TORONTO

STAFF REPORT
ACTION REQUIRED

Front Street West Reconfiguration Environmental Assessment Study

Date:	January 26, 2012
To:	Public Works and Infrastructure Committee
From:	Acting General Manager, Transportation Services
Wards:	Ward 20 (Trinity-Spadina) Ward 28 (Toronto Centre – Rosedale)
Reference Number:	P:\2012\Cluster B\TRA\TIM\pw12003tim

SUMMARY

Union Station, the City's most important transportation hub and one of the busiest in Canada, is undergoing a major revitalization. In addition, the Toronto Transit Commission (TTC) is currently constructing a second platform at Union Station which requires the reconstruction of Front Street West, between Bay and York Streets. These two concurrent initiatives provide a tremendous opportunity to cost-effectively reconfigure this section of Front Street in order to improve the public realm, enhance the pedestrian environment and safety, complement the heritage features of this important city building, and create an exciting, attractive and functional "front door" to Union Station not only for daily commuters but also for special cultural events.

On an average weekday, over 165,000 GO Train passengers use Union Station, most of whom have destinations to the north. With projected increases in population in the Greater Toronto Area and employment in the City's downtown, and proposed expansion of GO Train service to meet the increasing demands, the passenger volumes at Union Station are forecast to double within fifteen years. It is necessary, therefore, to implement measures to effectively accommodate these increased pedestrian volumes and to ensure, to the greatest extent possible, their safety. Accordingly, a Municipal Class Environmental Assessment (EA) was undertaken to evaluate alternatives for the reconfiguration of Front Street West between York Street and Bay Street. Although this section of Front Street is used by automobiles, cyclists, taxis, trucks, vendors, etc., the primary purpose of this EA study was to identify a new plan for Front Street that meets the City's objective of improving this area for pedestrians.

Fourteen alternative configurations were developed and evaluated, with input from numerous City Divisions (City Planning, Heritage, Economic Development and Culture, Technical Services) and consultation with the public, stakeholders, and external review agencies. Based on the evaluation and consultation, a recommended plan has been developed that includes the following main features:

- A reduction in the number of traffic lanes from two lanes to one lane (widened to 4.75m to better accommodate cyclists) in each direction with a centre median and left turn lanes at appropriate locations;
- A mid-block pedestrian crossing area, with a slightly raised elevation (flush with the adjacent sidewalks) and specialized surface treatment;
- Widened sidewalks and boulevard areas on both the north and south sides of Front Street which will allow tree planting on the north side and the expansion of the public realm and civic plaza on the south side;
- Enlarged pedestrian areas and widened crosswalks at both the Front/Bay and Front/York/University intersections to accommodate increased pedestrian volumes;
- Provision of designated lay-by areas to accommodate taxi and private automobile pick-up and drop-off activity;

The detailed design of this reconfiguration will also include other elements that will enhance the public realm and address the needs of various users including special surface treatments, pedestrian-scale and special event lighting, bench seating, wayfinding and information booths, bicycle parking, enhanced vendor locations, etc.

The funds for this project are not included in the Transportation Services 2012 Capital Budget and 10-Year Capital Plan and, therefore, the source of funds for this project, estimated to be approximately $5 million, still need to be identified. However, the work currently being done by the TTC, in addition to work related to the construction of the northwest PATH system and watermain replacement along Front Street, provide a unique, cost-effective and, perhaps, one-time opportunity to incorporate the above recommendations. Otherwise, deferral of consideration of this proposal will require the TTC to reinstate Front Street, following completion of their works, to the previous configuration and any future reconfiguration will come at considerably higher cost and additional disruption.

RECOMMENDATIONS

The General Manager, Transportation Services, recommends that:

1. City Council authorize the General Manager of Transportation Services to issue a Notice of Completion and to file the Environmental Study Report for the Front Street Reconfiguration Class Environmental Assessment Study in the public record for a minimum 30 days in accordance with the requirements of the Municipal Class Environmental Assessment.

Implementation Points

Following approval of this report by City Council, the Environmental Study Report (ESR) will be filed in the public record for a minimum 30-day period. If there is no Part II Order request then the project could move to detailed design and subsequently to implementation.

