

RELIEF LINE



Environmental Project Report Section 2 - Study Process

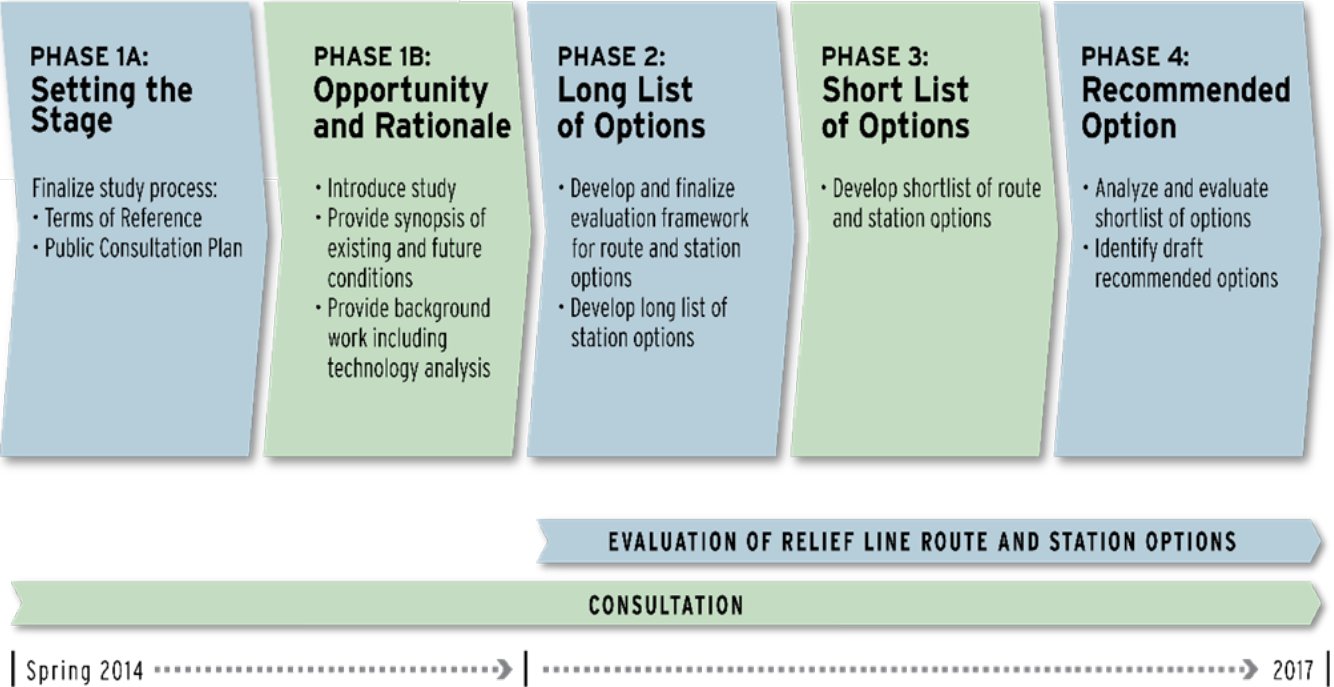


2 Study Process

2.1 Pre-TPAP Activities

The *Relief Line Project Assessment* (RLPA) was initiated by the City and TTC in 2014, based upon a study Terms of Reference and Public Consultation Plan as approved by City Council in June 2014 (see **Appendix 2-1**). The RLPA consisted of four major phases of work, each of which included technical analysis and public and stakeholder engagement, as illustrated in **Figure 2-1** and described below. The public consultation process is discussed in **Section 4**.

Figure 2-1: RLPA Study Process



A number of assumptions informed the planning process from the identification and evaluation of alternatives through to conceptual design and the identification of impacts and mitigation measures. In general, the Relief Line South was assumed to be a subway (see **Appendix 2-2**), and to follow standard TTC design standards for stations, the alignment, and running structure. Traditional TTC construction methods, detailed in **Appendix 2-3**, are assumed.

