



RELIEF LINE

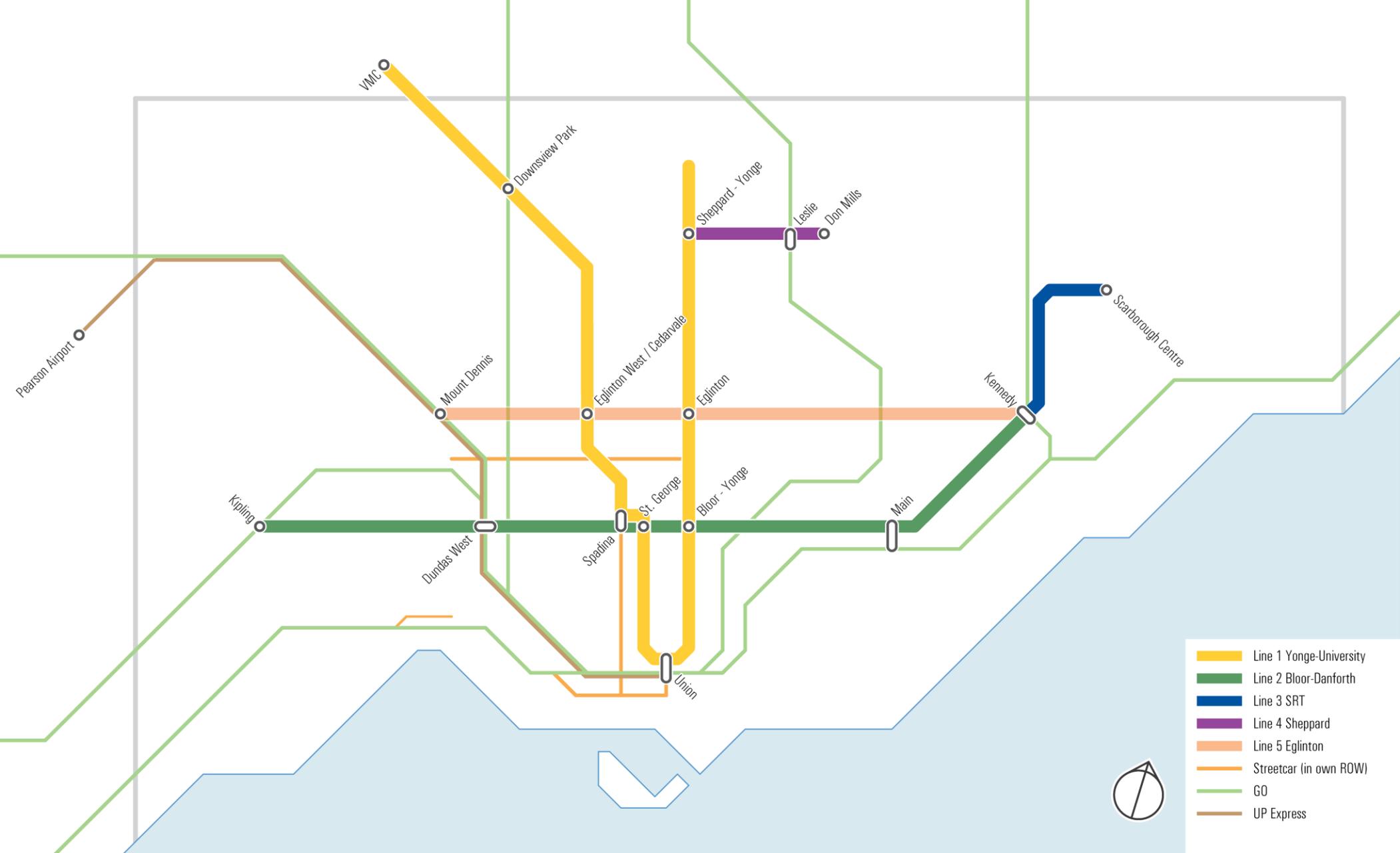


AGENDA

1. Welcome & Introductions
2. Project Background
3. Project Approach & Schedule
4. Draft Long List of Options
5. Evaluation Process
6. Next Steps

PROJECT BACKGROUND

OUR RAPID TRANSIT NETWORK TODAY



- Line 1 Yonge-University
- Line 2 Bloor-Danforth
- Line 3 SRT
- Line 4 Sheppard
- Line 5 Eglinton
- Streetcar (in own ROW)
- GO
- UP Express

OUR FUTURE RAPID TRANSIT NETWORK



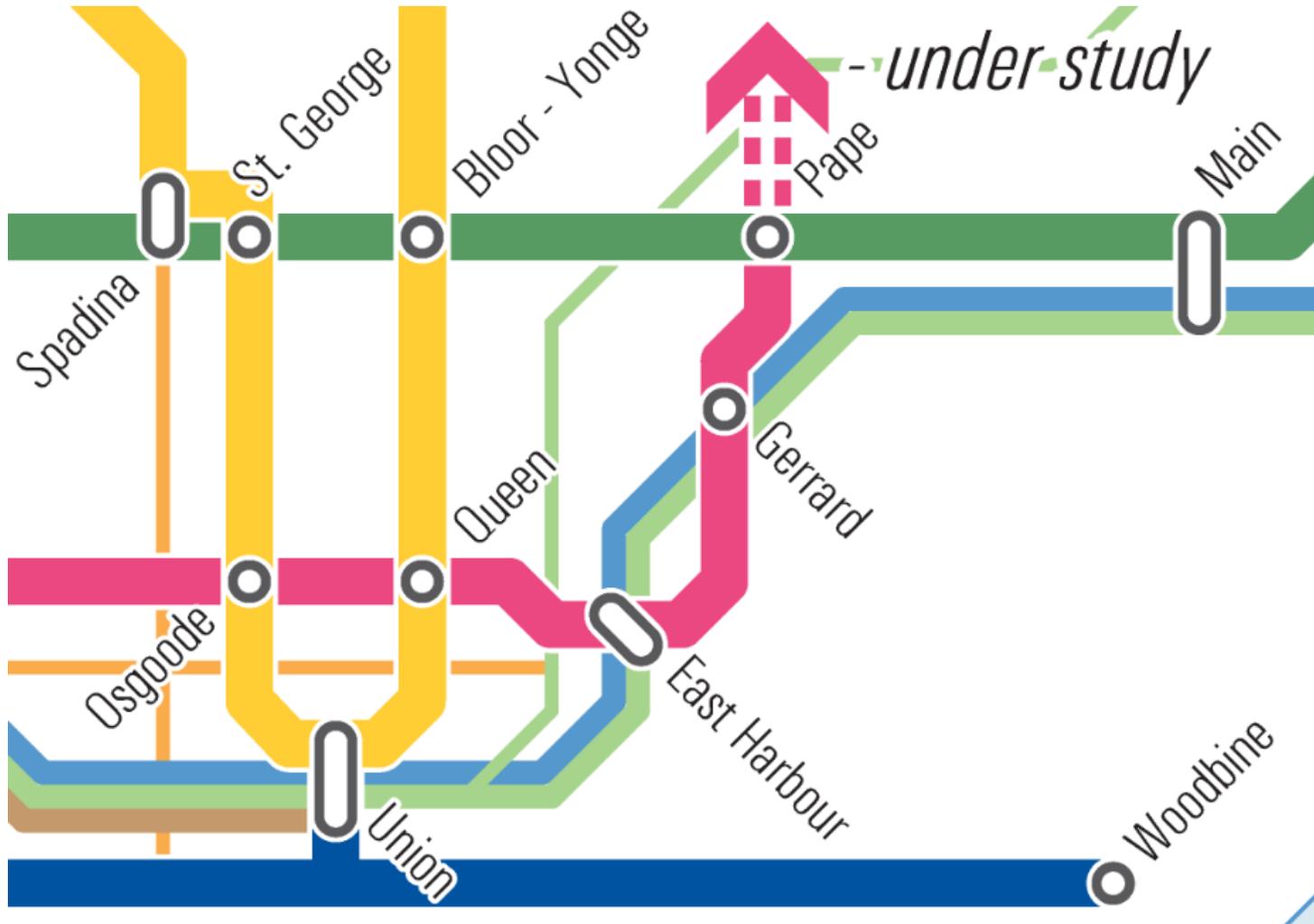
- █ Line 1 Yonge-University
- █ Line 2 Bloor-Danforth
- █ Line 4 Sheppard
- █ Line 5 Eglinton
- █ Finch W LRT
- █ Relief Line
- █ Sheppard LRT/RT
- █ Waterfront LRT
- █ Streetcar (in own ROW)
- █ SmartTrack
- █ GO RER/Electrified
- █ UP Express

BACKGROUND

2009	City Council approved Yonge North Extension EA , contingent on Relief Line and City/TTC commenced study to determine need for the Relief Line
2012	TTC's Downtown Rapid Transit Expansion Study concluded the initial phase of Relief Line and GO Transit improvements would help ease crowding
2013	Relief Line identified as part of the "Next Wave" of transit projects in the Metrolinx's Big Move plan and identified by Metrolinx as a priority for future transit investment
2014	Relief Line (South) Project Assessment launched. City/TTC commenced planning for preferred route and station locations for the Relief Line South.
2015	Metrolinx's Yonge Relief Network Study recommended a subway from Downtown to Don Mills Station. Metrolinx Board gave direction to advance planning of Relief Line South, Yonge Subway Extension, and assess a northerly extension of the Relief Line.
2016	City Council approved Relief Line Initial Business Case and Preferred Alignment for Relief Line South (Pape to Downtown via Queen/Eastern) subject to assessment of an additional alignment west of Pape.
May 2017	City Council approved Carlaw alignment for Relief Line South between Gerrard and Queen and authorized commencing TPAP , proceeding with conceptual design , and developing an initial business case for Relief Line North .

