



Fenelon Falls Second Crossing:

Municipal Class Environmental Assessment



Public Information Centre 2

November 6, 2019

Agenda

Event	Time
Presentation	5:00 – 5:45 PM
Table Discussions	5:45 – 6:15 PM
Q&A	6:15 – 6:50 PM
Next Steps and Closing	6:50 – 7:00 PM

Introductions



City of Kawartha Lakes

Martin Sadowski
Corby Purdy
Juan Rojas

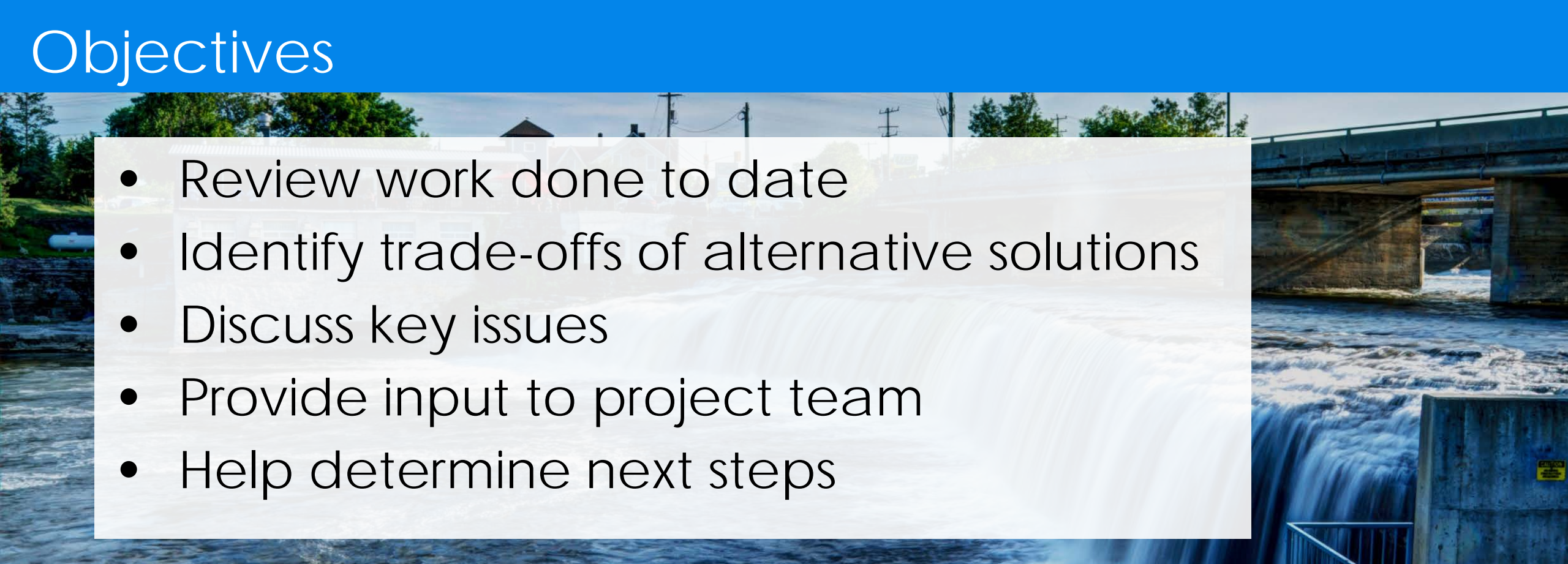


Dillon Consulting

Rory Baksh
Merrilees Willemse
Gareth Mogg
Ian Borsuk



Objectives

- 
- Review work done to date
 - Identify trade-offs of alternative solutions
 - Discuss key issues
 - Provide input to project team
 - Help determine next steps

Feedback is an important component of the project and will be used to determine the project's direction.

Presentation Outline



- Summary of problems and opportunities
- What we have studied
- Transportation analysis
- Alternative solutions
- Impacts and trade-offs
- Preferred solution
- Next steps

Problems and Opportunities

Key Problems

- Congestion and traffic delays
- Bridge back-up
- At capacity by 2031
- Helen and Lindsay Street intersection
- Main street experience
- Business impacts and parking
- Traffic and land use, e.g., Tim Hortons, Sobeys

Key Opportunities

- Reduce delays and traffic congestion
- Improve main street experience
- Improve connectivity
- Support Downtown Revitalization Plan
- Improve relationship between land use and transportation

Intersection Issues

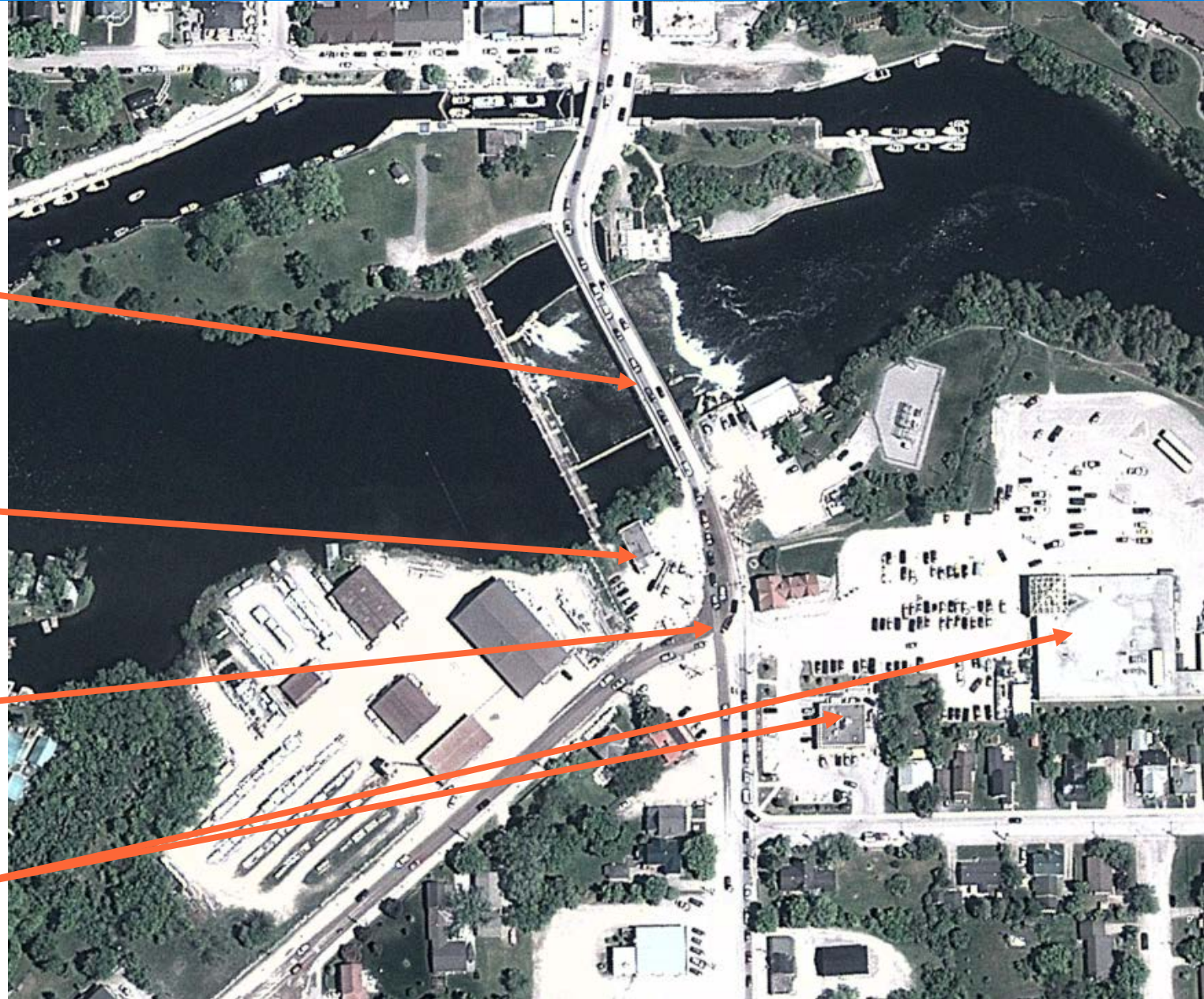
At capacity: Downtown Corridor Study shows Helen/Lindsay St intersection will be 'at capacity' by 2031.

Queues: not enough storage for vehicles waiting to turn = significant queues. Particularly southbound left turn which affects bridge.

Access Control: Gas station access on the west side of Lindsay St causes additional delays from northbound left turns.

Signal Timing: Traffic signals are not optimized and do not provide separate left turn movements.

Land use: the Tim Hortons and Sobeys, and the gas station cause traffic flow issues at the intersection.