2.1.1 Phase 1 – Problem Statement and Rationale for the Project

During Phase 1, the Terms of Reference and Public Consultation Plan were developed. This phase identified the key decision points where public and stakeholder comments would be sought, including:

- The proposed evaluation framework;
- The long list of options for potential stations;

- The evaluation process for the long list of station options;
- The shortlist of options for potential stations and alignments;
- The evaluation of the shortlisted options; and
- Recommended alignment and stations.

Additionally, Phase 1 had the following additional objectives:

- Introduce the study to the public;
- Document existing and future conditions (see **Section 5**); and
- Summarize background work from the earlier studies.

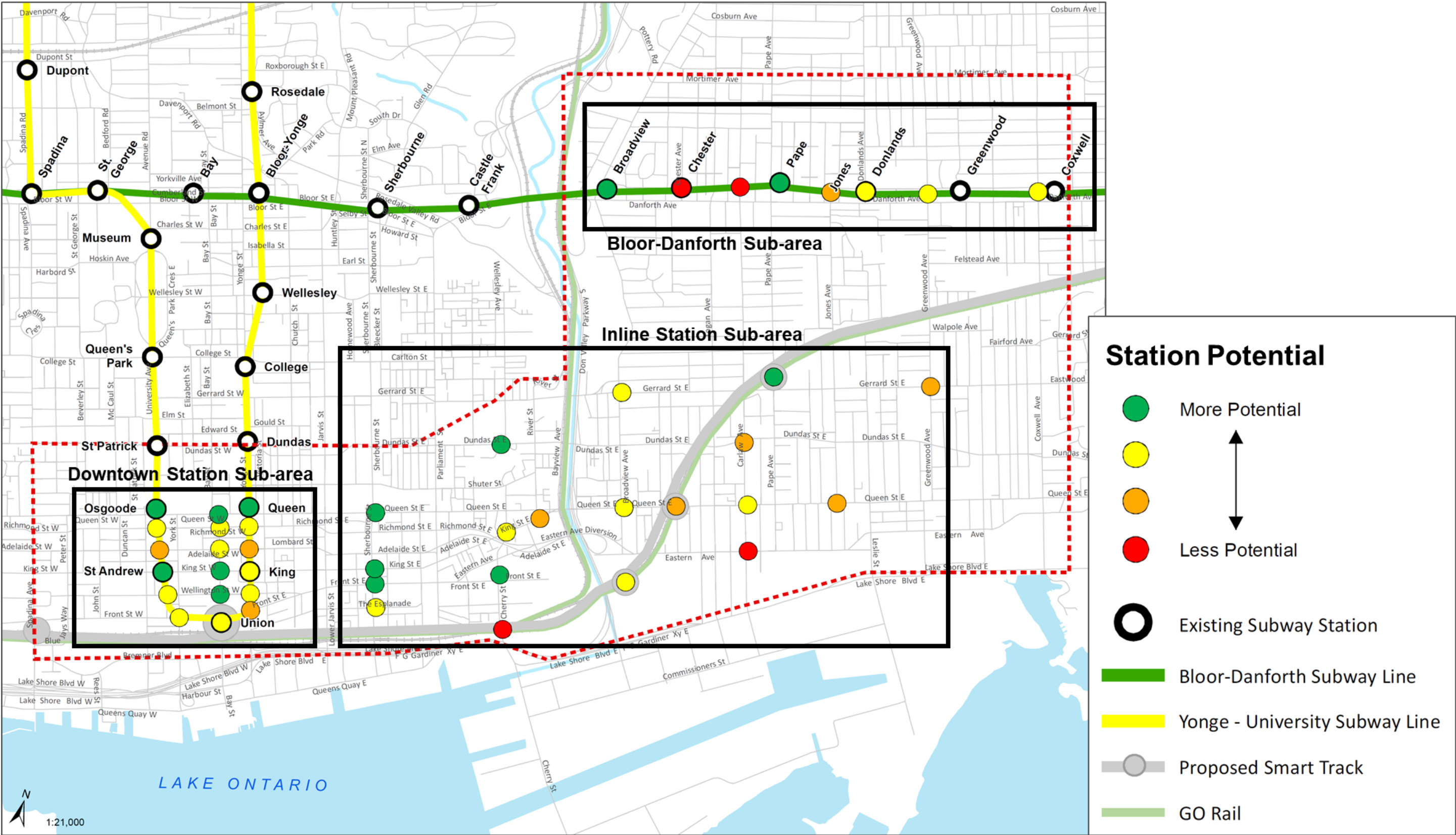
2.1.2 Phase 2 – Evaluation Framework and Long List of Options