RELIEF LINE OVERVIEW

North & South of Pape Station



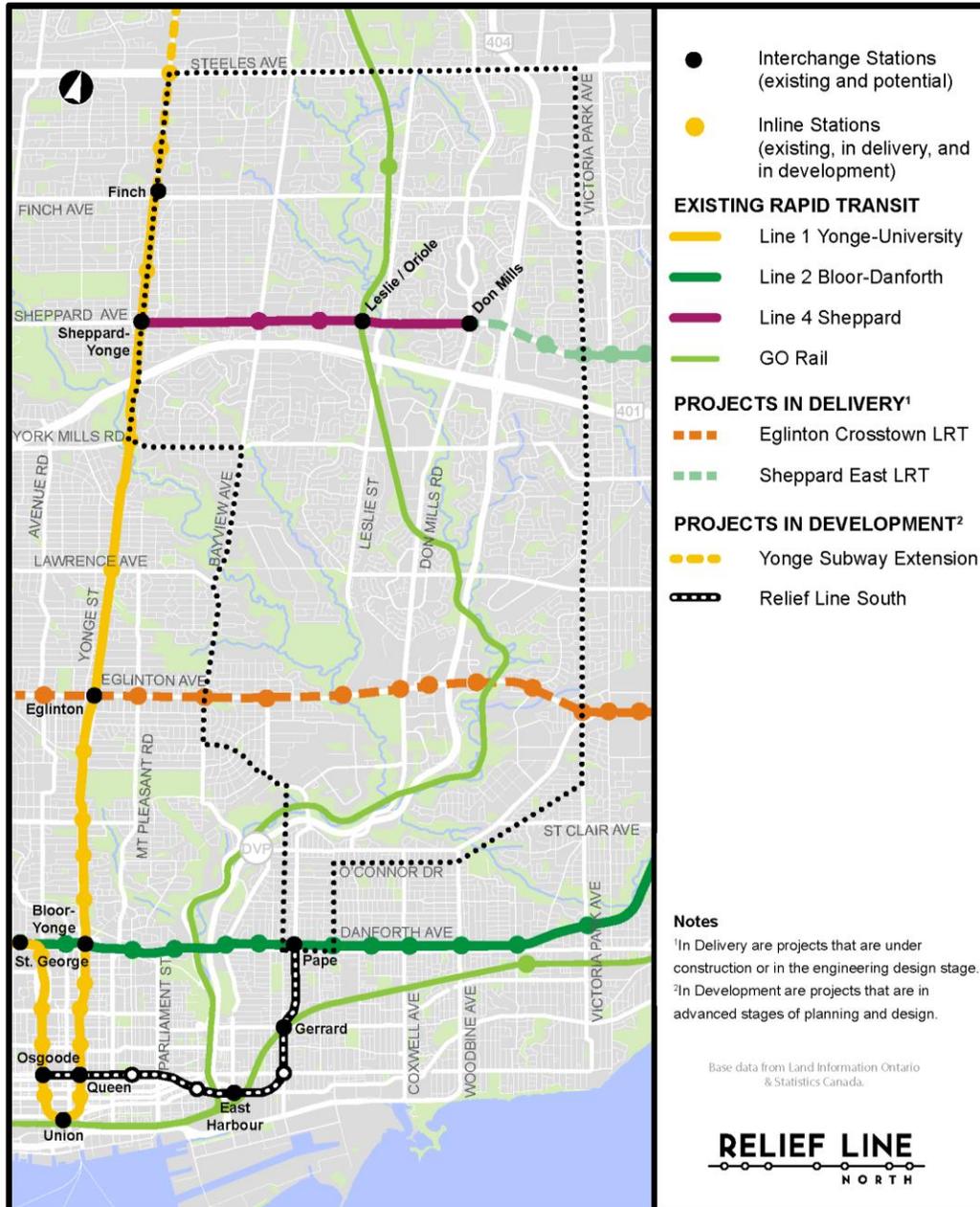
Relief Line North

- Alignment and stations to be determined through study now being initiated
- First round of engagement happening now

Relief Line South

- TPAP being initiated in April 2018
- Design underway for 8 stations from Osgoode to Pape
- Conceptual Design & costing underway
- Draft Environmental Project Report 90% complete
- Report back to Council late 2019

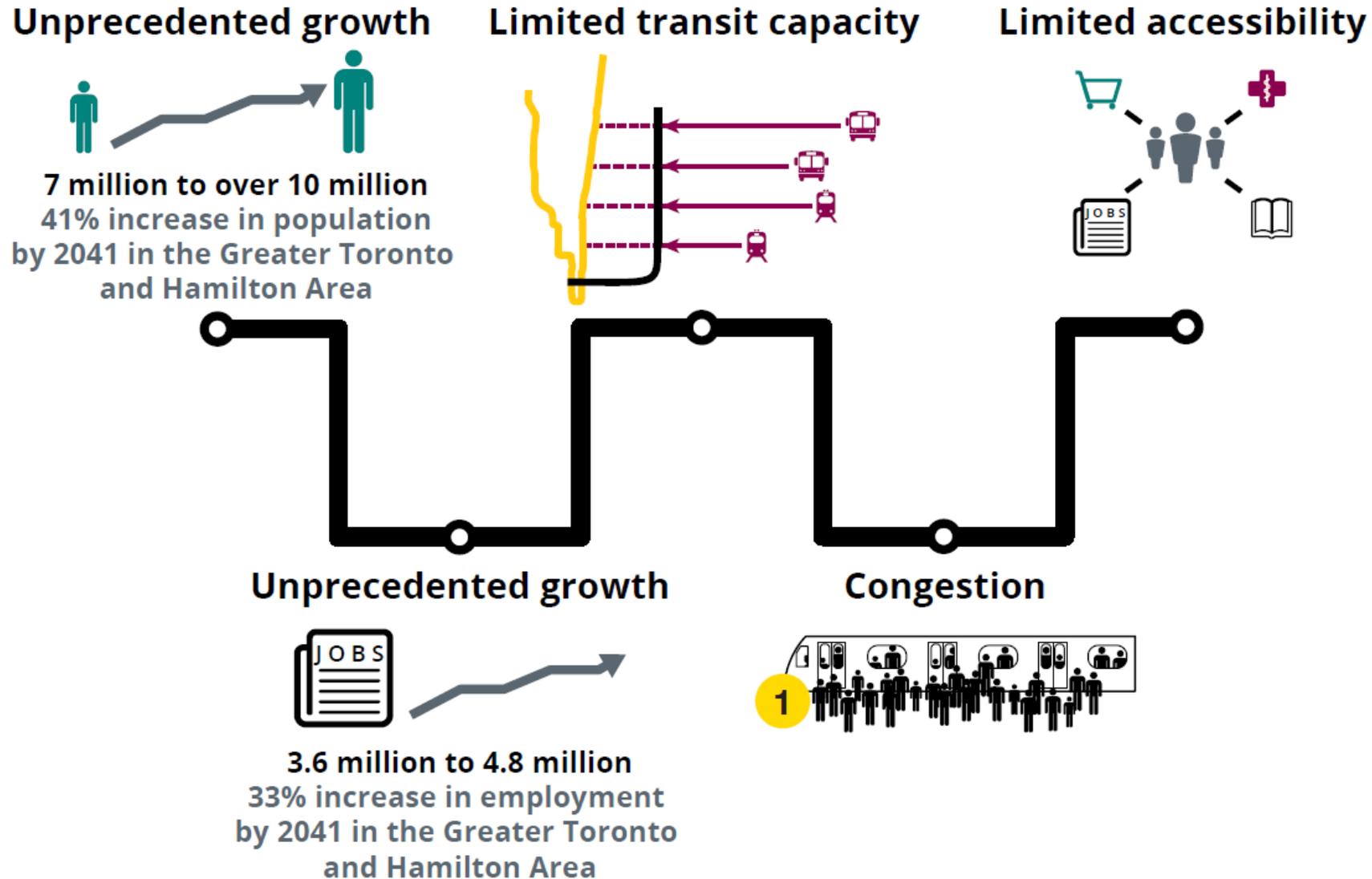
RELIEF LINE NORTH STUDY AREA



- From Pape Station on Line 2 (Danforth) north to Steeles Avenue
- From Yonge / Bayview east to Victoria Park Avenue