What We Have Studied

In-Town Study Area



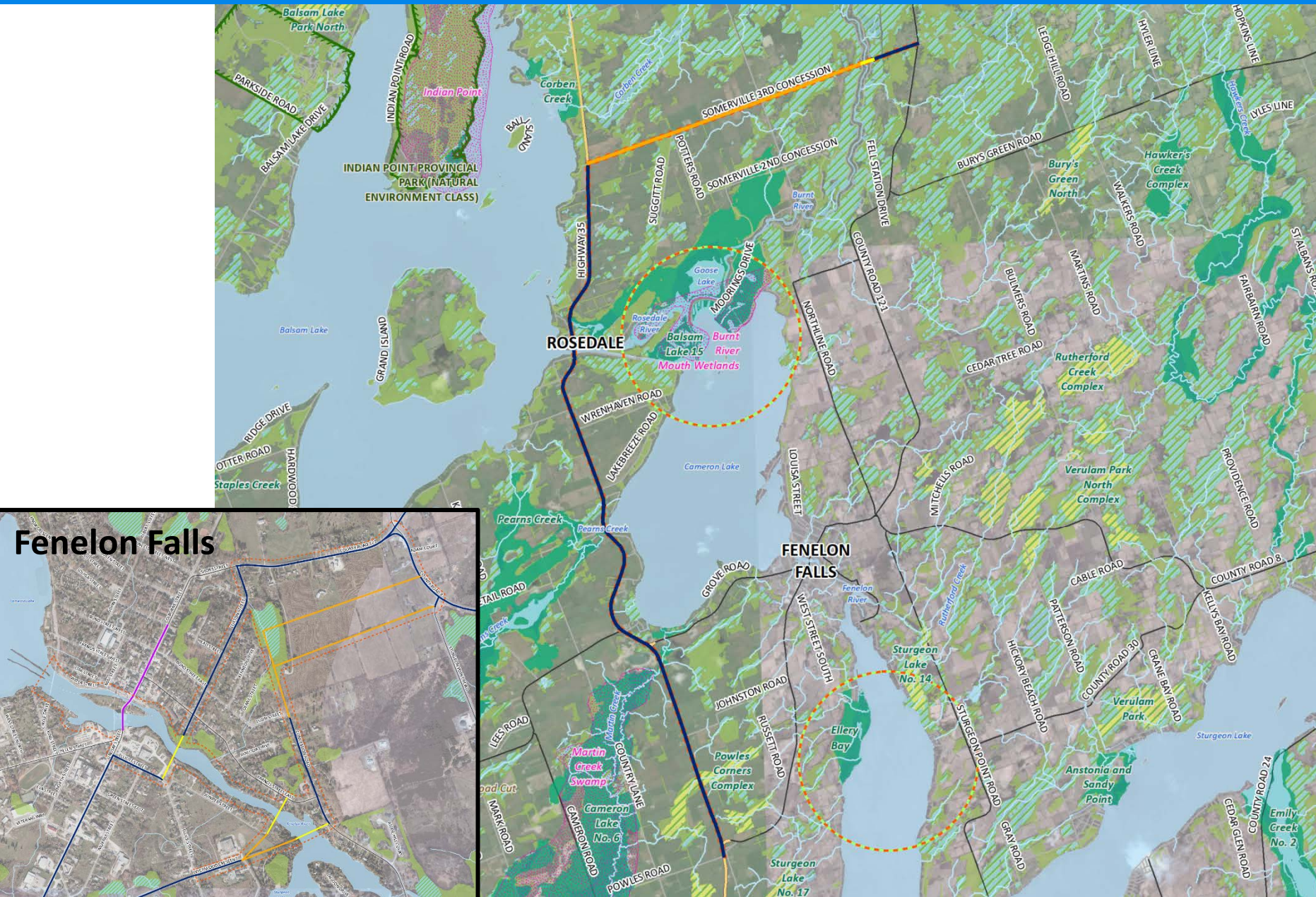
Bypass Study Area



Desktop Studies undertaken in study areas:

- **Environmental Conditions**
 - Aquatic and terrestrial
- **Socio-Economic Conditions**
 - Properties, people and businesses
- **Cultural Heritage and Archaeology**
- **Transportation**
 - Updated traffic data analysis (Streetlight)
- **Technical Feasibility**
 - Topography, property, utilities, technical constraints

Natural Environment and Technical Considerations

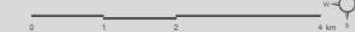


FENELON FALLS SECOND CROSSING ENVIRONMENTAL ASSESSMENT

DESIGNATED NATURAL FEATURES FIGURE 2A

- Potential New Crossing
- Potential Road Widening and Upgrade
- Potential Traffic Route
- Potential Area of Interest
- Study Area
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse
- Waterbody
- Provincially Significant Wetland
- Locally Significant Wetland
- Unevaluated Wetland
- ANSI, Earth Science
- ANSI, Life Science
- Provincial Park
- Wooded Area

SCALE: 1:66,718



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF, FENELON FALLS

MAP CREATED BY: LK
MAP CHECKED BY: GM
MAP PROJECTION: NAD 1983 UTM Zone 17N

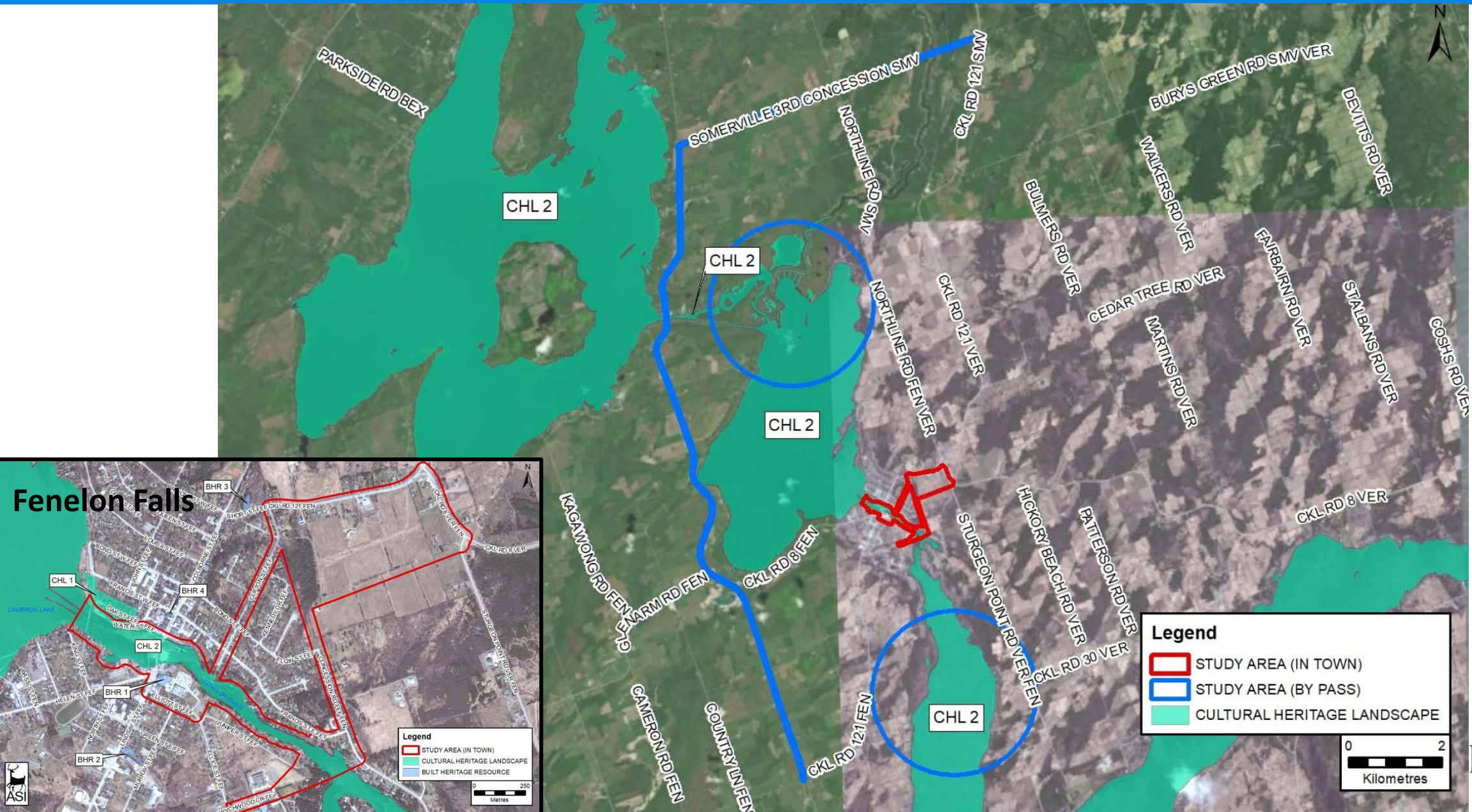
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



