ST. CLAIR AVENUE WEST AREA

TRANSPORTATION MASTER PLAN

(BETWEEN KEELE STREET & OLD WESTON ROAD)



ENVIRONMENTAL ASSESSMENT STUDY PUBLIC DROP-IN EVENTS – June 23 & 25 2018

St. Clair Avenue West Area Transportation Master Plan



1

WELCOME / STUDY PROCESS

Project Team members are here to receive your feedback on the evaluation of alternative solutions, and the recommended solutions and designs.

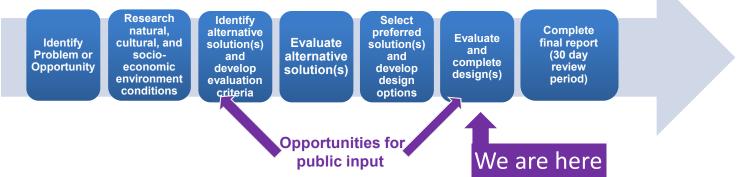
Council Direction:

- April 2012: Public Works and Infrastructure Committee was requested that the City initiate an EA to improve traffic conditions on St. Clair Avenue West between Old Weston Rd and Keele St
- June 2012: City Council direction to initiate and carry out an EA
- November 2016: City Council direction to coordinate planning and delivery with SmartTrack station
- December 2017: City Council direction to coordinate the SmartTrack Station, St. Clair TMP and northwest extension of the West Toronto Rail Path

Study Process

This Transportation Master Plan (TMP) is being carried out according to the Municipal Class Environmental Assessment (EA) process.

Major Steps in the Study



The TMP is being completed to evaluate and recommend infrastructure improvements, and outline an implementation strategy. The TMP will document all four phases of the EA process, and it will be placed on the public record for review.

The TMP has been coordinated with planning and design of the St. Clair-Old Weston SmartTrack Station, to be located east of Keele Street.



STUDY AREA

Problem/Opportunity Statement

The Kitchener GO Transit rail corridor crosses St. Clair Avenue West between Keele Street and Old Weston Road, limiting east/west movement for cyclists, pedestrians & vehicles. This results in issues of congestion and connectivity of the transportation network in the area.

The Transportation Master Plan will evaluate alternatives to improve movement using existing and potential new road connections for the benefit of all modes of travel within the study area.





OTHER TRANSPORTATION PROJECTS IN THE STUDY AREA

Since 2015, development of the TMP has been coordinated with the planning and design of the St. Clair-Old Weston SmartTrack Station. In addition to the SmartTrack project, other transportation projects near the study area include:



Electrification of the Kitchener rail corridor– Metrolinx: Increases GO service in both directions by adding new tracks and infrastructure to support electrification between Union and Bramalea GO Station. *Construction Timing: 2025*



Davenport Diamond Rail Grade Separation – Metrolinx: Increases capacity on the Barrie GO corridor by constructing a grade separation structure between the north/south GO Rail corridor and the east/west CP Rail corridor. *Construction Timing: 2019* to 2025



St. Clair Avenue West Area Transportation Master Plan M Toronto

WHAT WE HAVE HEARD SO FAR

The first Public Event was held on December 2, 2015. The purpose was to present and receive feedback on:

- Problem/opportunity to be addressed
- Proposed Alternatives
- Evaluation criteria

97 people attended the event. The City received 400+ comments via online survey, phone, letter, and in-person discussion.



