - Desire for bike compatibility with Transit. Safety. Ideas for affordability. Alternative transit modes (tram/bus) for getting around CC. Ensuring transit stations/hub allow connections to all modes. New and/or frequent services for destination areas e.g. 17 Ave SW
  - Cycle tracks and other cycling
    - Expansion and new connections of cycle tracks. Bike security and amenities including bonus incentives for new developments. Bike share/rentals. Improve bikes/ car/ pedestrian interactions.
  - Transportation, roads, and connectivity-related ideas and issues
    - Future proofing i.e. self driving cars. Address congestion. Think of design continuity between connections (the whole trip).
  - Multi-mode issues and ideas

- Consistency for bike/car/ped rules. Multi-modal planning. Ensure safety for all modes to encourage use.
  - Ideas and issues surrounding incentives, policy and processes
    - Transit incentives and subsidies to make getting to and staying in the Centre City easier. Funding needed to enable pedestrian-first approach.
- Less Common Themes
  - Ideas and issues surrounding development, mixed use development and enhanced amenities
  - Enhance connections to other parts of the city, as well as routes around the Centre City
  - Ideas to support accessibility during winter, at LRT stations and Centre City buildings
  - Beautification, maintenance and ideas to enhance cleanliness
  - Issues and ideas supporting business needs (couriers/loading) and use of pedestrian space
  - Implement the plan bit by bit but with authority.

***Principle 3 – Create great streets, places and buildings – for people***

- Top Themes
  - Transportation, Roads, and Connectivity-related ideas and issues
    - Development of "hubs" i.e. utilize Green Line. Connections between major areas. Move or utilize the CPR tracks somehow. Parking.
  - Pedestrians, underpasses, sidewalks and connections between Beltline and downtown
    - Pedestrian comfort and sidewalk maintenance. Construction impacts need to be limited. Parking and green space along 9 and 10 Avenues.

A full list of all Quick Win ideas can be found in the [What We Heard Report](#) online and are also included in this document in the Goals and Initiatives Overview.

## Existing Policy Review: Centre City Plan (2007)

The following is a list of existing policies within the 2007 Centre City Plan. A review of these policies identified a need to keep their intent in the updated Plan. Policies as written below may be consolidated or rewritten as necessary.

### Policies and Actions to Remain in the Centre City Plan

**Bolded** terms are who we expect to have to follow-up with to determine if each policy still aligns with other policy documents that have been done over the past 10 years.

#### *Planning & Community Design*

- 4.1.5 – Support a high priority on transit service for the Downtown. See Movement and Access System.
- 4.1.9 - Support opportunities in the Downtown that promote additional open space and public realm vitality such as sPARKS. See Open Space section and Glossary.
- 4.1.10 – Ensure an adequate supply of short-stay parking.
- 4.2.1.3 – Establish stronger physical and visual connections to the Bow riverfront by innovatively designing pedestrian intersections along 10 Street SW and 4, 5 and 6 Avenues SW as well as at 11 Street SW and 6 Avenue SW. Investigate design solutions to provide a more comfortable and safe intersection crossing for pedestrians (e.g. pedestrian safety features and scramble/diagonal crossings, etc.). See the Movement and Access System section and Appendix D: Glossary. (Pathway and Bikeway Plan)
- 4.2.1.4 - Establish stronger cycling connections to the Bow riverfront along 11 Street SW at 5 and 6 Avenue SW and along 8 Street SW and 8 Avenue SW. (Pathway and Bikeway Plan)
- 4.2.1.5 - Better connect the West End neighbourhood with the Bow riverfront by developing innovative design solutions to minimize the impact of transportation mobility through and surrounding the neighbourhood (e.g. investigate the feasibility of moving major roadways away from riverfront, create an enhanced pedestrian environment along 9 Avenue SW, etc.). (Network Planning?)
- 4.2.1.6 - Ensure the appropriate pedestrian movements are maintained and enhanced within Shaw Millennium Park. This should include consideration of a visually creative pedestrian overpass over Bow Trail to the riverfront. (Pathway and Bikeway Plan)
- 4.2.1.8 - Consider pedestrian and bicycle opportunities over the CPR tracks at 9 Street SW and improve north/south pedestrian and bicycle movement along 14 Street SW. (Pathway and Bikeway Plan)
- 4.2.1 – **ACTION** - Explore the feasibility of realigning Bow Trail/14 Street interchange to improve the functional and aesthetic design of the riverfront parks spaces. (Network Planning?)
- 4.2.2.9 – Pursue the possibility of a bike station facility in the vicinity of the Eau Claire Plaza. (Pathway and Bikeway Plan)
- 4.2.2 – **ACTION** - During the review of the Downtown Street Network Standards, review the Eau Claire Area Redevelopment policies related to traffic control and calming measures and the Public Improvements Plan in order to ensure a pedestrian-scale environment, the reduction or slowing of traffic, and enhancement of the streetscape while maintaining the same amount of on-street parking. (Roads)
- 4.2.3.5 - Integrate all development along 2 Street SW with the future LRT station and transit and pedestrian/bicycle movements along 2 Street SW. See Concept 23: Bicycle Network and Concept 24: Transit Network. (Green Line)

- 4.2.3.11 - Consider the potential for sPARKS and/or a woonerf along Macleod Trail SE and 1 Street SE between Riverfront Avenue and 4 Avenue SE. See Section 6: Open Space and Appendix D: Glossary. (Livable Streets)
- 4.2.5.9 - Maintain the pedestrian linkage on the MacDonald Bridge between East Victoria Crossing and Ramsay community. (Roads?)
- 4.2.5.11 - Consider the technical feasibility and the financial merit of burying the south west LRT line adjacent to Stampede Park south of 25 Avenue. (Transit)
- 4.2.7.3 - Establish a strong pedestrian/bicycle connection for Connaught Centre to the Elbow riverfront via the 13 Avenue Greenway and to the Bow River via 4 and 8 Street SW, 10 Avenue S as well as +30 opportunities over the CPR tracks given the lack of a central neighbourhood connection for pedestrians to link to the north. (Pathway and Bikeway Plan)
- 4.2.7.5 - Incorporate a transit loop into the public realm plans for 8 Street SW and 17 Avenue SW. (Transit)
- 4.2.8.5 - Establish a strong pedestrian/bicycle connection for West Connaught to the Bow riverfront via the 13 Avenue SW Greenway to the west and along enhanced 8, 11 and 14 Street SW pedestrian streetscapes. In addition to the traffic lights, enhance the pedestrian/bicycle crossing at 13 Avenue SW and 14 Street SW to ensure pedestrian/bicycle movements can move with ease and comfort (e.g. Urban Braille, pedestrian-scaled urban and landscape features at the intersection).
- 4.2.8.7 - Maintain the only at-grade CPR track crossing at 11 Street SW for the important north/south pedestrian/bicycle and vehicular movement system that it provides to move people and goods between the north and south side of the CPR tracks. (Pathway and Bikeway Plan)
- 4.2.8.8 - Accommodate pedestrian/bicycle movements in future plans for the 14 Street SW/Bow Trail interchange.
- 4.2.8.9 - Improve the key route of pedestrian/bicycle travel along 10 Avenue SW with consideration of a pedestrian/bicycle connection over 14 Street SW at 10 Avenue SW.
- 4.2.8.10 – Consider pedestrian/bicycle opportunities over the CPR tracks at 9 Street SW.
- 4.2.9.2 - A direct and enhanced pedestrian/bicycle connection at 19 Street SW and 10 Avenue SW (Pathway and Bikeway Plan)

## ***Parks & Open Space***

- 5.1.9 - Establish and develop sPARKS as flexible and eco-friendly places/connections that complement neighbourhood centre activities and create places for localized civic celebrations and events. sPARKS shall: (Livable Streets)
  - Be located on north-south oriented streets that have low traffic volumes (e.g. less than 5,000 vehicles per day);
  - Be located in areas that already have active land uses at-grade or have the potential for redevelopment or significant improvement of existing building edges;
  - Accommodate slow-moving vehicular traffic and on-street parking in the winter and various active/passive pedestrian activities in the summer;
  - Ensure through-cycling;
  - Consider distinctive eco-paving (e.g. full or partial water retention or permeability), textures and colour treatments;
  - Provide distinctive, movable and multipurpose street furniture to accommodate various pedestrian activities; and
  - Provide special lighting, water, landscaping or public art features.