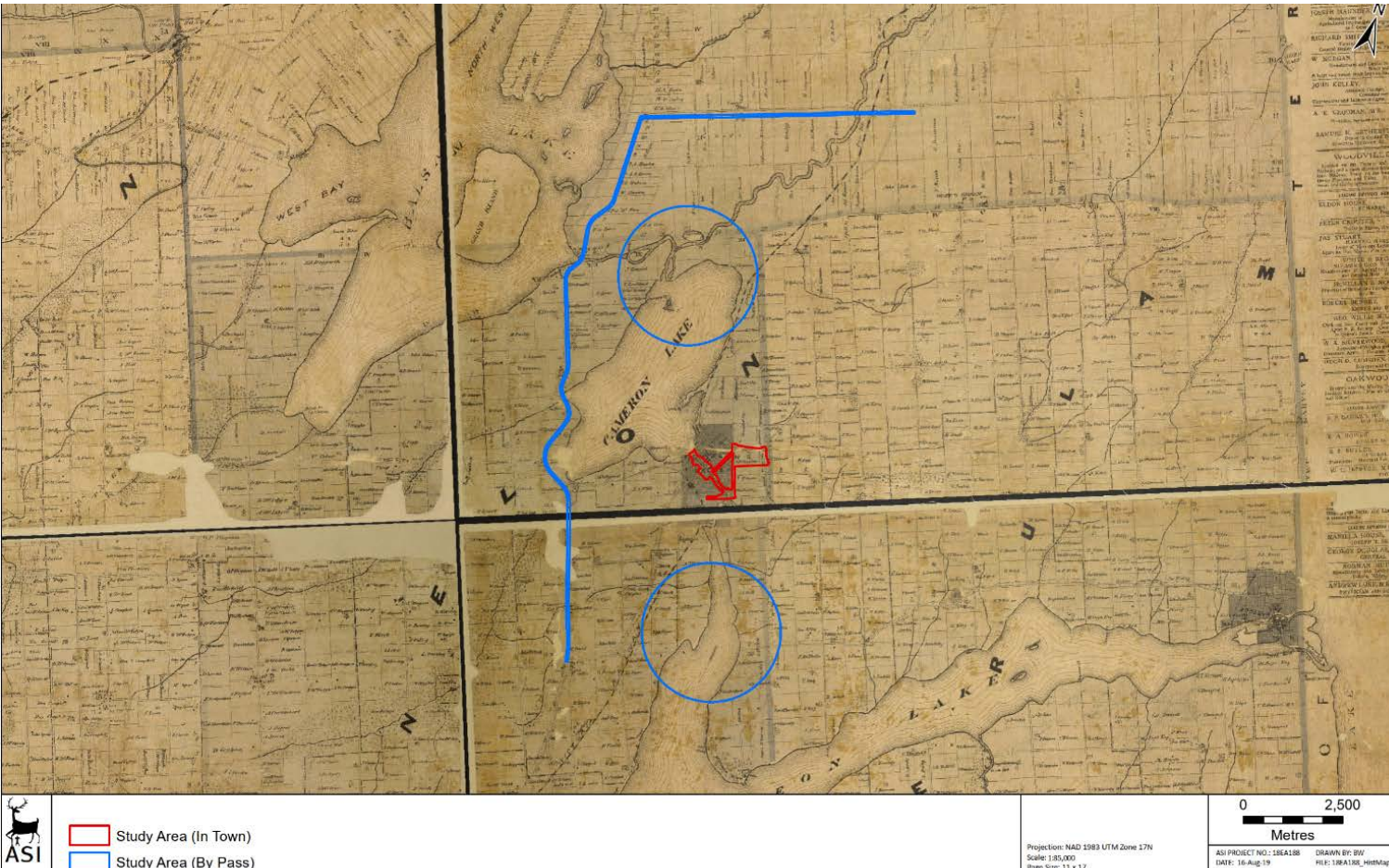
PROJECT: 19-0411
STATUS: DRAFT
DATE: 2019-07-17



Cultural Heritage Considerations



Archaeology Considerations



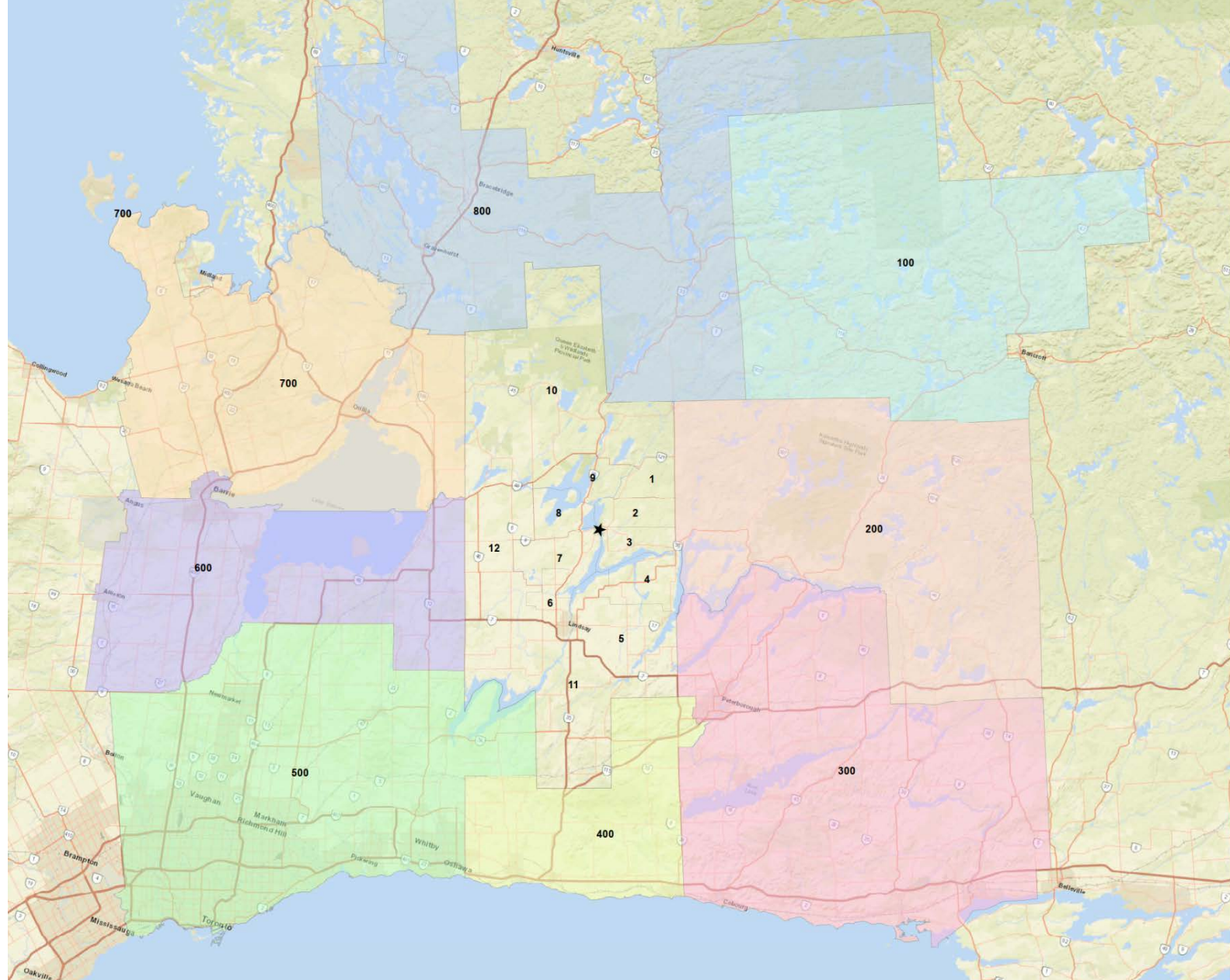
There is archeological potential along all waterways.

A Stage 1 archeological assessment, including a property inspection, will be required for the preferred alternative.

Transportation Considerations

Streetlight Data collects anonymous GPS data from numerous sources, e.g. cell phones.

- Data is not connected to any user information.
- Data collected through mobile apps that “**use your current location**”.
- Helps understand travel patterns for people and goods movement.
- Data is not direct vehicle volume counts.



