



THE REGIONAL MUNICIPALITY OF NIAGARA
LINKING NIAGARA TRANSIT COMMITTEE
AGENDA

LNTC 6-2019

Wednesday, October 23, 2019

2:00 p.m.

Council Chamber

Niagara Region Headquarters, Campbell West

1815 Sir Isaac Brock Way, Thorold, ON

	Pages
1. <u>CALL TO ORDER</u>	
2. <u>DISCLOSURES OF PECUNIARY INTEREST</u>	
3. <u>PRESENTATIONS</u>	
3.1 <u>Transit Governance Review - Project Scope and Milestones</u>	1 - 10
Arminda Dumpierrez and Yuval Grinspun, Optimus SBR + Left Turn Right Turn	
3.2 <u>West Niagara On Demand Expansion Options</u>	11 - 37
Rob Salewytch, Program Manager, Transit Services	
4. <u>DELEGATIONS</u>	
5. <u>ITEMS FOR CONSIDERATION</u>	
6. <u>CONSENT ITEMS FOR INFORMATION</u>	
6.1 <u>LNTC 3-2019</u>	38 - 40
Linking Niagara Transit Committee Minutes - Wednesday, May 29, 2019	
6.2 <u>LNTC 5-2019</u>	41 - 43
Linking Niagara Transit Committee Minutes - Wednesday, September 25, 2019	

7. **OTHER BUSINESS**

8. **NEXT MEETING**

The next meeting will be held on Wednesday, November 20, 2019 at 2 p.m. in the Council Chamber, Regional Headquarters.

9. **ADJOURNMENT**

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisory Coordinator at 905-980-6000 (office), 289-929-8376 (cellphone) or accessibility@niagararegion.ca (email).



Niagara Transit Governance Study

Linking Niagara Transit
Committee (LNTC) Meeting



October 23, 2019

Niagara  Region



Niagara Transit Governance Study

→ LNTC Meeting

→ Contents

1. About Optimus SBR and LTRT
2. Project Mission & Success
3. Project Team
4. Project Outcomes
5. Project Approach
6. Timelines
7. Questions

About Optimus SBR

Optimus SBR is an independently owned management consulting firm that works with organizations across North America.



Strategy and
Operations



Change
Management



Learning &
Enablement



Customer
Experience



Project
Management



Consultation/
Facilitation



Governance
& Leadership



Risk
Management



Process
Improvement



Robotics Process
Automation



Research
& Analytics

Practice Areas

Government & Health Care • Energy & Transportation • Travel & Private Sector
Financial Services

About LTRT

Left Turn Right Turn (LTRT) is a consulting firm providing services to public transit agencies across North America.



- Strategic Planning
- Policy Analysis and Development
- Transit Planning and Service Design
- Organizational Reviews
- Operations and Business Process Reviews
- Technology Modernization
- Stakeholder and Public Engagement; Change Management
- Procurement and Implementation Support

Project Context



Transit services in Niagara currently operate under local and regional jurisdictions.

A need for inter-municipal transit was identified as a critical factor in the growth and development of Niagara Region (cross-boundary mobility, transit to GO services, reducing congestion, facilitating economic development, etc.)

Municipalities and the Region endorsed the creation of a consolidated transit system (as recommended by Dillon Consulting in 2017) to develop a regionally integrated conventional, and specialized, transit system

Niagara Region wishes to evaluate different transit service delivery models to identify which options best suits the future operational and planning needs

The purpose of this project is to understand projected service demand, current assets, and best practices to recommend an ideal transit governance model for the Region

Project Mission & Success

→ Project Mission

To evaluate and recommend a future Transit Model for Niagara Region, including an associated governance structure and transition plan that encompasses all municipal transit service operations in the region.

→ Project Success

- Detailed review of Niagara's current municipal transit systems and local service delivery operations
- A high-level 10-Year projection of future transit demand to meet future ridership demands for both inter-municipal and local service delivery
- Recommend a future Transit Model option comprised of a detailed governance structure and transition plan
- Buy-in, understanding, and excitement surrounding the region's future Transit Model from employees and key stakeholders

Project Team

Team Member	Key Responsibilities
Arminda Dumpierrez <i>Executive Oversight</i>	<ul style="list-style-type: none"> ○ Facilitation of Stakeholder Engagement Activities ○ Deliverable Development and Quality Assurance ○ Client Issue Escalation and Relationship Management ○ Ongoing Advice
Yuval Grinspun <i>Project Manager</i>	<ul style="list-style-type: none"> ○ Day-to-Day Project Management and Point of Contact ○ Ongoing Reporting and Communications ○ Deliverable Development ○ Facilitation of Stakeholder Engagement Activities
Eric Gillespie <i>Transit Lead</i>	<ul style="list-style-type: none"> ○ Technical Leadership on Deliverable and Recommendations ○ Facilitation of Stakeholder Engagement Activities
Elizabeth Hill <i>Human Resources & Legal Expert Advisor</i>	<ul style="list-style-type: none"> ○ Advice to the Project Team ○ Deliverable Development
Andrew Anderson <i>Transit Integration Advisor</i>	<ul style="list-style-type: none"> ○ Advice to the Project Team ○ Deliverable Development
Brendan Mcilhone <i>Project Coordinator & Consultant</i>	<ul style="list-style-type: none"> ○ Ongoing Reporting and Communications ○ Deliverable Development
Mariam Ali, Matt Lattavo, Trajce Nikolov & Janany Ragunathan <i>Consultants</i>	<ul style="list-style-type: none"> ○ Deliverable Development ○ Best Practices Scan ○ Service Model Forecasting ○ Facilitation of Stakeholder Engagement Activities

