



Shediac Transportation Plan

Presentation to Council and Staff

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November 25, 2013




Outline

- Study Overview and Objectives
- Transportation Network Characteristics
- Assessment of Major Upgrades
- Implementation Plan for Traffic Improvements
- Active Transportation Network
- Active Transportation Implementation Plan

-- Study Overview and Objectives

Overview

- Identify future transportation needs, including roadway improvements, and all future arterial and collector roads;
- Identify opportunities to expand on the existing trails system;
- Identify streets that may incorporate options for cycling lanes and widened sidewalks or trails;
- Review and develop typical design standards for roadways and Active Transportation facilities;
- Develop a phased implementation plan of recommended improvements within a 5 to 10 year planning horizon;

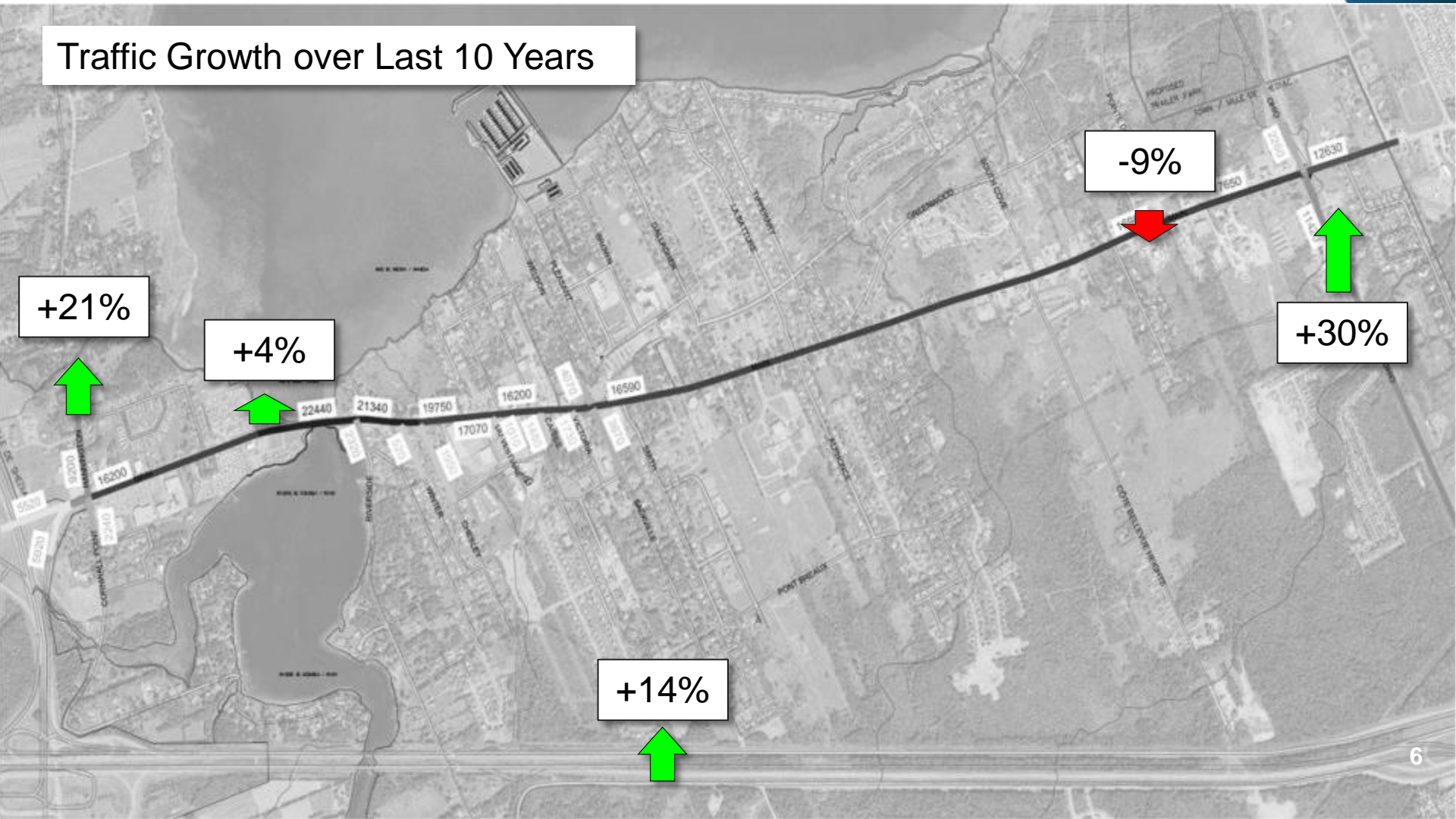
A circular photograph showing a street scene. In the foreground, a concrete sidewalk runs along a grassy area. To the right of the sidewalk, there is a red fire hydrant and a signpost. The signpost has two signs: a yellow diamond-shaped sign with a black silhouette of a pedestrian, and a rectangular sign with a black and white striped background and a yellow center containing the text 'NOUVEAU' and 'NEW'. The street is paved and has a white line marking. In the background, there are trees, utility poles, and a cloudy sky. The text 'Transportation Network Characteristics' is overlaid in white on a semi-transparent grey rectangular background in the center of the image.

Transportation Network Characteristics

Existing Traffic Conditions

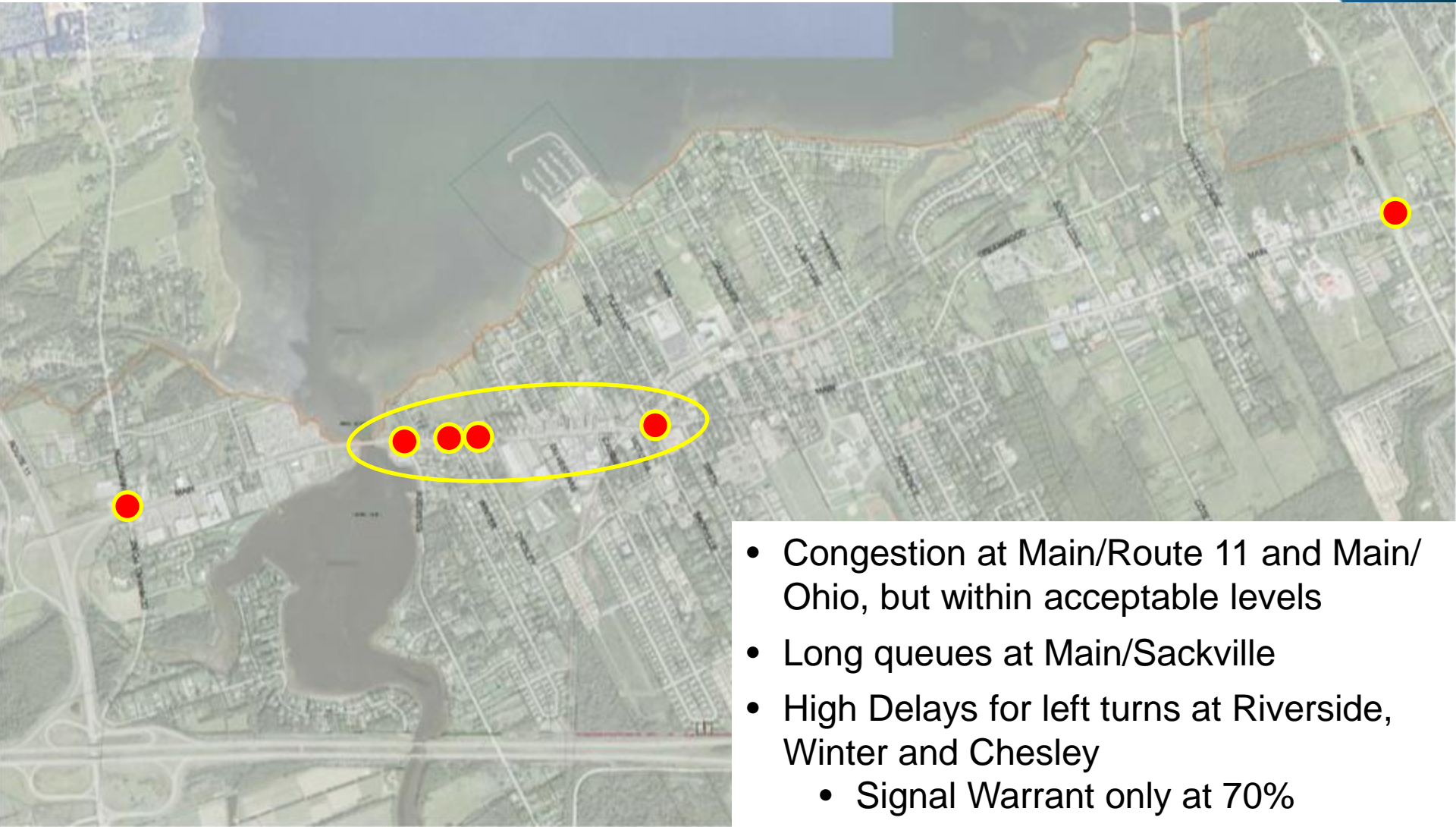
Traffic Growth Trends

Traffic Growth over Last 10 Years



-- Existing Traffic Conditions

Locations of Congestion and Delay



- Congestion at Main/Route 11 and Main/Ohio, but within acceptable levels
- Long queues at Main/Sackville
- High Delays for left turns at Riverside, Winter and Chesley
 - Signal Warrant only at 70%

