TORONTO

CONGESTION MANAGEMENT

PLAN 2016-2020

City of Toronto | Transportation Services

CONTENTS

THE NEED FOR CONGESTION

MANAGEMENT

Travel demand continues to rise in the City of Toronto as the population increases and our economy grows. Existing road infrastructure is not able to keep pace with this increase in travel demand – in fact it is impractical to build enough roads and infrastructure to comfortably accommodate this demand. The resulting situation – where travel demand exceeds the capacity of the transportation network – is traffic congestion.

Each area of the city has different factors that contribute to traffic congestion. Roads in one area may be affected by issues related to parking and stopping or construction work zones; others by infrastructure bottlenecks that decrease road capacity; and still others by traffic signals that could be better coordinated with existing traffic flow. Traffic in all parts of the city can be affected by poor weather conditions, special events, collisions and other unexpected traffic incidents.

The impact of this congestion is significant. Estimates from 2008 for the Greater Toronto and Hamilton Area (GTHA) suggest that congestion costs commuters as much as $3.3 billion annually in terms of delay and increased vehicle operating costs, while the cost to the local economy was an additional $2.7 billion due to lost economic output and accompanying job loss.[1] To the typical commuter in the GTHA this translates to an average of 81 hours of delay each year, which reflects a delay of 33 minutes for every hour driven in the peak period.[2]

The City of Toronto's first Congestion Management Plan (CMP) was originally prepared for the period 2014-2018, and has now been updated for the period of 2016-2020. The CMP's objective is to better manage congestion (e.g. reduce delays, reduce the number of stops, etc.) and improve safety through innovation and technology that will maximize the efficiency, reliability and sustainability of the road network for all users while reducing the impacts on the environment.

[1] Costs of Road Congestion in the GTHA (Greater Toronto and Hamilton Area), Metrolinx, Dec., 2008.

[2] TomTom North American Congestion Index, TomTom International, 2013.

CONGESTION MANAGEMENT

VISION & GOALS

Vision for Managing Congestion

The City of Toronto Congestion Management Plan 2016-2020 pays special attention to the needs of all travellers – pedestrians, cyclists, public transit users, and drivers – as well as goods movement and emergency services. It is important to ensure that the projects identified in the Congestion Management Plan consistently address the needs of these road users. To accomplish this, the City has developed a Vision Statement and goals for the Congestion Management Plan.

The overall vision of the Plan is:

> "Through innovation and technology maximize the safety, efficiency, reliability and sustainability of the transportation network for all users while reducing the impact on the environment."

Congestion Management Goals

The Vision of the Plan is supported by the following goals and measurable objectives:

GOALS		OBJECTIVES
1	Improve the safety of the transportation network	• Reduce the number of traffic collisions • Reduce collision severity and fatalities
2	Maximize the transportation system efficiency and reliability	• Increase communication • Reduce delays • Reduce travel time variability • Reduce vehicle operational costs
3	Improve the City of Toronto's ability to detect and respond to incidents, events and changing traffic conditions	• Reduce duration of traffic incidents and events through improved detection, response and clearance times
4	Improve the availability and reliability of information for the public	• Reduce traveller frustration • Increase use of all diverse modes of transportation
5	Reduce the impact of transportation on the environment	• Reduce greenhouse gas emissions (GHG) • Increased fuel savings for City and residents

CONGESTION MANAGEMENT

PROJECTS/INITIATIVES

The Congestion Management Plan 2016-2020 builds on the successes from the first CMP and identifies new capital projects, capital expansions to successful projects, and the operational support (such as staff and services) needed to maintain these initiatives. The proposed projects and initiatives for the Congestion Management Plan 2016-2020 will emphasize:

- Documenting and taking advantage of the lessons learned during the execution and deployment of initiatives originally contemplated in the CMP 2014-2018
- Taking a more proactive approach to traffic management on arterial roads, complementing current traffic management activities on City expressways
- Applying evolving technology to traffic and congestion management, from wireless communication to advanced sensors to social media
- Providing a “tool kit” from which activities can be chosen and applied to the unique road contexts around Toronto
- Placing an emphasis on forwarding-thinking technologies, such as Connected Vehicle readiness and Big Data analysis
- Ensuring existing and new transportation infrastructure is resilient in the event of emergencies such as flooding and power failures
- Strengthening partnerships and information sharing, to improve efficiency and coordination of the City’s transportation network
- Ensuring that all new systems and procedures are adequately supported operationally

This report provides a general overview of the City of Toronto Congestion Management Plan for 2016-2020. Amongst the many projects completed so far, this report highlights our key accomplishments to-date, and our next steps moving forward.