The TTC subsurface work on Front Street will be completed in 2014. The next project requiring work in the right-of-way is the replacement of a 600 mm diameter water main between Bay and York Streets. This may occur immediately after the TTC project is complete, or (depending on the duration and scope of work required) may be deferred until after the Pan Am games in 2015. In either case, to minimize disruption to users, to make the most efficient use of public funds, and to achieve the objectives for Front Street, it is suggested that the implementation of the recommended plan (as per this EA study) for Front Street between York and Bay streets immediately follow the water main replacement. This will require that detailed design work begin immediately after EA approval.

Financial Impact

The estimated cost of the recommended plan is $5.0 million. There are opportunities to reduce the net cost if implementation is coordinated with the reinstatement of Front Street by the TTC following their subway platform expansion and City's work on the northwesterly extension of the PATH network. The net cost would increase if implementation is deferred such that the subway and northwest PATH projects continue with their mandate to reinstate Front Street to its pre-existing condition.

No funding provision has been made in the Transportation Services 2012 Capital Budget and 10-Year Capital Plan for implementation of the recommended reconfiguration of Front Street. It is anticipated that the necessary funding for this project, if approved, could be accommodated by amending an already approved Environmental Assessment (Scarlett Road Bridge Rehabilitation) that includes a transit component which is no longer planned. Estimated funding of $5 million, currently in the Transportation Services 10-Year Capital Plan will therefore become available for the reconfiguration of Front Street. The project implementation is scheduled for 2013 and 2014. Should the project be approved, the funding would be included in the Transportation Services 2013-2022 Capital Budget and Plan submission for consideration with the 2013 Capital Budget.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

ISSUE BACKGROUND

The City of Toronto purchased Union Station in 2000. Union Station is one of the busiest transportation hubs in Canada, serving more than 165,000 GO Transit passengers and thousands of TTC and VIA Rail commuters a day. Over the next 15 years, pedestrian activity from Union Station is expected to double as a result of GO Transit service expansion and growing ridership. Pedestrians along Front Street already outnumber vehicles by a ratio of 10:1. With such pedestrian volumes, issues have emerged concerning available pedestrian queuing space at intersections, and about the safety of informal mid-block pedestrian crossings of Front Street.

Furthermore, Union Station and Front Street represent a significant gateway for visitors and commuters to the downtown area. Additionally, the Union Station plaza is becoming a destination for cultural events and programs. However, the street is showing signs of neglect and disrepair, while the public realm is characterized by clutter and disunity. Front Street regularly experiences conflicts between curbside activities such as food vending, passenger pick-ups/dropoffs, and taxi operations that increase congestion and confusion in the area.

In 2004, the City of Toronto commissioned a Union Station Master Plan. Recognizing the challenges faced in the area for the effective operation of Union Station, the Master Plan identified criteria for the restoration and refurbishment of Union Station and its surroundings.

A more detailed Union Station District Plan (2006) explored the recommendations of the Master Plan and included a number of short-term priorities. Among them was to initiate an Environmental Assessment study for Front Street improvements. In addition to the EA study, the City of Toronto, TTC and Metrolinx/GO Transit are working to renovate and re-organize Union Station's GO concourse and its north and side moats, construct a second subway platform, excavate a northwest PATH connection to the broader underground PATH network, and construct a new roof and glass atrium over the rail passenger platforms.

COMMENTS

The Front Street Reconfiguration Class Environmental Assessment Study has been completed in accordance with the requirements for a Schedule "C" project under the Municipal Class Environmental Assessment (the Class EA).

The Environmental Study Report (ESR) describes in detail the first three phases of the five-phase environmental planning process set out by the Class EA:

Phase 1 – identification of the problem or opportunity;

Phase 2 – identification and evaluation of alternative solutions; and

Phase 3 – identification and evaluation of alternative design concepts for the preferred solution.

The preparation of the ESR and the filing of the document in the public record, which is the subject of this report, constitute Phase 4 of the environmental planning process. Phase 5 is the construction and operation or implementation of the project, and monitoring of impacts, in accordance with the terms of the EA approval.