Future Traffic Conditions (2023)

Locations of Congestion and Delay



- Congestion expands along Main Street throughout the downtown
- Queuing at Main Street/Route 11
- Traffic Signals become warranted at Chesley Street
- Other improvements needed to reduce traffic on Main Street

-- Existing and Future Traffic Conditions

Summary

- Heavy traffic on Main Street during summer season
- Difficult to turn onto Main Street from side streets and driveways,
- No traffic signals are warranted at this time, but likely to become warranted within 10 years
- No alternative east-west route through the town puts all the pressure on Main Street
- Apparent need for a 3rd access to Route 15, connecting to the Downtown



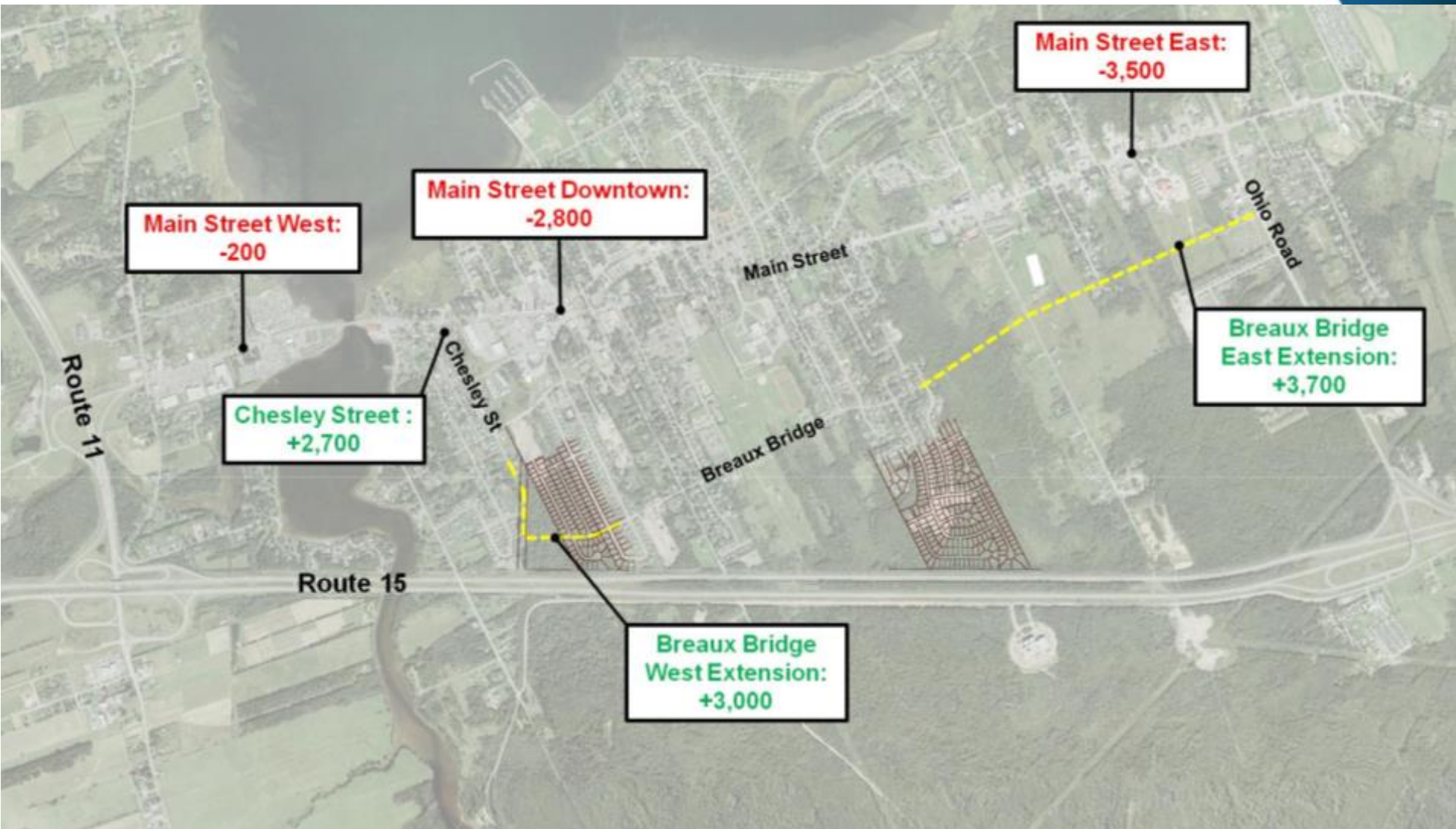
Assessment of Major Upgrades

Major Upgrades Assessment

- The following major upgrades were assessed in terms of impact to traffic patterns:
 - **Breaux Bridge Street Extension**
 - **Chesley Street Extension to Breaux Bridge Street**
 - **3rd Access to Route 15**

