

Alternative 6

As with the do-nothing alternative, there would be disruption during construction. Following completion of the construction, the increase in transit service is projected to spur redevelopment along St. Clair. The long-term expansion of the transit customer base (up to 16,000 new daily passengers) is expected to have a positive effect on the local economy. Improvements to the streetscape would also increase business attractiveness.

On-street loading can occur as it does on other Toronto commercial streets, and the change from the current situation (in which some double-parking may occur) is not expected to have a significant effect on business. There is the potential to add new dedicated loading areas on side streets for deliveries.

Based on the changes to parking supply (and factoring in the relative importance of convenient parking in this environment), the socio-economic assessment has indicated that, unless parking losses are mitigated:

- Potential reduction in corridor sales of up to 2% would be projected;
- Specific areas of concern are:
 - St. Clair Gardens BIA;
 - St. Clair West BIA; and,
 - Area between St. Clair West BIA and the Hillcrest Village BIA.
- As the projected sales reductions are relatively modest, it is difficult to ascribe any employment losses to the projected reductions in sales levels. Therefore, any potential for related store closings would be expected to be extremely minor (if any).

Other than the effects on these factors, the proposal is projected to have little effect on the business community.

Alternative 9

As with the do-nothing alternative, there would be disruption during construction. There would be little or no change in the redevelopment potential. There would be no changes in sidewalk activity in the long term, however the slight improvement in streetscape could increase business attractiveness. New loading areas can be provided on side streets.

Based on the changes to parking supply (and factoring in the relative importance of convenient parking in this environment), the socio-economic assessment (**Appendix 8B**) has indicated that, unless parking losses are mitigated:

- Potential reduction in corridor sales of up to 3% would be projected;
- Unless the effect of the loss in parking is mitigated by a replacement of parking spaces, specific areas of concern would include:
 - St. Clair Gardens BIA;
 - St. Clair West BIA; and,
 - Area between St. Clair West and Hillcrest Village BIA's.
- As the projected sales reductions are relatively modest, it is difficult to ascribe any employment losses to the projected reductions in sales levels. Therefore, any potential for related store closings would be expected to be extremely minor (if any).

Other than the effects on these factors, the proposal is projected to have little effect on the business community.

9.5.5 Community

Do Nothing

There would be no change from existing conditions.

Alternative 6

Alternative 6 provides the greatest degree of compliance with the Official Plan policies and Provincial SmartGrowth policies regarding implementation of transit priority, while protecting stable residential neighbourhoods.

Construction times would increase slightly over the do-nothing alternative, temporarily affecting access and parking. Community cohesion would be improved due to the perception of a narrower and more defined road space, and through creation of enhanced mid-crossing pedestrian refuges at the platforms. There would be no change in the ability to host major events, such as World Cup celebrations. There would be a significant improvement in transit and pedestrian access for key users of community services (youth and seniors), with a minor reduction in access for drivers. There is no projected negative effect on residential assessment values, based on historical data for Spadina. There would be no changes in noise levels.

There would be reductions in sidewalk widths at some signalized intersections, but the remaining sidewalk widths would be comparable to other pedestrian-oriented commercial streets in Toronto, permitting sufficient space for outdoor retail display and cafes. The sidewalk reductions are tabulated in **Figure 9.5.5.1**. Property strips would be acquired in five locations to maintain an adequate sidewalk width. No expropriation of entire properties would be required.

Alternative 9

Alternative 9 provides only a small degree of compliance with the Official Plan policies and Provincial SmartGrowth policies regarding implementation of transit priority, because the slight increase in transit service reliability and quality could not be maintained over the long term.

Construction times would increase slightly over the do-nothing, temporarily affecting access and parking. There would be a minor improvement in community cohesion due to the perception of a narrower street, with planted medians in select locations. There would be no change in the ability to host large events such as World Cup celebrations. The transit access for key users of community facilities, youth and seniors, would improve marginally in the short term, while there would be no negative effect on drivers. There would be no change in noise levels.

9.5.6 Natural Environment

Do Nothing

There would be no changes from existing conditions.

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The replacement of numerous street trees in poor condition and the platform island plantings would have a marginally positive effect on air quality and natural habitat. This would also improve stormwater quality and reduce stormwater runoff quantity. The decreased delay for left turns and other traffic movements would also benefit air quality. Maintaining the existing traffic capacity means that air quality would not be adversely affected by congestion.