Project Outcomes

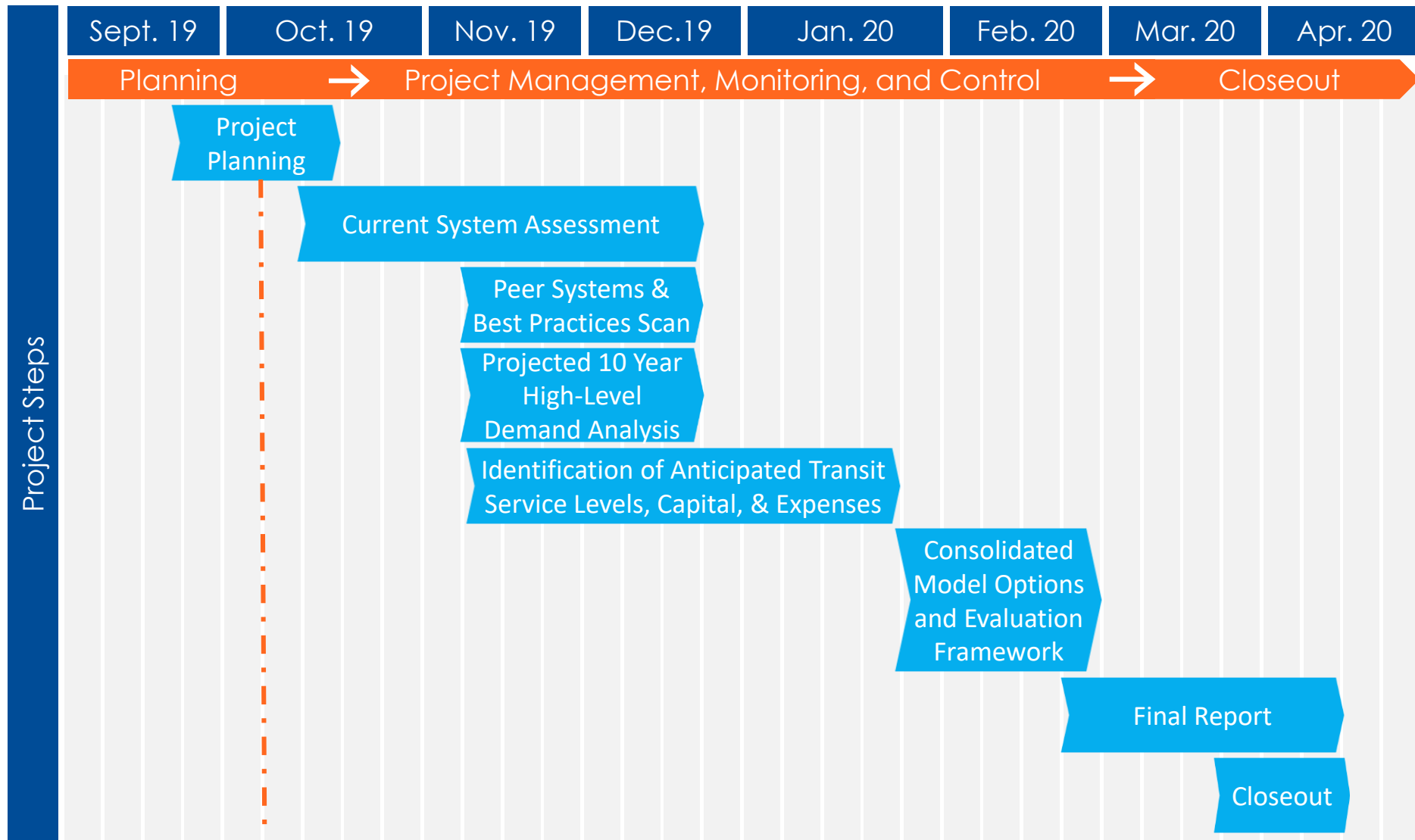
The final deliverable encompasses a recommended governance model, arrived at after extensive stakeholder engagement, an understanding of the current state of transit for the Niagara region, leading practices across North America and the consideration of the most relevant options.

- Stakeholder engagement with key stakeholders across the Niagara Transit Systems and area municipalities
- Current State Assessment of ridership demands, including a leading practices Scan assessing peer systems
- Future State Transit Service Plan incorporating various modeling scenarios for Niagara
- Evaluation Framework to consider the various options

The Study will encompass a report in the form of a business case, for the preferred transit service delivery model. It will include:

- governance structure
- organizational structure
- transit service delivery functions, ten (10) year capital needs
- ten (10) year operating needs
- funding sources
- strategic plan for asset management
- transition plan, and
- legal opinion.

Proposed Timeline



WE ARE HERE



A background graphic featuring a network of interconnected nodes and lines, resembling a molecular or digital structure. The nodes are represented by circles of varying sizes, and the lines are thin and light gray. The overall color scheme is dark gray with teal accents.

MOVING TRANSIT FORWARD

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara Region On-Demand Transit

Matt Robinson – Director, GO Implementation Office, Niagara Region

Robert Salewytsch – Program Manager – Transit Services, Niagara Region

**MOVING
TRANSIT
FORWARD**

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

12

Niagara  Region

Agenda

- Background
- Fixed-Route versus On-Demand
- Why Via?
- Niagara Feasibility Study
- Next Steps

Background

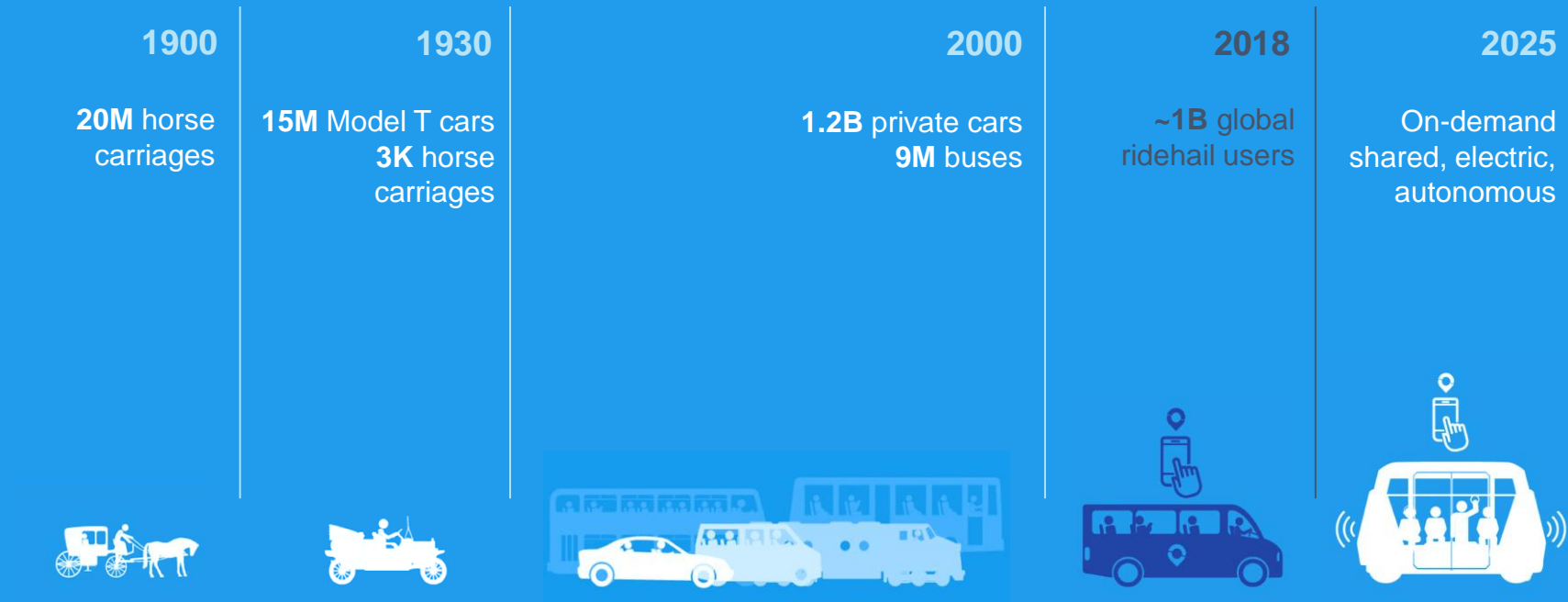
- IMT Service Enhancement Implementation Strategy (LNTC-C 21, 22, 23, 2018) identified NRT expansion pilot projects for Niagara West, as well as Pelham and Lincoln connections
- Niagara Transit Service Delivery and Governance Strategy (Dillion, 2017)
 - Crystal Beach and Sherkston connectivity
- NRT service expansions approved in 2019 Operating Budget
- Modelling simulation done in coordination with IMTWG
 - Part of IMTWG/LNTC workplan
- Jurisdictional challenges pushed Niagara West IMT implementation to 2020