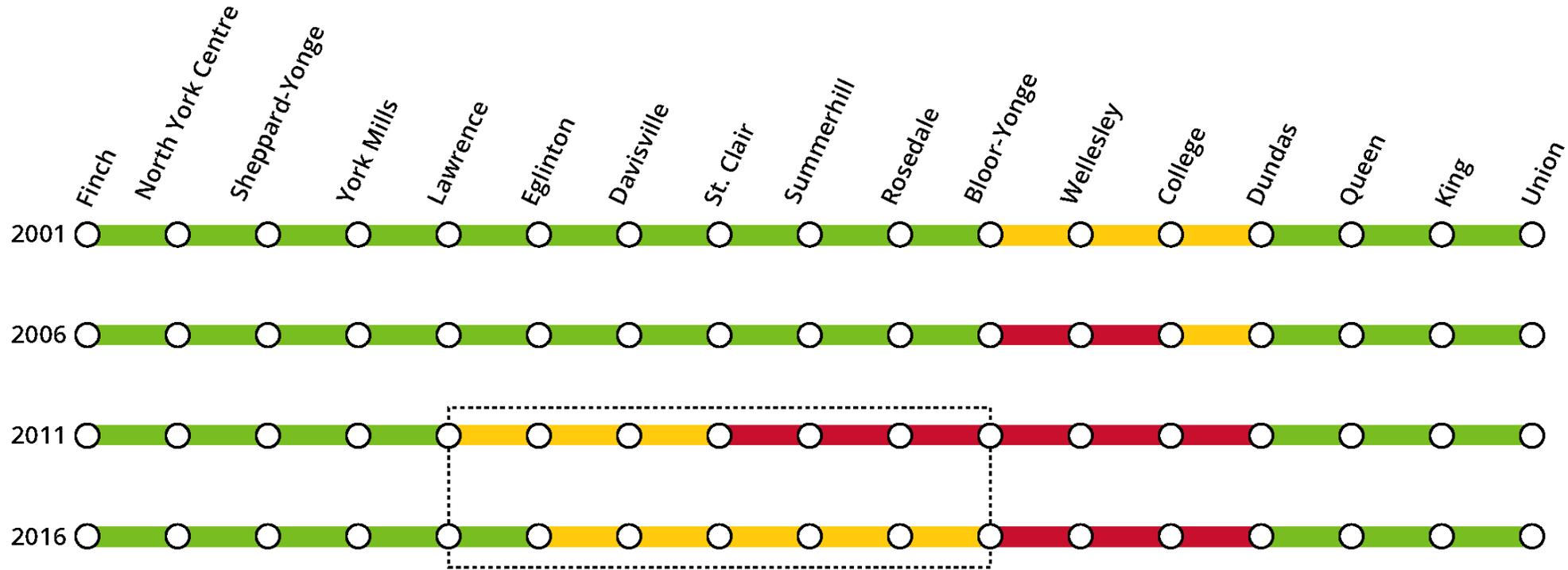
WHY DO WE NEED THE RELIEF LINE NORTH?

Problem Statement

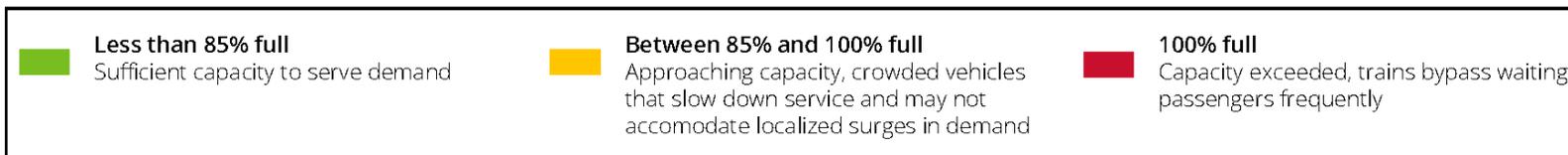


WHY DO WE NEED THE RELIEF LINE NORTH?

Crowding on Line 1 Yonge – Morning Rush Hour into Downtown



With the roll-out of the new Toronto Rocket Subway fleet in 2014, capacity increased by 10 percent. This has resulted in a minor improvement for certain sections, however Bloor Station to Dundas Station remains at or above capacity.



WHY DO WE NEED THE RELIEF LINE NORTH?

• **Relieve congestion**



- Line 1 currently operates over capacity during peak travel times. A continuation of Relief Line South, travelling north – from Pape Station – will provide more capacity and reduce overcrowding, helping to improve the performance of the entire regional transportation network.

• **Improve experience, health and environment**



- Rapid transit options reduce per trip greenhouse gas emissions, provide an alternative to car use and are a more active form of transportation helping to protect our environment and our health.

• **Connect people and places**



- RLN will provide improved transit access for more communities not yet served by rapid transit, helping to create connected places and better connect people with urban centres, employment nodes and regional destinations.

• **Grow with the Region**

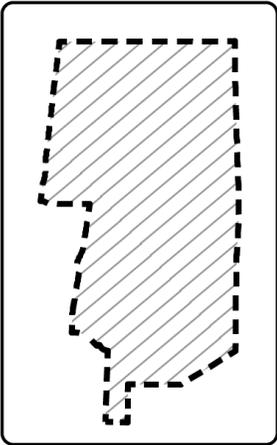


- By 2041, the GTHA, which had a population of nearly 7 million in 2016, is expected to grow to over 10 million people and 4.8 million jobs.

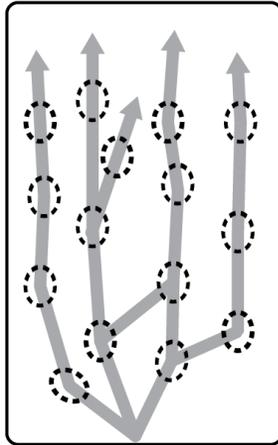
PROJECT APPROACH & SCHEDULE

PROJECT APPROACH & SCHEDULE

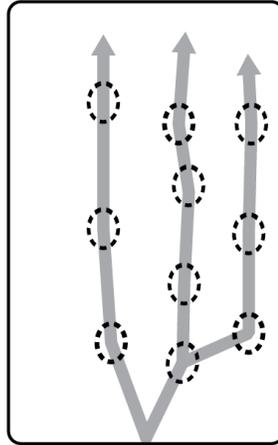
2018 2019 2020



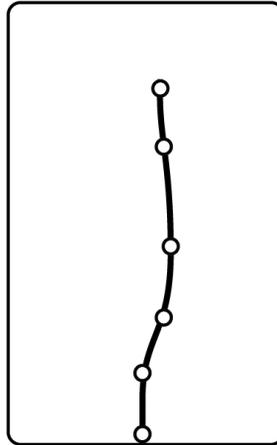
Step 1
Define the project



Step 2
Identify a long list of station areas and corridor options



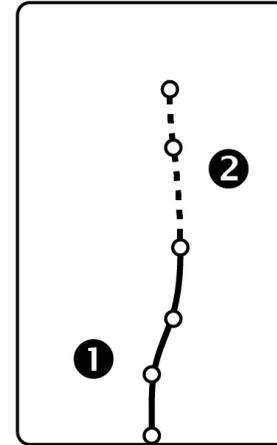
Step 3
Analyze options, including potential alignments and technologies, to identify a short list of station areas and corridor options



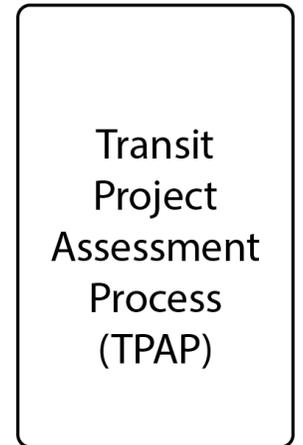
Step 4
Evaluate the short list of options through an Initial Business Case to determine a preferred alignment



Step 5
Develop a conceptual design for the project



Step 6
Determine phasing for construction and implementation



Environmental Assessment

We Are Here

ENGAGEMENT OPPORTUNITIES

2018 2019 2020

Round 1

Consultation on:

- Study Area
- Evaluation Criteria
- Problem Statement
- Long List of Station Areas
- Long List of Corridors

Round 2

Consultation on:

- Short List of Corridors and Stations
- Emerging Preferred Alignment
- Initial Business Case

Round 3

Consultation on:

- Conceptual Design
- Phasing Analysis

Round 4

Consultation on:

- Draft Environmental Project Report
- Project Impacts
- Mitigation Strategies

We Are Here

WHAT WE HAVE HEARD FROM YOU SO FAR:

Online Feedback



Connect communities across the City

Whether it's going to work, school or key destinations across the city, people want easier connections to get to where they're going.



Enhance the transit experience

Transit experiences would be more enjoyable with a reduction in congestion on transit lines and highways. This means faster and more efficient travelling to, from and within the City.



Build an integrated transit network

Increased connections between local and regional transit systems would help build an integrated and convenient transit network with more options.



Expedite the Relief Line North

Transit lines – trains, subways and buses – are all experiencing crowding within the study area and the Relief Line North is required quickly.



