# Sidewalks & Pathways

Led by: Director of Mobility

## **Service Description**

Mobility designs and maintains Calgary's network of sidewalks and pathways. This pathway system is one of the most extensive metropolitan pathway networks in North America. With traffic control and safety, sweeping and snow control, Mobility supports active travel modes and wheeling for all ages and abilities. Sidewalks, pathways, trails and protected on-street bikeways connect communities and provide Calgarians with safe and accessible year-round opportunities to walk, cycle, run, ride, and use mobility devices. We focus on inclusive, equitable, safe, accessible and reliable sidewalks and pathways to ensure that walking and wheeling are viable and attractive options for all Calgarians.

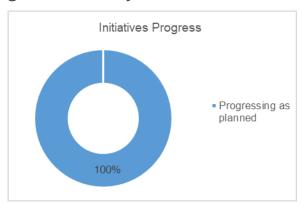
## **Service Updates**

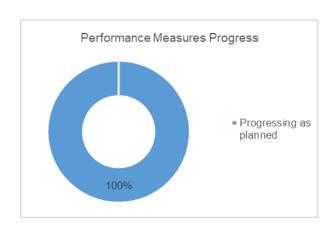
#### Key service results

To promote year-round walking and wheeling, improved snow and ice control clearing occurred on pathways, at schools and transit bus pads. Regular meetings with Bike Calgary identified over 40 locations for system improvements. There was also participation in the Alberta Motor Association School Patrol Program and year-end celebrations with over 7,000 patrollers.

The new Council-approved Winter Maintenance Policy provided Calgarians with benefits that include enhanced sidewalk snow clearing in the downtown core, and more accessible pathways, wheelchair ramps and laneway sidewalk crossings. Public safety and accessibility have been improved through wheelchair ramp installations and tactile treatment. Our use of green cement also demonstrates our commitment to the environment with a mid-year reduction of 18 tons of carbon. Other key results include installing missing sidewalk and pathway links, implementing Mobility Safety action plans, Active & Safe Route to School initiatives, pedestrian bridge rehabilitation, bollard removals and permits for 77 patios. We also installed Rectangular Rapid Flashing Beacons to support the Always Available for All Ages and Abilities (5A) network.

#### **Progress summary**





## Risk(s) impacting the progress

Sidewalks & Pathways Asset Deterioration
Insufficient Sidewalks & Pathways Capital Funding
Risk of Missing Pathways Links and an Inadequate Trail Strategy



## **Measuring Our Performance**

Legend



Expected Future Performance

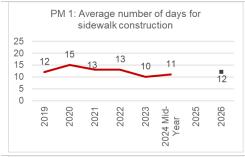




#### **Performance Measures**

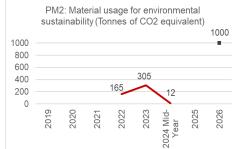
#### Story behind the numbers

**Status** 



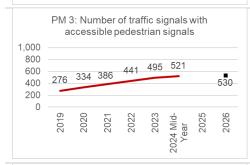
The average number of days for sidewalk construction remains stable. While weather and other factors can impact schedules, we continually strive to minimize these effects and maintain a high level of service. Well-maintained sidewalks enhance safety and improve accessibility. Sidewalk repairs significantly reduce the risk of tripping and falling, which helps prevent injuries and promotes safer pedestrian mobility. Our commitment to timely and efficient repair ensures minimal disruption, keeping sidewalk infrastructure readily available to Calgarians.





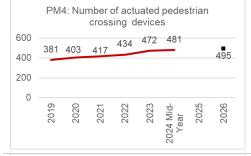
With the winter season over, concrete pouring for major projects began in May. The reported quantity of General Use Lime (GUL) cement usage is 500 cubic meters, resulting in a reduction of approximately 18 tonnes of carbon to the end of June. Additional concrete work utilizing GUL cement will further increase the tonnes of CO2 equivalent and reduce our carbon footprint.