As a requirement of Schedule "C" projects, if City Council endorses the study recommendations, the ESR will be filed in the public record for a minimum 30-day review period. During this period, members of the public, and any other interested individuals, interest groups, or government agencies, may request that a Part II Order be issued. If a Part II Order is not granted or if requests or objections received during the filing period are resolved, the project is approved under the Environmental Assessment Act and may proceed.

The Class EA Study was carried out with the assistance of technical consultants and supported by a Technical Advisory Committee comprised of staff from Transportation Services, City Planning, Toronto Water, and Technical Services.

Public Consultation

Public involvement is an integral and ongoing part of the study process for the Front Street Reconfiguration Class Environmental Assessment Study. The public consultation requirements of the Class EA were met and exceeded.

Two Public Information Centres were publicized and held: July 5, 2010 in Union Station, and November 2, 2011 at Metro Hall. In addition, the Project Team conducted 21 meetings with stakeholders. Details of the public consultation process and the primary concerns expressed by the public and stakeholders are documented in Attachment 3.

Environmental Assessment Findings

(1) Problems and Opportunities

With Front Street in front of Union Station substantially disrupted at present for the purposes of constructing a second Union Station subway platform and the northwest PATH, there is a unique opportunity to reinstate the roadway not as it was, but in a way that reflects the plans and aspirations expressed in the Union Station Master Plan, the Union Station District Plan, and the Union Station Revitalization Plan.

The objectives are to:

- Accommodate increased development and passenger (pedestrian) demand growth associated with Union Station;

- Achieve city building objectives through urban design opportunities including expanded sidewalks and a grand civic plaza;
- Effectively manage traffic operations on Front Street, including taxis, buses, and passenger pick-up/drop-off;
- Improve pedestrian safety and prioritize the role of pedestrian activity;
- Reorganize Front Street to better balance pedestrian, cyclist and vehicle activities;
- Preserve and enhance civic and heritage features.

A full discussion of the existing conditions can be found in Chapter 4 of the ESR.

(2) Evaluation of Alternative Solutions

The Union Station District Plan (2006) included an extensive review of transportation patterns in the study area, involving both key stakeholders and the public. Based on the reviews and input received, the plan developed 14 alternatives for the redesign of Front Street at Union Station. These options were refined and considered in greater detail in the Front Street Reconfiguration EA study.

All alternative solutions are based on a base case condition which incorporates committed plans by others including:

- Second subway platform at TTC Union Station and its associated utilities (vents);
- Northwest PATH extension and associated street level improvements on York Street; and,
- Union Station Revitalization plan including a pedestrian-oriented plaza and new access points.

Based on this input, six evaluation factors were defined:

- Provide improved pedestrian facilities;
- Support and encourage a pedestrian culture;
- Contribute to overall city building initiatives and urban design;
- Provide a high level of design quality;
- Provide improved loading areas (taxi, buses, passenger pick-up/drop-off); and,
- Minimize impacts.

The alternatives that were developed and evaluated were the following:

1 "Do Nothing"
2A 4 Lanes with Median
2B 2 Lanes with Median
3A Narrowed 4 Lanes
3B Narrowed 2 Lanes
3C 4 Lanes with Dedicated Bike Lanes
4A 2 Lanes with Median and Double Lay-by

4B 4 Lanes with Double Lay-by
4C 2 Lanes with Double Lay-by
5A 4 Lanes with Centre Median Parking
5B 2 Lanes with Centre Median Parking
6A 2 Lanes One-way
6B 1 Lane One-way
7 Complete Urban Plaza (i.e. closure of Front Street)

A brief description of the alternatives and results of the evaluation are provided in Attachment 2 and in the ESR. The evaluation included consideration of the public and agency comments that were provided throughout the study process.

