iTRANS
transportation planning and traffic consultants

Town of Cornwall and Town of Stratford

Transit Feasibility Study
Final Report

Cornwall & Stratford, P.E.I.

October 2007

October 9, 2007 Project # 3617

Robert Hughes & Kevin McCarville
Town of Stratford & Town of Cornwall

Dear Robert and Kevin:

Re: Town of Stratford & Town of Cornwall
Transit Feasibility Study – Final Report

We are very pleased to submit seven (7) copies of the Transit Feasibility Study Final Report for the Town of Stratford and Town of Cornwall. A PDF Version will also be emailed to you.

We very much appreciated the opportunity to work with the Stratford and Cornwall communities and town staff in an open and frank environment, which we feel resulted in innovative and flexible next steps that can be taken in the near future.

We look forward to future opportunities to work in the area and are available to assist in implementation, if required.

Yours truly,

iTRANS Consulting Inc.

Wally Beck, C.E.T.
Vice President

Encl. Final Report

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Project # 3617

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1. INTRODUCTION

1.1 Study Purpose

The Town of Cornwall and the Town of Stratford are within commuting distance from the City of Charlottetown. While the City of Charlottetown is served by public transit through a contract with a private operator, Trius Tours, there is no public transportation service to or within Cornwall or Stratford. The Federal government has financial resources available for capital expenditures for transit through the new deal Phase 2 funding, of which approximately $3.4 million is available for Prince Edward Island (P.E.I.) as well as additional Federal funding, known as the Public Transit Capital Trust Fund, which is identified in the 2006 Federal Budget.

The purpose of this study, which has been carried out as one study with each Town being examined independently, is to assess the feasibility and present optional plans for public transportation services for the Towns of Stratford and Cornwall.

1.2 Project Needs and Objectives

The need for community-based public transportation to accommodate the work trip is complemented by a need to provide service within each town and between towns, for non-work based trips such as shopping, medical, personal business, and leisure. If made available, this level of service would enable those residents that are unable to, or choose not to, drive to access amenities that are accessible to those that do drive. This need will be accentuated as the population ages.

The purpose of this study was to:
- Quantify the current latent demand for transit service
- Address both Conventional Transit and Specialized (Mobility) Transit needs
- Identify ridership growth strategies to target secondary markets
- Identify appropriate vehicles and service levels required to meet the demand
- Determine Route and service design (hours of operation, route travelways, etc.)
- Identify low-cost methods of service delivery, where appropriate
- Develop a Service Plan that is fiscally responsible

Similar to other studies of this kind, for this study to be successful and ultimately accepted, the public and Stakeholders were consulted.

It is for this reason iTRANS executed:
- A tour and a meeting with Stakeholders in each town
- A peer review of similar-sized municipalities to identify expectations early in the study
- Public consultations

As well, iTRANS:

- Identified the current state of transit service within the region.
- Addressed governance issues in relation to service integration with Charlottetown Transit service.
- Provided a range of service delivery options, assessment criteria and associated costs for each municipality.
- Identified and quantified the economic, social and environmental benefits of each option.
- Reviewed the financial requirements needed to operate transit service.
- Provided a service start-up Implementation Plan and growth strategy for each town
- Presented:
  - Service level policies (walk distance guidelines / route coverage, service hours, service reliability, safety, etc.).
  - Service performance indicators to determine if and when service should be expanded.
  - Conventional and Specialized (Mobility) Transit service demand.
  - Best practices.
- Identified:
  - Infrastructure costs (vehicles, bus stops, shelters).
  - Operating budget line item cost estimates capital, debt financing, etc.
  - Ridership revenues / net cost.

1.3 Study Methodology

To meet the project needs and objectives, the following steps were undertaken:

- Conduct a peer review
- Collect data and conduct Stakeholder consultations
- Identify initial policies
- Undertake and analyze surveys
- Identify initial service concept design options
- Conduct and assess a public consultation

2. PEER REVIEW

iTRANS identified a number of similar-sized municipalities across Canada in a peer review, shown in **Exhibit 1**, to assist the Towns in determining what the expectations are for today and for the future. The peer reviews have been carefully interpreted since environments can vary significantly from one municipality to another across Canada. Thus, they have been used for order-of-magnitude comparisons only. A graphical representation of **Exhibit 1** is available in **Appendix A** (**Figure 1** to **Figure 13**).