The various projects and initiatives within the Congestion Management Plan 2016-2020 can be categorized under the following nine strategy areas:

INTELLIGENT TRANSPORTATION SYSTEMS

CONGESTION AND ENGINEERING STUDIES

INCIDENT AND EVENT RESPONSE

CONSTRUCTION COORDINATION

CURBSIDE MANAGEMENT

SUPPORT OF ALL MODES OF TRANSPORTATION

TRAVELLER INFORMATION

TRANSPORTATION OPERATIONS CENTRE

STATE OF GOOD REPAIR

The above nine strategy areas complement and intersect with one another, and together produce a comprehensive approach to managing traffic congestion.


Yonge St

INTELLIGENT TRANSPORTATION SYSTEMS

Introduction

Communication technology is becoming increasingly sophisticated and rapid. Intelligent Transportation Systems (ITS) apply these advances to the monitoring and management of transportation networks. The City of Toronto has already made extensive progress building its ITS systems, such as the City's RESCU (incident management) and SCOOT (smart signals) systems. However, the majority of these systems are 20 years old and require regular maintenance and upgrade. The recommended projects under this category will continue to strengthen the City's Intelligent Transportation Systems, helping to manage traffic congestion by:

- Improving monitoring capabilities to improve response times to unexpected traffic incidents (e.g. illegal lane occupancy, congestion, collisions);
- Improving coordination of traffic signals with traffic flows;
- Increasing the amount and quality of traffic information for improved planning, prioritizing and performance evaluation;
- Increasing the efficiency of communication across the City's network of computers and traffic signals; and
- Determining that equipment is in a state of good repair.

Key Accomplishments to Date

Illuminated Turn Restriction Signs

In 2014, four intersections along King Street were equipped with illuminated (LED) signs supporting time-of-day left-turn restrictions. This pilot program determined that by better communicating when turning restrictions are active, we are able to improve bylaw compliance and traffic flow. An additional 40 signs will be installed in the Downtown area by 2016. As part of the CMP 2016-2020, approximately 20 to 25 new signs are proposed to be installed each year from 2016 through 2020.

Arterial Traffic Monitoring Camera Program

Traffic cameras help us to detect problems on the road, work with emergency responders, and provide public travel information. In the Spring of 2015, the City installed 43 new traffic cameras (primarily along the Pan Am Games Route Network) that were instrumental in managing traffic during the Games. Building on this success, additional phases of deployment will see a further 40 installations later in 2015, and 40 more in 2016. The CMP 2016-2020, proposes to expand this program by an additional 40 cameras in each of 2018 and 2020.


Front St W


Expressway Ends
1.5 km
at Lake Shore Blvd.
595

Next Steps

Updating Toronto's Adaptive Traffic Signal Control Technology

Planning studies in 2014 identified the need to update the City's adaptive 'smart' traffic signal control system and identified potential technologies that could replace the current system. In 2016, the City will complete a pilot deployment of a new system to update this out-dated technology. It is anticipated that this technology will be successful, and that it will reduce delays and congestion, particularly during 'unusual' traffic conditions (such as near a collision). If successful, the CMP 2016-2020, proposes annual expansions of 'Smart Signals' across the City, starting in 2018.

Updating Toronto's Advanced Traffic Management System

Since 1992, the City has employed an Advanced Traffic Management Systems (called RESCU) to help manage traffic on the City's expressways. This software is no longer supported by its developer and no longer meets the City's operational needs which have evolved over time. The effort to upgrade this software is currently underway with completion expected in early 2016.

