Northwest PATH Extension (Union Station to Wellington Street) - Municipal Class Environmental Assessment Addendum (Schedule "C")

Date: June 26, 2018
To: Government Management Committee
From: Director, Real Estate Services
Chief Planner and Executive Director, City Planning Division
Wards: Ward 28, Toronto Centre-Rosedale
Ward 20, Trinity-Spadina

SUMMARY

On July 7, 2015, City Council deferred completion of the Northwest (NW) PATH, due to projected cost increases to complete the tunnel, and directed the Chief Corporate Officer to undertake a review of the options for the completion of the NW PATH and to continue negotiations with Metrolinx on funding options.

This report recommends a new route for the underground pedestrian connection, animated with approximately 3,600 square feet of retail and advertising, situated within the University Avenue right-of-way, starting at the end point of the Phase 1 PATH tunnel at the York/Front/University intersection and extending northwesterly through the existing underground parking garage by removing 185 spaces (Carpark #52, operated by the Toronto Parking Authority), connecting to the existing underground PATH system at the northeast corner of University Avenue and Wellington Street.

RECOMMENDATIONS

The Director, Real Estate Services, and the Chief Planner and Executive Director, City Planning Division, recommend that:

1. City Council approve the Recommended Alignment (#4) with retail in the Northwest PATH EA Addendum Environmental Study Report, prepared by Arup Canada Inc., dated April 30, 2018, to extend the below-grade route between Union Station and Wellington Street to support increased pedestrian flows to and from Union Station.
2. City Council authorize the Chief Planner and Director, Real Estate Services to issue a Notice of Completion and to file the Northwest PATH EA Addendum Environmental Study Report in the public record for 30 days in accordance with the requirements of the Municipal Class Environmental Assessment (Schedule C).

3. City Council direct the General Manager, Facilities Management, to manage the technical development of the project moving forward into detailed engineering, procurement and execution.

4. City Council request the Director, Real Estate Services to report back during the 2019 Capital Budget Process on a business case that reflects all third party interests, results of the funding discussions with Metrolinx, and any necessary amendments to the 2019-2028 Capital Budget that detail the shared cost of constructing a new northwest PATH pedestrian connection.

**FINANCIAL IMPACT**

This report recommends that City Council endorse the selection of Alignment #4 for Phase 2 of the NW PATH Extension (which will extend the NW PATH from the northwest corner of the intersection of Front Street and York Street along University Avenue to just north of Wellington Street) in the Northwest PATH EA Addendum Environmental Study Report. There is no immediate financial impact resulting from this recommendation.

It is currently estimated that the total capital cost for constructing this alignment will be $87.9 million (year of expense) based on a Class D estimate (-20% to +30% accuracy) prepared for the City by Hanscomb Limited and shown in detail on Table 1.

**Table 1: Break-out of Class D (-20% to + 30% accuracy) Capital Cost Estimate**

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Design and Tendering Services</td>
<td>$10.734 million</td>
</tr>
<tr>
<td>2 Construction Administration Services</td>
<td>$4.335 million</td>
</tr>
<tr>
<td>3 Post Construction Support Services</td>
<td>$0.055 million</td>
</tr>
<tr>
<td>4 Escalation of Items 1-3</td>
<td>$3.477 million</td>
</tr>
<tr>
<td>5 Construction Costs (Escalated, Class D)</td>
<td>$69.253 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$87.854 million</td>
</tr>
</tbody>
</table>

The Project is currently identified in Facilities, Real Estate, Environment & Energy's (FREEE) 2018-2027 Approved Capital Plan. However, the amounts currently set out in
the Plan for this Project will need to be supplemented with additional funding received through an amended cost-sharing agreement that staff will be negotiating with Metrolinx. Table 2 provides greater detail regarding the estimated capital impact and current available funding.

Table 2: Estimated Capital Impact of Recommended Alignment #4 ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Required</td>
<td>5.952</td>
<td>5.952</td>
<td>1.860</td>
<td>13.786</td>
<td>43.693</td>
<td>16.052</td>
<td>0.558</td>
<td>87.852</td>
</tr>
<tr>
<td>Current FREEE</td>
<td>0.805</td>
<td>1.650</td>
<td>1.650</td>
<td>0.870</td>
<td>19.635</td>
<td>25.000</td>
<td></td>
<td>49.610</td>
</tr>
<tr>
<td>Capital Required (FREEE)</td>
<td>5.147</td>
<td>4.302</td>
<td>0.210</td>
<td>12.916</td>
<td>24.058</td>
<td>(8.948)</td>
<td>0.558</td>
<td>38.242</td>
</tr>
</tbody>
</table>

In addition to the capital costs, there will also be other financial impacts resulting from a decision to proceed with construction of the recommended alignment. These impacts are outlined in Table 3.

