



The Meadoway & The Multi-use Trail Class Environmental Assessment



The 
Meadoway
COMMUNITY POWERED GREEN SPACES

Presented By: Corey M. Wells

A project of:



Toronto and Region
Conservation
Authority



PARCEL 4228
DATE-AUG. 28-75
EQUINON EAST

Florida's Big and Beautiful State

More vehicles
prohibited

RESTAURANT



Hydro Corridors Today

- >500 km of transmission corridors in the Toronto Area
- Entire corridor mown multiple times a year
- Thick, non-native fescue grass
- Low biodiversity with poor ecological and hydrological function
- Lacks aesthetic appeal



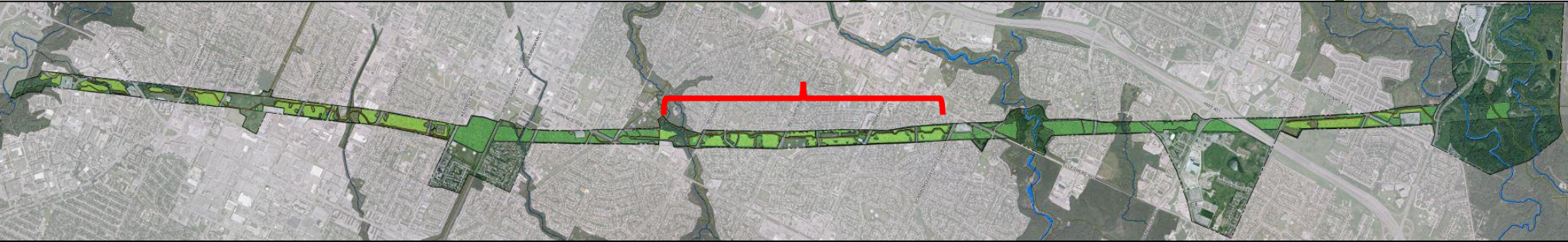
Reimagining Corridors – Untapped Potential

The Gattineau Hydro Corridor in Scarborough – The Future Meadoway

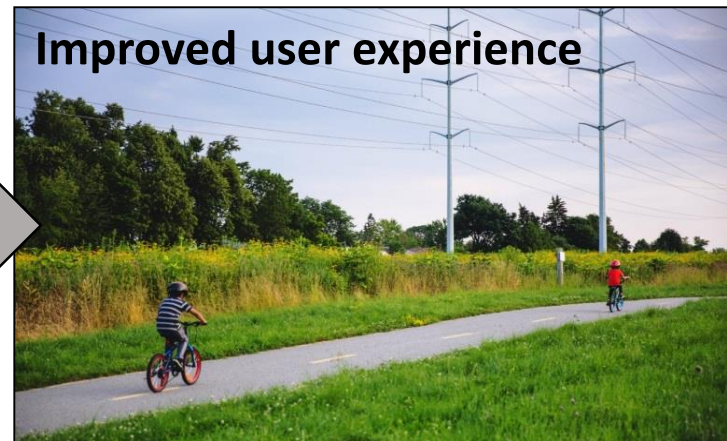




But Can It be Done? Scarborough Centre Butterfly Trail



- 3.5 km section of the hydro Corridor
- Prior to 2011, a barren ~40 ha area of grass was mowed eight times annually
- Entire section of corridor restored to meadow habitat, with trail improvements
- Revitalized the space, reintroduced native vegetation,



The Meadoway – Community Powered Greenspaces

- Builds off of the success of the SCBT
- Restores 200 ha of meadow and completes over 16 linear km of multi-use trail
- Establishes a full link between downtown Toronto and Rouge National Urban Park



CONNECTIONS



NATURAL
ENVIRONMENT
& EDUCATION



TRANSPORTATION



RECREATION



COMMUNITY
& PUBLIC
REALM



BLUEPRINT
FOR
REVITALIZATION



The Meadoway – Core Components



Meadow Restoration

Community Engagement,
Education, & Stewardship



Planning & Design of the
Multi-use Trail via Class
Environmental Assessment



Why Plan a Multi-use Trail?



Looking East at Markham Rd.