Uninterruptable Power Supply (UPS) Installations

To provide better traffic system resiliency in the event of power black-outs, the CMP envisions the deployment of UPS at key intersections. In 2014, 19 UPS units were deployed, and a further 81 are planned for installations over the next three years.


Leslie Street
Signals Retimed
Give Your
Feedback
Call 311
TORONTO

CONGESTION AND ENGINEERING STUDIES

Introduction

The focus of this strategy is to keep the City of Toronto's signal timing plans current and its traffic management strategies up-to-date. Recommended projects and activities under this strategy will help manage traffic congestion by:

- Improving the ability of Transportation Operations Centre operators to respond effectively to changing traffic conditions with pre-prepared plans;
- Maintaining coordination as new traffic signals and new operational features are added to the network;
- Identifying practical solutions to key expressway congestion and safety concerns, through advanced technologies/ systems or applying current solutions in innovative ways; and
- Exploring integrated approaches that look at multiple traffic corridors as one system, thus optimizing flow across all corridors.

Key Accomplishments to Date

Completed Seven 'Priority Corridor' Signal Timing Optimization Studies

Coordinating traffic signals to improve traffic flow and reduce delays is a staple activity for Transportation Services. By year end, the City will have completed 15 optimization studies using CMP funding. Observed benefits from these projects are a 5% to 10% reduction in travel times. The CMP 2016-2020 proposes annual Operational funding to continue supporting these Optimization Studies.

Developed Three 'Auxiliary' Corridor Signal Timing Plans

In three of the City's highest priority corridors, special timing plans were develop to better manage the special traffic patterns observed during nights, weekends, and expressway closures. The estimated benefit of this project is a 3% to 5% reduction in the travel time in these corridors during expressway closures.

Streamlined Procurement Process

To reduce the overall duration of the procurement process, a roster of pre-qualified consultants have been selected in six categories of work including: Intelligent Transportation Systems, Congestion & Engineering Studies, Incident & Event Response, Contract Administration, Traveller Information, and Traffic Safety. This will reduce procurement lead times by approximately 40%.

Traffic Assistance Personnel Feasibility Study Completed

Transportation Services investigated the use of Traffic Assistance Personnel to manage traffic at key intersections. This feasibility study determined that by keeping intersections clear, meaningful reductions in traffic congestion and vehicle delays can be realized. At the same time, pedestrian safety can also be enhanced by ensuring that motorists and pedestrians obey the traffic signals.

Next Steps

Active Traffic Management Feasibility Study

Through "Active Traffic Management" travel lane assignments and speed limits may be controlled and changed in real-time. Using hard shoulders as travel lanes during peak periods and reversal lanes (such as the one along Jarvis St.) are examples of these solutions. A consulting assignment is currently in procurement to investigate the potential for expanding these strategies in Toronto. The assignment is expected to conclude in 2016.

Big Data Management and Reporting

The City has hired a Big Data Lead who will investigate ways to use existing data, and new data sources, to better manage roadways, and to anticipate operational and infrastructure needs. The hiring of the Big Data Lead is the first step in establishing an operational structure and procedures that will be on-going. As part of this project, a "hackathon" is planned for October 2015. Further, the CMP 2016-2020 proposes that Big Data Management be assigned additional operating resources for staff, data acquisition from third parties, and consultant services.

Connected / Autonomous Vehicle Preparedness

Industry reviews suggest that the introduction of "connected" and "autonomous" vehicles will improve safety and mobility on urban streets, and that these vehicles may be widely available for purchase within 10 years. In anticipation, Transportation Services has established a Working Group to foster the development of policy, regulations, standards, and guidelines that will help us to shape the City we want, and not simply react to this technological change as it occurs.

Integrated Corridor Management - Network Deployments

The CMP 2014-2018 included funding for an Integrated Corridor Management feasibility study (to be completed in 2017) that would determine how to coordinate operations across jurisdictions and their related facilities in real-time. The CMP 2016-2020, proposes to deploy multiple integrated corridors across the City in 2018 through 2020.