(3) Recommended Design

Alternative 2B was selected as the Recommended Design, illustrated in Attachment 1 and on Figures 7-1 to 7-3 of the ESR, which includes the following elements:

- Roadway:
    - 12m wide roadway that accommodates one lane of traffic in each direction and a centre median or left-turn lane at appropriate locations;
    - A mid-block raised pedestrian crossing area, which incorporates a slight narrowing of the roadway to 10m that accommodates one lane in each direction and a 3m wide pedestrian refuge median;
    - Wide curb lanes (4.75m) to accommodate cyclists in the area outside of the mid-block pedestrian crossing area;
    - Centre median designed to accommodate U-turn activities;

- Curbside Uses:
    - Provision of formal laybys resulting in:
        - Increased passenger pick up / drop off zone by 35% to 60 m;
        - Increased disabled loading by 2.5 times to 30 m;
        - Decreased designated taxi space by 25%, from 158 m (29 taxis) to 120 m (22 taxis);
        - Retention of Royal York mixed loading zone at 60 m.
        - Elimination of designated curbside space for buses (buses can continue to use passenger pick up / drop off zone)
    - Introduction of accessible passenger loading spaces within the mid-block crossing area;

- Pedestrian Features:
    - Widened sidewalks on both sides of Front Street;
    - Enlarged pedestrian areas at the Front Street / Bay Street and Front Street / York Street intersections;
    - Widened crosswalks at the York Street and Bay Street intersections;

- Raised and visually distinct mid-block crossing zone, designed to reduce vehicular speeds and allow safe pedestrian crossing without signal control;
- Flush design between the sidewalk and road within the raised mid-block crossing area;
- Median refuge in the mid-block crossing area;

- Public Realm:

  - Continuation and development of a tree canopy along the north side of Front Street;
  - Introduction of post-and-ring bicycle parking;
  - Facilitation of way-finding with info booths;
  - Introduction of bench seating;
  - Enhanced street vendor locations;
  - Street and pedestrian-scale lighting on the north side of the street; and,
  - Multi-functional street light poles to accommodate special event lighting.

Project Cost and Implementation

The estimated cost for the preferred design option for the reconfiguration of Front Street is approximately $5.0 million. There are opportunities, however, to reduce the net cost of the project through coordination with other concurrent works, as described further below. The ability to take advantage of these reductions will depend on the priority placed by Council on project capital funding.

The TTC's current work related to the construction of a second platform and improvements to the concourse level at its subway station at Union Station requires work in the Front Street right-of-way from York Street to approximately mid-block between Bay and Yonge Streets. Some Toronto Water works are coordinated with this TTC effort and will follow completion of the subway "box". Once the TTC has completed its work, it is required to reinstate the right-of-way to the pre-construction condition.

It is proposed that for the section of Front Street between York and Bay Streets the recommended reconfiguration be constructed instead of reinstating the pre-construction condition. However, no funding provision has been made in the Transportation Services 2012 Capital Budget and 10-Year Capital Plan for this implementation. If approved, the necessary funding could be accommodated by amending the already approved Environmental Assessment for another capital project – the Scarlett Road Bridge Rehabilitation. This Scarlett Road EA includes a transit component that the TTC has indicated is no longer planned. The estimated funding of $5.0 million for this transit component, currently in the Transportation Services 10-Year Capital Plan, would therefore become available for the Front Street reconfiguration if the Scarlett Road EA is amended to delete this transit component.

The current TTC schedule is for the subway contract to be complete by early 2014. If the Front Street reconfiguration project is to be in place (with construction complete) before the Pan Am Games in July and August 2015, the detailed design needs to get underway now and the funding committed to the project in the 2013 and 2014 capital budgets.

Next Steps

Following approval of this report by City Council, the ESR will be filed in the public record for a minimum 30-day period. If there is no Part II Order request then the project could move to detailed design and subsequently to implementation. The ability to move forward will depend on the availability of funding.

In order to create the most timely, lowest cost, and most cost-efficient project, detailed design would need to begin immediately and be coordinated with TTC's design for the Front Street reconstruction.