- 5.1.12 – Explore opportunities for incorporating bicycle facilities in Centre City parks.
- 5.1 – ACTION - Identify an opportunity to undertake a sPARKS pilot project. The project should include feasibility study, design and implementation of the sPARKS (e.g. Centre Street S/Volunteer Way).
- 5.2.3 - Reinforce strong pedestrian connections to the riverfront to meet open space needs for the residential/mixed-use neighbourhoods in the following manner:
  - Establish a 12/13 Avenue S Greenway connection to the Bow and Elbow Rivers by connecting the new West Park and Elbow Riverfront Park; and
  - Reinforce the importance of the north/south pedestrian-enhanced connections to the riverfront. (Livable Streets)
- 5.2.7 - When required, due to an increase in pedestrian, bicycle and pedestrian-motorized vehicles, explore the separation of pedestrians, bicycles and in-line skaters along the riverfront pathways/promenade to ensure the pathway system remains comfortable and safe for both the pedestrian and cyclist’s recreational and commuter needs. (Pathway and Bikeway Plan)
- 5.2.8 - Resolve the pathway/transportation conflict points between the Louise Bridge (9 Street SW) and the new West Park (Crowchild Trail SW) by twinning the pathway system from Nat Christie Park to the Pumphouse Theatre and/or other solutions that would minimize congestion for the pedestrian along this area of the riverfront. (Pathway and Bikeway Plan)

## *Transportation*

- 6.0 – ACTION - Develop a Centre City Transportation Strategy to review existing policies and plans in order to support the vision of the Centre City Plan and implement the Green Transportation and Public Realm Hierarchy. Major areas of emphasis shall include:
  - Review of the role and function of the rights-of-way within the Centre City;
  - Expansion of the bus and LRT operations;
  - The movement of goods and service vehicles in and out of the Centre City; and
  - Exploring alternative modes and optimizing the existing infrastructure.
- 6.1.1 - Provide for major pedestrian corridors, as shown on Concept 21: Pedestrian Network, that are unobstructed and interconnected, provide urban design interest and that facilitate accessibility among the Districts, neighbourhoods, and major Centre City destinations (e.g. offices, retail core, major cultural, open space facilities, and the river pathway system). (Pathway and Bikeway Plan)
- 6.1.2 - Enhance existing regional pathways and provide new pathways as shown in the Beltline Area Redevelopment Plan and including 9 Avenue SE from 4 Street SE to the Elbow River, and the Elbow River/Stampede Park pathway. (Pathway and Bikeway Plan)
- 6.1.3 Sidewalks & Pathways – Integrate and connect major pedestrian corridors with regional pathways to ensure pedestrian access to regional open spaces, major Centre City destinations, and the surrounding neighbourhoods.
- 6.1.5 Sidewalks & Pathways – Establish north-south connections and overcome existing barriers (e.g., CP Railway, Bow and Elbow Rivers) by facilitating the implementation of the proposed underpasses, overpasses, pedestrian bridges and other integrated design initiatives.
- 6.1.7 Sidewalks & Pathways – Improve horizontal and vertical linkages to provide better connections between the sidewalk and +15 system.
- 6.1.9 Sidewalks & Pathways – Support tree planting projects on major pedestrian corridors and encourage innovative tree planting techniques to ensure long-term tree health. Coordinate tree planting and utilities through the Centre City Integrated Action Committee. (Roads)

- 6.1.1 +15 – Continue to develop and maintain the +15 system within the revised +15 policy area as shown on Concept 22: +15 Network.
- 6.1.2 +15 - Ensure key links and bridges are provided through the development approval process in order to improve the overall continuity of the +15 system (including any + 30, -15 underground, etc.). At the same time, bridge locations shall be balanced with the objective of maintaining key view corridors as identified on Concept 26: Gateways, Landmarks and View Corridors.
- 6.1.3. +15 - Encourage the sensitive and creative design of new and replacement +15 bridges. Depending on the immediate site context, consideration should be given to when the bridge should be a feature element and provide animation and visual delight to the public realm and when its visual impact should be minimized, so as not to detract from local views and surrounding buildings. To this end, The City should consider the use of design competitions in order to generate ideas and creative contextual solutions.
- 6.1.4 +15 - Recognize that +15 bridges can negatively impact the pedestrian realm below them in terms of microclimatic conditions. For this reason, the design of bridges should consider ways to mitigate any negative conditions such as lighting, wind mitigation or improvements to the sidewalk level.
- 6.1.5 +15 – Enhance all components of the +15 Network to improve the attractiveness and usability of the system and better animate and activate the links to the ground level, which may include:
- Design +15 entrances/public interfaces at street level to be visible, legible and aesthetically appealing; and
  - Animate the interior design and use of the +15 Network by including special features (e.g., museum overflow space, performance space, exhibition space, tourism advertisement, art work, plants, lighting, etc.) in order to create a dynamic and enjoyable walking experience within the network.

## **Urban Design**

- 7.4.1 – Views – Evaluate and minimize the impact of all new +15 bridges on important views.
- 7.4.2 – Views – Preserve views to the Centre Street Bridge and Calgary Tower by limiting +15 connections across Centre Street at a minimum distance of three blocks from each of these landmark structures/areas.
- 7.7.1.7 – Linkages – Provide design solutions for the efficient and safe transfer of people from the vehicular to the pedestrian realm.
- 7.7.1.8 – Linkages – Reduce conflicts between the different modes that contribute to the linkage system.
- 7.7.1.9 – Linkages – Where technically feasible, this plan encourages the conversion of one-way streets to two-way to stimulate commercial and pedestrian activity.
- 7.7.1.11 – Linkages – Ensure that all linkages have direct access to sunlight, at least on one side of the linkage, to support healthy landscaping at street level.
- 7.7.1.13 – Linkages – Discourage the cluttering of the pedestrian zone, especially the main pedestrian paths, with street furniture, commercial signage, etc.
- 7.7.1.17 - Linkages – Ensure linkages are well-designed and use high-quality materials and construction standards. This may include: durable materials such as granite and stone to lengthen infrastructure life cycle, permeable paving to minimize storm-water run-off, the use of solar energy to provide power where required (e.g. signage, lighting, etc.), the use of alternative eco-friendly paving materials that can be recycled, repaired or replaced with minimum energy consumption, and sustainable urban forestry practices.

- 7.7.1.18 - Linkages – Use the appropriate materials to provide an attractive and safe pedestrian/bicycle infrastructure.
- 7.7.1.1 – Alleys – Encourage an appropriate design (lighting, access, materials) and operations (cleanliness, maintenance) of all alleys throughout the Centre City, and further ensure that new buildings provide a safe alley environment by providing special design attention to: the building interface with the alley; pedestrian entrances; loading docks and ramps; and garbage access.
- 7.7.1.2 – Alleys – Explore opportunities to activate the entrances to alleys by wrapping at-grade uses at the corner and providing parking/servicing further away from the street that intersects with the alley.
- 7.7.1.3 – Alleys – Where possible, identify alleys, sections of alleys or blocks of alleys that could be developed to include public art, active uses, etc. such as the 7 Avenue gALLERy Project.
- 7.7.1.1 – Mid-block Connections – Encourage open mid-block pedestrian walkways on full block new/redevelopment projects.
- 7.7.1.2 – Mid-block Connections – Where feasible, north-south mid-block locations are preferred.
- 7.7.1.3 – Mid-block Connections – Active uses should be considered at-grade on the corners of and along mid-block connections.
- 7.7.1.4 – Mid-block Connections – The sidewalks shall provide appropriately-scaled and clear path widths and surface treatments.
- 7.7.1.5 – Mid-block Connections – Interfaces should include landscaped setbacks, storefronts, layered landscaping and full pedestrian access.
- 7.7.1.6 – Mid-block Connections – Safety shall be ensured through appropriate lighting and natural surveillance.
- 7.7.1 – Linkages – ACTION – Review the Downtown Street Network Standards within the context of the expanded Centre City Boundary. This will include the review of the role and function of each right-of-way. The review shall involve an inter-Business Unit team that can address both technical and urban design.