The Existing Trail is Fragmented



With Impressive Planning Challenges



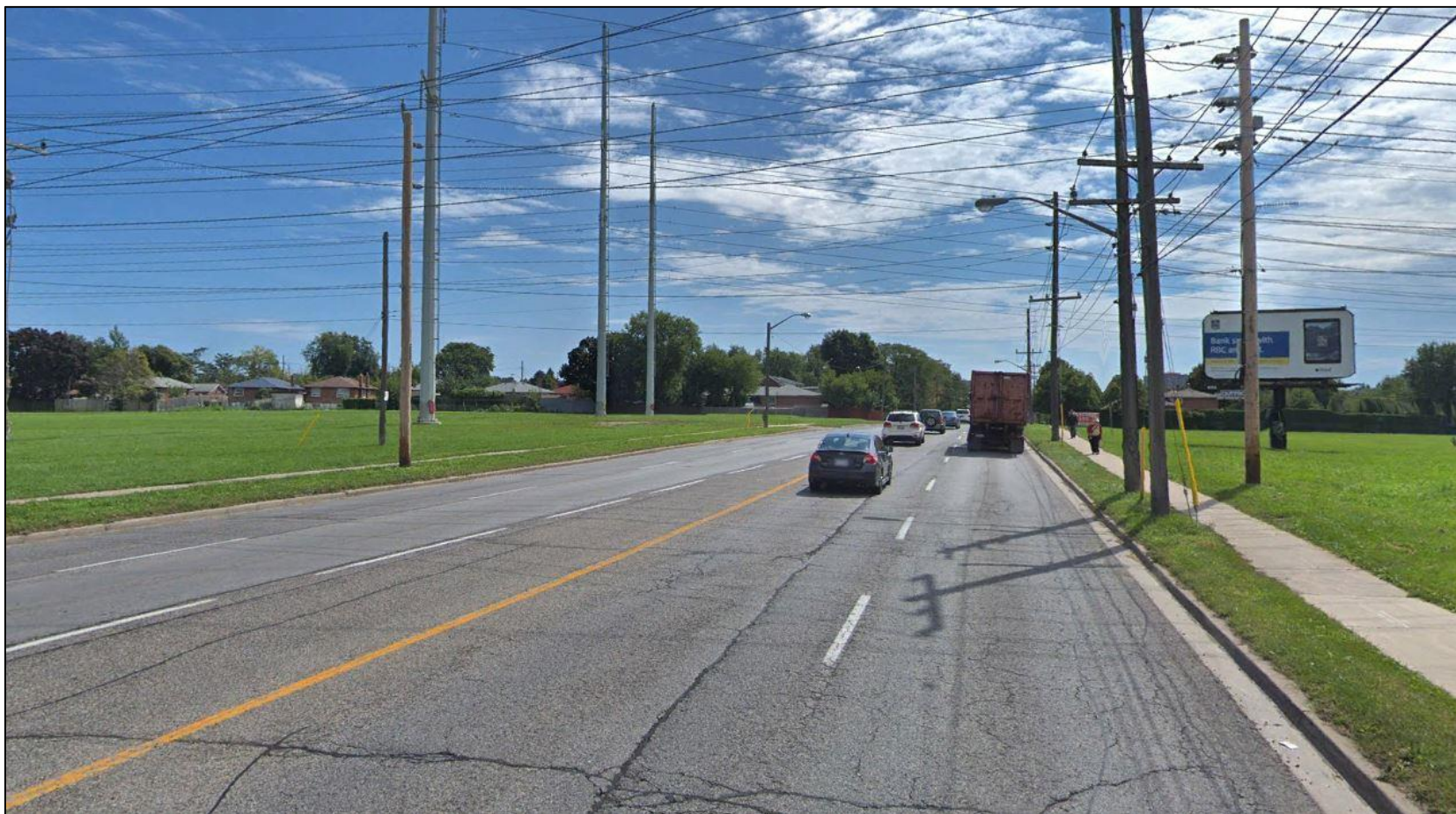


Both Natural and Man-made





Both Natural and Man-made



Midland Avenue, a 4-lane, 50 km/h major arterial road

The Meadowway Multi-use Trail Class EA

WHAT?

1. What is an environmental assessment (EA)?

- A process used to predict environmental effects before project implementation

2. What are the benefits of the EA process?

- Minimize or avoid adverse environmental effects before they occur
- Incorporate environmental factors into decision making
- Provide for meaningful public and stakeholder participation

WHY?

3. Why are we undertaking an EA for The Meadowway?

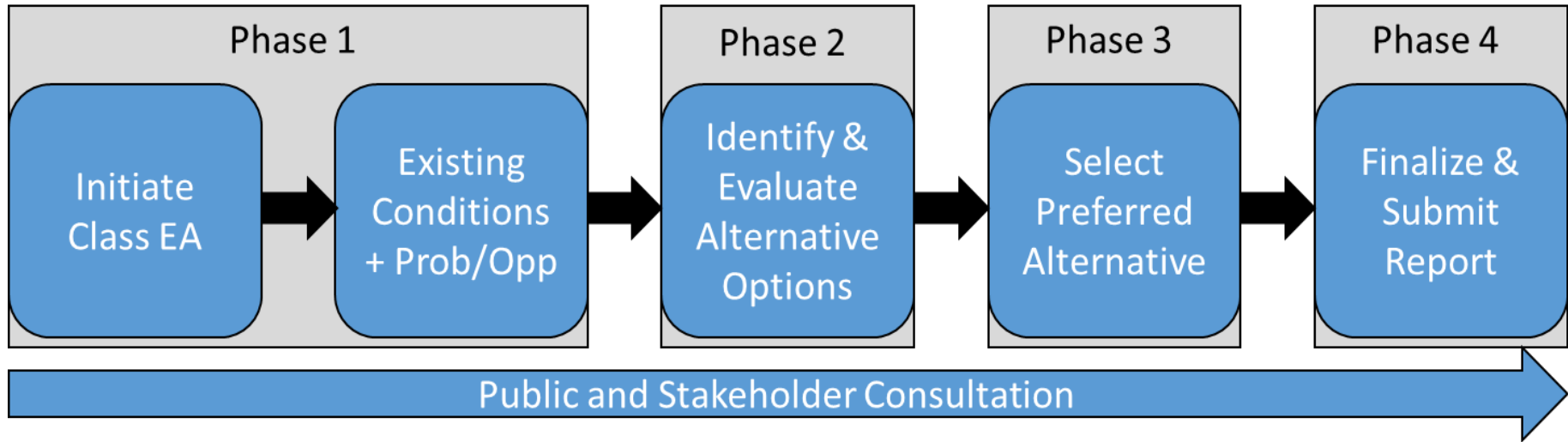
- Identify and evaluate a range of potential multi-use trail alignments and bridge crossings for sections of the hydro corridor where no trail currently exists
- Select and refine a preferred alignment and connect with existing network

HOW?

4. How are we doing it?

- The Municipal Engineers Class Environmental Assessment – Schedule C framework
- Technical studies to ensure safety and minimize impact
- Meaningful public and stakeholder engagement

Key Phases of The Meadowway Class EA



- Formally initiated in October of 2018
- Development of guiding principles, objectives, and opportunity statements
- Assessment, analysis, and synthesis of existing conditions



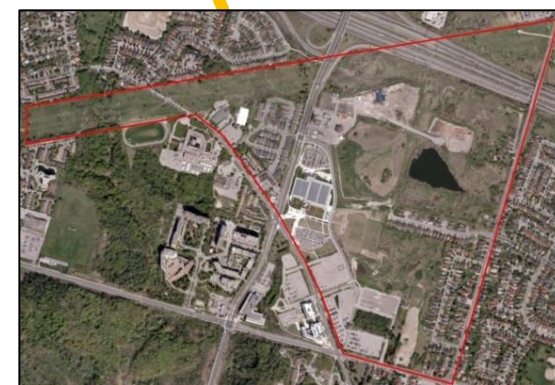
A Focus on “Incomplete” Sections of the Corridor

- 16 linear kilometre trail
- 7 sections
- 4 “Complete”
- 3 “Incomplete”

S5 - Scarborough Golf Club – Neilson Rd.