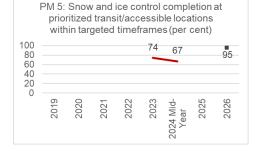
Accessibility is an essential component of providing a mobility network that can be used by people of all ages and abilities. Traffic signals with actuated pedestrian signals provide an equitable service to vehicular, wheeling, and pedestrian traffic across the city. By continuously increasing the number of accessible pedestrian signals on pathways, sidewalks, crosswalks, and other parts of the network, we improve infrastructure accessibility and inclusivity for all Calgarians.





Crossing devices that are activated by pedestrians support safe movement across road lanes. These devices include overhead flashers (252), Rectangular Rapid Flashing Beacons (210), and pedestrian signals (20). The increase in accessible pedestrian crossing devices supports multiple modes of mobility and enhances safety across the transportation network.





Despite challenges such as supply chain issues and contractor staff availability (work not completed by city forces), we remain committed to improving our service on pedestrian infrastructure. A new contract award is anticipated for the upcoming winter season, which will enhance reliability and consistency. We have consistently achieved the 24-hour clearing timeframe, and the average time to complete clearing continues to trend favourably, averaging approximately 25 hours. Extreme snow events, including the record snowfall in March 2024, impacted this measure, our efforts demonstrate resilience and efficiency in maintaining timely service.

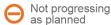




PROGRESS STATUS









FUNDING TYPE



Capital

**Funding Type:** 



Operating

Initiative 1

Impact Area: City-wide

\$C

Enhance support for walking and wheeling as preferred mobility choices to and beyond schools, shopping, parks, recreational and other locations by prioritizing Always Available for All Ages and Abilities (5A) routes, enabling coordinated lifecycle replacements with adjacent roadway assets and other engineering measures that connect or extend routes, and address missing sidewalk or pathway links.

UPDATE



In alignment with priorities for the Always Available for All Ages and Abilities (5A) network, ongoing project activities include establishing safe routes to schools, pavement rehabilitation planning, and installing traffic control devices to improve safety at high-risk pedestrian crossing locations. Site reviews are underway to complete more safety enhancements for pedestrians at crossings and intersections. 5A network spending on Rectangular Rapid Flashing Beacons to the end of June 2024 was \$381 thousand.

Initiative 2

Impact Area: City-wide

**Funding Type:** 





Provide innovative and environmentally-friendly approaches to sidewalk design and construction, and reduce carbon dioxide emissions through the exploration and implementation of carbon upcycling practices, using waste material such as fly ash in concrete sidewalks and by adopting the usage of glass materials in new use categories such as concrete construction.

UPDATE



The Mobility Business Unit will continue to use recycled asphalt in the production of new hot mix asphalt. In addition, higher Recycled Asphalt Pavement (RAP) mixes (40 per cent RAP mixes) will be piloted this year. Less new asphalt is required as 40 per cent of the asphalt removed from the pathway is used in the new asphalt applied to the pathway. Using General Use Lime cement has resulted in a carbon reduction of approximately 18 tonnes to the end of June 2024.

Initiative 3

Impact Area: City-wide

**Funding Type:** 



Improve the availability and use of sidewalks and pathways infrastructure to Calgarians by enhancing coordination, engagement, collaboration, feedback and communication activities with workgroups, supporting partners and impacted communities.

UPDATE



Continued collaboration between internal teams, vendors and contractors results in safe and accessible sidewalk and pathways infrastructure. Improved communication across teams as well as procurement planning are minimizing sidewalk and pathway construction delays, and helping to ensure that we can keep the average number of days for sidewalks construction in the 11-day range or lower for 2024.

Initiative 4

Impact Area: City-wide **Funding Type:** 





Improve the safety, accessibility and attractiveness of the pedestrian realm through continuous improvement, design, maintenance, innovation, benchmarking, and implementation of related programs and technology such as piloting the use of heave phenomena control devices that control the expansion and contraction of concrete.

UPDATE



Wheelchair ramp construction will continue throughout 2024 as part of our ongoing programs. We will also maintain the use of fiber-reinforced concrete for new sidewalks and repairs to enhance durability. This year, we are piloting steel Tactile Warning Surface Indicators (TWSIs) as surface-applied treatments to improve curb extensions, enhance sight distances, and reduce parking impacts.

