

# Streets

Led by: Director of Mobility

## Service Description

Our streets connect people and places throughout Calgary. We drive, walk, cycle and ride every day to and from work or school, for social or recreational activities, and to move goods and services. Streets provide critical access for emergency services and rights-of-way for all underground and overhead utilities. We provide space for on-street parking which supports businesses and residential users. We also support The City's efforts to reduce greenhouse gas emissions.

Streets are Calgary's most abundant public space, and we support nearly every service The City of Calgary provides to Calgarians.

## Service Updates

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### Highlights

Keeping Calgary's streets clean and free of debris, the Streets service successfully completed the Spring Clean-Up Program with 99 per cent on-time completion. Other accomplishments included an early Seasonal Patio Program kickoff, pavement rehabilitation planning and contracts, streetlight pole replacements advancing ahead of schedule and addressing streetlight outages.

The service also implemented an artificial intelligence adaptive signal system on Macleod Trail between 39th Avenue and Glenmore Trail with its initial traffic data collection and signal pattern modeling phase currently in progress.

Pothole repairs were also a major focus of the service. Other highlights include noise barrier retrofit planning, bridge rehabilitation, initial work to update the Truck Route Bylaw, slope stabilization, major mobility projects such as the Banff Trail Area Improvements, initiation of operational and safety improvements such as the Macleod Trail Median Barrier and a downtown flood barrier.

### Challenges

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Challenges faced include supply chain issues affecting equipment availability for the Spring Clean-Up Program, procurement delays, escalating construction costs, inflation, insufficient funding, contractor availability such as the withdrawal of Enmax from streetlight maintenance, staff retirements and turnover and industry labour shortage for field personnel.

Prolonged freeze and thaw cycles during last winter season also resulted in clogged storm drains and an increase in pothole repairs. Over 9,700 potholes have been repaired in 2023, which is a 118 per cent pothole repair request increase in comparison to the related timeframe in 2022. More frequent and severe weather events resulted in flooding and road blockages. Meeting the increasing service expectations of Calgarians is an emerging challenge.



# Measuring Our Performance

## Legend

— Actuals

■ Expected Future Performance

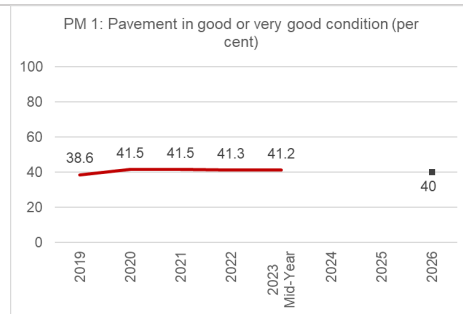
➡ Progressing as planned

⬅ Not progressing as planned

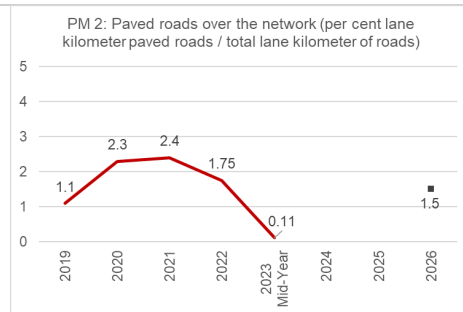
## Performance Measures

## Story behind the numbers

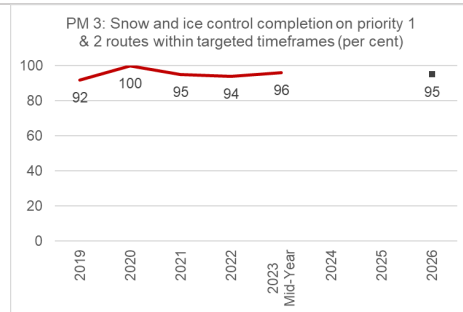
## Status



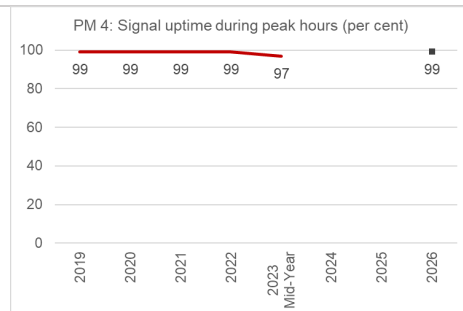
Pavement condition is maintained or improved through investments and maintenance costs can increase significantly if maintenance treatments and timelines are missed or deferred. Hence, lifecycle infrastructure investments to maintain or enhance pavement conditions are critical. For mid-year 2023, the percentage of pavement in good or very good condition remains steady from the previous three years at 41.2 per cent.



