
TESTON ROAD AREA TRANSPORTATION IMPROVEMENTS

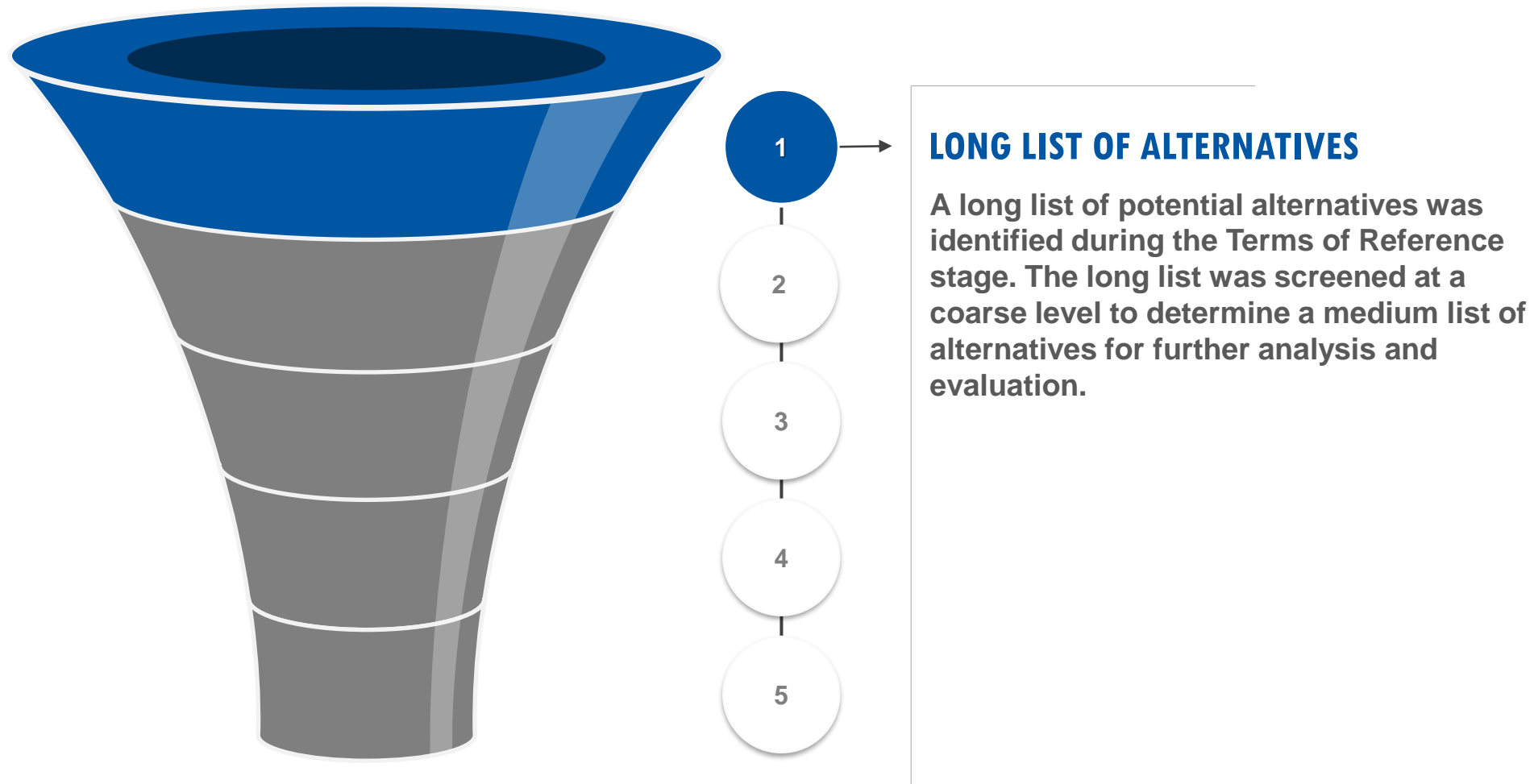
Individual Environmental Assessment

Virtual Public Open House #1

July 2021

Presentation Part 2

Process of Selecting a Preferred Alternative to the Undertaking



Long List of Alternatives

1.0 Do Nothing

1.1 Do Nothing

2.0 Travel Demand Management

2.1 Shifting demand to off-peak periods

2.2 Promoting alternative transportation options (Transit, cycling, walking, etc.)

3.0 Travel Systems Management

3.1 Prioritize transit

3.2 Intelligent Transportation System strategies

3.3 Carpooling

3.4 Autonomous/ driverless & connected vehicles

3.5 Providing real-time information to users

3.6 Ride-sharing services

3.7 Park and Ride facilities

3.8 Intersection improvements

3.9 High Occupancy Vehicle Lanes

3.10 Reserved Bus Lanes

4.0 New Cycling/Pedestrian Infrastructure

4.1 New Cycling and/or Pedestrian Infrastructure

5.0 Improved and/or New Transit Services

5.1 Expand transit system capacity by increasing service frequency

5.2 Create new routes on existing corridors

5.3 Build bus rapidways on existing corridors

6.0 Improved Existing/Planned Transitways

6.1 Improved Existing / Planned Transitways

7.0 New Transitways

7.1 New Transitways

8.0 Improved Existing Roadways

8.1 Improved Existing Roadways

9.0 New Roadways

9.1 New Roadways

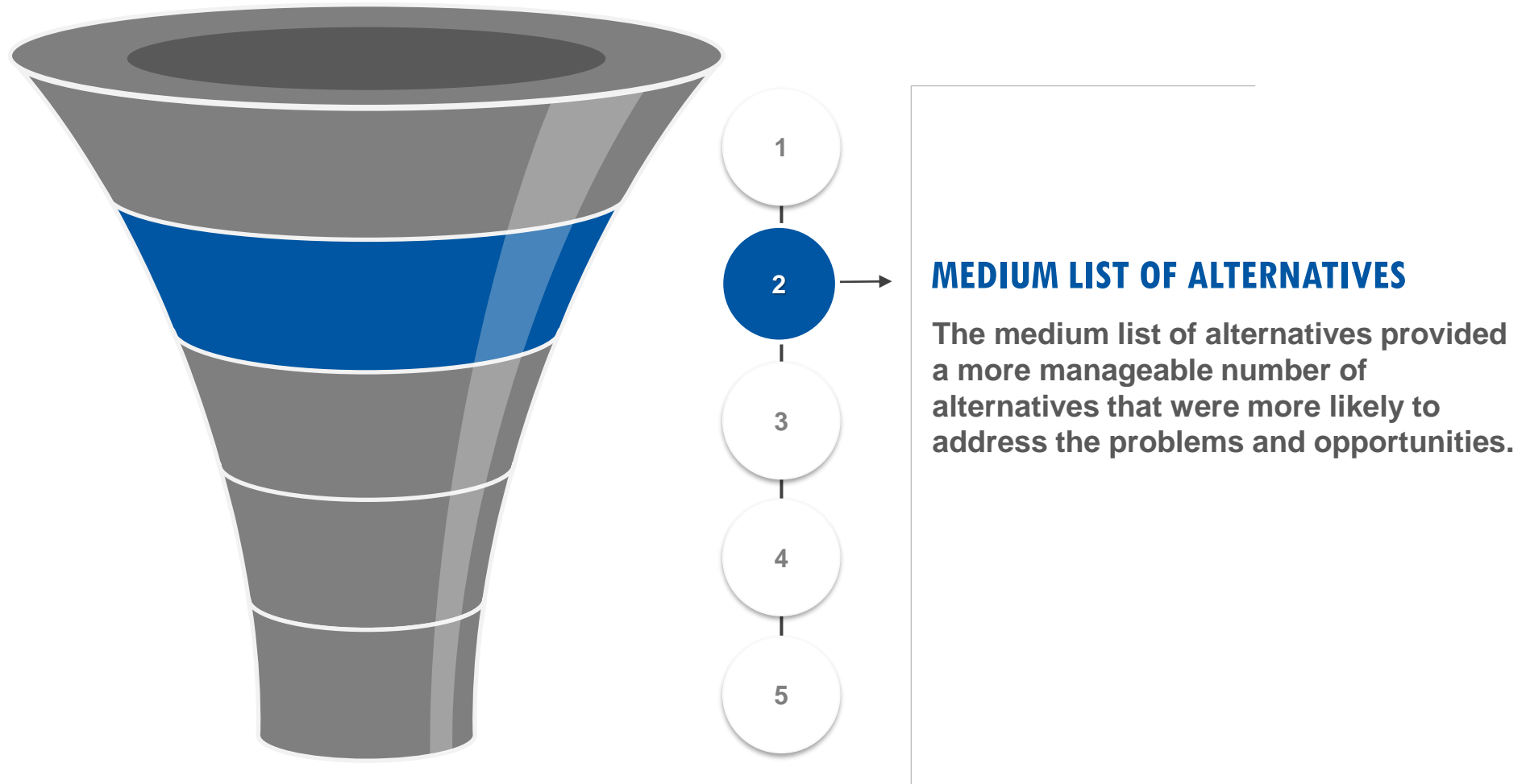
10.0 Combinations of the above

10.1 Combinations of the above

Long List of Alternatives

- The long list of alternatives was screened to produce a medium list of general types of alternatives
- Alternatives that could not significantly address the problems/opportunities as either a stand-alone or combination alternative were not carried forward
- Many of the alternatives not carried forward from the long list (e.g. 2.0 Travel Demand Management, 3.0 Transportation System Management) are still anticipated to contribute to future transportation needs