Initiative 5

Impact Area: City-wide

**Funding Type:** 





Strengthen the culture of safety throughout the sidewalks and pathways network by establishing safety protocols and projects through the Safer Mobility Plan, and exploring opportunities for more social media-based campaigns and short animated clips about safe pedestrian behavior that would engage various age groups and focus on the shared responsibility of safety for all sidewalk, pathway and roadway users.					
UPDATE	Monthly mobility safety updates on Calgary.ca continue to enhance public awareness of our safety initiatives. In March, an extensive distracted driving campaign was launched, and will continue to run periodically. Our Travel Safe Student Video contest successfully engaged students from grades 6-12, and plans are already underway for 2025. Our annual back to school safety campaign will build on previous messaging and further promote safe behaviours around schools.				
		Impact Area: City-wide	Funding Type:		
Initiative 6		Oity-wide	\$0		
Enhance maintenance and functional performance through the use of collected data, analysis, reporting, forecasting, risk-based approaches and innovative equipment exploration such as the use of Segway-style paint machines for painting longer stretches or tight areas, and the use of durable marking products that make crosswalks and high pedestrian traffic areas visible even after winter and increase safety for pedestrians.					
UPDATE	Performance management reviews and improvements set clear goals for measuring success. Service teams were involved in risk reviews, and risk assessment engagements provided opportunities to collaborate and minimize and/or eliminate risk. The Service is piloting Adaptive Traffic Signal Control system technology along Macleod Trail to improve traffic flows. As well as Crosswalk paint research partnerships with universities also enhanced sidewalk safety.				
		Impact Area:	Funding Type:		
Initiative 7		City-wide	<b>9</b>		
Provide Calgarians with stronger sidewalks that require less maintenance and have an extended lifespan through updated sidewalk designs and specifications.					
UPDATE	New thicker sidewalk specifications are now being designed and implemented. Calgary sidewalks are on the thinnest side of sidewalks in Canadian municipalities resulting in higher repair and maintenance costs as compared to other municipalities. Changing the specifications from 100mm to 125mm will result in lower future replacement and maintenance costs.				
		Impact Area:	Funding Type:		
Initiative 8		City-wide	\$0		
Continually enhance responses to community traffic, walking and biking concerns or issues, through attention to 3-1-1 trends and innovative techniques to delivery efficient and effective service improvement.					
UPDATE	Configuration and information updates have been made to Mobility service requests from Calgarians, ensuring more effective and efficient response delivery. Additionally, we have reviewed and updated the content of email notifications to ensure they provide relevant and clear information for all impacted service requests. For the first 6 months service requests have increased from 33,730 in 2022 to 44,615 in 2023 and 46,805 in 2024. Service requests relating to biking, driving, and walking were 3,124 for the first 6 months of 2024.				
		Impact Area:	Funding Type:		
Initiative 9		City-wide	<b>9 9</b>		
Enhance snow and ice control on sidewalks and pathways by continuing to explore cost-effective methods and innovative technology-based solutions for removing snow and ice.					
UPDATE	In 2024, Council approved the new Winter Maintenance Policy which will significantly advance service levels for all modes of travel. A number of the trials undertaken in 2023 will be embedded in operational practices such as clearing more engineered walkways leading to schools, clearing barriers of snow at high volume crossings and addressing more prioritized laneway crossings.				
		Impact Area:	Funding Type:		
Initiative 10		City-wide	<b>99 99</b>		
Advance additional carbon dioxide emission reduction, incorporating green technologies and materials for environmental sustainability, through the use of materials such as Green Concrete which can store carbon dioxide and by replacing					

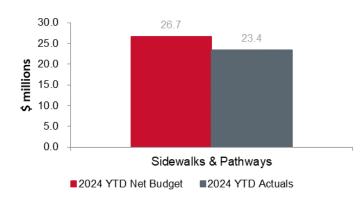
cement material with limestone which reduces cement content by five percent.