Exhibit 1: Peer Review

Municipalities	Population Served	Revenue Vehicles	Revenue Vehicle km	Revenue Vehicle Hours	Regular Service Passenger Trips	Total Direct/Auxiliary Operation Costs	Total Operating Revenue	Average Fare	Adult Fares (Cash)
COBOURG	18,000	3	137,254	7,247	65,094	$438,727	$118,884	$1.74	$1.75
YELLOWKNIFE	18,000	7	n/a	9,710	155,172	$630,937	$252,122	$1.62	$2.50
CORNER BROOK	20,000	6	210,000	8,970	98,400	n/a	n/a	n/a	$2.25
WHITEHORSE	23,205	9	444,590	14,110	355,760	$1,751,094	$488,379	$1.26	$2.00
STRATFORD	30,000	15	547,212	30,382	570,131	$1,954,549	$703,559	$1.19	$2.00
CLARINGTON	30,000	3	n/a	n/a	143,827	$838,286	$225,332	$1.55	$2.00
MILTON	31,500	4	300,204	12,054	71,502	$1,018,139	$150,671	$1.75	$2.00
CHARLOTTETOWN	32,000	6	260,000	14,700	79,200	$476,261	$152,460	$1.93	$2.00
MOOSE JAW	32,131	7	328,264	14,872	379,627	$907,201	$336,197	$0.83	$2.00
PRINCE ALBERT	34,000	10	402,000	18,074	307,285	$868,500	$214,980	$0.70	$1.75
BELLEVILLE	37,000	14	692,912	32,559	839,114	$2,511,859	$1,274,685	$1.49	$2.00
TIMMINS	38,000	23	837,415	35,649	775,481	$3,758,022	$1,276,245	$1.63	$2.00
CHATHAM	44,000	6	n/a	15,033	260,610	$816,030	$400,981	$1.54	$2.00
GRANDE PRAIRIE	44,631	16	652,158	32,248	533,830	$2,011,266	$653,562	$1.14	$2.00
BRANDON	45,000	16	1,122,616	44,380	917,711	$3,025,011	$1,036,665	$1.04	$2.00
WELLAND	47,000	17	739,794	30,274	357,010	$1,978,488	$708,552	$1.80	$2.25
NORTH BAY	49,000	28	1,430,583	62,846	2,243,650	$4,787,789	$2,895,847	$1.29	$2.00
CORNWALL	49,500	20	797,862	45,675	505,286	$3,616,753	$783,367	$1.47	$2.00
MEDIAN	**33066**	**9.50**	**547212.00**	**18074.00**	**356385.00**	**1751094.00**	**488379.00**	**1.49**	**2.00**
MEAN	**34609**	**11.67**	**593524.27**	**25222.53**	**481038.33**	**1846406.59**	**686616.94**	**1.41**	**2.03**

Municipalities	Cost per Capita	Service Hours per Capita	Passengers per capita	Revenue/Cost Ratio	Net Cost per Capita	% Accessible Buses
COBOURG	24.37	0.40	3.62	0.27	17.77	100.0%
YELLOWKNIFE	35.05	0.54	8.62	0.40	21.05	100.0%
CORNER BROOK	n/a	0.46	4.92	n/a	n/a	0.0%
WHITEHORSE	75.46	1.03	15.33	0.28	54.42	0.0%
STRATFORD	65.15	1.05	19.00	0.36	41.70	40.0%
CLARINGTON	27.94	0.00	4.79	0.27	20.43	0.0%
MILTON	32.32	0.46	2.27	0.15	27.54	0.0%
CHARLOTTETOWN	14.88	0.58	5.50	0.33	19.26	33.3%
MOOSE JAW	28.23	0.48	11.81	0.37	17.77	0.0%
PRINCE ALBERT	25.54	0.54	9.04	0.25	19.22	0.0%
BELLEVILLE	67.89	0.91	22.68	0.51	33.44	42.9%
TIMMINS	98.90	1.09	20.41	0.34	65.31	56.5%
CHATHAM	18.55	0.34	5.92	0.49	9.43	100.0%
GRANDE PRAIRIE	45.06	0.78	11.96	0.32	30.42	43.8%
BRANDON	67.22	0.99	20.39	0.34	44.19	31.3%
WELLAND	42.10	0.77	7.60	0.36	27.02	35.3%
NORTH BAY	97.71	1.28	45.79	0.60	38.61	28.6%
CORNWALL	73.07	0.93	10.21	0.22	57.24	35.0%
MEDIAN	**42.10**	**0.67**	**9.62**	**0.34**	**27.54**	**34.2%**
MEAN	**49.38**	**0.70**	**12.77**	**0.34**	**32.05**	**36%**