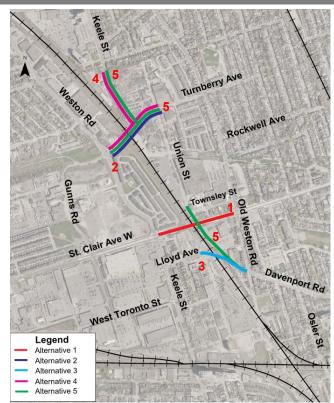
Key Comments	Project Team Review and Response
Support for widening St. Clair Avenue to relieve vehicle congestion in the area.	Support for widening St. Clair Ave between Keele St and Old Weston Rd has been noted.
Concern about increased traffic volumes, including truck traffic, on local streets as a result of the Gunns Road extension.	The new arterial road connections will provide effective routes, minimizing the risk of cut-through traffic on local streets.
Support for extending Davenport Road northwest to Union Street, and extending Gunns Road and Keele Street.	Support for the extension of Davenport Road, Gunns Road and Keele Street has been noted.
Concerns about construction timing, duration and costs.	The City is working with Metrolinx to coordinate construction of the St. Clair TMP infrastructure improvements with SmartTrack. As part of this work, construction staging and traffic management plans will be developed to manage the impact of construction on the community. Construction is anticipated to occur between 2020 and 2024.
Concern about new road connections having negative impacts on property value.	New road connections may have positive or negative impacts on property value. These impacts have been considered as part of the socio-economic environmental evaluation.
Many of the alternatives are car-centric and do not connect to any cycling networks, such as extension north of West Toronto Rail Path.	Cycling facilities are proposed on each of the Gunns Road, Keele Street and Davenport Road extensions as well as on Union Street. An opportunity to extend the West Toronto Rail Path northwesterly to the Lavender Trail is also proposed through a multi-use trail along the Davenport Road and Gunns Road extensions.



ALTERNATIVES WE HAVE CONSIDERED

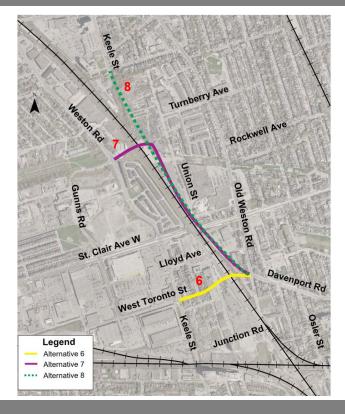
The road improvements presented at the first public event in December 2015 are shown below:

- 1: Widen St. Clair Ave between Keele St & Old Weston Rd
- 2: Extend Gunns Rd from Weston Rd to Union St
- 3: Extend Davenport Rd to Lloyd Ave
- **4**: Extend Keele St to connect to the Gunns Rd extension
- 5: Extend Davenport Rd to improved Union St, extend Keele St and extend Gunns Rd



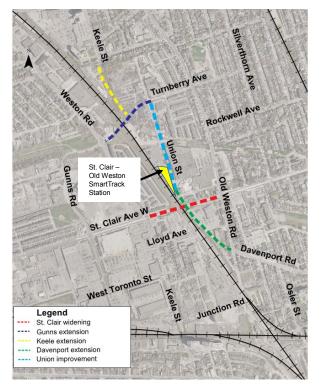
Feedback from the first public event, and input from the project team, resulted in the consideration of additional alternatives, shown below:

- **6**: Extend Davenport Rd to West Toronto St
- 7: Extend Davenport Rd to Gunns Rd
- 8: Extend Keele St & Davenport Rd to Union St, alongside the rail corridor





PRELIMINARY SCREENING OF ALTERNATIVES



The recommended package of improvements is:

- Widen St. Clair Ave W. between Keele St & Old Weston Rd
- Extend Gunns Rd from Weston Rd to Union St
- Extend Keele St to meet Gunns Rd
- Extend Davenport Rd to meet the improved Union St

This package improves network capacity in both the eastwest and north-south directions while improving safety for pedestrians, cyclists, motorists and transit through the study area.

These improvements provide new routes to the SmartTrack station for multiple TTC routes and will further improve access to public transit.

Alternative	Recommended Action
1: Widen St. Clair Ave between Keele St & Old Weston Rd	Carried forward for further evaluation.
2: Extend Gunns Rd from Weston Rd to Union St	Carried forward for further evaluation.
3: Extend Davenport Rd to Lloyd Ave	Not recommended. Route does not effectively reduce traffic on St. Clair Ave, and results in poor traffic operations on Keele St, and at the Keele/St. Clair intersection.
4: Extend Keele St to connect to the Gunns Rd extension	Carried forward for further evaluation.
5: Extend Davenport Rd to improved Union St, extend Keele St and extend Gunns Rd	Carried forward for further evaluation.
6: Extend Davenport Rd to West Toronto St	Not recommended. Route does not effectively reduce traffic on St. Clair Ave, and results in poor traffic operations on Keele St, and at the Keele/St. Clair intersection; high property impact.
7: Extend Davenport Rd to Gunns Rd	Not recommended - conflicts with future SmartTrack station between the existing rail corridor and Union Street.
 8: Extend Keele St & Davenport Rd to Union St, adjacent to the rail corridor 	Not recommended - conflicts with future SmartTrack station between the existing rail corridor and Union Street.