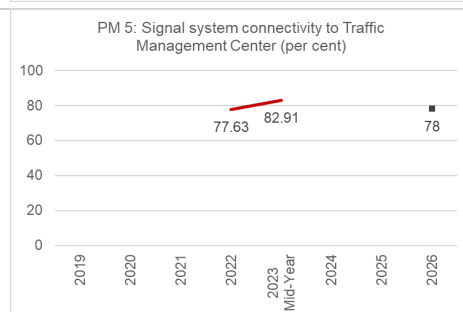
The Paving Program for The City of Calgary runs from June through October each year, depending on weather constraints. Hence, this mid-year value depicts the early stages or start of the 2023 paving season. Major paving and community paving projects have been identified. There are 16,958 total current lane kilometers in Calgary and 307 lane kilometers are planned for paving this year. The yearly percentage of paved roads over the network depicts the percentage of lane kilometers roads paved yearly in the city compared to the total lane kilometers of roads in the city.



The City's Priority Snow Plan provides a schedule for clearing snow from sidewalks, roads, and other public spaces. Priority 1 routes include the busiest major roadways, downtown roads, and other spaces, while Priority 2 routes include community roads, designated emergency locations, intersections, etc. Although major events such as the significant multi-day snowfall experienced in February, with over 25 cms of snow, impact completion, the overall percentage of completion remains significantly high (96 per cent) for snow and ice control within 18 hours (Priority 1) and within 36 hours (Priority 2).



Traffic signals are required for safe and effective traffic management through road network intersections. When signals are functioning properly, safe interaction of various users of the road network space is enhanced. This traffic signal uptime performance measure reflects signal connectivity to the traffic control system. In the first half of 2023, information technology downtime, flash flooding and storm damage to equipment impacted signal uptimes. These issues have been resolved. Overall, traffic signal uptimes remain high.



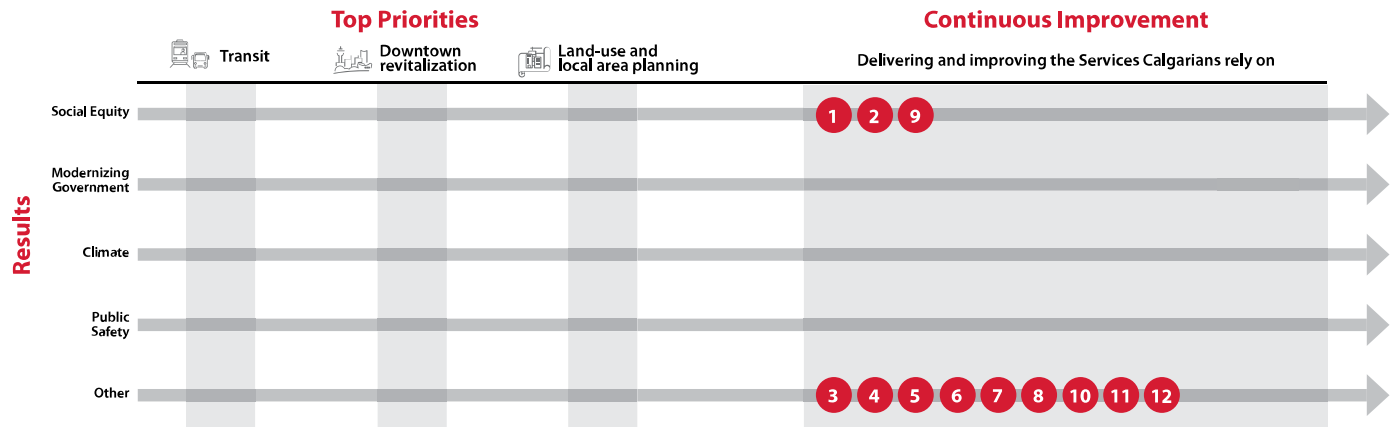
This performance measure tracks the percentage of traffic signal connectivity to the Mobility Operations Centre for traffic monitoring and incident management. Calgary currently has over 1,200 traffic signals. Communication capabilities are being added to traffic signals that currently do not have any communication mechanism and, as new traffic signals are built, communication capabilities are also simultaneously added to the new signals to ensure a synchronized increase to the percentage of signals connected to the Mobility Operations Center.





