Prince Edward Island Public Transit Coalition

Public Transit Feasibility Study

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The purpose of the Public Transit Feasibility Study is to investigate the feasibility of introducing a wider range of transportation options in Prince Edward Island communities. The result of the study is a made-in-Prince Edward Island approach and implementation plan for Island-wide public transit service. The design reflects local needs and the unique setting and service environment of the Island and will be supported in principle by key stakeholders.

The Phase 1 Needs Assessment of the Public Transit Feasibility Study explored innovative and alternative ways of providing an Island-wide public transit service. Founded on research, analysis and consultation, the Phase 1 report provided a framework for moving forward on a Stage 1 implementation in the short term and ultimately providing inter-municipal public transit services across Prince Edward Island.

The final report integrates the results of the Phase 1 study along with details of service design standards and prototypes, fare structure and policy, fleet requirements and management plan and facility requirements. It includes an implementation plan and marketing and communication strategy and identifies partnership opportunities.

The Case for Public Transit

Island-wide transit offers a wide variety of benefits to the residents and communities of Prince Edward Island.

> The residents of PEI are very well informed on the benefits of public transit, and see its benefits, not only to themselves as users, but the island community as a whole

- Access and Equity

Public transit provides access to opportunity. Lack of access to essential services, primarily due to the absence of transportation options, contributes not only to poor health but also to a pervasive loss of independence among senior citizens. While clearly a concern in rural areas of P.E.I., seniors interviewed in urban areas also identified lack of access to transportation options as major quality of life issue.

Access to public transit can enhance the quality of life of seniors dramatically.

Transportation strategies that help island residents save money or reach new opportunities can also help to improve public health.

Public transit currently serves a relatively small portion of trips in most communities, but the trips it serves tend to be high value to users and society. Transit provides basic mobility by helping people reach important activities such as medical services, education and employment.

Inequities face people too young or old to drive, those who are disabled, and those who face cultural or language barriers. Only public transit can provide the basic level of mobility that these disadvantaged groups need to make important trips to work, school and health care.

- Economic Efficiency

Public transit travel is cheaper than auto travel. The implications of this factor go beyond mere cost savings. More efficient transportation systems may actually let us shift public and private resources to other needs, like education or health care, thereby improving our quality of life and economic competitiveness.

- Access to Employment

Public transit provides access to jobs. Increasingly, employers are making the connection between transit accessibility and the basic viability of their operations. Manufacturing facilities, call centres and recreational businesses in particular, depend on transit to deliver their workers safely, economically and on schedule. The PEI Business Development representatives took this one step further, recognizing a role for transit in permitting not only employee access to jobs, but giving employers more flexibility in where they choose to locate on the island.

- Personal Productivity

Public transit allows people to make better use of their time. Transit commuters can make productive use of their travel time. This fact is recognized by Transport Canada's models, which discount the cost of transit users' travel time by 25 percent.

- Retail Support

For retailers, public transit means increased customer accessibility. Shopping destinations have access to a larger customer base when transit services are expanded. This effect is not only limited to major destinations in Summerside and Charlottetown, but expands the market base for commercial and retail outlets across the island, as small communities gain better access to these facilities.

- Employment Opportunities

Public transit can create jobs in P.E.I. The transit industry in Canada represents a significant source of employment - approximately equal to the broadcasting industry or petroleum extracting industry.

In PEI, the transit service represents an excellent opportunity for local providers to expand their operation and increase employment levels—perhaps in the area of 30 to 40 employees in a mature system. While not a significant player in the business economy, the transit service would still represent stable full time and regular part time employment for island residents.

- Safety

Riding transit is far safer than driving.

While requiring a significant modal shift from auto driver to transit passenger to effect change, unacknowledged social and economic costs such as provincial medical costs due to accidents are gaining prominence in public discourse about the benefits of transit.

Transit can contribute to road safety on Prince Edward Island since it is the safest mode of urban transportation. The risk of fatality for a car passenger is 20 times higher than for a transit passenger making the same trip. Public transit in Canada is also working to improve its already outstanding contribution to public safety by attracting more automobile users, and by further reducing today's low rates of transit passenger injury and death through passenger education and driver training.

- Health and the Environment

Public transit contributes to a healthier environment.

Health concerns consistently top the list of concerns among Canadian residents, and recently, concern over the environment has moved to the top of polling results. Canadians and residents of PEI are increasingly concerned about climate change, air quality, and the general health of themselves and their families.

The magnitude of the behavioural change required for public transit usage to make a visible impact on air quality and climate change requires a long-term perspective that fosters tactics that resonate with residents and decision makers in the short and medium term.