ST. CLAIR AVENUE WEST WIDENING

St. Clair Avenue would be widened to the south between Keele Street and Old Weston Road to 4 travel lanes with a dedicated streetcar right-of-way. St. Clair Avenue will continue to pass under the rail corridor. The rail bridge needs replacement as well; the two projects would be completed together.



Key features and benefits:

- Provides the most direct improvement to east-west travel
- Minimizes risk of road blockages for traffic and emergency access
- Integrates pedestrian ramp connection to local streets and SmartTrack Station
- Opportunity to coordinate work with the replacement of the rail bridges



View along St. Clair looking west towards the Davenport Road and the Kitchener GO Rail bridges.

What was considered ?

- Road over or under the rail bridge
- Widening to the north, south or to both sides of St. Clair Avenue West
- The addition of a streetcar stop under the rail bridge
- Pedestrian ramps
- Intersection designs

The recommended design reflects these considerations.

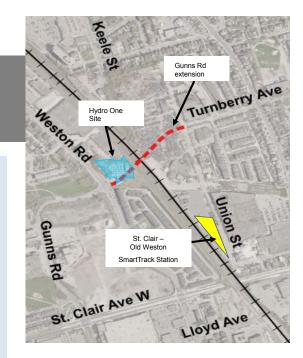


GUNNS ROAD EXTENSION

Gunns Road would be extended from Weston Road under the rail corridor to Union Street, providing a new east/west connection.

Key features and benefits:

- New east-west link improves connectivity for pedestrians, cyclists, motorists and transit.
- Shifts some transportation demand from St. Clair Avenue.
- Integrates bike and walking connections to the Lavender Creek Trail and the SmartTrack station.
- Allows TTC bus access to SmartTrack station from Weston Road (route 41).



Recommended Design Proposed Cross-section north side

View along Gunns Road extension looking east

What was considered?

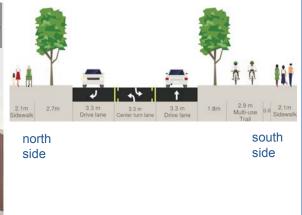
- Road over or under the rail bridge.
- Grading on either side of the extension.
- Extending Gunns Road to form 3-legged intersection at Union Street, south of Turnberry Avenue.
- Providing access to Hydro One site.

The recommended design reflects these considerations.

St. Clair Avenue West Area **Transportation Master Plan**



9



KEELE STREET EXTENSION

Keele Street would be extended to meet the proposed extension of Gunns Road, improving access to and from the north.

Key features and benefits:

- Accommodates pedestrians, cyclists, motorists and transit traveling to and from the north, particularly for accessing the SmartTrack station.
- Adds north/south traffic capacity.
- Allows access for TTC route 41 to SmartTrack Station.
- Minimizes traffic infiltration through the local road network.







View of Keele Street extension at the proposed intersection with Gunns Road extension

What was considered ?

- Grading on either side of the extension.
- The City is working with the Toronto and Region Conservation Authority (TRCA) to develop an alignment and design that minimizes impacts to the Lavender Creek ravine and vegetation. The alternatives and their evaluation will be documented in the study report.

The recommended design reflects these considerations.

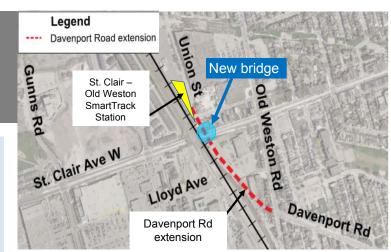


DAVENPORT ROAD EXTENSION

Davenport Road would be extended from Old Weston Road via a new bridge over St. Clair Avenue West to meet Union Street.

Key features and benefits:

 Improves pedestrian, cyclist, motorist and transit travel to and from south/east, including trips to the SmartTrack station.