### **General / Non-Policy Direction**

- Develop a Centre City Transportation Strategy to review existing policies and implement the Centre City Plan, including emphasis on:
  - Review of the role and function of rights-of-way;
  - Expansion of bus and LRT operations;
  - Movement of goods and services;
  - Alternate modes of transport and needed infrastructure optimization.
- Integrating major pedestrian corridors with regional pathways;
- Identification of major pedestrian corridors/nodes needing improvement
  - Physical improvements not identified in Step Forward
  - Opportunities/constraints for greening the pedestrian realm
  - Opportunities to connect over/under CP tracks
- Identification of next round of cycling infrastructure
  - On-street routes through Centre City
  - Upgrades to regional pathways
  - “Cycling station” near Eau Claire
- Improve horizontal and vertical linkages to provide better connections between sidewalk and +15 system.
- Potential relocation of Bow Trail away from riverfront and other West End changes

- Plan for 8 Av tunnel
- Multi-modal transit station at 2 ST
- Section on Vehicular Traffic Management – transportation mode priorities for each street?
- Mid-block pedestrian crossings on 17 Avenue
- Tactical improvements vs full streetscape improvement master plans
- Feasibility of two-way conversions
- Verification of strategies for parking management – removal of minimums
- How best to implement Strategic Direction 4 from Goods Movement Strategy pertaining to commercial movement and deliveries.

## Redundant Policies

The following is a list of existing policies and actions within the 2007 Centre City Plan. A review of these items identified that they are redundant. They may be in a Local Area Plan, Guideline or Strategy document and do not need to be kept in the updated Plan. Policies as written below should be deleted.

### *Policies and Actions to be moved into a Local Area Plan*

- 4.2.3.6 - Reinforce the significance of pedestrian movements along all of the north/south streets through the Chinatown neighbourhood given their direct connection between the Downtown and the Bow riverfront. Such considerations should include clear sidewalk paths, landscaping, and transparent and active land uses.
- 4.2.6.5 – Improve the 10 Avenue S pedestrian/bicycle interface along the CPR tracks south of the Downtown.
- 4.2.6.9 – Given the heavy pedestrian usage of 4 Street SW, investigate ways to improve and support an enhanced pedestrian realm.

### *Policies and Actions to be moved to / are addressed by Relevant Implementation Strategy*

- 4.2.4.5 - Design and implement the +15/pedestrian linkage east of the Municipal Building at 8 Avenue SE such that it is direct and appropriately integrated into the future development of the urban campus and/or other development east of the Municipal Building.
- 4.2.11 – Linkage to the Downtown +15 system is discouraged in all the neighbourhoods in order to achieve a vital and livable public realm for residents. Other +15 connections may be considered on their own merits where they can meet specific intent and policies of the Centre City Plan. One example would be to link buildings to LRT stations.
- 6.0 – ACTION - Develop a Centre City Transportation Strategy to review existing policies and plans in order to support the vision of the Centre City Plan and implement the Green Transportation and Public Realm Hierarchy. Major areas of emphasis shall include:
  - Review of the role and function of the rights-of-way within the Centre City;
  - Expansion of bus and LRT operations;
  - The movement of goods and service vehicles in and out of the Centre City; and
  - Exploring alternative modes and optimizing the existing infrastructure.
- 6.1 – ACTION - Create a new +15 Curator/Programmer position in order to facilitate and broker exhibitions and events within the +15 system. Consider funding this position through the existing +15 Fund. Such a position should be piloted for a minimum of two years in order to allow for sufficient time for a proper evaluation.
- 6.2 – Bicycle Network - ACTION – Investigate the feasibility of the following bicycle improvements: (Pathway and Bikeway Plan)
  - A pedestrian and bicycle-only crossing of CPR tracks at 2 Street SW;
  - A pedestrian and bicycle-only crossing over 14 Street SW at 10 Avenue S;

- Improve 10 Avenue S from 14 Street SW to 4 Street SE.

- 6.2 – Bicycle Network – ACTION - Encourage the development of a “bicycle station” in the vicinity of Eau Claire Plaza. A “bicycle station” incorporates, at a minimum, secure bicycle parking. It can also include showers, lockers, bicycle repair, service and sales, food and beverage sales, etc. (Pathway and Bikeway Plan)
- 7.7.1.12 – Linkages – Improve micro-climate conditions on shaded sides of a linkage by manipulating built form massing and through the use of reflective materials and façade angles to create brighter pedestrian environments.
- 7.7.1.14 – Linkages – Ensure the appropriate level of pedestrian-oriented lighting is provided to improve legibility and increase a sense of personal safety in vehicular and pedestrian zones.
- 7.7.1.15 – Linkages – Incorporate the principles for Calgary Urban Braille System (CUBS) and way-finding.
- 7.7.1.16 – Linkages – Incorporate elements of beauty in the vehicular zone through coordinated street lighting, traffic signalization, signage, way-finding features and public art.
- 7.7.1.19 - Linkages – Facilitate a coordinated approach to street furniture that responds to architectural theme/quality of a precinct/linkage and enhances pedestrian comfort in all seasons.
- 7.7.1.1 – Underpasses / Overpasses – Regardless of elevation (underground, at-grade or above-grade) new built form, places and pedestrian/bicycle linkages related to an underpass/overpass should include the following considerations in their design:
- Wherever possible, underpasses/overpasses shall have an active edge treatment that may include retail or community services, recreational or entertainment facilities;
  - Brighter colour schemes should be incorporated that create more inviting pedestrian environments;
  - Underpasses/overpasses should have full vertical and horizontal access for bicycles and the physically challenged including the full Calgary Urban Braille System (CUPS);
  - Underpasses/overpasses should be well lit and may incorporate electronic surveillance; and
  - Underpasses/overpasses should include embedded public art features.
- 7.7.1.2 – Underpasses / Overpasses – In the case of an improvement or restoration of an existing underpass the following should be considered:
- Appropriate treatments of retaining walls with public art celebrating the CPR heritage in the form of murals, 3-D sculptural elements or any new electronic media that would animate the pedestrian zone and be complementary to structural elements;
  - Painting the original metal structure white to create a more inviting pedestrian environment; and
  - Adding colour at night with special lighting features to lighten the underpass for safety.
- 7.7.1.3 – Underpasses / Overpasses – When an entire redevelopment or replacement of an existing underpass is being proposed, key design considerations should include the following:
- Provision of space for alternative transportation modes (e.g. bicycles, skate boards and other modes, etc.);
  - Provision of vehicular access on a separate level from alternative transportation modes as listed above; and
  - Creation of structures which are imaginative in blending structural/engineering and architectural/artistic elements.



7.7.1 – Linkages – ACTION – Priority streets for detailed designs are: Centre Street S/Volunteer Way; 8 Avenue SW from 3 Street SW to 11 Street SW; 11 Avenue SW from 5 Street SW to 11 Street SW; 13 Avenue Greenway from Macleod Trail SE to 14 Street SW; 8 Street SW from 3 Avenue SW to 17 Avenue SW; and Centre Street from the Centre Street Bridge to 9 Avenue S.

***Policies and Actions to go to Guidebook or MDP***

7.7.1.1 – Linkages – Retain and promote the street grid as a primary city form-maker.

7.7.1.2 – Linkages – Encourage the comprehensive design of linkages at the city block and/or streetscape scale.

7.7.1.10 – Linkages – Promote the pedestrian zone as a multifunctional space where people walk, do business, sit and watch.

***Policies and Actions to be Deleted from Centre City Plan***

4.2.1 – ACTION - Establish a comprehensive planning, parks and transportation process for implementation of the LRT/Transportation directives through Shaw Millennium Park.