## Progress on Service Delivery

### Alignment with Council Refined Priorities and Result Areas



#### Legend



Completed



Progressing as planned







Not progressing as planned



Initiative number

Initiative	Initiative Update	Status
1 Enhance safety and accessibility of the mobility network by promoting safety-related processes, procedures and communication, and by installing ramps and related infrastructure.	Through increasing signal system connectivity to the Mobility Operations Centre and implementing accessibility improvements such as wheelchair ramps (486 installed in 2023), the Safer Mobility Plan continues to focus on safety of the public across the mobility network.	
2 Maintain safe workspaces while delivering services to Calgarians by establishing employee safety enhancements to support staff with safety meetings, and techniques and guidelines for incorporating safety-based awareness and thinking in day-to-day tasks and activities.	The Mobility Safety Implementation Team and Joint Worksite Health & Safety Committee have been established, with revised terms of reference. Monthly safety bulletins have been published to the operational areas, a safety stand-downs was implemented with another planned for July, examples of safety learnings posted for staff to learn from, and monthly reporting from SDMS provides information on the status of the safety management system in support employee safety.	
3 Promote actions that encourage transportation mode changes such as from driving to walking or the use of transit and vice-versa through participation in transportation mode projects, activities and collaborations with other workgroups or partners.	Understanding travel mode and mobility network patterns through methods such as surveys and data analysis promotes understanding and the capability of continually improving the network.  Data collection and analysis on pedestrian, cycling and vehicle usage on the transportation network is ongoing. The downtown cordon counts have been completed, the NE screenline count is planned for the fall, cycling counts are planned for the summer city-wide, the travel log survey data is currently being analyzed to determine travel behaviours of Calgarians, with the final analysis to be completed in Q4.	
4 Expand employee training, awareness and learning opportunities regarding respect in the workplace, diversity and inclusion, and code of conduct through encouraged participation in City-specific learning and development programs, team communications, internal courses and employee-centered discussions.	Employees are a critical resource for the City of Calgary and Mobility is focused on ensuring that the right environment is continually developed and encouraged.  All corporate training, including Code of Conduct and Respectful Workplace, has been completed within corporate timelines. Diversity and inclusion information is regularly included in the monthly safety bulletins. In March, the Mobility Management Team was provided anti-racism resources that are to be used for discussions in future staff meetings.	

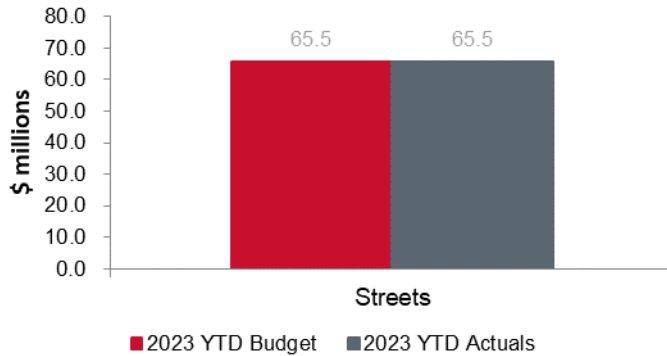
Initiative	Initiative Update	Status
5 Enable opportunities for positive economic and environmental impacts by determining strategies and mechanisms to reduce travel hours within specified or peak travel periods.	Travel studies support understanding of travel behaviours. Transportation monitoring and data analytics teams connect with other workgroups to gather information regarding transportation studies. Also, the Adaptive Signal Control System on Macleod Trail between 36 Avenue and Glenmore Trail is in the process of initial modelling and adaptive control capabilities are expected to be enabled in August with approximately ten per cent improvement in travel time throughout the day following activation of adaptive control.	
6 Minimize construction costs and interruptions to the public or to traffic flows through enhanced or continued engagement, collaboration and coordination with internal and external groups.	Construction costs have continued to be a challenge in 2023 and project teams continue to engage with internal and external partners to reduce costs and optimize construction timeframes, while also seeking to minimize traffic disruptions and closures. Communication to residents regarding City Forces delivered pavement rehabilitation projects has been enhanced through improved community signage, modernized pamphlets, and further information on websites.	
7 Improve work efficiency, lower costs, generate savings and maintain or improve levels of service and overall service delivery by researching, exploring and implementing technologies that provide efficiencies and solutions.	Continuous improvement elements to further enhance service delivery include improving work efficiency, lowering costs, generating savings and maintaining or improving service levels.  Drone technology was used by the Spyhill Crusher Plant to measure material piles, and this saved \$30,000 in vendor fees and reduced time for the activity by weeks. Research is also in progress for alternative energy solutions for the Spyhill Plant. Other efficiencies include consideration for workforce planning implementation for additional workgroups and enhancing reporting analytics capabilities.	
8 Provide longer lasting roadway results and less invasive roadway repair activities by utilizing efficient roadway-associated repair and rehabilitation methods such as narrow trenching for utility work and durable pothole repair patches.	Roadway maintenance benefits from long-lasting and durable materials and continually improving techniques for efficient roadway repair enhances road user experience.  Alternative materials for pothole repairs were used with the objective of providing longer lasting results and reducing repair costs. Also, joint heating and infra-red heater specifications have been updated to improve roadway compaction for long-lasting pavements and maintenance cost reduction. Contracts involving heat joints have been awarded and locations include Metis Tr N.E., 68 St N.E., 52 St S.E., Shaganappi TR S.W. and 14 St S.W..	
9 Maximize the useful life of roadway assets by continually monitoring and managing asset lifecycles, planning for timely maintenance, making the best use of resources, proactively procuring materials and implementing efficient asset rehabilitation and replacement activities.	Inspections and condition analysis are used to update asset data for enhanced asset maintenance planning and decision making. Asset management and lifecycle planning is occurring for various assets and capital upgrades for the Asphalt Plant were also completed.	
10 Eliminate or minimize procurement-related disruptions by continuing to work with Supply Management and other internal teams/resources, and external groups and partners including contractors, vendors and consultants to conduct procurement in a timely manner.	To properly manage budgets and optimize expenditures, there is continued focus on improving procurement strategies, especially with post-pandemic supply delays, increased construction costs, inflation and other price increases.  Workgroups are focused on determining and implementing strategies, such as making purchases when prices are lower, to mitigate procurement challenges like high prices during peak seasons. An example includes purchasing winter materials during the summer season. Collaboration is also ongoing with City teams for a new centralized vehicle and equipment coordination model.	
11 Enable appropriate adjustments as a result of emerging trends regarding the use of streets by engaging and working with various groups to better understand and incorporate transportation data and street-use feedback.	Increasing and improving understanding of transportation data through surveys and travel mode research enhances adaptability to emerging trends and the ability to provide valuable service.  Data collection and analysis of pedestrian travel, cycling and vehicle usage on the transportation network is occurring, along with travel log surveys, to determine citizen travel behaviors. Downtown cordon data has been completed. Bicycle counters are also being replaced and calibrated at regular intervals to provide better data on cycling activity, particularly in the city center.	