STEER IT, CLEAR IT
Minor Collision?
Move Vehicles
Off Roadway

INCIDENT AND EVENT RESPONSE

Introduction

The City of Toronto's Transportation Operations Centre has been actively involved in incident management through its RESCU system – detecting collisions and other incidents in expressway corridors, coordinating emergency response, and notifying motorists. The activities under this strategy focus on reducing the duration of incidents and minimizing congestion that can result, and are designed to complement increased monitoring capabilities. Recommended projects and activities under this strategy will help manage traffic congestion by:

- Strengthening relationships among key agencies – e.g., Transportation Operation Centre, emergency services, towing industry, road maintenance, etc.– to improve coordination, reduce response and clearance times and improve safety of field personnel; and

- Educating motorists to move their vehicles out of the flow of traffic after minor collisions.

Key Accomplishments to Date

Deployed the "Steer it – Clear it" Program

"Steer It – Clear It" signs were installed along the Don Valley Parkway and the Gardiner Expressway in 2014 to remind motorists to move their vehicle off the travelled portion of the roadway after a minor collision. These will reduce delays caused by travel lane blockages.

Next Steps

Expressway Service Patrols

Half of all congestion on the City's expressways are caused by collisions and vehicle breakdowns. A recently completed feasibility study showed that Service Patrols significantly reduced the delay costs associated with lane blockage times and produced benefit-cost ratios of 10:1 (due to reduced delay). Consequently, the CMP 2016-2020 proposes "service patrol" vehicles for the City's expressways to assist in detecting and clearing disabled vehicles from the roadway. A proposed staged deployment is scheduled to commence in 2016.

Traffic Systems Support for Emergency Evacuation Routes

In the event of a major emergency event, a major challenge is the movement of large volumes of traffic out of a given area in a timely manner. In order to expedite the movement of evacuees to a safe area, there is a need to provide traffic systems that support evacuation zones and routes. Working with the City's Office of Emergency Management (OEM), this new project would review and confirm the needs and feasibility of deploying systems to support evacuation route plans.


Leslie St
Leslie St
LESLIE St

CONSTRUCTION COORDINATION

Introduction

Construction and the need for contractors to occupy lanes with equipment and/or supplies can have significant traffic impacts. This includes construction for road maintenance and new building developments. The number of new developments across the City of Toronto is a sign of positive economic development, but also provides a key challenge for traffic flow. Recommended projects and activities under this strategy will help manage traffic congestion by:

- Improving the coordination and management of construction work zones across the City;
- Improving information available to travellers about traffic conditions and detours associated with work zones;
- Improving information available to Transportation Operations Centre operators for use in monitoring contractor activities and adjusting signal timing plans accordingly; and
- Encouraging contractors to participate as much as possible in minimizing the impact of work zones on traffic.

Key Accomplishments to Date

Road & Lane Closure Management

Efforts are underway to improve the work-flow management for all forms of road and lane closures (e.g. construction, maintenance, special events, filming, etc.) This effort is focussed on operational improvements, institutional coordination, and documentation, but may result in additional system support needs. This is an operational issue that will be on-going. The CMP 2016-2020, is proposing a system deployment that will allow coordination of planned work and identification and resolution of conflicts amongst all internal units responsible for managing road and lane closures.

Next Steps

Smart Work Zones

Construction commonly creates bottlenecks leading to congestion. 'Smart Work Zones' employ mobile trailers equipped with cameras and variable message signs to help monitor and control traffic in these areas to reduce the negative impacts of long-term work. New 'Smart Work Zone' trailers are being purchased in 2016 to help ease traffic congestion in these areas.

Coordination with Capital Road Works Projects

This project will coordinate the construction of civil works related to the planned deployment of transportation systems with the City's Capital Road Works program. Constructing the civil works provisions for systems at the same time that major road work is being undertaken can significantly reduce the total costs of deploying these systems.

