



WEST HANTS REGIONAL MUNICIPALITY

ZERO EMISSION TRANSPORTATION FEASIBILITY STUDY



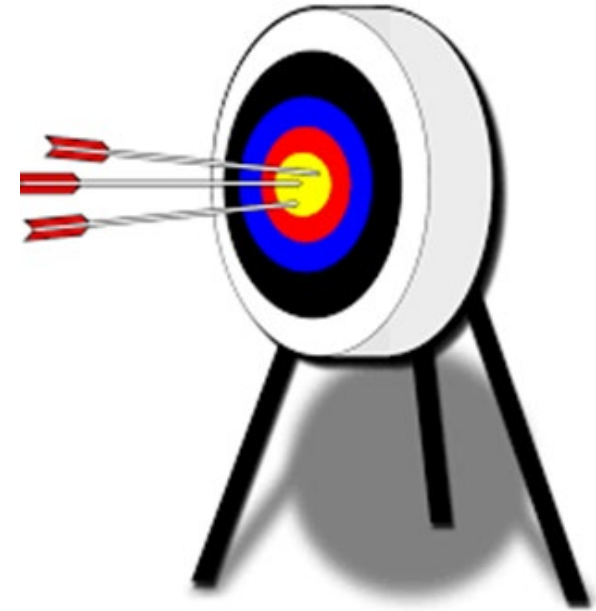
West Hants Regional Municipality Council
July 28, 2026

Study Purpose

The study responds to Council's priorities and the WHRM GHG Emission Local Action Plan.

There is recognition that public transit can:

- Improve inclusivity and social equity;
- Reduce impacts on the environment;
- Contribute to the economic well-being of the community;
- Increase housing options;
- Improve the quality of life; and
- Add to the value and attractiveness of residential and commercial properties.

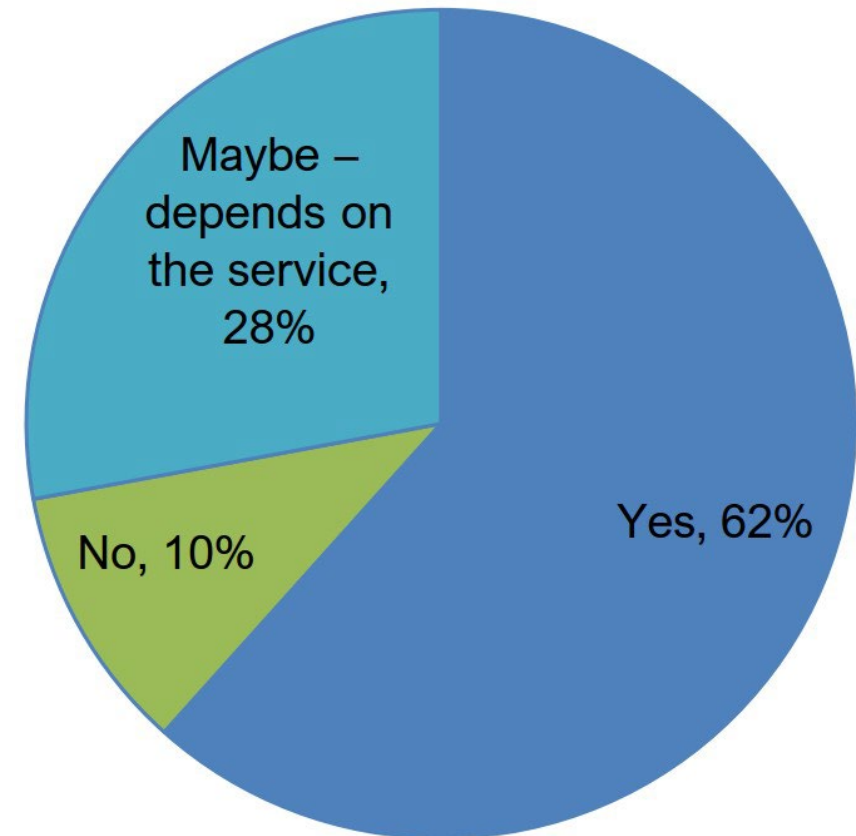


Study Process

Starts with Community Engagement

- 11 Stakeholder Interviews;
- 2 Staff Workshop Sessions;
- 6 Public Open Houses; and
- An Online Community Survey (87 submissions)

Would you consider using public transit if it were available?

