

# 2023 Annual Report

# MOVESMART

## MOBILITY MANAGEMENT STRATEGY





# MOVESMART

## MOBILITY MANAGEMENT STRATEGY



On March 10, 2021, Vaughan Council endorsed MoveSmart, reinforcing the City's commitment to Transportation and Mobility - a strategic priority in the Term of Council Service Excellence Strategic Plan. With a focus on improving the municipal road network, enhancing road safety and supporting more cycling and pedestrian infrastructure to create a fully connected and integrated community, MoveSmart positions the City to achieve the strategic goals and objectives set forth by Council.

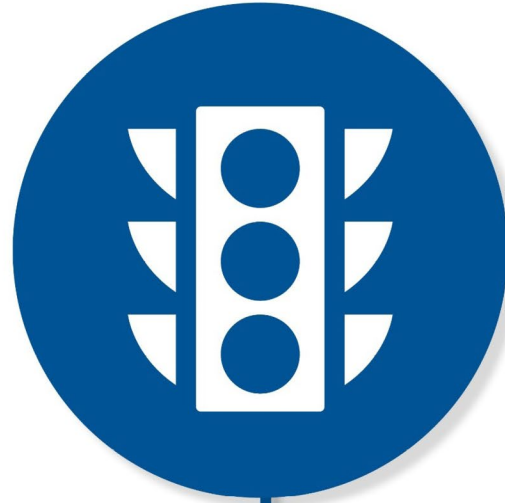






**ROAD SAFETY PROGRAM**

Increase road safety and raise public awareness



**MOBILITY MANAGEMENT PROGRAM**

Improve efficiency through innovation and technology



**SUSTAINABLE MOBILITY PROGRAM**

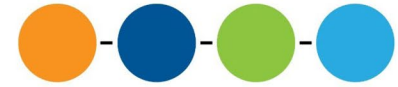
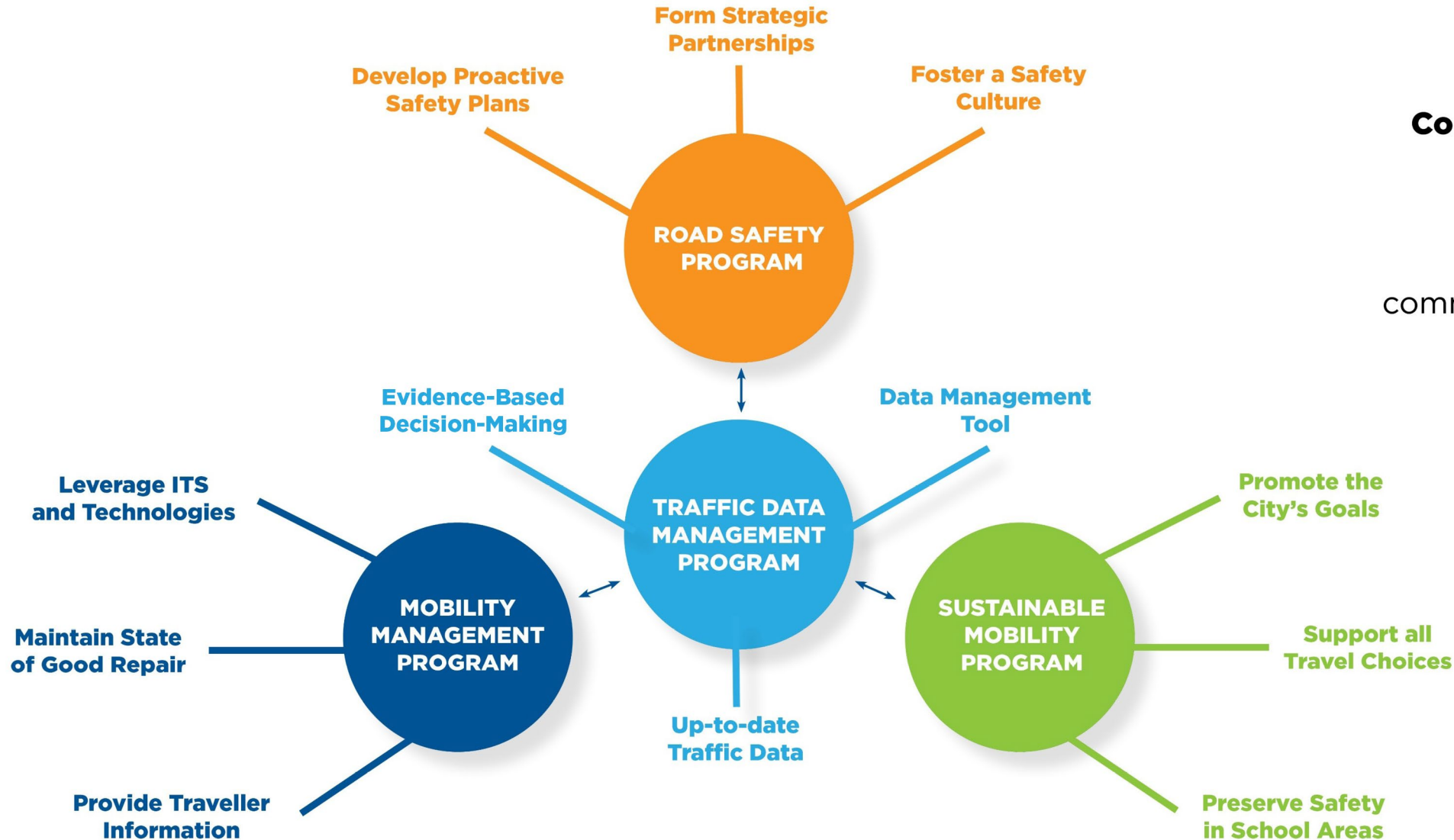
Support active and sustainable transportation



**TRAFFIC DATA MANAGEMENT PROGRAM**

Assure accuracy and availability of traffic data

# MoveSmart Integrated Programs



## Communications and Public Awareness Initiative

Ongoing awareness of tangible benefits through communication and education





### ROAD SAFETY PROGRAM

Increase road safety and raise public awareness



### MOBILITY MANAGEMENT PROGRAM

Improve efficiency through innovation and technology



### SUSTAINABLE MOBILITY PROGRAM

Support active and sustainable transportation



### TRAFFIC DATA MANAGEMENT PROGRAM

Support active and sustainable transportation

#### 2021 / 2022



##### In-Service Road Safety and Corridor Operational Review

Identify safety measures for priority locations, community areas and corridors



##### Neighbourhood Traffic and Speed Management Plan

Improve safety and livability of neighbourhoods by calming traffic

#### 2023



##### Construction Management and Work Zone Safety Plan

Develop guidelines to minimize impacts and maximize safety for construction workers and the public



##### Road Safety Strategic Plan

Foster partnerships and a data-driven approach for improving safety

#### 2024



##### Network Screening and Annual Report

Prioritize safety resources for roads and intersections



##### Automated Speed Enforcement Plan

Use technology for enforcement in school zones and other community areas



##### Speed Compliance Plan

Address speeding behaviour with feedback to drivers

#### 2025



##### Low-Cost Safety Countermeasures Plan

Implement low-cost measures such as pavement markings, signage, etc.