Support growth

Design the Relief Line North to maximize development potential in residential and employment areas along the route and surrounding neighborhoods.



Improve transit equity

Create an affordable transit service with station accessibility in high density neighbourhoods.



Extend service times

Longer service hours will offer transit users more options when planning their route.

DRAFT LONG LIST OF OPTIONS

DRAFT LONG LIST OF STATION AREAS

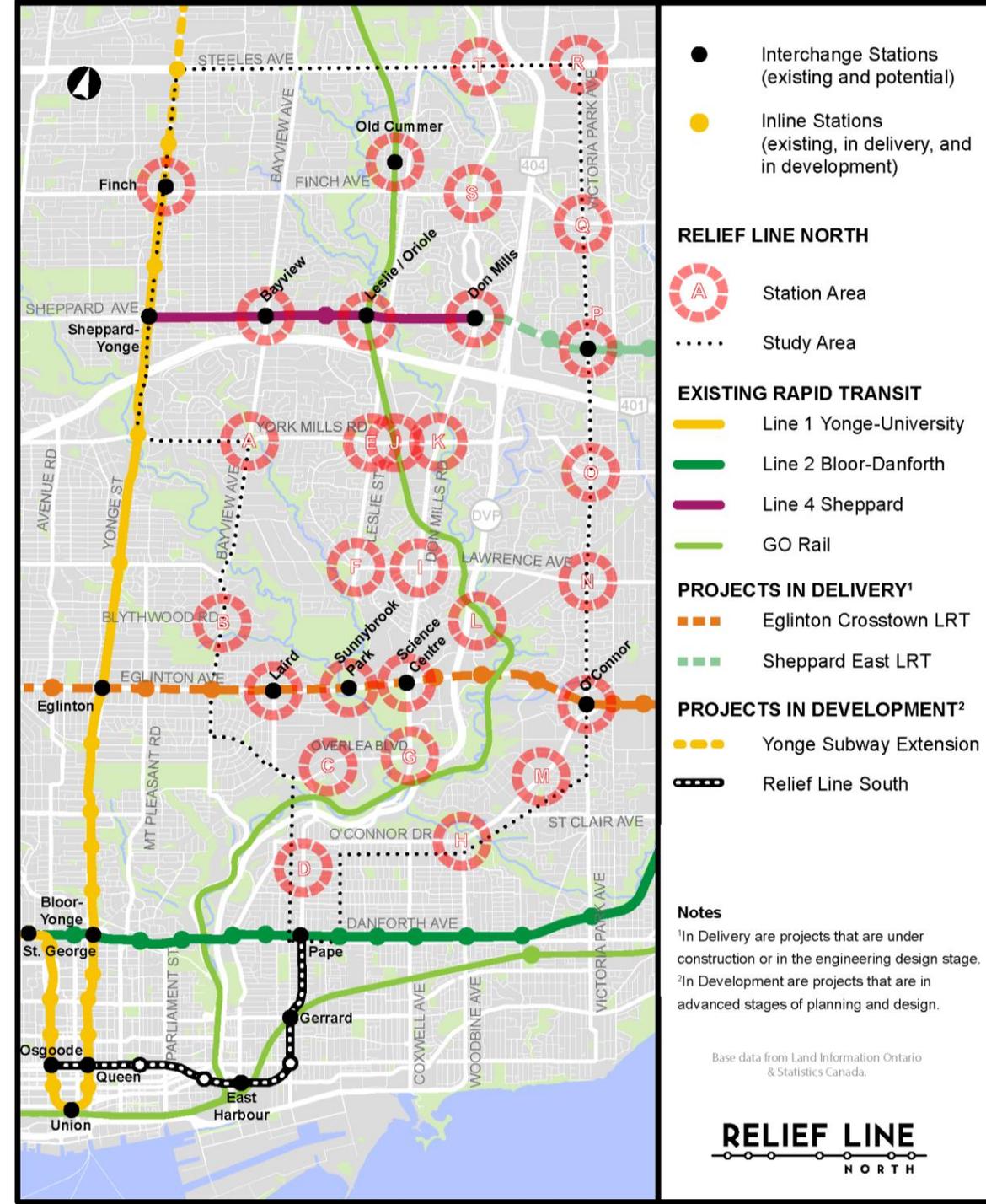
Potential station areas were identified based on:

Major transit network connections:

- ✓ Existing transit network (TTC and GO)
- ✓ Future Regional and City transit networks

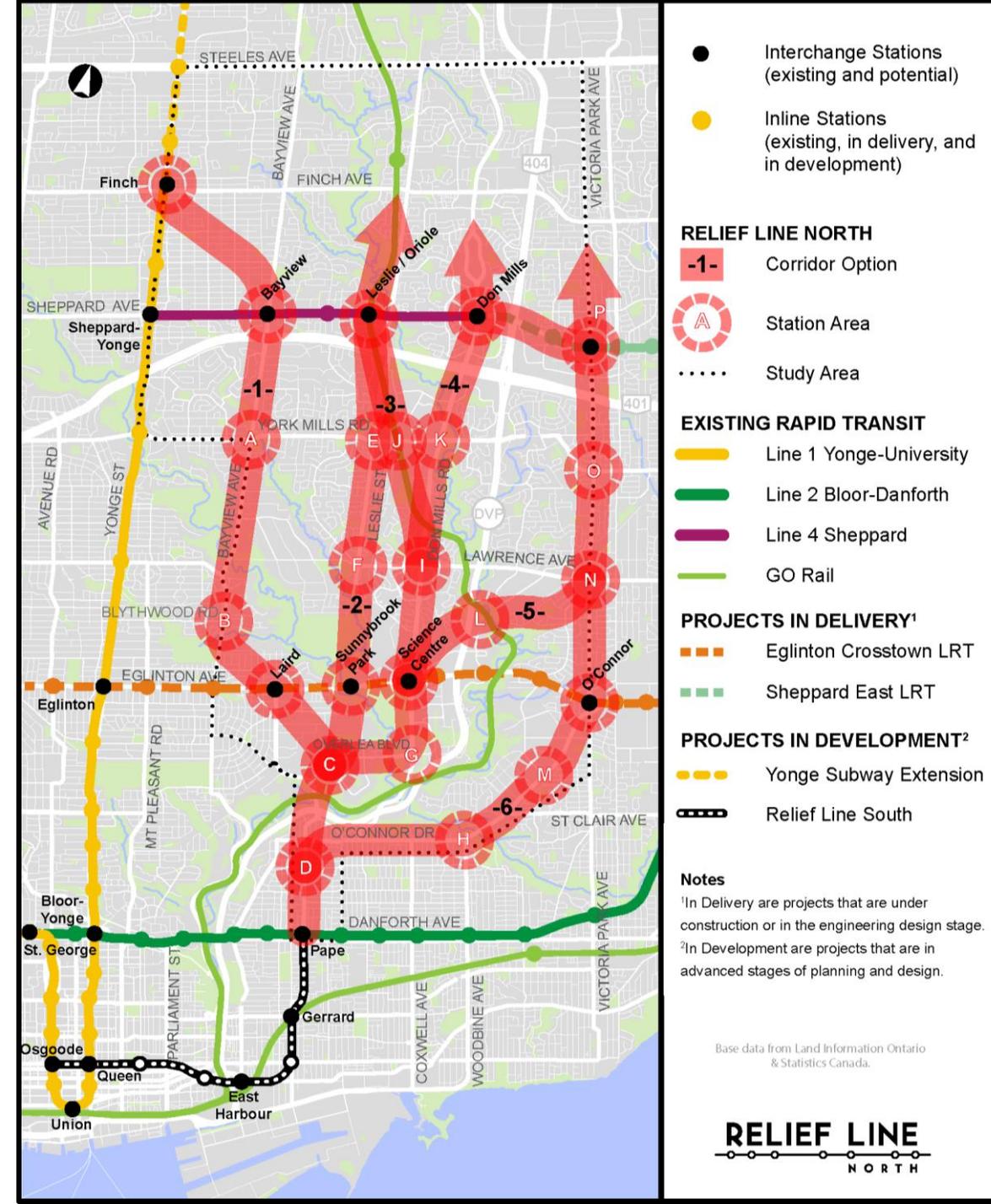
Locations of major activity:

- ✓ Key destinations
- ✓ Higher densities
- ✓ Existing planning permissions (urban structure, land use, future vision)