Major Upgrades Assessment

Breaux Bridge and Chesley Extensions



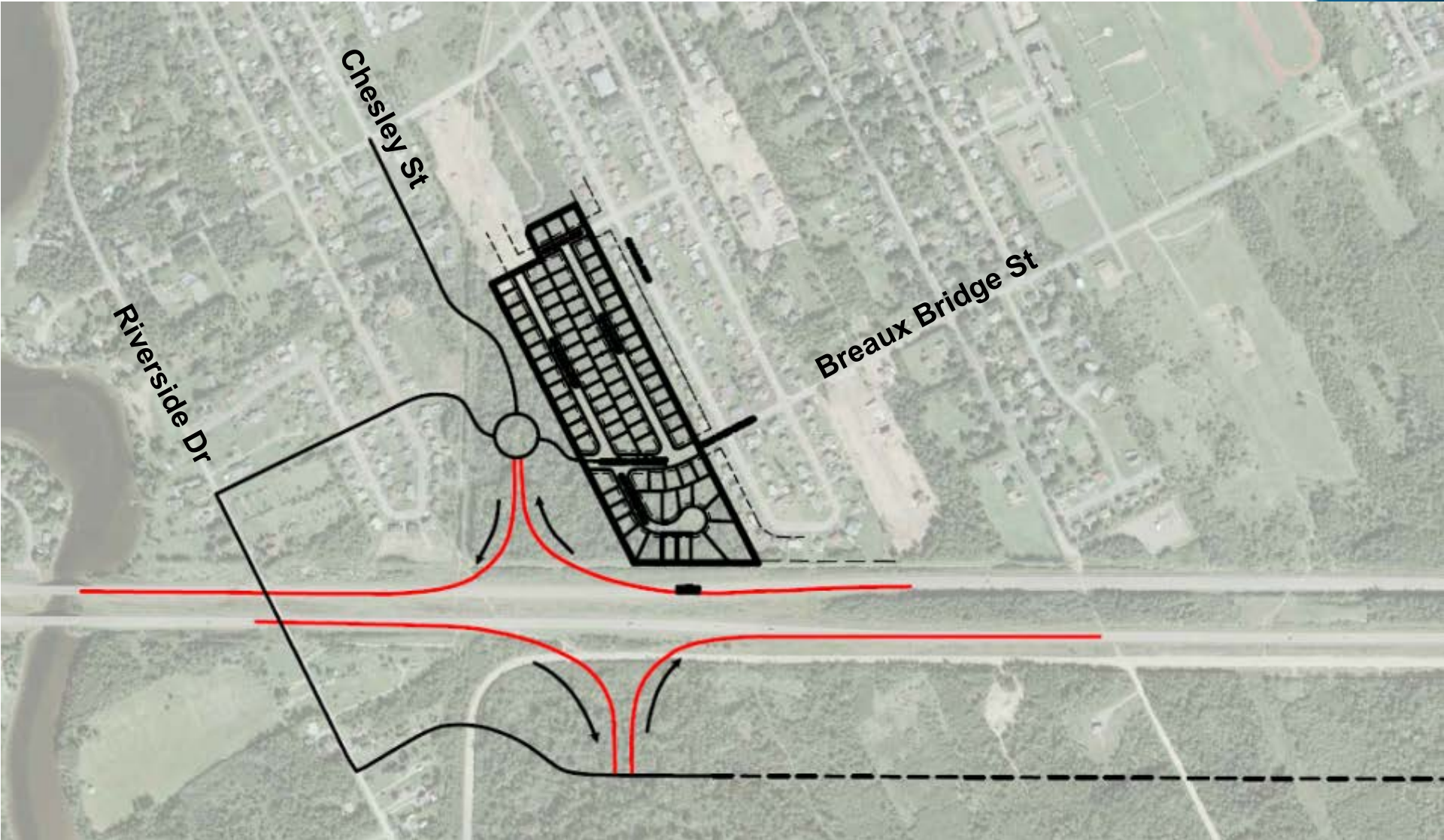
Major Upgrades Assessment

3rd Access to Route 15 CONCEPT 1A



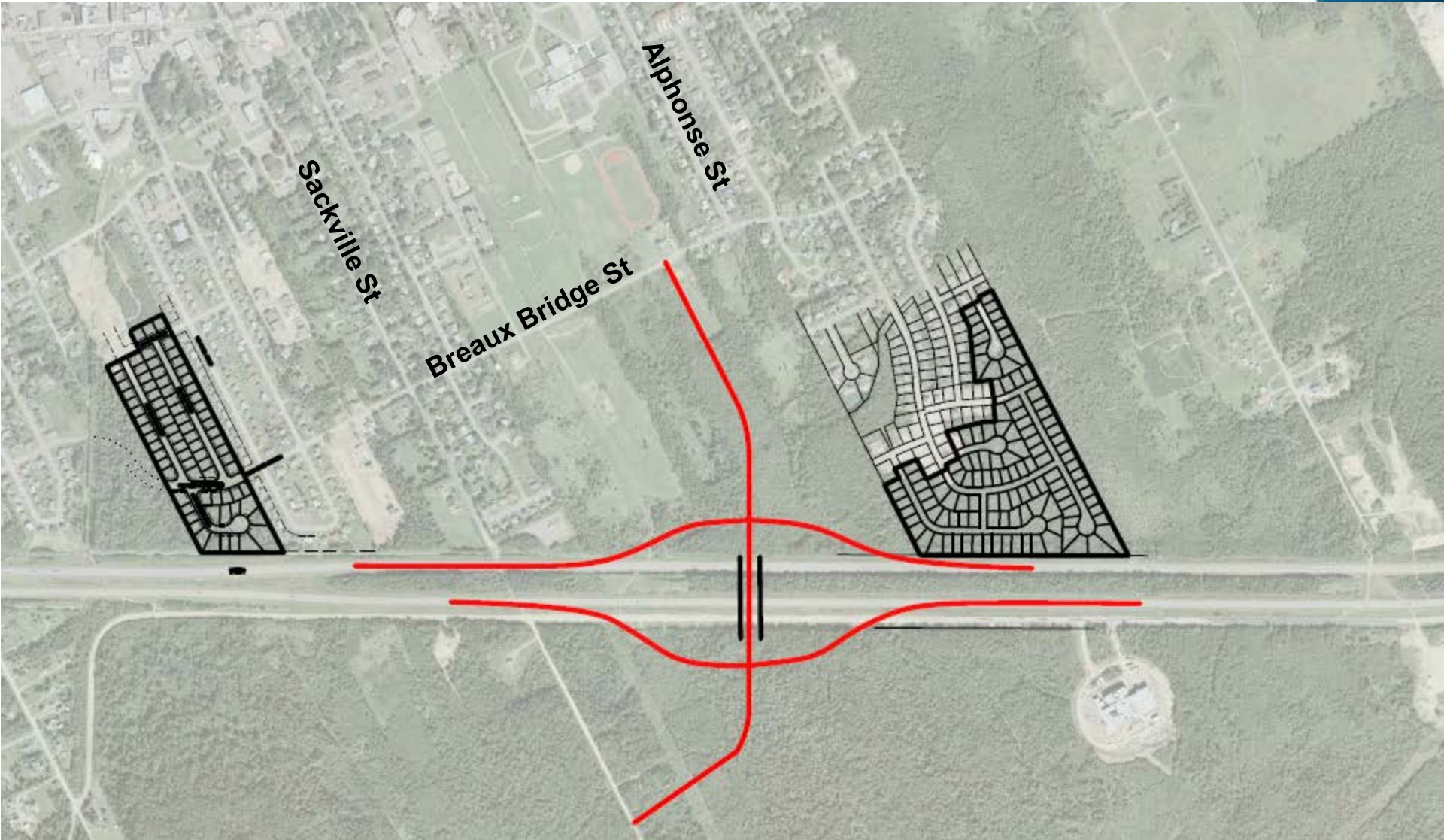
Major Upgrades Assessment

3rd Access to Route 15 CONCEPT 1B



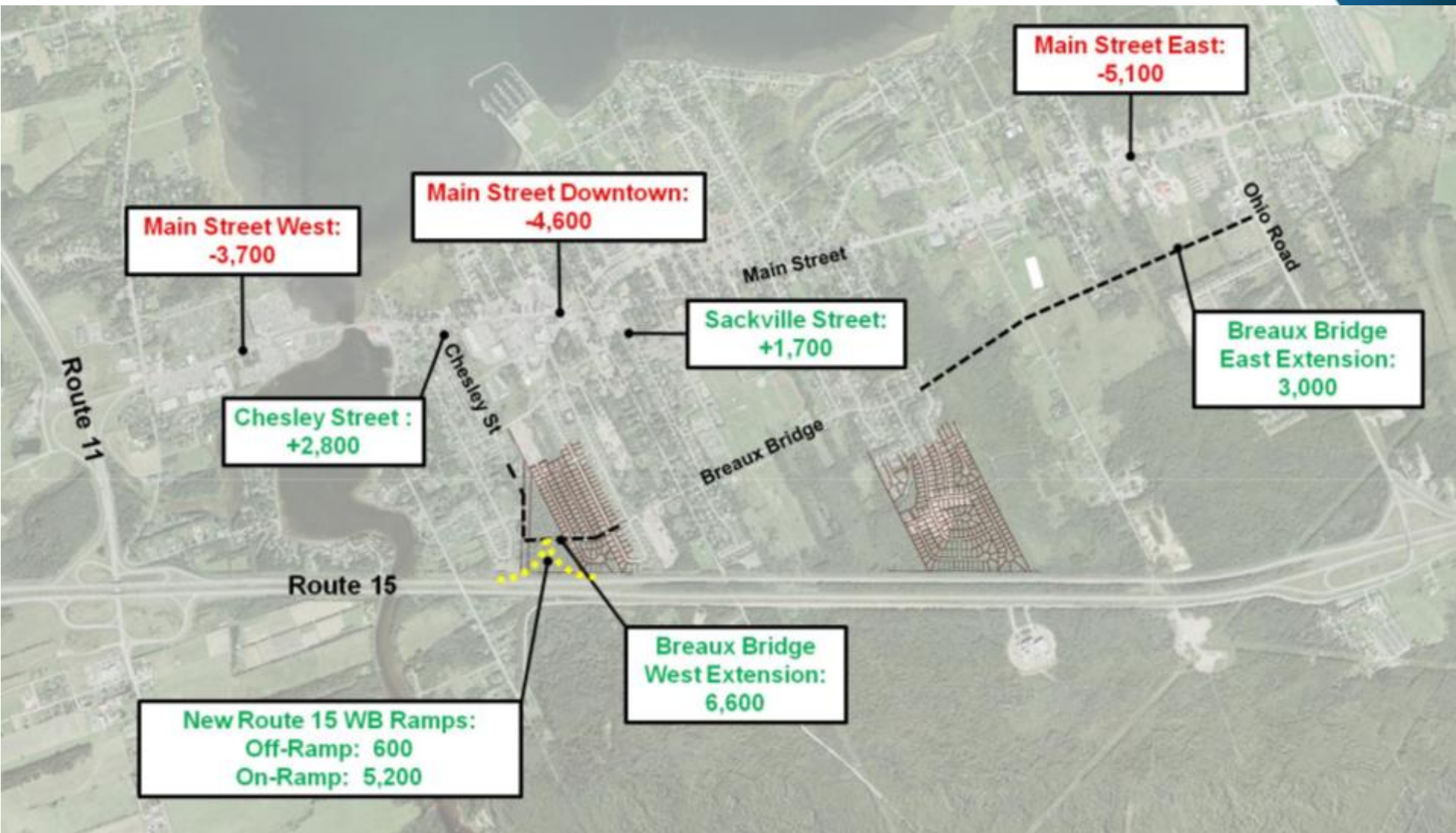
Major Upgrades Assessment

3rd Access to Route 15 CONCEPT 2



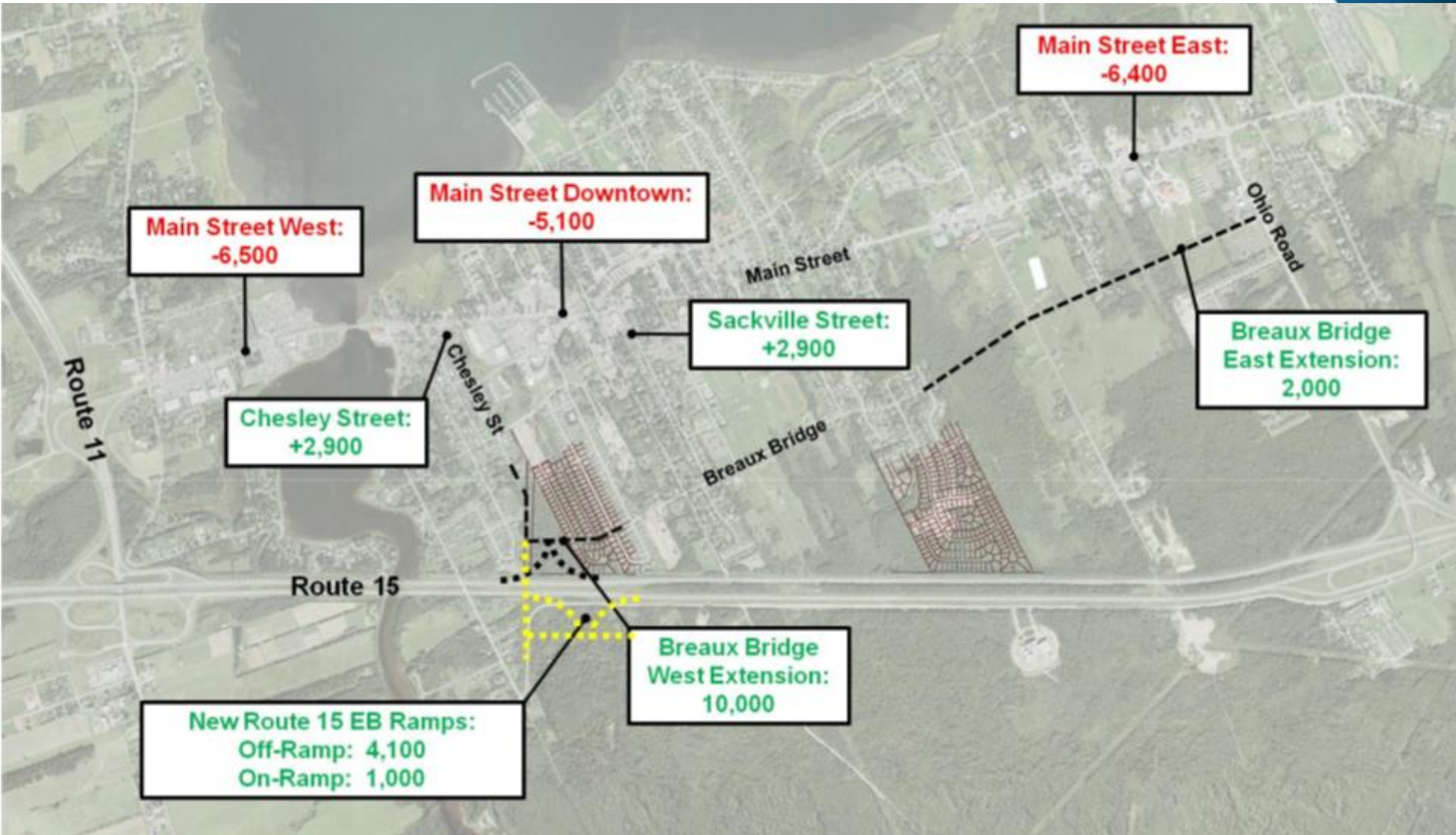
Major Upgrades Assessment

3rd Access to Route 15 – Westbound Ramps



Major Upgrades Assessment

3rd Access to Route 15 – Eastbound Ramps and Overpass





Implementation Plan: Traffic Improvements

Implementation Plan for Traffic Improvements

Overview

- The recommended improvements have been prioritized in the following implementation periods to aide in the planning of capital expenditures.