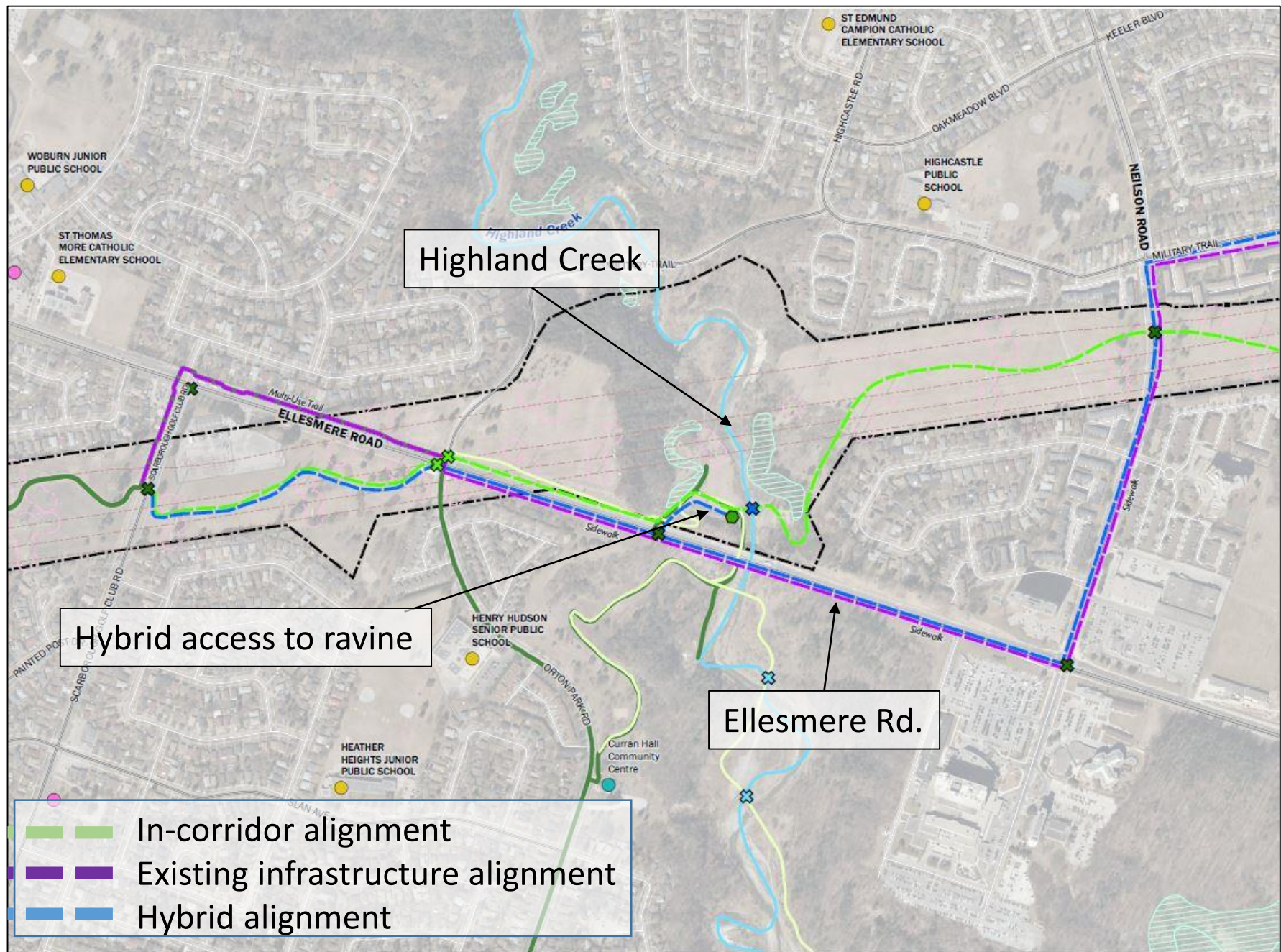


S3 - Kennedy Rd. – Thomson Memorial



S6 - Neilson Rd. – Conlins Rd.

Section 5 – Scarborough Golf Club to Neilson Rd.



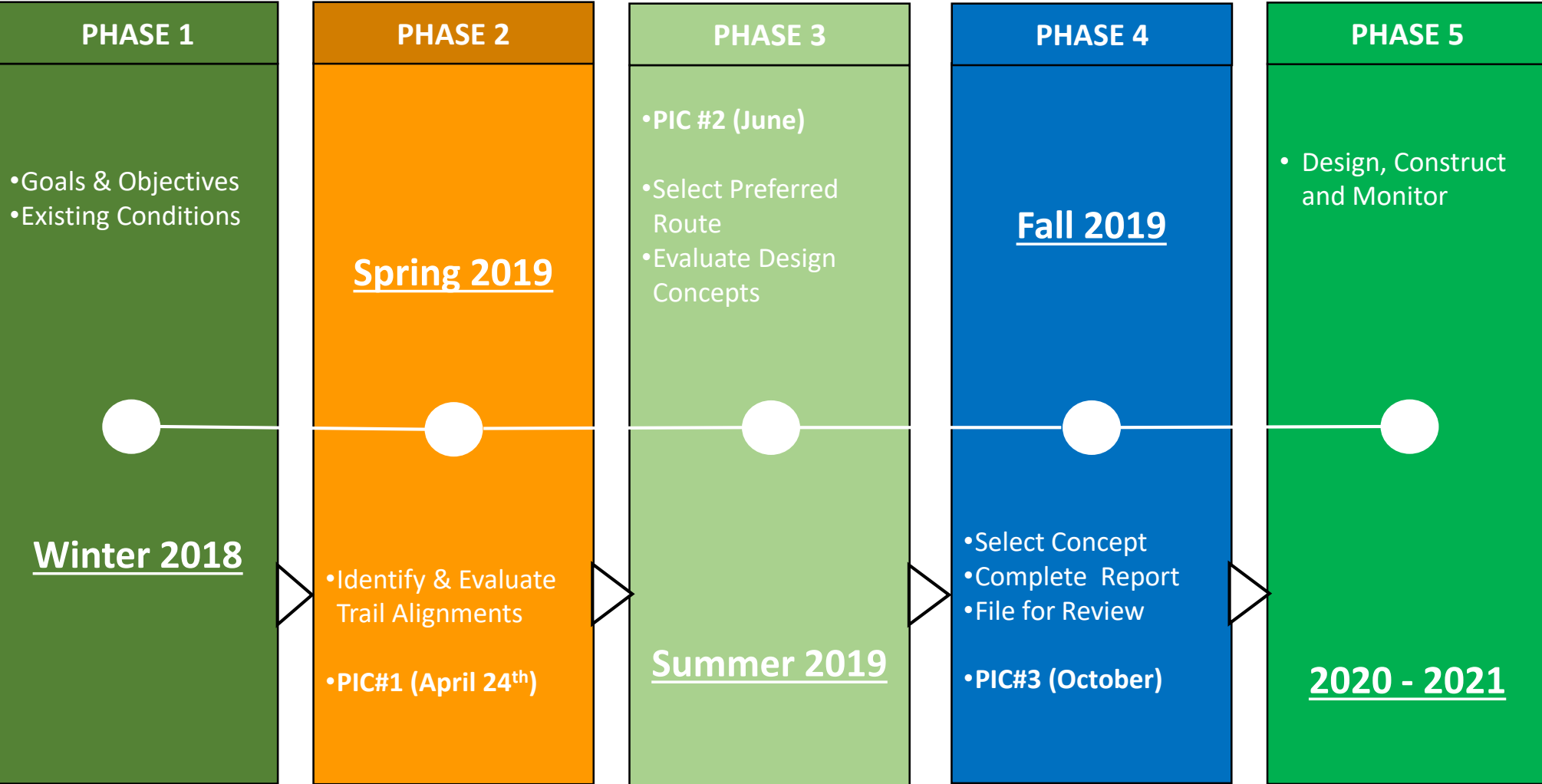


Objectives-based Evaluation

Proposed Objective	Evaluation Criteria
Provide a positive user experience	<ul style="list-style-type: none">• Maximizes interaction and connection to urban greenspace• Opportunity to provide education and stewardship
Protect and enhance natural features	<ul style="list-style-type: none">• Capacity to maximize naturalization/restoration of the hydro corridor• Minimizes amount of natural habitat removed/disturbed• Minimizes impact to watercourses• Minimizes potential for impacts to valley slopes (e.g. erosion)
Provide connections	<ul style="list-style-type: none">• Extent of linkages to multi-modal transportation, other trails, and key amenities• Length of new trail connection (related to travel distance and time)
Maintain a safe environment for all potential trail users	<ul style="list-style-type: none">• Extent and character of trail that has the ability to minimize potential conflict between trail users and vehicles along with other user types• Extent of trail that has the ability to meet and/or exceed AAA and AODA for trail design• Minimizes potential for concern regarding personal security• Minimizes potential for flood risk to trail users
Be good neighbours	<ul style="list-style-type: none">• Minimizes potential for operations/maintenance impacts on corridor and roads• Minimizes potential for impact on neighbours adjacent to the corridor as well as road users• Extent of support/leverage for other infrastructure initiatives
Be cost effective	<ul style="list-style-type: none">• Constructability• Capital cost• Operating and maintenance cost



Looking Ahead



Visualization Toolkit Overview



Presented by: Perkins+Will

A project of:



Guiding Principles



Connections

A seamless east-west connection should be created to link Rouge National Urban Park to Downtown Toronto. The Meadowway will re-establish the original link between the region's ravine systems that run north-south through the corridor.