Public Awareness and Education Program

The objective of this new project is to build public awareness regarding the ways travellers can learn about the location and timing of construction projects and major events across the City. By building this awareness, we can influence directional, modal and time-of-travel choices, and thereby minimize the disruptive effects of associated road and lane closures on travel plans.


DETOUR ON ROUTE
7 AM - 9 AM
4 PM - 6 PM
MON - FRI


RIER
ELIVERY
ZONE
10AM - 3PM
tiff.
THIS
IS YOUR
FILM
FESTIVAL

CURBSIDE MANAGEMENT

Introduction

On-street parking in the downtown core is in high demand with taxis, couriers, delivery trucks and private vehicles all competing for available curb space. The streets in these areas are often narrow with limited road width available and high traffic demand adding to the challenge. Activities under this strategy will be conducted in close collaboration with the Toronto Parking Authority, and will help manage traffic congestion by:

- Using innovative solutions to improve the balance of parking demand with traffic operational requirements;
- Reducing illegal parking which may affect traffic flow; and
- Increasing legal parking availability and reducing parking “search time”.

Key Accomplishments to Date

Deployed Pilot "Courier Zones"

This pilot project identified and implemented 28 dedicated courtesy loading zones strategically located to avoid disruption of the traffic flow. This project has reduced the impact of courier operations on major downtown routes, such as King Street.

Increased Road and Lane Disruption Enforcement

The introduction of increased enforcement of the existing parking, standing and stopping regulations during peak periods in the downtown core has improved road network operations. This successful program is on-going.

Adjusted Turn Restrictions and "No-Stopping" Peak Periods

The City has adjusted the times for parking, stopping and turn prohibitions along King Street, Queen Street and Adelaide Street to better reflect current peak traffic flow conditions. The City is currently conducting public consultations to implement similar changes along Dundas Street and Carlton Street / College Street in 2015.

Next Steps

Curbside Management Strategy

The City has recently awarded a consulting assignment to develop a Curbside Management Strategy that will improve upon the efficiency of curbside space allocation and usage for all parking and loading activity in the Downtown core. Some of the outcomes of this Strategy may include: adjusted parking, stopping and turning restriction hours, increased parking violation fines during rush hours, implementation of a courier zone pilot, and establishment a multi-agency parking enforcement team.


Wellesley St E

SUPPORT OF ALL MODES OF TRANSPORTATION

Introduction

Encouraging people to use modes other than their private vehicles – such as walking, cycling or public transit – is an important traffic management strategy as it reduces the number of vehicle trips. The City of Toronto is already actively promoting all modes of transportation through its Official Plan and other initiatives such as the Bikeway Trails Implementation Plan. Projects and activities under this strategy support those efforts and help manage traffic congestion by:

- Improving the effectiveness and coordination of traffic management activities involving public transit vehicles and active transportation modes; and

- Exploring the most creative and effective use of typical street design standards and traffic engineering techniques to provide a more balanced use of the road right-of-way

Key Accomplishments to Date

Expanded the City's Bicycle Network

The City installed more than 22 km of bikeways along streets, including a pilot project of cycle tracks along Adelaide Street, Richmond Street, and Simcoe Street. The pilot cycle tracks separate cyclists from mixed traffic with a painted buffer and flexi-post bollards and/or planters, thereby increasing the cyclist's sense of comfort and safety and encouraging more people to cycle. The development of a new on-street Cycling Network Plan is underway which will recommend 5 and 10 year plans for Capital Projects for the expansion of the cycling network.

Updated Pedestrian Crossing Times

Pedestrian crossing times were lengthened at 150 sites to better suit observed pedestrian crossing speeds (e.g. for seniors) and provide adequate pedestrian clearance timing.

Next Steps

Transit Signal Priority (TSP) Strategy

The City has recently awarded a consultant assignment to undertake a comprehensive industry review identifying best practices in TSP operations. The study will identify a strategy that sets out the preferred policy, the broad technical approach, and the operational approach that best meet the needs of all traveller transportation modes. Following this planning study in early 2016, the CMP 2016-2020 includes funding to design and upgrade existing TSP sites, and for new network deployments of TSP in 2018 through 2020.