 - Immediate Term (0-2 years)
 - Short Term (2-5 years)
 - Medium to Long Term (5-10+ years)
- Opinions of probable construction costs were also prepared for each improvement within the 5-year plan.

Implementation Plan for Traffic Improvements

Traffic Signal Upgrades

0 to 2 years

- Several traffic signal equipment and timing upgrades are recommended.
- These should be completed in the immediate term
- Costs are very low

Implementation Plan for Traffic Improvements

Main Street/Sackville Street

0 to 2 Years	1. Install right turn slip lane and island	\$60,000
	2. Lengthen westbound left turn lane	\$1,000



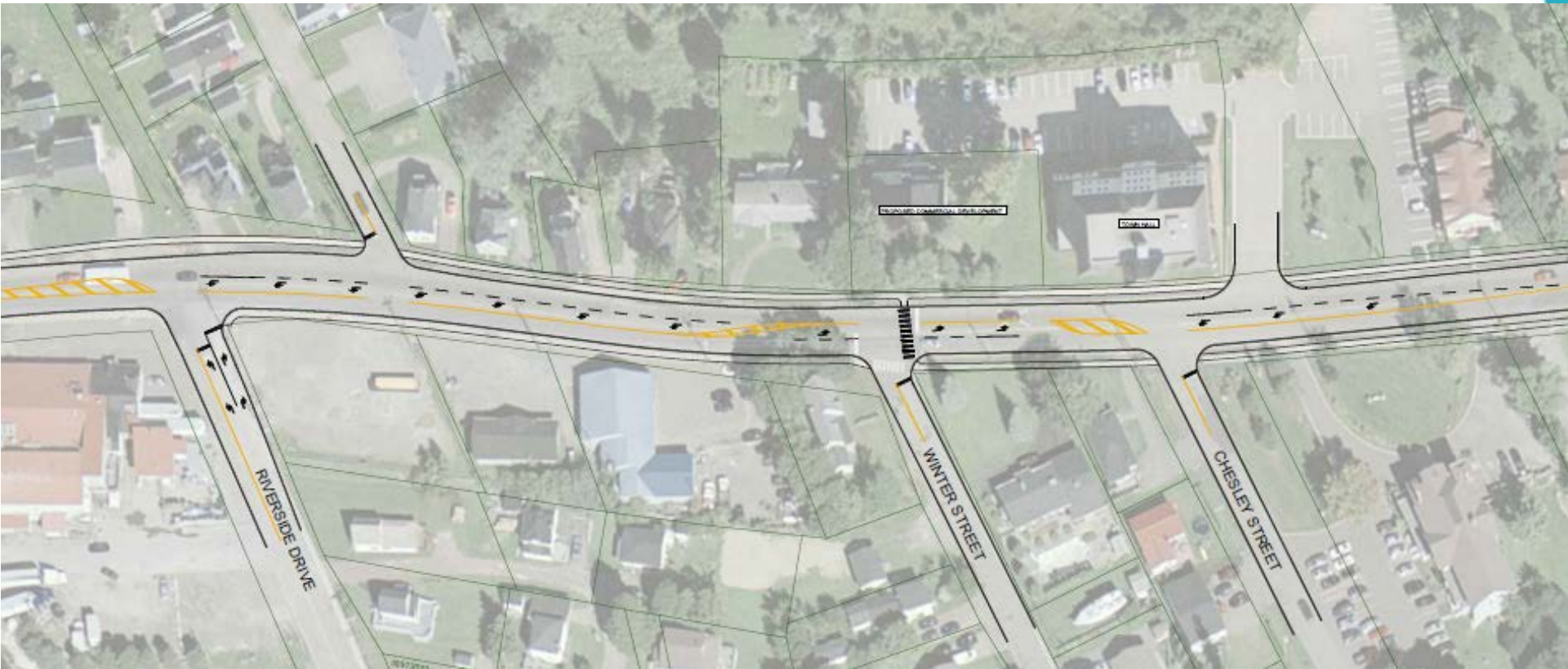
Implementation Plan for Traffic Improvements