As this alignment will be passing through the existing underground Toronto Parking Authority (TPA) parking lot #52, it will result in the temporary loss of TPA net revenue in the estimated amount of $6.764 million due to the full closure (323 parking spaces) of the lot during construction.

Once construction is complete, the TPA will experience a permanent loss of approximately 185 parking spaces in this lot. On a preliminary basis, the TPA have estimated that this reduction in parking will result in an annual net reduction in parking revenues to the TPA of approximately $1.4 million starting in 2024. Any net revenue losses will impact the TPA’s annual contributions to the City and the TPA’s Capital Budget. This is based on their Net Income Sharing Agreement, whereby the TPA contributes 85% of annual net revenue to the City’s Non Program Operating Budget while the remaining 15% is used to fund the TPA Capital Budget.

However, these reduced parking revenues will be offset by revenues (estimated by third party resources at $1.1 million annually in 2024) generated by advertising and 3,600 sq. ft. of retail space.
Table 3: Estimated Operating Expense Impact of Recommended Alignment #4 ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>Net Present Value Total</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net TPA Revenue Loss during Construction</td>
<td>(6.764)</td>
<td></td>
<td>(2.192)</td>
<td>(2.259)</td>
<td>(2.326)</td>
</tr>
<tr>
<td>Ongoing TPA Revenue Loss</td>
<td>(21.851)</td>
<td></td>
<td></td>
<td></td>
<td>(1.372)</td>
</tr>
<tr>
<td>Ongoing Retail &amp; Ad Revenue</td>
<td>18.052</td>
<td></td>
<td></td>
<td></td>
<td>1.152</td>
</tr>
<tr>
<td>Net Ongoing Impact</td>
<td>(3.799)</td>
<td></td>
<td></td>
<td></td>
<td>(0.220)</td>
</tr>
</tbody>
</table>

This report recommends that City Council request that the Deputy City Manager, Internal Corporate Services report back through the 2019 Capital Budget Process on a business case that reflects all third party interests, results of the funding discussions with Metrolinx, and any necessary amendments to the 2019-2028 Capital Budget that detail the shared cost of constructing a new NW PATH pedestrian connection.

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

**DECISION HISTORY**

In April, 2008, as part of PW14.6 Municipal Class Environmental Assessment Study (Schedule "C") for a New Northwest PATH Connection (Union Station to Wellington Street) City Council endorsed the preferred alternative in a Municipal Class Environmental Assessment (EA) study for the NW PATH project. The previously approved route for the NW PATH extended from the west moat of Union Station up York Street to 100 Wellington Street West and 70 York Street and included a combination of cut and cover tunneling and at-grade surface improvements in the pedestrian realm.


In July 2015, as part of GM5.19 Union Station Revitalization Project – Status Update, City Council directed that design costing for the completion of the NW PATH be undertaken, that negotiations with Metrolinx on funding options be continued and that completion of phase 2 of the NW PATH be deferred until appropriate funding is obtained.

ISSUE BACKGROUND

A Municipal Class Environmental Assessment (EA) Addendum study has been undertaken by Real Estate Services to develop, examine and evaluate a number of alternative designs and solutions in order to recommend a new northwest pedestrian connection between Union Station and the existing PATH network in the vicinity of Wellington Street. This study is an update to the original EA that was endorsed by City Council on April 28, 2008, which recommended a route from the west moat of Union Station up York Street to 100 Wellington Street West and 70 York Street. The project is based on a need to plan and prepare for significant increases in pedestrian demand at Union Station over the next 15 to 20 years and beyond.