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SIGNATURE

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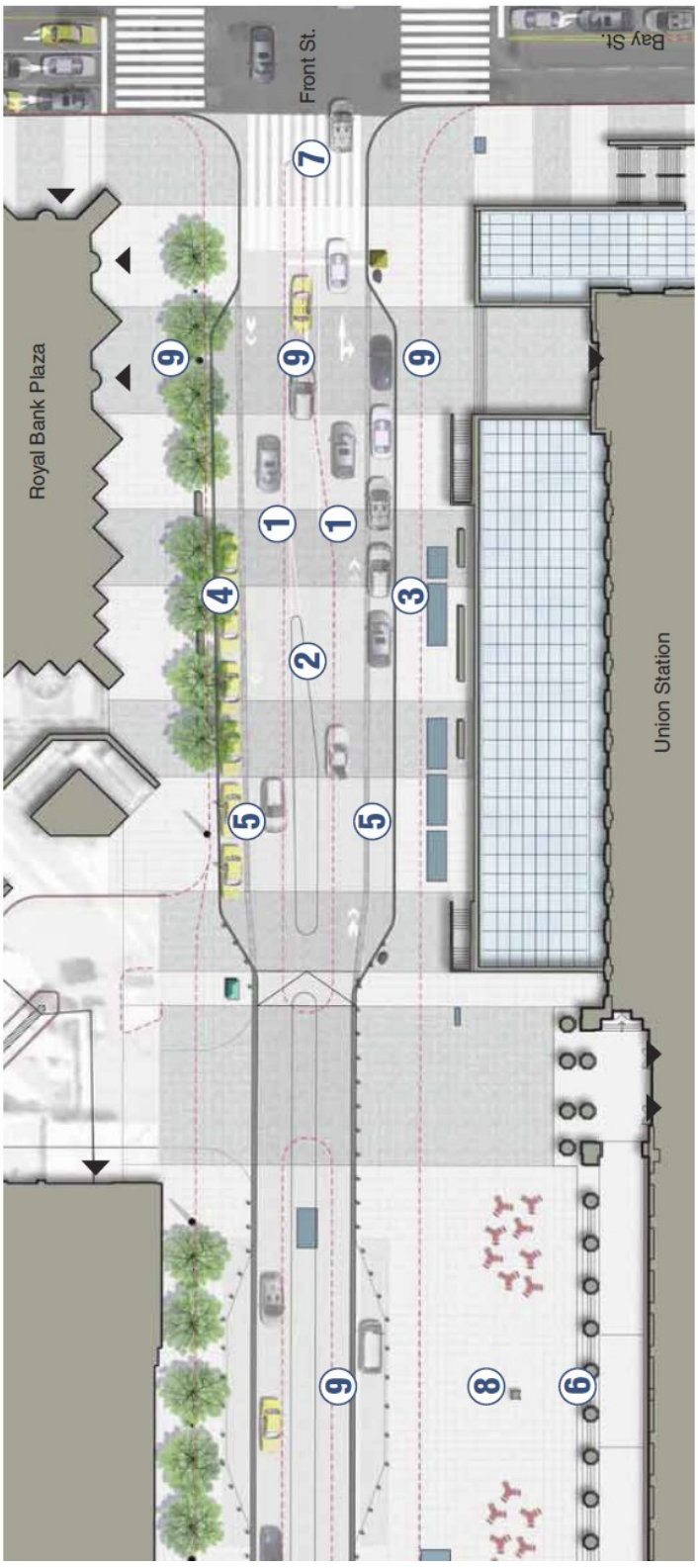
ATTACHMENTS