Left Turn Lanes on Main Street

0 to 2 Years

Re-paint Main Street to provide left turn lanes at Riverside Drive, Chesley Street, and new commercial access west of Town Hall

\$3,000



Implementation Plan for Traffic Improvements

3rd Access to Route 15

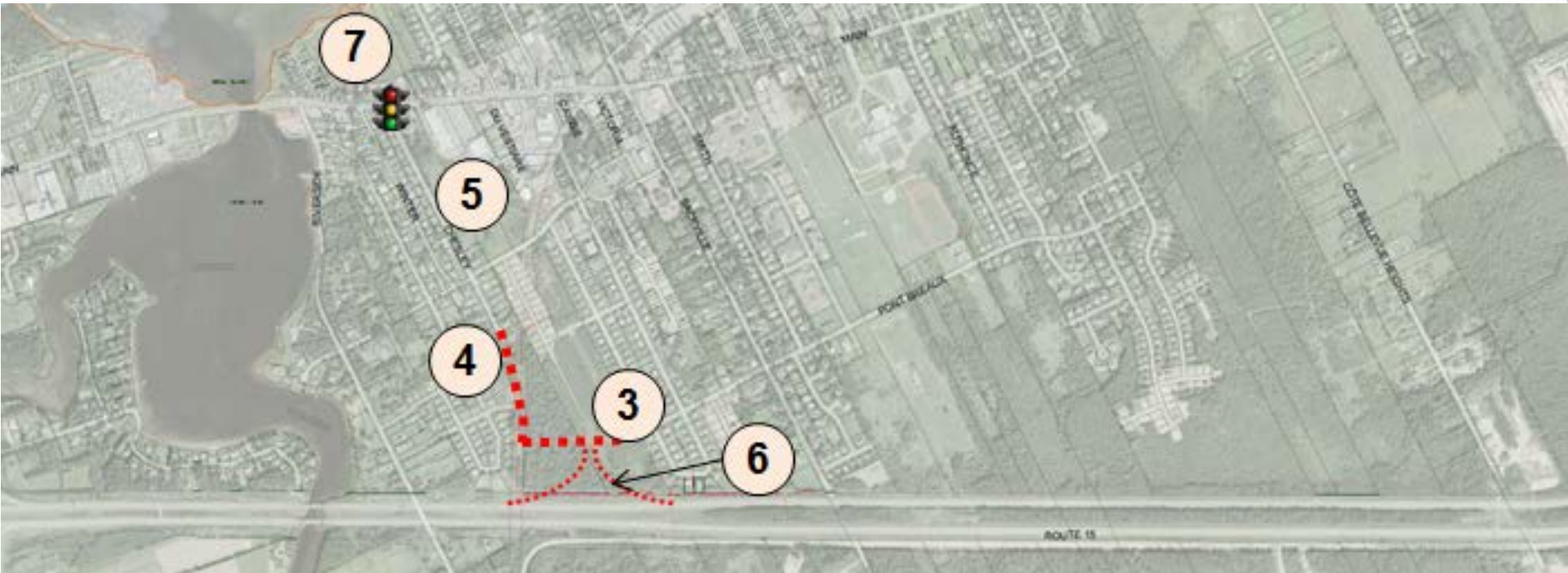
0 to 2 Years	1. Initiate a Functional Planning/Pre-Design Study to finalize the location and design of a new Route 15 access
	2. Secure the required right-of-way

Implementation Plan for Traffic Improvements

3rd Access to Route 15

2 to 5 Years

3. Construct Breaux Bridge west extension (340 m)	\$850,000
4. Construct Chesley extension (250 m)	\$600,000
5. Upgrade Chesley Street with bike Lanes and sidewalk (670 m)	\$1,500,000
6. Construction new Route 15 WB Ramps onto the Breaux Bridge extension	\$2,000,000
7. Upgrade and Signalize Main Street / Chesley Street	\$300,000

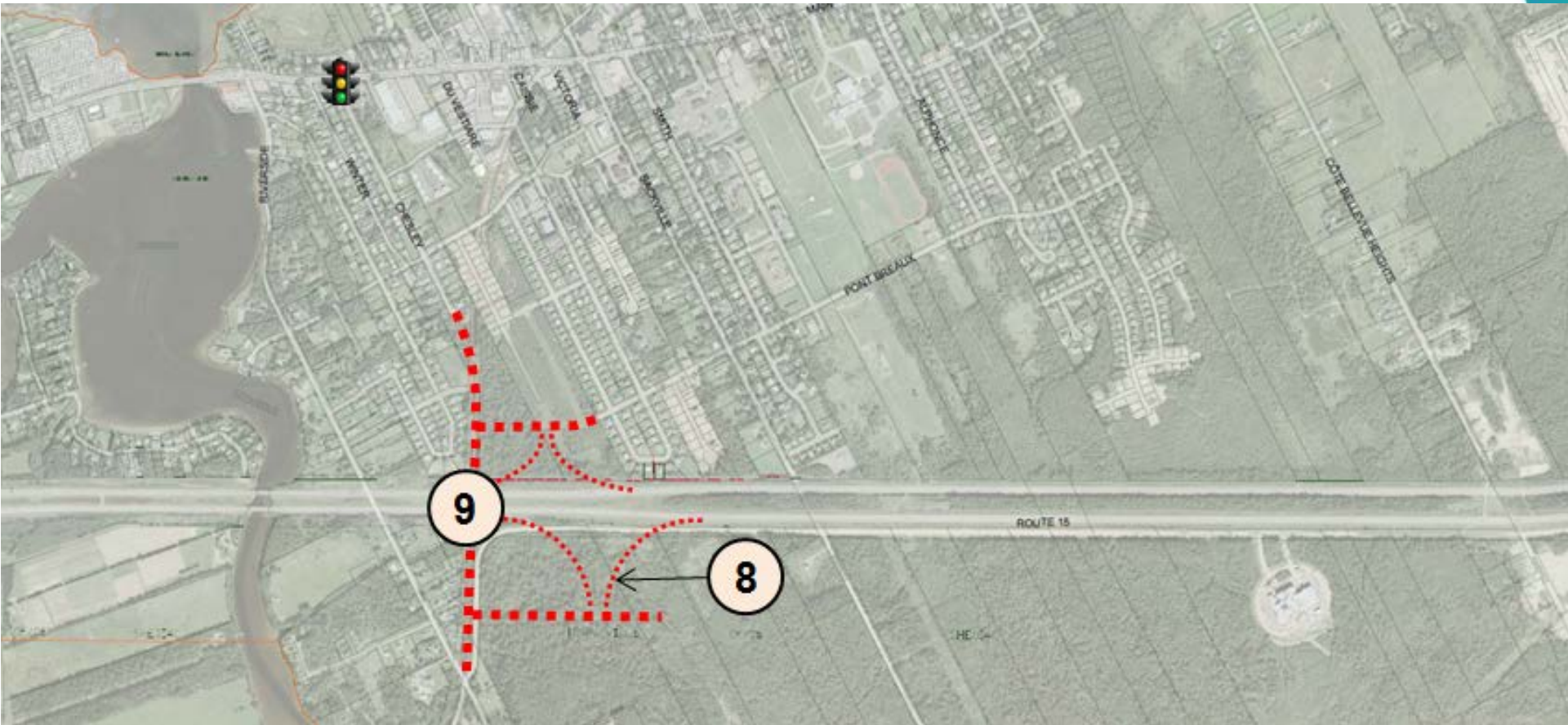


Implementation Plan for Traffic Improvements

3rd Access to Route 15

**5 to 10+
Years**

- | | |
|---------------------------|--|
| 5 to 10+
Years | 8. Construction new Route 15 WB Ramps onto the Breaux Bridge extension |
| | 9. Upgrade and Signalize Main Street / Chesley Street |