#### 2026



##### Rail Transportation and Safety Plan

Improve mobility while minimizing noise at crossings near residential area



##### Heavy Traffic and Truck Routing Plan

Manage heavy vehicle and truck transport throughout the city

#### 2021 / 2022



##### Traffic Signal Control System and Upgrades

Establish a traffic signal control system and upgrade field equipment



##### Pavement Markings and Signs

Replace and optimize markings and signs



##### Update Streetlights

Continue LED retrofit with smart adaptive features

#### 2023



##### Traffic Signal Operations and Maintenance

Maximize the efficiency of traffic signal operations



##### Curbside Parking Management

Establish parking policies and procedures throughout the city



##### Traffic By-Law Consolidation

Consolidate the City's road-related by-laws



##### Intelligent Transportation System (ITS) Strategy and Plan

Establish a roll-out plan for existing and emerging smart mobility technologies

#### 2024



##### Traveller Information Systems

Generate and present data to support travellers

#### 2021 / 2022



##### School Crossing Guards

Manage the City's school crossing guard program



##### Safer School Zones Plan

Develop and implement safety measures near schools for traffic, pedestrians, and pick-ups/drop-offs



##### Input into Development Planning

Provide insights to help the City's planning for future development

#### 2023



##### Pedestrian Infrastructure Enhancement Plan

Optimize and upgrade the City's pedestrian infrastructure



##### Creation of Community Safety Zones

Develop guidelines to create and operate community safety zones

#### 2024



##### Cycling Network Expansion

Optimize and upgrade the City's cycling infrastructure



##### Travel Demand Management Plan

Share insights and decisions for the City's travel demand management plan

#### 2021 / 2022



##### Traffic Data Needs Assessment

Identify traffic data requirements to support the MoveSmart Strategy



##### Traffic Data Management System

Procure and implement a traffic data management system

#### 2023



##### Traffic Data Services

Enhance the City's traffic data collection programs and contracts



### Communications and Public Awareness Initiative

Ongoing awareness of tangible benefits through communication and education

# MOVESMART

## Mobility Management Strategy



# Road Safety Program

Increase road safety and raise public awareness



## In-Service Road Safety and Corridor Operational Review

Identify safety measures for priority locations, community areas and corridors



## Neighbourhood Traffic and Speed Management Plan

Improve safety and livability of neighbourhoods by calming traffic



## Road Safety Strategic Plan

Foster partnerships and a data-driven approach for improving safety



## Automated Speed Enforcement Plan

Use technology for enforcement in school zones and other community areas

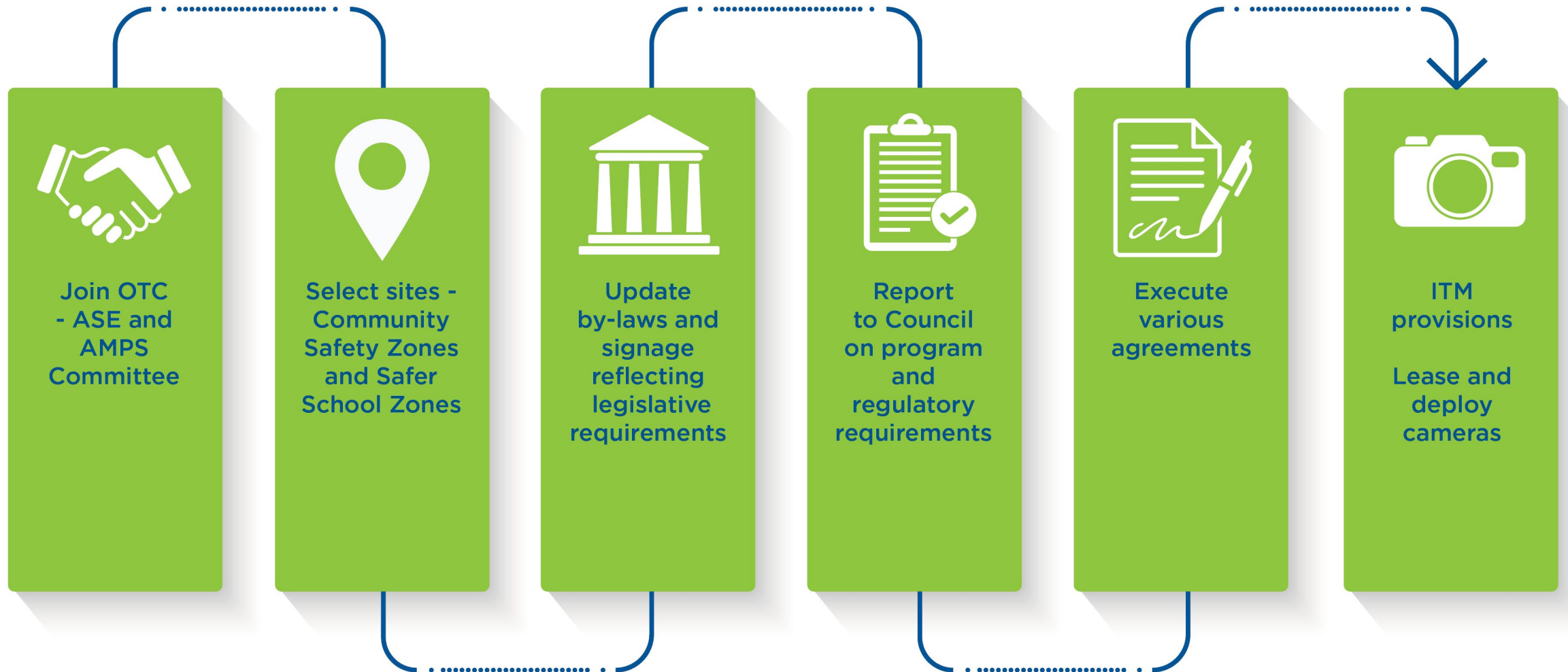
## ACCOMPLISHMENTS

- ✓ Pilot 40 km/hr neighbourhoods
- ✓ Neighbourhood Traffic Calming Plan
- ✓ Corridor Reviews
- ✓ Traveller Safety Plan (York Region)
- ✓ Automated Speed Enforcement (established internal working group, stakeholder consultations)