Agenda

✓ Background

- Fixed-Route versus On-Demand
- Why Via?
- Niagara Feasibility Study
- Next Steps

Transportation is facing unprecedented transformation



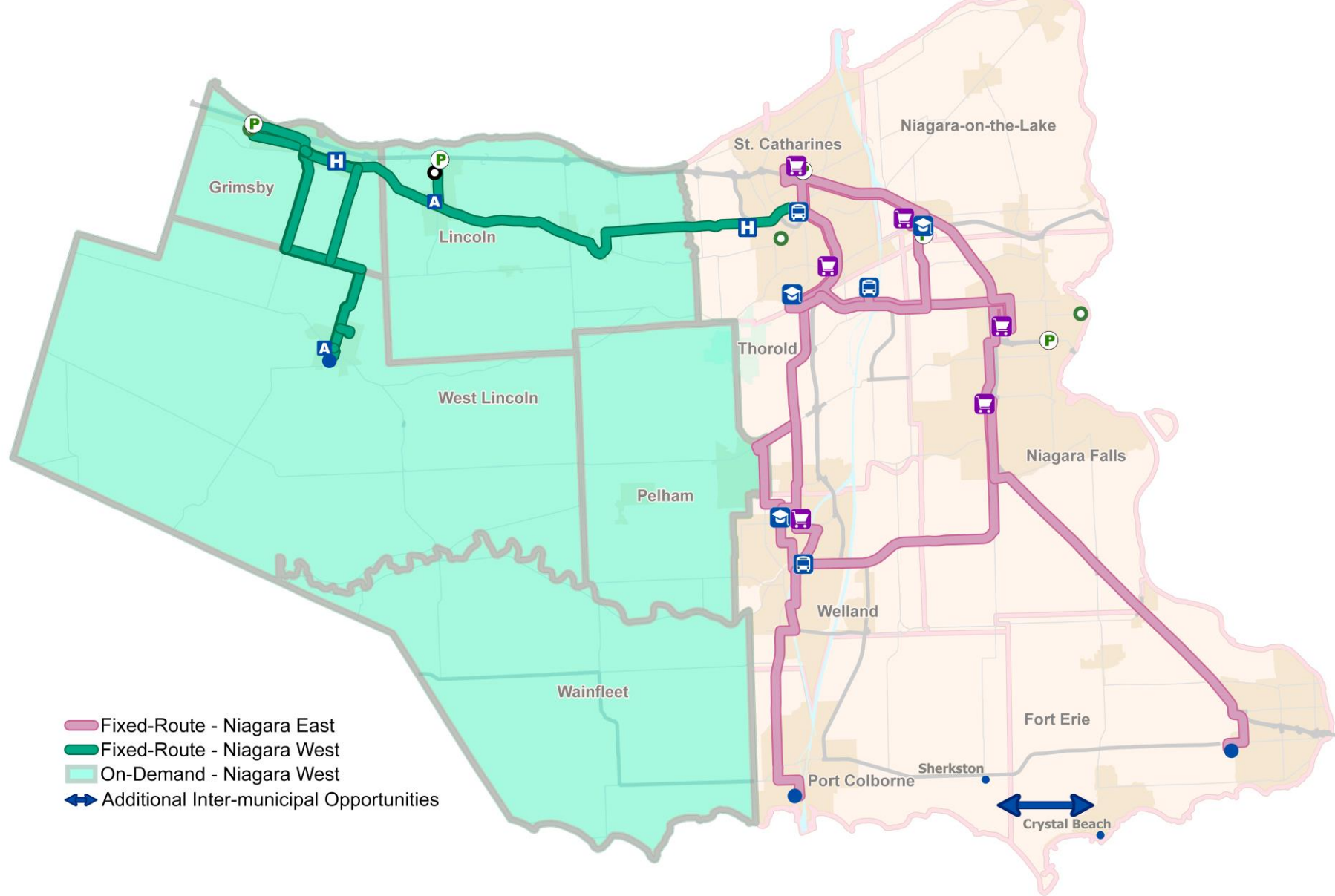
Fixed-Route versus On-Demand

Fixed-Route

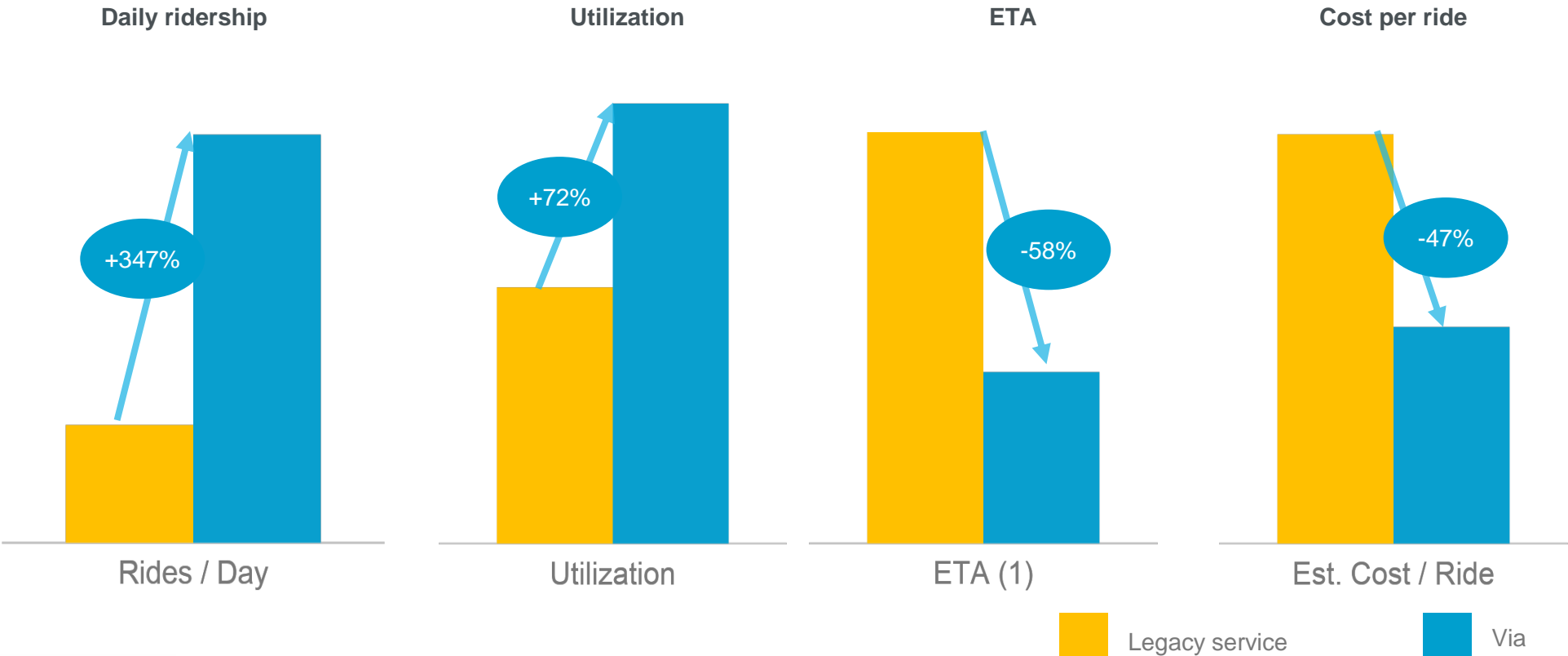
- Limited area coverage
- Relies on peak demand to maximize vehicle utilization = EMPTY BUSES
- Requires 4 months to adjust schedules and routing
- Requires a special license, limited driver pool
- Limited data

