Calgary Safer Mobility Plan – Annual Report 2025

Speed Cushion/Hump Pilot and Community Safety Improvements

Background

We continue to receive a high number of requests for community safety improvements due to safety and speeding concerns that often request speed cushions/humps. To evaluate the feasibility of a program and cost, pilot deployment of temporary (rubber) speed cushions and humps was competed in summer/fall of 2024 along seven corridors across the city. Temporary materials were used for quick implementation and data was collected to better understand benefits on collector roadways in the local context.

Pilot Details and Findings

Based on review of available literature and consultations with other jurisdictions, speed cushions/humps are most effective when deployed as a corridor improvement with a set of speed humps at regular intervals. The spacing of 150-300 metres were used when possible. This resulted in installation of 3-7 sets of cushions/humps per corridor.

The preliminary speed data was obtained through the SMATS iNode Traffic Analytics. This traffic data analysis platform collects data through an integration of sensors and advanced technologies, which continuously monitor road and traffic conditions in real time. Utilizing SMATS, we obtained comprehensive data on harmonic speeds, 85th percentile speeds, and average travel time both before and after the installation of temporary speed cushions and speed humps for 5 of 7 pilot locations, as detailed in the table below. Traditional tube speed studies are in progress to confirm these findings, but the overall trend of speed reduction is not expected to change.

Before and After Speed and Travel Time (SMATS iNode Traffic Analytics)

Road Segment*	Harmonic Speed Reduction (km/h)	85th Percentile Speed Reduction (km/h)	Average Travel Time Increase (seconds)
Royal Oak Drive N.W.	6	6	32
Taradale Drive N.E.	6	10	34
Hamptons Way N.W.	4	9	18
29 Street S.W.	4	5	17
Crescent Heights High School (1 Street N.W., 9 Avenue N.W., 11 Avenue N.W.)	2-3	3-5	5-9

* More details about segments and deployment locations available at **Speed Cushion and Speed Hump Pilot.**

The maintenance requirements and durability implications of the temporary rubber material through Calgary's winter season did come with challenges particularly along busier roadway sections and future deployments would focus on the use of permanent materials. We are currently working with community partners to replace the temporary features with permanent in 2025/2026.

Speed Cushions and Community Safety Improvements Program Outline and Cost

In response to overwhelming public demand and positive safety outcomes of the pilot, we are proposing a new Community Safety Improvements program to focus on installation of permanent speed cushions with potential added component of improving crosswalk safety through proven measures like Rectangular Rapid Flashing Beacons (RRFBs) and curb extensions. The program will focus on locations in communities where pedestrian collision risk is most significant such as collector roadways near community entrance locations, school areas and playground zones. The associated annual funding request for $6.5M will Future capital funding request for and additional $6.5M will be a key consideration in the development of the 2025 budget presented in November. The costs are outlined below and will come with the need for 2 new FTEs.

Speed Cushions:

Capital investment: $2.5M (2 corridors per ward per year, 3-7 permanent speed cushion sets per corridor)

Crosswalk & Pedestrian Crossing Upgrades:

Capital investment: $4.0 M (2 RRFBs and crosswalk upgrades per ward per year)