Market Analysis

Potential transit markets are defined geographically and demographically. The population analysis makes it clear that there are service opportunities to connect communities such as Souris, Montague, O'Leary, Bloomfield, Alberton, Tignish and the surrounding areas of Charlottetown and Summerside. Creating links between smaller communities and from them to the main service corridor are important but require community-based solutions.

Employment-based commuters represent a significant portion of peak period travel in the Charlottetown-Summerside corridor in both directions. These destinations also attract commuters from smaller communities across the Island. Similarly seasonal workers represent a substantial market, particularly in the Cavendish area during the summer and for coastal fish and seafood processing operations. Seniors and people with disabilities represent smaller but growing and more dispersed markets than employee and student commuters. However, because of limited mobility and access to services, they are critical markets to serve.

Service Designs

Service levels for the commuter connector services must support commuter needs, including the flexibility to accommodate off-peak travel. The service design standards established a preferred service design of approximately nine trips in each corridor with three trips concentrated in each peak period. The remainder provide support trips in off-peak periods, such as midday and late evening, to give the flexibility for commuters to travel to or from work at different times.

Commuter Connectors are designed to connect commuters to their jobs, with fast, direct convenient service

The number of trips on each of the routes was determined based on the projected ridership and the recommended service standards, balancing economic efficiency and attractive service levels.

Community connectors are designed to provide important connections between intermediate communities, sometimes removed from the main commuter corridor link, and to major urban centres such as Charlottetown and Summerside.

Community connectors are designed to connect communities to each other

Community connectors are designed to provide less frequent service, but to accommodate a wider variety of trip purposes. This means that they operate throughout the day, with more frequent stops, and service frequencies of one to two hours. These routes, as well as providing transportation for the seniors, persons with disabilities, and others with specific transit needs, are also important as support routes for the commuter service allowing transit commuters the option of returning home during the midday for events such as illness, family emergency or a snow storm warning.

Fares

Fares are proposed, based on a 6-zone structure, dividing each of the three counties approximately in half. Travel in one or two zones (for example, anywhere in Prince County) would be permitted on the base fare, while travel into a third zone (for example from Tignish to Charlottetown) would require an additional 50 percent fare supplement. Base cash fares are recommended at $7.00 per one-way trip with a variety of volume and concession discounts available. After accounting for a variety of proposed discounts (10-ride or monthly pass) and concession fares (students and seniors), the average one-way fare is estimated at approximately $6.00. Free transfers to Charlottetown Transit should be provided, and this will need to be negotiated with the local municipality.

Facilities

The report recommends an initial service and storage facility in Tignish, Summerside area and Charlottetown, with the central facility in the Summerside/Kensington area. Terminal facilities are recommended in Summerside and Charlottetown, as well as the route ends in Tignish, Montague and Souris. The report provides details on car parking and transit stop facilities, recommending a hierarchy of facilities. For the initial services, stops can be incorporated with existing facilities, and enhanced facilities developed later.

Staged Implementation

Implementation of the island-wide service is recommended in two stages. This will allow orderly deployment of the service, testing of the service designs and ridership patterns, and development park-and-ride facilities.

Recommended Stage 1

The recommended Stage 1 plan includes commuter connector service from Tignish to Summerside, Summerside to Charlottetown, and Charlottetown to Montague. Initial service levels for this stage will be less than the recommended mature service, but still sufficient to attract the necessary initial ridership.

Ridership estimates were based on a first principles approach. This includes determining or estimating the overall travel in the corridors, and establishing a range of estimates based on market share expected to be achieved by transit. These market shares were varied to reflect different attraction rates to the service, as well as to represent the maturing of the service over time. Results of the estimation process were validated against the result of the consultation and fact-finding process.

For the Stage 1 service, even lower market share estimates were used, reflecting the “newness” of the service concept and the time required for people to adapt to using transit, general rates achieved in small and rural communities across the country, and the levels of service.

RECOMMENDED STAGE 1 ROUTES

STAGE 1 PROJECTED RIDERHSIP

Link	Daily Travel Potential	Peak Hour Travel Potential
M-1 Summerside-Charlottetown	175	75
M-2 Tignish-Summerside Commuter	100	40
M-3 Charlottetown-Montague	85	35

Recommended Stage 2

The Stage 2 implementation links build on the Stage 1 routes, complementing the commuter services by adding community connector links, and laying the groundwork for the community support network. This stage also includes increased service levels on the Stage 1 routes, and a seasonal route linking Charlottetown and Summerside to the Cavendish areas.

The Stage 2 travel potential figures are projected for approximately 3 years from launch. This means that the Commuter corridors are expected to reach these levels by the end of Year 3, and the Community Connector corridors by the end of Year 4 or Year 5.