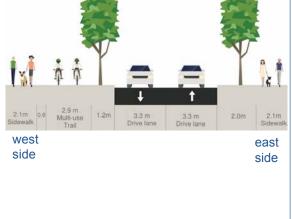


- Reduces congestion at the St. Clair / Old Weston intersection.
- Extends Davenport Road cycling facilities with a multi-use trail on the west side, and connects existing cycling routes.

Recommended Design



Proposed Cross-section



View of Davenport Road looking northwest across Old Weston Road

What was considered ?

- Extension of Davenport Road through an offset intersection, north of the existing leg of Davenport Road.
- Different cycling facility configurations.

The recommended design reflects these considerations.

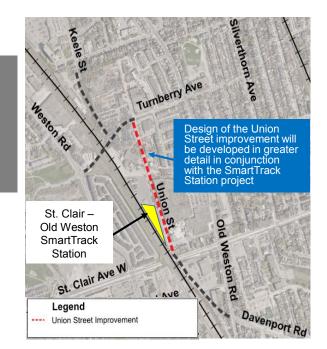


UNION STREET IMPROVEMENT

Union Street would be improved between Townsley Street and Turnberry Avenue, as part of improved connections between Davenport Road, Keele Street and Gunns Road.

Key features and benefits:

- Improves access and safety for pedestrians, cyclists, motorists and buses to the SmartTrack site.
- Completes the link between Gunns Road and the Davenport Road connection.





What was considered?

developed in consultation with

Metrolinx.

- Different cycling facility configurations.
- Widening to the east or the west side of Union Street.

The recommended design reflects these considerations.



EVALUATION CRITERIA

These criteria have been used to evaluate the short-listed improvements.



Socio-Economic **Environment**

- Property acquisition
- Temporary occupation
- Temporary access obstruction during construction (including businesses)
- Permanent access closures
- Impacts on development
- Construction noise & vibration
- Operational noise & vibration
- Construction dust and emissions
- Impact on existing streetscape (type and number affected)
- Opportunity to add new streetscape elements



Natural

Environment

- Groundwater quality •
- Groundwater quantity Water flow effects

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- Effects on drainage and storm water management
- Changes to fish and fish habitat including species of concern
- Vegetation communities including species of concern
- Wildlife and wildlife habitat including species of concern
- Impacts on existing trees Types and quantities of
- excess materials to be managed Storage and/or use of excess
- materials
- Air quality effects

Adherence to City of Toronto design standards and guidelines for transportation

Transportation

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- facilities Accessibility (Compliance with City Accessibility Design
- Guidelines and provincial AODA) Average delay for traffic ٠
- (peak hour) Transit travel time and

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- service reliability Intersection operations ٠ (existing and proposed weekday peak hours)
- Number of people that can ٠ be moved, by all modes
- Travel time/average speed Ability to introduce new .

cycling facilities

- Ability to introduce new or
- widened pedestrian facilities and connections Number of lanes available to
- bypass road incidents and respond to emergencies
- . Intersection operations (existing and proposed weekday peak hour)
- Travel time on major streets •
- Accommodation of additional rail track
- Accommodation of potential ٠ SmartTrack station
- Opportunity to provide . access to potential SmartTrack station
- Opportunities for improved TTC service



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Environment

- Archaeological impacts •
- **Built Heritage impacts** •
- Cultural Heritage Landscapes ٠





Cost

Constructability

- Ability to maintain transit, pedestrian, road, rail, and bike mobility through the study area during
- construction Duration of disruption
- Number of stages/duration
- Engineering feasibility
- Number and scale of utilities affected

- Total construction cost
- estimate
- Property cost estimate

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EVALUATION OF THE RECOMMENDED IMPROVEMENTS

Evaluation Criteria	Widen St. Clair Avenue West	Extend Gunns Road	Extend Keele Street	Extend Davenport Road & Improve Union Street
Transportation Network Resiliency (creating alternative access routes)	Θ	44	44	44
Travel Time and Speed for Motorists & Transit	- 11	1	✓	44
Cycling Access + Safety	Θ	44		44
Pedestrian Access + Safety	1	44		
Emergency Response Access	44	44	44	11
Minimizing Risk of Traffic Infiltration	-11	1	44	✓
Support for SmartTrack Station	1	44	11	11
Cultural Heritage	×	Ξ		*
Natural Environment		44	Θ	J J
Socio-Economic Environment	-14	✓	1	Θ
Key Contributions	 Most directly addresses problem statement in terms of relieving congestion 	 Creates alternative to St. Clair Ave. and Rogers Rd. East/west multi-modal access improvement Support SmartTrack Station 	 Creates alternative to Keele St. North/south multi-modal access improvement Supports SmartTrack Station Together with Gunns Rd, reduces risk of cut-through traffc 	 Needed for SmartTrack station access North/south multi-modal access improvement Relives congestion on Old Weston Road and St. Clair Avenue West