Community + Public Realm

The Meadowway will stitch together the surrounding neighbourhoods, creating new connections and enhancing existing links. A wide range of public spaces will be provided for people to socialize, congregate, and support community events.



Natural Environment and Education

The restoration and programming of The Meadowway should increase access for a wide range of users so that they can explore, learn, and enjoy the urban green space. It will become a platform for stewardship, education, and research on natural habitats.



Transportation

Increasing opportunities for alternative, non-vehicular modes of transportation within the Greater Toronto Area will reduce car dependency and equitable access. The corridor will advance the integration of a multi-modal transportation system.



Recreation

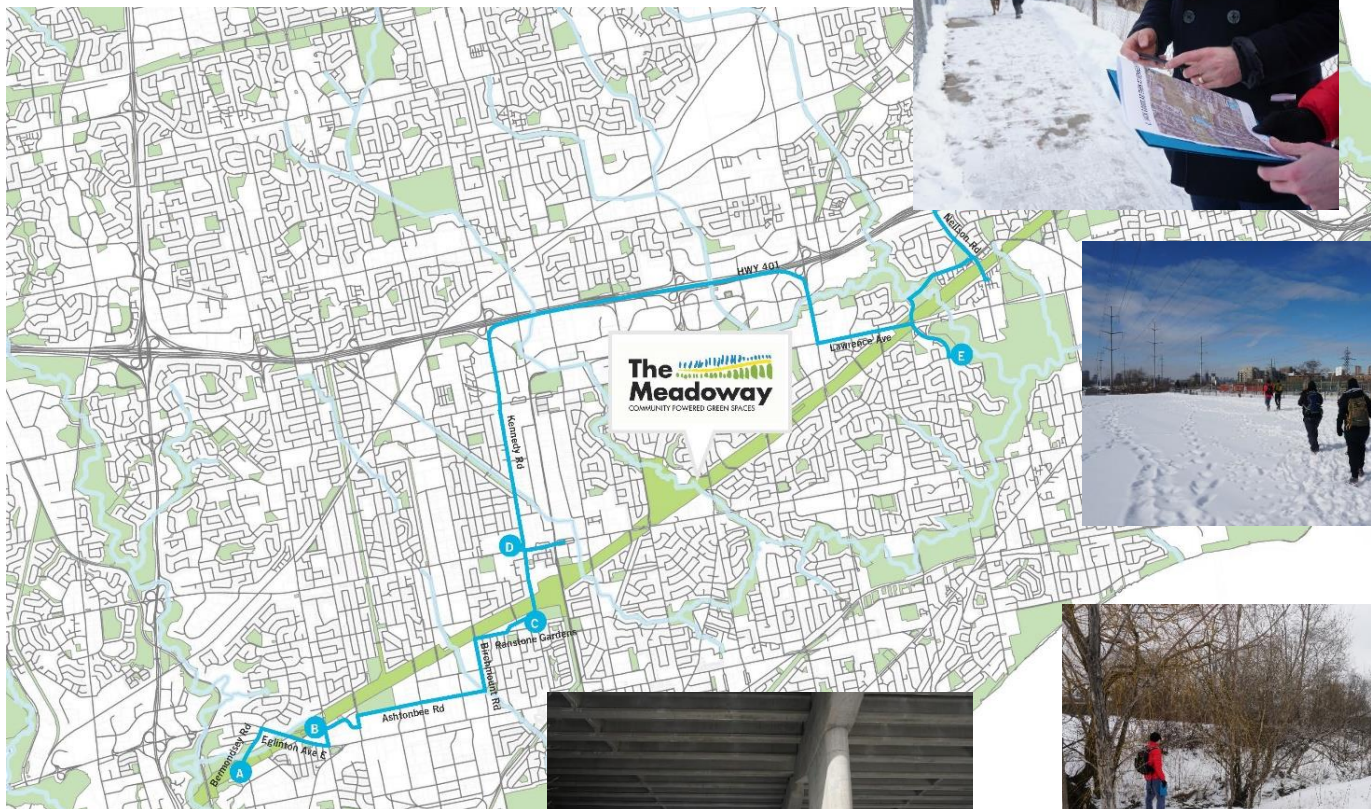
The Meadowway will encourage outdoor recreational opportunities along the trail network or adjacent spaces, for a wide range of users and communities or neighbourhoods.



Blueprint for Revitalization

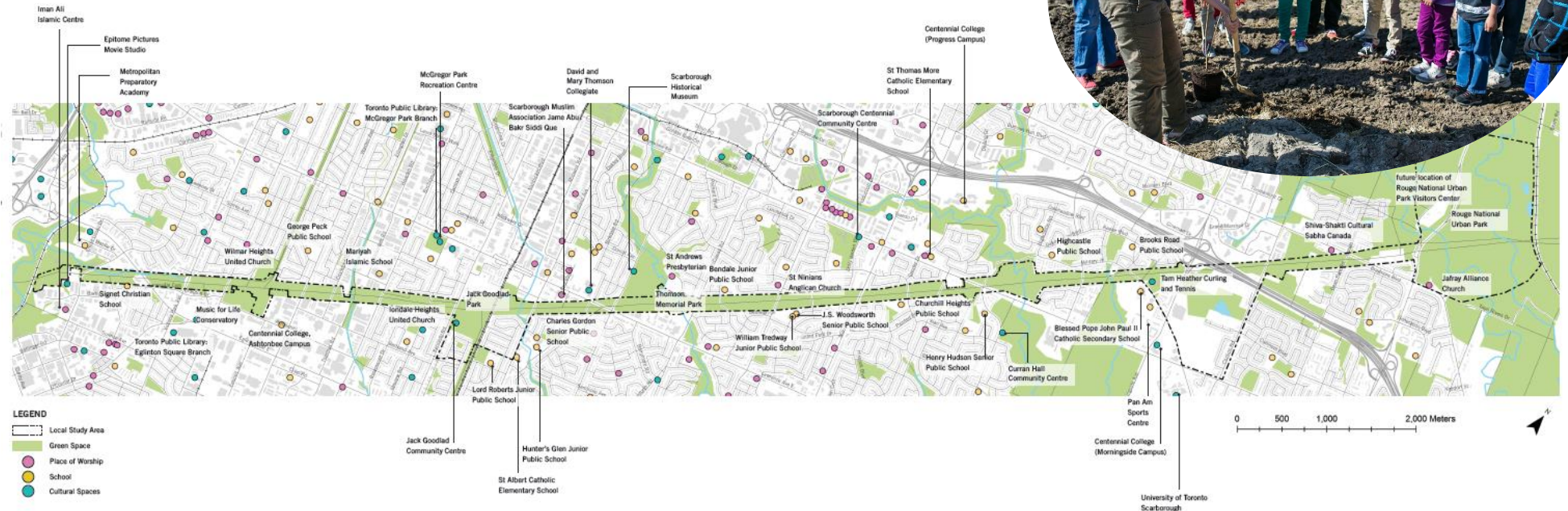
Throughout the process and upon implementation, The Meadowway will serve as a model for how to successfully revitalize and repurpose hydro corridors in both a local and international context.