- 5.3 Build Bus Rapidways on Existing Corridors, 6.0 Improved Existing/ Planned Transitways and 7.0 New Transitways were not carried forward. Existing transit corridor plans for Major MacKenzie Drive will address future east-west rapid transit needs within the study area.

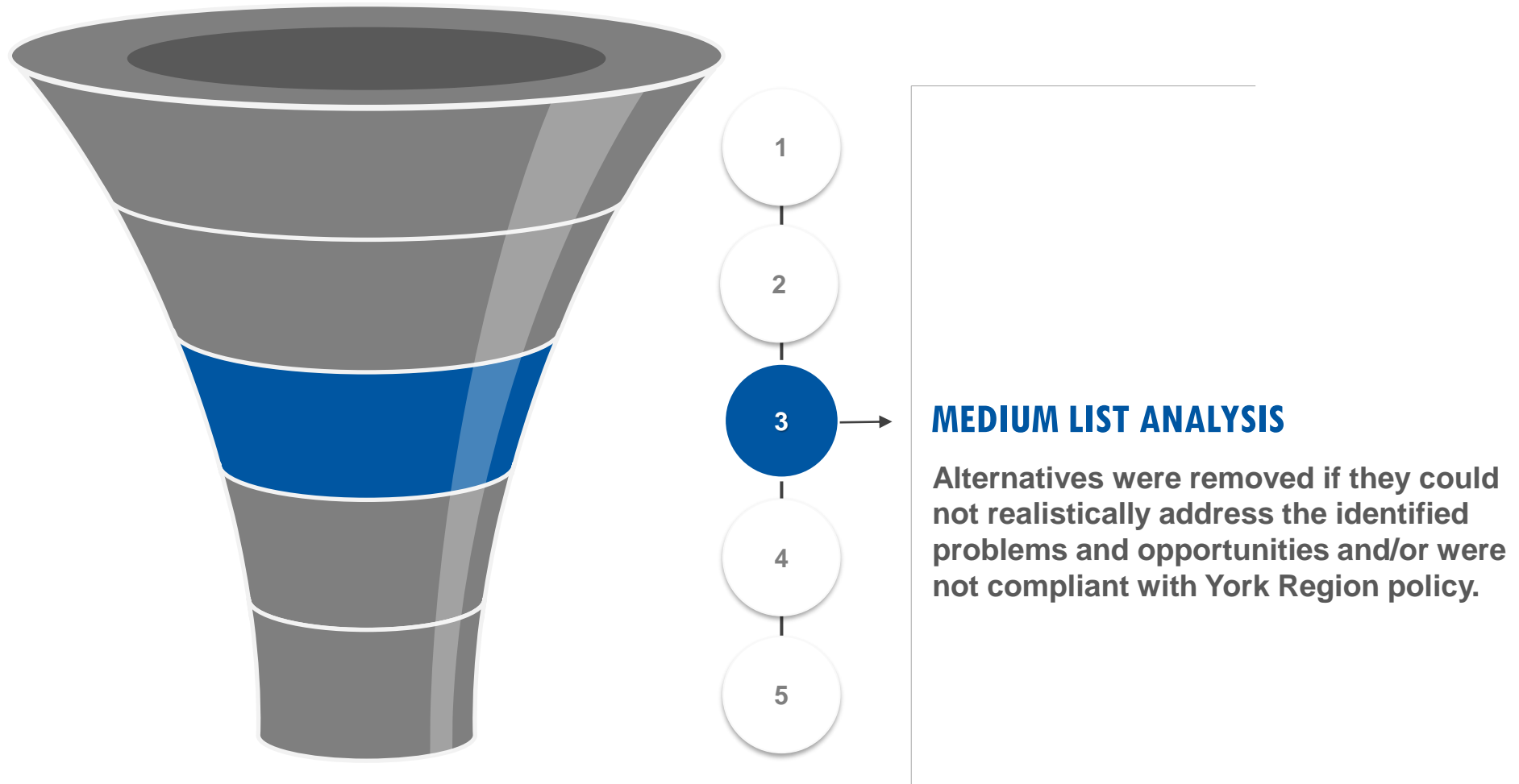
Process of Selecting a Preferred Alternative to the Undertaking



Generating Alternatives

- Screening of the long list of alternatives led to two stand-alone alternative categories and three combination alternative categories being carried forward
 - **Stand-Alone Alternatives**
 - Alternative Category 1.0 – Do Nothing (for comparison only)
 - Alternative Category 9.0 – New Roadways
 - **Combination Alternatives**
 - Alternative Category 4.0 – New Cycling and/or Pedestrian Infrastructure
 - Alternative Category 5.0 – Improved and/or New Transit Services
 - Increased Service Frequency or New Transit Routes on Existing Corridors
 - Alternative Category 8.0 – Improved Existing Roadways
 - One- or Two-Lane Road Widening for High Occupancy Vehicle (HOV) Lanes or General Purpose Lanes (GPLs)

Process of Selecting a Preferred Alternative to the Undertaking



Short Listing of Alternatives

- Two Stand Alone Alternatives were carried forward:
 - Category 1.0 – Do Nothing (2041 TMP Network excluding Teston Road Extension from Dufferin Street to Keele Street)
(All other Stand Alone and Combination Alternative build on the above)
 - Category 9.0 – New Roadways – 4 Lane Teston Road Extension (Dufferin Street to Keele Street - including Pedestrian/Cycling Facilities)
- Combination Alternatives were generated which combined the following alternatives: New Cycling and Pedestrian Infrastructure; Improved and/or New Transit Services, and/or, Improved Existing Roadways.