4.2.2.10 – Provide a pedestrian bridge crossing between Prince’s Island Park (at 6 Street SW) and the Bow riverfront along Memorial Drive

4.2.2.11 – Provide opportunities to link the pedestrian to the Bow riverfront between 7 and 8 Street SW. Considerations should include: a boat launch along the riverfront and interactive/interpretive public art.

4.2.2.12 – Incorporate, when needed, innovative traffic control and calming measures and the Public Improvements Plan (as per the Eau Claire ARP) in order to create a pedestrian-scale environment, reduce or slow traffic, and enhance the streetscape while maintaining the same amount of on-street parking.

4.2.3.7 – Enhance Riverfront Avenue for bicycle travel.

4.2.3.8 - Better connect the pedestrian physically and visually to the Bow River along the pathway system east of Centre Street. This should include an enhanced promenade with lighting, urban features, public art and active land uses along Riverfront Avenue to provide vitality along this area of the pathway system.

4.2.3. – ACTION - Implement the promenade concept between Centre Street and MacLeod Trail SE along Riverfront Avenue SE.

4.2.4.5 - Design and implement the +15/pedestrian linkage east of the Municipal Building at 8 Avenue SE such that it is direct and appropriately integrated into the future development of the urban campus and/or other development east of the Municipal Building.

4.2.4.8 - Ensure legible connectivity for pedestrians as they move between East Village to the Downtown, East Victoria Crossing neighbourhood to the south, and Bridgeland community to the north.

4.2.4.9 - Support the design and implementation of the 4 Street SE underpass to enhance pedestrian, bicycle and vehicular connectivity.

4.2.4 – ACTION - Implement the vision for a promenade along the riverfront of East Village and Fort Calgary.

4.2.5.5 - Ensure that the Southeast LRT line is appropriately-integrated to meet the physical and functional needs of the neighbourhood.

- 4.2.5.6 - Establish a strong pedestrian and bicycle linkage for East Victoria Crossing to the Elbow riverfront via the 12 Avenue SE Greenway and 4 Street/Olympic Way SE northwards to the Bow River.
- 4.2.5.7 - Support the design and implementation of the 4 Street SE underpass to enhance pedestrian, bicycle and vehicular connectivity.
- 4.2.5.8 - Close 7 Street SE to provide adequate pedestrian Elbow riverfront connections to Fort Calgary and the Bow River.
- 4.2.6.4 - Establish a strong pedestrian linkage to the Elbow riverfront via the 13 Avenue and 12 Avenue SE Greenway and to the Bow River via 1 and 4 Street SW. The pedestrian linkage should provide ease of access for pedestrians and cyclists to the riverfront pathway and regional parks
- 4.2.9 – ACTION – Explore the feasibility of realigning Bow Trail to improve the functional and aesthetic design of the riverfront parks spaces.
- 4.3.0.5 - Ensure future transportation and transit opportunities associated to Shaw Millennium Park respect the high quality of design and redevelopment required to maintain this open space as a special area.
- 4.3.1 – Stampede Park redevelopment & access
- 5.2.5 – Complete the comprehensive promenade concept along the Bow and Elbow riverfronts.
- 5.2.9 – Explore the feasibility and opportunities for three new bridges.
- 5.2.12 - Enhance crossings and connections to the north side of the Bow River (including implementation of the approved Memorial Drive landscape design concepts) and through to the Zoo and the Bridges Redevelopment.
- 5.2 – ACTION - Prepare a Feasibility Study of the potential opportunities to better connect the pedestrian directly down to, onto, over and along the Bow River. The study should:
  - Identify recreational opportunities on the river such as rafting/boating launches and a river taxi;
  - Support implementation of skating on the Bow River lagoon in the Eau Claire neighbourhood; and
  - Resolve existing and future increased congestion points of pedestrian, bicycle, inline skating and pedestrian-motorized vehicle movements along the riverfront pathway/promenade.
- 5.2 – ACTION - Prepare a Feasibility Study on future pedestrian/bicycle bridges from Prince's Island Park/6 Street SW to the north side of the Bow River/Memorial Drive, between Fort Calgary and the St. George's Island and the Bridges Redevelopment, and between Fort Calgary and Inglewood (north of 9 Avenue to connect the pedestrian pathway system over the Elbow River).
- 5.2 – ACTION - Prepare and implement a comprehensive promenade design concept with lighting/street furniture and lookout points in the locations that currently do not have such a design (e.g. West Park and West End neighbourhood, East Village between Centre Street and Fort Calgary and along the entire Elbow River). Prioritize the Elbow River pathway extension through Stampede Park due to the flood-prone nature of the east bank pathway.
- 6.1.3 - Integrate and connect major pedestrian corridors with regional pathways to ensure pedestrian access to regional open spaces, major Centre City destinations, and the surrounding neighbourhoods.

- 6.2.1 – Provide for a safe, convenient and well-connected bicycle network within the Centre City as shown on Concept 23: Bicycle Network. (Pathway and Bikeway Plan)
- 6.2.2 – Facilitate the implementation of bicycle-friendly designs, which may include wide curb lanes, bicycle lanes, signage, etc. (Pathway and Bikeway Plan)
- 6.2.3 – Wherever achievable, provide separate bicycle and pedestrian paths within the regional pathway system. (Pathway and Bikeway Plan)
- 6.2.4 – Enhance existing CPR tracks and river crossings. Provide additional access across the river and CPR tracks at key locations as identified on Concept 23: Bicycle Network. (Pathway and Bikeway Plan)
- 6.2.5 – Provide a smooth surface on roads, clear of obstacles (potholes, debris, sewer grates, uneven asphalt, gravel, snow, etc.) (Pathway and Bikeway Plan)
- 6.2.6 – Provide Class 1 and Class 2 bicycle parking facilities throughout the Centre City. (Pathway and Bikeway Plan)
- 6.2 – ACTION – Investigate the feasibility of the following bicycle improvements:
  - A pedestrian and bicycle-only overpass to connect the 13 Avenue Greenway over Macleod Trail and the LRT tracks into Stampede Park and connecting to 12 Avenue SE; and
  - Allowing cyclists on Stephen Avenue Mall during non-lunch hours.
- 7.7.1.4 – Linkages – Ensure new development creates a human-scaled street wall and streetscape. The street wall height to street width ratios should be 1:1, 1:2, 1:3, 2:1 where “street wall” represents the base of tall buildings or the entire mass of low to medium-height buildings. (Centre City Guidebook)
- 7.7.1.5 – Linkages – Complement the street wall with other streetscape elements such as a single or double row of trees, a denser rhythm of pedestrian-scaled street lighting or other special features that enhance the sense of human scale; or through fine articulation of building base/façade with attractive canopies, overhangs and similar architectural devices. (Centre City Guidebook)
- 7.7.1.6 – Linkages – Design linkages that satisfy aesthetic, safety and functional needs for a variety of human activities and travel modes. (Centre City Guidebook)
- 7.7.1 – Linkages – ACTION – Review the design of the right-of-way cross sections in relation to the Streetscapes Character concepts. The review shall involve an inter-Business Unit team that can address both technical and urban design.

## Maps to be Reviewed

The following maps exist in the 2007 Centre City Plan and will be reviewed and possibly eliminated.