On-Demand

- Complete area coverage
- Vehicle utilization responds to demand in real-time
- Dynamically adjusts routing
- Requires standard G license, increases potential driver pool
- Significant data analytic potential



On-demand transit technology achieves significant improvement across multiple operational metrics



(1) Based on 60-min loop. Excludes 1-hour during AM/PM weekday peak with 30-min loop.
Note: Utilization and cost figures estimated based on best available information.

Agenda

- ✓ Background
- ✓ Fixed-Route versus On-Demand
- Why Via?
- Niagara Feasibility Study
- Next Steps

Why Use Via?

Consulting and Planning

In-depth analysis using proprietary approaches and tools to understand the potential for innovative mobility



Microtransit Platform (SaaS)

Licensing Via's on-demand shuttle system to transit agencies and operators who prefer to use their own vehicles and drivers



Microtransit Operations (TaaS)

Turnkey solution that includes technology plus drivers, vehicles, and operations management



New Mobility Solutions

Mobility-as-a-Service (MaaS) products, demand management tools, school bus platforms, and more...



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Via's Global Presence: Via, ViaVan and Partners

Global Deployments

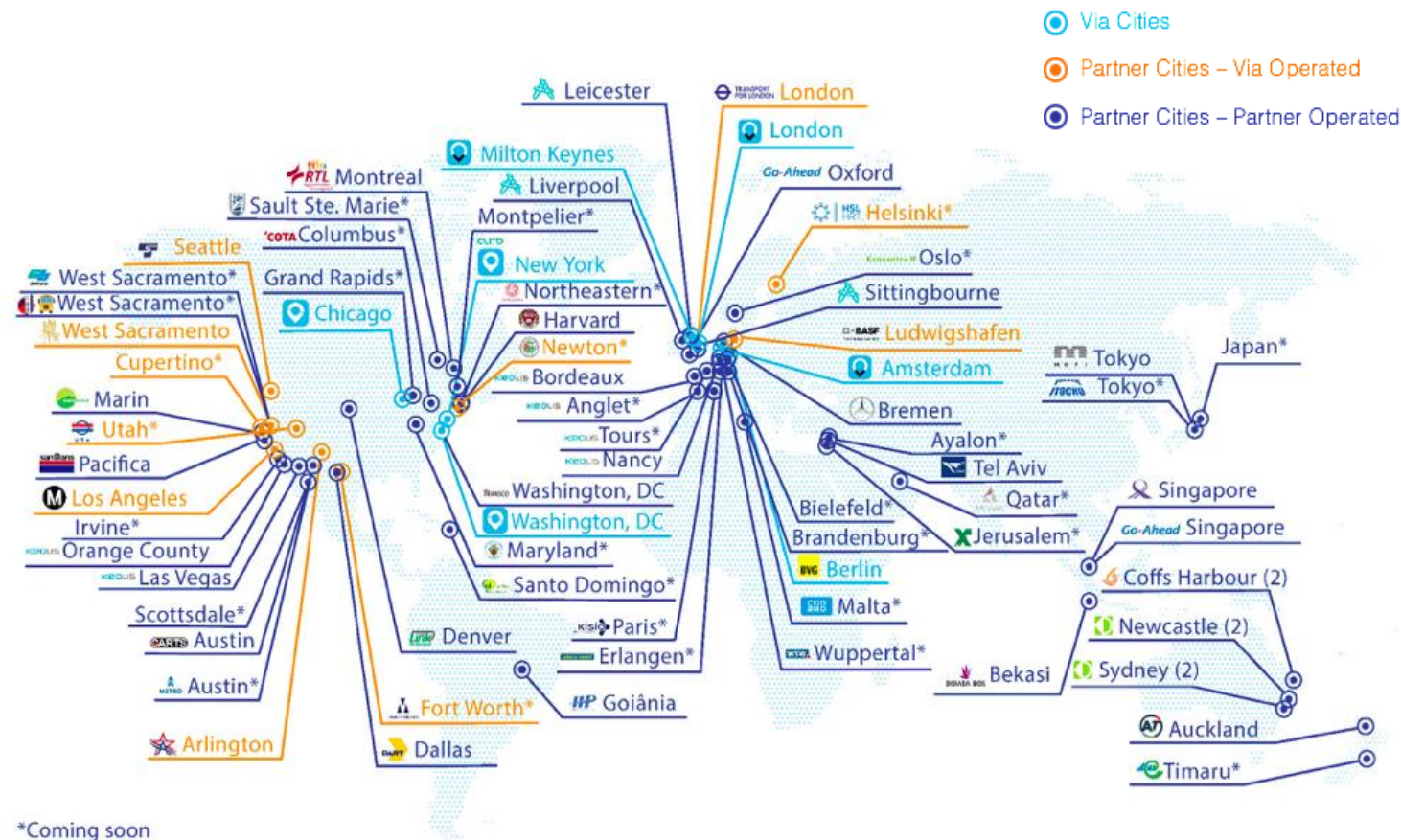
80+

Rides/Month

2m+

Engineers

225+



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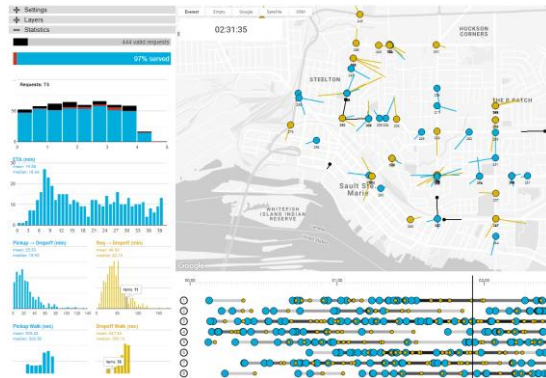
CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara Region