Potential Timing for complete set of improvements to be constructed: **2020 to 2025**





HOW WILL TRAFFIC CONDITIONS CHANGE?

Construction of the recommended improvements will improve traffic conditions throughout the area.

- ✓ Reduces bottlenecks on St. Clair Avenue between Keele Street and Old Weston Road.
- ✓ Provides more direct and flexible routes for emergency service response.

DELAY	Reduces the total delay per cycle at intersections on St. Clair Avenue:			
	Alternative	Keele St. at St. Clair Ave.	Old Weston Rd. at St. Clair Ave.	
	2031 Do Nothing	234 sec	76 sec	
	2031 With TMP Improvements	192 sec	27 sec	
	Delay goes down by:	42 sec	49 sec	

KEELE STREET AT ST. CLAIR AVENUE: Queuing Reductions

(through movements during the morning peak period)

Alternative	Average Eastbound Queue	Average Westbound Queue	Average Northbound Queue	Average Southbound Queue
2031 Do Nothing	450m	235m	45m	940m
2031 With TMP Improvements	79%	93%	33%	78%

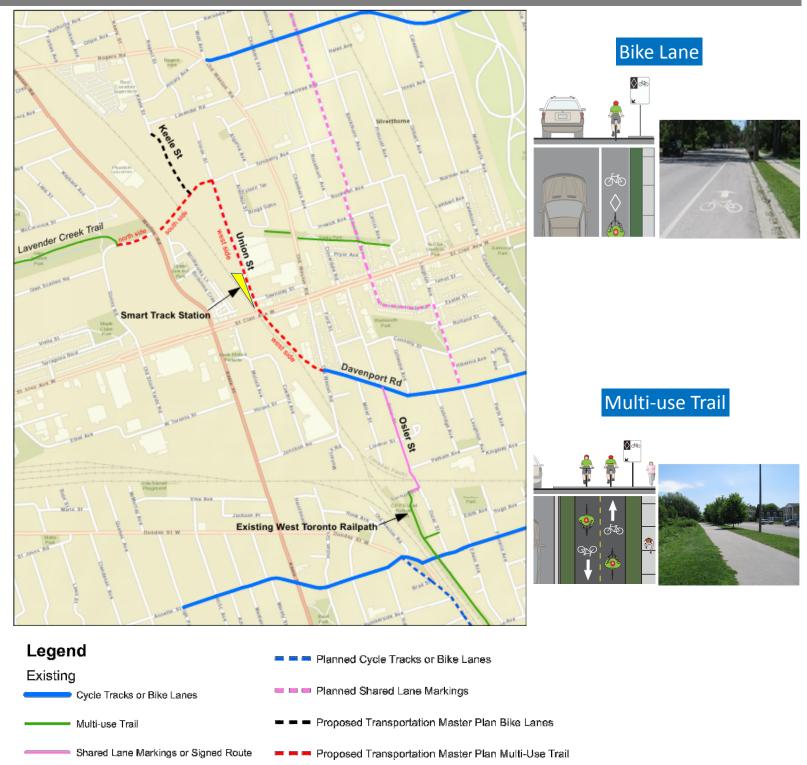
OLD WESTON ROAD AT ST. CLAIR AVENUE: Queuing Reductions (through movements during the morning peak period)

Alternative	Average Eastbound Queue	Average Westbound Queue	Average Northbound Queue	Average Southbound Queue
2031 Do Nothing	10m	50m	45m	130m
2031 With TMP Improvements	50%	95%	89%	96%



CYCLING IMPROVEMENTS

Following the City's Ten Year Cycling Plan, new cycling connections are recommended as part of the road improvements. These will provide a comprehensive network of connections to existing bike facilities. A mix of bike lanes, cycle tracks, and multi-use trails will provide safe and effective links.