# Automated Speed Enforcement Process



# Automated Speed Enforcement Stakeholders



- By-law and Compliance, Licensing and Permit Services
- Corporate and Strategic Communications
- Financial Services
- Legal Services
- Office of the Chief Information Officer
- Procurement Services
- Office of the City Clerk
  - Access and Privacy
- Enterprise Information Management Services
  - Insurance And Risk Management
- Transportation and Fleet Management Services

- Provincial government
  - Ontario Ministry of Transportation
  - Ministry of the Attorney General
- City of Toronto – Joint Processing Centre (camera data and image processing)
- Current AMPS vendor (parking tickets)



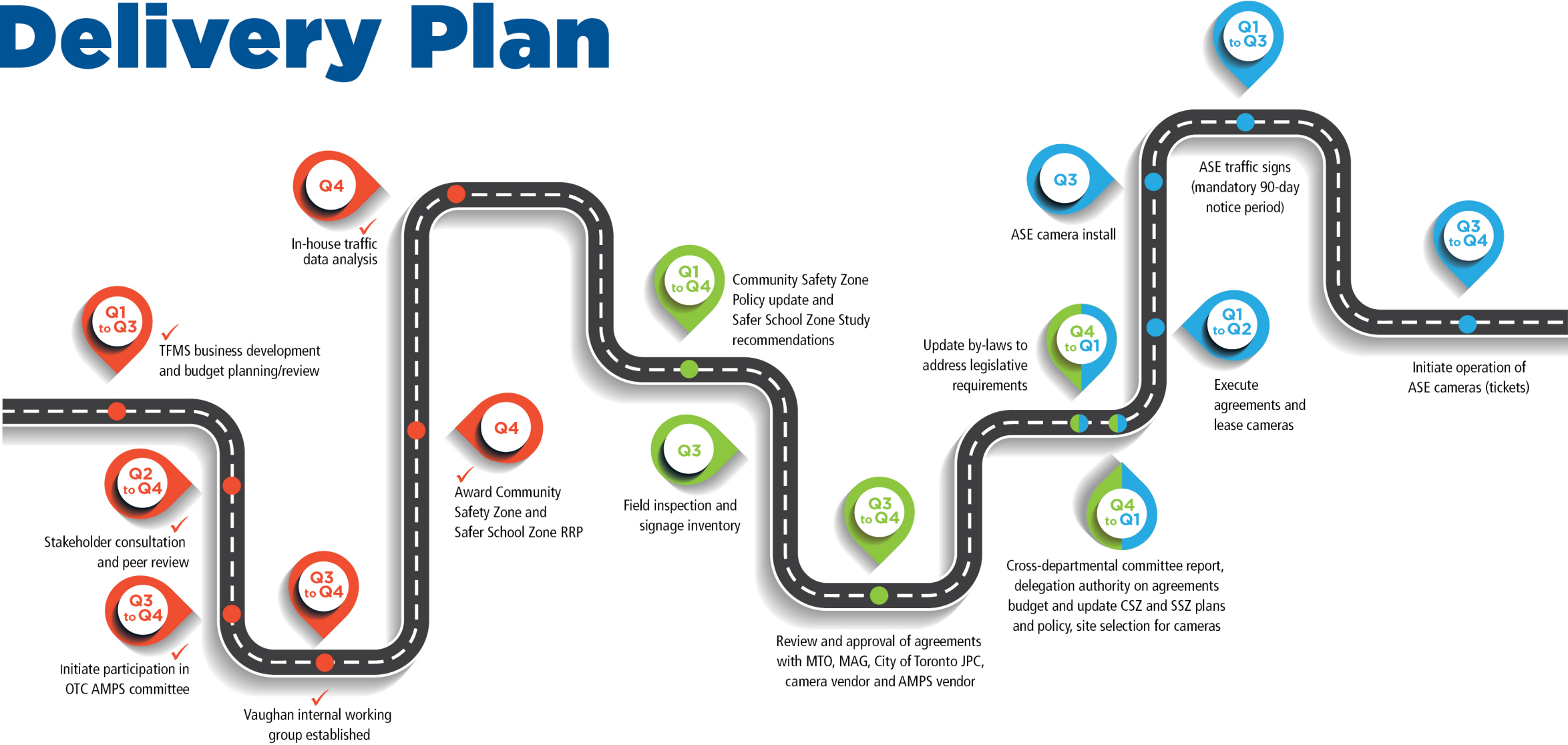
- Speed camera vendor



*Note: the City of Vaughan is required to enter into separate agreements with each of the above-noted stakeholders.*



# Automated Speed Enforcement Delivery Plan





# Road Safety Program

Increase road safety and raise public awareness



## Construction Management and Work Zone Safety Plan

Develop guidelines to minimize impacts and maximize safety for construction workers and the public



## WHAT'S NEXT

- Neighbourhood Traffic Calming Plan pilot
- Traffic operational reviews
- York Region's Traveller Safety Plan
- Identify Automated Speed Enforcement areas through the Community Safety Zones Plan and Safer School Zones Plan
- Launch the Construction Management and Work Zone Safety Plan