Field Investigation



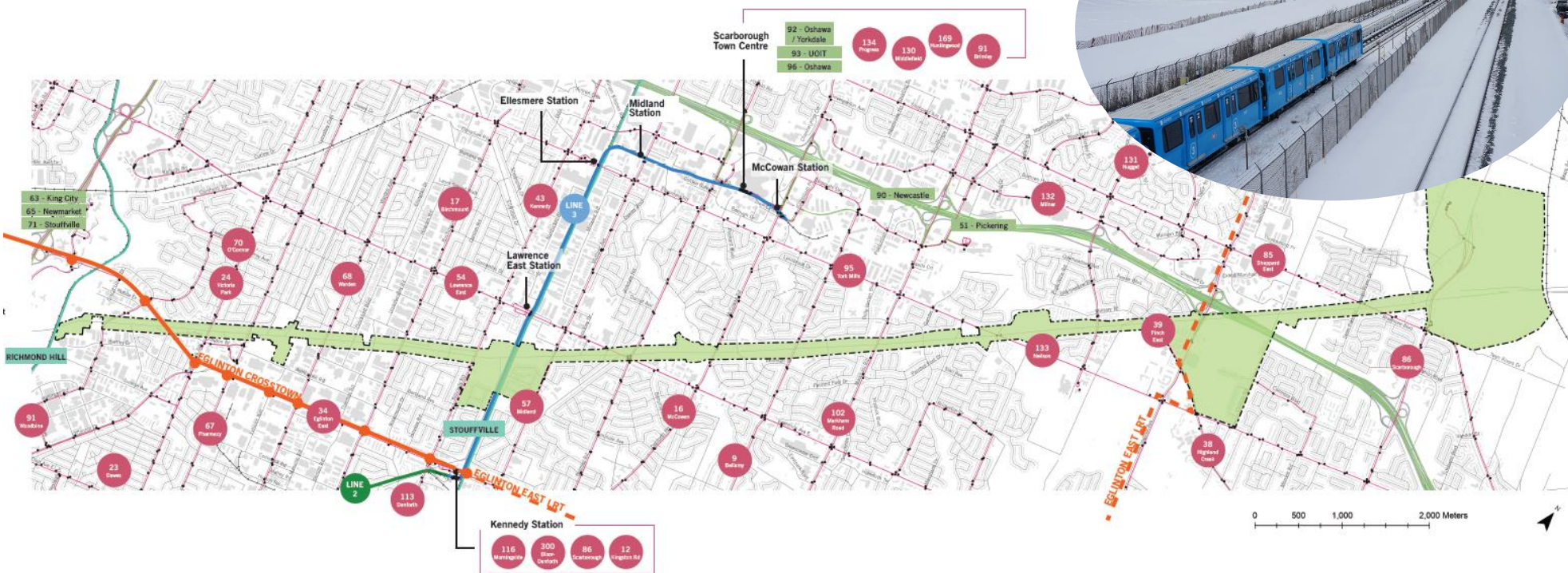


Existing Conditions: Destinations



- Many local schools, libraries, community centres, places of worship
- Opportunity to establish important connections between the wider community and the natural environment

Existing Conditions: Transit



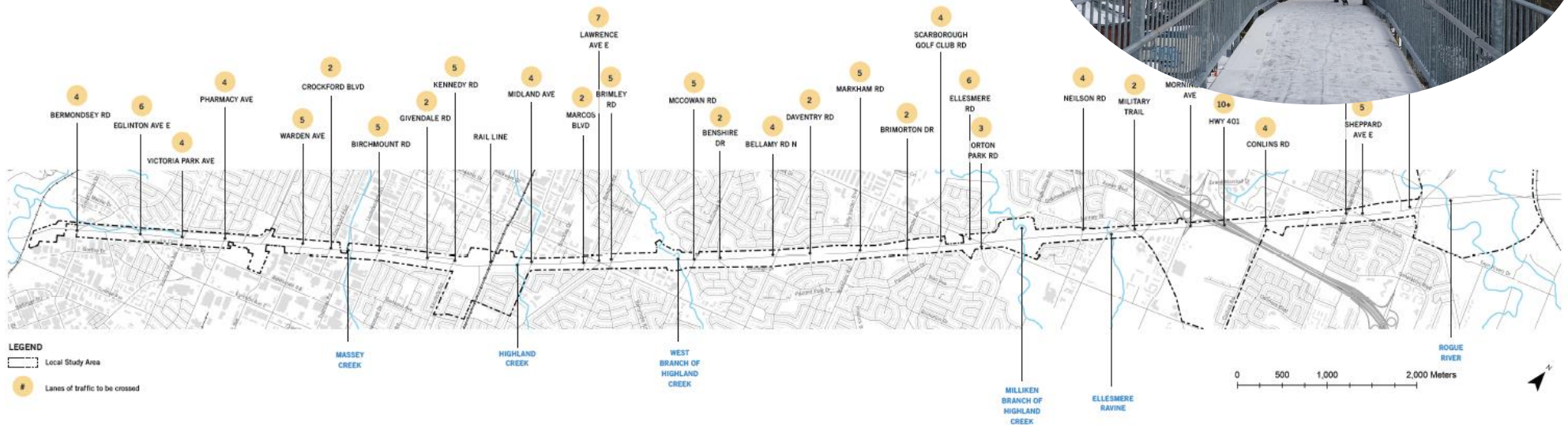
- Local multi-modal hubs (Kennedy Station, Scarborough Town Centre, etc).
- Future transit improvements: Scarborough subway, Regional Express Rail (RER), Eglinton Crosstown and Eglinton East LRT