Next, an evaluation framework was established to define the approach for considering options during the study. The output of this process was evaluation criteria for the station, corridor, and alignment evaluation phases, based on the evaluation framework developed as part of the Review of the City's Official Plan Transportation Policies (*Feeling Congested?*). The eight broad categories included:

- **Choice** – Develop an integrated network that connects different modes to provide for more travel options;
- **Experience** – Capacity to ease crowding/congestion; reduce travel times; make travel more reliable, safe and enjoyable;
- **Social Equity** – Do not favour any group over others; allow everyone good access to work, school, and other activities;
- **Shaping the City** – Use the transportation network as a tool to shape the residential development of the City;
- **Healthy Neighborhoods** – Changes in the transportation network should strengthen and enhance existing neighbourhoods; promote safe walking and cycling;
- **Public Health and Environment** – Support and enhance natural areas, encourage people to reduce how far they drive;
- **Affordability** – Improvements to the transportation system should be affordable to build, maintain and operate; and
- **Supports Growth** – Investment in public transportation should support economic development; allow workers to get to jobs more easily; allow goods to get to markets more efficiently.

The evaluation process and criteria are outlined in **Appendix 2-4**. Concurrent with the development of the evaluation framework, a long list of potential station locations was developed, based on the identification of major activity areas, and made available for public comment (see **Figure 2-2**).

Figure 2-2: Long List of Potential Station Locations (Grouped by Downtown, Inline, and Bloor-Danforth Sub-areas)