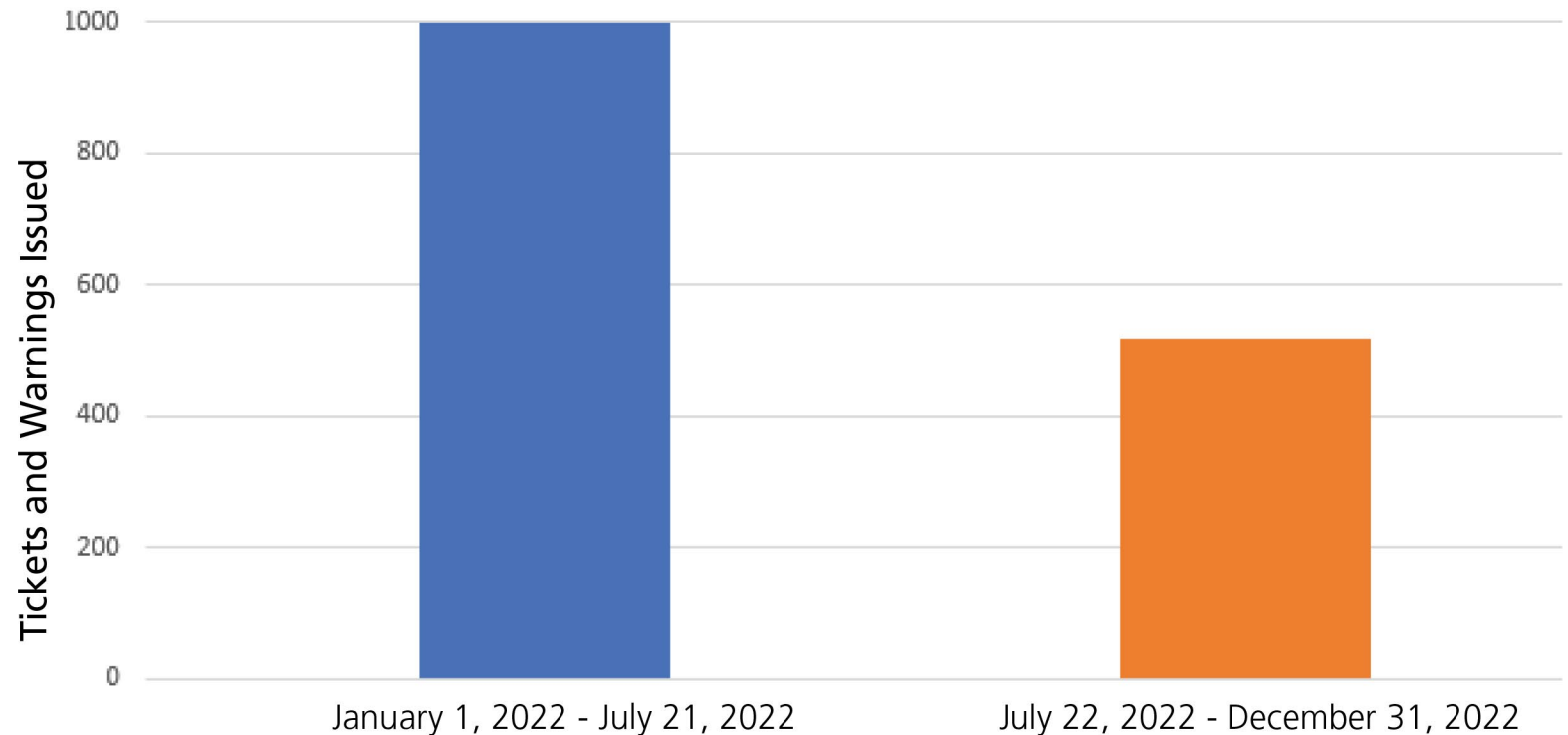


# Road Safety Program

Increase road safety and raise public awareness



Total York Regional Police speeding tickets and warnings issued in 40 kilometre per hour area pilot blocks



A **48 per cent decrease** in speeding and warning tickets in all 40 kilometre per hour block pilot locations.



# Mobility Management Program

Improve efficiency through innovation and technology



## Traffic Signal Control Systems and Upgrades

Establish a traffic signal control system and upgraded field equipment



## Pavement Markings and Signs

Replace and optimize markings and signs



## Update Streetlights

Continue LED retrofit with smart adaptive features



## Intelligent Transportation System (ITS) Strategy and Plan

Use technology for enforcement in school zones and other community areas

## ACCOMPLISHMENTS

- ✓ Installed **more than 65 special stencil pavement markings**
- ✓ Installed **more than 240 flexi posts**
- ✓ **Upgraded 25 intersections** with LED traffic signals and reflective backboards, pedestrian countdown timers
- ✓ **Comprehensive analysis completed** to develop an Intelligent Transportation System, leveraging latest technology







# Mobility Management Program

Improve efficiency through innovation and technology



## Curbside Parking Management

Establish parking policies and procedures throughout the City



## Traffic By-Law Consolidation

Consolidate the City's road-related by-laws



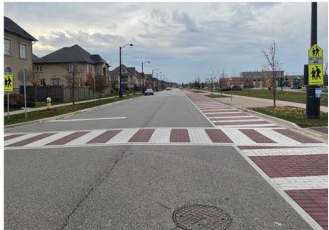
## WHAT'S NEXT

- Procure an advanced traffic signal control system
- Pilot an additional 17 upgraded traffic signals on York Region's Centracs system
- Retrofit an additional 25 signalized intersections with LED traffic signals, reflective backboards and countdown timers
- Complete streetlight upgrades
- Finalize in-road flexible post guidelines and identify new locations for implementation
- Work with By-law and Compliance, Licensing and Permit Services on Curbside Parking Management and Traffic By-law Consolidation

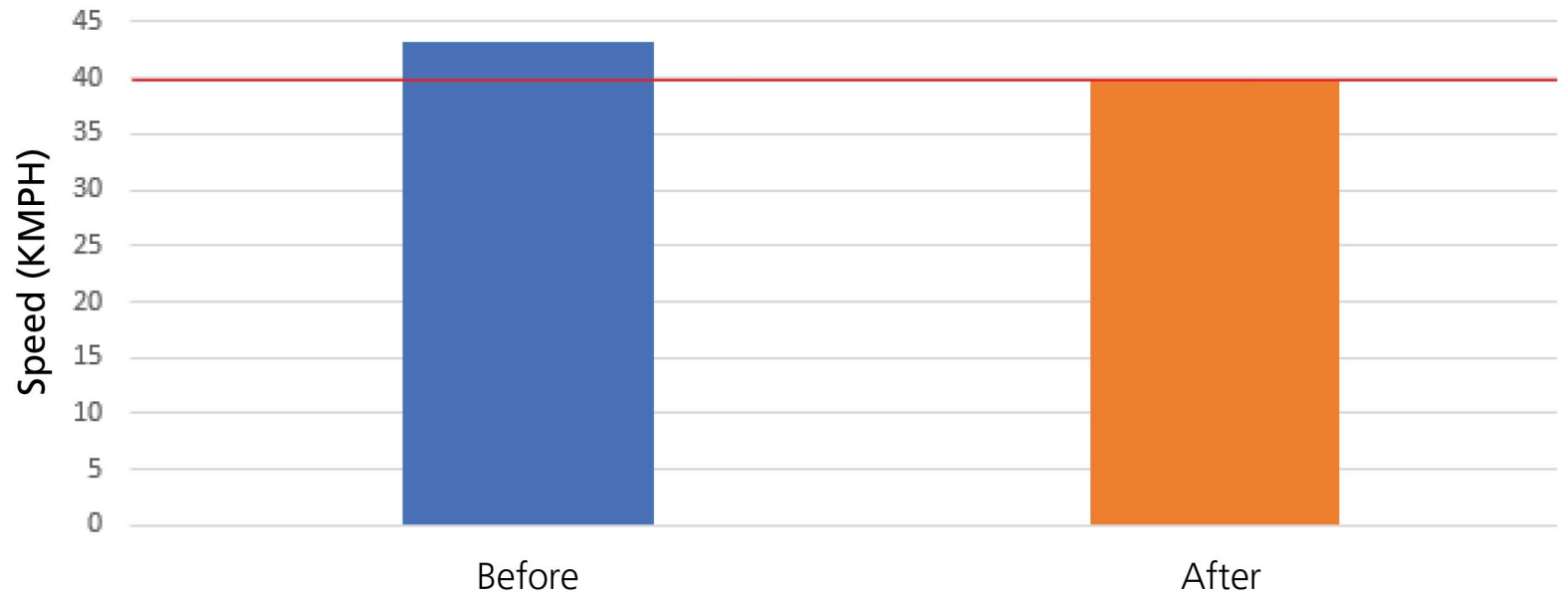


# Mobility Management Program

Improve efficiency through innovation and technology



Average speeds at locations before and after various traffic calming measures implemented



A **9 per cent decrease** in average speed after various traffic calming measures were implemented (includes all 40 kilometre per hour locations, Active School Travel pilot locations and hot spots around the city).