Existing Conditions: Cycling



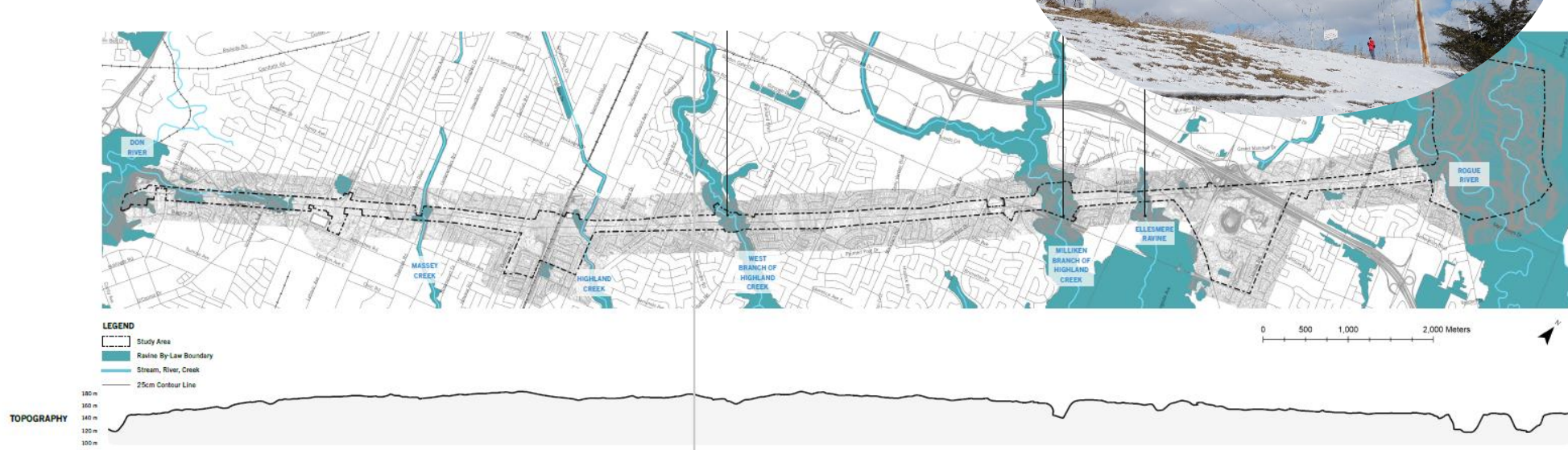
- Toronto Ten-Year Cycling Plan includes new and improved bike routes
- Connection to trails (East Don River Trail, West Highland Creek Trail, Upper Pan Am Path, Rouge Park Vista Trail, etc.)

Existing Conditions: Crossings



- 31 road crossings, 1 rail, and 6 creek crossings; lanes of traffic identified
- Important to prioritize pedestrian and cyclist safety as crossings are built or upgraded to support multi-use trail usage

Existing Conditions: Ravine Coverage and Topography



- Important historical ravines and water bodies that were once used for travel and trade can be good storytelling opportunities
- Highlight the changes in topography through planting and trails

Existing Conditions: Biodiversity



Case Studies



Case Studies



CASE STUDY

THE BELTLINE

Atlanta, USA

35.4km trail




ABOUT
As of 2017, over 315 public meetings were held, engaging around 12,200 participants in the planning process. Methods included flyers in public places, door-to-door campaigns, direct mail, email distribution lists, social media, a website, e-newsletters and automated phone calls.

ENGAGEMENT
As implementation of the loop continues to occur, other engagement efforts include walking and cycling tours, marathons, open houses, performances, parades, outdoor workouts, artist installations, volunteer opportunities, and more.

STRATEGY
The 2030 strategic implementation plan of the BeltLine, which is delivered through 7 phases, is based on a two-pronged approach: Infrastructure Work Streams (transit, trails, parks and streetscapes) and Investment Work Streams (cultural and economic development).

QUICK STATISTICS

- TYPE: Railway Revitalization
- LENGTH: 22 miles (35.4 km)
- 5,600 units of affordable housing
- 1,100 acres of brownfields




CASE STUDY

SYDNEY PARK

Sydney, Australia

41.6 ha park



ABOUT
Formerly the location of a major landfill site and brickmaking site, Sydney Park is made up of over 40 hectares of lush grass, landscaped gardens, rolling hills, meandering pathways and picturesque wetlands. It is the City's largest environmental project to date, built in partnership with the Australian Government. From the late 1940s and 1950s there was no wildlife in this industrial-heavy, contaminated site. This infrastructure opportunity has evolved into a vibrant environmental asset.

STRATEGY
When the landfill was closed, a layer of soil and rubble was placed over the pits to create the park. From there, the existing topography was used to enhance panoramic views of the skyline and recreational activities. The new wetland habitat now co-exists with the industrial heritage structures, and new roadways provide recreational facilities. Various community groups such as the CARES (Community and Road Education Scheme) provide a safe place for children to learn about road safety.

ENGAGEMENT
The City engaged a multi-disciplinary design team that participated in a roundtable, discussing the intersections of art, design, science, and ecology.

QUICK STATISTICS

- TYPE: Landfill revitalization, into public park space
- AREA: 41.6 hectares
- STATUS: Ongoing
- COST: \$11.3 million



Lessons for The Meadoway



CONNECTIONS

The BeltLine connects over 40 neighbourhoods, which over time have evolved in their own separate ways, without any common thread until this trail was planned. This is an opportunity to bridge both literal and figurate gaps, allowing those neighbourhoods that have fallen into disrepair to join a cohesive, broader community. Regular community meetings (e.g. study groups, city wide conversations, quarterly briefings, etc.) throughout the neighbourhoods ensure that all voices are heard and every resident or future user of the BeltLine gets a seat at the table.



RECREATION

An important element of the trail system along the BeltLine is the variety it offers in length, natural environment, views/vistas, and adjacent uses and amenities. This allows users to explore the range of natural and built typologies throughout the corridor. The BeltLine also has a large focus on health and fitness, offering the "Run.Walk.Go!" series, which are 5k or 10k races that allow users to explore specific segments of existing trails. Participants range from avid runners to families with strollers and pets. In other times of the year, free fitness classes are offered, such as yoga, aerobics and zumba.



COMMUNITY AND PUBLIC REALM

A variety of community based events draw residents and visitors to the BeltLine. This includes volunteer opportunities, performances, parades, markets, and more. However, one specific initiative that stands out is its integration of art. Art on the Atlanta BeltLine is a program that features a year-round public art collection aimed to engage the community. This includes a variety of mediums: sculpture, murals, dance, music, theatre, photography, fashion, film and more. The BeltLine also leverages the popular use of social media to promote their landmarks and infrastructure. For example, the BeltLine website features "Top Instagram Spots", paired with a destination brochure that maps these memorable spots: <https://beltline.org/top-instagrammable-spots-on-the-atlanta-beltline/>



TRANSPORTATION

The BeltLine is developed through a long-term vision, with a transportation plan that includes modes of transit, trails, and connectivity, including an eventual 50-mile streetcar system that will run through the city of Atlanta. A municipal System Plan is in place to focus on connecting neighbourhoods to key points of interest and activity hubs. The design of the system of trails along the BeltLine is categorized by typologies, all providing a different immersive experience of the city and its natural and built environments. It offers accessible (ADA compliant) access points and multi-use facilities, supporting travel for any active transportation mode.