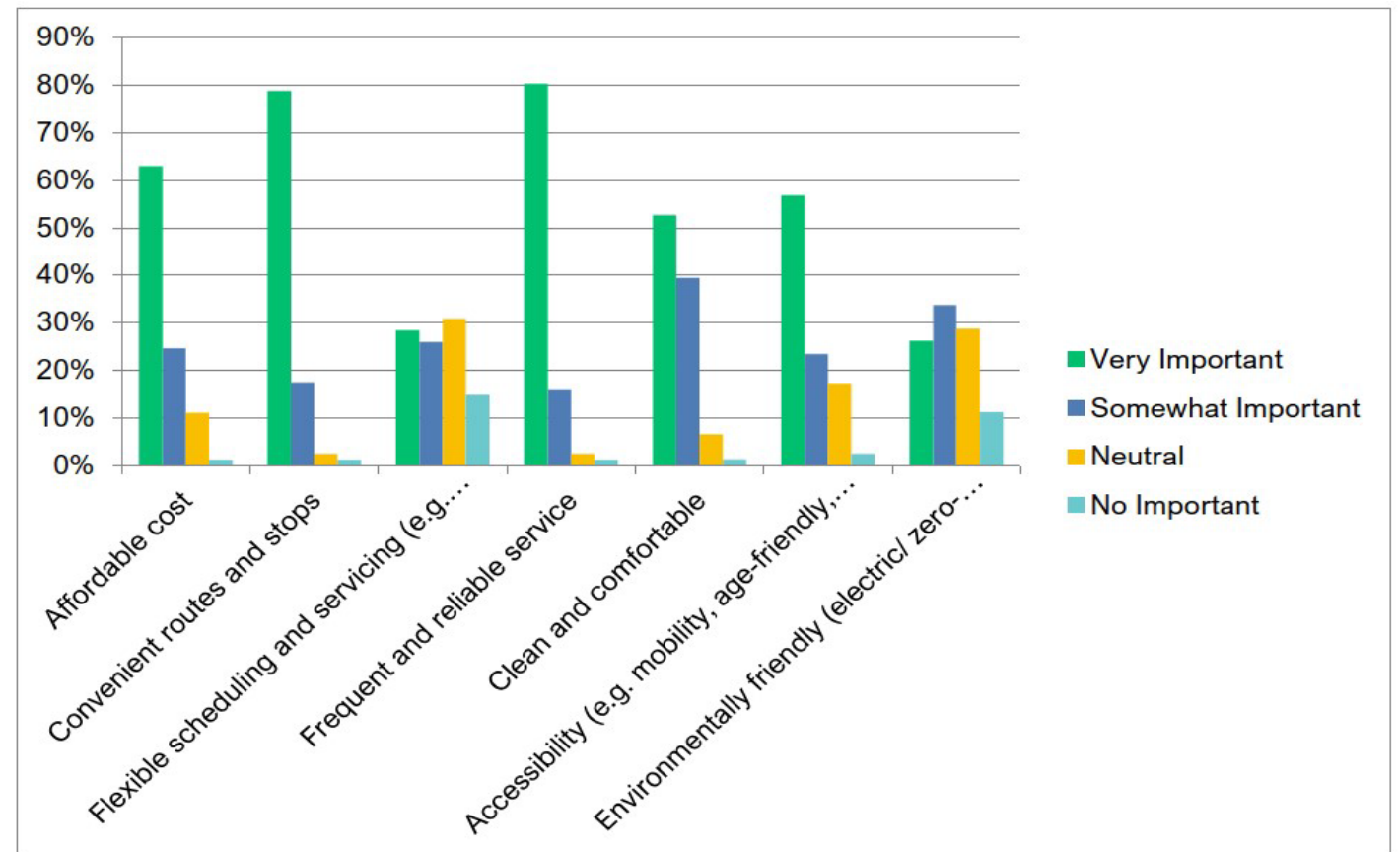


What We Heard

What is Expected of Public Transit

- Convenient and reliable
- Accessible
- Affordable
- Fiscally responsible and sustainable

How important are these factors to you when considering using a transit service?