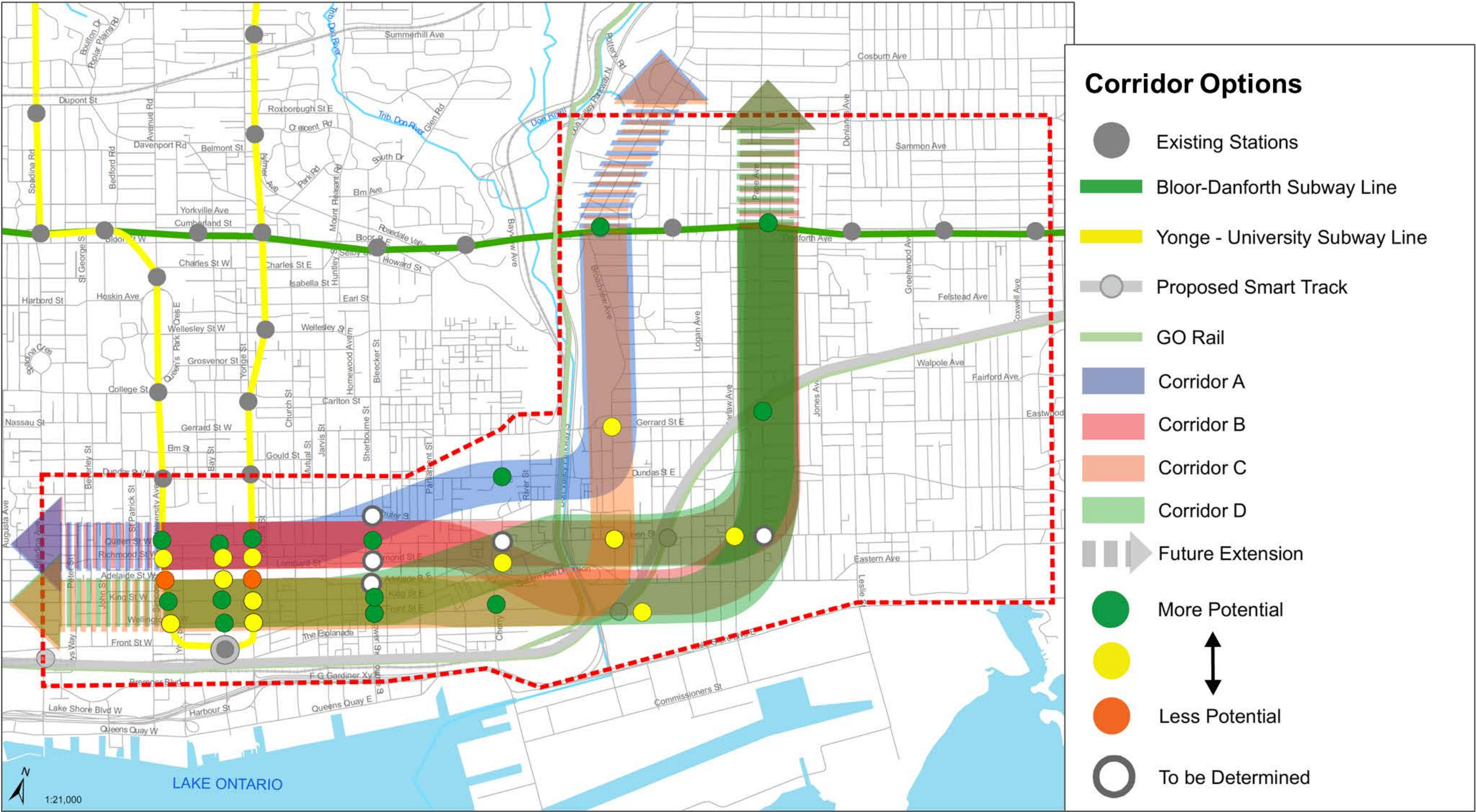
2.1.3 Phase 3 – Short List of Options

The objective of Phase 3 was to develop a short list of corridor options. To start this process, the long list of potential station locations identified in the previous phase was reviewed using the evaluation criteria. Station options that did not meet the requirements were not carried forward. Criteria deemed as critical included overall engineering feasibility (in which physical constraints presenting insurmountable challenges, e.g., availability of laydown/staging area, presence of major utilities, ability to maintain existing subway operations) were identified, as well as the ability to access the TTC's east end subway maintenance and storage facility at Greenwood Yard.

Once the critical items were addressed and screened, the remaining station options were evaluated. Specific criteria were developed to address the unique considerations at the terminal/interchange station locations on Line 1 and Line 2 as well as for inline stations. These criteria were then applied to the terminal station options and interchanges with the Line 1 and Line 2 stations, from which a shortlist of stations emerged that would be most effective in meeting the defined transit objectives. Similarly, the inline stations were scored for their ability to achieve the City's objectives.

Following the determination of the emerging preferred interchange station locations (King/St. Andrew and Queen/Osgoode along Line 1 and Broadview and Pape along Line 2), broad corridors, shown in **Figure 2-3**, was developed to connect the well-performing inline stations with the preferred interchange stations used as “anchors.”