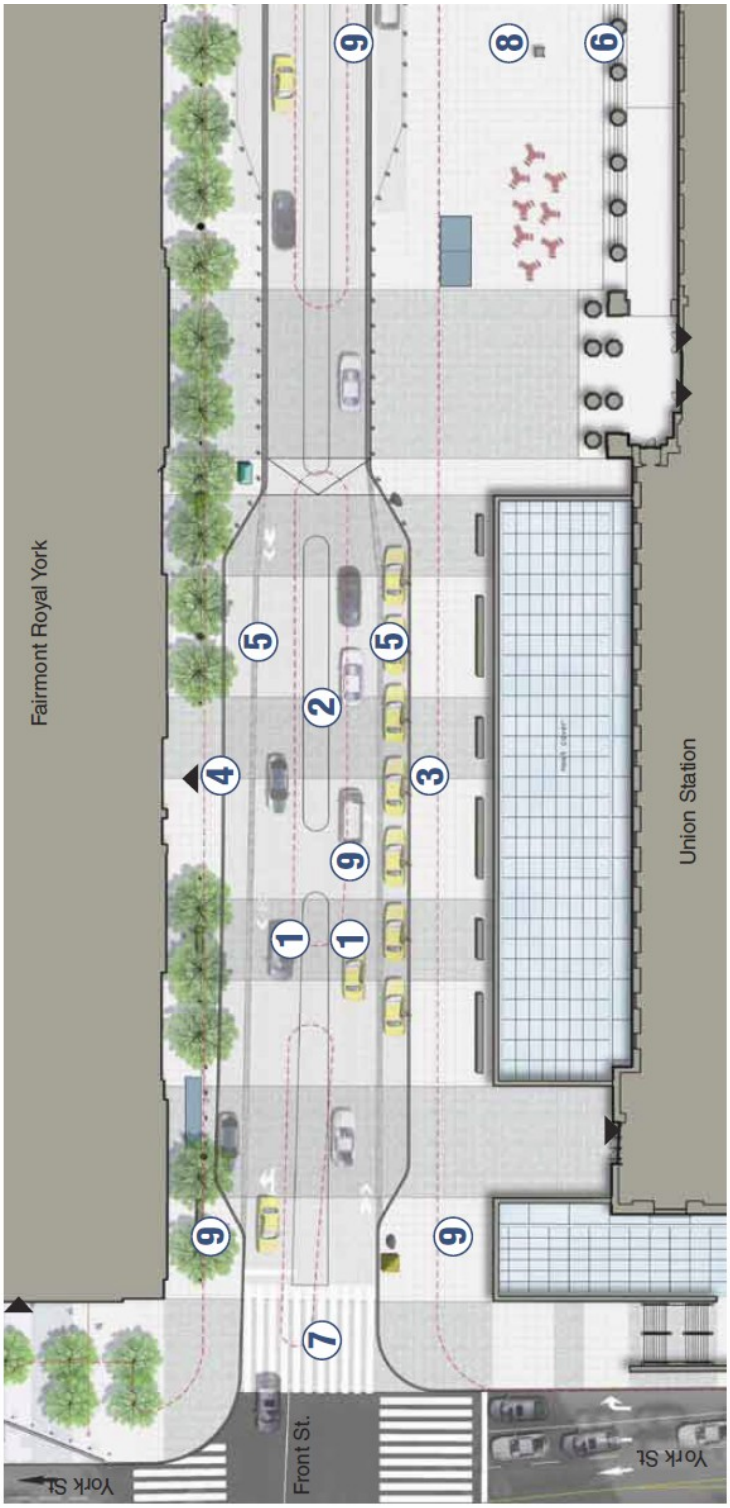
Attachment 1: Recommended Plan
Attachment 2: Evaluation of Alternatives
Attachment 3: Public Consultation and Public/Agency Concerns

ATTACHMENT 1
Recommended Plan – East Half



1. Reduced to two-travel lanes shared with cyclists in each direction to increase pedestrian and plaza areas, while calming traffic and minimizing crossing distances.
2. A central median to contribute to calming traffic
3. Extensive widening of sidewalks on the south side to accommodate both high volumes of pedestrian movement and waiting areas, as well as better integration of TTC vents
4. Widening of sidewalks on the north side to also enable continuous street trees that can enhance the pedestrian amenity while providing for visual continuity
5. Lay-by for taxis and pick-up or drop-off to the east and west to enable a well defined central plaza and unobstructed pedestrian-priority area
6. An opening up of the sweeping panoramic view of Union Station and the Dominion Public Building along the south side of Front Street
7. Widened crosswalks and minimized crossing distances at intersections
8. Integrated security measures
9. Coordinated paving patterns that integrate existing and planned treatments while delineating different areas and enhancing the area's distinction

Recommended Plan – West Half



ATTACHMENT 2

Results of the Evaluation of Alternative Solutions and Alternative Designs for the Preferred Solution

Detailed descriptions of the alternatives and the evaluation of these alternatives are included in Chapter 5 and Tables 5-16, 5-17, 5-18 and 5-19 of the Environmental Study Report.