Modeling Future Service

Divided urban study area (Windsor and Falmouth) into 45 zones

Determined trip producers (population)

Dwelling unit counts conducted manually by zone

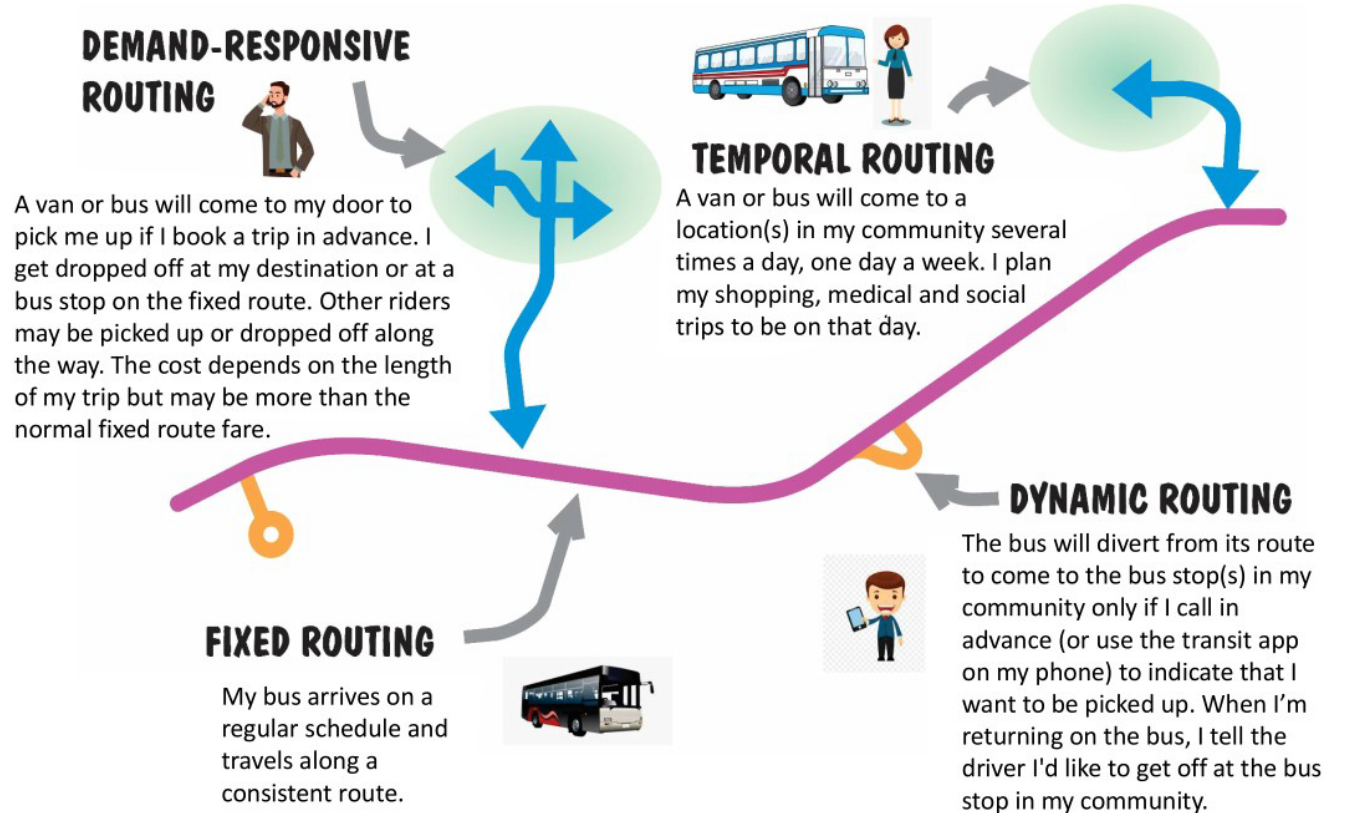
Determined trip attractors (destinations)

Destination points assigned by expectation of attractiveness for transit trips

Zone	Destinations Within Zone	Destination Score	Dwelling Units
1	- Downtown Windsor - Windsor Curling Club - Fort Edward Historical Site	8	122
2	- Downtown Windsor - Access NS	6	104
3	- Hants Aquatic Centre (Seasonal)	1	72
4			219
5	- Community Centre - Lawtons - Commercial Plaza	3	76
6			92
7	- King's Edgehill School	1	16
8			113
9	- Sobey's - Royal Canadian Legion - Kent - West Hants Education Centre	4	6