Figure 2-3: Corridor Options

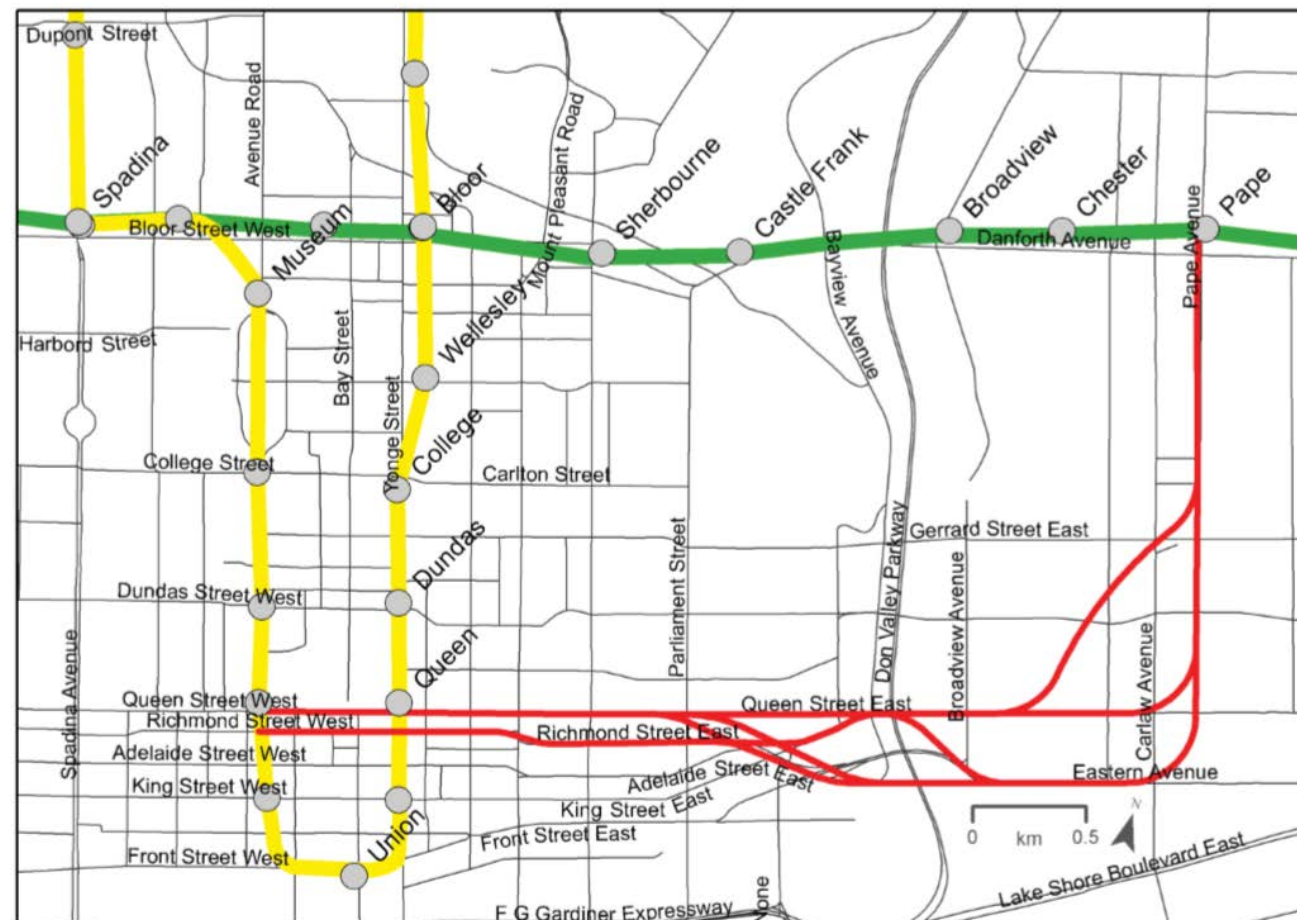


2.1.4 Phase 4 – Recommended Options

The objective of Phase 4 was to determine the preferred alignment and station locations, advance the preferred option through conceptual design, and undertake the required environmental studies for the Environmental Project Report (EPR). Leading to this, the corridor options identified in Phase 3 were evaluated using the corridor-level evaluation criteria developed in Phase 2. The corridor evaluation criteria considered the characteristics of both the stations and alignments within the corridor boundaries. The outcome of this stage was the selection of Downtown to Pape via Queen/Richmond as being the preferred corridor option, which was approved by City Council on March 31, 2016.