Identification and Evaluation of Alternative Solutions

The Union Station District Plan undertook an extensive review of transportation patterns in the study area, involving both key stakeholders and the public. Based on the reviews and input received, the plan developed 14 alternatives for the redesign of Front Street at Union Station:

1	"Do Nothing"
2A	4 Lanes with Median
2B	2 Lanes with Median
3A	Narrowed 4 Lanes
3B	Narrowed 2 Lanes
3C	4 Lanes with Dedicated Bike Lanes
4A	2 Lanes with Median and Double Lay-by
4B	4 Lanes with Double Lay-by
4C	2 Lanes with Double Lay-by
5A	4 Lanes with Centre Median Parking
5B	2 Lanes with Centre Median Parking
6A	2 Lanes One-way
6B	1 Lane One-way
7	Complete Urban Plaza (i.e. close Front Street)

The evaluation of these alternatives was based on the guiding principles and project objectives derived from the Union Station Master Plan, the Union Station District Plan and the City's Urban Design Guidelines, and input from the project team, the Technical Advisory Committee and input from stakeholders and the public.

Based upon the results of the analysis and evaluation, Alternative 2B (Two Lanes with Median) is the preferred alternative generally for the following reasons.

- This solution will provide the most consistent and balanced improvement to pedestrian facilities with respect to widening of sidewalks and crosswalk waiting areas, pick-up and drop-off waiting areas and areas for pedestrians to gather. It provides an effective pedestrian priority zone that is unobstructed and with minimal crossing distances. The presence of a centre median provides for a pedestrian refuge that enhances the sense of pedestrian safety while enabling crossing patterns.

- It supports/encourages a pedestrian culture through the expansion to the pedestrian realm on the south and north sides of Front Street, which can accommodate adequate buffering and potential amenities. The reduction to one lane in each direction, combined with a centre median calms traffic speeds and provides for a pedestrian refuge, which is optimal for reducing potential conflicts with other modes of movement and enhancing pedestrian comfort, convenience and safety.

- It facilitates the provision of a high quality, coordinated, environmentally sustainable streetscape that is appealing in all seasons, while integrating the need for TTC vents.

- Of all alternatives this alternative most contributes to city-building and urban design initiatives with respect to consistency with city policies, charters and guidelines that encourage pedestrian activity and a high quality urban design environment; reinforcing the existing street and block pattern; strengthening connectivity and the open space system through the expansion of the pedestrian realm; and the retention of the street as a heritage resource while enhancing the heritage/cultural setting. Furthermore, the configuration enables the potential for landscaping on the north side to enhance visual continuity; the opening up of the panoramic view of the south facades; and reinforces the distinction of the Union Station District and this area's civic and gateway importance to the City.

- It provides improved loading areas through the provision of dedicated lay-by space for vehicle pick-up and drop-off activity on both the north and south sides of Front Street. The reduction to two travel lanes provides the opportunity for passenger pick-up and drop-off activity on the north side of Front Street in front of the Royal Bank Plaza. The design for a single lane of traffic in each direction is expected to discourage the double parking of taxis impeding through traffic that occurs currently. As with existing operations some of the space will be dedicated for taxi storage. The remainder of the lay-by space provided may be used for passenger vehicle and bus pick-up and drop-off activity. The provision of a central median creates opportunities for U-turns.

A full description of the evaluation of the alternative solutions can be found in Chapter 5 and Tables 5-16, 5-17, 5-18, and 5-19 of the ESR.

Based on Alternative 2B as the preferred solution, alternative design options were developed and assessed on the basis of the following project objectives:

- Provide improved pedestrian facilities;
- Support and encourage a pedestrian culture;
- Contribute to overall city building initiatives and urban design;
- Provide a high level of design quality;
- Provide improved loading areas (taxi, buses, passenger pick-up and drop-off); and,

- Minimize impacts.