RECOMMENDED STAGE 2 ROUTES

STAGE 2 PROJECTED RIDERHSIP

Link		Daily Travel Potential	Peak Hour Travel Potential
M-1	Summerside-Charlottetown	225	100
M-2	Tignish-Summerside Commuter	200	80
M-3	Charlottetown-Montague	175	75
A	Tignish - Summerside	125	40
B	Montague-Souris-Montague	100	40
C	Summerside-Cavendish-Charlottetown	150	40
D	Charlottetown-Wood Islands-Montague	75	35

Five-Year Plan

The following table shows the five-year projections for capital costs, operating costs and ridership and revenue, along with performance indicators. As shown in the table, financial performance is in line with recommended requirements, and annual operating subsidies range from about $600,000 in the Stage 1 implementation, to about $1.6 million in Year 5.

FIVE-YEAR FINANCIAL PROJECTION

	Year 1	Year 2	Year 3	Year 4	Year 5
Capital Costs		(all figures in (,000s)			
Vehicles					
Commuter units	11 *	1	1	1	1
Community units		10	3	3	
cost	$1,980	$1,980	$720	$720	$180
Stops Cost	$48	$35	$15		
Shelter Cost	$96	$166	$100	$30	$0
Terminal Stations Cost	$100	$50	$50	$0	$0
Park-Ride Cost	$250	$750	$500	$250	$250
AVL system	$135	$135	$40	$40	$10
Fare Systems	$22	$22	$210	$40	$10
Passenger Communications	$50	$50	$50	$50	$50
Total Capital Costs	$2,681	$3,188	$1,685	$1,130	$500
Operating Costs					
Vehicles					
Commuter Vehicle Hours	13.5	14	15.4	16.9	18.6
Community Vehicle Hours		10	13.5	17	17
Vehicle Operating Costs	$1,080	$1,920	$2,312	$2,712	$2,848
Planning and Administration					
Administration Costs	$87	$353	$385	$417	$428
Technology					
Technology Operating Costs	$51	$51	$4	$4	$1
Total Operating Costs	$1,218	$2,324	$2,701	$3,133	$3,277
Ridership And Revenue					
Commuter Ridership	91	106	121	136	151
Revenue	$546	$636	$726	$816	$906
Community Riderhsip		68	87	96	106
Revenue	$0	$408	$522	$576	$636
Total Ridership	91	174	208	232	257
Total Fare Revenue	$546	$1,044	$1,248	$1,392	$1,542
Other Revenue	$50	$60	$70	$80	$100
Total Revenue	$596	$1,104	$1,318	$1,472	$1,642
Operating Subsidy	$622	$1,220	$1,383	$1,661	$1,635
R/C	44.8%	44.9%	46.2%	44.4%	47.1%
$/P-KM	$0.25	$0.40	$0.43	$0.45	$0.43

R/C = Revenue to Cost Ratio

AVL = Automated Vehicle Location

$/P-KM = Dollar per Kilometre

* = Actual Figure

Funding Options

There are currently no provincial programs designed to directly fund public transit in Prince Edward Island. But the success of island-wide transit depends on additional financial support for both capital and operating costs.

With the implementation of a province-wide transit system, there would appear to be a clear role for the government of PEI in funding both capital and operating costs. In addition to the available federal funding (which will increase with the additional ridership of a island-wide system) the province is the only level of government with the resources to effectively support this service.

A “green levy” fund in Prince Edward Island could be used to support both a contribution to capital funding as well as operating funding support. Based on recent data, an 1-cent green levy drawn from gasoline sales would generate approximately $2 million annually, which could be used to support the initial capital requirements as well as the on-going annual operating costs.

This would suggest that a dedication of a portion of federal gas tax funding will be sufficient to support capital expenditures and a green levy or carbon levy in the range of $1.5 million to $2.0 million annually would be sufficient to meet the on-going requirements or the proposed plan. A green levy could take the form of:

- an allocation of fuel sales based on price (to provide a natural increase in revenue to keep pace with inflation and fund service expansion) with the risk of short-term volatility
- an allocation of fuel sales based on volume, with the risk of declining funds in real dollar terms
- a carbon levy, based on vehicle sales and projected fuel efficiency

To support the capital requirements of implementing and supporting on-going infrastructure requirements of the island-wide transit system, established in the range of $1.5 million to $2.0 million, it is recommended that the transit agency work with the government of PEI and the federal government to ensure the allocation of federal funding programs to cover these costs.

For operating costs, it is recommended that the established transit agency:

- establish a fare structure as recommended in this report to optimize ridership and revenue
- work with the identified strategic partners to maximize constituent ridership, rider revenue, and both direct and indirect financial support from these beneficiaries
- work with the government of Prince Edward Island to develop a green levy plan to fund the balance of operating and capital costs.

For more information, contact the PEI Public Transit Coalition at 902 – 368 – 7337.

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