Service Delivery Types

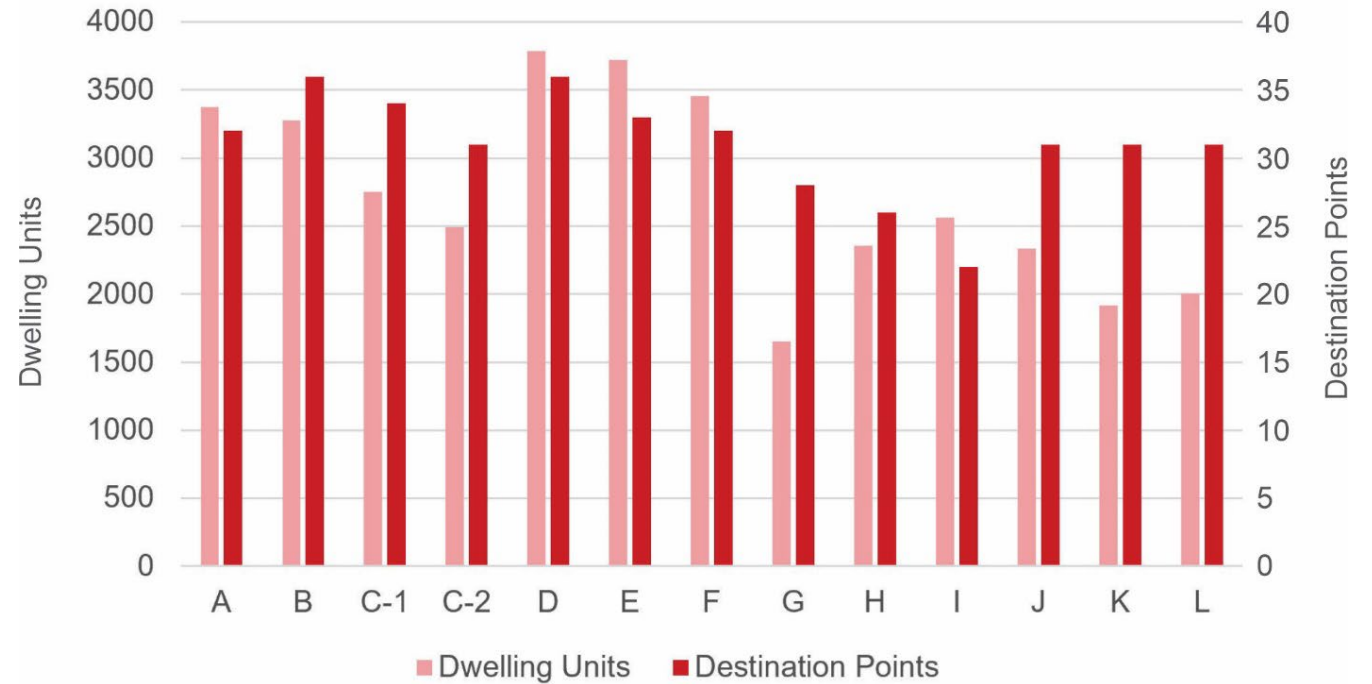
- Urban-rural fixed route
- Urban fixed route
- Demand responsive
- Flex-route
- Rural day-a-week