St. Clair Avenue West Transit Improvements Class Environmental Assessment

Int. #	St. Clair Avenue (from West to East)	Intersection Sidewalk Cuts (approx. in metres)						Sidewalk Remainder Width			
		NW	NE	SW	SE	Min	Max	NW	NE	SW	SE
1	Gunns Road	4.93	4.86	0.20	0.40	0.20	4.93	2.25	2.40	6.16	5.71
2	Keele Street/Weston Road*	3.57	4.03	3.07	3.91	3.07	4.03	4.38	3.18	5.28	2.63
3	Old Weston Road*			8.65	4.17	4.17	8.65	2.87	6.50	1.47	1.50
4	Silverthorn Avenue/ Hounslow Heath Road	3.10	3.00	3.69	3.70	3.00	3.70	3.73	3.81	3.73	3.77
5	Laughton Avenue	2.21	1.87	2.19		1.87	2.21	4.01	3.41	3.42	4.26
6	Caledonia Park Road		1.00	0.26	1.30	0.26	1.30	4.05	3.93	3.33	3.39
7	Lansdowne Avenue	1.09	1.53	1.72	0.79	0.79	1.72	3.58	3.11	2.94	3.85
8	Earlscourt Avenue	0.13	0.49	0.27	0.50	0.13	0.50	4.98	4.43	4.59	4.32
9	Via Italia		1.48	1.51	0.62	0.62	1.51	4.63	3.30	3.19	4.05
10	Dufferin Street	0.93	0.05	0.96		0.05	0.96	4.22	4.91	3.35	4.39
11	Northcliffe Boulevard	0.00	1.01		1.08	0.00	1.08	3.75	2.56	5.62	4.56
12	Glenholme Avenue	0.17		1.92	1.90	0.17	1.92	3.97	4.50	3.44	3.50
13	Oakwood Avenue	0.11	1.51	0.74	0.84	0.11	1.51	3.04	2.56	3.45	4.74
14	Alberta Avenue	0.02		1.05	0.68	0.02	1.05	4.76	4.80	3.69	4.06
15	Winona Avenue	2.11	2.21	1.05	0.98	0.98	2.21	2.62	2.85	3.68	6.73
16	Arlington Avenue	0.46	1.30	1.66	0.42	0.42	1.66	4.20	3.42	3.27	4.15
17	Christie Street	1.02	1.00	0.97	1.00	0.97	1.02	3.70	3.65	4.61	3.73
18	Wychwood Avenue		0.33	0.12		0.12	0.33	4.64	4.58	3.61	4.64
19	Vaughan Road	0.81	0.42	1.21	0.24	0.24	1.21	3.60	4.24	3.61	4.66
20	Bathurst Street*	1.69	1.89	0.84	0.37	0.37	1.89	5.13	5.90	3.57	3.89
21	Wells Hill Avenue					0.00	0.00	3.39	7.81	2.70	2.73
22	Spadina Road	1.06	1.10	0.64	1.11	0.64	1.11	3.47	3.95	4.00	3.70
23	Russell Hill Road	1.47	1.07	0.37	0.69	0.37	1.47	3.57	3.74	3.98	3.79
24	Warren Road	1.32	2.18		0.00	0.00	2.18	3.52	3.00	4.72	4.56
25	Poplar Plains Road	1.36	1.20	0.64	0.69	0.64	1.36	3.69	3.70	3.70	3.68
26	Avenue Road*	0.40	2.45	0.36		0.36	2.45	4.37	3.14	2.41	2.52
27	Deer Park Crescent*	1.02	0.99	1.69	1.09	0.99	1.69	1.77	2.08	3.00	3.00
28	Yonge Street**	1.61	0.98	0.52	1.12	0.52	1.61	3.00	2.07	1.83	3.00

*Sidewalk cuts to be mitigated by construction of new sidewalk adjacent to existing location. Remaining sidewalk width reflects mitigation

**Existing adjacent plaza space extends the pedestrian area on the NW corner



FIGURE 9.5.5.1 Intersection Sidewalk Cuts

Alternative 9

Air quality would improve marginally at the outset, due to the reduced delay for left turns and the replacement of a few street trees where sidewalks would be reconstructed. However the potential for increased delays and congestion from lower transit use would degrade air quality in the longer term. New trees would improve the natural habitat and improve stormwater management, however the narrower platforms would eliminate the potential for plantings.

9.5.7 Neighbourhood Traffic

Do Nothing

No change from existing conditions is projected; peak hour volumes are typically in the range of 100 to 200 vehicles per hour on local streets.