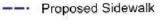




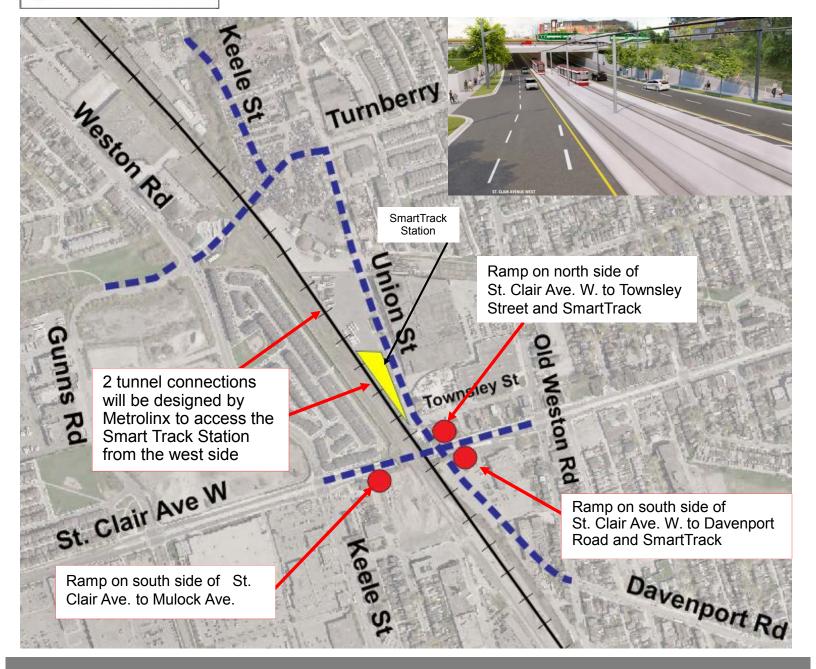
PEDESTRIAN ACCESS IMPROVEMENTS

Sidewalks will be added on both sides of all new streets to improve pedestrian connectivity across the study area. Three accessible ramps will connect pedestrians on St. Clair Ave. to local streets and the SmartTrack Station. These will be based on City standards for widths and lighting, and will conform to the requirements of the Accessibility for Ontarians with Disabilities Act (AODA).