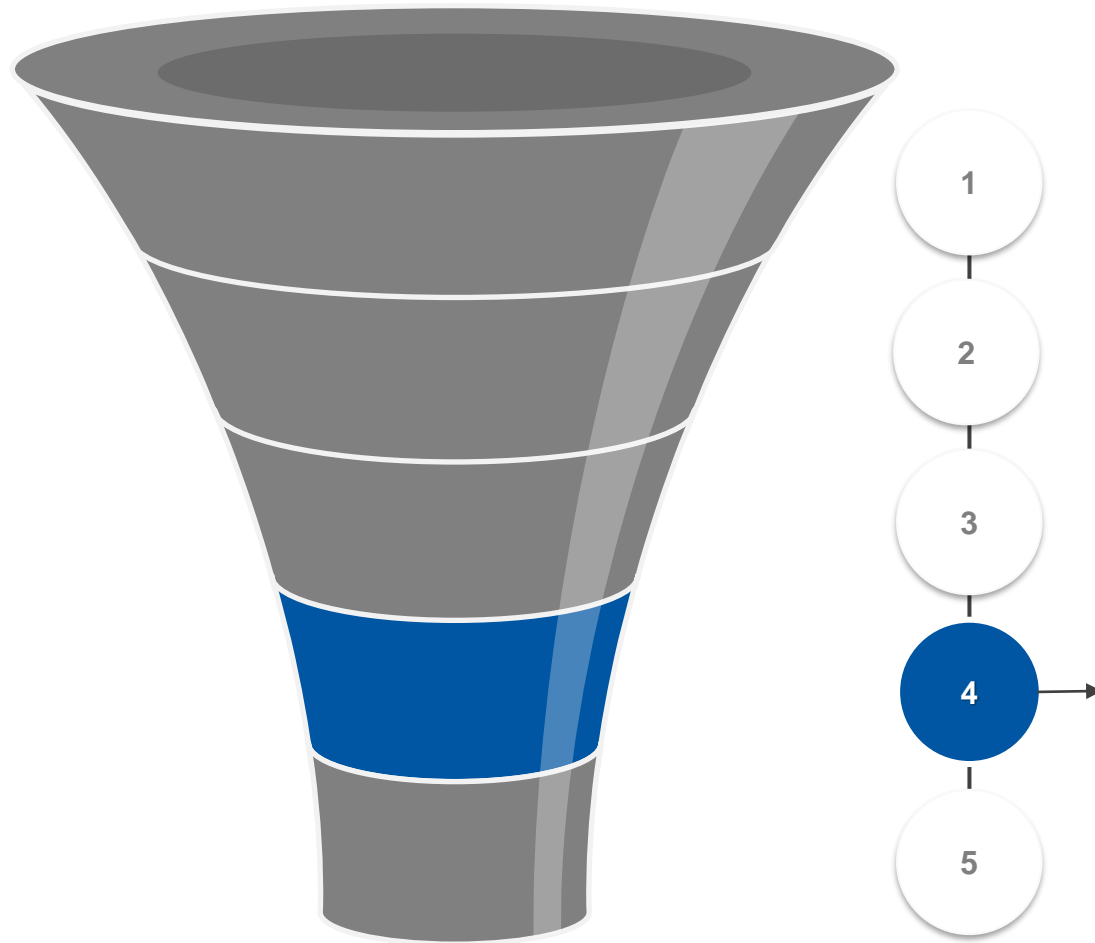
Short Listing of Alternatives

- A New Cycling and Pedestrian Only Link across the Don River Valley along the Teston Road Extension (Dufferin Street to Keele Street) alignment was included in all Combination Alternatives
- The potential for Improved and/or New Transit Services to carry a significantly increased share of trips was assessed (equivalent to up to 1 or 2 lanes of new roadway capacity)
 - Transit Mode Share of total westbound A.M. peak hour trips is already projected to increase from 3% in 2016 to up to 13% in 2041.
 - While Transit will make a significant key contribution to future travel it is not considered likely to accommodate significantly increased travel by 2041 above and beyond a 13% Transit Mode Share within the study area.
- Therefore, improved and/or New Transit Services were not carried forward as part of the Short-Listed Combination Alternatives

Short Listing of Alternatives

- Improved Existing Roadway alternatives considered adding 1 to 2 General Purpose Lanes (GPLs) or 1 High Occupancy Vehicle (HOV) lane per direction to various roadways above and beyond planned future (2041 TMP) improvements.
 - Roadway Widening Concepts included sections of Kirby Road, Major MacKenzie Drive, Dufferin Street, Keele Street and/or Teston Road.
 - York Region policy does not support 8-lane roadways and only supports 6-lane roadways where 2 lanes are for Transit/HOV – therefore most of the roadway improvement/widening concepts were screened out.
 - Two of the Improved Existing Roadway concepts were carried forward which also included a new Cycling and Pedestrian Only Link along the Teston Road Extension (Dufferin Street to Keele Street) alignment.
- Overall, four Alternatives to the Undertaking were short-listed and carried forward for further assessment and evaluation.

Process of Selecting a Preferred Alternative to the Undertaking

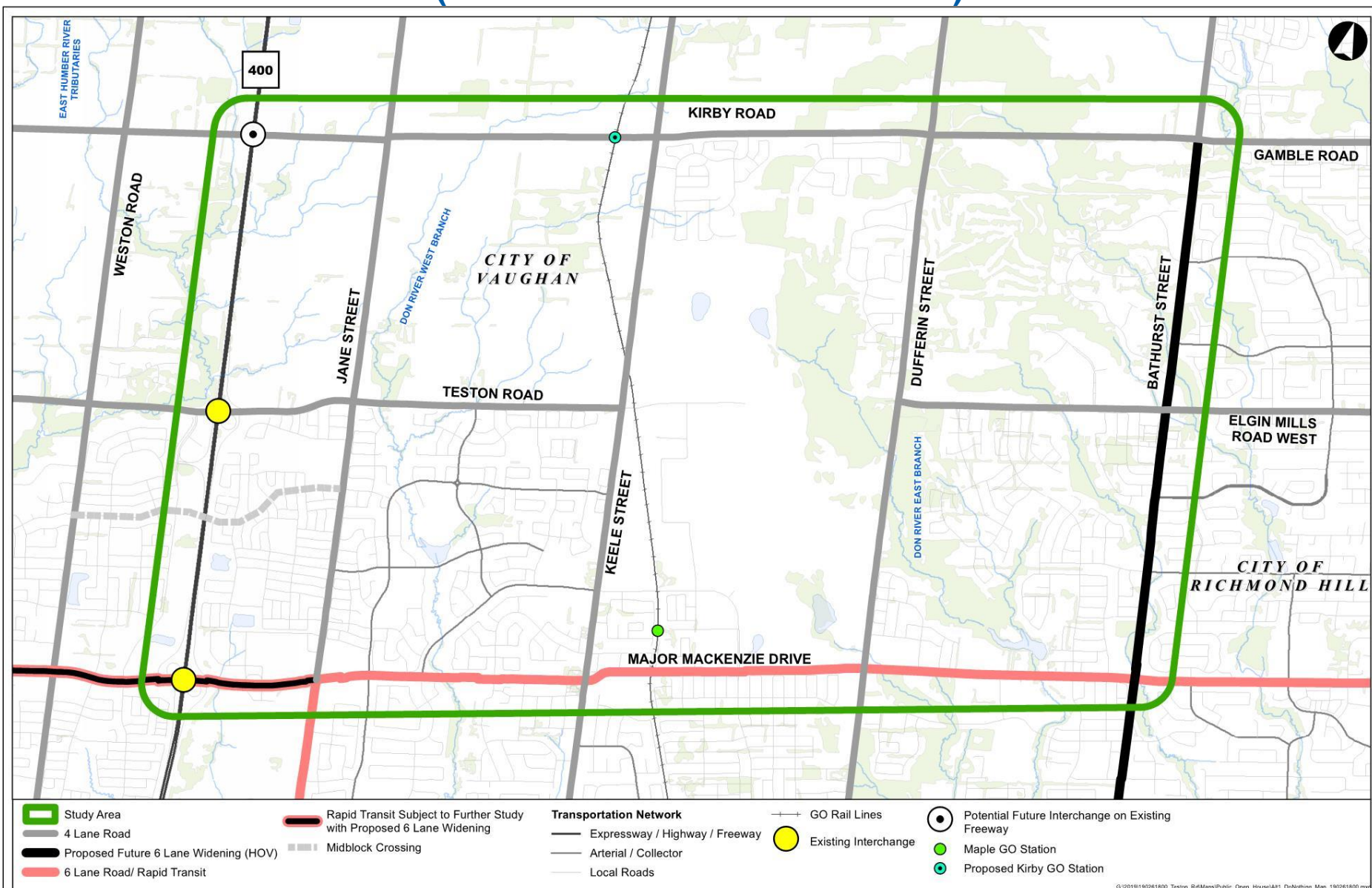


SHORT LIST EVALUATION

A short list of alternatives was evaluated against the Terms of Reference criteria to determine the Recommended Alternative to be carried forward for consultation and feedback.