NATURAL ENVIRONMENT AND EDUCATION

The multi-faceted "waterscape" of Sydney Park celebrates the connection between people and place. It offers educational opportunities throughout, specifically regarding the function of wetland environments. Learning opportunities also include the habitat creation for both flora and fauna, as well as the remaining brickworks heritage area.



BLUEPRINT FOR REVITALIZATION

This is a good example of how priorities of water reuse, recreation, biodiversity and habitat are all addressed in the project. Moving from a formal post-industrial site and waste disposal zone, the parkland now invites recreation and playground areas. The bio-retention wetlands not only capture, hold, and clean about 340 Olympic-sized swimming pools per annum, but they also improve local water quality, habitat, and reduce potable water consumption in the area.



TRANSPORTATION

This interwoven series of community infrastructures and systems are all integrated within the fabric of the park. New pathways and crossings intersect throughout the wetland systems, so park users can discover playful, dramatic, and peaceful parts of the larger natural and built landscapes.





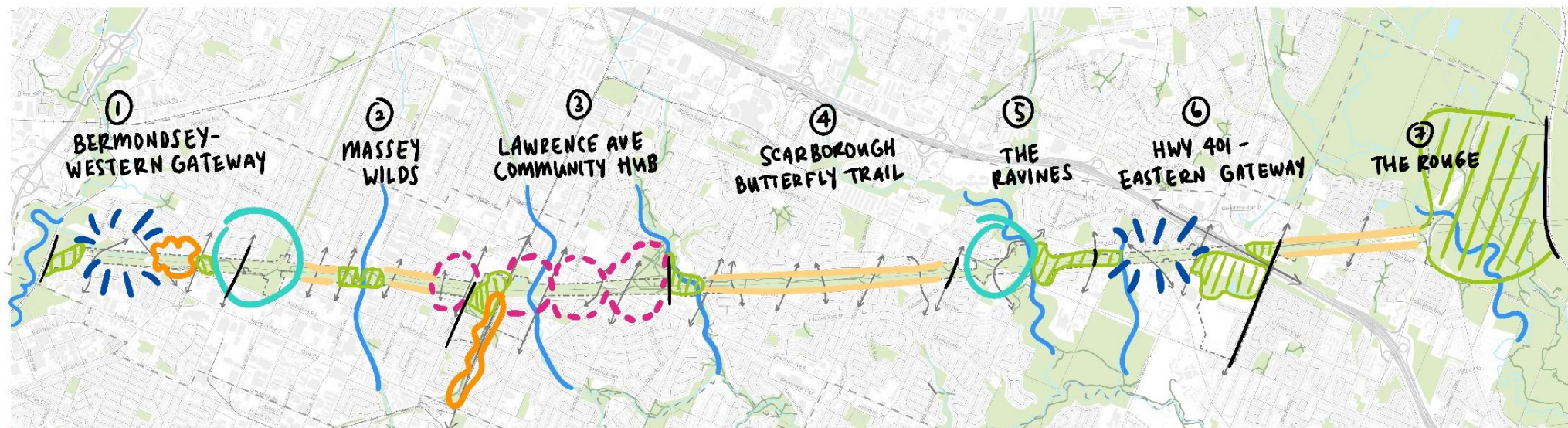
CROSSINGS CAN BE EXCITING AND PLAYFUL

CROSSINGS AND WALKWAYS ARE INTEGRATED SEAMLESSLY INTO WETLAND HABITATS

WATER HARVESTING SYSTEMS ALSO SERVE AS PUBLIC ART PIECES

THE MEADOWAY VISIONIZATION TOOLKIT: BACKGROUND AND CASE STUDIES 81

How it all comes together!