Various elements were considered in the development of the design options including:

- Median design – barrier curb vs. mountable curb
- Mid-block crossing area – signalized vs. uncontrolled crossing
- Accommodation of cyclists – bike lane, shared lane or no lane
- Loading accommodation – laybys, curbside or no accommodation
- Traffic capacity – number of lanes and provision of separate turn lanes and storage lanes

Conclusions

The evaluation of these various design options resulted in a recommended design for the reconfiguration of Front Street that includes the following:

- A 12 metre-wide roadway outside of the table-top mid-block crossing area that accommodates one lane in each direction and either a centre median or left-turn lane;
- A 10 metre-wide roadway within the table-top mid-block crossing area that accommodates one lane in either direction and a 3 metres pedestrian refuge median;
- Widening of the sidewalks on the north and south sides of Front Street;
- Inclusion of bump-outs at Front Street/Bay Street and Front Street/York Street intersections;
- Widening of crosswalk;
- Reallocation of lay-by space uses;
- Introduction of accessible loading spaces within the table-top mid-block crossing area;
- Increased width of the curb lane and introduction of a signed bicycle route with shared curb lane outside of the mid-block crossing area;
- Flush design between the sidewalk and road within the table-top mid-block crossing area;
- Centre median that incorporates U-turn activities outside;
- Continuation and development of a tree canopy along the north side of Front Street;
- Introduction of post-and-ring bicycle parking;
- Facilitation of way-finding with info-booths;
- Introduction of bench seating;
- Enhanced street vendor locations;
- Street and pedestrian scaled lighting on the north side of the street; and,
- Multi-functional street light poles to accommodate special event lighting.

ATTACHMENT 3

Public Consultation and Public/Agency Concerns

Two Public Open Houses, as well as individual meetings with affected property owners and stakeholders were conducted during the course of the study. In addition, interested stakeholders who were placed on the study mailing list were sent a notice of the Public Open House and advertisements were placed in the Toronto Star.

The first Public Meeting was held on July 5, 2010 to review the problem statement, the alternative solutions, the evaluation criteria, evaluation results and preliminary preferred alternative solution. For the Notification of Study Initiation and Public Information Centre No. 1, over 19,000 flyers were distributed by Canada Post to residences and businesses in the study area. The meeting was held at Union Station and 54 members of the public signed in with many more stopping to review the information presented. The attendees were generally in support of the Preliminary Preferred Alternative as it appeared to effectively address pedestrian needs, achieve urban design objectives, and satisfy essential vehicle activity requirements.

The second Public Meeting was held on November 2, 2011 to present the design options, the evaluation results, and the preliminary preferred Design Option for the reconfiguration of Front Street. For Public Information Centre No. 2 over 19,000 flyers were distributed by Canada Post to residences and businesses in the area. As well, interested stakeholders who were placed on the study mailing list were sent a notice of the Public Open House and advertisements were placed in the Metro daily newspaper. The meeting was held at Metro Hall and 91 members of the public attending. In general the reaction to the Preliminary Preferred Design Option was favourable.

During the course of the study, individual meetings were held with stakeholders who would be or possibly could be affected by the recommended design for the Front Street Reconfiguration.

A full description of the public consultation program can be found in the ESR. Throughout the public consultation process a wide variety of comments was received that assisted in the development and evaluation of the alternatives. The primary concerns identified through the consultation process are summarized below.

- Traffic Congestion
    - Capacity and delays
    - Impact of passenger pick-up and drop-off activity
    - U-turns
- Bicycle Infrastructure
    - Bike lanes
    - Bike parking
- Taxi accommodation, activity and control/marshalling
- Impact on abutting properties

    - Fairmont Royal York
    - Brookfield Development
- Environment and safety for pedestrians
    - Mid-block crossing
    - Crosswalks at intersections
- Quality of streetscape
    - Trees
    - Wayfinding signage
    - Surface treatment
    - Pedestrian-scale and event lighting

All input was considered in the development and evaluation of alternatives. Some revisions to the designs were made to address the concerns and measures have been implemented to mitigate the impacts. The consultation and input were invaluable in the development of the recommended configuration.