Alternative 1

Do Nothing – Planned 2041 Transportation Network excluding Teston Road Extension (Keele Street to Dufferin Street)



Alternative 1

Do Nothing – Planned 2041 Transportation Network excluding Teston Road Extension (Keele Street to Dufferin Street)

Advantages

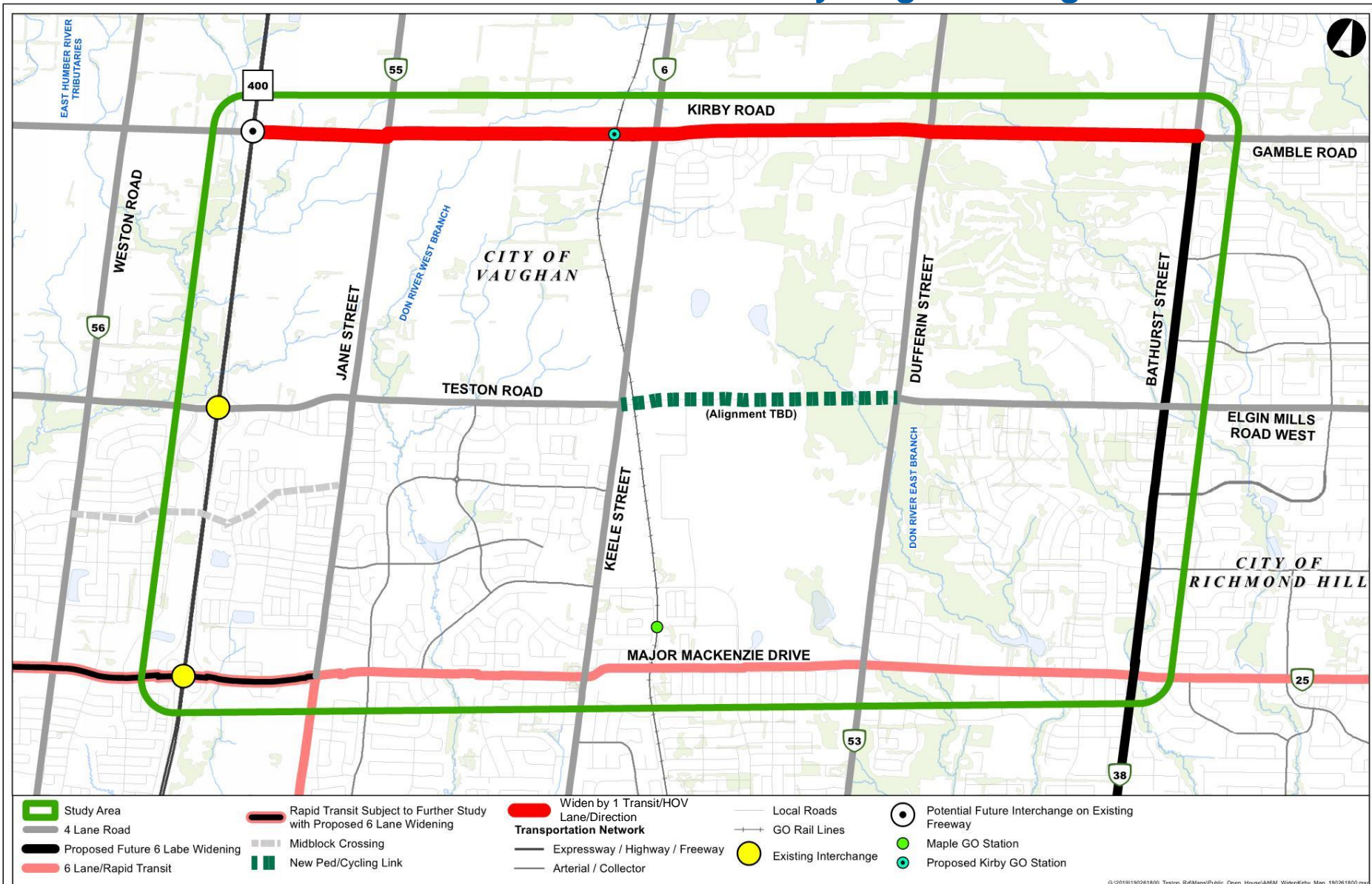
- No additional environmental ‘footprint’ impacts
- Does not impact cultural heritage resources
- Does not impact landfills, contaminated properties, terrestrial or aquatic environments
- No construction impacts

Disadvantages

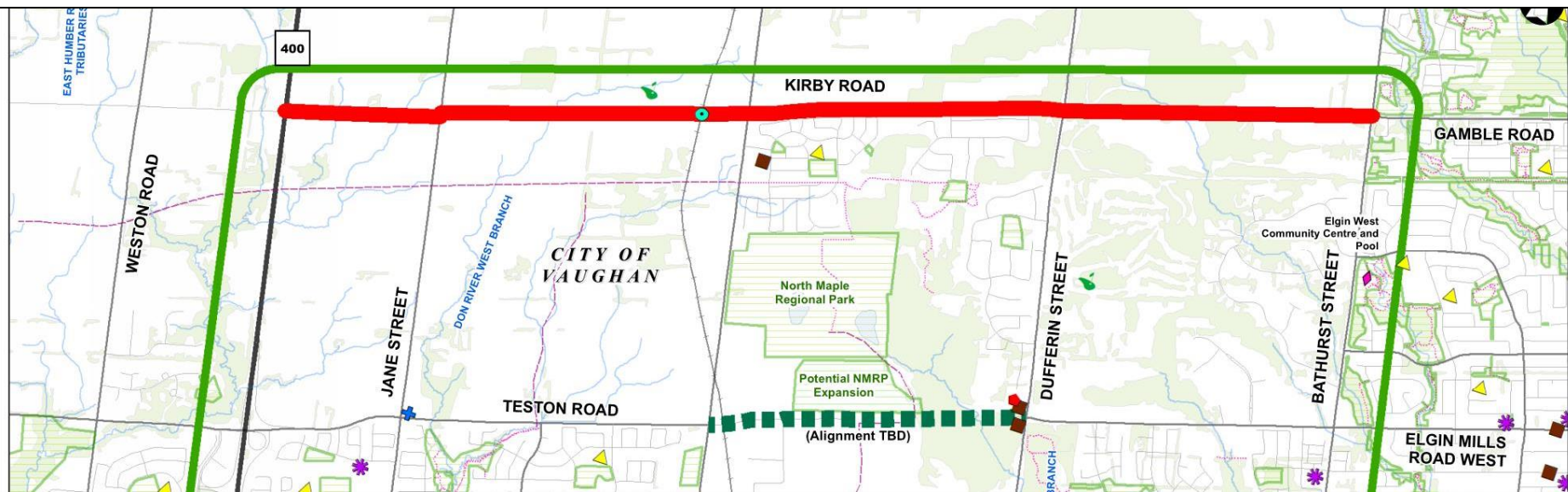
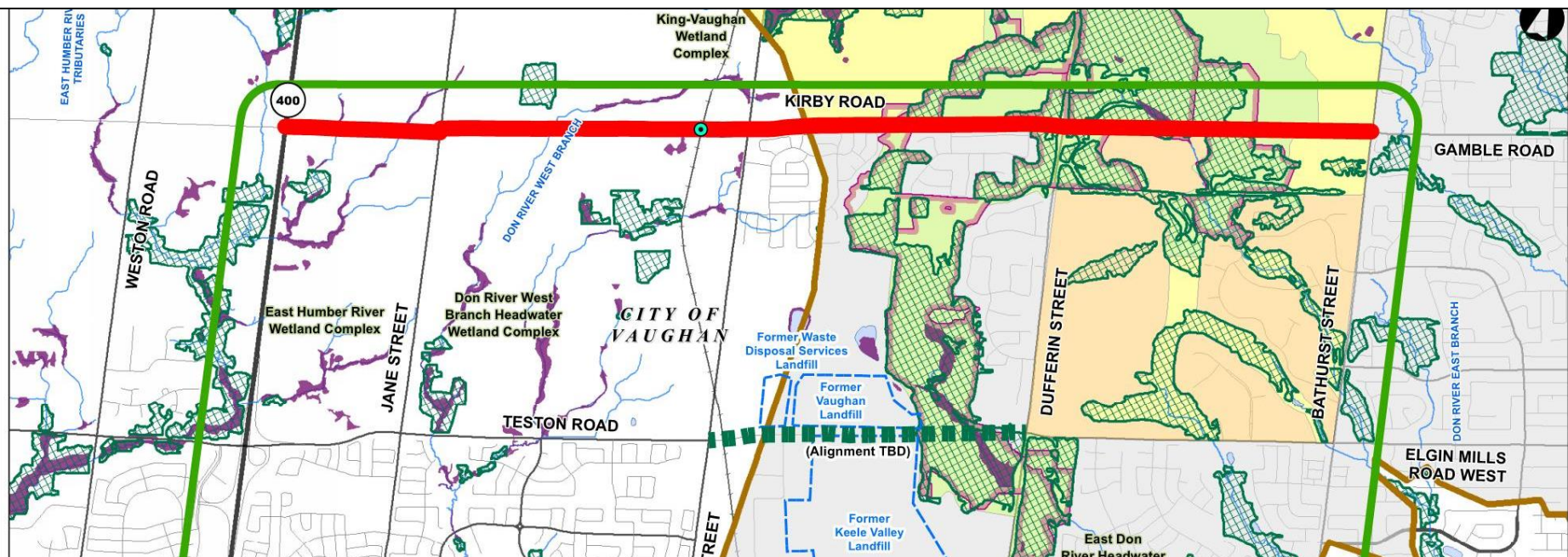
- Does not address discontinuity on Teston Road and limits mobility and access for all modes of travel within the study area and beyond including to Highway 400
- Does not address future east-west travel demand
- Does not reduce travel times and results in significant out-of-way travel
- Increased congestion causes safety issues
- Contributes more to emissions and climate change as congestion increases
- Does not benefit the local economy by increasing movement of goods/people