UPDATE	This year, General Use Lime (GUL)/low carbon concrete will continue to be used in all major projects. In addition, enhanced flash/carbon upcycling technologies will be adopted, subject to applicable procurement strategies. Using General Use Lime cement has resulted in a carbon reduction of approximately 18 tonnes to the end of June 2024.				
Initiative 1	1	Impact Area: City-wide	Funding Type:		
Adopt permanent public realm enhancements by continuing to review, explore and investigate temporary options for transition towards permanent public realm structures where applicable or required.					
UPDATE	Construction on wheelchair ramps and missing links has recently begun, with several projects beginning construction such as the Lake Ontario Drive sidewalk connection.				
Initiative 12		Impact Area: City-wide	Funding Type:		
Provide service quality and responsiveness associated with the sidewalks and pathways service by continually monitoring and reviewing overall network usage and fee schedules.					
UPDATE	573 data collection studies for various modes of transportation including walking, cycling, driving, and wheeling have been completed in the first 6 months of 2024. These studies are critical to inform network planning and forecasting. Customer experience and material costs are also tracked and analyzed to improve responsiveness and service delivery.				



## **Service Updates on Financial Performance**

# Net Operating Budget and Actuals as of June 30, 2024

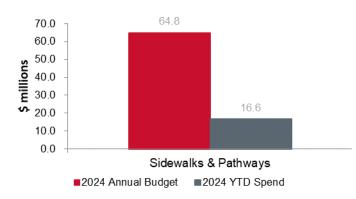


# Operating Budget Updates - 2024 YTD net operating budget vs actuals:

Sidewalks and Pathways Service has a favourable operating variance of \$3.3 million mainly due to favourable traffic permit revenue, recoveries to the signal capital program, budget timing difference of the contracted portion of sidewalk snow clearing, and lower administrative spending overall.

Offsetting this was an active winter season where year-to-date Calgary had 159 cm of snow versus 61 cm same time last year, driving up spending in material and equipment usage. There was increased spending in concrete sidewalk repairs. The streetlighting variance was also unfavourable primarily due to increased spending as more contractor crews were deployed to reduce the number of deficient luminaires, reducing response time from 65 days to 7 days, with less than 500 outages. As of June 2024, the Sidewalks and Pathways Service, through public engagement and Council direction, updated the former "Snow and Ice Control Policy" to the new "Winter Maintenance Policy", which enables faster 24-hour snow clearing response on Priority 2 community and transit routes. The new Winter Maintenance Policy improves safety, increases transit reliability, improves public satisfaction, includes 750 km of pathways, priority walking and wheeling lanes, and all City-maintained pedestrian infrastructure and sidewalks next to City-owned property. The enhanced services, once the upcoming winter starts, will spend against the remaining 2024 budget. The June year-to-date 159 cm of snowfall was unusually higher than the 10-year average of 147 cm full year. The possibility of severe storm events in the latter half of the year may lead to financial pressures against the current year's budget.

# Capital Budget and Spend as of June 30, 2024



# Capital Budget Updates - 2024 total capital budget vs 2024 YTD spend:

The Sidewalks & Pathways service's capital spend rate was 25.6 per cent as of June 30, 2024. Significant pedestrian bridge replacement and upgrade work has occurred at the 16 Avenue and 29 Street overpass and is on track for substantial completion by end of the year. Main Streets program work regarding the construction of equitable and vibrant streets is ongoing in Marda Loop and Bridgeland, with the development of a master plan for Sunalta. Eau Claire Plaza redevelopment work occurred as part of the new redesign to allow for more flexible year-round uses and improved accessibility. Public realm investments include work for Riley Park and Sandy Beach improvements. Progress regarding the Always Available for All Ages & Abilities (5A) network includes working on the removal of missing sidewalk and pathway links, installation of rectangular rapid flashing beacons, and other mobility improvements. The Accessible Improvements program installed new sidewalks and pathways. After contractor-related delays, the Concrete Rehabilitation program is ramping up work during the summer to replace concrete assets, ensure an accessible, pedestrian friendly environment, and strive for environmental sustainability using green or reduced carbon footprint construction materials.