Following City Council's endorsement of the York Street alignment in 2008, the EA report was approved by the Ministry of Environment and Climate Change (MOECC). Detailed engineering of the York Street alignment design was completed in Q4 of 2010 and Phase 1 construction of the Project began in Q4 2014 under the supervision of Engineering and Construction Services. Phase 1, which connects Union Station to the intersection of Front Street and York Street, was co-funded by the City and Metrolinx pursuant to a 2009 agreement in which the parties agreed to share the costs equally, subject to a cap of $33 million for Metrolinx' share. This segment of the tunnel was opened to the public in Q2 of 2015 at a total cost of $48.4 million. The approved construction budget for the full extension to Wellington Street was $66 million.

Recognizing that Metrolinx' 2018 Regional Express Rail (RER) Programme and Union Station Enhancement Project (USEP), which were not contemplated during Phase 1 of the NW PATH Project, will create significant demand on Union Station's access points and pedestrian routes, there is a need to re-initiate discussions with Metrolinx to complete the NW PATH connection to the York GO Concourse to ensure efficient flow of passengers in and out of Union Station.

COMMENTS

Study Process

An EA Addendum Study commenced in Q1 2017 to examine and evaluate a number of alternative solutions in order to recommend a new northwest pedestrian connection between Union Station and the existing PATH network in the vicinity of Wellington Street. The Study has concluded that additional below grade pedestrian facilities are needed to provide the capacity required to relieve congestion generated by Metrolinx' ongoing service expansion. The evaluation maintained consistency with the original EA while providing updated pedestrian modelling assumptions. After extensive consultation with the public, adjacent property owners and City review agencies was conducted, resulting in the following preferred route:

Alignment #4

A new underground pedestrian tunnel, animated with retail and advertising, situated within the University Avenue right-of-way, starting at the end point of the Phase 1 tunnel
at the York/Front/University intersection and extending northwesterly through the existing underground parking garage (Carpark #52, operated by the Toronto Parking Authority), connecting to the existing underground PATH system at the northeast corner of University Avenue and Wellington Street.

The recommended alignment has the benefit of:

- Supporting the Official Plan with respect to promoting public transit and other more sustainable modes of transportation as well as the goals and objectives of Union Station revitalization;

- providing expanded pedestrian capacity and effectively accommodating a range of pedestrian demands (more effective distribution and connectivity, weather protection and direct routing to demand areas northwest of Union Station);

- demonstrating the best overall access to new job growth and the preferred pedestrian route, accommodating the highest bi-directional pedestrian flows (5,000) in the peak hours;

- providing pedestrians with a safe and comfortable environment for commuting to and from Union Station that follows PATH design guidelines;

- ensuring the new route is AODA compliant for both the TPA Carpark and PATH; and

- balancing costs with pedestrian tunnel performance while seeking to minimize potential disruptions and impacts to utilities, vehicular and transit operations.

During the development of the original 2008 EA, Metrolinx (formerly GO Transit) had indicated that the construction of the NW PATH was critical to the phasing of its operational improvement program, including the opening of the York Concourse. Given that the need for these expanded pedestrian services was, in large part, as a result of GO Transit’s improvement program to support downtown employment, Metrolinx agreed to enter into a cost sharing agreement with the City, pursuant to which it agreed to contribute 50% of the required construction funding, to a maximum of $33 million, in exchange for an easement to be granted in favour of Metrolinx over the full length of the tunnel. The approved construction budget for the full extension to Wellington Street was $66 million.

The EA Addendum maintains consistency with the original methodology; however, the following changes and updates were made to account for the ten years that have elapsed since the original EA was complete:

- Updated pedestrian analysis with 2031 planning horizon to account for changes to the downtown core (employment surveys, updated signal timings at surface intersections, transit and development plans, etc.); and

- Enhanced understanding of the feasibility of each proposed alignment through conceptual design studies and a detailed cost estimates.
It is important to note that although cost is a key component of the EA Addendum evaluation, it is not the only focus of this study. Section 2 of this report details the evaluation criteria that were endorsed by the MOECC for use in the EA Addendum; while Table 2, Attachment 2 and the body of the study outline the major factors that influenced the ranking of the Alignments.

**Environmental Assessment Findings**

1. **Analysis of the Opportunity**

The projected pedestrian volumes at Union Station and in particular the pedestrian demands anticipated in the vicinity of Front Street and York Street/University Avenue have been examined previously as input to the Master Plan and District Plan studies, with the key objective of providing additional capacity, amenity and routing options to accommodate and effectively disperse station related pedestrian activity.