Alternative 6

The change in local street volumes has been assessed on a sub-area basis. In all but two of the areas, no increase is expected. In the two areas with a projected increase (east of Bathurst Street), the changes are expected to be +2% and +8%, based on computer modelling. This is negligible in terms of traffic operations or capacity.

Traffic signals would be added at Alberta Avenue, Poplar Plains Road and Warren Road, improving local access. The signalized intersection at Wychwood Avenue would be improved by including the offset north leg into the intersection. By removing turn restrictions at major intersections (Avenue Road, Bathurst Street, Dufferin Street, Old Weston Road and Keele Street) there is projected to be less likelihood of neighbourhood traffic infiltration.

Local sensitivities were identified by stakeholders with respect to the potential for traffic infiltration on the following streets forming parallel routes to St. Clair Avenue:

1. Heath Street, east of Spadina Road; and
2. The partial parallel route afforded by Alcina Avenue, Benson Avenue and Rosemount Avenue between Bathurst Street and Dufferin Street.

Alternative 9

The average change in local street volumes is projected to be -11% based on the computer modelling. The range of volume changes is expected to be within $\pm 10\%$ based on vehicle-km travelled. This is negligible in terms of traffic operations or capacity.

9.5.8 Pedestrians and Cyclists

Do Nothing

No change from existing conditions is expected. Extra bike racks can be added on the sidewalk.

Alternative 6

There is the potential to improve safety through the implementation of enhanced crosswalks, improved lighting, wider and more protected platforms, and a pedestrian/cyclist refuge in the centre of St. Clair. New signals at Poplar Plains Road, Warren Road, Tweedsmuir Avenue and Alberta Avenue would increase safety while crossing the street. Crossing times would decrease by 1.4 seconds at one location, and increase by 2.6 seconds at 11 locations due to sidewalk narrowings. There would be a minor increase in intersection waiting times (up to 10 sec). Crossing at unsignalized locations would improve with the addition of the median refuge. Extra bike racks can be added during sidewalk reconstruction. Figure 9.5.5.1 illustrates the projected change in sidewalk widths in locations where a cut is required.

Alternative 9

There is the potential to improve safety with the implementation of enhanced crosswalks, more protected platforms, and improved lighting. The crossing time would increase by an average of 1.8 seconds at six locations, and waiting times would increase slightly by up to 10 seconds. Cross street access would improve at select unsignalized intersections with the addition of a refuge adjacent to planted medians. Extra bike racks can be added at sidewalk reconstruction locations.

9.5.9 Special Access Issues

Do Nothing

No change from existing conditions.

Alternative 6

Emergency vehicles would have unimpeded access to reserved lanes, and access from Fire Hall 25 would be maintained by a special design treatment at Hendrick Avenue. Special design features would ensure full moves to and from Prospect Cemetery. The design would allow pedestrian crossings from St. Clare's Church to the Jerrett Funeral Home.

Alternative 9

Full moves to and from St. Clair would be maintained at Prospect Cemetery. Vehicular access and crossings from the Jerrett Funeral Home to St. Clare's Church would not be affected.

9.6 Urban Design Opportunities

In addition to the operational changes described above, the reconstruction of the streetcar tracks provides an excellent opportunity to help improve the appearance and attractiveness of St. Clair Avenue West. In this manner, both the functional and aesthetic elements of the corridor could be brought together in a mutually beneficial way through the transit improvement project. Alternative 6 provides a much greater opportunity for urban design improvement than Alternative 9, because of the associated changes required to the road and the sidewalks. The details of these improvements will be finalized in consultation with the community during detailed design.

The aesthetic or beautification elements of the project design include such features as enhanced sidewalks, transit shelters, platforms, street trees, new streetlighting, public art and improvements to major local landmarks such as the entrance to Earls Court Park. The preservation and rejuvenation of the unique character of the St. Clair Avenue West corridor is an important aspect of the project.

A range of elements can be incorporated into the track reconstruction project, including complementary connections with the surrounding neighbourhoods and green spaces. The

urban design enhancements that will be investigated during detailed design include the following.

Pedestrian Improvements

The combination of public transit and retail activity requires special attention be paid to the pedestrian environment. There are a number of elements that would receive special treatments, including intersection crossings, transit platforms, and shelters, benches, street furniture, lighting, and streetscaping.