- Concept 21: Pedestrian Network on Page 87
- Concept 22: +15 Network on Page 89
- Concept 23: Bicycle Network on Page 93
- Concept 24: Transit Network on Page 95
- Concept 25: Parking Management on Page 101
- Map 1: Street Network on Page 114
- Concept 28: Streetscape Character on Page 115

## Internal Stakeholder Review

Internal stakeholders reviewed the 2007 Centre City Plan and provided the following comments:

- Multi-modal transit station on 2 ST including high-speed rail to Edmonton
- Connectivity gap study
- Are street network classifications of any use?
- Please mention of the following policies/guidelines in the Updated Centre City Plan for reference.
  - Complete Streets Policy and Guideline (2014) - <http://www.calgary.ca/CA/city-clerks/Documents/Council-policy-library/TP021-Complete-Streets-Policy.pdf>
  - Pathway and Bikeway Plan (currently under update) - [http://www.calgary.ca/Transportation/TP/Documents/cycling/pathway\\_map.pdf](http://www.calgary.ca/Transportation/TP/Documents/cycling/pathway_map.pdf)
  - Cycling Strategy (2011) - <http://www.calgary.ca/Transportation/TP/Documents/cycling/Cycling-Strategy/2011-cycling-strategy.pdf>
  - Pedestrian Strategy (2016) - <http://www.calgary.ca/Transportation/TP/Documents/Planning/Calgary-Transportation-Plan/pedestrian-strategy-report-sept2016.pdf>
  - Access Design Standards (2016) - [http://www.calgary.ca/PDA/pd/Documents/development/access\\_design\\_standards.pdf](http://www.calgary.ca/PDA/pd/Documents/development/access_design_standards.pdf)
  - Street Capacity Guidelines (2014) - <http://www.calgary.ca/Transportation/TP/Pages/Planning/Calgary-Transportation-Plan/Street-Capacity-Guidelines.aspx>
  - Calgary Pathways and Bikeways Routes (Live Map) - <https://maps.calgary.ca/PathwaysandBikeways/>
  - Centre City Urban Design Guidelines - <http://www.calgary.ca/PDA/pd/Pages/Centre-City/Centre-City-Urban-Design-Guidelines-project.aspx>
  - Centre City Illumination Guidelines (2011) - <http://www.calgary.ca/PDA/pd/Documents/Centre-City/Centre-City-Policies/centre-city-illumination-guidelines.pdf>
  - Downtown Underpass Urban Design Guidelines (2010) - <http://www.calgary.ca/PDA/pd/Documents/Centre-City/Centre-City-Policies/underpass-guidelines.pdf>

- Regarding the Transit Network

As The City moves into the future, the transit system must be built out to support the increased need for more transit options. The transit options should include a new C-Train line to connect the North and South East (Green Line), new BRT (MAX) lines that connect to the LRT lines, and local bus service that provides a connected network.

In addition, the transit network must also provide multi-modal connections. The transit network must be supported by multi-modes of transportation, that is equitable, safe, and connected.

- Activated alleys. We should allow the uses of alleys to be activated like they do in Australia. This allows us to dictate to developers.
- Multimodal Transit Station. Should this not be connected through the entire transit network? Should it be at 4 Street Station?
- How do we integrate new green energy?

## Suggestions from Transit

### *Policies*

1. Transit routes should generally be located on streets as shown in Map X.
2. Streets identified as Major Transit Streets in Map X are critical for transit operations and connectivity through Centre City, and should provide a high degree of accommodation for efficient public transit service.
3. Support continued investment into the Rapid Transit Network and Primary Transit Network to provide a grid of frequent transit service through Centre City.
4. Supporting investments in improving connectivity, reliability, travel time, and customer experience both to/from and within Centre City. This can be achieved through new services or infrastructure, or modifications to existing routes.
5. Plan for two multi-modal Transit Hubs as shown in Map X. These Hubs will integrate rapid transit lines (LRT, Bus Rapid Transit (BRT)), local transit routes, regional public transit, and connections with other modes. Over time, features which should be present include:
  - a. Safe, accessible, direct, convenient, and weather protected pedestrian connections
  - b. between transit access points;
  - c. High-quality wayfinding, communication, public safety, and service information systems.
  - d. Integrated transit waiting amenities for bus zones in adjacent developments.
  - e. Availability of high-quality and secure bike parking
  - f. Seamless transfers between public transit systems or operators
  - g. Accommodation of loading zones for pick-up/drop-off by private vehicles, taxis, and
  - h. potentially other shared transportation services that feed customers into the transit
  - i. network.
6. Provide a high quality pedestrian and cycling environment to support access to transit in order to encourage the use, functionality, and enjoyment of the public transit system.
7. Supporting development which encourages and prioritizes transit and active modes. This can include:
  - a. Reduced parking supply on site;
  - b. Improved transit waiting amenities; and,
  - c. Providing high quality bike parking near bus stops and rapid transit stations
8. Support the continued efforts to operate a more environmentally friendly fleet and operations.

### *Transit Infrastructure & Priority:*

9. Support the completion of the Rapid Transit Network as outlined in RouteAhead, the Strategic Plan for Calgary Transit. Key Centre City components include:
  - a. Completion of the Green Line LRT
  - b. Construction of the 8 Avenue Subway
10. Undertake a feasibility analysis to introduce transit-only lanes in Centre City to improve travel time and reliability for customers, specifically:
  - a. Along 5 Avenue and 6 Avenue to support BRT lines.
  - b. Along 4 Street SW to support the Primary Transit Network connection
11. Support the construction of BRT Stations where these lines stop in Centre City, either as standalone structures or integrated within adjacent developments.
12. Support dedicated space for transit waiting amenities at all bus zones.

### *Regional Transit:*

13. Pursue improved regional transit connections between Calgary and other municipalities, including:
  - a. Supporting a future high speed rail link to Edmonton
  - b. Working with other municipalities to accommodate service and connections from those communities or which intercept vehicle trips and encourage the use of transit as an alternative.



## Appendix B: Best practice research

### Preparing for Automation

#### [Source](#)

Autonomous vehicles are expected to make transportation more equitable by offering low-cost mobility options that can cut through racial and ability inequities. However, they will create higher levels of unemployment in the motor vehicle operation and maintenance sectors, and will require massive investments in infrastructure to support them.

From a planning perspective, regional planning is required to ensure that metropolitan areas succeed in creating space for these mobility options. Comprehensive plans need to be less prescriptive and more goal-oriented to help cities cope with and adapt to rapid changes – plans should include a section on “The Future” which allows for flexibility, experimentation, and innovation.

Land use patterns will be affected by autonomous vehicle technology by shrinking retail needs to smaller showroom/pickup spaces in conjunction with greater demand for warehousing and e-commerce logistical space. As auto repair and maintenance needs decline, former sites will become available for redevelopment.

Buildings will need to be located and designed to facilitate both pedestrians and autonomous deliveries. As retail and parking demand shrinks, ground floors may be designed for disaster resilience. Cities should proactively plan for the reuse of parking structures, which could be reconfigured into warehouse or office space.

Key considerations:

- The time to begin planning is now
- Good planning principles of walkability and highest-and-best-use still apply
- Planning must anticipate the disruptive effects of technology
- Planning must account for uncertainty

### Barcelona – Superblocks

#### [Source](#)

The Gracia superblocks involved physically cutting off some through streets entirely, but on most streets, they simply raised the level of the pavement so that it was even with the sidewalks (all means of travel share equal access), reduced the speed limit, and eliminated one-way through streets. That changed drivers' habits.

A study of Gracia before and after the superblocks found that foot travel in the area increased by 10 percent and bicycle traffic by 30 percent, while vehicle traffic declined by 26 percent in interior streets. Meanwhile, thousands of square meters of new shared public spaces were opened to residents, who quickly came to embrace them. No one ever suggests reintroducing automobile through traffic to Gracia.

“Even though [the Poblenou superblock] only has 1,800 people living there, it’s a very young population, with a lot of young families with little kids,” says Echave. “Once you have a safe space for your kids, you’re happy!”

But it also showed that with a little courage, the process of transforming urban space can be accelerated. It can work better to present the changes as a fait accompli and allow residents to shape rather than reject them. It just requires faith — faith that well-designed public spaces, where they can be created, will be embraced and endure.

## Bogotá – Ciclovía

### [Source](#)

Starting at seven in the morning and until two in the afternoon, vast stretches of the city's principal avenues and highways are turned over to everyone looking to enjoy a bit of fresh air. All kinds of transportation are welcome—bicycles, roller skates, scooters, wheelchairs, skateboards—as long as they are not motor-driven.