Alternative 2

Widening of Kirby Road (Bathurst Street to Highway 400) from 4 to 6 Lanes with 2 new Transit/HOV Lanes + Pedestrian / Cycling Crossing of Don River



Alternative 2 – Natural and Socio-Economic Effects



Alternative 2

Widening of Kirby Road (Bathurst Street to Highway 400) from 4 to 6 lanes with 2 new Transit/HOV Lanes + Pedestrian / Cycling Crossing of Don River

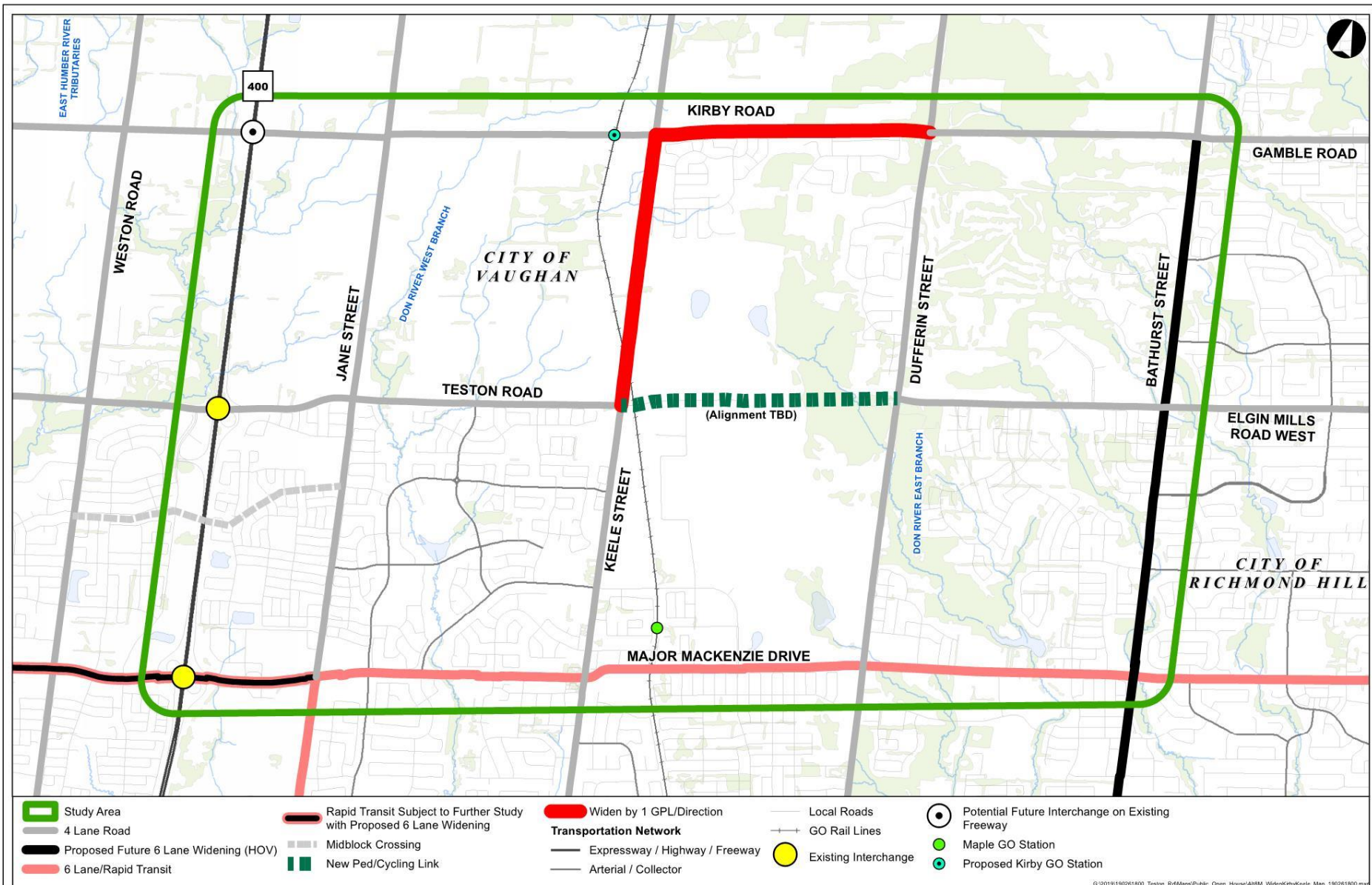
Advantages

- Less potential to impact landfills vs. Alternative 4.
- Would provide some benefit to economy through increased movement of goods/people.
- Opportunity for High Occupancy Vehicle lanes and improved access to Kirby GO station.
- Addresses discontinuity of Teston Road for Active Transportation users.
- Moderate constructability issues.