At signalized intersections, the pedestrian areas need to be well defined. This could be done in a variety of ways including coloured, textured pavement, interlocking brick, or painted patterns. Walk paths would be textured for people with visual impairment, and audible traffic signals would be introduced as an additional aid. It is envisioned that the major signalized intersections would have a unique treatment for pedestrian areas. The minor signalized intersection may have a different type of treatment.

Another pedestrian improvement that should be made is provision of buffers along private parking areas that are directly adjacent to sidewalks. Currently, vehicles park adjacent to the sidewalk with no separation in some locations. These buffers could include planters, benches, bollards or some combination, to provide a more secure and inviting pedestrian environment in these areas.

The existing sidewalks along St. Clair are mostly in good condition and are not scheduled for replacement in the near future. However, the preferred design concept requires that some sidewalks be modified to accommodate intersection changes. Therefore, there would be opportunities to provide sidewalk treatments in these areas. The treatment of sidewalks will be part of the detailed design phase of the project and will be subject to community input.

Streetcar Platforms and Shelters

The current streetcar platforms and shelters are substandard and in poor condition. The public expressed numerous concerns about the safety of the platforms due to their narrow width, the lack of protection provided by the deteriorated railings, limited weather protection provided by the existing shelters and poor accessibility from the sidewalks.

The reconstruction of intersections for the exclusive transit lanes will provide an opportunity to build new, improved, wider, more attractive platforms at all streetcar stops locations and to introduce substantial and attractive shelters and railings. New platforms

would be made wide enough that they could accommodate wheelchairs and mobility aids so that, when the Toronto Transit Commission purchases accessible streetcars in the future, the St. Clair Avenue line and its platforms will be compatible. Part of the pedestrian improvements component that will be incorporated into the project will include improved definition of the pedestrian space at intersections to make access to the platforms safer.

A custom designed shelter for the St. Clair streetcar would provide identity to the line as well as act as a feature of the urban design strategy. A custom designed shelter could also incorporate public art features that reflect the culture, heritage or other notable aspects of the corridor.

Unique Locations for Urban Design Improvements

A number of “key locations” along St. Clair Avenue have been identified for special streetscape, urban design and/or public art features, thereby adding to the character of the street. The unique sites are:

- a) Avenue Road intersection – this is a major intersection with two City parks located on the north side;
- b) Tweedsmuir to Bathurst (area on top of the underground streetcar loop) has a large unused pavement surface which could be used to create a gateway to the “main street” retail area west of Bathurst as well as improving connections between the north side and the green spaces on the south side;
- c) Oakwood intersection – with historic Oakwood Collegiate situated at the southwest corner, this intersection is a high-volume transit passenger and pedestrian location. Public art could be incorporated at this location, recognizing the commemoration of Oakwood Collegiate’s 100th Anniversary in 2005;
- d) Lansdowne Loop alongside J.J. Piccininni Centre serves many uses, including pedestrian access to Earls court Park, but is not very attractive. The Loop could be redesigned to create a more visible, prominent and inviting access to Earls court Park;
- e) Gunns Loop – as the western terminal for the streetcar line, this location could be improved to provide a much more inviting and interesting environment for transit passengers transferring to and from the streetcar line.

The Community would be invited to identify other key landmarks along St. Clair Avenue which warrant special treatment.

Public Art

The project team is working with community groups, including local artists who have expressed an interest in contributing to the project, to integrate public art along St. Clair Avenue West. There is a strong arts community in the St. Clair West area that has recently developed a major community arts project associated with the Wychwood Barns property. There is a desire in the arts community to contribute to the project as well as to participate in future consultation, with respect to art themes and distinctive sites that reflect the heritage and values characteristic of St. Clair Avenue.

There are a number of opportunities for public art along the streetcar lines including:

- Integrated art at streetcar platforms
- Art at unique sites (discussed above)
- Discrete art at locations such as potential public square at Northcliffe Boulevard
- Art integrated into street furniture or sidewalk designs.

As part of ongoing consultation with the community during the design phase, a special public art consultation group will be established to work with the design team.

Connecting to Public Spaces and Parks

There are a number of public spaces along the length of the corridor with different treatments or levels of connectivity to St. Clair Avenue West. The public space/parks corridors include:

- Sir Winston Churchill Park (east of Spadina Road)
- Cedarvale Ravine (north of St. Michael's College)
- Deer Park (east of Bathurst Street)
- Wychwood Car Barns (south of on Wychwood Avenue)
- Earls Court Park (west of Lansdowne Avenue)
- Joseph J. Piccininni Centre

A number of smaller parkettes are located along the corridor, providing much needed public spaces in this urban environment.