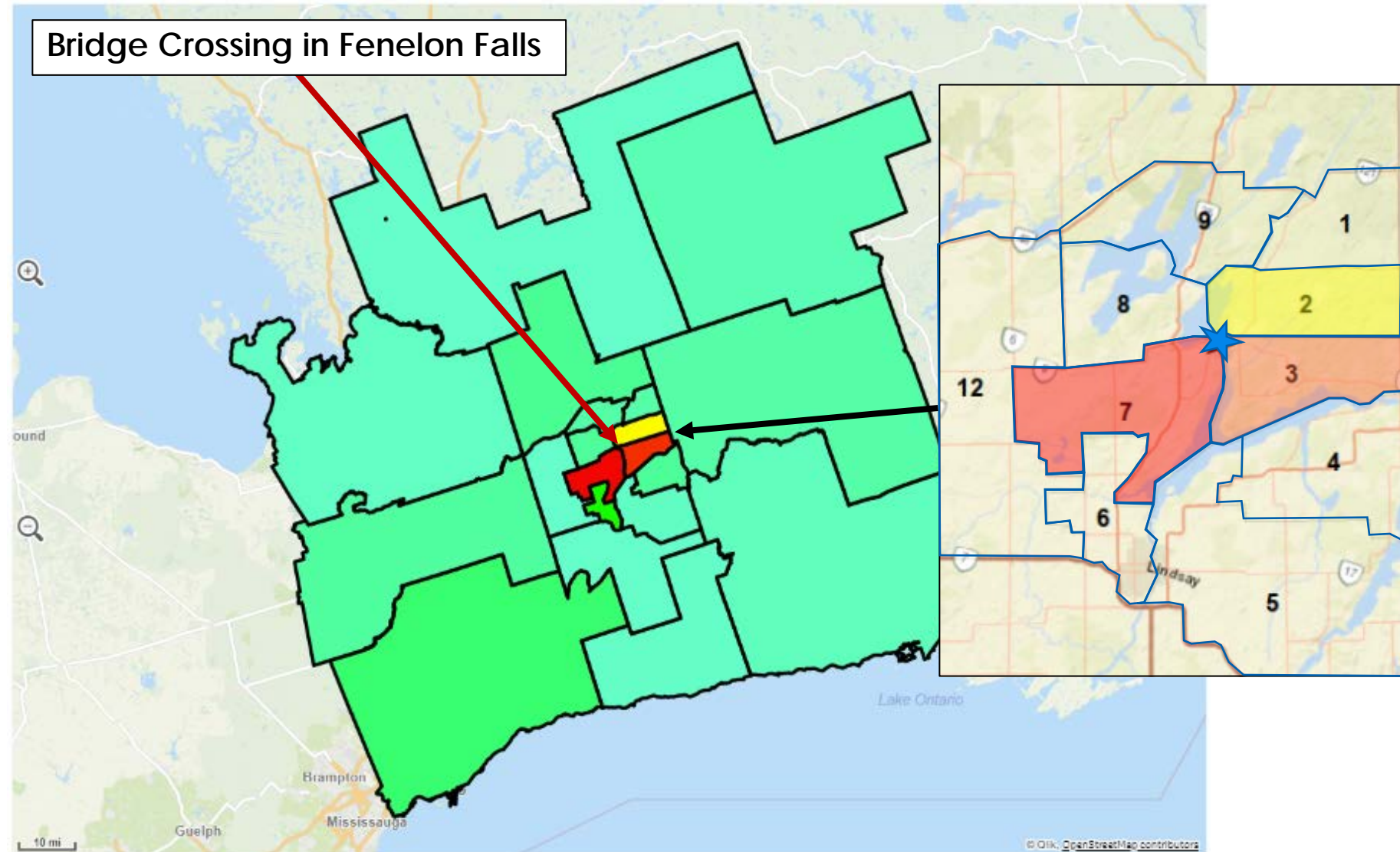
Streetlight Data

Origin Trips Map

Red = where most trips originate.

Light Green = where the least trips originate.

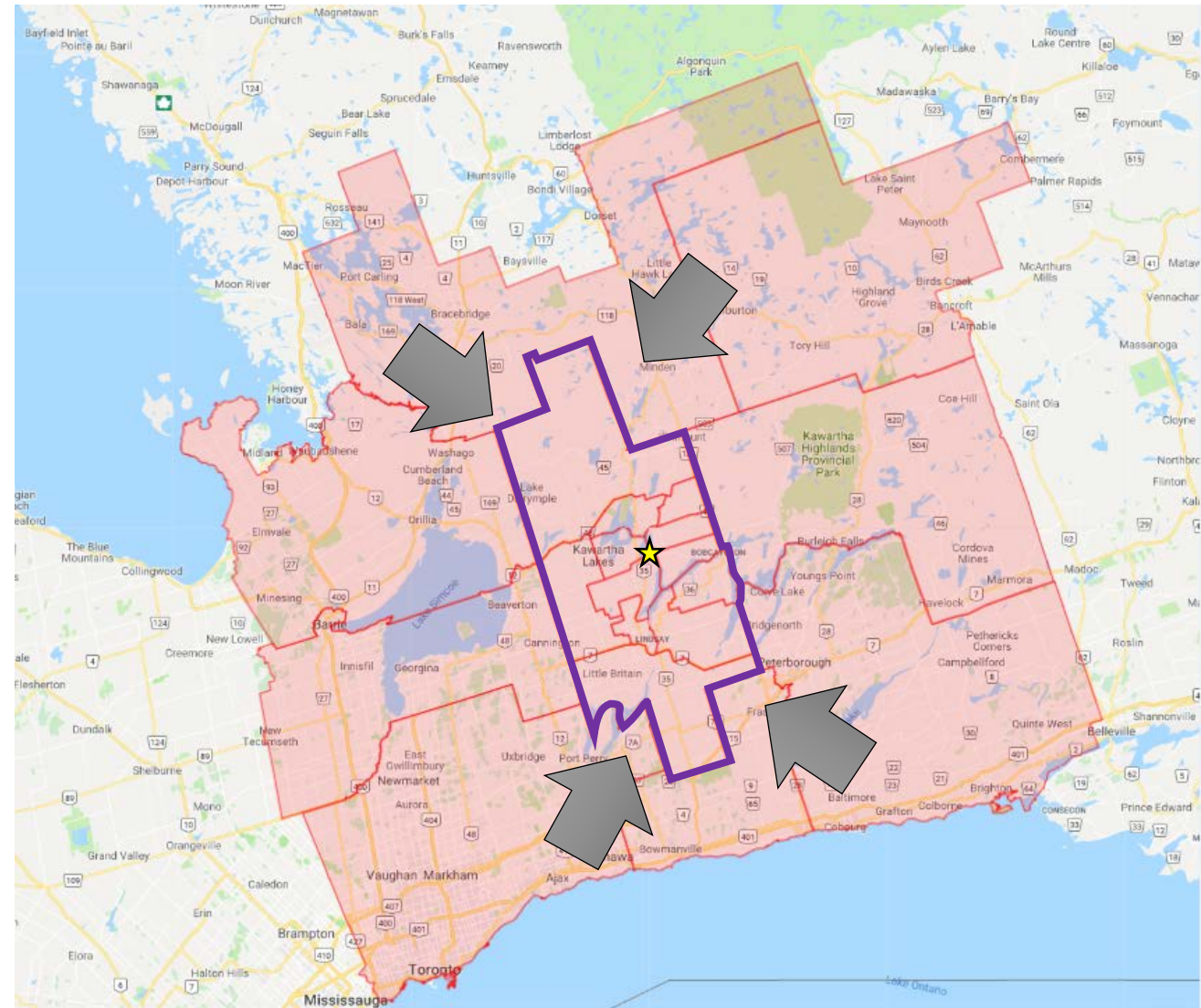
Most trips that use the bridge originate from within relatively 'local' zones.



Streetlight Data: Internal vs External

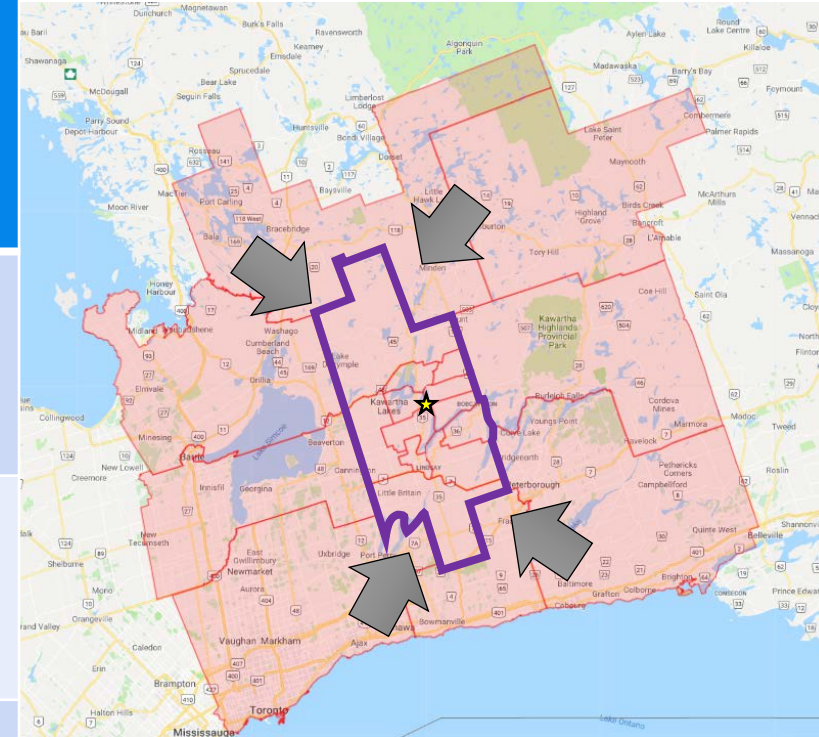
Internal trips within City of Kawartha Lakes vs. external trips:

- **5% - 10%** of trips on the Bridge are travelling between External Areas
- **15% - 21%** of trips are between Kawartha Lakes and External Areas
- **69% - 81%** of trips are within the City of Kawartha Lakes



Streetlight Data: Internal vs External

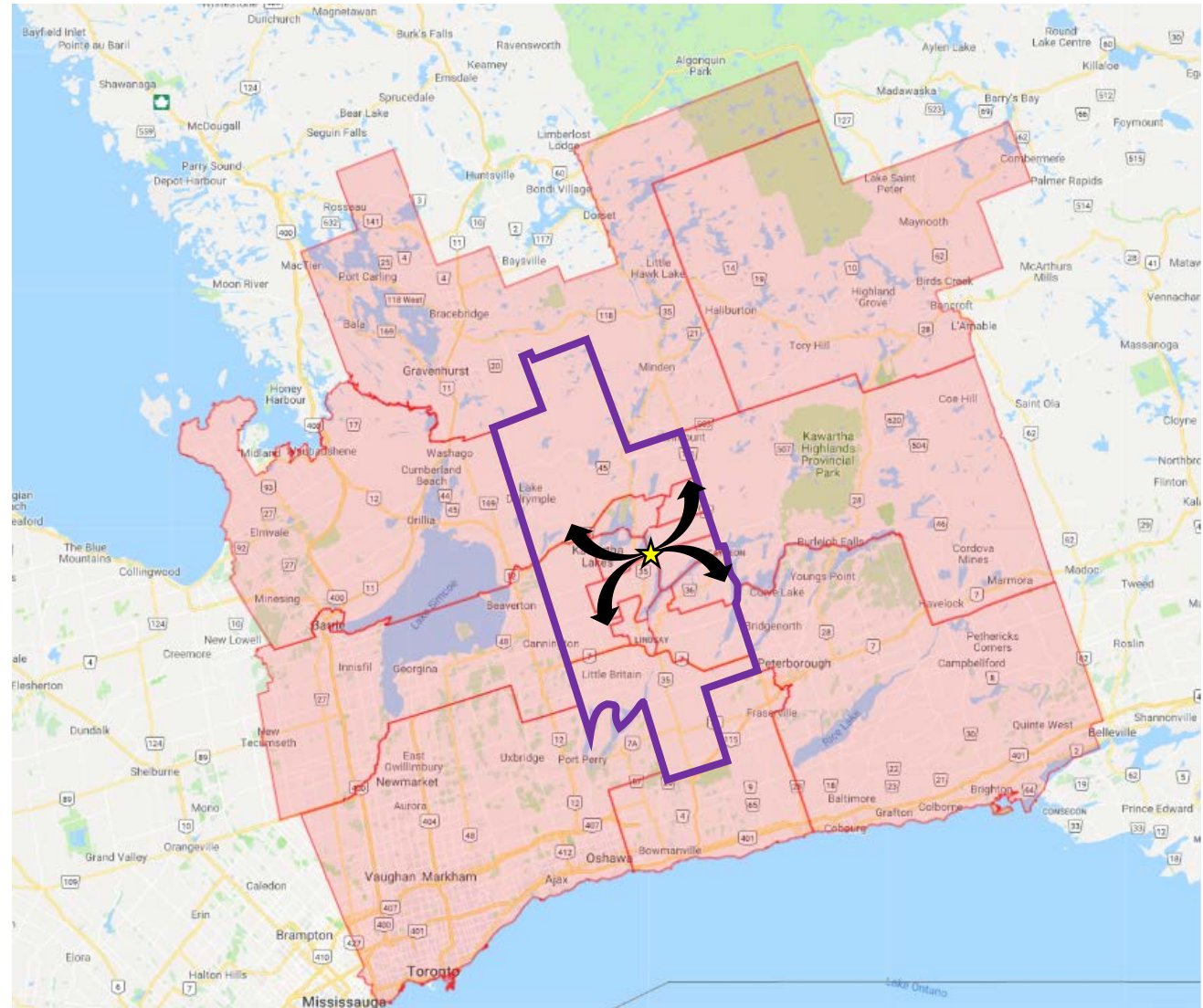
	Average Summer Day	Average Summer Weekday	Average Summer Friday	Average Summer Friday PM PEAK	Average Summer Weekend Day	Average Summer Weekend Midday PEAK
External to External	6%	5%	8%	9%	7%	6%
External to/from Internal	17%	15%	18%	21%	21%	21%
Internal	77%	81%	74%	69%	72%	73%



Streetlight Data: Location of Trips

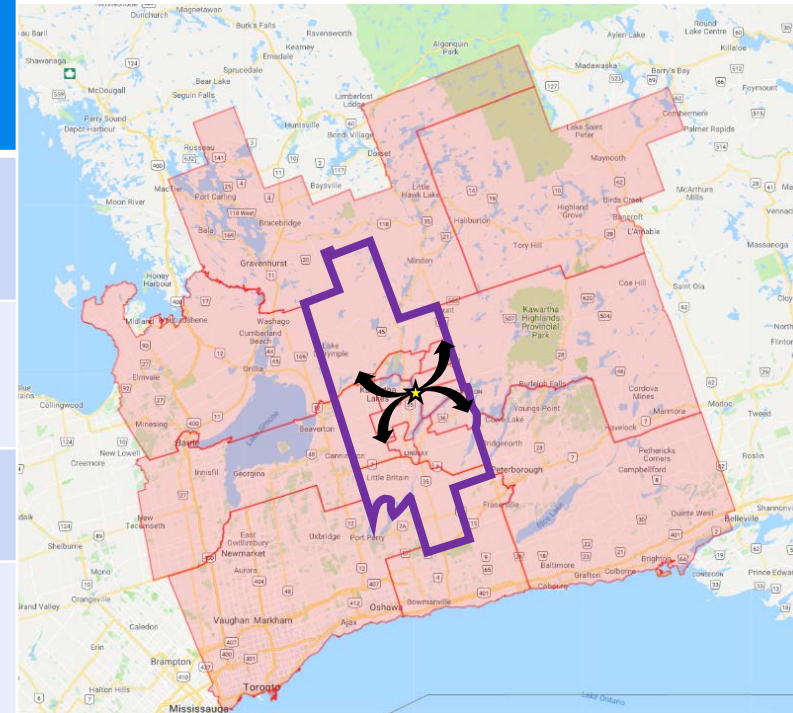
For vehicles which cross the bridge within Kawartha Lakes:

- **4% - 5%** of trips are between areas in the North
- **47% - 51%** of trips are between areas in the South
- **35% - 39%** of trips travel from north to south and south to north



Streetlight Data: Location of Trips

	Average Summer Day	Average Summer Weekday	Average Summer Friday	Average Summer Friday PM PEAK	Average Summer Weekend Day	Average Summer Weekend Midday PEAK
North to North	4%	4%	4%	5%	4%	4%
South to South	50%	51%	49%	47%	49%	47%
Other	36%	35%	38%	38%	37%	39%
Travel between adjacent zone	10%	10%	9%	10%	10%	10%



Streetlight Data: Summary

According to the Downtown Corridor Study, the bridge will be **at capacity** during spring weekend peak hours and summer weekday/weekend peak hours by 2031.

Potential for traffic diversion:

- Approximately **20-30%** of traffic would be diverted on a Burnt River bypass.
- Approximately **40-50%** of traffic would be diverted on an in-town crossing.