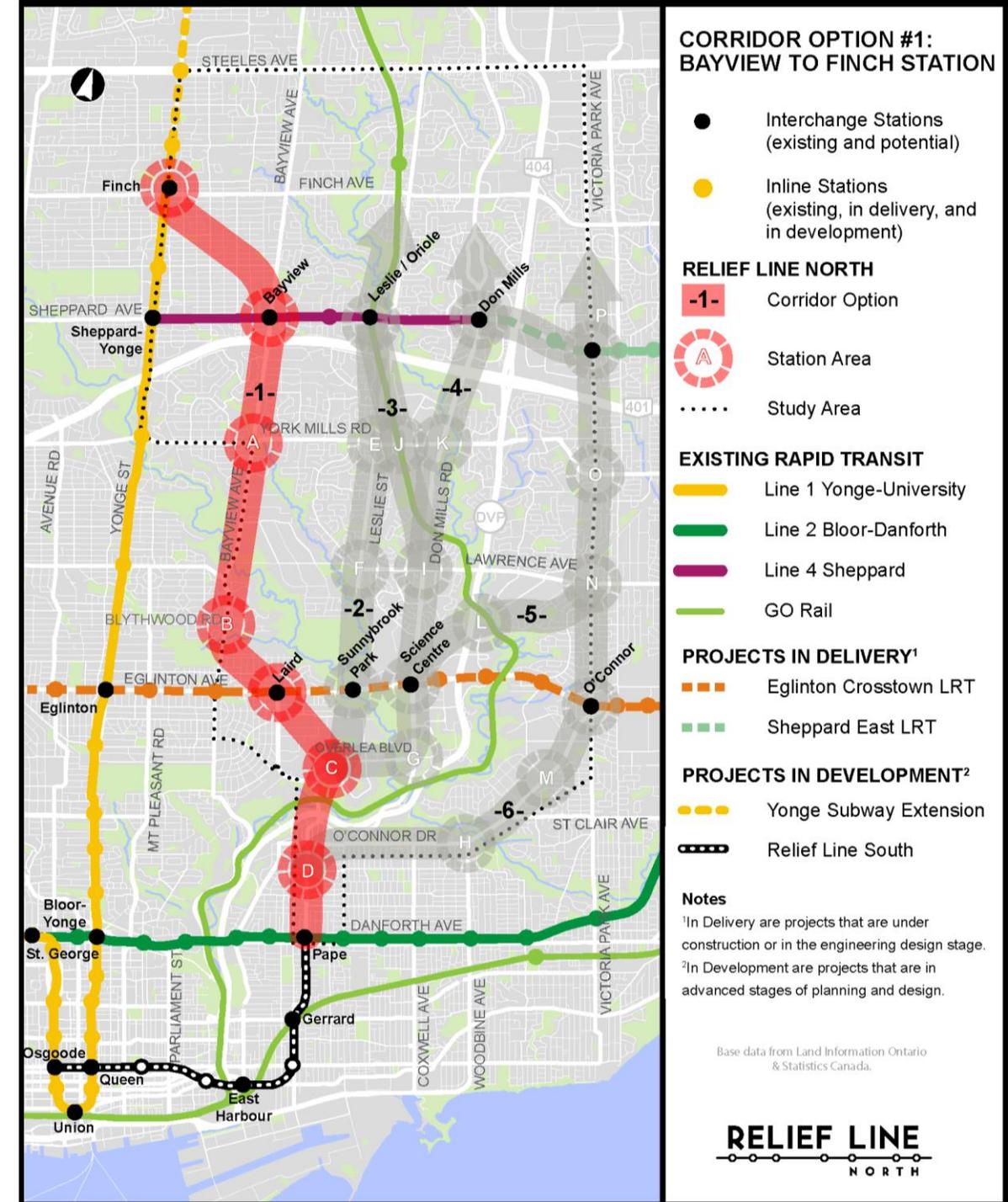
DRAFT LONG LIST OF CORRIDOR OPTIONS

- Corridors were identified by:
 - Connecting potential station areas; and
 - Serving communities with significant existing transit ridership.
- A total of six corridors were identified going north from Pape station on Pape avenue:
 - Bayview to Finch Station
 - Leslie
 - Don Mills to Leslie Station via GO corridor
 - Don Mills to Sheppard Avenue East
 - Don Mills to Victoria Park
 - Victoria Park via O'Connor



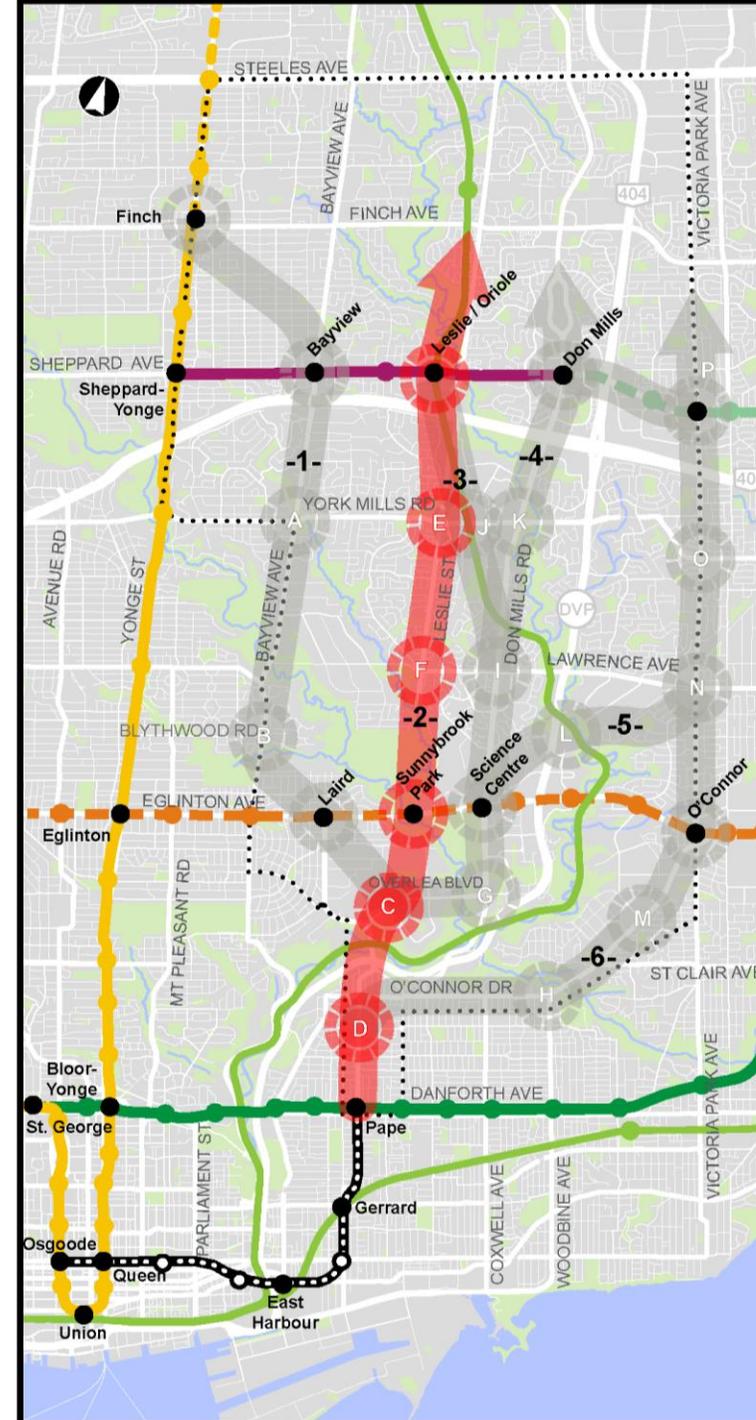
OPTION 1: BAYVIEW TO FINCH STATION

- Option would
 - Go north from Pape Station to Thorncliffe Park
 - Connect with Line 5 Eglinton at Laird Station
 - Head north on Bayview Avenue
 - Connect with Line 4 Sheppard at Bayview Station
 - Connect with Line 1 Yonge at Finch Station.



OPTION 2: LESLIE

- Option would
 - Go north from Pape Station to Thorncliffe Park
 - Connect with Line 5 Eglinton at Sunnybrook Park Station
 - Head north on Leslie Street
 - Connect with Line 4 Sheppard at Leslie Station



CORRIDOR OPTION #2: LESLIE

- Interchange Stations (existing and potential)
- Inline Stations (existing, in delivery, and in development)
- RELIEF LINE NORTH**
- 1-** Corridor Option
- A** Station Area
- Study Area

- EXISTING RAPID TRANSIT**
- Line 1 Yonge-University
- Line 2 Bloor-Danforth
- Line 4 Sheppard
- GO Rail