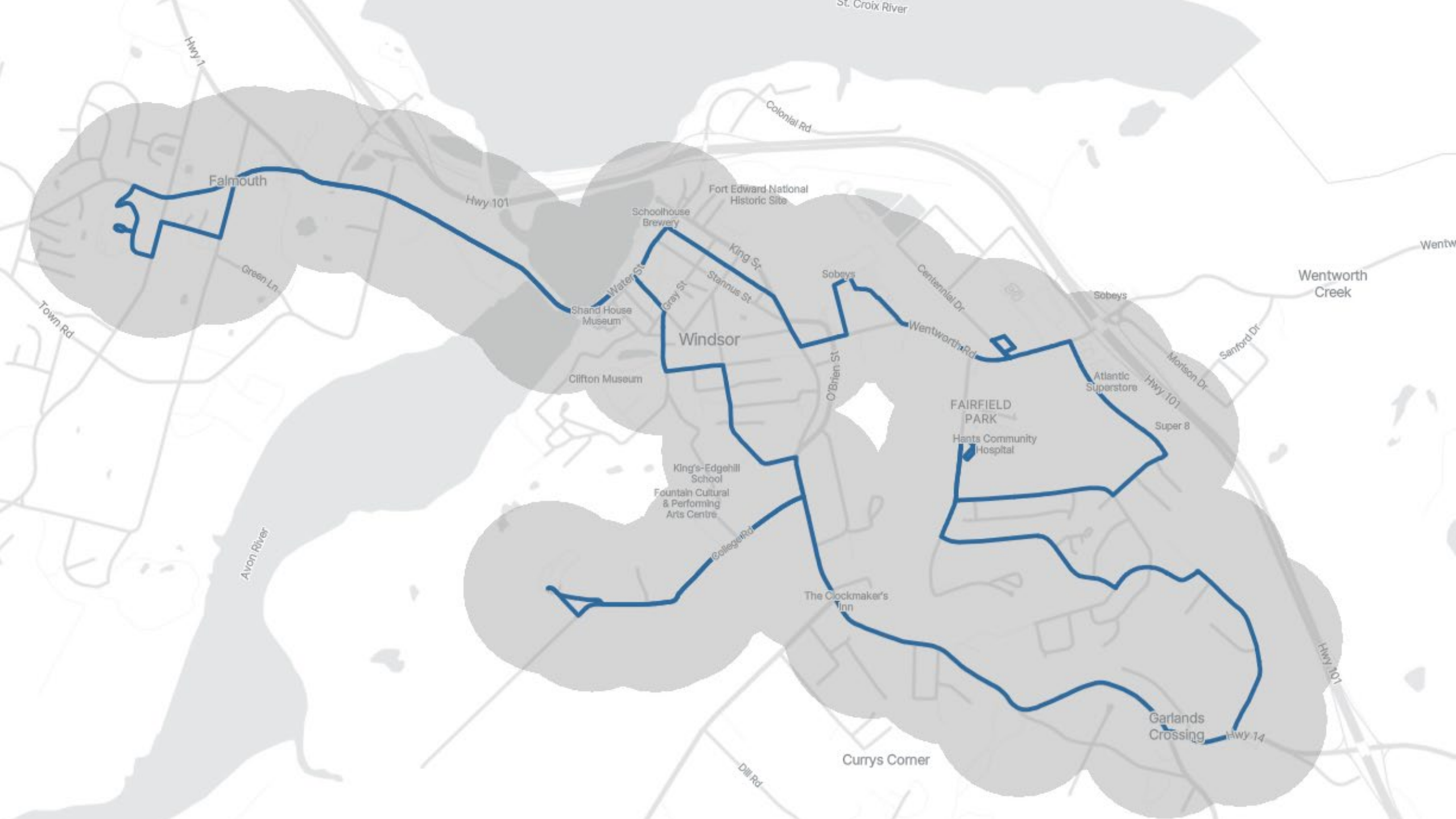


Urban Fixed Route

14 concept layouts produced and compared

- Ability to reach dwelling units and destinations
- Service frequency
- Reliability
- Clarity for customers