# Traffic Data Management Program

Assure accuracy and availability of traffic data



## Traffic Data Needs Assessment

Identify traffic data requirements to support the MoveSmart Strategy

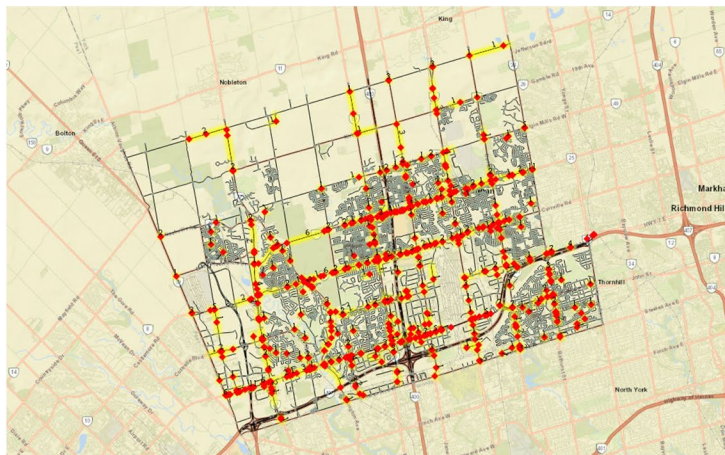


## Traffic Data Management System

Procure and implement a traffic data management system

## ACCOMPLISHMENTS

- ✓ Continue to identify traffic data needs
- ✓ Data from 2016-2021 entered in Traffic Data Management System
- ✓ Leverage new software and analytics







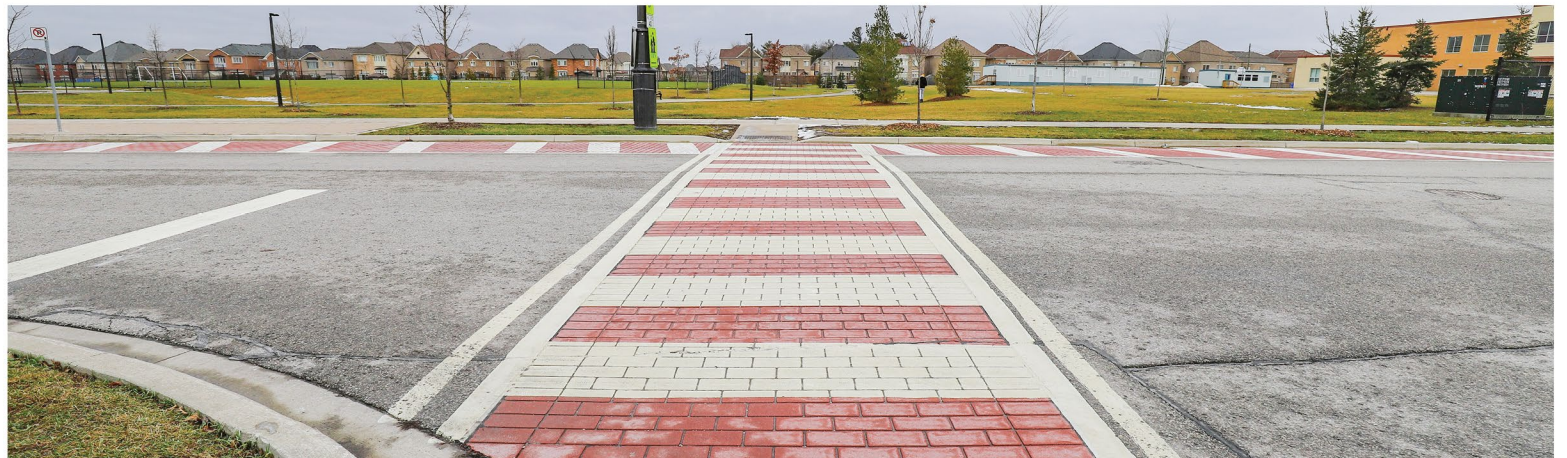
# Traffic Data Management Program

Assure accuracy and availability of traffic data



## WHAT'S NEXT

- Enhance traffic data collection programs needed to support MoveSmart and other City services
- Partnerships with academic programs