Implementation Plan for Traffic Improvements

Breaux Bridge Extension

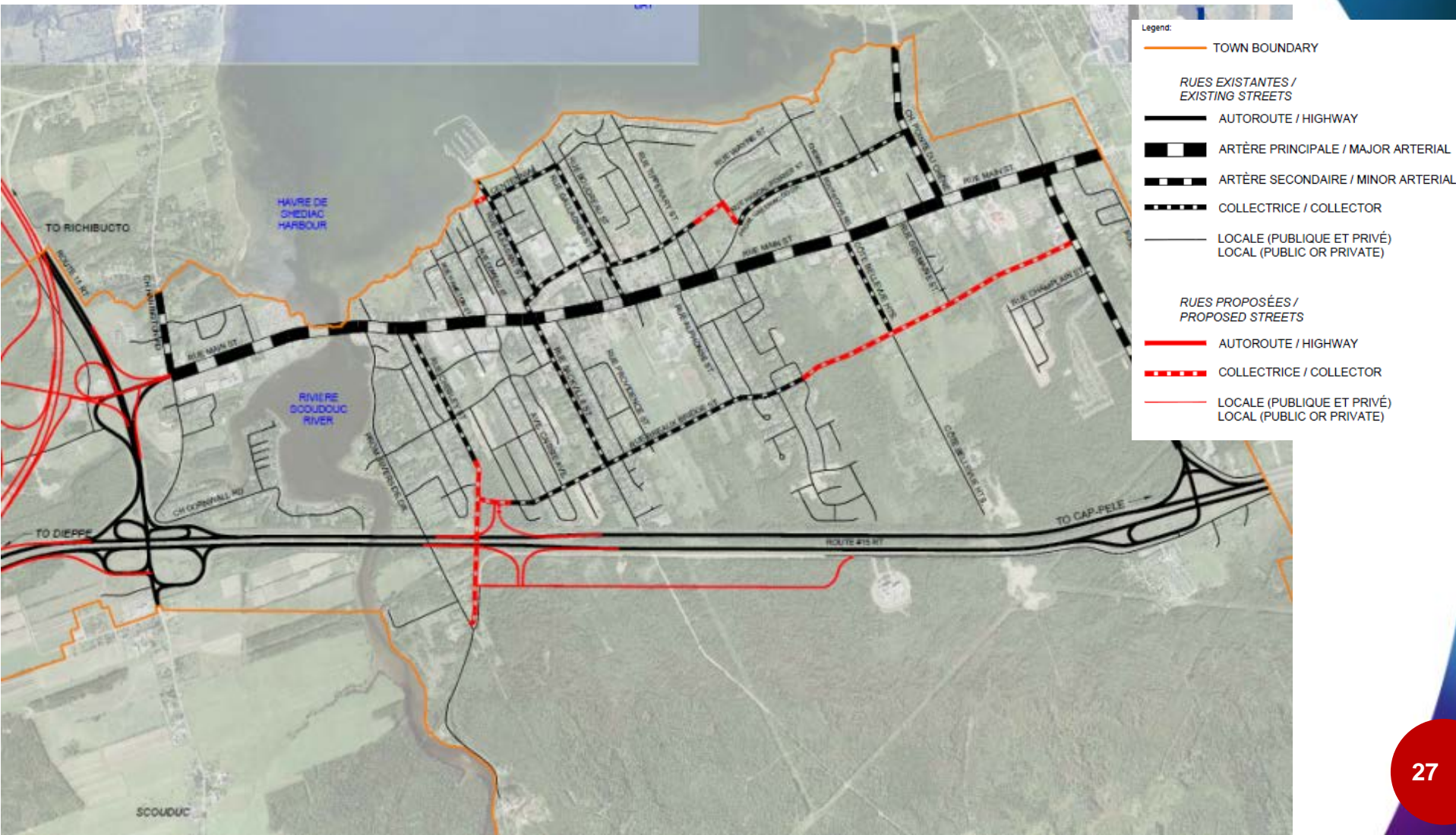
**5 to 10+
Years**

1. Complete Breaux Bridge Extension to Ohio Road (1,500 m)



-- Street Classification

Recommended Classification Map

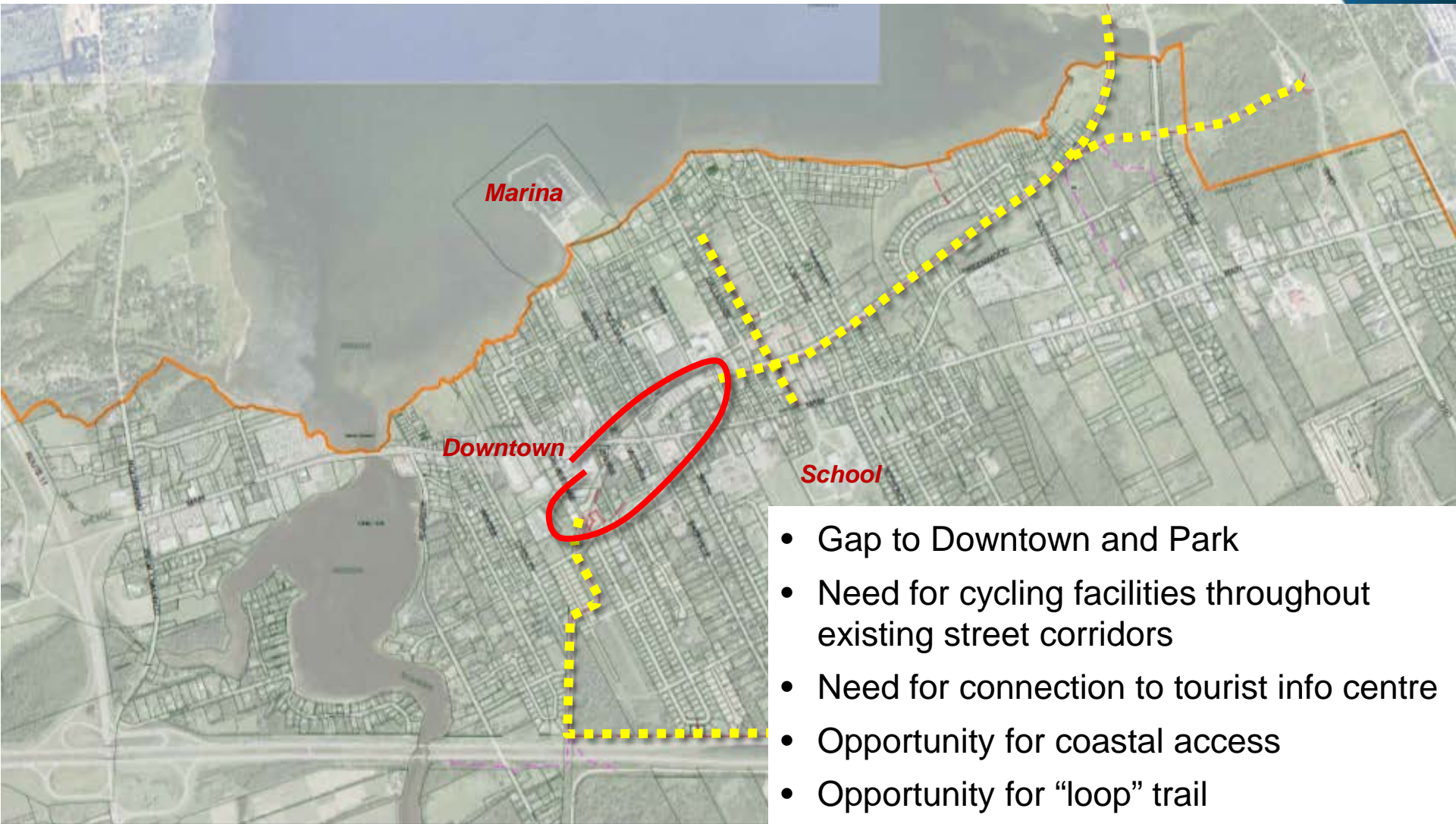




Active Transportation Network

Existing Trails

Gaps and Opportunities



- Gap to Downtown and Park
- Need for cycling facilities throughout existing street corridors
- Need for connection to tourist info centre
- Opportunity for coastal access
- Opportunity for “loop” trail