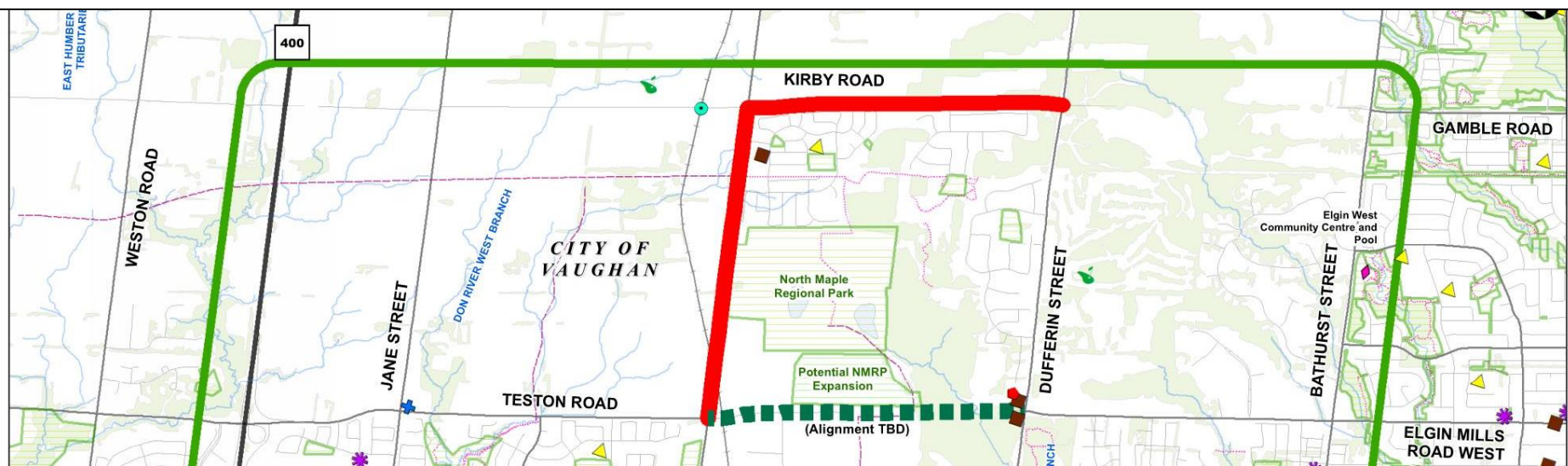
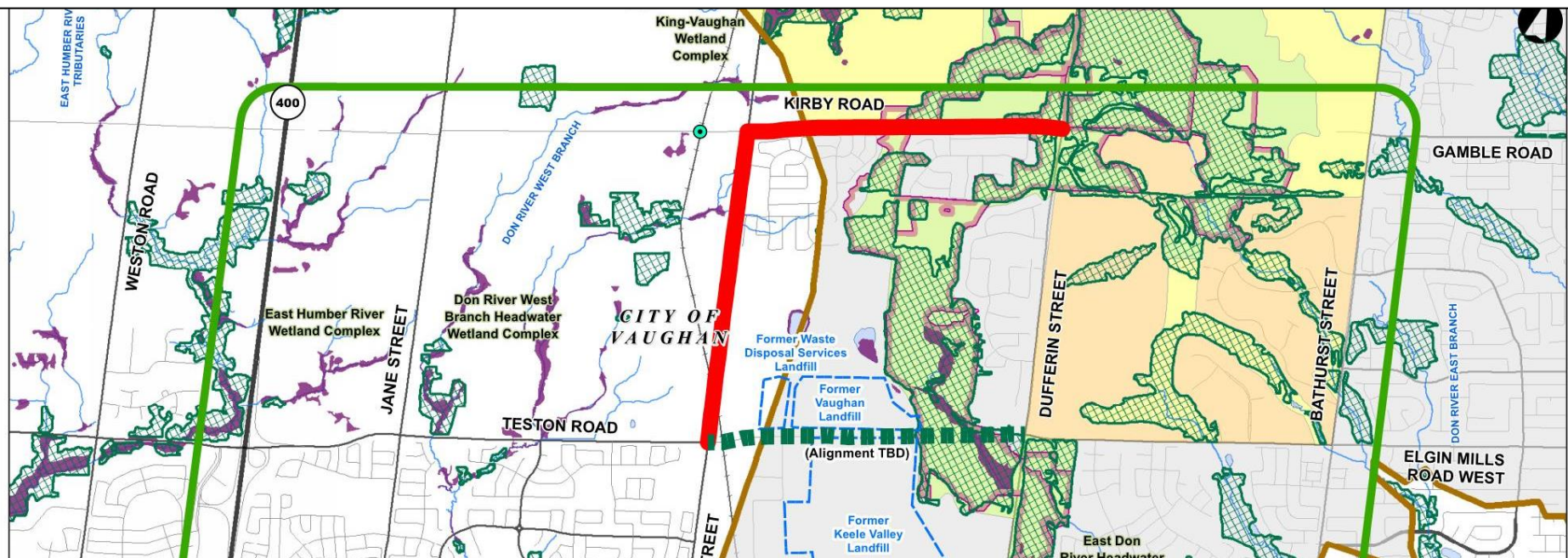
Disadvantages

- Does not address the discontinuity for vehicles along Teston Road.
- Only partially addresses travel demand, reduction in travel times, and safety.
- Value is reduced if interchange not built at Highway 400 and Kirby Road.
- Kirby Road intersections at Keele Street and Jane Street well over capacity.
- Impacts a larger area of the Oak Ridges Moraine.
- Increased traffic near noise sensitive areas.

Alternative 3 – Widen both Kirby Road (Dufferin Street to Keele Street) and Keele Street (Kirby Road to Teston Road) from 4 to 6 lanes + Pedestrian/Cycling Crossing of Don River



Alternative 3 – Natural and Socio-Economic Effects



Alternative 3 - Widen both Kirby Road (Dufferin Street to Keele Street) and Keele Street (Kirby Road to Teston Road) from 4 to 6 Lanes + Pedestrian/Cycling Crossing of Don River

Advantages

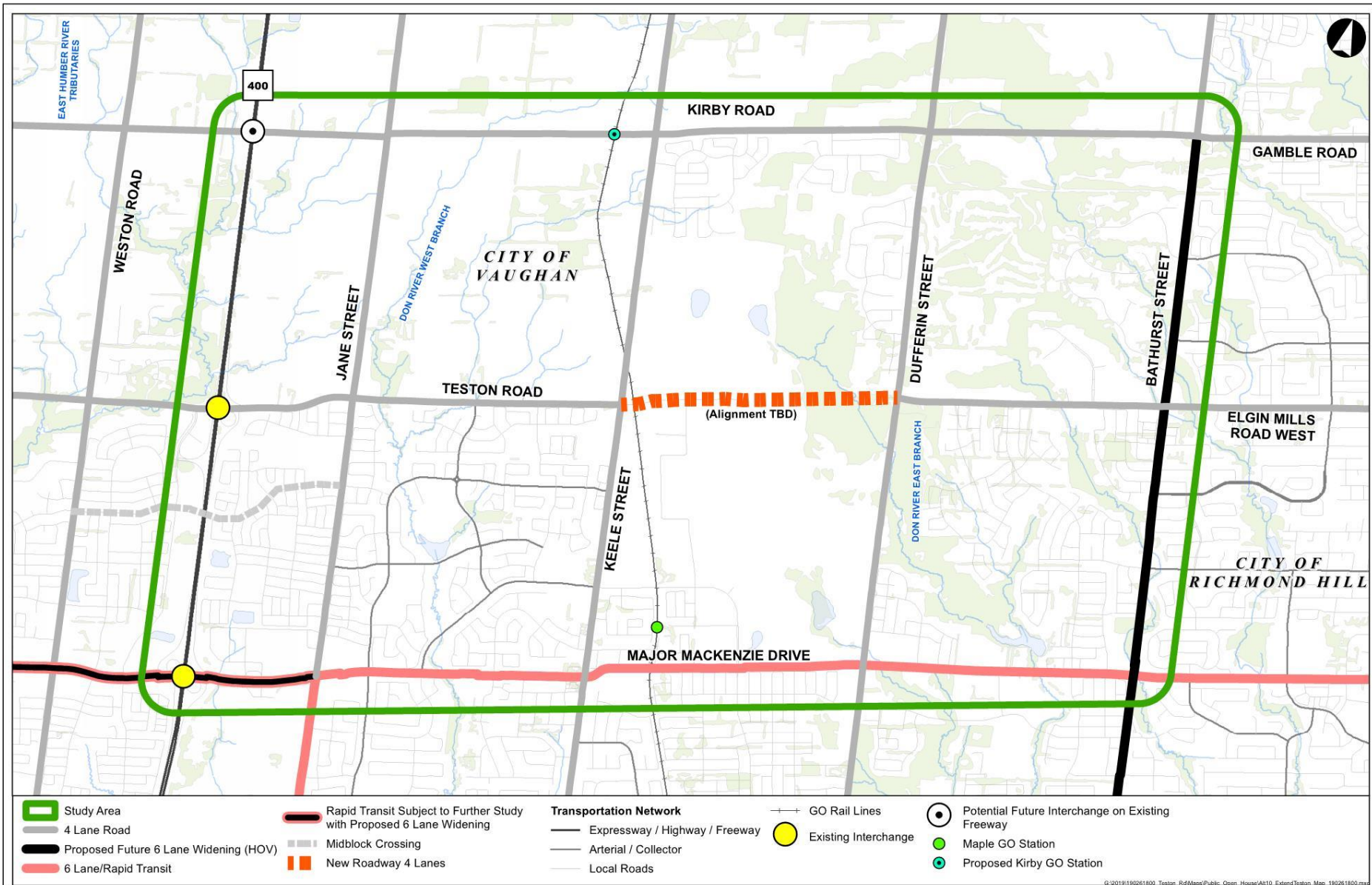
- Less impact to terrestrial and aquatic environments vs. Alternatives 2 and 4.
- Does not impact any wetlands.
- Less potential impact to landfills vs. Alternative 4.
- Less impact to the Oak Ridges Moraine area vs. Alternative 2.
- Would provide some benefit to economy through increased movement of goods/people.
- Addresses discontinuity of Teston Road for Active Transportation users.
- Easier to construct.