Based on current pedestrian modelling projections, approximately 19,000 morning peak hour pedestrians are forecasted to exit to Front Street in 2031. Approximately 12,800 of these pedestrians are expected to continue travelling north, of which an estimated 5,300 will be oriented to the northwest.

One of the key findings from the pedestrian modelling for the City's design year of 2031 was that Union Station itself would accommodate passenger growth caused by increased ridership, but elements of the street network would see a significant increase in pedestrian volume – with the York/University/Front St intersection being a key intersection highlighted in the analysis.

Current projections illustrate that existing facilities and operations will not adequately meet projected pedestrian demands, nor provide any opportunity for redistribution of other existing PATH users who may be oriented north and west of the Station. Based on the results of the pedestrian studies, there is a clear need for a new NW PATH connection to relieve current congestion and provide increased pedestrian capacity and routing options between Union Station and the downtown core. A full description of existing and future pedestrian demand is contained in the EA Addendum Study, Appendix C.

There is also an opportunity to effectively coordinate the construction of new public infrastructure in the area. In particular, Metrolinx’ expansion programme including Regional Express Rail, SmartTrack and Union Station Enhancement Project are part of a number of important projects being planned for and developed at Union Station. 75% of northbound movements in the AM peak hour are arriving or departing GO users (17% are TTC and remaining 8% are other). With the increase of approximately 280,000 users/day at Union Station over the next (15) years, the new NW PATH pedestrian connection will be critical to the phasing of various projects, including the opening of a new south GO concourse area (targeted for 2022) as part of USEP Phase 1. Therefore, completion of the NW PATH must move forward to design and implementation on an urgent basis.
Other work in the area that provides a coordination opportunity includes Hydro One’s major infrastructure relocation programme, which is currently under development and spans from the intersection of Bay Street and Dundas Street to The Esplanade. The construction activities resulting from these projects provide an opportunity for the City to undertake street level and subsurface work in a coordinated approach that will minimize construction cost and disturbance to pedestrians and automobiles, and provide new pedestrian and transit infrastructure in a planned and efficient manner.

2. Identification and Evaluation of the Proposed Alignments

To address the projected pedestrian demands, four alignments were generated and evaluated, including the original alignment up York Street. A brief description of these alignments and the results of the evaluation are provided below, and the layouts can be found in Attachment 2.

Alignment 1 – York Street (Original Alignment): Connects through the north side of the existing NW PATH tunnel at the corner of University Avenue and Front Street, and continues north under York Street to connect into the PATH concourse at 100 and 70 Wellington Street West.

Alignment 2 – Front Street: Connects west of the existing NW PATH tunnel, crossing over the TTC subway structure, and running west under the north side of Front Street. It connects into the new Cadillac Fairview development at 160 Front Street West.

Alignment 3 – Piper Street Buildings Option: East of the existing NW PATH tunnel entering the Royal York Hotel at concourse level. It turns north, through the existing buildings, creating a new PATH tunnel connection across Piper Street to connect into 95 Wellington Street.

Alignment 4 – University Avenue (Parking Lot): Connects west of the existing NW PATH tunnel, and through a partially repurposed underground parking lot (Toronto Parking Authority Carpark #52). The alignment connects to the existing PATH network at 55 University Avenue.

Alignments 2 and 3 were not previously considered in the original EA. Alignment 4 is similar to a previously analysed route; however, the updated alignment is a hybrid approach as the initial design contemplated complete removal of the parking lot and the elimination of all available spaces.

Each alignment was analyzed and evaluated in detail utilizing five criteria groups:

- Policy and Planning Environment: this criterion considered conformity of the proposed solutions with existing policies and municipal government directives;
- Transportation: this criterion considered the likely success of each proposed solution in accommodating existing and projected peak-period pedestrian congestion, diversions, level of service, ease of use, safety, connectivity and accessibility;
• Geotechnical/Engineering: this criterion considered technical issues such as impacts to utilities, construction costs, maintenance and traffic impacts;

• Socio-economic Environment: this criterion considered the effects on the surrounding area during and after the implementation of any solution; and

• Cultural Environment: this criterion considered the effects of the proposed solutions on the historic fabric of the study area.