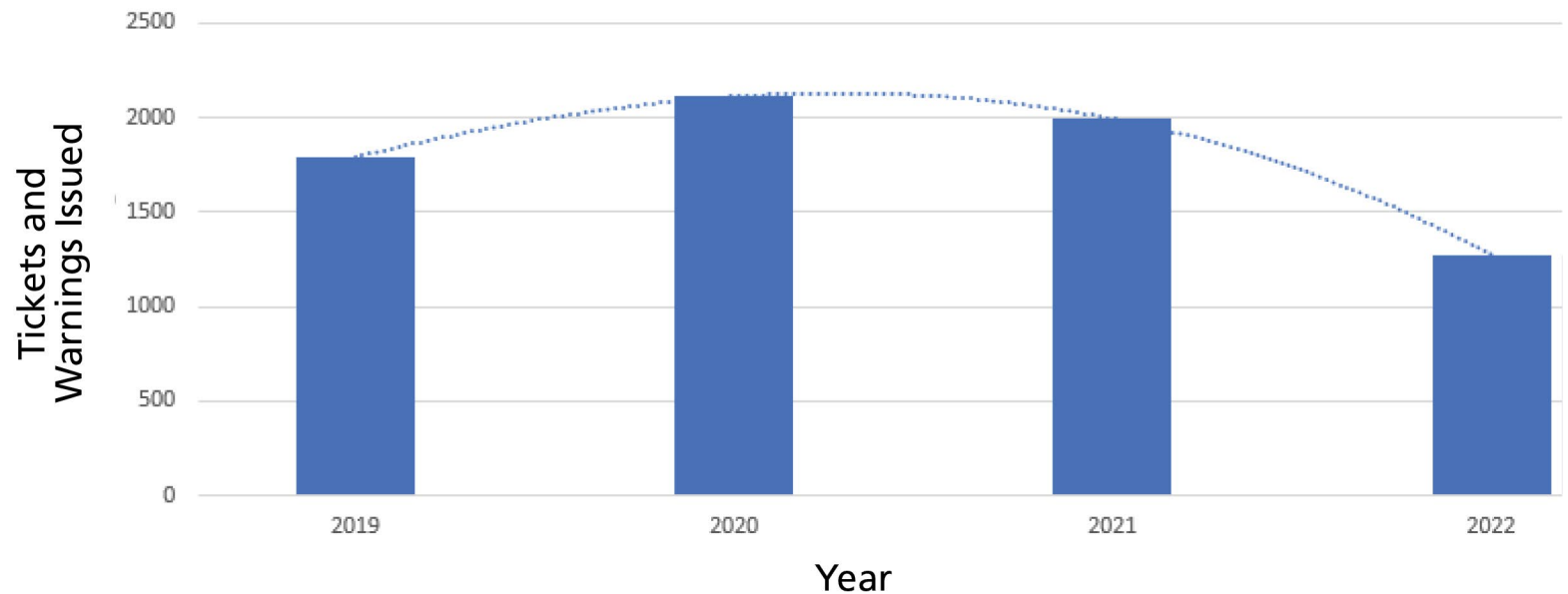


# Traffic Data Management Program

Assure accuracy and availability of traffic data



Speeding tickets and warnings issued in area 40 km/hr neighbourhood blocks



A **29 per cent decrease** from 2019-2022 (since implementing various traffic calming measures within 40 kilometre per hour neighbourhood pilot block locations).



# Sustainable Mobility Program

Support active and sustainable transportation



## School Crossing Guards

Manage the City's school crossing guard program



## Safer School Zones Plan

Develop and implement safety measures near schools for traffic, pedestrians, and pick-ups/drop-offs

## ACCOMPLISHMENTS

- ✓ Implemented the Active School Travel pilot program in collaboration with local partners
- ✓ Created a road safety handbook
- ✓ Reported to Council on the School Crossing Guard Program Exposure Index Matrix
- ✓ Launched the Safer School Zones Plan and Community Safety Zones Plan







# Sustainable Mobility Program

Support active and sustainable transportation



## Pedestrian Infrastructure Enhancement Plan

Optimize and upgrade the City's pedestrian infrastructure



## Creation of Community Safety Zones

Develop guidelines to create and operate community safety zones

## WHAT'S NEXT

- Develop framework for the Safer School Zones Plan and Community Safety Zones Plan
- Develop guidelines to create and operate Community Safety Zones
- Continue to engage youth through Active School Travel
- Pedestrian Infrastructure Enhancement Plan



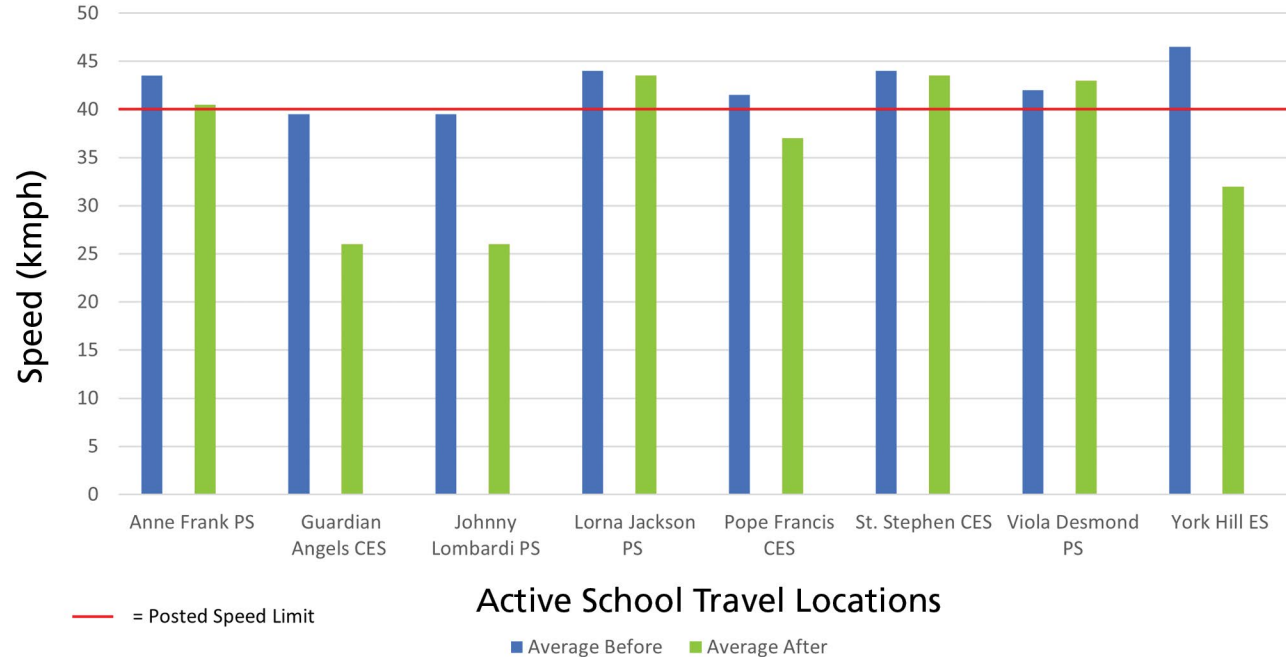


# Sustainable Mobility Program

Support active and sustainable transportation



Average speed in Active School Travel pilot locations before and after traffic calming implementation