Alternative Solutions



Four potential solutions:

In-Town Options

- Expand Existing Bridge
- Build New In-Town Bridge
- Improve Local Traffic Operations = **ALL**

Bypass Option

- 3rd Concession Bypass

Impacts and Trade-Offs of Alternatives



• Traffic Congestion



• Cost



• Traffic Flow



• Local Businesses



• Active Transportation



• Heritage and Views



• Community



• Private Property



• Terrestrial Environment



• Boating



• Aquatic Habitat



• Technical Design Complexity

Option 1: Traffic Operation Improvements

Improvement options for Helen St. and Lindsay St. intersection:

- **Signal Changes**
 - Optimising Signals
 - Provide new left turn signals
- **Access Control**
 - Tim Hortons / Sobeys / Gas Station
- **Additional Capacity**
 - Extend Storage Lanes on Helen Street
- **Restrict Movements**
 - Allow only right hand turns into and out of Helen Street
- **Potential for a Two-lane Roundabout**
- **Potential to explore relocating some land uses to improve traffic flow and access**



Option 1: Improve Local Traffic Operations



Improves traffic flow



Technically easy



Low cost



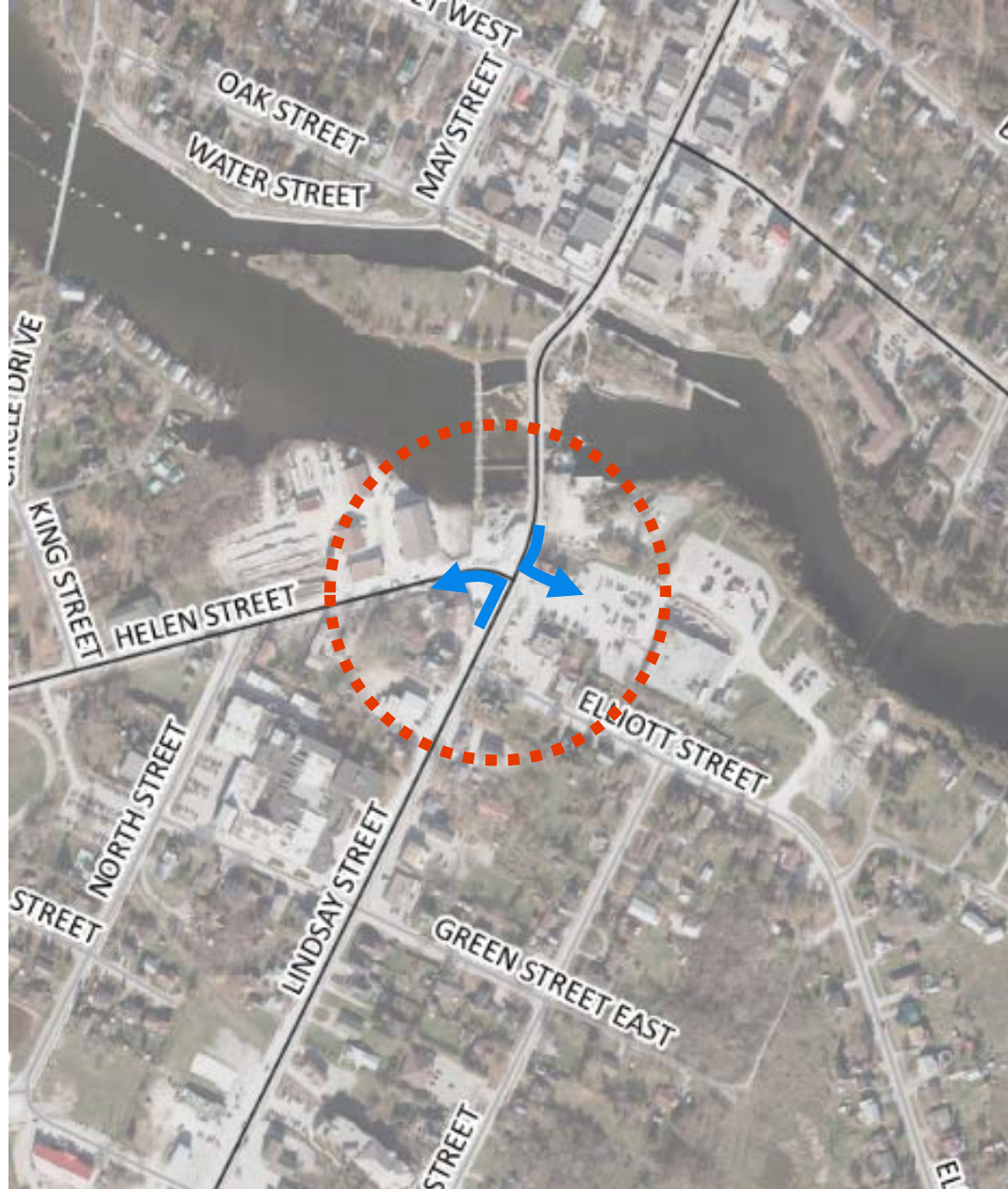
Supports downtown revitalization



Opportunity to improve safe crossings



No terrestrial, aquatic, boat or heritage impacts



Does not reduce number of vehicles in town or provide option for vehicles

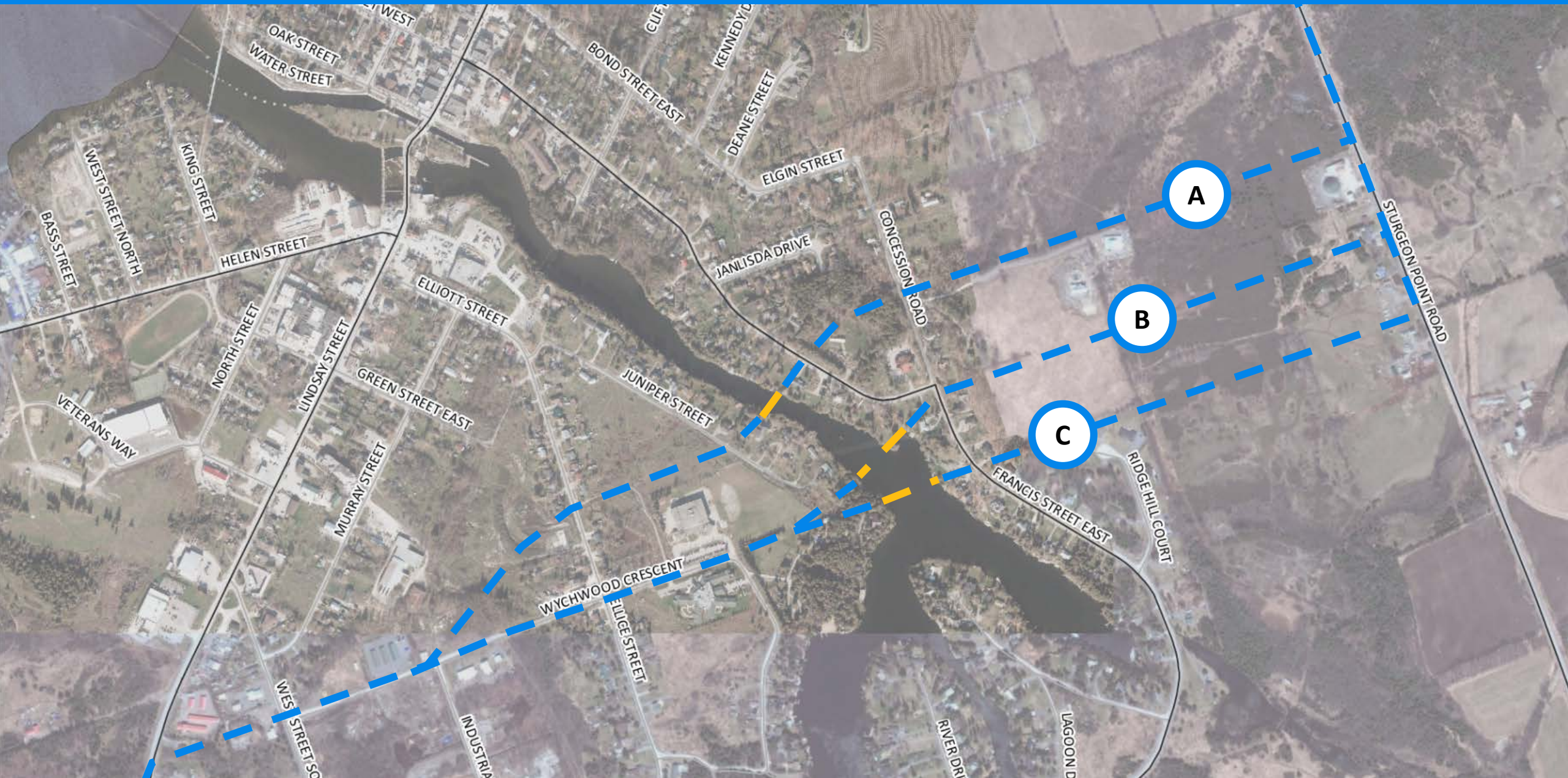


Potential for minor business impacts



Potential for minor property impacts

Option 2: In-Town Bridge Crossing



Option 2: In-Town Bridge Crossing



Greatest potential to address traffic & growth



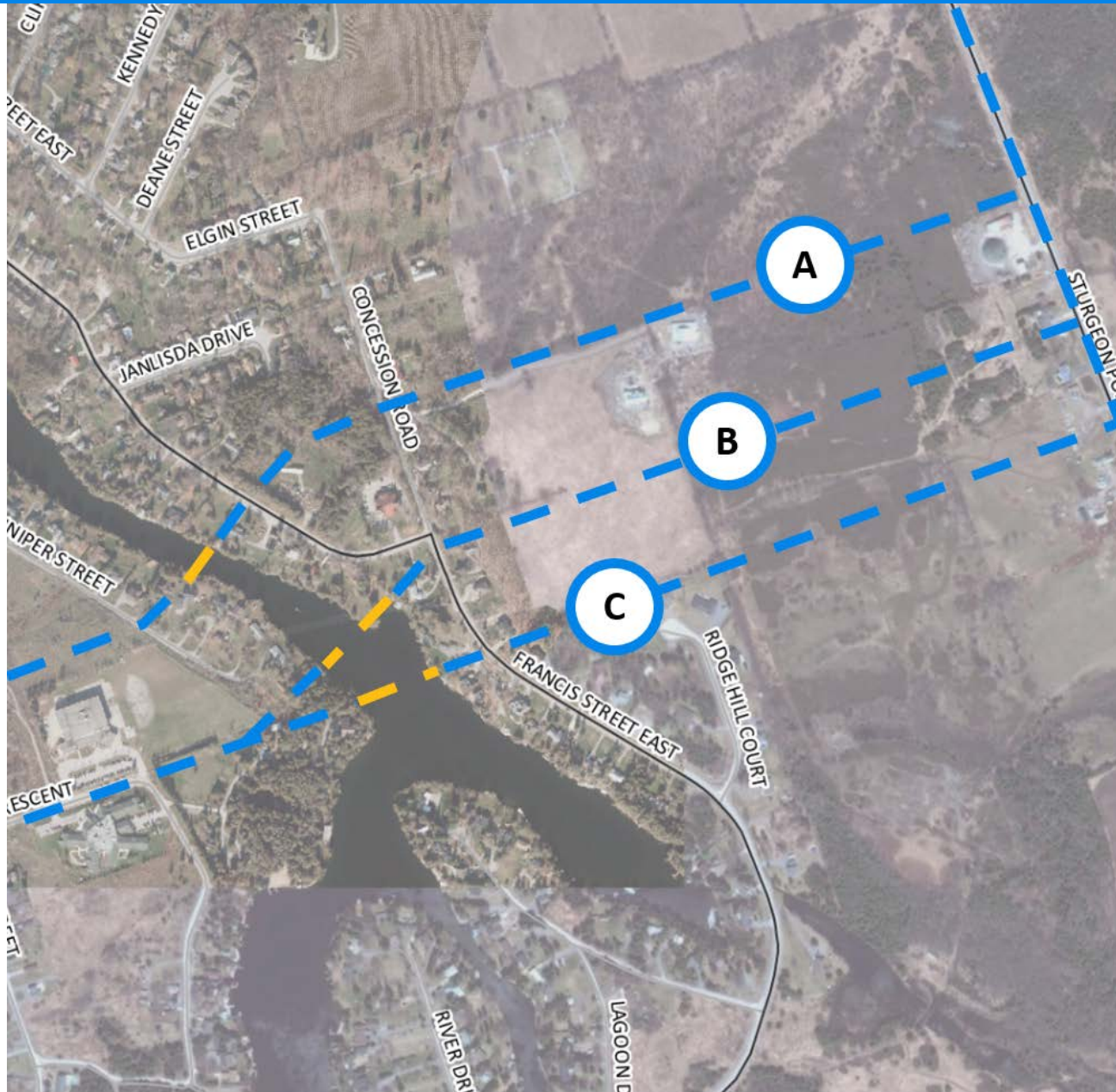
Improves AT experience



Improves traffic flow, provides new community connections



Improves main street experience which supports businesses



Property, heritage and environmental impacts



Boating impacts



Community impacts

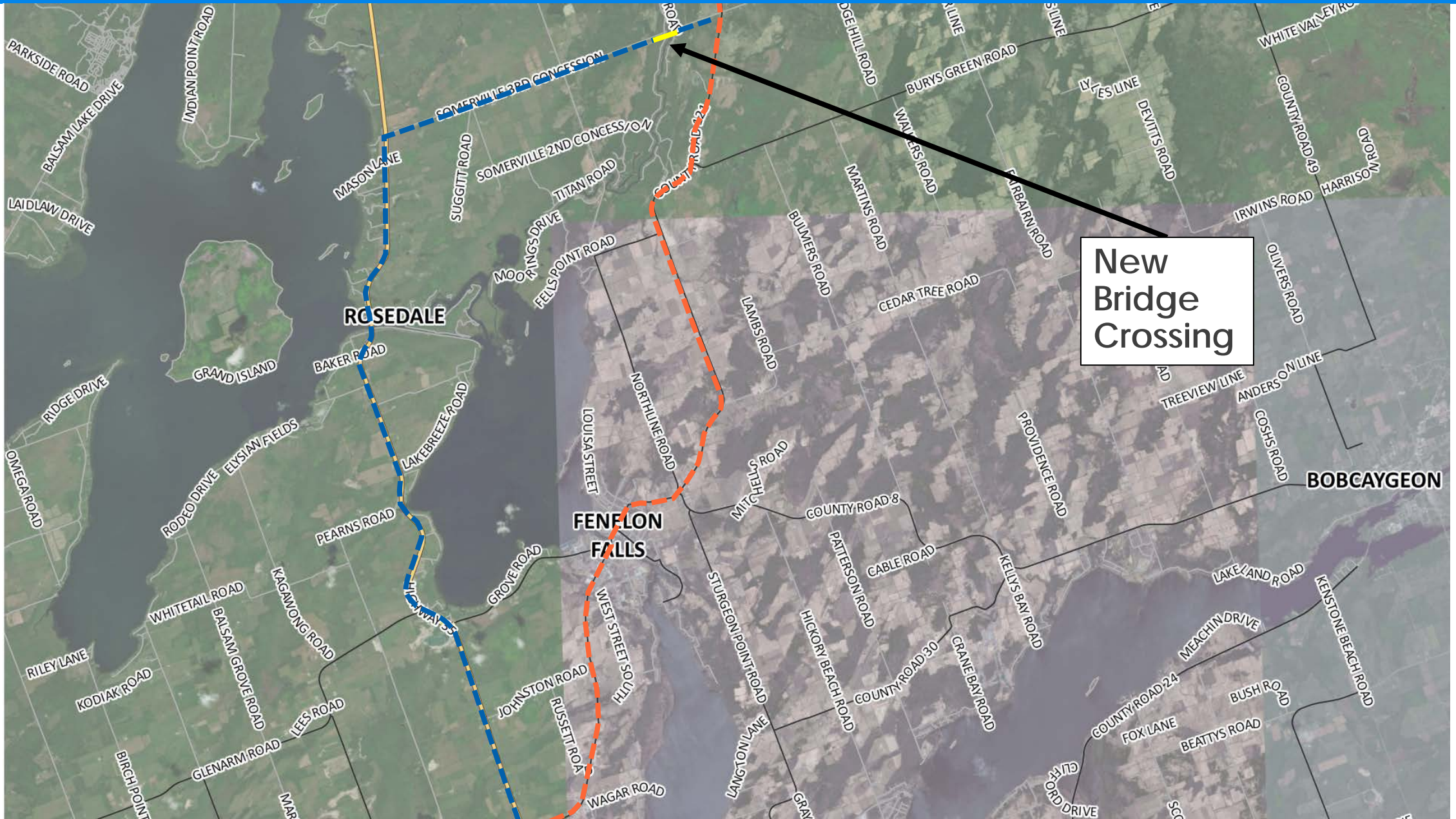


Technically challenging



High cost

Option 3: Bypass Crossing



Option 3: Bypass Crossing



Reduces traffic congestion (truck traffic)