The evaluation criteria outlined in the EA Addendum identified Alignment #4, a new underground route up University Avenue through Carpark #52, as the preferred alignment. This supports current City Council direction and policy, balances cost with tunnel performance across a wide variety of measures, and provides the highest quality pedestrian experience through animation and retail opportunities. Table 4 provides a comparison of the four alignments.

Table 4: Alignment Comparison

<table>
<thead>
<tr>
<th>Alignment</th>
<th>EA Final Ranking</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Cost to Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. York Street (Base Case)</td>
<td>4</td>
<td>• EA Approved</td>
<td>• Most expensive option (terminated by Council due to costs)</td>
<td>$125.27M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No vertical circulation needed</td>
<td>• Requires lane closures on Front and York</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Attracts new pedestrian demand</td>
<td>• Long, unanimated tunnel without space for retail</td>
<td></td>
</tr>
<tr>
<td>2. Front Street</td>
<td>2</td>
<td>• Least impact to existing buildings</td>
<td>• Most utility impacts, creating significant risk of escalating costs and schedule duration (primary driver of Phase 1 overruns)</td>
<td>$80.84M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increases PATH connections to the west</td>
<td>• Retail or additional connections available along Front are prohibitively expensive due to utilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Excellent connection to jobs</td>
<td>• Requires lane closures on University and Front</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Long, unanimated tunnel without space for retail</td>
<td></td>
</tr>
<tr>
<td>Alignment</td>
<td>EA Final Ranking</td>
<td>Advantages</td>
<td>Disadvantages</td>
<td>Cost to Build</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| 3. Piper Street Buildings | 3                | • Lowest cost option  
• Pedestrian animation  
• Fewest construction impacts at surface | • Least demand for pedestrian users  
• Minimal network improvement  
• Indirect, circuitous routing  
• Narrowest cross-section  
• Requires multiple easements and licenses  
• Requires elevators to be constructed within buildings to access retail | $42.32M       |
| 4. University Avenue | 1                | • Best peak hour pedestrian service to support transit growth  
• Ensures TPA Carpark AODA compliance and opportunity to complete maintenance  
• Excellent connections to jobs  
• City-owned retail opportunities  
• Completes missing north to south connection in area with additional connections to west possible  
• Optimal design for perceived safety and security to public with new city-owned retail opportunities | • Requires temporary lane closures on University  
• Short term loss of parking spaces during construction  
• Long term relocation of parking spaces  
• Revenue stream losses impacting EA Addendum ranking, as cost factors are considered in the Geotechnical and Engineering Environment evaluation criteria | $87.85M       |
3. Identification and Evaluation of Alternative Design Concepts

In order to further investigate Alignment #4, a base concept was presented to a Technical Advisory Committee consisting of the TTC, TPA, Metrolinx, and several City of Toronto divisions, as well as a Stakeholder Advisory Committee, which included interested third party associations such as the Toronto Financial District BIA. Through these reviews, coupled with public consultation, feedback on both the EA Addendum evaluation and potential alternative design concepts were incorporated in an effort to enhance the base tunnel design. The preferred alignment garnered the broadest support during the evaluation phase.

Alignment 4 – University Avenue (Parking Lot):

Alignment #4 involves a new tunneled connection from the west wall of the existing NW PATH, though the TPA's Carpark #52 below the University Avenue right-of-way, connecting to the food court level at 55 University Avenue. This connection will occur via staircase and an elevator providing AODA compliance for both access to the parking lot and the existing PATH network. The plan view is included in Attachment 3.

Within the parking structure, the alignment will result in the removal of the intermediate slab along the east wall of the parking lot. This will create a comfortable pedestrian environment with high ceilings and a wide corridor, space for retail, and a direct connection to the PATH from the garage that does not currently exist. This option can also accommodate a structural liner, if one is required, in order to reinforce the existing Carpark structure. The base case provides approximately 3,600 square feet of retail space and results in the permanent removal of 185 parking spaces, leaving 137 functional parking spaces available.

University Avenue Alignment Design:

The results of the evaluation identified Alignment #4 – University Avenue as the recommended alignment, incorporating the following design features:

- compliance with the City of Toronto PATH Design Guidelines;
- direct connections to 55 University Avenue and the TPA Carpark #52 using a combination of stairwells and an elevator for AODA compliance;
- removal of Carpark #52 intermediate slab. Will install a new load bearing partition wall between the pedestrian route and Carpark;
- potential installation of a new structural liner depending on the conditions of the existing structure;
- hybrid pumping station for combined sewer relocations;
- approximately 3,600 square feet of potential retail space.