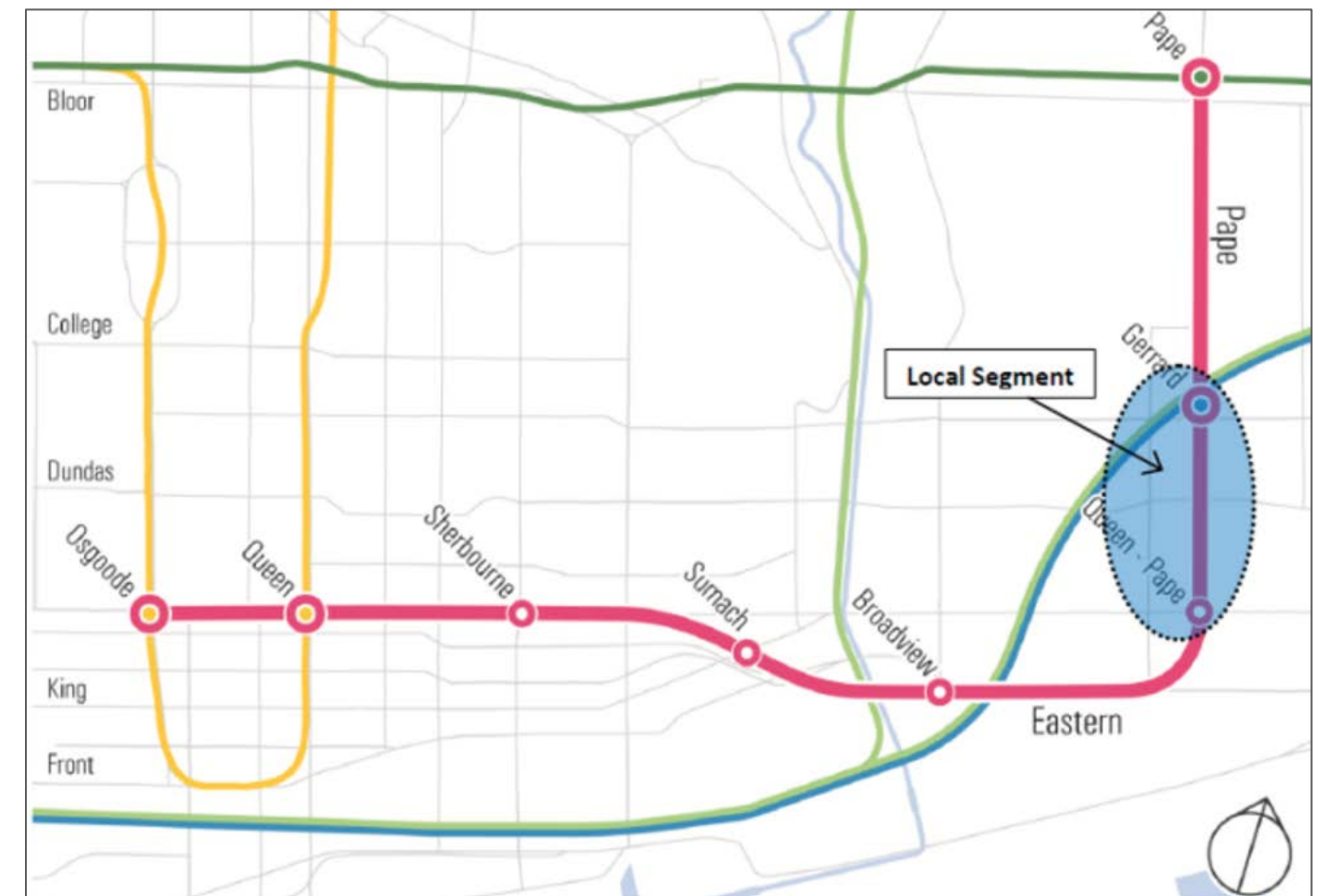
A range of alignment options within the preferred corridor was then developed, taking into account the evaluation of the inline stations during Phase 3. The long list of alignment options considered is shown in **Figure 2-4**.