Improvements made as part of the transit project will complement revitalization/beautification plans for parts of the St. Clair Avenue West proposed by local BIAs and other interest groups in the community.

A recent Capital Improvement Plan was completed for the St. Clair West Revitalization Committee (SWRC) that included a number of suggestions for potential projects in the area between Keele Street and Gunns Road and Glenhome Avenue.

One of the potential projects is the creation of a half underground parking lot, covered by a public square on the northwest corner of St. Clair and Northcliffe. The property at this corner is owned by the Toronto Catholic District School Board. The TPA and City Parks division are currently investigating the potential to develop this site for this dual purpose. The estimated cost to create a public square on this site, assuming the parking structure and roof are constructed by TPA, is \$1-1.5 million. City Parks has indicated that it will include this project in its budget for 2006, pending the outcome of discussions between TPA, TDCSB and City staff.

Another area identified as requiring special treatment is the Lansdowne streetcar loop immediately adjacent to the Joseph J. Piccininni Community Centre. The loop serves many uses including streetcar stop, bus stop, access to rear laneways and pedestrian access to the park. It is an unattractive and uninviting area. An urban design concept has been developed for this loop, that could be funded through the City's Urban Design program. The approximate cost for these improvements is \$500,000.

Street-tree Replacement and Additions

A condition assessment of existing street trees along St. Clair shows that most trees are in fair to good condition. (This does not include smaller plantings in planters, many of which are in poor condition.) The majority of street trees are planted in pit pavers or in turf areas. Turf plantings are found within the sidewalk/boulevard areas or in one of several parks or parkettes within the corridor, such as Earls Court Park and the parkettes abutting the Avenue Road/St. Clair Avenue intersection. The Toronto Maintenance Management System is used by City of Toronto's Parks & Recreation Division to regularly update and verify the type, ownership, condition and status of all street trees. It also sets out schedules for replacement of damaged, dying or dead trees, usually during the following growing season. Urban Forestry staff will work closely with St. Clair project staff during design and construction to ensure that current standards for tree plantings, including species, sizes, tree pits, and pit covers are implemented as part of the St. Clair Transit Improvements project. Variations in tree species, locations and sizes will be also investigated as appropriate to ensure the viability of the tree as well as enhance the visual aesthetics of the area. They will also assist in reviewing appropriate locations where additional tree plantings may occur, including locations suggested by the community and area BIAs, as appropriate.

Streetlighting Improvements

An assessment of the existing streetlighting along St. Clair Avenue West indicates that the current state of the street lighting plant does not warrant any near-term changes. Lighting levels do not meet all of the City’s standards, though any upgrades would have to be scheduled in the context of a City-wide Capital program to address lighting level deficiencies on arterial roads. However, the St. Clair West Transit Project may provide an opportunity to co-ordinate the required street lighting improvements. The potential to improve streetlighting along the corridor will be investigated during detailed design.

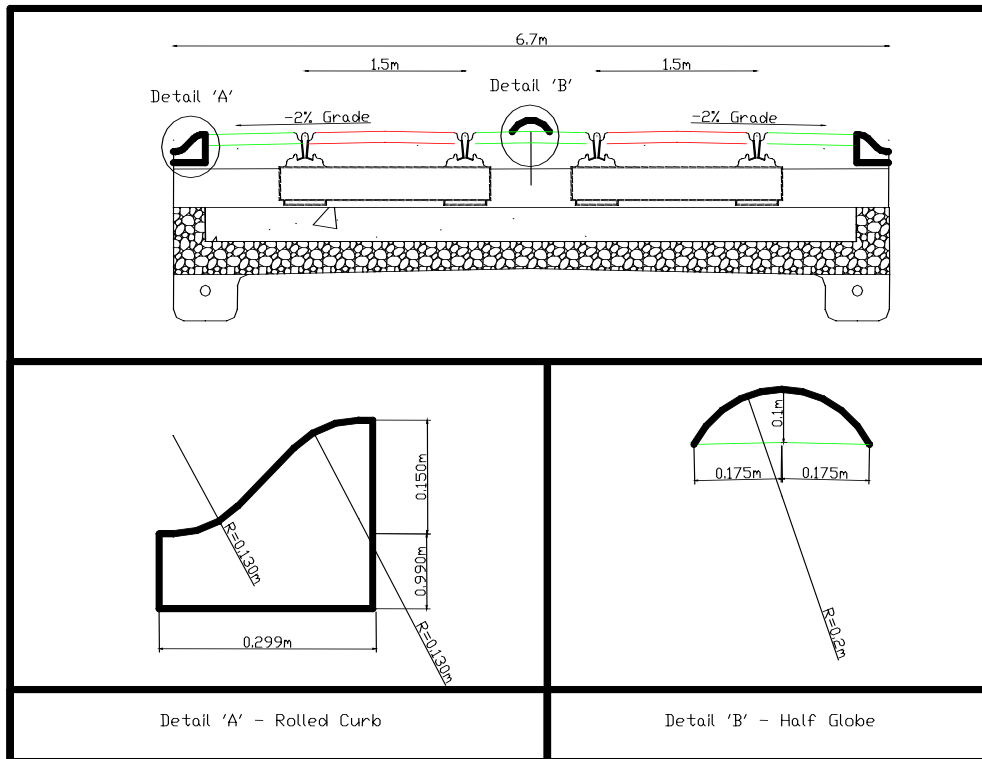
9.7 Consultation with Emergency Services to Develop an Acceptable Design