- PROJECTS IN DELIVERY¹**
- Eglinton Crosstown LRT
- Sheppard East LRT

- PROJECTS IN DEVELOPMENT²**
- Yonge Subway Extension
- Relief Line South

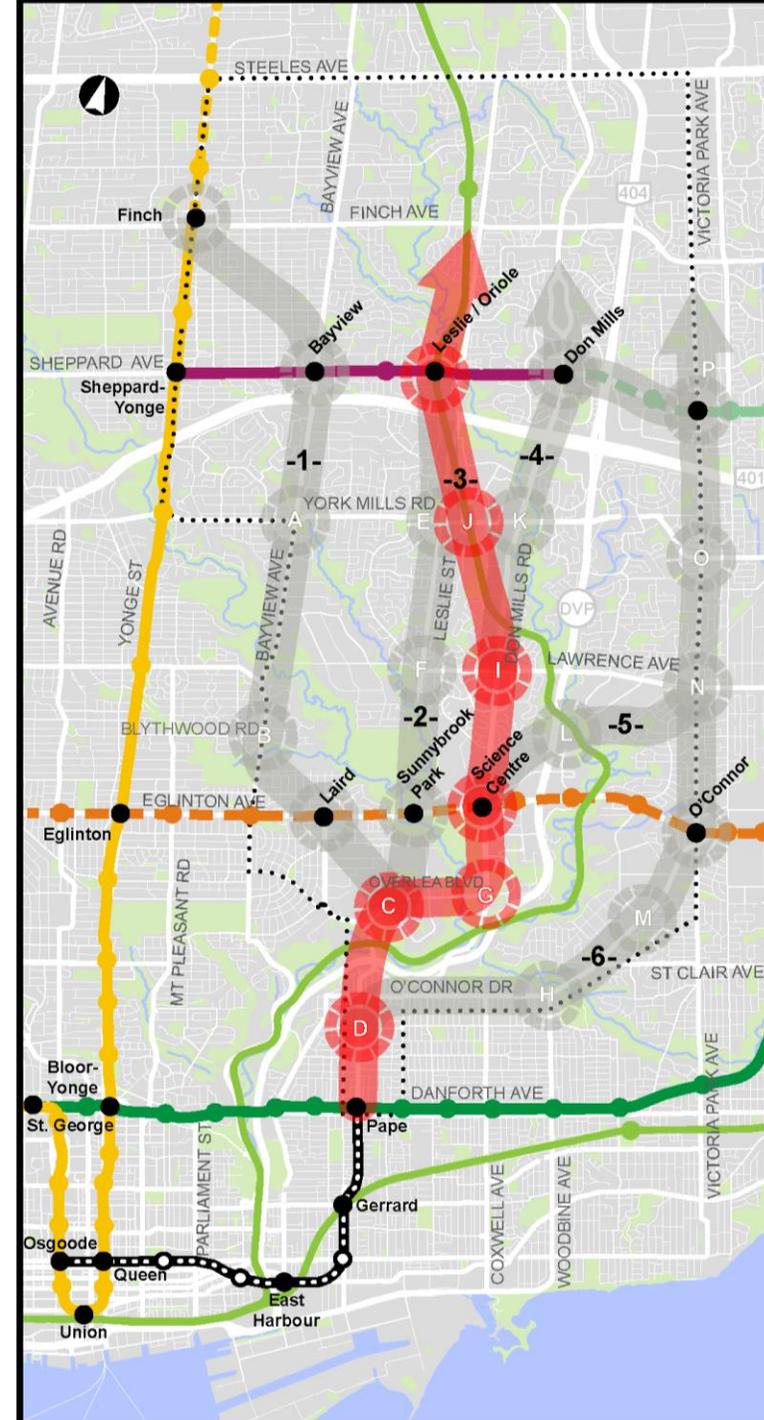
Notes
¹In Delivery are projects that are under construction or in the engineering design stage.
²In Development are projects that are in advanced stages of planning and design.

Base data from Land Information Ontario & Statistics Canada.



OPTION 3: DON MILLS TO LESLIE VIA GO RAIL CORRIDOR

- Option would
 - Go north from Pape Station to Thorncliffe Park
 - Head north on Don Mills Road
 - Connect with Line 5 Eglinton at Science Centre Station
 - Cut across via the GO Corridor, north of Lawrence Avenue
 - Connect with Line 4 Sheppard at Leslie Station and with Oriole GO Station on the Richmond Hill line.



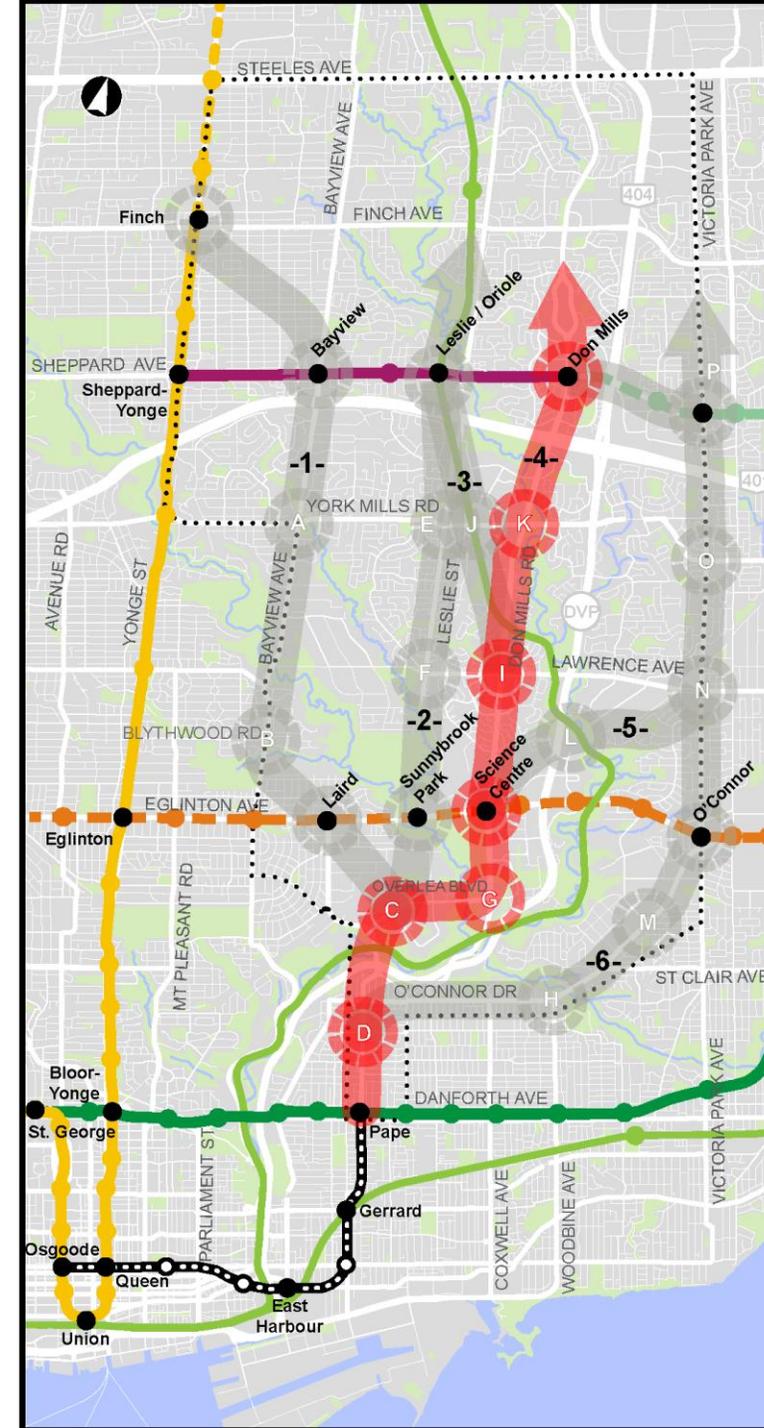
CORRIDOR OPTION #3: DON MILLS TO LESLIE VIA GO CORRIDOR

- Interchange Stations (existing and potential)
- Inline Stations (existing, in delivery, and in development)
- RELIEF LINE NORTH**
- 1-** Corridor Option
- Station Area
- Study Area
- EXISTING RAPID TRANSIT**
- Line 1 Yonge-University
- Line 2 Bloor-Danforth
- Line 4 Sheppard
- GO Rail
- PROJECTS IN DELIVERY¹**
- Eglinton Crosstown LRT
- Sheppard East LRT
- PROJECTS IN DEVELOPMENT²**
- Yonge Subway Extension
- Relief Line South

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OPTION 4: DON MILLS TO SHEPPARD AVENUE EAST

- Option would
 - Go north from Pape Station to Thorncliffe Park
 - Head north on Don Mills Road
 - Connect with Line 5 Eglinton at Science Centre Station
 - Connect with Line 4 Sheppard at Don Mills Station.