Via in Canada

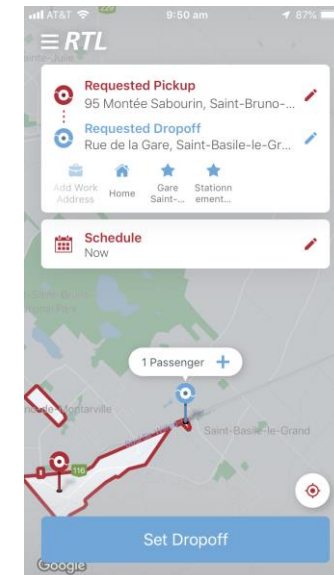
Sault Ste Marie, ON

- Launched **September 2019**
- Provide on-demand service on **Sunday evenings**
- Goal: **reduce the number of vehicles** in operation **quality** of service for residents
- **Utilization** in first few weeks of service has been and **exceeded expectations**



Longueuil, QC

- Launched **October 2018**
- Provides **first mile, last mile** connection to **EXO stations** in St. Bruno de Montarville



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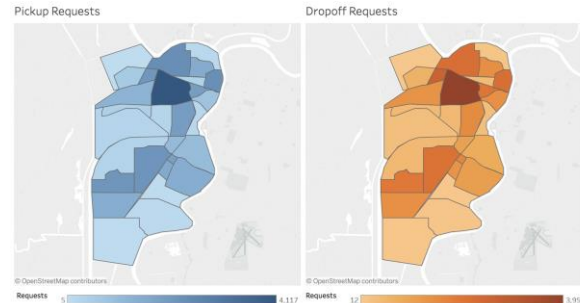


**MOVING
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FORWARD**

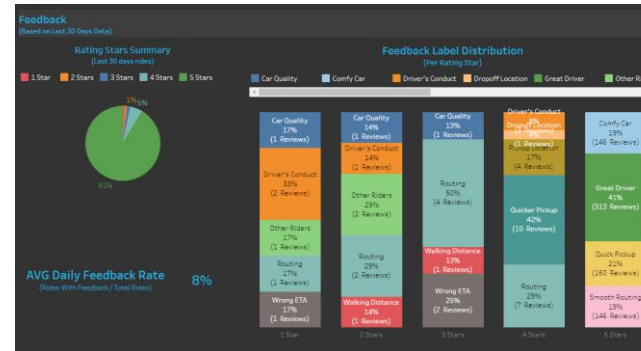
CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Reports and Shared Data

Destination



Customer Feedback Dashboard



And more including:

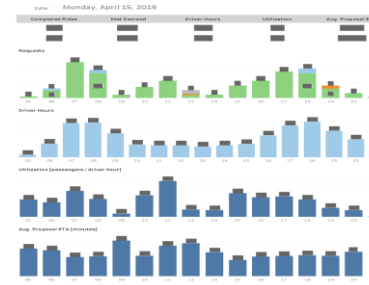
- Growth Dashboard
- Rides Table
- Daily Reports
- Bespoke reports

Via's experienced data science team will provide high-touch support and bespoke reports upon request

Dashboard



Report



Efficiency Dashboard



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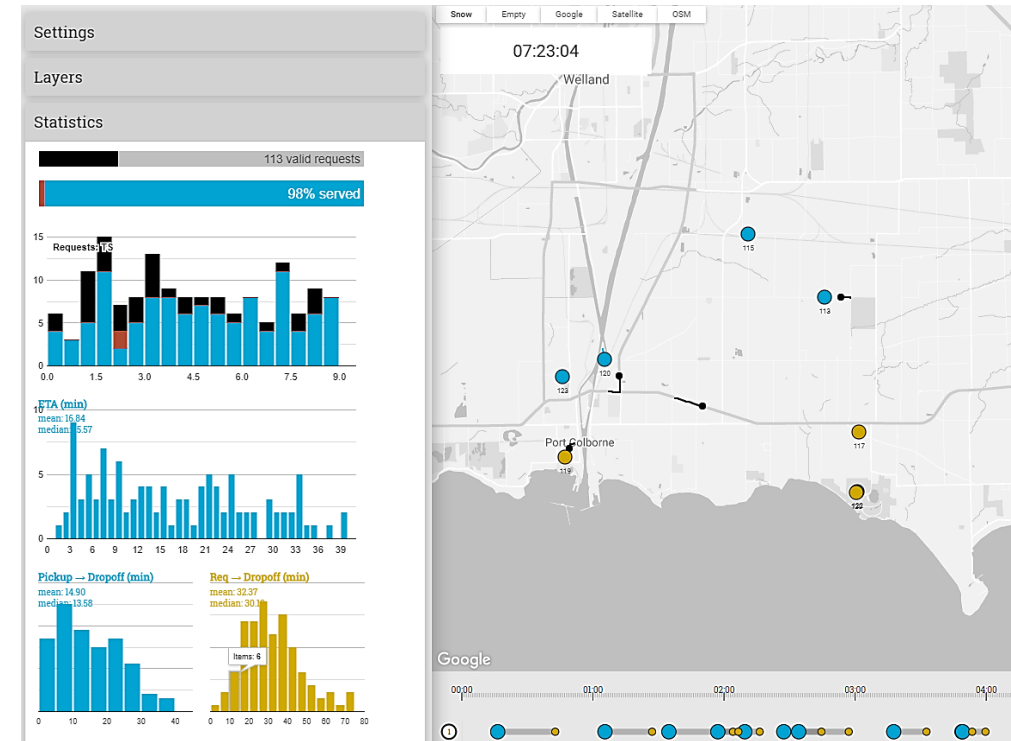
Niagara Region

Agenda

- ✓ Background
- ✓ Fixed-Route versus On-Demand
- ✓ Why Via?
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Niagara Feasibility Study

- **Project Goal:** To understand how **on-demand transit** can best provide coverage in low-density and under-served areas of Niagara (e.g., Western Niagara)?
- **Consultant:** **Via** (an on-demand transit planner, technology provider, and operator).
- **Scope of Work:**
 - Understand **existing transit options** (bus ridership data, specialized transit data, Transportation Tomorrow Survey).
 - Develop potential service '**scenarios**' (see following slides)
 - **Simulate** each scenario — number of vehicles, utilization (passengers per vehicle hour), wait times, walking distance, etc.
 - Agree on an **optimal** solution for inter- and intra-municipal transit options