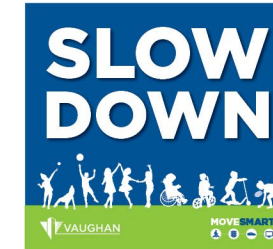
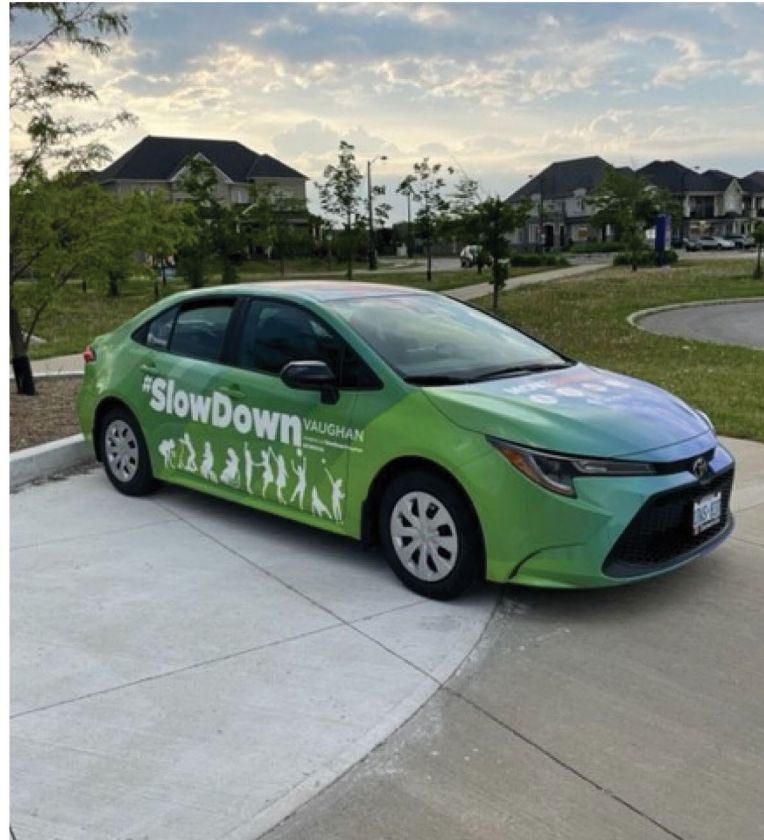
Recent studies near schools with traffic calming measures show **a trend in reduced vehicle speeds**. The City intends to continue these studies to better understand the effects of combining different traffic calming measures and how they influence road safety.



# Road safety is a shared responsibility.

## SUPPORTS:

- ✓ Active School Travel and road safety initiatives in schools
- ✓ School Crossing Guard Program
- ✓ Safer School Zone Plan and Community Safety Zones Plan
- ✓ Automated Speed Enforcement
- ✓ Neighbourhood Traffic Calming Plan
- ✓ Speed Limit Policy
- ✓ Road Safety Strategic Plan



MORE THAN  
**5,700**  
#SlowDownVaughan  
signs across the city

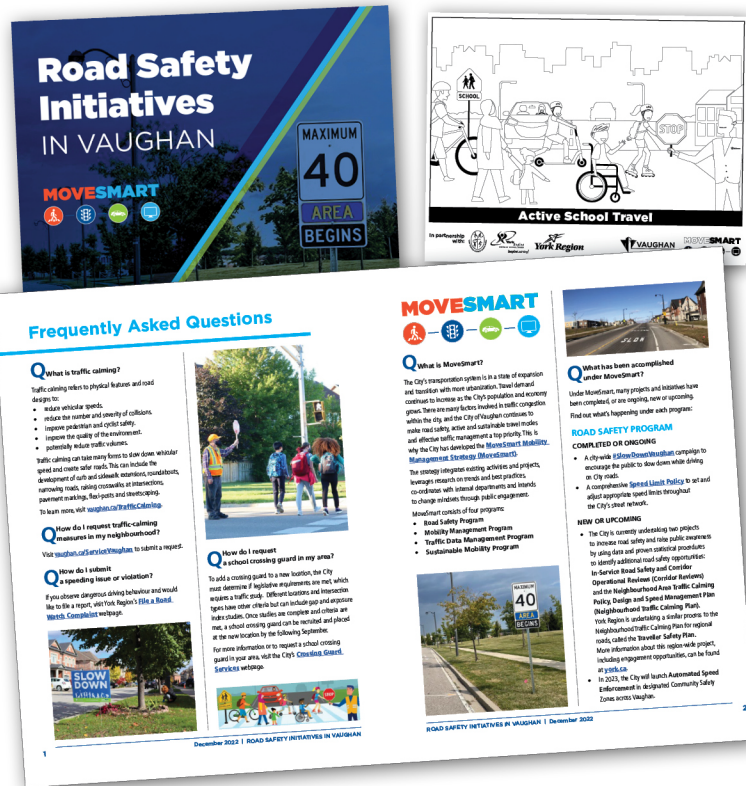


# Communications and Public Awareness Initiatives

Ongoing awareness of tangible benefits through communication and education

Corporate and Strategic Communications supports MoveSmart with a comprehensive communications approach that includes:

- **SOCIAL MEDIA MESSAGING:** shared with more than **71,000 followers** across the City's four corporate social media platforms
- **NUMEROUS WEBPAGES:** dedicated to MoveSmart featured on vaughan.ca, which garners more than **2.6 million visits annually**