A little over 75 miles (120 kilometers) of roadway are turned over to the Sunday Ciclovía and—just to get one last statistic out of the way—a slightly wobbly census shows that as many as one-and-a-half million Bogotanos come out on Sunday to bike or ride. The extremely lazy are free to stroll.

And eat. And dance. And people watch. Along the Séptima Norte stretch of the Ciclovía, which cuts through a narrow park in an upper-class section of the city, flâneurs fill sidewalk cafes, their dogs parked below their chairs, baby strollers alongside. Nearby, a capoeira group rehearses, and a bit further several dozen tai chi students push the air gently away in this direction and that.

The Ciclovía has recreovia, or Fun Stops, along the way. At this particular one a killer salsa band sets up most Sundays, right after a Zumba instructor stops yelling loud enough to be heard three blocks away. For the aspirationally trim, fruit salad and orange juice are available for sale curbside. A cup of sliced green mango can be bought at a little mango-shaped cart across the way.

## Vancouver – Climate Emergency

### [Block gas-powered cars from parts of Vancouver, city planners and engineers recommend](#)

In a major new effort to tackle what it's calling a climate-change emergency, Vancouver is looking at blocking gas-powered cars from certain parts of the city, discouraging builders from dedicating so much space to concrete-intensive basements, and adding 500 electric bikes to the city's bike-share program.

City planners and engineers have recommended those measures and dozens of others as possible ways of meeting an aggressive effort to drastically cut Vancouver's greenhouse-gas emissions by 2030.

"We know there's a lot of concern about climate change. We're trying to signal that we can move on those challenges," said Matt Horne, the city's climate policy manager.

Vancouver is one of several cities in North America and Europe, including London, England, Los Angeles, Berkeley, Victoria, Richmond, B.C., Hamilton and Montreal, to have declared a climate-change emergency. The vote in January on that declaration was the trigger for this week's report on how to accelerate changes.

It also follows the October, 2018, report from the International Panel on Climate Change, saying the world's citizens only have 12 years to keep global warming to a maximum of 1.5 C higher than pre-industrial levels.

City staff acknowledge measures recommended in the report are ambitious and may generate some negative consequences. City councillors vote Wednesday on whether to ask staff to draft a detailed plan by fall 2020 on how to proceed on the recommendations.

"This will push the limits of what staff think can be accomplished in the next decade and staff realize that there will likely be political, financial and 'pace-of-change' challenges to their implementation," the report said.

But, according to councillors and staff, it's worth trying to push the boundaries to show other cities and countries what can be done about climate change.

“We need to report back on the level of difficulty and whether the pace of change is feasible,” city manager Sadhu Johnston said. “We’re not going to single-handedly save the world but we can be a global leader.”

Councillors from the Green and OneCity parties are willing to go hard.

“I do think the public is ready. They see the reports on the urgency and then the lack of action,” OneCity’s Christine Boyle said.

The Greens’ Pete Fry said the plan is very aspirational and “some of the targets are pretty aggressive. I’m not sure we’re going to meet the targets.”

But he, too, thinks many in the public are ready for more dramatic action.

And Non-Partisan Association Councillor Melissa De Genova said that, while all councillors need to be prepared to make tough decisions on climate-change issues, she does wonder if some of the initiatives might not have unintended outcomes, particularly for housing.

She worried that adding more requirements for energy-efficient construction, especially for developers trying to build the low-cost apartments that are in short supply, will drive up their already high cost.

The recommendations are a significant push beyond the Greenest City Action Plan that the former Vision Vancouver government initiated in 2011. That plan, then seen as aggressive, aimed to reduce by 2020 GHG emissions in the city to 5 per cent below 1990 levels. But it has moved only slowly toward its goals, with the most recent report showing only a 7-per-cent reduction in emissions since 2007.

Mr. Horne’s team is recommending that Vancouver endorse aggressive action through “six big moves” that would eliminate 1.2 million tonnes of greenhouse-gas emissions from the city every year.

That would be done largely by making buildings more energy-efficient and discouraging gas-powered vehicles through many different strategies.

Among the suggested targets for 2030: Two-thirds of all trips in the city should be done by means other than private vehicle; half of the kilometres driven in the city should be done with zero-emission vehicles; and that “embodied emissions” in new buildings should be reduced by 40 per cent.

Mr. Horne said the city would use incentives first to try to encourage changes, such as giving a 5-per-cent bonus in building floor space for those who are constructing zero-emission projects.

## Appendix C: Goals and initiatives overview

### Goal 1

Goal #1	Provide better connections within and beyond the Centre City.
Source	Initiative
CCP 4.2.1	ACTION - Explore the feasibility of realigning Bow Trail/14 Street interchange to improve the functional and aesthetic design of the riverfront parks spaces.
CCP 4.2.1.3	Establish stronger physical and visual connections to the Bow riverfront by innovatively designing pedestrian intersections along 10 Street SW and 4, 5 and 6 Avenues SW as well as at 11 Street SW and 6 Avenue SW. Investigate design solutions to provide a more comfortable and safe intersection crossing for pedestrians (e.g. pedestrian safety features and scramble/diagonal crossings, etc.).
CCP 4.2.1.4	Establish stronger cycling connections to the Bow riverfront along 11 Street SW at 5 and 6 Avenue SW and along 8 Street SW and 8 Avenue SW.
CCP 4.2.1.5	Better connect the West End neighbourhood with the Bow riverfront by developing innovative design solutions to minimize the impact of transportation mobility through and surrounding the neighbourhood (e.g. investigate the feasibility of moving major roadways away from riverfront, create an enhanced pedestrian environment along 9 Avenue SW, etc.).
CCP 4.2.1.6	Ensure the appropriate pedestrian movements are maintained and enhanced within Shaw Millennium Park. This should include consideration of a visually creative pedestrian overpass over Bow Trail to the riverfront.
CCP 4.2.1.8	Consider pedestrian and bicycle opportunities over the CPR tracks at 9 Street SW and improve north/south pedestrian and bicycle movement along 14 Street SW.
CCP 4.2.5.11	Consider the technical feasibility and the financial merit of burying the south west LRT line adjacent to Stampede Park south of 25 Avenue.
CCP 4.2.5.9	Maintain the pedestrian linkage on the MacDonald Bridge between East Victoria Crossing and Ramsay community.
CCP 4.2.7.3	Establish a strong pedestrian/bicycle connection for Connaught Centre to the Elbow riverfront via the 13 Avenue Greenway and to the Bow River via 4 and 8 Street SW, 10 Avenue S as well as +30 opportunities over the CPR tracks given the lack of a central neighbourhood connection for pedestrians to link to the north.
CCP 4.2.7.5	Incorporate a transit loop into the public realm plans for 8 Street SW and 17 Avenue SW.
CCP 4.2.8.5	Establish a strong pedestrian/bicycle connection for West Connaught to the Bow riverfront via the 13 Avenue SW Greenway to the west and along enhanced 8, 11 and 14 Street SW pedestrian streetscapes. In addition to the traffic lights, enhance the pedestrian/bicycle crossing at 13 Avenue SW and 14 Street SW to ensure pedestrian/bicycle movements can move with ease and comfort (e.g. Urban Braille, pedestrian-scaled urban and landscape features at the intersection).
CCP 4.2.8.7	Maintain the only at-grade CPR track crossing at 11 Street SW for the important north/south pedestrian/bicycle and vehicular movement system that it provides to move people and goods between the north and south side of the CPR tracks.
CCP 4.2.8.8	Accommodate pedestrian/bicycle movements in future plans for the 14 Street SW/Bow Trail interchange.
CCP 4.2.8.9	Improve the key route of pedestrian/bicycle travel along 10 Avenue SW with consideration of a pedestrian/bicycle connection over 14 Street SW at 10 Avenue SW.
CCP 4.2.9.2	A direct and enhanced pedestrian/bicycle connection at 19 Street SW and 10 Avenue SW