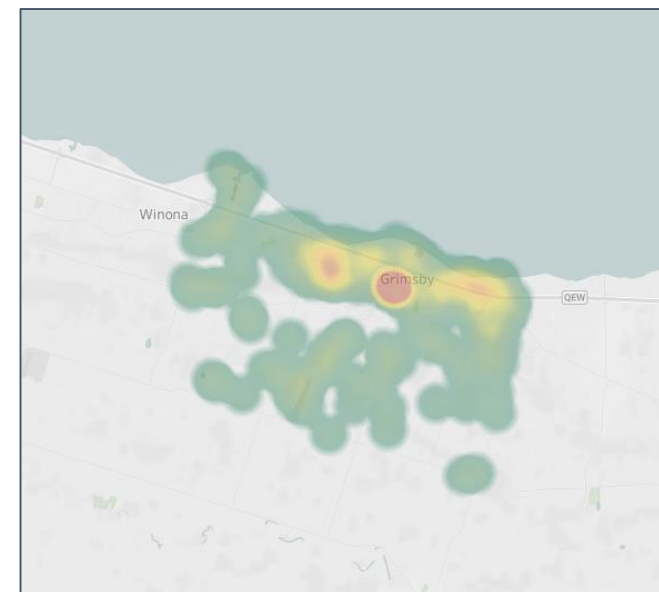


Screenshot of a simulation performed using Via's simulation tool. The map displays routing, pickups, and drop-offs, while the dashboard left of the map displays key performance indicators including the number of requests, wait time distributions, and pickup and drop-off walking distance.

Overview of Simulations

Assumptions

- Simulated **low**, **medium**, **high** demand scenarios
- Demand patterns were based on **Transportation Tomorrow Survey** and **specialized transit data** (see example demand heat map, upper right)
- **Wait times:** 20 - 30 min average, 60 min max.
- **Walking distances:** 100 - 200m average walk to pick up/drop-off, curb-to-curb where walking is unsafe or difficult.
- **Vehicles:** 6+ seat minivans recommended (see example vehicle, lower right).



Example demand heatmap for Grimsby



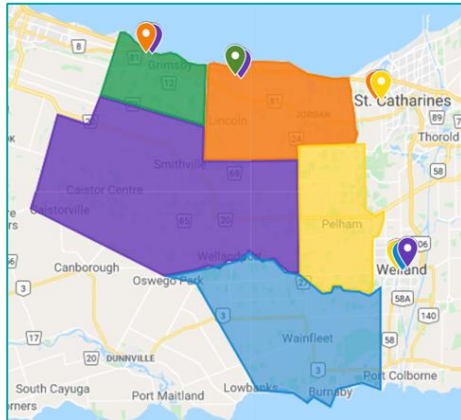
Example vehicle type

Inter-municipal Scenarios

Niagara Regional Transit can only provide **inter-municipal** trips. However, residents also want to travel **within** their municipality. 'First Mile, Last Mile' (FMLM) options:

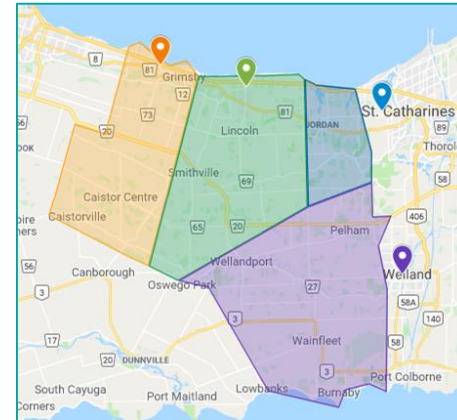
Compliant FMLM Option (least flexible):

- Travel to nearest transit hub in another municipality **ONLY** (e.g., Grimsby residents must travel to Lincoln to connect to a bus/train)
- Requires another option for intra-municipal trips



Non-compliant FMLM Option (more flexible):

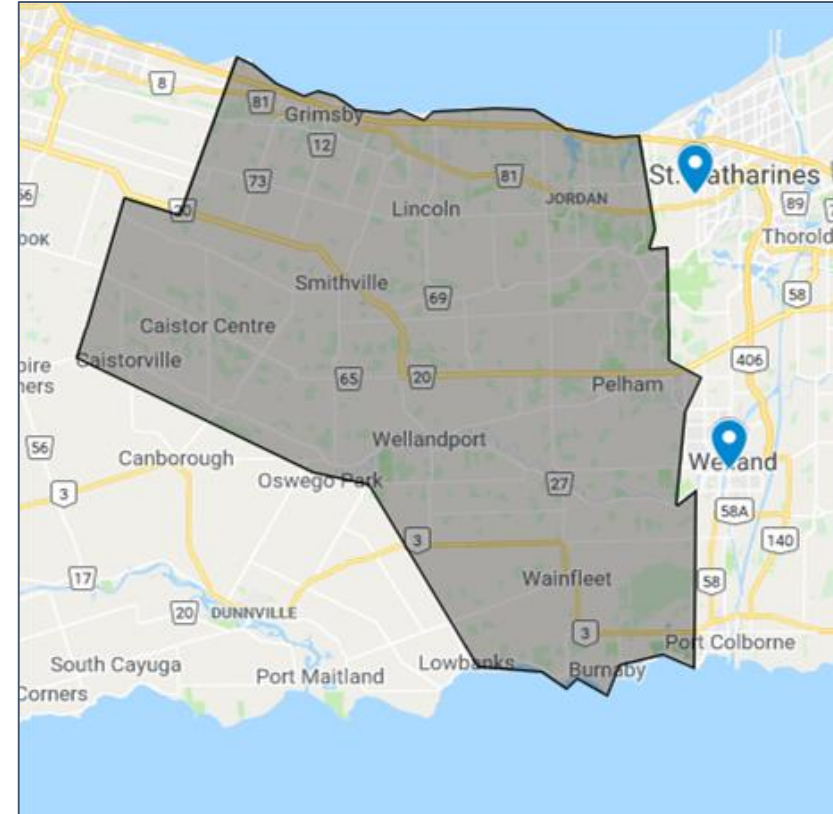
- Allow trips to nearest transit hub (even in same municipality)
- Based on their origin, each passenger will only have 1-2 possible destinations (transit hubs)



Inter-municipal Scenarios

Integrated / Most Flexible Option:

- All trips permitted (**between** or **within** municipalities)
- Most efficient option (\$)
- Connections to St. Catharines and Welland
- Requires partnership with each municipality in the defined zone.
- Zone boundary can be amended depending on local participation
- Separate municipal services **not required**



