## IE19.11

## Attachment 1: yongeTOmorrow EA Study Process and Milestones

The process to arrive at the Recommended Design Concept consisted of three stages of design, consultation and evaluation. Figure 1 provides a summary of the yongeTOmorrow EA study process, timelines, and milestones.



Figure 1. Summary of yongeTOmorrow EA Timeline

Figure 2 two provides a summary of the key stages of design and evaluation undertaken during the yongeTOmorrow EA process.



Figure 2. Summary of the yongeTOmorrow EA Design and Evaluation Process

**Step 1** – **Long-List Screening:** The design team started the study by collecting data and identifying a problem and opportunity statement. Next a set of goals, objectives and evaluation criteria were created using input from stakeholders. A Long-List of Alternatives were developed for the typical 20 metre Yonge Street right-of-way as follows (Figure 3):

- 1) Existing Conditions Baseline Comparison
- 2) Car Free A (Pedestrian Priority)
- 3) Car Free B

- 4) One Driving Lane A
- 5) One Driving Lane B
- 6) One Driving Lane C
- 7) One Driving Lane D (One-Way Driving Access)
- 8) One Driving Lane E
- 9) Two Driving Lanes A
- 10)Two Driving Lanes B
- 11)Two Driving Lanes C
- 12) Two Driving Lanes D (Two-Way Driving Access)
- 13)Three Driving Lanes A
- 14)Three Driving Lanes B
- 15) Four Driving Lanes (2031 Future Do Nothing)



Figure 3. The Long-List of Street Design Options which included options with four driving lanes, three driving lanes, two driving lanes, no driving lanes and cycling facilities

These Alternatives were then evaluated using the evaluation criteria and three Emerging Alternatives were identified in a report to Infrastructure and Environment Committee in October 2019. These Emerging Alternatives were then confirmed as the Short-List of Street Design Options: Pedestrian Priority, One-Way Driving Access and Two-Way Driving Access with cycling facilities on a parallel street (Figure 4).



Figure 4. The Short-List of Street Design Options which best met project objectives and were carried forward to the next phase of study.

During the long-list evaluation, it was determined that the existing four lane cross section ("Do-Nothing"), three lane cross sections, and cross sections with continuous cycle tracks did not adequately support project objectives within a 20 metre right-of-way and were not carried forward to the next round of evaluation.

**Step 2** - **Alternative Solutions:** The priorities along Yonge Street vary based on the adjacent properties and how they influence people's use of the street. Four Alternative Solutions were developed by applying one of the three Street Design Options (Pedestrian Priority, One-Way Driving Access or Two-Way Driving Access) to each block of Yonge Street based on its local needs (Figure 4).

A cycling facility feasibility assessment was also carried out on Bay Street, Church Street and University Avenue. Alternative 4 with cycling facilities on University Avenue was identified as the Preferred Alternative because it provided significant improvements to the pedestrian street experience while limiting impacts to traffic operations across the neighbourhood. Consultation during Round 2 also identified that more consideration was desired for people cycling as well as deliveries, loading, and ride hailing.



Figure 4. Summary of Alternatives identifying Alternative 4 as the Preferred Alternative

**Step 3 - Design Concepts**: Keeping the feedback about cycling and more driving access to support business in mind, the Preferred Alternative (Alternative 4) was then developed into three Design Concepts: 4A, 4B and 4C. These three concepts evaluated different ways to operate Alternative 4, but all utilize the same physical design (a reduction of the existing four lane cross section to two lanes from College Street to Queen Street).

Figure 5 illustrates how Alternative 4 has been refined by block during the day to form t 4A, 4B, and 4C. In all three Design Concepts, overnight (i.e. 1:00 am to 6:00 am), there would be two-way driving access for buses, cars and trucks from College Street to Queen Street. All concepts would also include a cycle track on University Avenue.



Figure 5. Design Concepts 4A Most Pedestrian Priority, 4B Pedestrian Priority with Two-Way Driving Access, 4C Pedestrian Priority with One-Way Driving Access and Cycle Tracks(from College/Carlton Street to Gerrard Street)

A range of operational strategies on a scale of most pedestrian priority to some pedestrian priority with higher levels of driving access were assessed.

4a provides the most pedestrian priority and the least driving access. A short two-way local access would be provided between Gould Street and Edward Street to service loading docks. There are more turn restrictions, and fewer curbside activity zones to allow more spaces for cafés, seating and greening.

4b has two pedestrian priority zones flanked by two-way local driving access. It has the least turn restrictions, the most dedicated turn lanes, and the most curbside activity zones.

4C has two pedestrian priority zones flanked by one-way or two-way local driving access. It also adds a cycle track from College Street to Gerrard Street. The evaluation identified 4C as the Recommended Design Concept as it provides a balanced approach that provides increased support for pedestrians and cyclists in key places, while maintaining driving access where needed (Figure 6).

Evaluation Criteria	4a – Most Pedestrian Priority	4b – Pedestrian Priority with Two-Way Driving Access	4c – Pedestrian Priority with One-Way Driving Access & Cycle Tracks
<ul> <li>Pedestrian Movement</li> <li>Pedestrian Experience</li> <li>Retail &amp; Tourism</li> <li>Greening</li> <li>Street Flexibility</li> <li>Special Events</li> <li>Public Safety</li> <li>Health &amp; Wellbeing</li> </ul>	Best	Good	Better
Cycling	Better • • •	Good	Best
<ul> <li>Driving</li> <li>Transit</li> <li>Curbside Activity</li> </ul>	Good	Best	Better
Cost Effectiveness	Better	Best	Best

Figure 6. Summary of Design Concept Evaluation

Following Round 3 of consultation, refinements were made to 4C based on stakeholder feedback to form the Recommended Design Concept - 4D. Through consultation with area stakeholders, it was determined that Two-Way Operation from Gerrard Street to Walton Street would be more appropriate considering the development proposals located on this block. 4C has since been amended to provide Two-Way Driving Access from Gerrard Street to Walton Street to Final Recommended Design Concept 4D (Figure 7).



Figure 7. Summary of differences between Design Concepts 4C and 4D