Bicycle Detection Technology

Bicyclists stopped at intersections must often use pedestrian push-buttons, because traditional in-ground vehicle detector loops can have difficulty detecting bicycles. This project will review the technical and operational requirements for bicycle detection at signalized intersections, and suggest industry solutions that can be applied within the City of Toronto.

Travel Demand Management

This project will expand upon the existing "Smart Commute" Program, currently run by the Environment and Energy Division, to investigate and identify additional strategies and polices to reduce travel demand and make the best use of the existing transportation network capacity.


Victoria Park Av
60


SOMEONE
LOVES YOU
DRIVE SAFELY
MAXIMUM
90

TRAVELLER INFORMATION

Introduction

Providing convenient access to current and reliable road and traffic information allows travellers the opportunity to make informed decisions on the best timing, mode, and route for their trip. This strategy builds on advances made under the Intelligent Transportation Systems activities (see Page 5), and will help manage congestion by:

- Improving the amount of information available to travellers allowing them to make informed decisions on their route;
- Increasing the ease and speed in which information about traffic conditions can be shared with travellers and other agencies; and
- Strengthening data sources and networks to verify that information on current traffic conditions, incidents and events is accurate and reliable.

Key Accomplishments to Date

Deployed Traffic Reports via Twitter

Last year, the City began to broadcast tweets with relevant traffic incident and closure information for the City's expressways and Lake Shore Boulevard. The deployment of additional traveller information strategies will follow in subsequent years.

Installation of New Expressway Variable Message Signs

The City installed 13 variable message signs (VMS) along the Don Valley Parkway and Gardiner Expressway in 2014. These signs help to convey safety and congestion messages to travellers along their travel path.

Deployment of Travel Time Information on Expressways

In 2014, the City started to use the variable message signs along the Gardiner Expressway and Don Valley Parkway to communicate expected travel time to major destinations. Travel time information allows travellers to make decisions about route and provides insight to expected arrival times at their ultimate destination.

Next Steps

Deployment of Travel Time Information – Pilot Deployment on Major Roads

The CMP envisions the expanded use of variable message signs (VMS) to communicate travel times on key arterial roads. Pilot deployments (using trailers) are now active on eastbound Eglinton Avenue East approaching the Don Valley Parkway, and on southbound Kipling Avenue approaching the Queensway and Gardiner Expressway. In 2016 and 2017, permanent VMS are planned for various locations. Should these signs prove effective, deployment of additional variable message signs in 2018 through 2020 will follow.

Traveller Information Strategy Study

The City has long provided various forms of traveller information, but wants to better leverage new technologies and delivery methods (e.g. social media, smart phone apps, etc.). Therefore, this strategy will identify how the City can best engage its customers and provide effective travel information. The assignment is currently in procurement, and will be completed in early 2016. The CMP 2016-2020 includes the deployment of traveller information services proposed in the Traveller Information Strategy, including new social media channels and website updates in 2018 through 2020.


TO 401
VIA NB DVP
5 MIN
DON VALLEY
PKWY SOUTH
STOP
90 km/h

TRANSPORTATION

OPERATIONS CENTRE

Introduction

The Transportation Operations Centre (TOC) is the City's nerve centre for traffic and congestion management, monitoring traffic conditions and coordinating traffic control field devices 24 hours per day, seven days per week. Other agencies also play a central role in managing the road network – including emergency services, TTC, GO Transit, Ministry of Transportation Ontario, 407ETR, and Regional governments. Activities under this Technical Element focus on coordination and cooperation amongst the various agencies to maximize the efficiency of transportation network operations. This would improve traffic congestion by:

- Improving incident detection and monitoring of the transportation network, allowing TOC operators to respond to changes in traffic conditions accordingly and more rapidly; and

- Strengthening a regional approach to traffic and congestion management, addressing Toronto traffic congestion resulting from incidents in other jurisdictions and vice versa.