CCP 6.0	ACTION - Develop a Centre City Transportation Strategy to review existing policies and plans in order to support the vision of the Centre City Plan and implement the Green Transportation and Public Realm Hierarchy. Major areas of emphasis shall include:
CCP 6.0	o Review of the role and function of the rights-of-way within the Centre City;
CCP 6.0	o Expansion of the bus and LRT operations;
CCP 6.0	o The movement of goods and service vehicles in and out of the Centre City; and
CCP 6.0	o Exploring alternative modes and optimizing the existing infrastructure.
CCP 6.1.1	Provide for major pedestrian corridors, as shown on Concept 21: Pedestrian Network, that are unobstructed and interconnected, provide urban design interest and that facilitate accessibility among the Districts, neighbourhoods, and major Centre City destinations (e.g. offices, retail core, major cultural, open space facilities, and the river pathway system).
CCP 6.1.1	Continue to develop and maintain the +15 system within the revised +15 policy area as shown on Concept 22: +15 Network.
CCP 6.1.2	Ensure key links and bridges are provided through the development approval process in order to improve the overall continuity of the +15 system (including any + 30, -15 underground, etc.). At the same time, bridge locations shall be balanced with the objective of maintaining key view corridors as identified on Concept 26: Gateways, Landmarks and View Corridors.
CCP 6.1.3	Encourage the sensitive and creative design of new and replacement +15 bridges. Depending on the immediate site context, consideration should be given to when the bridge should be a feature element and provide animation and visual delight to the public realm and when its visual impact should be minimized, so as not to detract from local views and surrounding buildings. To this end, The City should consider the use of design competitions in order to generate ideas and creative contextual solutions.
CCP 6.1.4	Recognize that +15 bridges can negatively impact the pedestrian realm below them in terms of microclimatic conditions. For this reason, the design of bridges should consider ways to mitigate any negative conditions such as lighting, wind mitigation or improvements to the sidewalk level.
CCP 6.1.7	Improve horizontal and vertical linkages to provide better connections between the sidewalk and +15 system.
CCP 7.4.1	Evaluate and minimize the impact of all new +15 bridges on important views.
CCP 7.4.2	Preserve views to the Centre Street Bridge and Calgary Tower by limiting +15 connections across Centre Street at a minimum distance of three blocks from each of these landmark structures/areas.
CCP 7.7.1.1	Mid-block Connections – Encourage open mid-block pedestrian walkways on full block new/redevelopment projects.
CCP 7.7.1.2	Mid-block Connections - Where feasible, north-south mid-block locations are preferred.
DES 62	Design and deliver 17 Ave Extension.
Quick Wins	North-south pedestrian corridor, dedicated space to move people from river to 9 AV, think Las Ramblas
Quick Wins	Plus15 connections from hotels
Quick Wins	More/better connections from grade to Plus15
DES 56	Adjust cycling network through the Beltline to align with the Green Line LRT plans.
DES 57	Improve connections to the cycle track network from the pathway system and neighbouring communities by building or improving on-street bikeways.
Quick Wins	Improve east-west cycling connections. Expand and connect cycle tracks



## Goal 2

Goal #2	Improve public realm safety, comfort and navigation in the Centre City.
Source	Initiative
CCP 4.1.9	Support opportunities in the Downtown that promote additional open space and public realm vitality such as sPARKS.
CCP 4.2.2.	ACTION - During the review of the Downtown Street Network Standards, review the Eau Claire Area Redevelopment policies related to traffic control and calming measures and the Public Improvements Plan in order to ensure a pedestrian-scale environment, the reduction or slowing of traffic, and enhancement of the streetscape while maintaining the same amount of on-street parking.
CCP 5.2.8	Resolve the pathway/transportation conflict points between the Louise Bridge (9 Street SW) and the new West Park (Crowchild Trail SW) by twinning the pathway system from Nat Christie Park to the Pumphouse Theatre and/or other solutions that would minimize congestion for the pedestrian along this area of the riverfront.
CCP 6.1.9	Support tree planting projects on major pedestrian corridors and encourage innovative tree planting techniques to ensure long-term tree health. Coordinate tree planting and utilities through the Centre City Integrated Action Committee.
CCP 7.7.1	ACTION - Review the Downtown Street Network Standards within the context of the expanded Centre City Boundary. This will include the review of the role and function of each right-of-way. The review shall involve an inter-Business Unit team that can address both technical and urban design.
CCP 7.7.1.1	Alleys - Encourage an appropriate design (lighting, access, materials) and operations (cleanliness, maintenance) of all alleys throughout the Centre City, and further ensure that new buildings provide a safe alley environment by providing special design attention to: the building interface with the alley; pedestrian entrances; loading docks and ramps; and garbage access.
CCP 7.7.1.11	Ensure that all linkages have direct access to sunlight, at least on one side of the linkage, to support healthy landscaping at street level.
CCP 7.7.1.13	Discourage the cluttering of the pedestrian zone, especially the main pedestrian paths, with street furniture, commercial signage, etc.
CCP 7.7.1.17	Ensure linkages are well-designed and use high-quality materials and construction standards. This may include: durable materials such as granite and stone to lengthen infrastructure life cycle, permeable paving to minimize storm-water run-off, the use of solar energy to provide power where required (e.g. signage, lighting, etc.), the use of alternative eco-friendly paving materials that can be recycled, repaired or replaced with minimum energy consumption, and sustainable urban forestry practices.
CCP 7.7.1.18	Use the appropriate materials to provide an attractive and safe pedestrian/bicycle infrastructure.
CCP 7.7.1.2	Alleys - Explore opportunities to activate the entrances to alleys by wrapping at-grade uses at the corner and providing parking/servicing further away from the street that intersects with the alley.
CCP 7.7.1.3	Mid-block Connections – Active uses should be considered at-grade on the corners of and along mid-block connections.
CCP 7.7.1.4	Mid-block Connections – The sidewalks shall provide appropriately-scaled and clear path widths and surface treatments.
CCP 7.7.1.5	Mid-block Connections – Interfaces should include landscaped setbacks, storefronts, layered landscaping and full pedestrian access.
CCP 7.7.1.6	Mid-block Connections – Safety shall be ensured through appropriate lighting and natural surveillance.
CCP 7.7.1.7	Provide design solutions for the efficient and safe transfer of people from the vehicular to the pedestrian realm.
CCP 7.7.1.8	Reduce conflicts between the different modes that contribute to the linkage system.

DES 58	Implement a way-finding program to guide Calgarians and visitors to key destinations along bicycle routes.
DES 63	Improve existing on-street bike routes to improve comfort and safety and to align with current best practices.
DES 64	Improve lighting deficiencies at roadway crossings, underpasses, transit stations and high use pathways.
DES 65	Review and improve pedestrian facilities (connectivity and accessibility) within 600m of all current and future Centre City transit station areas.
DES 67	Build mid-block crossings and temporary curb extensions (delineators, paints, flower pots, traffic calming cubs) in high-use areas to promote a safe and enjoyable walking experience.
DES 9	Complete design concepts for Stephen Ave, 2 ST SW, Barclay Mall.
Quick Wins	Improved enforcement of jaywalks, speeders, etc.
Quick Wins	Fund the green triangle, give this plan teeth
Quick Wins	Unsafe and sparse use of parkades after hours - centralized parkade, reduced rate on off-peak hours for some lots
Quick Wins	Reduce curb cuts along pedestrian access. Relocate vehicular access/egress to lanes and lower order roads
Quick Wins	1.5m minimum width sidewalk - currently too narrow to pass with stroller
Quick Wins	Proper, well-lit crosswalks
Quick Wins	Ensure well-maintained sidewalks in less public higher-crime areas. Prioritize these sidewalks in asset management plans
Quick Wins	Create opportunity for business in pedestrian zone
Quick Wins	Improve accessibility to downtown buildings and LRT stations
Quick Wins	Limit or eliminate right turns on red to keep pedestrians with right of way safe.
Quick Wins	"Zero Dead Goal" target of no pedestrian fatalities in CC due to collisions
Quick Wins	Plus15s open 24/7, indoor events (especially in Winter). Some cities have underground, let's build a community above
Quick Wins	More education re: bike signals (for drivers especially)
Quick Wins	Better define pedestrian/biking areas on Stephen Ave to reduce conflicts.
Quick Wins	Bike paths vs Sidewalks in winter. Why are bike paths cleared first?