Figure 2-4: Potential Alignments within the Preferred Corridor



The alignment options were evaluated using the criteria developed in Phase 2. As with the corridor evaluation, the alignment evaluation considered characteristics of both the stations and the alignment itself. The outcome of this process was the identification of a recommended alignment which followed Queen Street, Eastern Avenue, and Pape Avenue, and included 3 interchange stations with Lines 1 and 2, and 5 inline stations. On June 12, 2016, City Council approved the Pape/ Eastern/ Queen alignment, subject to further analysis within a local segment generally between Gerrard Street East and Queen Street East. The Council approved alignment within the local segment is shown in **Figure 2-5**.

Figure 2-5: Preferred Alignment and Local Segment

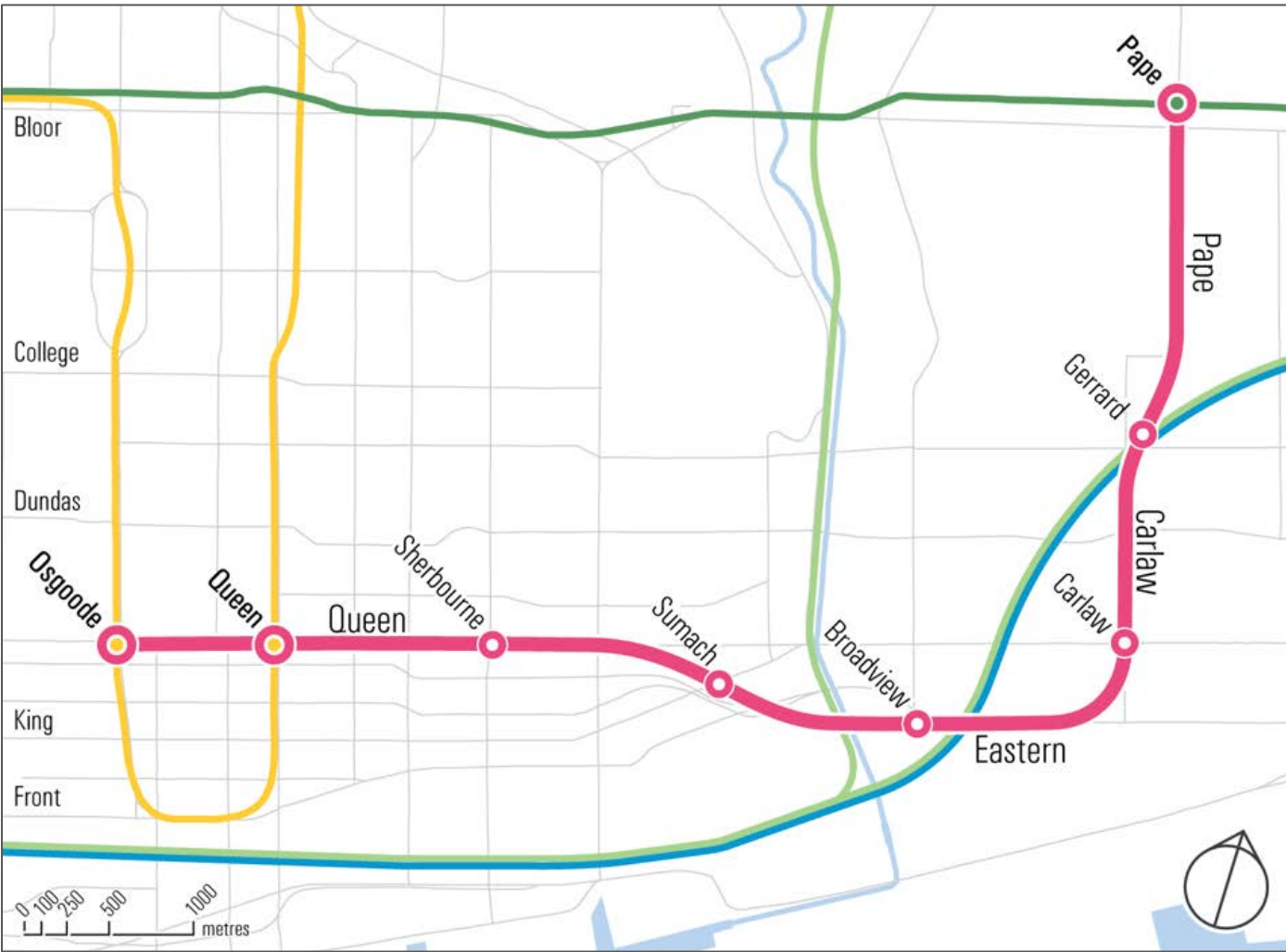


Two alignment options within the local segment were further assessed, as shown in **Figure 2-6**. Following further technical analysis and community consultation, the Carlaw option was identified as being preferred. The Carlaw alignment within the local segment was approved by City Council on May 24, 2017, resulting in the final alignment and station locations as shown in **Figure 2-7**.

Figure 2-6: Preferred Alignment within Local Segment



Figure 2-7: Final Preferred Alignment



Following City Council approval of the preferred alignment and station locations, conceptual design was initiated to bring the subway design to a level of detail sufficient to adequately identify the environmental impacts associated with the project and propose mitigation and monitoring measures.

The process for the identification and evaluation of alternatives is outlined in **Appendix 2-4**.

2.2 Transit Project Assessment Process

The TPAP is an environmental assessment process developed specifically for the approval of public transit projects. The Transit Projects Regulation, Ontario Environmental Assessment Act, Regulation 231/08, exempts proponents of all public transit projects from the requirements under Part II and Part II.1 of the Environmental Assessment Act, and creates a process that certain projects must follow in order to be exempt. The TPAP is a proponent-driven, self-assessment process and does not require that a transit project be approved by the Minister of the Environment, Conservation and Parks before proceeding.