LEGEND



Gateway



Education Opportunities



Community Hub



Recreation Hub



Passive Meadows



Wild / Immersive Experiences



Ravine / Creek



Crossing



Lookout Point

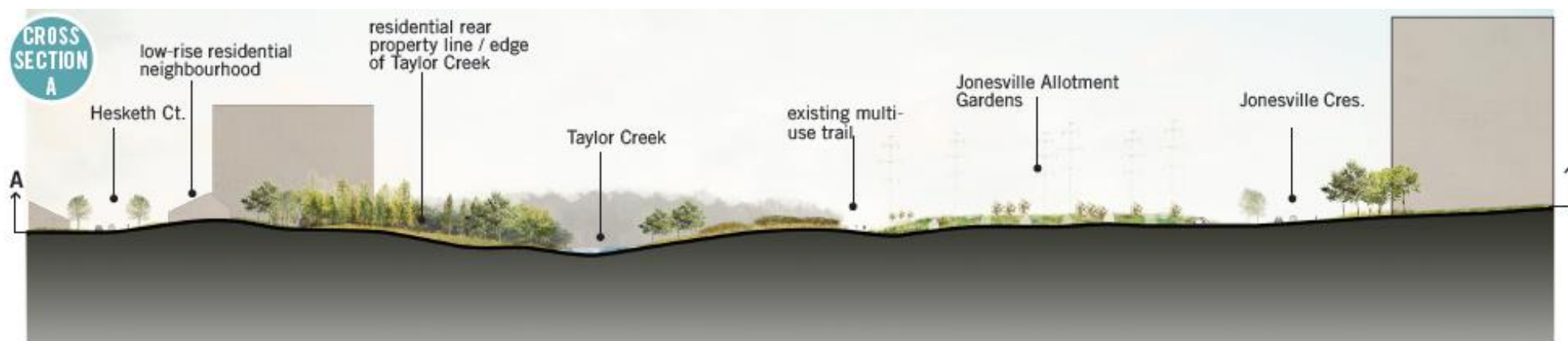
Section 1: Bermondsey-Western Gateway

East Don Trail to Pharmacy Avenue



Section 1: Bermondsey-Western Gateway

East Don Trail to Pharmacy Avenue



Section 2: Massey Wilds

Pharmacy Avenue to Kennedy Road



Section 2: Massey Wilds

Pharmacy Avenue to Kennedy Road



Section 3: Lawrence Ave Community Hub

Kennedy Road to Thomson Memorial Park



Section 3: Lawrence Ave Community Hub

Kennedy Road to Thomson Memorial Park



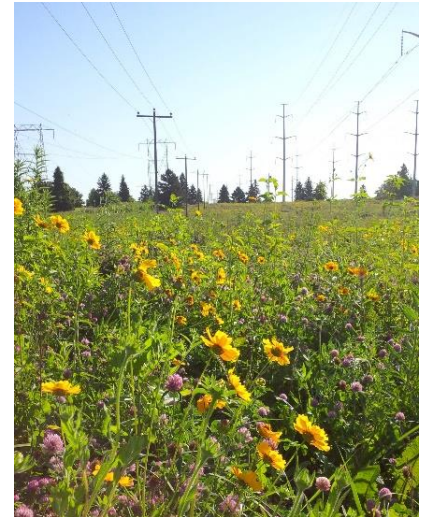
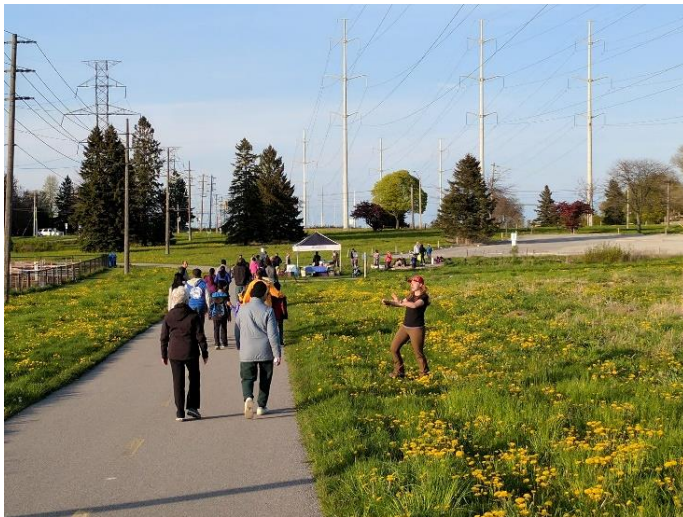
Section 4: Scarborough Centre Butterfly Trail

Thomson Memorial Park to Scarborough Golf Club Road



Section 4: Scarborough Centre Butterfly Trail

Thomson Memorial Park to Scarborough Golf Club Road



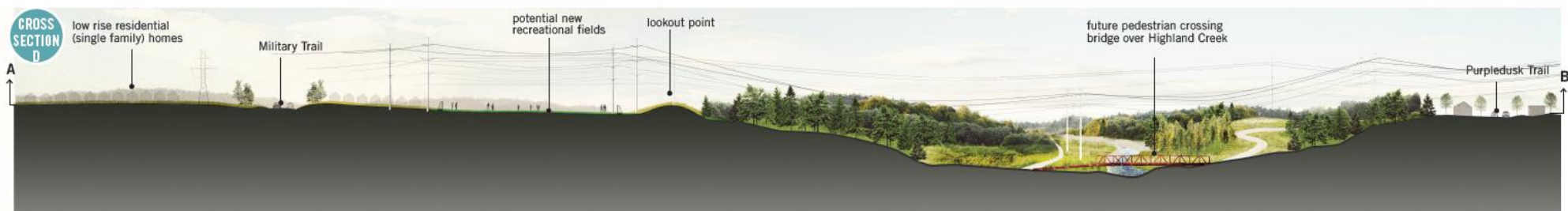
Section 5: The Ravines

Scarborough Golf Club Road to Neilson Road



Section 5: The Ravines

Scarborough Golf Club Road to Neilson Road



Section 6: 401 – Eastern Entrance

Neilson Road to Conlins Road



Section 6: 401 – Eastern Entrance

Neilson Road to Conlins Road



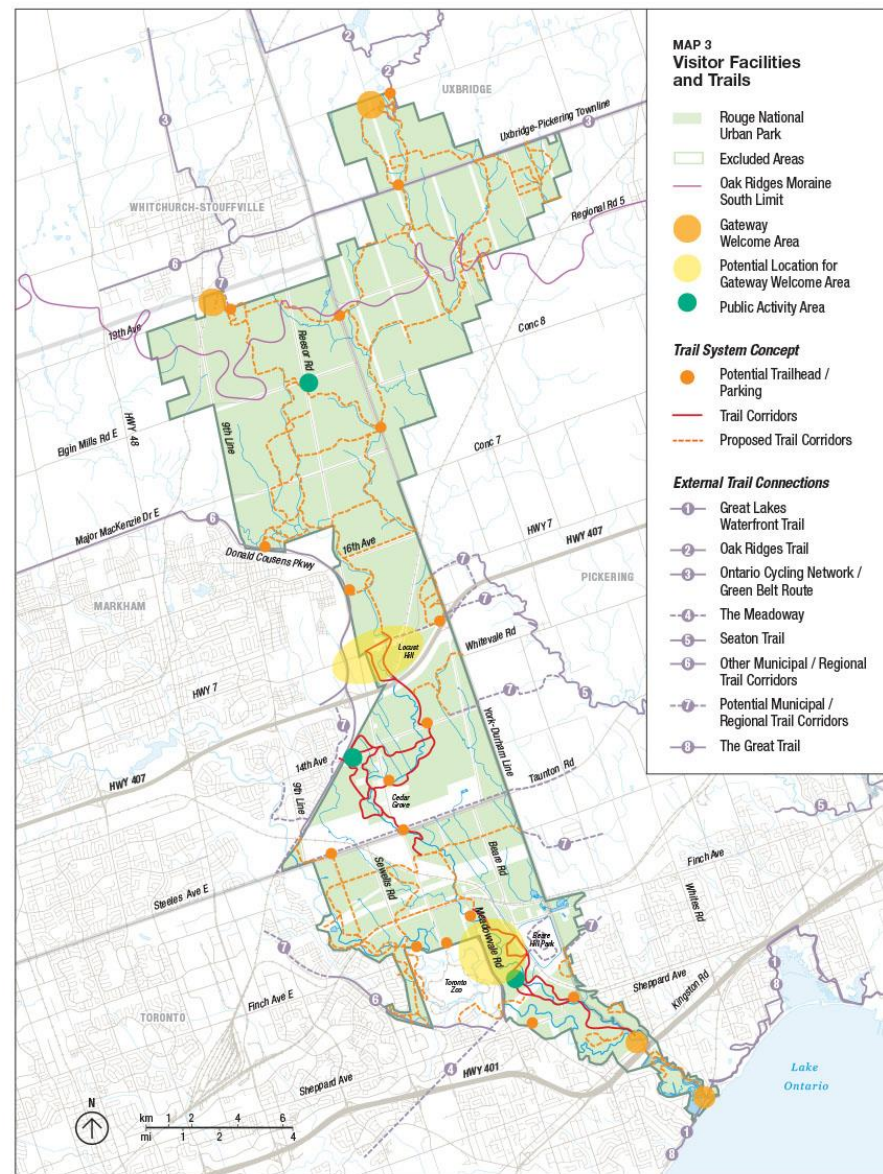
Section 7: The Rouge

Conlins Road to Rouge National Urban Park



Section 7: The Rouge

Conlins Road to Rouge National Urban Park



Public Visioning Workshop: Today

(To be read on both sides of the table)



Precedent Imagery

Proposed Zones

Emerging Vision

Draw / interact right
on the map!



QR code to scan
with your phone

Public Visioning Workshop: Today

On the edges of the map (both sides around the table):



Opportunity for Comments
(sticky notes)

Interactive Questions (stickers)

Cross Sections

STORY OF PHASE 1 (SCARBOROUGH CENTRE BUTTERFLY TRAIL)



Emoji stickers for
kids to collect!

Spotlight on meadows / biodiversity

ION 4



Next Steps

- Producing a set of visuals – renderings and animations
 - Crossings / Bridges
 - Viewpoints
 - Etc.
- Public Meeting 2 / 3
 - June 2019
 - October 2019



Thank You

Questions & Comments