An extensive process of consultation was completed with Fire, EMS and Police Services of the City of Toronto, to ensure that they were in agreement first with the selection of the preferred Design Alternative, and second with the design of the exclusive transit lanes. Meetings were held with emergency service representatives to review the outputs of the microsimulation model, and to reach consensus on the design specification of the transit lanes.

A photomontage of Alternative 6 is illustrated at right in terms of a perspective drawing, and a draft concept for the transit lanes design details is shown in **Figure 9.7.1**. It involves slightly raised transit lanes (15 cm), paved in a contrasting material to the traffic lanes to indicate that the lanes are reserved. A rolled curb will facilitate emergency vehicle access onto and off the lanes. Between the two transit lanes, the draft concept is for small “half-globes” to be placed to indicate that vehicles should not cross the transit lanes. These half-globes will be constructed so as to permit emergency service vehicles to cross them without damage to vehicles. The design of these half-globes would be completed during the detailed design phase.



Figure 9.7.1: Preliminary Design Detail Concepts



The raised lanes and half-globes would not be implemented across signalized intersections. No differential in height between the streetcar and traffic lanes would be present through the signalized crossings of north-south streets.

The only issue raised by the emergency services staff requiring mitigation is that of winter maintenance of the transit lanes. Prompt and effective maintenance is required to ensure that the lanes are accessible and safe for emergency services.

9.8 Costs

The capital costs of the alternatives are as follows:

- Do-nothing: \$25 million for track replacement and \$5 million for platform replacement (this has been budgeted by the TTC);
- Alternative 6: \$42 million, including a basic level of streetscape improvement;
- Alternative 9: \$55 million, including a basic level of streetscape improvement.

Alternative 6 provides a much higher level of cost-effectiveness than either the do-nothing or Alternative 9, based on its ability to attract additional riders and offer them a reliable, quality transit service which can be maintained into the foreseeable future.

The Toronto Parking Authority budgets required for any mitigation are not included in these costs, nor are the costs for vehicles.

9.9 Preferred Solution

Based on the outcomes for each category and its relative weight, in terms of each criterion and its relative importance, the team identified Alternative 6: Exclusive Streetcar Lanes for St. Clair Avenue as the draft technically preferred solution. This alternative was identified to be most effective in addressing the future needs of mobility, businesses, vitality and sustainability of the St. Clair area while also creating a safe, aesthetically pleasing, environmentally-friendly solution that conforms with the Official Plan goals.

The effects of the Exclusive Transit Lanes undertaking are summarized as follows:

- The existing level of auto capacity is maintained throughout the street, and access for left turns is improved at numerous locations;
- Transit reliability, consistency and trip quality will improve significantly;
- Design provisions will accommodate the needs of unique stakeholders, such as the Jerrett Funeral Home and Prospect Cemetery;
- The design accommodates the needs of emergency service providers for travel along the street and access across it;
- Safety for pedestrians is improved, through the introduction of streetcar platforms where these do not currently exist, through creation of wider platforms,
- Access for cyclists is maintained throughout at its current level, and crossing accessibility is improved;
- The construction period is of prime concern with respect to business impacts. A mitigation plan is defined below to address that issue;
- There is no effect on community facilities or festivals;
- There is a marginal loss in on-street parking. Mitigation of that effect is discussed below; and
- The urban design quality of the street can be improved, creating a unique identity for St. Clair Avenue.