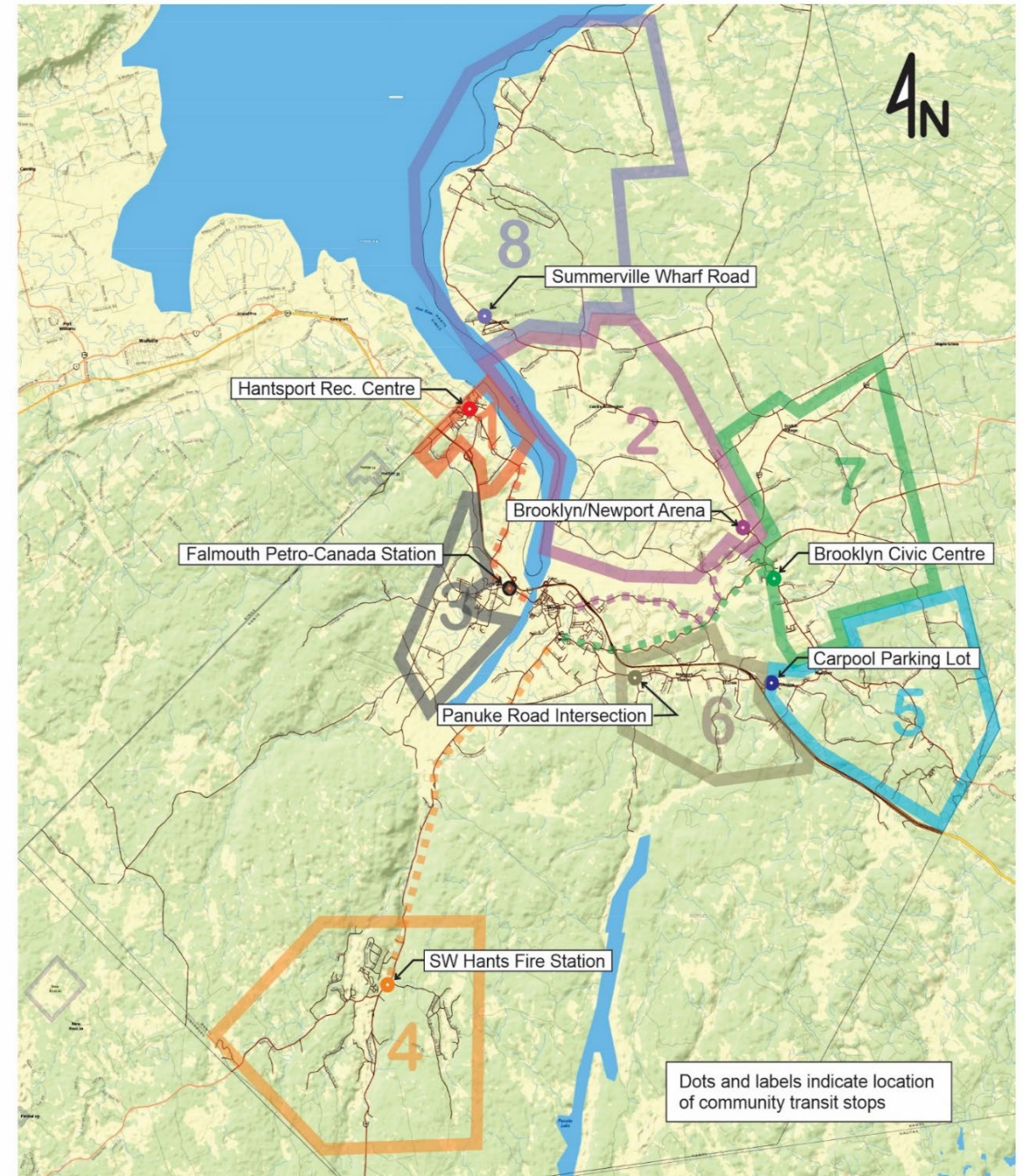






Rural Day-a-Week Service

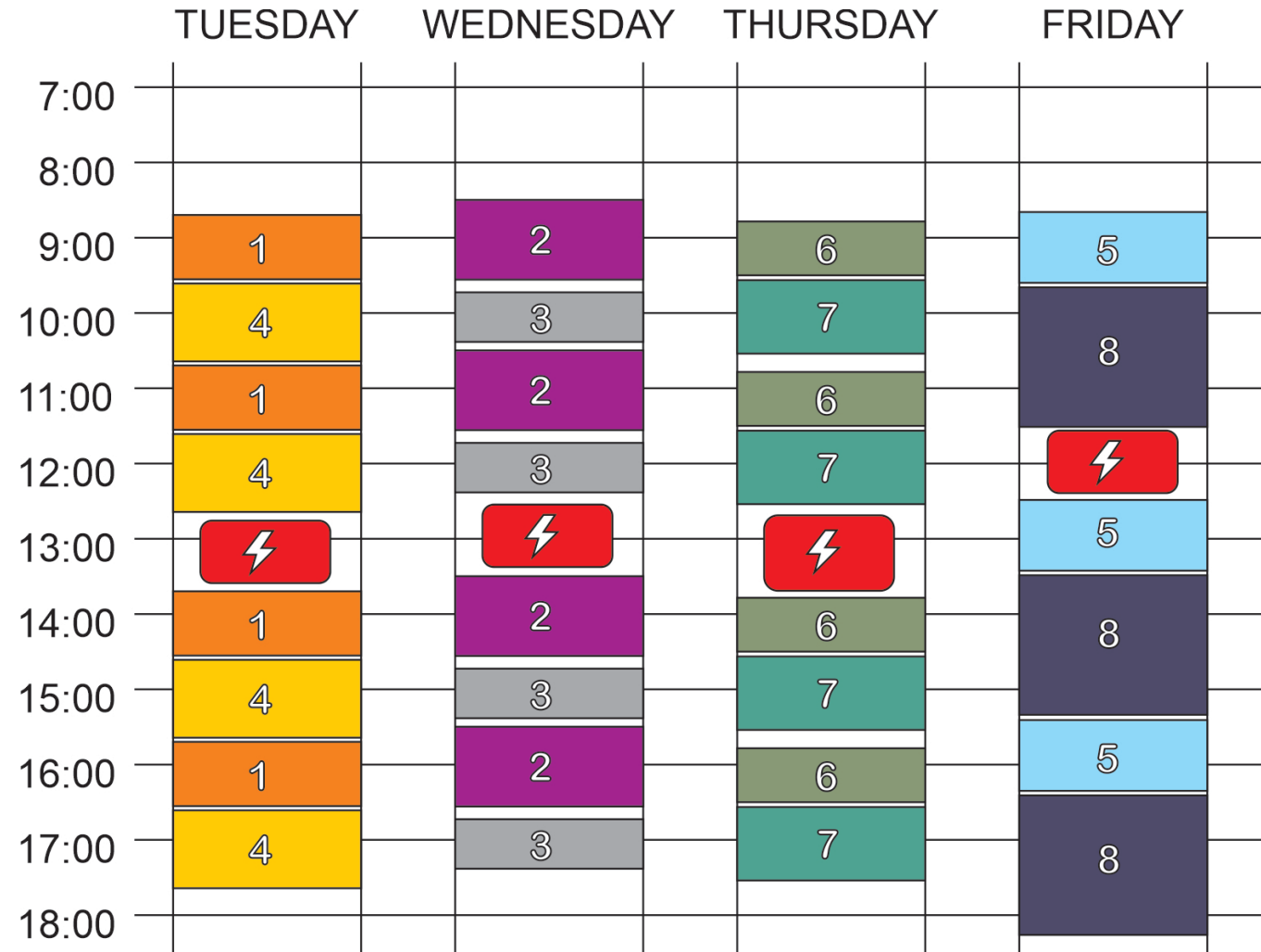
- Eight Pick-up Zones
- Each day of the week (Tue-Fri) one pair of zones will receive service
- Bus travels from Sports Complex to community pickup stop (with parking available) arriving at a scheduled time
- 30-40 minute pick-up/drop-off window for reservations
- Bus leaves community bus stop for Sports Complex departing at a scheduled time



Rural Day-a-Week Service

Options for Rural Residents

- Reserve a pick-up at home on transit day within the pick-up window
- Travel to the community bus stop for the scheduled departure time
- Flag down the bus as it travels between the community and the Sports Complex
- Reserve a pick-up at home with West Hants Dial-a-Ride



Operating Options

Operator	Description	Examples
Municipality	WHRM would operate the service itself, hiring staff and creating a Transit division within the organization.	Halifax Transit, Transit Cape Breton, Bridgewater Transit, and Yarmouth Transit
Community Not-for-Profit	West Hants Dial-a-Ride would operate the service with funding from the Municipality as well as other sources.	Antigonish Transit CHAD Transit (Pictou County)
Multi-System Operator	Although we are aware of few examples, we believe Nova Scotia would benefit from having a single operator for its multiple smaller non-contiguous transit systems. Tidal Transit (formerly Kings Transit) might be positioned to take on a role like this.	BC Transit
Private Sector Operator	There are some private sector bus charter companies within Nova Scotia who could be procured through a tendering process to operate a fixed route.	Charlottetown Transit

Selection of Vehicle

Urban Transit Bus versus Mini-Bus

- Urban transit bus is double the cost and double the life expectancy
- Urban transit bus has more capacity and is more comfortable



Battery-Electric versus Gas/Diesel

- Battery-electric is double the acquisition cost and half the energy and maintenance cost
- Battery-electric may not operate a full day on a single charge and battery management strategies are needed