# Communications and Public Awareness Initiatives

Ongoing awareness of tangible benefits through communication and education

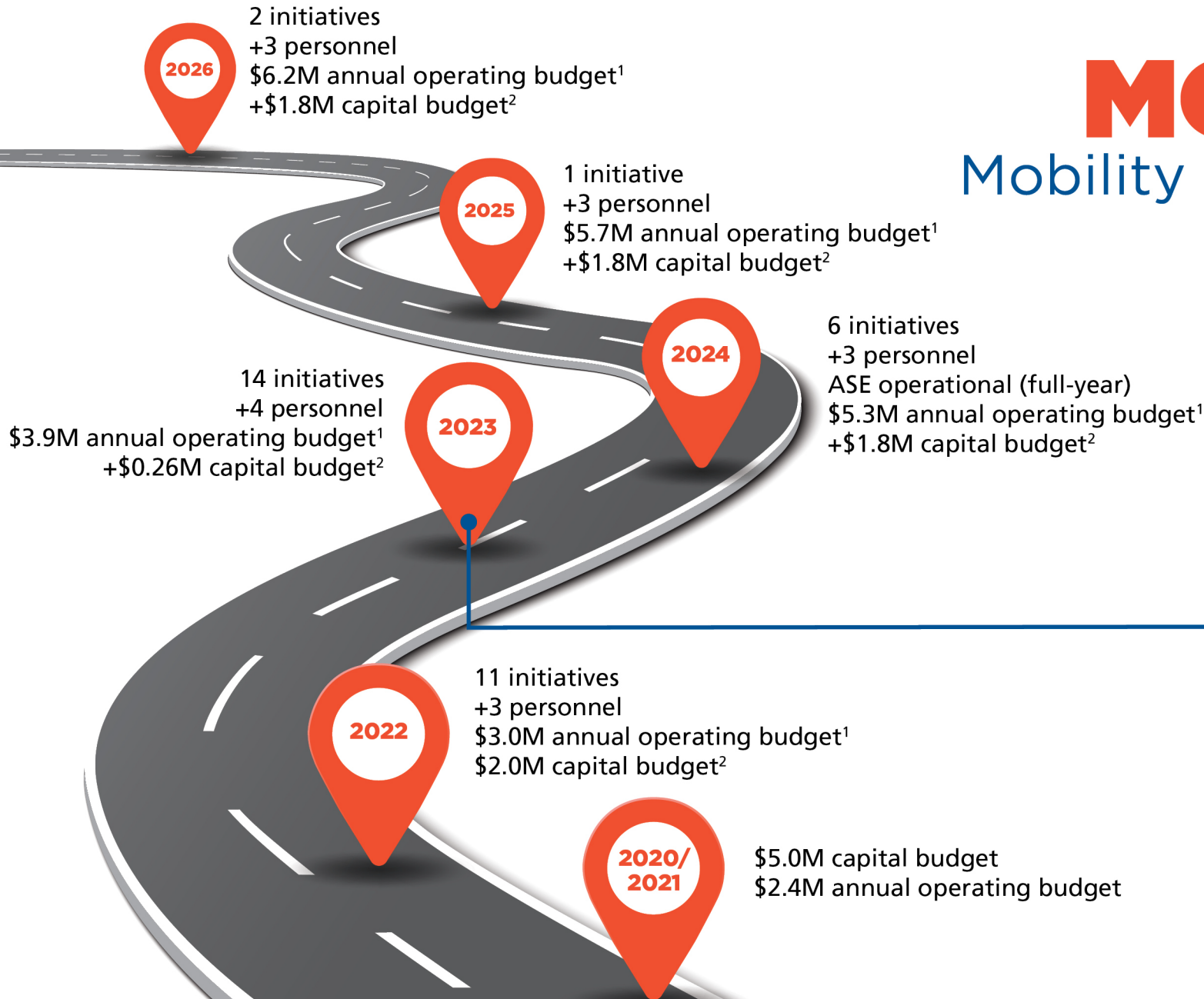


- **DIGITAL SIGNS:** shared throughout our city-wide network and garnering **more than 63,000 daily impressions** or **more than 23 million impressions annually**
- **FEATURES IN CITY HALL CONNECTS NEWSLETTER:** distributed to all residences and businesses across the city (nearly **115,000 mailboxes**)
- **MOBILE SIGNS:** numerous signs across the city, strategically placed in each ward



# MOVESMART

## Mobility Management Strategy



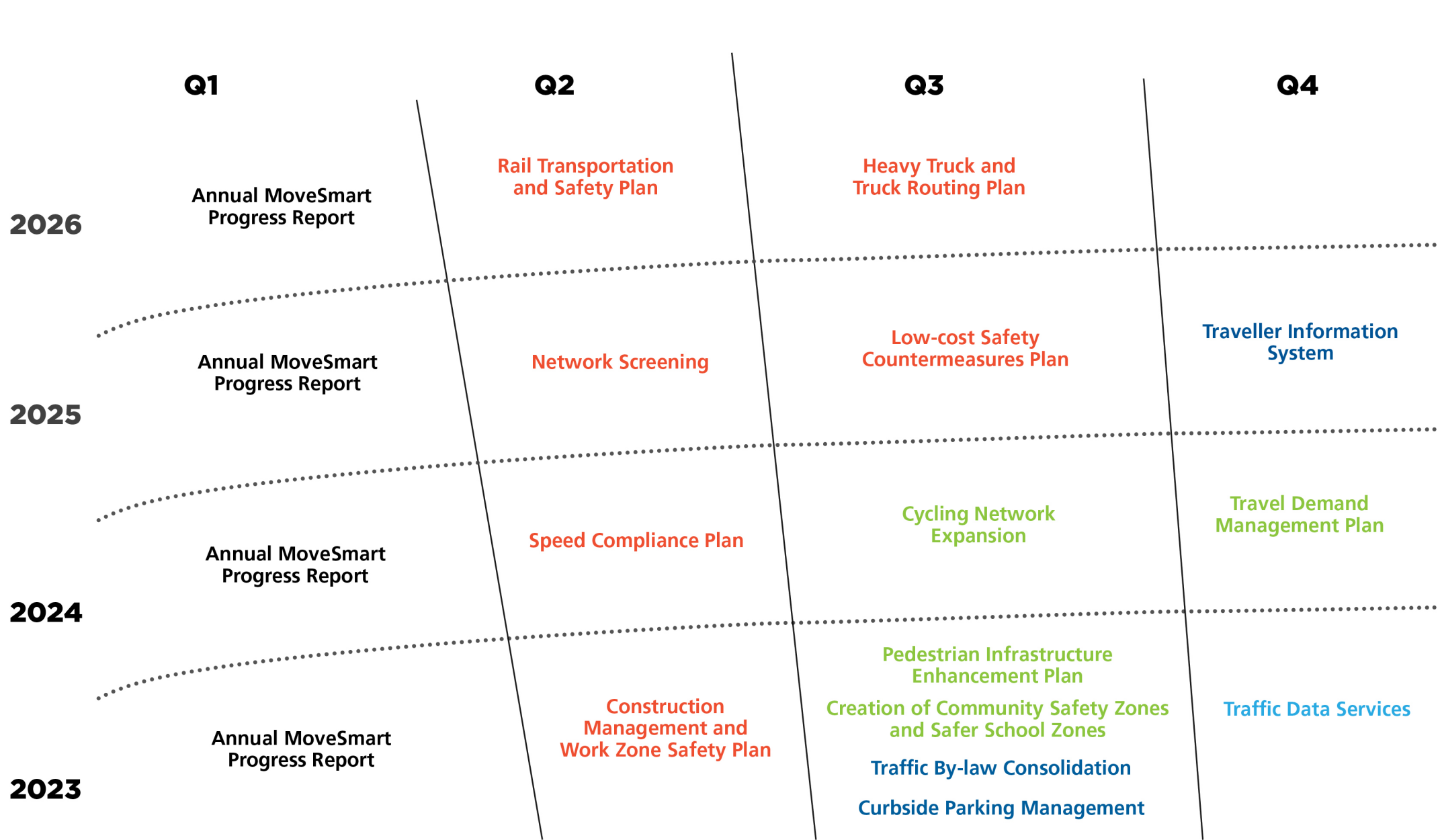
6 initiatives  
+3 personnel  
ASE operational (full-year)  
\$5.3M annual operating budget<sup>1</sup>  
+\$1.8M capital budget<sup>2</sup>



## Timelines and Resources

<sup>1</sup> Figure represents total gross operating expenditures  
<sup>2</sup> Figure represents new capital budget requests or top-ups





Note: All project timelines are reflective of anticipated commencement date and subject to budget approval process.

# Thank you

**MOVESMART**

MOBILITY MANAGEMENT STRATEGY