CORRIDOR OPTION #4: DON MILLS TO SHEPPARD AVENUE EAST

- Interchange Stations (existing and potential)
- Inline Stations (existing, in delivery, and in development)

RELIEF LINE NORTH

- 1- Corridor Option
- ⊙ Station Area
- ⋯ Study Area

EXISTING RAPID TRANSIT

- Line 1 Yonge-University
- Line 2 Bloor-Danforth
- Line 4 Sheppard
- GO Rail

PROJECTS IN DELIVERY¹

- Eglinton Crosstown LRT
- Sheppard East LRT

PROJECTS IN DEVELOPMENT²

- Yonge Subway Extension
- Relief Line South

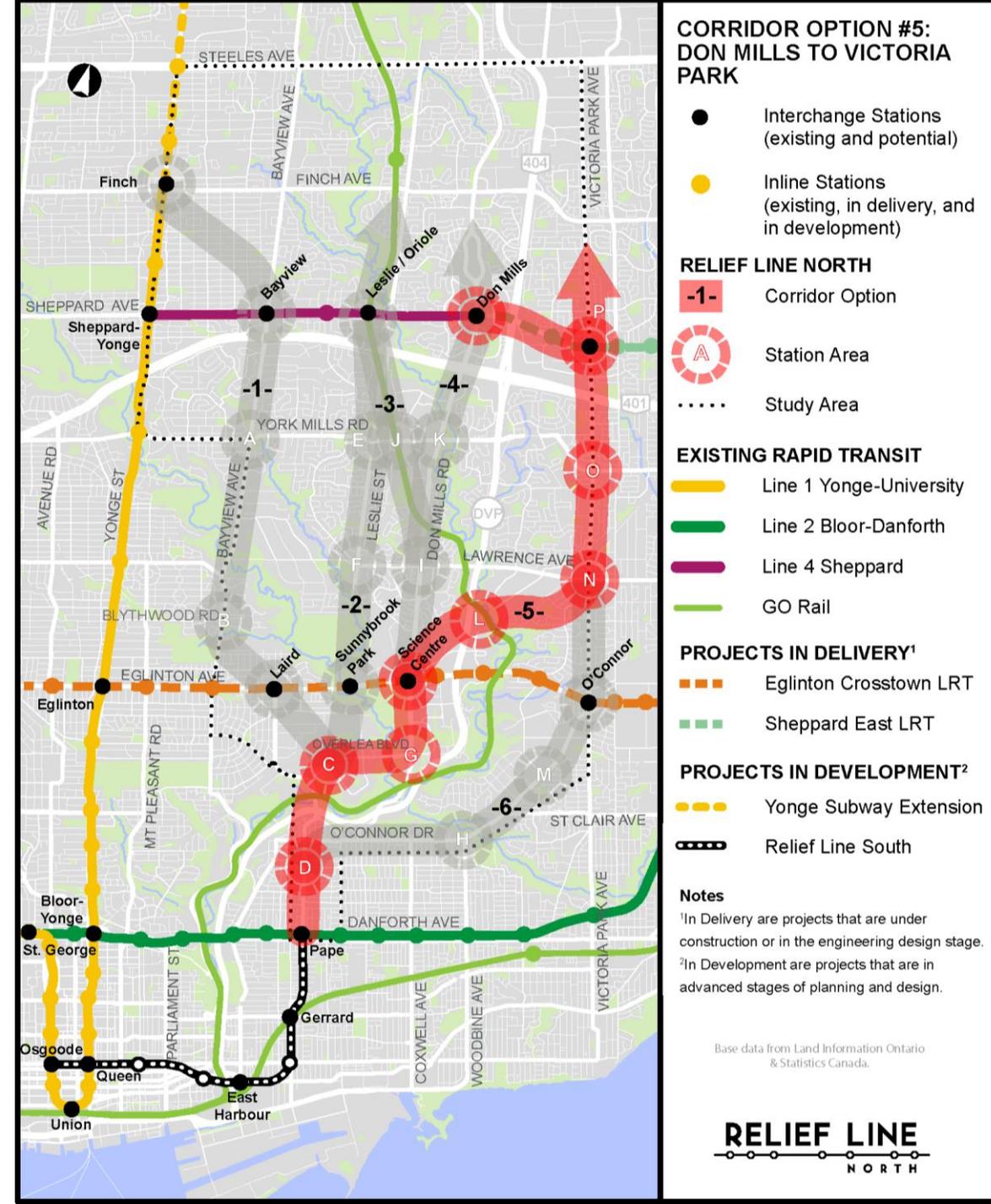
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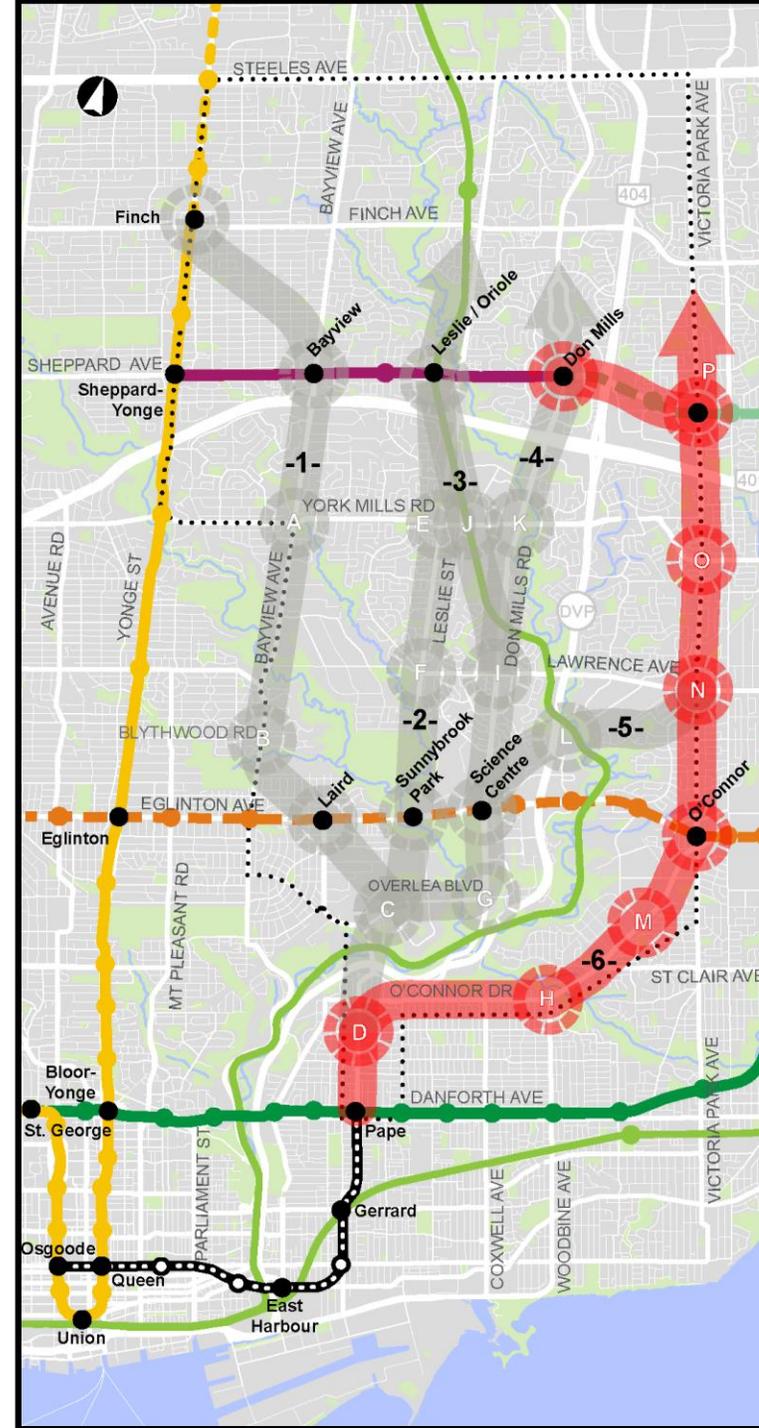
OPTION 5: DON MILLS TO VICTORIA PARK

- Option would
 - Go north from Pape Station to Thorncliffe Park
 - Head north on Don Mills Road to connect with Line 5 Eglinton at Science Centre Station
 - Cut across the DVP to Victoria Park Avenue
- Line 4 could be extended to Sheppard Avenue and Victoria Park Avenue.
- Potential to run continuous service from Sheppard-Yonge Station to Osgoode Station.



OPTION 6: VICTORIA PARK VIA O'CONNOR

- Option would:
 - Go north from Pape Station
 - Follow O'Connor Drive to Victoria Park Avenue
- Line 4 could be extended to Sheppard Avenue and Victoria Park Avenue
- Potential to run continuous service from Sheppard-Yonge to Osgoode



CORRIDOR OPTION #6: VICTORIA PARK VIA O'CONNOR

- Interchange Stations (existing and potential)
- Inline Stations (existing, in delivery, and in development)
- RELIEF LINE NORTH**
- 1- Corridor Option
- ⊙ Station Area
- ⋯ Study Area
- EXISTING RAPID TRANSIT**
- Line 1 Yonge-University
- Line 2 Bloor-Danforth
- Line 4 Sheppard
- GO Rail
- PROJECTS IN DELIVERY¹**
- Eglinton Crosstown LRT
- Sheppard East LRT
- PROJECTS IN DEVELOPMENT²**
- Yonge Subway Extension
- Relief Line South

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EVALUATION PROCESS

HOW WILL WE GET TO A SHORT LIST OF CORRIDORS?