The regulation does not require proponents to look at the rationale and planning alternatives to public transit or the rationale and planning alternatives or alternative solutions to the particular project. The Minister may give notice to proceed but can only act if there is a potential for a negative impact on a matter of provincial importance that relates to the natural environment or has cultural heritage value or interest, or on a constitutionally protected Aboriginal or treaty right. Proponents must complete the prescribed steps of the TPAP within specified time frames.

If a person, including members of the public, regulatory agencies and Indigenous communities, has concerns about this Project, objections can be submitted to the Minister within 30 days of the Notice of Completion. Objections received after the 30-day objection period will not be considered by the Minister. Proponents will be given an opportunity to comment on the concerns raised in an objection before the Minister acts. After the 30-day review period has ended, the Minister has 35 days within which certain authority may be exercised. A proponent may not proceed with a transit project before the end of the 35-day period unless the Minister gives a notice allowing the proponent to proceed.

Whether there is an objection or not, if the Minister acts within the 35-day period, one of three notices may be issued to the proponent:

- A notice to proceed with the transit project as planned in its EPR;
- A notice that requires the proponent to take further steps, which may include further study or consultation; or
- A notice allowing the proponent to proceed with the transit project subject to conditions.

If the Minister gives notice requiring that further steps be taken (e.g. conduct additional studies), the proponent must prepare a revised EPR and submit it to the Minister. If, within 30 days after receiving the revised EPR, the Minister is of the opinion that it still does not appropriately address negative impacts, the Minister can terminate the TPAP and require the proponent to comply with Part II of the Ontario Environmental Assessment Act or to comply with an approved class environmental assessment before proceeding with the transit project. If the Minister does not act within the 35-day period, the transit project may proceed as planned.