Building Connection to 55 University Avenue

Several possibilities for connections between the new PATH tunnel within the parking structure and 55 University Avenue at the north end of the alignment were considered.
The landowner of 55 University Avenue (Investor's Group) have been very supportive throughout the EA Addendum process, participating in landowner and 1-on-1 meetings, and offering support as the project continues through development. Future agreements will need to be negotiated and executed between the landowners of 55 University Avenue and the City of Toronto, and constructability issues around surface impacts and PATH level impacts to their tenants and customers will need to be considered.

Pedestrian modelling has demonstrated that this route is preferred for the purpose of servicing the larger northwest quadrant of the Union Station Master Plan.

Additional Building Connections

During consultation, stakeholders and landowners expressed interest in additional building connections to the west side of University Avenue. Connections to 40 University Avenue, 70 University Avenue, and to the new development located at 160 Front Street West via the Heenan Place alleyway were all considered. As part of future detailed design, the possibility of additional PATH connections to the NW PATH tunnel will be explored in more detail.

The underground routes that were identified and considered are all predominantly or exclusively within City-owned public highways with the potential for underground connections to private buildings where both desired and technically feasible.

Property Impacts

The proposed tunnel will be situated primarily within the University Avenue right-of-way, with the exception of some sub-strata property that is required for tunnel construction, located below the boulevard on the west side of 55 University Avenue.

Property implications of other optional connections to private properties will be investigated during later design stages (depending on the interests of the owners in pursuing the connections at that time) including a connection from the existing knock-out panel that was completed in Phase 1 of the NW PATH project for the purpose of connecting to the Royal York Hotel. Kingsett Capital, the landowner of the Royal York Hotel, is currently examining this opportunity.

Throughout the EA Addendum process, the TTC and TPA have been engaged in the public consultation, and participated in a Technical Advisory Committee (TAC) to ensure their engineering concerns were considered. Metrolinx was consulted on the results of the TAC as they were unable to participate.

Summary of Costs

In an effort to increase cost certainty, a Class D estimate (-20% to +30% accuracy) was provided by Hanscomb, a cost consulting firm with considerable experience in estimating construction costs. Alignment #4 is forecasted to cost approximately $87.9 million, assuming cost escalation of 10.51% to June 2021. The Project is currently identified in Facilities, Real Estate, Environment & Energy’s 2018-2027 Council
Approved Capital Budget and Plan, and is relying on the balance of the Project costs to be provided through the cost sharing agreement with Metrolinx.

Based on the work completed in this study, the cost of this project is $87.9 million, of which $69.2 million is required for construction of the new pedestrian tunnel, which includes $0.5 million that is required for repairs associated with a temporary sewer connection that was left from Phase 1 of the Project, and $18.6 million is needed for detailed engineering and contract administration (break-out included in Table 1). Project costs include a dedication of one percent (1%) to public art.

This project is a "growth related capital project" and as such, is eligible for funding under the City's Development Charges by-law. With the authorization of Council, City staff are prepared to undertake formal discussions with Metrolinx to secure appropriate funding and cost sharing. The financial obligations of the City will be determined in more detail and reported back during the 2019 Capital Budget Process.

Comparison of Overall Costs

Table 5 below provides a net present value cost comparison for the various alignments which incorporates adjustments for the impacts of:

- the revenue loss resulting from the removal of 185 parking spaces in Toronto Parking Authority (TPA) Carpark #52 under Alignment #4
- the rental revenues from 3,600 sq. ft. of retail in Alignment #4
- the revenues from advertising placed along tunnel sections that follow the public road allowance
Table 5: Summary of Revenue Stream Losses and Off-sets ($ million, all figures in net present value)