## Goal 3

Goal #3	Support the growing demand for walking, cycling and transit in the Centre City.
Source	Initiative
CCP 4.1.5	Support a high priority on transit service for the Downtown.
CCP 4.2.2.9	Pursue the possibility of a bike station facility in the vicinity of the Eau Claire Plaza.
CCP 4.2.3.11	Consider the potential for sPARKS and/or a woonerf along Macleod Trail SE and 1 Street SE between Riverfront Avenue and 4 Avenue SE.
CCP 4.2.3.5	Integrate all development along 2 Street SW with the future LRT station and transit and pedestrian/bicycle movements along 2 Street SW. See Concept 23: Bicycle Network and Concept 24: Transit Network.
CCP 5.1.12	Explore opportunities for incorporating bicycle facilities in Centre City parks.
CCP 5.1.9	Establish and develop sPARKS as flexible and eco-friendly places/connections that complement neighbourhood centre activities and create places for localized civic celebrations and events.
CCP 7.7.1.3	Alleys - Where possible, identify alleys, sections of alleys or blocks of alleys that could be developed to include public art, active uses, etc. such as the 7 Avenue gALLERy Project.
DES 53	Improve access to and mobility within the Centre City through investments in transit infrastructure and higher order transit services, including the RouteAhead BRT program and introducing 4-car train service on the Blue Line.
DES 61	Build and deliver cycle track projects in the East Village and Victoria Park to enhance connectivity and safety.
DES 66	Construct missing sidewalk links in the Centre City. Ensure sidewalks have an adequate width, include ramps at crossings and Urban Braille.
Quick Wins	Match funding to the mode share e.g. 2% of the budget
Quick Wins	Require "single occupant car" passes instead of transit passes
Quick Wins	Encourage removal/redevelopment of surface parking lots.
Quick Wins	Improve LRT stations downtown as a hub - good entrance features - transit-oriented experience - increased activities
Quick Wins	More pedestrian-only areas
Quick Wins	No traffic on Stephen Avenue (even after 6:00 pm)
Quick Wins	Move permanent and improved cycle track infrastructure - raised and separated tracks
Quick Wins	Prioritize bikes
Quick Wins	Do not prioritize bikes
Quick Wins	More consistency with cycling structure -> on the road? On the sidewalk?
Quick Wins	Add more bike parking locations in the public realm, including bike lockers and bike racks that take up an on-street parking stall (e.g. Kelowna)
Quick Wins	Ensure that roads are designed so that cyclists feel the need to bike on the sidewalk.
Quick Wins	Bikes on trains is still a hassle - designated spaces - roof racks on LRT for bikes
Quick Wins	One side of Reconciliation Bridge for pedestrians and the other for bikes?

Quick Wins	Build cycle tracks, wider sidewalks. Fund a vision zero policy. Make driving inconvenient.
Quick Wins	Better transit options along 17 Avenue to help avoid vehicle use; tram system as in European cities
Best Practices	Identify candidate locations for “superblocks” where internal roads can be prioritized for non-automobile traffic.
Best Practices	Identify candidate roads that can be closed or limited on weekends to facilitate recreational cycling.

## Goal 4

Goal #4	Provide affordable and accessible mobility options that serve the diverse population in the Centre City
Source	Initiative
DES 51	Improve safety, parking, loading, transit and traffic along the cycle track network.
DES 52	Support mobility within centre City through the LRT Free Fare Zone on 7 Av.
DES 60	Help Centre City communities apply and deliver micro-grant projects that improve walkability in partnership with the Federation of Calgary Communities.
Quick Wins	Accommodate other modes of transport (i.e. Uber) for people who are not able to walk, bike or take transit.
Quick Wins	Change the definition of pedestrian to include people on wheels, or with strollers, wheelchairs, mobility devices.
Quick Wins	Reduce tax rate
Quick Wins	Don't "villainize" cars - change the mindset, it's part of a bigger system.
Quick Wins	Multi-modal Access Plan (Master Plan)
Quick Wins	North-south access for cyclists compatible with pedestrians
Quick Wins	Consider bike rental programs in Centre City, invest in expensive bike share
Quick Wins	Free / subsidized transit in inner city; bigger free fare zone (incl Sunnyside / Zoo / Stampede)
Quick Wins	Improve / expand parking facilities at LRT stations / surrounding neighbourhoods
Quick Wins	Run trains at night / overnight and feeder routes

## Goal 5

Goal #5	Support economic development by addressing the travel needs of businesses, employees, and visitors.
Source	Initiative
CCP 4.1.10	Ensure an adequate supply of short-stay parking.
CCP 7.7.1.9	Where technically feasible, this plan encourages the conversion of one-way streets to two-way to stimulate commercial and pedestrian activity.
DES 13	Collaborate with Tourism Calgary and other stakeholders to attract and leverage world-class events and festivals.
DES 22	Work with festivals and entertainment groups to encourage Transit as a preferred method of access.
DES 23	Promote and/or market festivals and events through Transit (e.g. musicians on board, station activation, cross promotion).
DES 54	Collaborate with event organizers to develop a multiuse pass to generate revenue for Calgary Transit and provide convenient transportation service and access to activities throughout the city.
DES 55	Create a cross-corporate working group to support CED and the Mayor's Office in attracting companies to specific sites in Calgary's downtown by developing transportation improvement plans, particularly to create active mode connections between those sites and nearby amenities. Consider partially funding those improvements through short term allocation of new revenue.
Quick Wins	Balance for operating businesses - loading zones - couriers
Strategic Foresight	Work with Calgary Metropolitan Region to undertake a regional economic forecast that analyzes how employment locations and concentrations are expected to shift over the next 20 years.

## Goal 6

Goal #6	Prepare for the future of transportation
Source	Initiative
Quick Wins	On-street electric vehicle charging to support condo tower tenants
Quick Wins	Shared electric scooters like in San Diego (Bird, Lime)
Quick Wins	Dedicated small autonomous buses: like ELA pilot between Zoo and Telus Spark
Strategic Foresight	Autonomous vehicles may require upgrades to signage, road markings, lay-bys and other pieces of infrastructure. Designate priority corridors for potential future upgrades.
Strategic Foresight	Obtain travel data for Transportation Network Companies (TNCs) to understand the impacts of increased short-stay and delivery parking demand.



## Appendix D: Questions

During review of all the inputs, several questions arose that need to be addressed prior to finalizing the draft Plan. These questions are parked in this section.

1. What's the status of the Centre City Mobility Program (from Investing in Mobility)?
  - a. What remains to be implemented?
  - b. Has the Program been completely replaced by mode-focused strategies?
  - c. What about the Centre City Mobility Plan?
2. Transportation planning now focuses on different modes – how are we exploring multi-modality?
3. Updated forecasts of transportation demand into/out of the Centre City
4. How are new modes of transportation expected to affect demand patterns?
  - a. What are the implications for physical infrastructure?
  - b. What kind of soft improvements can be made to prepare for/accommodate these changes?
  - c. Results of pilot program for transportation network companies
5. Better public spaces
  - a. Develop a strategy for focusing on important multi-modal locations and ensuring they are high-quality and contribute to public realm and a broader sense of civic pride
  - b. Prototype and pilot a series of tactical improvements at select locations
  - c. Identification of opportunities for greening the public realm
6. Should 4<sup>th</sup> and 6<sup>th</sup> Avenues still be considered both “pedestrian corridors” and “arterials” in the Centre City Mobility Plan?
7. Is the full cycle track part of the Pathways & Bikeways Plan?
8. Are there conflicting priorities between different Transportation divisions:
  - a. With respect to the Centre City mobility network?
  - b. With respect to road beautification?
  - c. With respect to use of public right-of-way?
9. What's the status of the project to limit residential speeds?
10. How will the Downtown Strategy's pillar of “connectivity” affect the Centre City Plan?