Key Accomplishments to Date

Upgraded the Transportation Operations Centre

The City updated the 20 year old Transportation Operations Centre (TOC) video wall, workstations, Viewing Room, and all related supporting software and technology. These new facilities help the City to better manage and improve response time to incidents on roadways. They also facilitate emergency operations and traveller information delivery.

Next Steps

Development of a Traffic Management "Concept of Operations"

Transportation Operations Centres (TOCs) use "Concepts of Operations" as operational strategies governing what work gets done, what stakeholders have to be involved, how many people it will take to get the work done, what procedures will be used, and what systems will be used to complete the work effectively. An assignment is currently underway to update and reflect the growing responsibilities of the TOC.

Backup Traffic Operations Centre (TOC)

The continuous monitoring and control of traffic and the City's ITS infrastructure in the field (e.g. variable message signs, traffic signal controllers etc.) is fundamental to the effective management of traffic in the City. As part of the CMP 2016-2020, it is proposed that the planning for a backup emergency TOC be undertaken, and funding put aside for the build-out of a "back-up" TOC.

Coordination with Toronto Parking Authority and Parking Enforcement

The CMP 2016-2020 contemplates an increased coordination with Toronto Parking Authority and Toronto Police Services Parking Enforcement Unit. The objective is to identify, monitor and optimize the enforcement of traffic and parking violation at "hot spots".

Risk Assessment for Toronto's Traffic System Infrastructure

To ensure the City's deployed ITS infrastructure is safe and protected from viruses and cyberattacks, and from loss of communication, a study to investigate and assess the risks to these systems will be undertaken. Expected outcomes will be system improvements and operational methodologies to improve traffic system resiliency.


Incidents
ated:2015-09-16 13:22
Allen
Arterials
29.8
2
2.6
10
9.9
7DAYFORECAST
WED THU FRI SAT SUN MON TUE
Montreal Canadiens defenceman P.K. Subban pledges $10 million to Montreal Children's Hospital.

STATE OF GOOD REPAIR

Introduction

As part of the City's day-to-day work, we repair and maintain road surfaces, signs, pavement markings and traffic systems to provide a safe and reliable travel environment for Toronto. These maintenance efforts assist by removing sources of congestion and improving safety, thereby supporting the CMP goals and objectives.

Key Accomplishments to Date

Upgraded Maintenance and Testing Lab

In 2014, as part of our "State of Good Repair" efforts, upgrades to the Maintenance and Testing Lab were completed to support communications with field devices, remote maintenance of field devices, and setup of an enhanced testing environment.

Upgraded Communications Infrastructure

Since 2014, the City has replaced 400 leased communications lines with wireless system connectivity. This resulted in more reliable service, faster maintenance, and operational savings.

Upgraded Traffic Detection

The City's traffic detection technology was upgraded to remove older in-pavement technologies with "non-intrusive" technology that avoids traffic disruptions during maintenance activities. In the last year, the City has upgraded over 50 such detectors.

Upgraded Traffic Field Equipment

Since 2014, the City has modernized 250 traffic signal controllers and upgraded 60 RESCU controllers (used to control cameras, signs, etc., on expressways). This provides improved operation of traffic signals, traffic cameras, variable message signs providing travel times, traffic flow detection, etc.

Upgraded W.R. Allen Road Traffic Cameras and Communications

In support of the W.R. Allen Road Queue-End Warning System, traffic monitoring capabilities were improved by replacing old limited-functionality traffic cameras with new digital cameras with full "pan, tilt and zoom" functionality.

Next Steps

Support and Maintenance of Intelligent Transportation Systems (ITS)

Maintaining ITS in a 'state of good repair' is essential for delivering safe and reliable services. Therefore, as part of the CMP 2016-2020, Capital funding is proposed to support these system maintenance activities, which may include: systems upgrades, repairs and having available spare parts and related ancillaries.

Upgraded Traffic Detection

Through the CMP, the City has been successfully upgrading traffic detectors to "non-intrusive" technology that avoids traffic disruptions during maintenance activities. For the CMP 2016-2020, it is proposed that this program be continued beyond 2017.

streetsto

@TO_Transport #streetsTO

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