-- Active Transportation Network

Network Overview

- The recommended AT Network is made up of:
 - **Primary AT Roadway Corridors**
 - **Primary AT Multi-Use Pathways**
 - **Secondary AT Roadway Corridors**
 - **Secondary AT Multi-Use Pathways**

Active Transportation Network

Recommended Network Map



Legend:

- PROPERTY LINE
- TOWN BOUNDARY
- PRIMARY AT ROUTE (ON-ROAD FACILITY)
- - - PRIMARY AT ROUTE (MULTI-USE PATH FACILITY)
- SECONDARY AT ROUTE (ON-ROAD FACILITY)
- - - SECONDARY AT ROUTE (MULTI-USE PATH FACILITY)



-- Active Transportation Network

Types of Facilities

- **Dedicated Bike Lanes**

- Designated area for cyclists, separated from traffic by a solid white line.
- Applicable to arterial and major collector roadways



-- Active Transportation Network

Types of Facilities

- **Wide Shared Lanes**
 - Shared roadway space for use by both vehicles and cyclists.
 - Vehicles and cyclist normally operate side-by-side
 - Marked by “Sharrows”
 - Used on lower volume streets or where space does not permit dedicated bike lanes



-- Active Transportation Network

Types of Facilities

- **Paved Shoulders**

- 1.0-2.0m wide paved shoulders along roadways without curb
- May also be used by pedestrians
- Usually signed only (no markings)



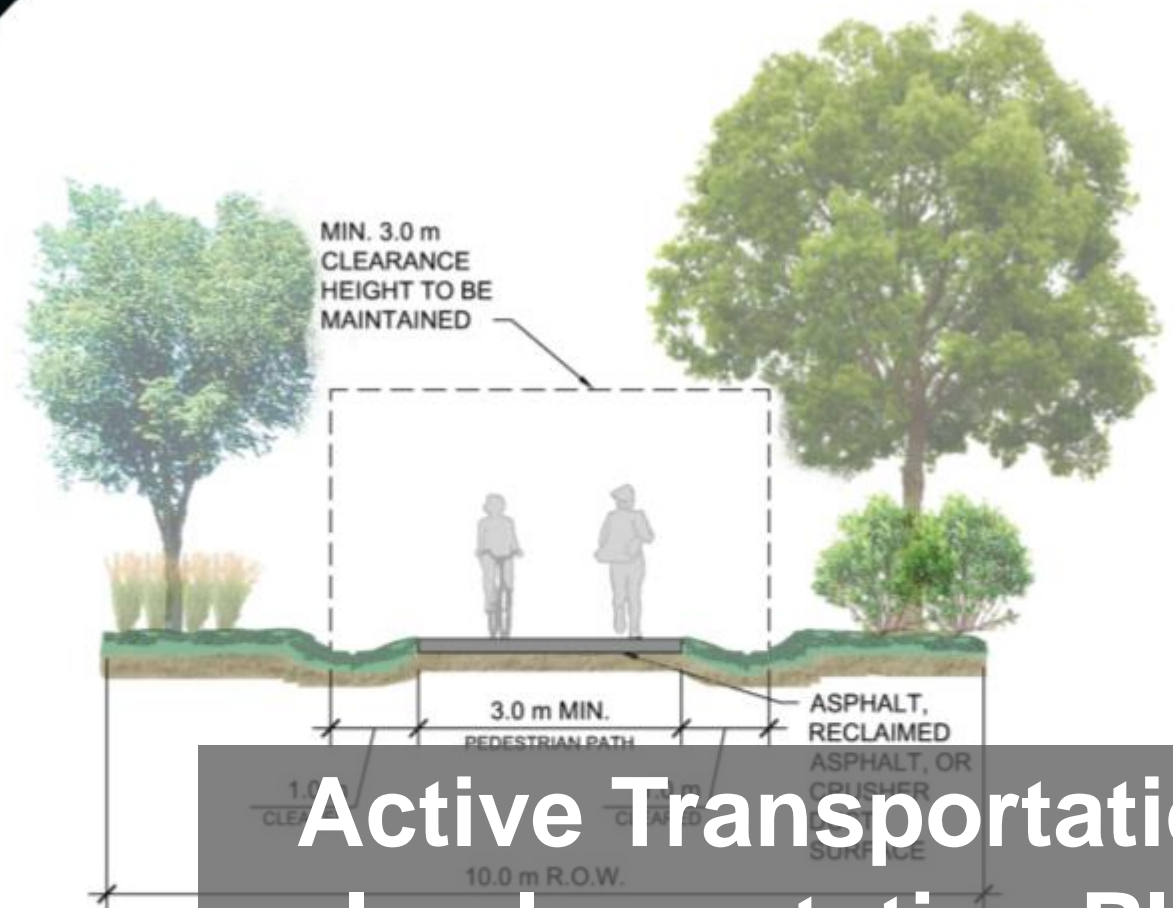
-- Active Transportation Network

Types of Facilities

- **Multi-Use Pathways**

- Wide (3.0m) trails for both pedestrians and cyclists
- Can be hard-surfaced or granular (crusher dust)
- Widely popular among users





Active Transportation Implementation Plan

Active Transportation Implementation Plan

Project 1: Shediac AT Loop

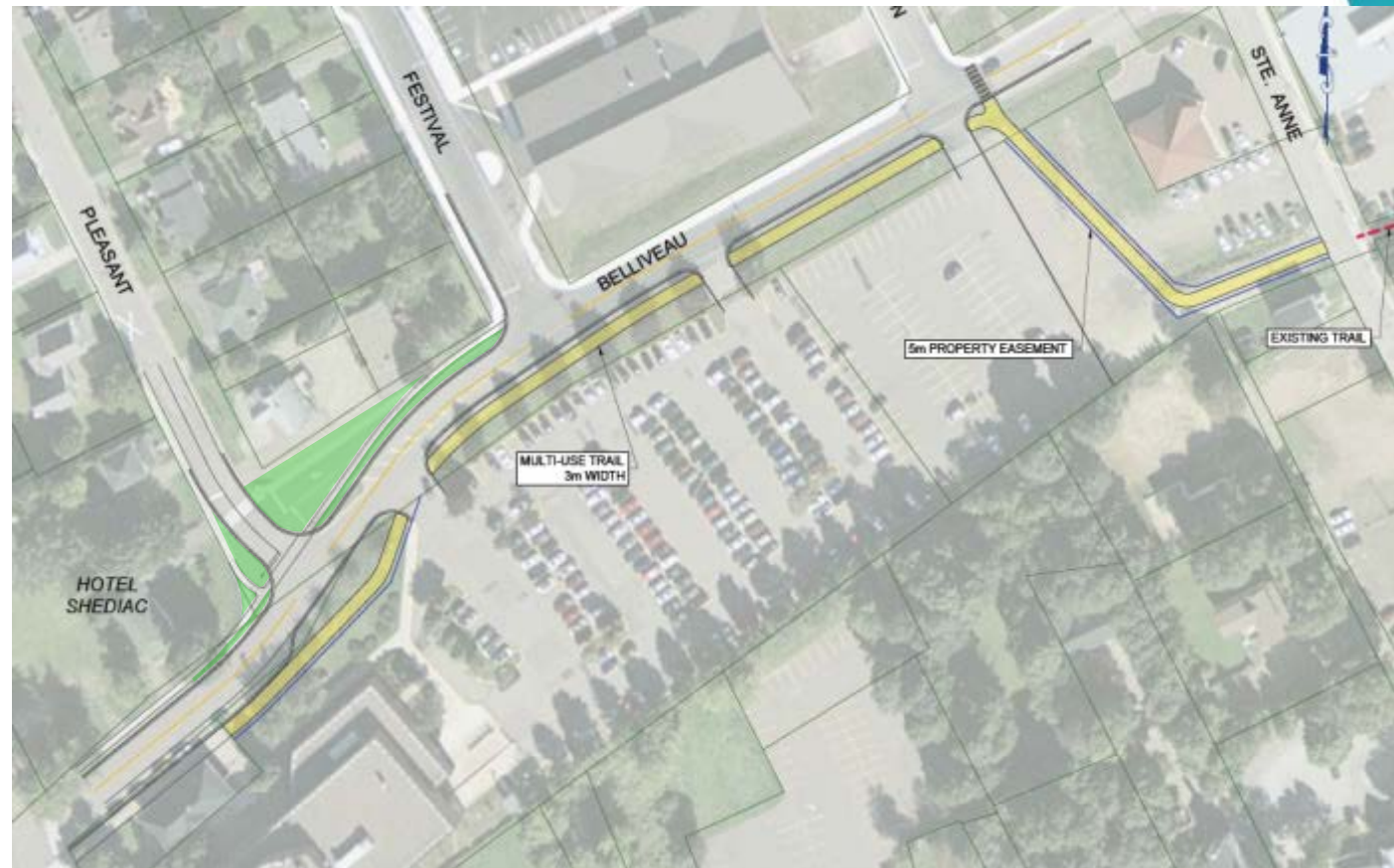
- **0 to 2 years**
 - Complete pathway from Downtown to Parlee Beach Park
 - Facility will be entirely multi-use pathway
 - Hard surface from Downtown to Sentier NB gate (1,000 m)
 - Granular surface from Sentier NB gate to Parlee Beach Park Road (1,900 m)
- Estimated Cost: \$370,000