Legend



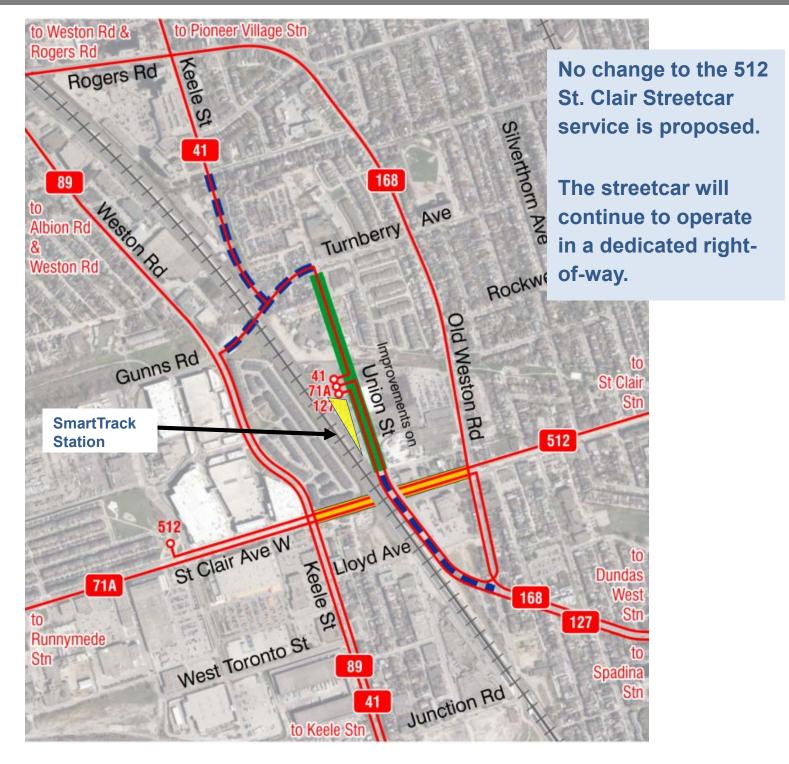
Pedestrian Access Ramp





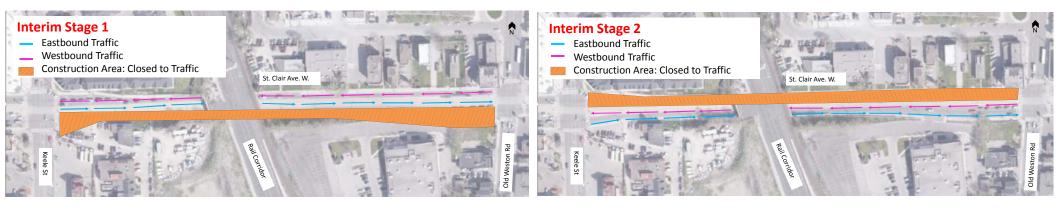
BUS ROUTE EXPANSIONS

TTC bus routes will be adjusted to serve the study area with the St. Clair – Old Weston SmartTrack Station in place. This is a preliminary map of the routes, expected to be in place by 2025. These will enhance bus access throughout the community, and minimize the need to drive to the Station.



CONSTRUCTION STAGING

The St. Clair rail bridge requires expansion and reconstruction to accommodate Metrolinx and CP needs, and to address current deficiencies. The St. Clair rail bridge reconstruction will occur at the same time as the St. Clair Avenue widening, to reduce traffic impacts.



- During construction activities, one lane of traffic will be maintained for each direction.
- The south side of St. Clair will be closed for construction first, with the 2 lanes of traffic provided on the north side.
- TTC streetcars will be temporarily replaced by buses in mix-traffic conditions.
- Once the south side is complete, the 2 lanes of traffic will be moved to the south side to allow work on the north side.
- Staging of the recommended road improvements, and the traffic management plan, will be determined through the detailed engineering phase.

NEIGHBOURHOOD TRAFFIC

The improvements will help to minimize cut-through traffic in residential areas.

- Widening St. Clair Avenue West provides the best way of minimizing traffic infiltration into residential neighbourhoods. Improving traffic flow on arterial roads reduces the likelihood of cut-through traffic.
- The proposed new road connections will provide routes from all directions that will be more direct and convenient than taking residential streets.
- Based on detailed modelling, the risk of traffic infiltration through local streets is low.
- The City has conducted extensive monitoring and collision analysis of the study area over the past 3 years. Nothing of significance has been identified to date.
- The City will monitor traffic and collisions after the improvements are constructed. Further mitigation measures may be identified if needed.



Existing Routings

Routings with the improvements in place





POTENTIAL PROPERTY IMPACTS

Property will be required to implement the proposed streets. Preliminary property requirements for the proposed street improvements have been estimated based on the design work done to date

Why are there property impacts?

• Through the evaluation of alternative solutions the Transportation Master Plan (TMP) recommends infrastructure improvements that have the highest impact to improve transportation options and connectivity for all modes of travel in the study area. Construction of the recommended infrastructure improvements will require the acquisition of property not owned by the City.

What are the expected property impacts?

- Property impacts are necessary for all recommended infrastructure improvements.
- Some of the impacts involve the acquisition of only a small portion of a property, while others require the acquisition of an easement that will allow the use of private property during construction or other specific purposes such as maintaining retaining walls.
- In other cases, it will be necessary to acquire the entire limits of a property to implement the recommended infrastructure.

How will I know if my property is impacted?

• All potentially impacted property owners have been sent letters by registered mail. If you have received a letter but have not yet met with the City, you are encouraged to contact City staff as soon as possible.



TRAFFIC CALMING AND SAFETY

The project team has worked with City Traffic Safety staff to discuss needs and opportunities for traffic calming and safety throughout the study area, and particularly on residential streets.