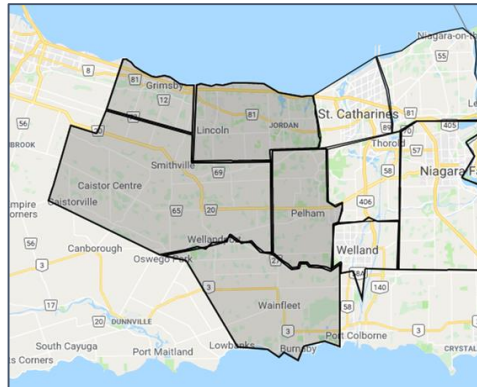
Confidential and Trade Secret

Comparison Between Medium Scenarios

Intra-municipal Scenarios

Zone	Zone Size (sq mi)	On-Demand (trips / day)	Vehicles (# of 6 seat vans)	Utilization (trips / vehicle hour)
Grimsby	29	60 - 138	3 - 4	2.2 - 3.8
Lincoln	60	46 - 108	3 - 4	1.7 - 3.0
West Lincoln	153	18 - 52	3 - 4	1.0 - 1.9
Wainfleet	89	4 - 23	1 - 2	0.5 - 1.3
Pelham	49	24 - 69	2 - 3	1.3 - 2.6
Total	380	151 - 390	12 - 17	1.5 - 2.5

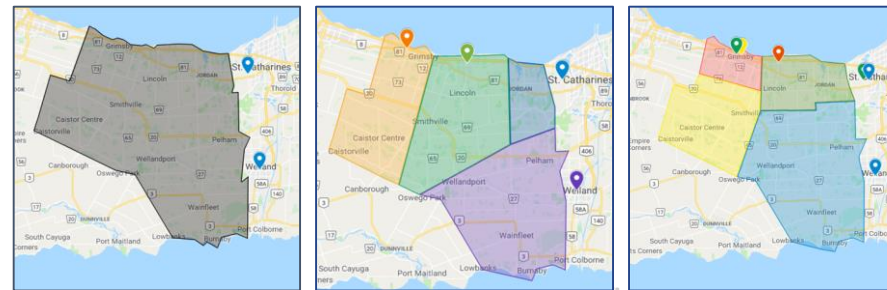
- 12 - 17 vehicles required (medium scenario)
- Estimated 150 - 390 trips across all zones
- **No** travel between zones (medium scenario would require 4-6 more vehicles)
- **No** connection to St. Catharines or Welland
- Confusing for riders



Inter-municipal Scenarios (3x options)

Zone	Zone Size (sq mi)	On-Demand (trips / day)	Vehicles (# of 6 seat vans)	Utilization (trips / vehicle hour)
<i>a) Integrated Western Zone (below, left)</i>	380+	270 - 470	12 - 17	2.5 - 3.1
<i>b) Nearest transit hub (below, center)</i>	380+	227 - 428	12 - 17	2.1 - 2.8
<i>c) Nearest inter-municipal transit hub (below, right)</i>	380+	205 - 413	12 - 17	1.9 - 2.7

- Assuming 12 - 17 vehicles, more trips (270 - 470 trips day) could be completed (including intra- and inter-municipal trips)
- Less efficient if trips are restricted to transit hubs (b & c)

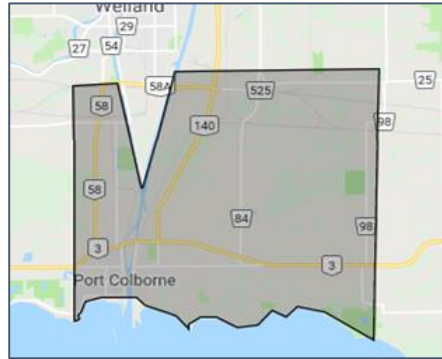
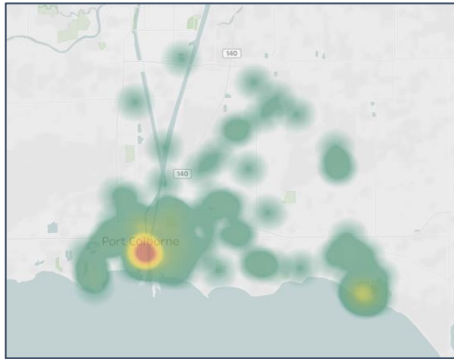


Confidential and Trade Secret

Additional Inter-municipal Opportunities

Port Colborne:

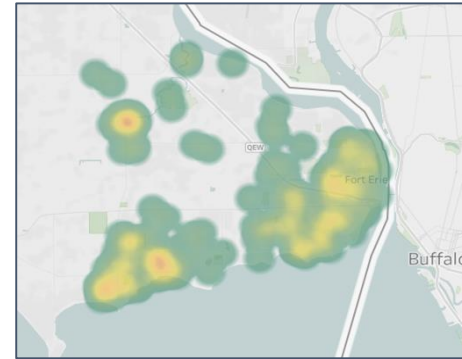
- Community bus completes **40 - 60 trips / day**
- On-demand service expected to complete **50 - 150 trips** per day across the entire municipality with 3-4 vehicles (medium scenario)
- Could complement community bus (during low demand periods)



Heat map and service area used to simulate on-demand transit

Fort Erie:

- Existing buses (#750, #760, #770) complete **100 - 150 trips / day**
- On-demand service expected to complete **70 - 150 trips** per day across the entire municipality with 3-4 vehicles (medium scenario)
- Could complement existing fixed-route services (or potentially replace one or more fixed routes)



Heat map and service area used to simulate on-demand transit

Agenda

- ✓ Background
- ✓ Fixed-Route versus On-Demand
- ✓ Why Via?
- ✓ Niagara Feasibility Study
- Next Steps

Next Steps

Service Model Design and Simulation ✓

Hours of operation,
number of vehicles,
zone identification

Advanced microtransit
simulation measuring
demand and expected
quality of service (wait
times, trip lengths, etc

01

Model Confirmation

Submit
Recommendations
Report to Public Works
Committee – Nov. 5

Confirm local
partnerships

02

Localization and Implementation

Finalize service design
and prepare for
implementation

Roll out applications and
service for testing in
preparation of launch

03

Continuous Optimization

Ongoing support to
ensure targets are
being reached

04

Questions?

Matt Robinson – Director, GO Implementation Office, Niagara Region

Robert Salewytsch – Program Manager – Transit Services, Niagara Region

A network diagram background consisting of a series of interconnected nodes and lines, forming a complex web. The nodes are represented by small circles, and the lines are thin, connecting the nodes in a non-linear fashion. The background is dark gray, and the text is white and teal.