<table>
<thead>
<tr>
<th>Alignment/Comments</th>
<th>#1 York</th>
<th>#2 Front</th>
<th>#3 Piper</th>
<th>#4 University</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Capital Impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>(84.266)</td>
<td>(54.378)</td>
<td>(28.468)</td>
<td>(59.096)</td>
<td>Excludes escalations</td>
</tr>
<tr>
<td><strong>Total Capital Impact</strong></td>
<td>(109.274)</td>
<td>(70.516)</td>
<td>(36.917)</td>
<td>(76.634)</td>
<td></td>
</tr>
<tr>
<td>Estimated Operating Impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPA Temporary Revenue Loss due to AODA Mandate and Construction of NW PATH (#4)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>(6.764)</td>
<td>Full closure of parking lot during construction (Temporary loss of 323 spaces)</td>
</tr>
<tr>
<td>On-going TPA Revenue Loss</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>(21.859)</td>
<td>Permanent loss of 185 spaces</td>
</tr>
<tr>
<td><strong>Total Impact to TPA</strong></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>(38.619)</td>
<td></td>
</tr>
<tr>
<td>Estimated Off-setting Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising and Retail Revenues</td>
<td>9.210</td>
<td>9.210</td>
<td>0.000</td>
<td>18.052</td>
<td>Open to the public with retail (Removal of 185 spaces)</td>
</tr>
<tr>
<td><strong>Net Present Value</strong></td>
<td>(100.064)</td>
<td>(61.306)</td>
<td>(36.917)</td>
<td>(97.201)</td>
<td>5% discounted cash flows</td>
</tr>
</tbody>
</table>

A finalized business case will be brought forward during the 2019 Capital Budget Process that will detail any updated costing, life cycle benefits of any rehabilitation work.
to Carpark #52, possible retail revenue returns to the TPA, results of any third party negotiations, and the full operating and capital impacts to the City.

Economic vitality and growth potential for the financial core, along with its value to the City, will be evaluated as part of this work.

**Impacts to Toronto Parking Authority Carpark**

The recommended alignment removes approximately 185 parking spaces from existing TPA Parking Lot #52 that runs from the Front Street and University Avenue intersection to Wellington Street at annual cost of $1.414 million. Projected revenue off-set from retail and advertising is forecasted at $0.860 million. Proposed construction (assuming worst case structural conditions) would involve removing an intermediate slab, installing a new structural lining, and constructing a new load bearing partition wall between the parking lot and the proposed PATH route. During the course of construction, the parking lot would need to be closed at a total cost of approximately $9.0 million.

In an effort to understand the impact to TPA Carpark #52 moving forward, and more importantly, to users of this garage, a vacancy study was done to analyse peak occupancy. The results of that study are summarized in Attachment 5. Within the immediate catchment area defined by the TPA (600 foot distance), there are (15) third party surface and garage lots available to serve the immediate area's short term parking needs.

Since the additional lots may not meet TPA service standards, it is recommended that Real Estate Services Staff work with the TPA to find additional parking to lease for TPA purposes if surrounding developments offer an opportunity to make up these lost spaces.

The recommended alignment also considered a key policy objective of the Official Plan which links land use and transportation planning policies to create a comprehensive strategy for accommodating the City’s future trip growth in a way that reduces auto-dependency. New infrastructure is required for the efficient operation of Union Station and encourages pedestrian activity is consistent with Official Plan policy.

The NW PATH also provides new barrier-free connections to Carpark #52 that will ensure the parking lot will be in compliance with a recommended Provincial mandate to be fully accessible by 2025. A primary goal of the PATH network is to achieve improved connections that allow all users to comfortably access and negotiate the walkways and facilities linked to the system without the need for assistance.

Real Estate Services has started the process of engaging some of the surrounding developments in an attempt to incorporate additional parking spaces in their development applications.

The opportunity exists for the TPA to complete an exhaustive building conditions study of the parking garage and coordinate any refurbishment work with the shutdown to make the lot viable as it nears the end of its design life cycle. Currently the TPA administers condition surveys that mainly focus on leaks, delaminated concrete and
surface level defects. A comprehensive testing rationale, followed by full rehabilitation works, should be considered in coordination with this Project.

**Pedestrian Amenities and Animation**

A number of design considerations impact the real and perceived level of safety and security of PATH users. Sharp angled corridors that block views, poorly lit areas that limit visibility, as well as constraints on tunnel width and head space are among the features that can make users feel unsafe, particularly after business hours.

Public amenities such as retail have also proven to generate activity within the PATH network. Various retail configurations in the PATH tunnel were considered during the design process. By removing the retail entirely from Alignment #4, 85 parking spaces could be retained, however this alignment would become one of the longest sections of unanimated PATH within the network and significantly impact the public's perceived level of safety.