A high level evaluation of the long list of stations and corridors will be conducted to narrow down the options for the Relief Line North. The following steps will be taken:

Evaluation 1

Station areas will be evaluated based on impacts and potential mitigation to:

- Natural heritage areas, environmentally sensitive areas, parkland and/or open spaces
- Flood plains
- Land uses

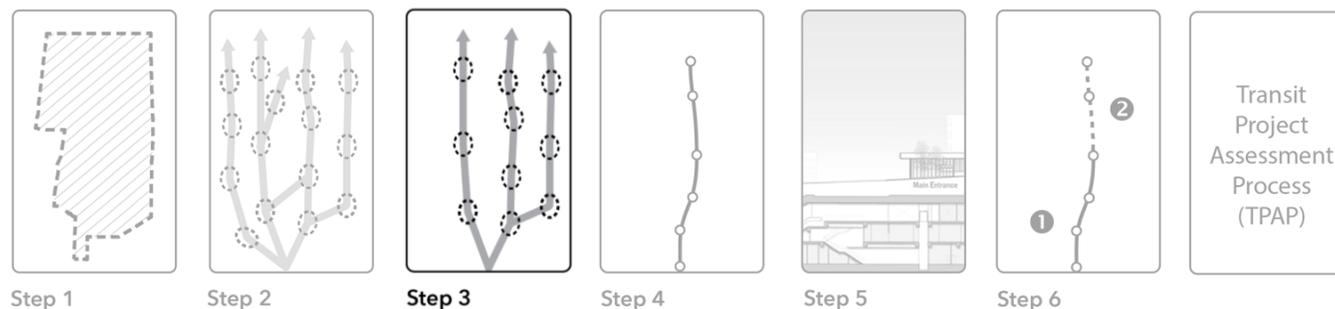
Evaluation 2

Corridors will be evaluated based on:

- Ability to relieve congestion
- Ability to provide continuous service north of Pape Station
- Connections to the existing and future transit network
- Feasibility based on engineering standards
- Ability to accommodate a Maintenance and Storage Facility (MSF) for vehicles

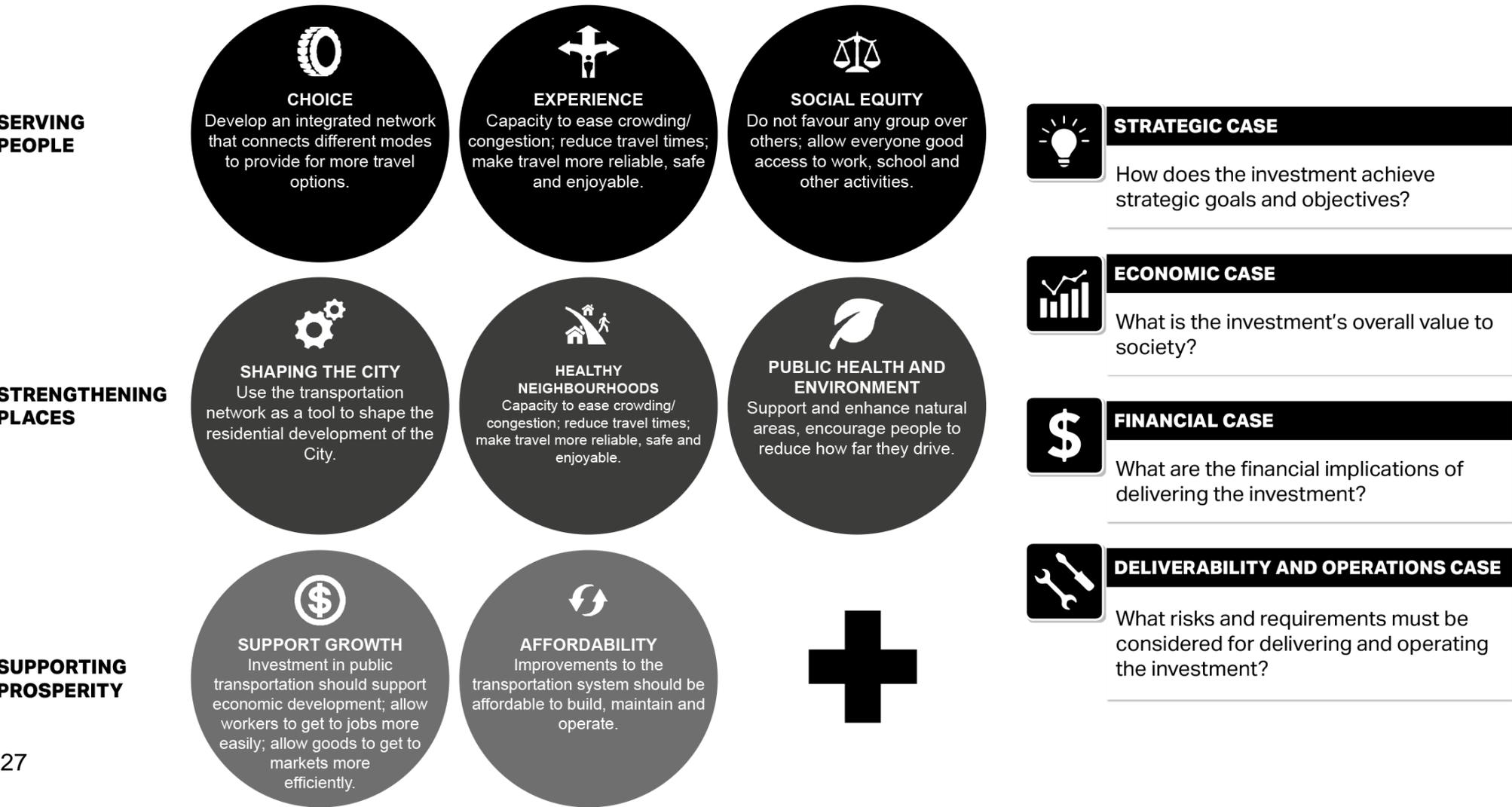
The Result

The short list of corridors



HOW WILL WE EVALUATE THE SHORT LIST?

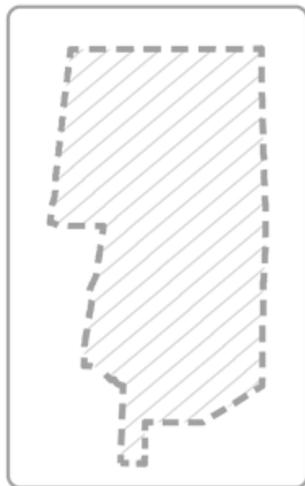
The evaluation framework and your input capture key considerations in transit project decision-making including operational needs, ridership, city-building and financial viability.



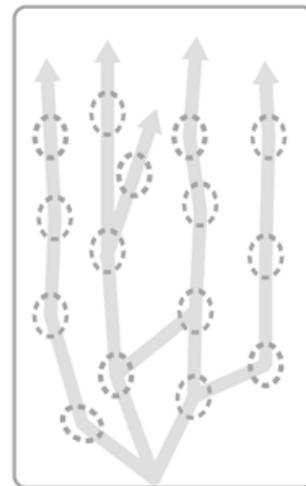
NEXT STEPS

CONSULTATION ROUND 1 | CONSULTATION ROUND 2 | CONSULTATION ROUND 3 | CONSULTATION ROUND 4

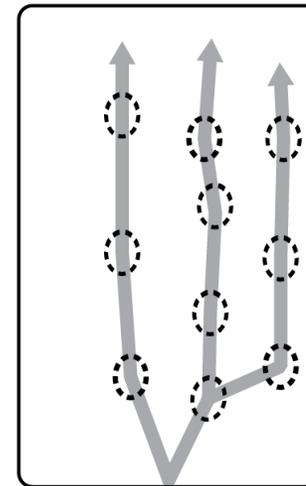
STUDY PHASE 1 | STUDY PHASE 2



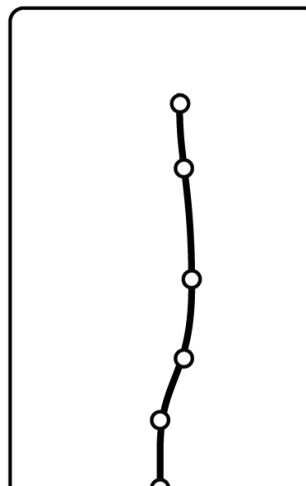
Step 1
Define the project



Step 2
Identify a long list of station areas and corridor options



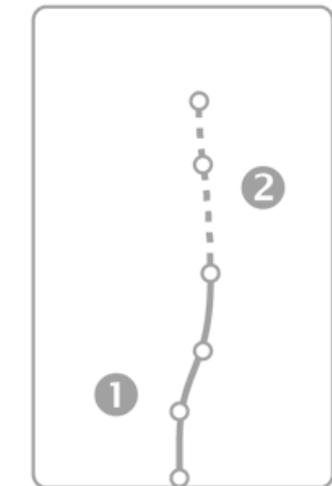
Step 3
Analyze options, including potential alignments, to identify a short list of station areas and corridor options



Step 4
Evaluate the short list of options through an Initial Business Case to determine a preferred alignment



Step 5
Develop a conceptual design for the project



Step 6
Determine phasing for construction and implementation

Transit Project Assessment Process (TPAP)
Environmental assessment

CONTACT US

- We want to hear your ideas, suggestions and opinions
- We are committed to keeping you informed and engaged as we complete each phase of the planning process
- If you have any questions or comments, please contact the Project Team:
 - By phone: 416-338-1065
 - By email: reliefline@toronto.ca
- Visit the project website at reliefline.ca





RELIEF LINE