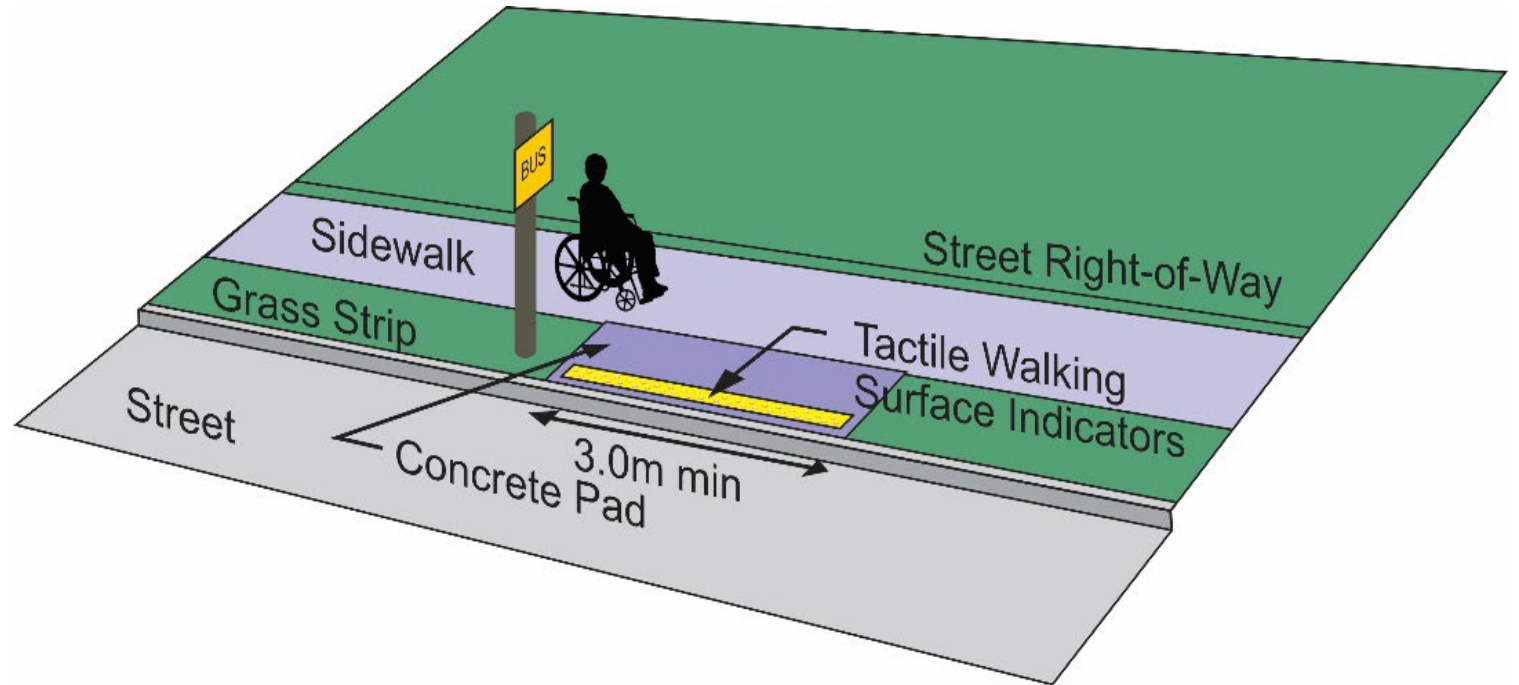
Battery Management Strategies

- Short recharge after every cycle
- Sub in a backup bus for one or two cycles during the day
- Skip off-peak runs for recharging
- Purchase a bus with a bigger battery



Aspects of Fixed Route Service

- Departs Sports Complex every hour 7am to 7pm Monday-Friday
- Recommendations on:
 - Staffing
 - Bus stop location & design
 - Fare collection
 - Bus tracking apps
 - Underwood barrier removal
 - Linkage to active transportation
 - Maintenance and bus storage
 - Marketing and monitoring
 - Financing through taxation





Annual Operating Costs

Urban Fixed Route

Item	Annual Cost
Electricity	\$38,000
Maintenance	\$20,000
Vehicle Replacement Reserve	\$46,000
Salaries and Administration	\$223,000
Miscellaneous	\$17,000
TOTAL	\$344,000

Rural Day-a-Week

Item	Annual Cost
Electricity	\$78,000
Maintenance	\$45,000
Vehicle Replacement Reserve	\$25,000
Salaries and Administration	\$114,000
Miscellaneous	\$3,000
TOTAL	\$265,000



Capital Costs

Urban Fixed Route

Item	Cost
35 ft Urban Transit BEB	\$1,480,000
26 ft Diesel Back-up Mini-Bus	\$220,000
Charging Infrastructure	\$130,000
Bus Stops	\$100,000
TOTAL	\$1,930,000

Rural Day-a-Week

Item	Cost
26 ft BEB Mini-Bus	\$300,000
Charging Infrastructure	\$130,000
TOTAL	\$430,000



THANK YOU

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