The Financial District BIA also commissioned a study in May 2016 in support of these conclusions. The research completed as part of this study indicated that people are likely to visit the PATH more often and for longer periods if they are comfortable in their surroundings and able to find their way around.

As all-day passenger loads to and from Union Station increase, the importance of providing a PATH connection to alleviate surface level congestion is amplified. To ensure this connection services as many users as possible it should be animated to increase safety and attractiveness.

**Surface Level Improvements**

The initial EA suggested surface level improvements along York Street. Due to the termination of construction of the NW PATH, the York Street Pilot project was initiated to create a significantly improved pedestrian space, delineated by planters, that includes curb lane finishes that will be finalized in spring 2018.

Currently, there are no plans to complete any surface level work along either York Street or University Avenue.

**Public Consultation**

The requirements for a Class EA public consultation plan were met and exceeded in this study. The public consultation program included the following:

- Landowner kick-off meeting
- Meetings with individual stakeholders
- Technical Advisory Committee (TAC) meeting
- Stakeholder Advisory Committee (SAC) meeting
- Landowner consultation
- Consultation with the Indigenous Community (Mississaugas of the New Credit First Nation)
- Three Public Information Centres (PICs)
- Associated notices and letters advertising the study
- Dedicated City of Toronto’s website with a link to the EA Addendum Study and opportunity for feedback in the form of a brief survey
- Social media outreach

This initiative has been well received by the public. Concerns raised during the EA process were mostly site specific issues related to building access, loss of TPA parking spaces and impacts on building operations and utilities. These issues and concerns have been taken into account during the evaluation process and have been reflected in the recommended design.

A full description of the public consultation program is contained in the EA Addendum Study. Any changes to the recommended Alignment will need to go through an additional round of public consultation.

**Next steps**

Pending approval of this report by City Council, the EA Addendum Study will be filed in the public record for a minimum 30-day period. Once EA Addendum approval is received from the MOECC, discussions can be finalized to secure agreements related to funding arrangements and any related matters. Staff will report back to Council with a detailed business case.

**CONTACT**

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**SIGNATURE**

David Jollimore, Director  
Real Estate Services

Gregg Lintern, Chief Planner and Executive Director  
City Planning Division
ATTACHMENTS

Attachment 2: Plan View of Recommended Alignment (#4) with Renderings
Attachment 3: North Facing Elevation of NW PATH and Cross Section of NW PATH at 55 University
Attachment 4: Carpark #52 Occupancy Study

Alignments Evaluated in Original EA (2008)

Alignment Solutions Considered in 2008
1. Do Nothing
2. Above ground routes with streetscape improvements
3. Improvements to existing underground routes
4. New underground routes
5. New underground routes connecting to above ground routes
6. New underground routes in parallel to above ground routes

Alignments Evaluated in EA Addendum (2018)

Diagram showing alternative solutions considered in 2018.
### Ranking of Alignments in 2018 EA Addendum Study

The evaluation of each proposed alignment, including a full description of the quality and quantitative measures used in each criterion, is fully documented in the EA Addendum Study.

<table>
<thead>
<tr>
<th>Alignment</th>
<th>Policy and Planning</th>
<th>Transportation</th>
<th>Geotechnical/Engineering</th>
<th>Socio-economic</th>
<th>Cultural</th>
<th>Final Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. York Avenue</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
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<td>2. Front Street</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Piper Street</td>
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<td>3</td>
</tr>
<tr>
<td>4. University Avenue</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Attachment 2: Plan View of Recommended Alignment (#4) with Renderings
Attachment 3: North Facing Elevation of NW PATH and Cross Section of NW PATH at 55 University Ave.
## Attachment 4: Carpark #52 Occupancy Study (2017)

<table>
<thead>
<tr>
<th>Carpark #</th>
<th>Municipal Address</th>
<th>Space count</th>
<th>Month</th>
<th>Transactions</th>
<th>Peak Occupancy Weekday</th>
<th>Peak Occupancy Weekend</th>
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<tr>
<td>52</td>
<td>40 York Street</td>
<td>323</td>
<td>May</td>
<td>16,117</td>
<td>71.10%</td>
<td>68.96%</td>
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<td></td>
<td></td>
<td>October</td>
<td>15,757</td>
<td>64.47%</td>
<td>55.62%</td>
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