Disadvantages

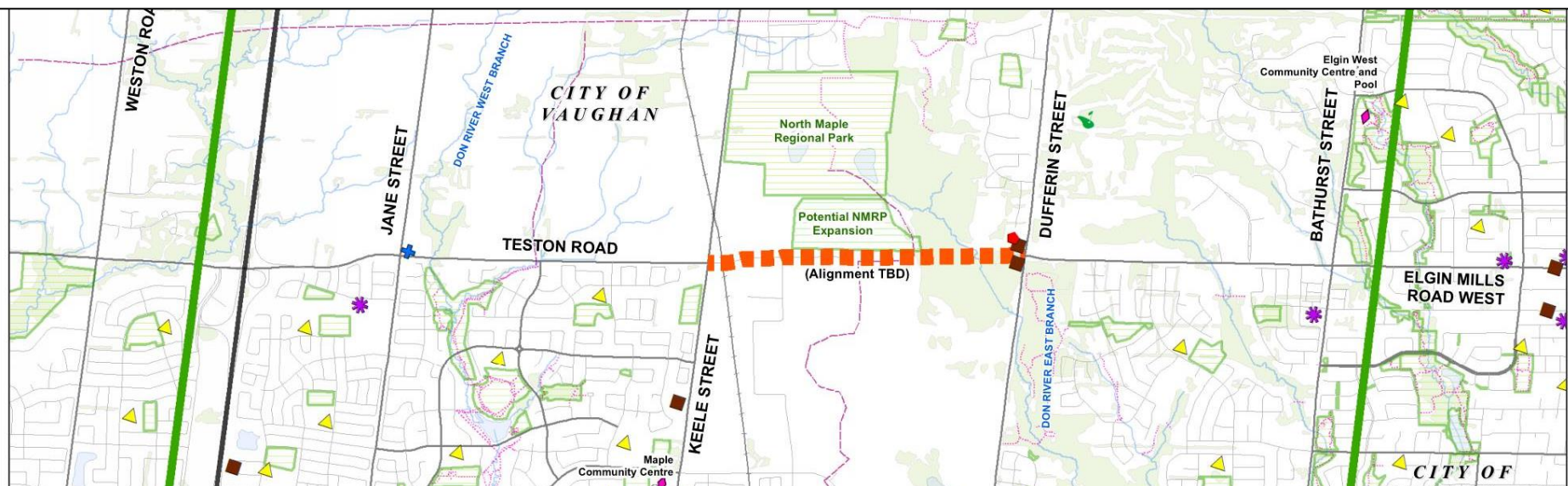
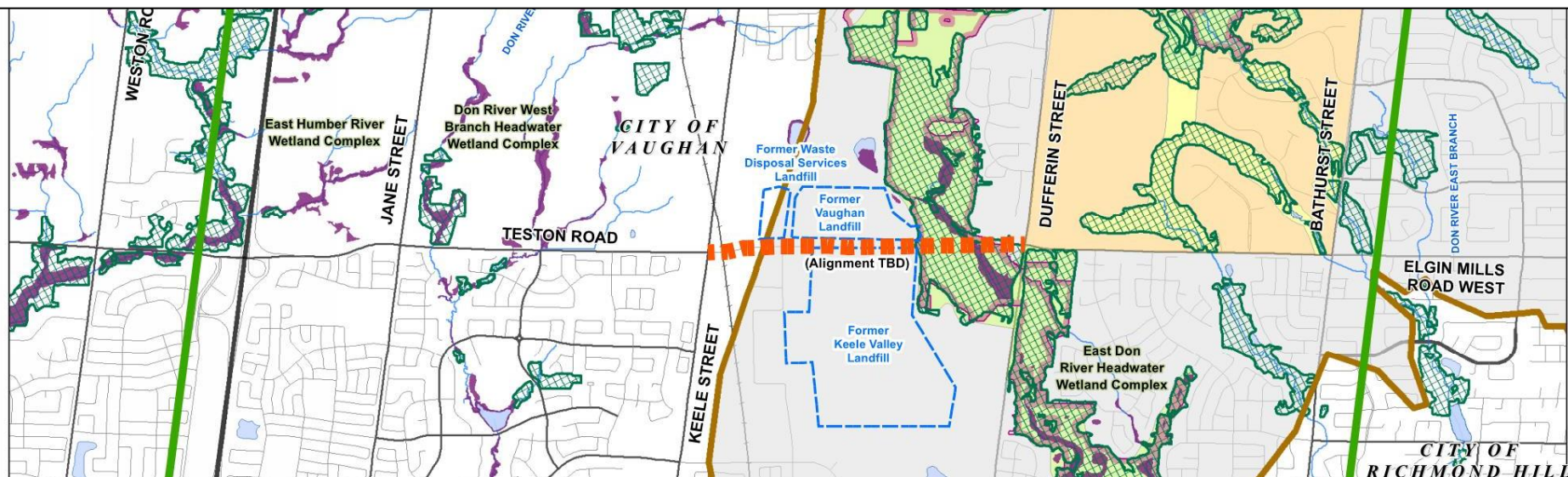
- Does not address discontinuity for vehicles along Teston Road.
- Only partially addresses travel demand, reduction in travel times, and safety.
- Kirby Road intersections at Keele Street and Jane Street well over capacity.
- Results in higher emissions, impacting air quality and climate change.
- Potential to impact cultural heritage resources.

Alternative 4

New 4-Lane Teston Road (Dufferin Street to Keele Street) with Pedestrian / Cycling facilities and Transit service



Alternative 4 – Natural and Socio-Economic Effects



Alternative 4

New Four-Lane Teston Road (Dufferin Street to Keele Street) with Pedestrian / Cycling Facilities and Transit Service

Advantages

- Completes the transportation network.
- Less impact to Oak Ridges Moraine vs. Alternative 2 with potential to span much of it.
- Reduces emissions, a benefit to air quality and climate change.
- Provides benefit to economy through increased movement of goods/people.
- Enhances east-west mobility and accessibility for all modes of travel.
- Addresses Teston Road discontinuity for all users.
- Reduces out-of-way trips and travel time for all modes of travel.
- Increases safety for all modes of travel and improves access for emergency vehicles.

Disadvantages

- Largest potential impact to the natural environment.
- Close proximity to landfills may result in conflicts.
- Potential to impact cultural heritage resources.
- Potential loss of property access at GO line crossing.
- More complex to construct.

EVALUATION CRITERIA

Survey Question 5



Survey available at [York.ca/TestonRoad](https://york.ca/TestonRoad)

NATURAL ENVIRONMENT

- Impact on fish and fish habitat, waterbodies
- Impact to terrestrial species, trees and vegetation
- Impact to landfills and contaminated properties
- Impact to air quality and climate change



SOCIO-ECONOMIC ENVIRONMENT

- Compliance with Regional and Provincial development policies
- Impact on noise emissions
- Impacts to local/regional economy



TRANSPORTATION

- Ability to address transportation study's problems/opportunities
- Complexity to construct
- Contributions to safety



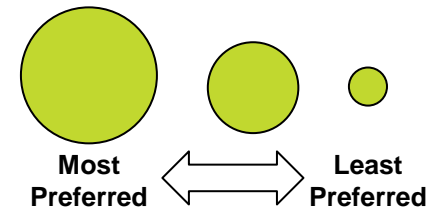
CULTURAL ENVIRONMENT

























- Impact to archaeological resources
- Impact to built heritage features



Evaluation of Alternatives

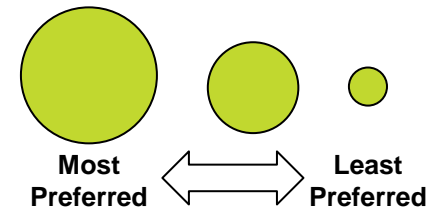
1.0 - Natural Environment - DRAFT



























| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|-------------------------------------|---|---|---|---|
| Fish & Fish Habitat |  |  |  |  |
| Terrestrial Ecosystems |  |  |  |  |
| Landfills & Contaminated Properties |  |  |  |  |
| Air Quality |  |  |  |  |
| Climate Change |  |  |  |  |
| Summary |  |  |  |  |

Evaluation of Alternatives

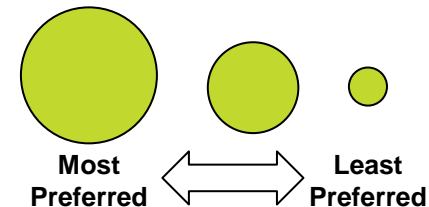
2.0 – Socio-Econ. Eenvt. - DRAFT



















| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|---|---|--|---|---|
| Provincial Land Use Planning |  |  |  |  |
| Regional/Municipal Policies & Land Use Planning |  |  |  |  |
| Local Development |  |  |  |  |
| Transportation Noise |  |  |  |  |
| Regional/Municipal Economy |  |  |  |  |
| Summary |  |  |  |  |