Initiative	Initiative Update	Status
12 Eliminate work duplications and maximize efficiencies with other workgroups by exploring other channels of efficiencies related to working with colleagues and partners, to develop strategies and achieve common goals.	Initiatives to eliminate work duplication include integrated vehicle and equipment procurement, building new processes with the City's Fleet and Supply Management teams and improved pothole repair request processing to eliminate multiple requests for the same pothole repair.	



## Service Updates on Financial Performance

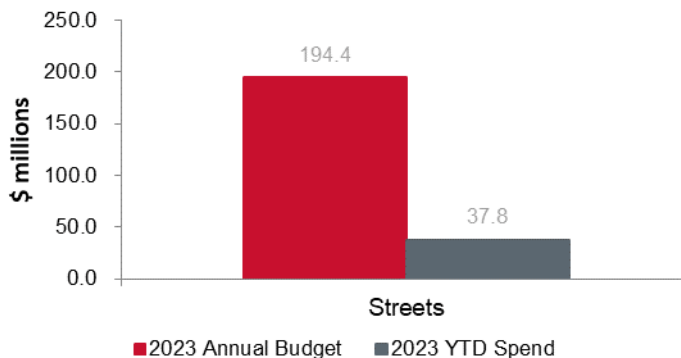
### Net Operating Budget and Actuals as of June 30, 2023



### Operating Budget Updates - 2023 YTD net operating budget vs actuals:

The Streets service's operating financial spending is aligned with budget. Favourable revenue from traffic permits and plant sales was offset by lower excavation permit revenue and enforcement tickets related to the Spring Clean-Up Program. Unfavourable recoveries in excavation and plants were offset by favourable snow and ice control recoveries from transit bus pads and train stations. Winter operational expenses were below budget mainly due to mild weather conditions. Lower spending in the service's operations was offset by unfavourable electricity charges, which increased streetlight utility spending.

### Capital Budget and Spend as of June 30, 2023



### Capital Budget Updates - 2023 total capital budget vs 2023 YTD spend:

The Street service's capital spend rate was 19.4 per cent as of June 30, 2023. As the summer construction season commences, the capital spend rate is expected to increase significantly. Ongoing investments and deliverables include Stoney Trail improvements at 11 Street N.E. Interchange and 80 Ave Flyover, 144 Ave N.W. Improvements at West Nose Creek, streetlight upgrades, major bridge rehabilitation and repairs, as well as traffic signal replacements. In accordance with the Calgary Safer Mobility Plan, current safety improvements include 20 permanent curb extension projects, seven smart right turns, left turn improvements, and ongoing signal projects. Final work for the Banff Trail Stadium project continues in 2023 with a new ramp to north-bound Crowchild Trail for improved vehicular movement on 16 Ave N.W.. The service completed Plus 15 bridge accessibility improvements at 26 locations and construction for the Airport Trail N.E. Phase II project is on track for completion.