Improves traffic flow



No impact to boat traffic



Lower cost than In-town



Minimal technical issues



Fewer overall environmental & heritage impacts



Less congestion supports Downtown revitalization



Community trade offs



Community trade offs



Does not address majority of the traffic congestion



Property impacts



Less traffic in town but no improvements to AT



Bridge crossing in flood plain

High Level Cost Comparison

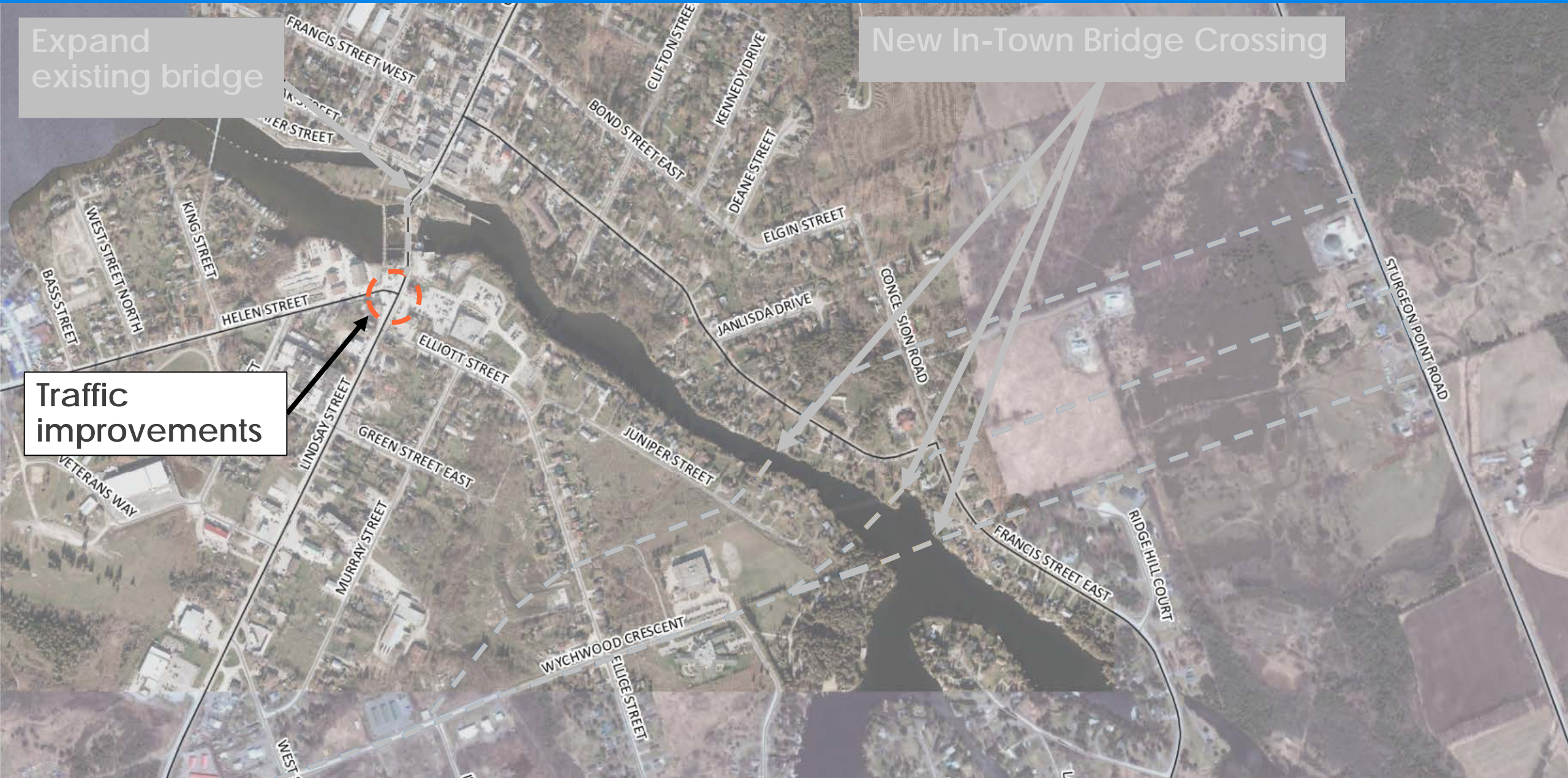
- **In-Town: Most Expensive** (1.5 – 2 times more expensive than by-pass. Tens of millions.)
 - Road reconstruction, bridge construction, property easements (26-29) and property acquisition (9-10).
 - Significant property costs.
- **Bypass: Less Expensive than In-Town crossings**
 - Road reconstruction, bridge construction, property easements (33) and property acquisition (3)
- **Traffic Improvements: Least Expensive** (range of relatively low cost improvements)
 - Depends on selected improvement but may include signal changes, intersection reconfiguration, land swap, access controls etc.

In-Town Solutions: Summary

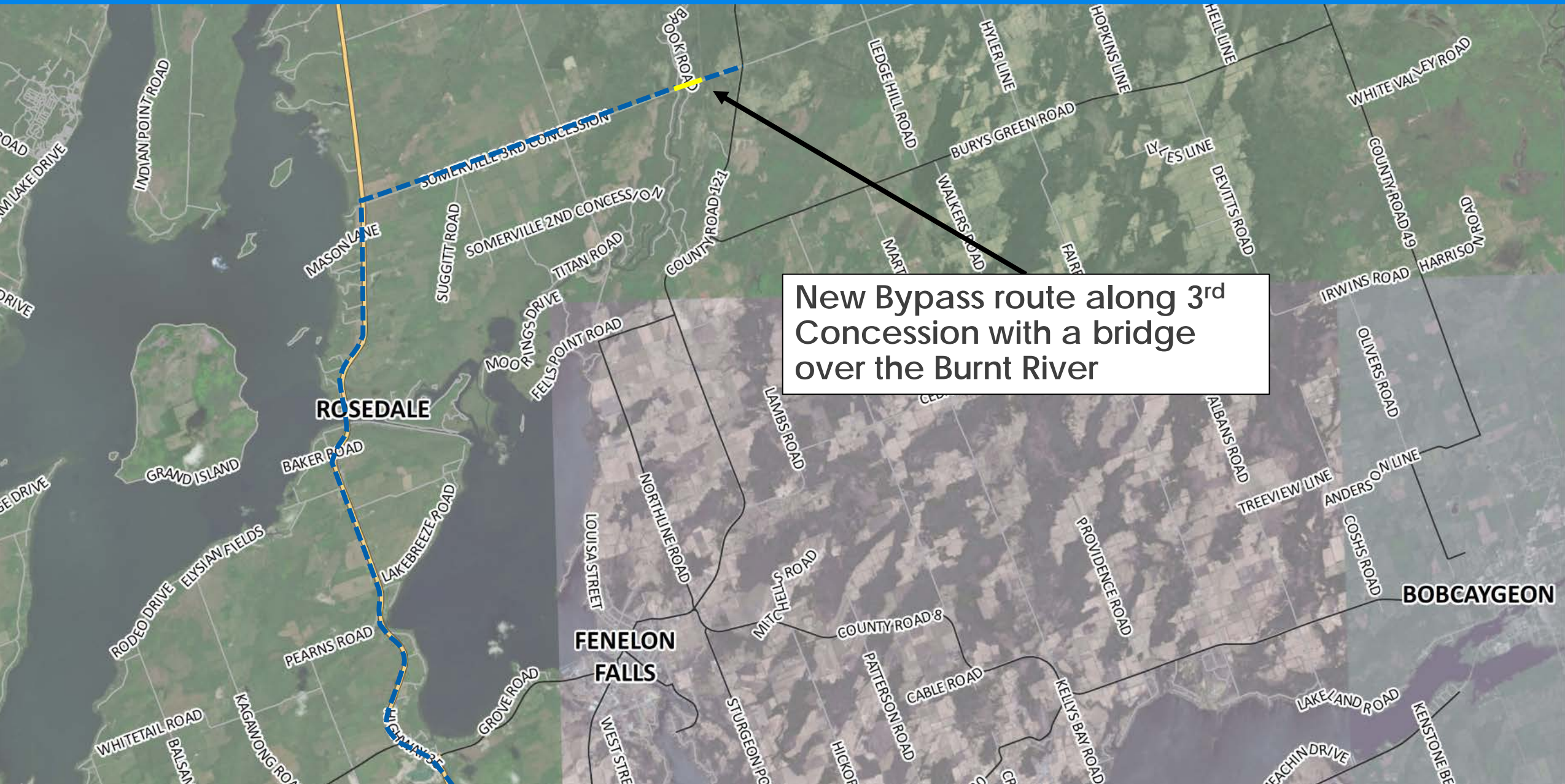
Expand
existing bridge

New In-Town Bridge Crossing

Traffic
improvements



Bypass Solution: Summary



New Bypass route along 3rd Concession with a bridge over the Burnt River

Preliminary Preferred Solution

In-Town Crossing

- Will address traffic issues on Lindsay and Colborne Streets
- Highest cost
- Technically more challenging
- Most significant environmental and community impacts

By-Pass

- Will address 20-30% of traffic
- Lower cost than In-Town crossing
- Fewer technical challenges
- Does not address In-Town intersection issues

Traffic Improvements

- Improves traffic flow but does not reduce traffic volumes
- Reduces queue times
- Lowest Cost

**Combine
for best
solution**

Activity: Table Discussions

- Did you understand the presentation? Do you have any questions about the work done to date?
- Which of the options do you prefer? Which do you not prefer?
- Which impacts and trade-offs are most important to you?

Questions?



Next Steps

- Confirm preliminary preferred
- Complete field studies
- Undertake final effects assessment and mitigation recommendations
- Draft Environmental Study Report
 - Recommend next steps in detailed design
- Prepare recommendation for Council



Thank You