MOVING TRANSIT FORWARD

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

**THE REGIONAL MUNICIPALITY OF NIAGARA
LINKING NIAGARA TRANSIT COMMITTEE
MINUTES**

**LNTC 03-2019
Wednesday, May 29, 2019
Campbell East (CE) 102
Niagara Region Headquarters, Campbell East
1815 Sir Isaac Brock Way, Thorold, ON**

Committee: W. Redekop (Mayor – Fort Erie), Sendzik (Mayor – St. Catharines), Ip (Regional Councillor), G. Miller (Municipal Councillor – St. Catharines), M. Siscoe (Municipal Councillor - St. Catharines) (Committee Chair), L. Van Vilet (Municipal Councillor – Welland) (Committee Vice Chair), S. Chemnitz, Chief Administrative Officer (St. Catharines)

Absent/Regrets: Campion (Mayor – Welland), Diodati (Mayor Niagara Falls), Fertich (Regional Councillor), C. Dabrowski (Municipal Councillor – Niagara Falls), G. Long, Chief Administrative Officer (Welland), K. Todd, Chief Administrative Officer (Niagara Falls)

Staff: M. Robinson, Director, GO Implementation Office, J. Alcock, Project Coordinator, GO Implementation Office, K. Ranjan, Transportation Lead, GO Implementation Office, R. Salewytch, Transit Service Planning Coordinator, H. Talbot, Financial & Special Projects Consultant, M. Trennum, Deputy Regional Clerk

Others Present: T. Luey, St. Catharines Transit, G. Morrison, St. Catharines Transit, M. Rusnell, Brock University

1. CALL TO ORDER

Committee Chair Siscoe called the meeting to order at 1:17 p.m

2. DISCLOSURES OF PECUNIARY INTEREST

There were no disclosures of pecuniary interest.

3. PRESENTATIONS

There were no presentations.

4. DELEGATIONS

There were no delegations.

5. **ITEMS FOR CONSIDERATION**

There were no items for consideration.

6. **CONSENT ITEMS FOR INFORMATION**

6.1 **LNTC-C 08-2019**

Transit Fare Integration Strategy

Moved by L. Van Vliet

Seconded by Councillor Ip

That Correspondence Item LNTC-C 08-2019, being a memorandum from M. Robinson, Director, GO Implementation Office, dated May 29, 2019, respecting Transit Fare Integration Strategy, **BE RECEIVED** for information.

Carried

6.2 **LNTC-C 09-2019**

Niagara Transit Governance Review

Moved by Councillor Sendzik

Seconded by G. Miller

That Correspondence Item LNTC-C 09-2019, being a memorandum from K. Ranjan, Transportation Lead, GO Implementation Office, dated May 29, 2019, respecting Niagara Transit Governance Review, **BE RECEIVED** for information.

Carried

6.3 **LNTC-C 10-2019**

Items for Information: PWC-C 11-2019 and PWC-C 17-2019

Moved by Councillor Ip

Seconded by G. Miller

That Correspondence Item LNTC-C 10-2019, being a memorandum from M. Robinson, Director, GO Implementation Office, dated May 29, 2019, respecting Items for Information: PWC-C 11-2019 and PWC-C 17-2019, **BE RECEIVED** for information.

Carried

6. CONSENT ITEMS FOR INFORMATION

Moved by G. Miller

Seconded by L. Van Vliet

That the following items **BE RECEIVED** for information:

LNTC 01-2019

Minutes of the Linking Niagara Transit Committee meeting held on March 6, 2019

LNTC 02-2019

Minutes of the Linking Niagara Transit Committee meeting held on April 24, 2019

Carried

7. OTHER BUSINESS

There were no items of other business.

8. NEXT MEETING

The next meeting will be held on Wednesday, June 26, 2019 at 2 p.m. in the Council Chamber.

9. ADJOURNMENT

There being no further business, the meeting adjourned at 1:44 p.m.

Matt Siscoe
Committee Chair

Matthew Trennum
Deputy Regional Clerk

Ann-Marie Norio
Regional Clerk

**THE REGIONAL MUNICIPALITY OF NIAGARA
LINKING NIAGARA TRANSIT COMMITTEE
MINUTES**

LNTC 5-2019

Wednesday, September 25, 2019

Council Chamber

**Niagara Region Headquarters, Campbell West
1815 Sir Isaac Brock Way, Thorold, ON**

Committee: Campion (Mayor – Welland), Redekop (Mayor – Fort Erie),
Sendzik (Mayor – St. Catharines), C. Dabrowski (Municipal
Councillor – Niagara Falls), G. Miller (Municipal Councillor – St.
Catharines), M. Siscoe (Municipal Councillor - St.
Catharines)(Committee Chair), G. Long, Chief Administrative
Officer (Welland), K. Todd, Chief Administrative Officer (Niagara
Falls)

Absent/Regrets: Diodati (Mayor – Niagara Falls), Fertich (Regional Councillor), Ip
(Regional Councillor), L. Van Vilet (Municipal Councillor –
Welland), S. Chemnitz, Chief Administrative Officer (St.
Catharines)

Staff: M. Robinson, Director, GO Implementation Office, M. Evelyn,
Legislative Coordinator, M. Greenfield, Project Manager,
Financial Sustainability, K. Ranjan, Transportation Lead, GO
Implementation Office, R. Salewytch, Transit Service Planning
Coordinator, H. Talbot, Financial & Special Projects Consultant,
M. Trennum, Deputy Regional Clerk

Others Present: Junkin (Regional Councillor), G. Morrison, St. Catharines Transit

1. CALL TO ORDER

Committee Chair M. Siscoe called the meeting to order at 2:08 p.m.

2. DISCLOSURES OF PECUNIARY INTEREST

There were no disclosures of pecuniary interest.

3. PRESENTATIONS

3.1 Specialized Transit Study - Concept Engagement

Steve Wilks, IBI Group, provided information respecting Specialized Transit Study - Concept Engagement. Topics of the presentation included:

- Work Plan - Status/Update
- Specialized Transit in Niagara Region - Existing Conditions
- What We Heard - Stakeholder Consultation & Survey Results
- Forecasting Future Travel Demand
- Challenges & Opportunities
- Guiding Principles
- Concepts - A Preferred Approach - An Eye on the Future

4. DELEGATIONS

There were no delegations.

5. ITEMS FOR CONSIDERATION

There were no items for consideration.

6. CONSENT ITEMS FOR INFORMATION

Moved by G. Miller

Seconded by Councillor Redekop

That the following items **BE RECEIVED** for information:

LNTC-C 10-2019

Fare Harmonization and Implementation Strategy

LNTC-C 11-2019

Service Enhancements - September 2019

LNTC-C 12-2019

Transit Governance Study Update

LNTC-C 14-2019

Niagara Region Transit Public Opinion Survey Results

LNTC 4-2019

Linking Niagara Transit Committee Minutes June 26, 2019

Carried

7. OTHER BUSINESS

7.1 Niagara Region Specialized Transit Information Session

Kumar Ranjan, Manager, Transportation Systems & Planning, announced that Niagara Region is hosting Public Information Sessions respecting Niagara Specialized Transit in St. Catharines on Wednesday, September 25, 2019 and in Niagara Falls on Thursday, September 26, 2019.

8. NEXT MEETING

The next meeting will be held on Wednesday, October 23, 2019 at 2:00 p.m. in the Council Chamber, Regional Headquarters.

9. ADJOURNMENT

There being no further business, the meeting adjourned at 3:14 p.m.

Matt Siscoe
Committee Chair

Matthew Trennum
Deputy Regional Clerk

Ann-Marie Norio
Regional Clerk