Active Transportation Implementation Plan

Project 1: Shediac AT Loop

- **0 to 2 years**
 - Belliveau Avenue Multi-use Pathway and intersection realignment



Active Transportation Implementation Plan

Project 1: Shediac AT Loop

- **2 to 5 years**

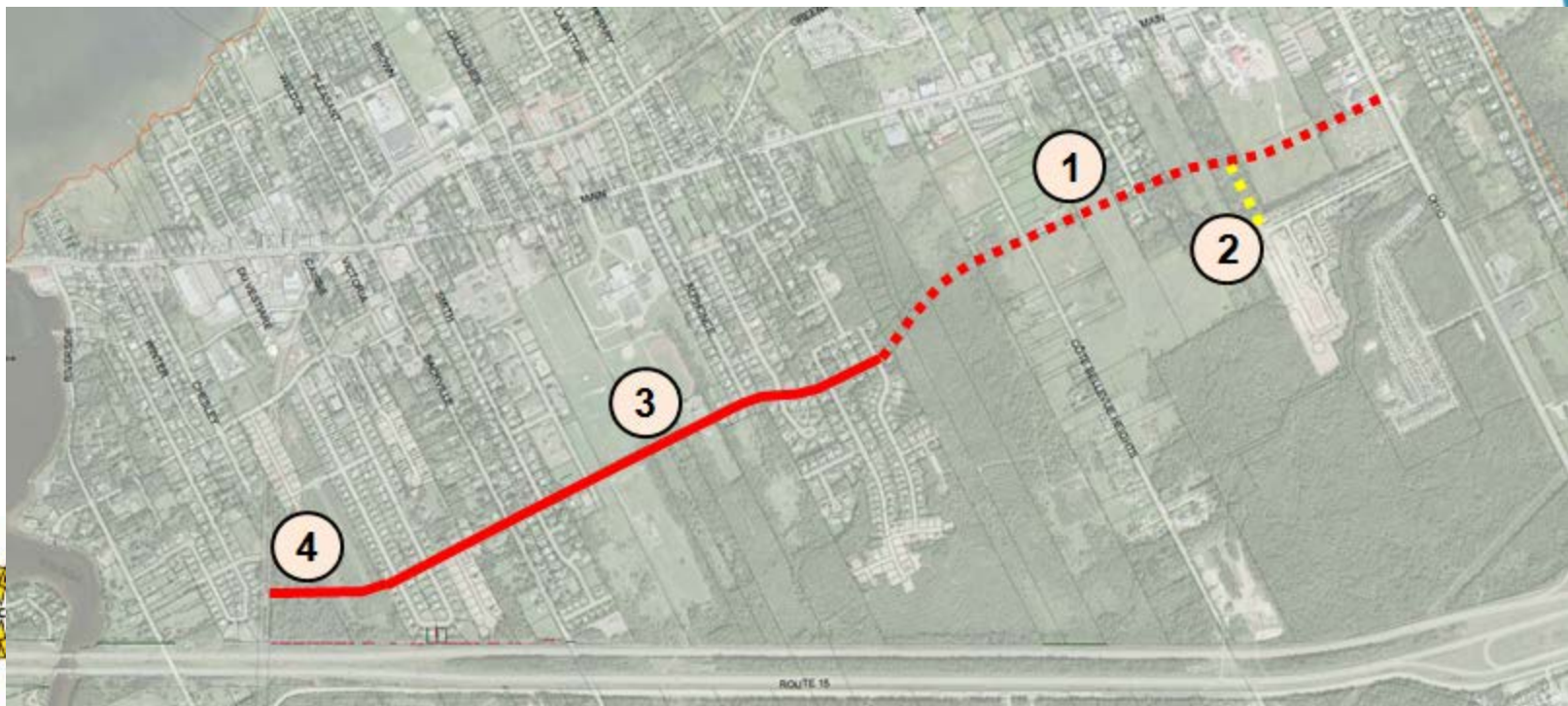
- Complete remaining loop (6.9 km)
- Shared on-street route on Victoria St
- Hard surface path along Harper Dr and Clarence Street
- Remaining is granular natural and roadside pathways
- Estimated Cost: \$600,000



Active Transportation Implementation Plan

Project 2: Breaux Bridge AT Route

2 to 5 Years	1. Secure corridor for future Breaux Bridge Extension to Ohio Road. Construct a granular pathway along this corridor (1,450 m).	\$160,000
	2. Connect multi-use pathway to Champlain Street (190 m)	\$21,000
	3. Continue to upgrade existing Breaux Bridge Street with bike lanes and sidewalk (1,000 m)	\$2,200,000
	4. Extend Breaux Bridge Street west with a roadside multi-use pathway (340 m)	\$850,000



Active Transportation Implementation Plan

Project 3: Main Street to Marina Route

0 to 2 Years	1. Secure ROW or agreement for pathway corridor	N/A
2 to 5 Years	2. Construct granular pathway from Dock Street to Boishebert Street (350 m). Boardwalks could be considered throughout wetland area.	\$40,000
	3. Construct granular pathway from Weldon Street to Pleasant Street (80 m).	\$9,000
	4. Sign Dock Street and Shore Drive as Cycling Route/AT Route.	\$1,000



Active Transportation Implementation Plan

Project 4: Main Street AT Route

**5 to 10
Years**

1. Restripe Main Street with three vehicle lanes plus 1.5 m bike lanes on each side (710 m)
2. Construct roadside multi-use pathway from Tourist Information Centre to Dock Street and construct bridge over Scoudouc River (350 m)



Active Transportation Implementation Plan

Project 4: Main Street AT Route

**5 to 10
Years**

3. Widen Main Street to accommodate 3 vehicle lanes plus 1.5 m bike lanes (370 m)
4. Implement shared lanes and curb extensions on Main Street through the Downtown (380 m)
5. Upgrade Main Street/Sackville Street intersection to provide sufficient width for shared lanes and other improvements.



3 4 5



Active Transportation Implementation Plan

Project 4: Main Street AT Route

**5 to 10
Years**

- | | |
|--------------------------|--|
| 5 to 10
Years | 6. Implement shared lanes on Main Street from Sackville Street to Monique Street (1,290 m) (or explore options for a roadside multi-use trail) |
| | 7. Restripe Main Street with three vehicle lanes plus 1.5 m bike lanes from Monique Street to west of Ohio Road (1,350 m) |
| | 8. Upgrade Main Street/Pointe du Chene Road intersection with a westbound right turn lane and continuous bike lanes in each direction. |



Active Transportation Implementation Plan

Project 5: School to Shore Route

- **5 to 10 years**

1. Construct hard-surface pathway on the edge of the school property from Main Street to Breaux Bridge Street (800 m).
2. Construct granular pathway from Boudreau Street to the shoreline (70 m)



Active Transportation Implementation Plan

Summary

- In 5 years, the Town will have:
 - 12 km of formalized multi-use pathways
 - 1.5 km hard surface paths
 - 10.5 km of granular surface paths
 - Plus several streets with on-street bicycle facilities/routes
- Provides significant opportunities for
 - Recreation
 - Alternative travel options
 - Tourism
 - Quality of Life

QUESTIONS?



Shediac Transportation Plan