- Vision Zero is a City program intended to enhance the safety of vulnerable street users. A Vision Zero perspective has been applied to this project by considering the needs of cyclists and pedestrians, particularly in terms of interaction with motor vehicles.
- Options such as restricting turns at intersections have been considered. However, these could force residents to make longer trips, and could increase traffic on other residential streets in the neighbourhoods. Options that rely heavily on police enforcement may not be the most effective in consistently controlling issues.
- Following construction of the TMP improvements, the City will monitor traffic volume, speed and collision data to determine if further adjustments to local streets are needed to ensure safe and efficient transportation.
- A Town Hall workshop with a focus on Vision Zero is one potential tool that can provide an opportunity for residents to voice their ideas and comment on other road safety suggestions.













PROPOSED MITIGATION MEASURES

Proposed mitigation measures, and commitments to future work for the recommended improvements are summarized below. Further details will be provided in the Transportation Master Plan report.

Factor		Proposed Mitigation Measures and Commitments to Future Work
Natural Environment	Terrestrial Ecosystems and Wildlife	 Disturbed areas will be stabilized and re-vegetated as soon as possible. Protect migratory birds and active nests in accordance with the requirements of the Migratory Birds Convention Act. Any wildlife incidentally encountered during construction will be protected. Mitigation measures related to the impacts to the natural feature in the study area will be determined in consultation with the Toronto and Region Conservation Authority. All required permits and exemptions will be obtained prior to start of construction.
	Aquatic Ecosystem	 Implement erosion and sediment control during construction to protect ditches, culverts, and watercourses. Impact to the watercourse in the natural feature south of the Keele Street terminus will be minimized/mitigated.
	Species at Risk	Species-at-risk will be protected in accordance with the requirements in the Endangered Species Act.
	General	All additional field investigations to support the realigned Keele St. extension will be completed during the next design phase.
Socio-Economic Environment		 The City will continue to correspond with impacted property owners throughout the study. The City will continue to reduce property impacts wherever possible.
		 The Contractor shall manage all excess materials and wastes generated during construction in accordance with the Environmental Protection Act The Contractor will implement a soil management plan, including spill contingency and emergency preparedness during construction.
		 Contractor shall be responsible for treatment of contaminated groundwater prior to release and in accordance with applicable regulations during construction. The Contractor will obtain all required permits prior to stat of construction (e.g. water-taking permit).
	Noise and Air Quality	 Construction to be completed in accordance with City of Toronto's noise by-law. The Contractor will be required to maintain equipment in good operating condition to prevent unnecessary noise and restrict idling to the minimum necessary. Noise mitigation measures for the build-out of the improvements will be documented in the Transportation Master Plan report. Dust will be controlled using water and not chemical suppressants in dust-sensitive area.
Cultural Heritage Environment		 All areas will be assessed for archaeological and heritage potential prior to the start of construction. If previously unknown or deeply buried archaeological resources are uncovered during construction, work will cease and the appropriate parties will be contacted for direction.
		 The City is completing cultural heritage studies to impacted potential built cultural heritage resources. The Contractor will be required to minimize indirect impacts (e.g. vibration) to identified cultural heritage resources during construction.
Transportation	Emergency Access	Advanced notice will be provided to emergency service providers notifying them of construction start and anticipated lane closures so they can define alternative routes.
	Traffic Interruptions and Delays	 The City of Toronto's 'Road Restrictions & Closures webpage' will be updated with road closure information. Advanced signage will be provided to motorists to notify them of construction start, and any lane closures, and detour routes required for construction.
	-	 The City is committed to monitoring volume, speed and collision data upon project completion. The need for design features to slow down traffic will be evaluated based on the traffic monitoring results.
	Utilities	Coordination with the existing utilities is on-going.



NEXT STEPS

Thank you for attending today's Drop-In Event.

Please feel free to ask questions and fill out a comment form before you leave. Comments can be left in the box provided or through the online feedback form on the project website **by July 8, 2018**.

After this Drop-In Event, the Project Team will:

- Review the comments received and respond to questions/concerns that require follow up.
- Incorporate any refinements into the proposed works based on public and agency input.
- Prepare the Transportation Master Plan Report and make available for a 30-day public review.



The information presented today is available online at www.toronto.ca/stclairwesttmp



Stay In Touch

Contact the Project Team if you have any questions or feedback regarding the information presented. **Contact:**

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