Evaluation of Alternatives

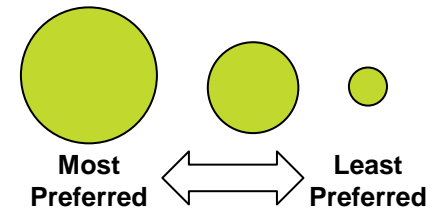
3.0 – Cultural Environment - DRAFT












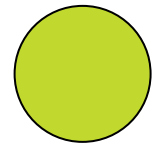






| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|--|--|--|--|--|
| Built Heritage/ Cultural Heritage Landscapes |  |  |  |  |
| Archaeological Resources |  |  |  |  |
| Indigenous Sites |  |  |  |  |
| Summary |  |  |  |  |

Evaluation of Alternatives

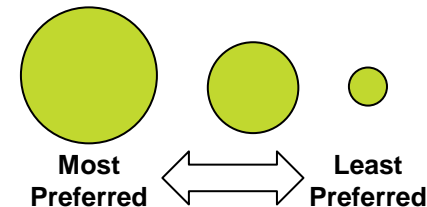
4.0 – Transportation - Part 1 - DRAFT



















| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|--|---|--|---|--|
| TDM/TSM |  |  |  |  |
| Enhanced Modal Integration |  |  |  |  |
| Accommodates Travel Demand |  |  |  |  |
| Addresses Teston Road Discontinuity |  |  |  |  |

Evaluation of Alternatives

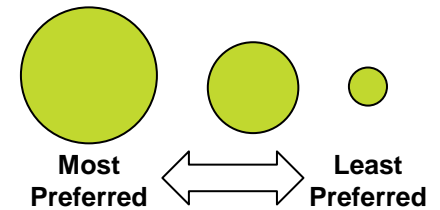
4.0 – Transportation - Part 2 - DRAFT
















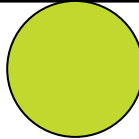



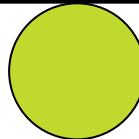


| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|------------------|---|---|---|--|
| Travel Time |  |  |  |  |
| Safety |  |  |  |  |
| Constructability |  |  |  |  |
| Summary |  |  |  |  |

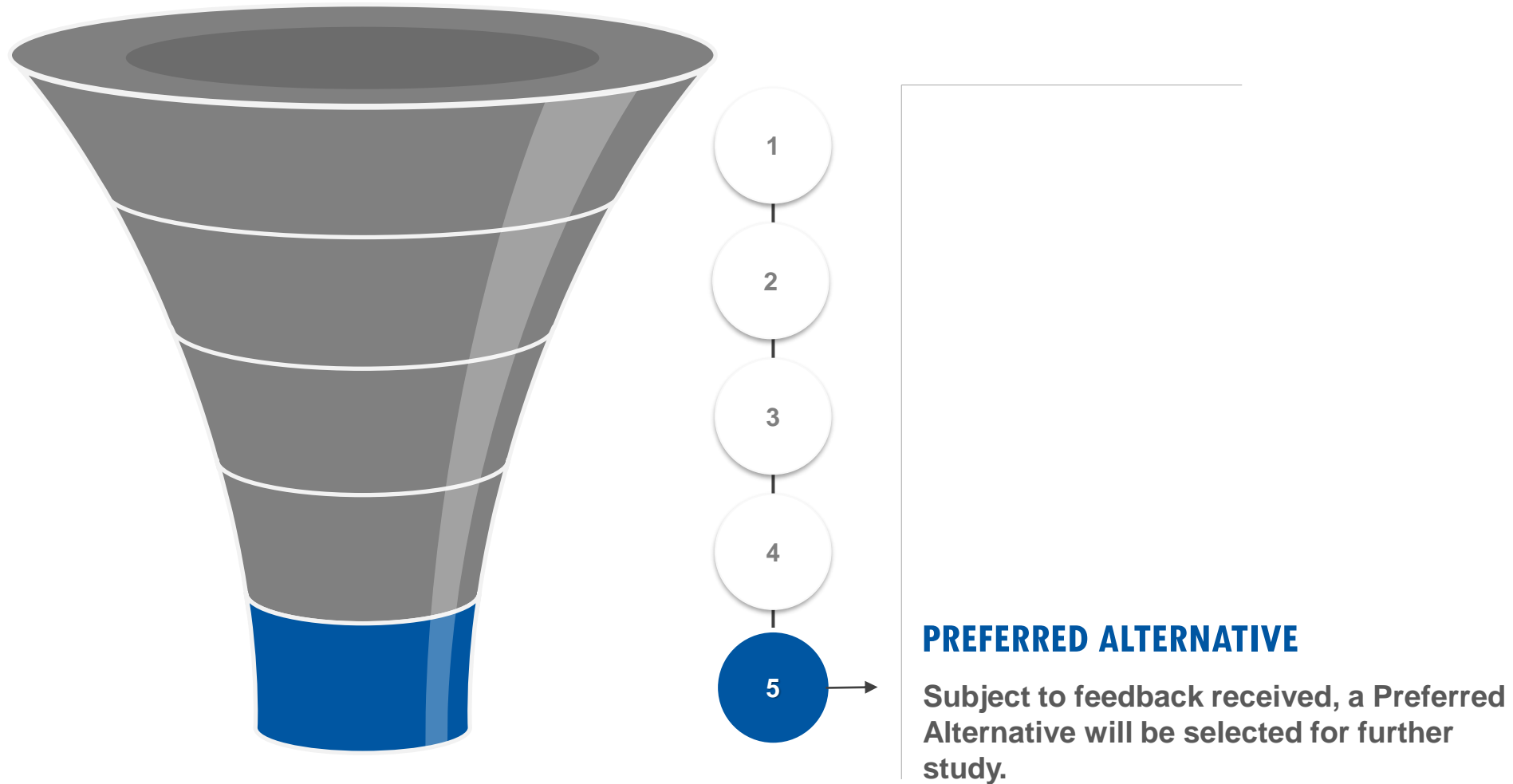
Evaluation of Alternatives

Summary - DRAFT



| | Alternative 1 'Do Nothing' | Alternative 2 Kirby Widening | Alternative 3 Kirby + Keele Widening | Alternative 4 Teston Extension |
|----------------------------|---|--|---|---|
| Natural Environment |  |  |  |  |
| Socio-Economic Environment |  |  |  |  |
| Cultural Environment |  |  |  |  |
| Transportation |  |  |  |  |
| Summary |  |  |  |  |

Process of Selecting a Preferred Alternative to the Undertaking



Recommended Alternative to be Carried Forward



- Based on the evaluation of alternatives it is recommended that Alternative 4: Teston Road Extension, be carried forward to the next phase of the project.
- Consultation is being undertaken with the public and various other stakeholders to obtain feedback and to confirm the recommendation.
- If Alternative 4 is confirmed as the Preferred Alternative the next phase will include:
 - Examination of alternative alignments and cross-sections
 - Structural alternatives for GO Rail and Don River valley crossings
 - Further evaluation of potential landfill and environmental impacts

Considerations for Alternative Methods

- Identification of Alternative Methods and measures to avoid / mitigate potential environmental impacts
- Alternative Methods will look at various alignments for a new Teston Road connection
- Design integration with public amenities such as existing or planned trails, parks or natural areas
- Ensuring a context sensitive and sustainable design solution

Next Steps

Survey Questions
7, 8, & 9



Survey available at [York.ca/TestonRoad](https://york.ca/TestonRoad)

- Review feedback received from the public and other stakeholders on the Alternatives to the Undertaking and the Recommended Alternative
- Revise evaluation of alternatives to incorporate feedback and confirm Preferred Alternative
- Generate Alternative Methods for the Recommended Alternative to the Undertaking
- Engagement with agencies and other interested groups
- Open House #2 to present Alternative Methods
 - Anticipated to be held in Fall 2021

Your Feedback is Important

- Your participation is important to the study process
- Join the study mailing list to receive future study notices or submit comments and questions to transportation@york.ca
- Please submit your comments on the Open House materials by August 16th, 2021
- Contact the study team at any time throughout the study to provide your feedback
- Study updates can be found at www.york.ca/TestonRoad

THANK YOU!