The purpose of this performance measures peer review is to assess potential interest in transit for the Towns of Stratford and Cornwall. Since this study intends to gauge the interest and feasibility of transit for the Towns, data is unavailable to directly compare transit operations in the Towns to similar sized systems. Charlottetown is, therefore, used as a proxy. Since transit service is relatively new to Charlottetown (initiated in September 2005), iTRANS secured 2006 operating data for the first full calendar year of operation and compared the statistics to 2005 figures available from the Canadian Urban Transit Association (CUTA), which is adequate for study purposes.

The peer review revealed key highlights of the Charlottetown transit system:

- Lowest Cost (Total Direct / Auxiliary Operation Costs) per Capita rate of $14.88. This means that among the peer group, service expansion is the most cost friendly; however, service levels are minimal and should be expanded if more persons are to switch from auto to transit.
- Lowest Revenue (Operating Revenue or Farebox Revenue) per Capita of $4.76. This is a typical performance for a new service start up. The ratio could be increased through increased ridership or by raising fares, however raising fares would deter ridership growth which is estimated to grow significantly in the start up years and alone can increase this ratio.
- The two preceding ratios are inputs for the Revenue / Cost ratio, or synonymously Cost Recovery, which is a financial performance indicator. Charlottetown's Revenue Cost ratio is 0.33 which ranks 10th among the 17 reporting peers. This is due to Charlottetown's relatively low total direct / auxiliary operating costs. It should be noted that environmental and quality of life benefits are growing in importance over financial performance since transit is more recognized as a service not unlike other tax supported municipal services.
- Respectable Passengers per Capita ratio is 5.5 with a peer median of 9.2 and an average of 12.8. Charlottetown is on par with Chatham, Ontario and Welland, Ontario which have a greater population by 37.5% and 47%, respectively. This illustrates that there is good demand for service in Charlottetown.
- Below average Revenue Service Hours per Capita are at 0.46 (28 minutes per person) which falls in the bottom third of the peer group. This means, coupled with a low Cost per Capita as identified above, service expansion could eventually be justified if the goal is to offer service on par with like size cities in order to, for example, be more competitive in attracting industry.

The exercise of using Charlottetown as a proxy for the Towns of Stratford and Cornwall and conducting a performance measures peer review revealed some interesting points; namely:

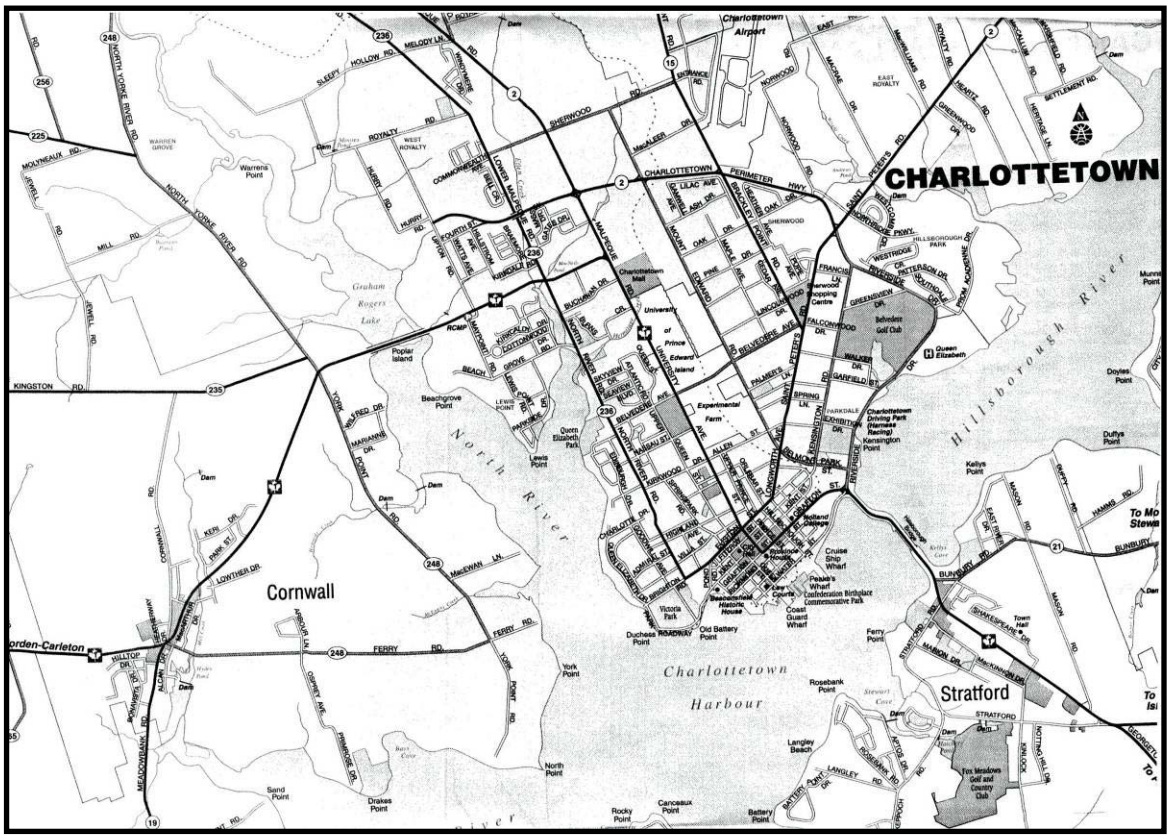
- A relatively low cost contract transit operator offers service in close geographic proximity to the Towns.
- There is average demand for public transit in the Towns.
- As ridership and revenue increases at a greater pace than cost, transit will become more self-reliant.
- The lower the Net Cost per Capita and below average Revenue Service Hours per Capita, the more feasible transit service expansion will be.
- The higher the service Net Cost per Capita and Revenue Hours per Capita are supported by the public, the better the quality of affordable transit service will be.

3. STAKEHOLDER CONSULTATIONS

3.1 Stratford and Cornwall Transit Focus Groups

As part of this study, iTRANS conducted a series of Stakeholder consultations called Transit Focus Groups (TFGs) in the towns of Stratford and Cornwall to ensure and encourage input from the public at large (both transit customers and non-transit customers) and the business community. **Exhibit 2** illustrates a map of the area showing the locations of both towns.

Exhibit 2: Town Locations



iTRANS held meetings with the Project Steering Committee and five distinct TFGs in the Towns of Stratford and Cornwall from April 9–11, 2007:

1. Taxi Association (Stratford and Cornwall)
2. Charlottetown Transit / Trius Tours
3. City officials (Stratford, Cornwall, and Charlottetown)
4. Stratford Community Representatives
5. Cornwall Community Representatives

The following section summarizes and presents the main issues raised at each of the TFGs. A detailed account of the series of consultations can be found below.

3.1.1 Taxi Association (Stratford and Cornwall)

The Taxi Association represents approximately 80 taxis, including seven-passenger vans. The number of taxis has been reduced from 125 since the Charlottetown Transit service started in September 2005.

In the opinion of the Taxi Association, the Cornwall market differs from the Stratford market in terms of car ownership and distance from the central business district (CBD) of Charlottetown. The Cornwall to Charlottetown fare ranges from $12 to $15 while the Stratford to Charlottetown fare ranges from $7 to $10. Taxi operators offer a discount to customers who book multiple rides. The current hourly rate is $30.

The zone fare based system was identified by the Taxi Association as being less profitable for taxi operators than the fare by distance system. The Taxi Association is open to the idea of shared-ride fixed-route taxi services whereby a taxi operator could be hired for a portion of each hour traveled. For example, a 20-minute roundtrip could be billed at the portion of the hourly rate.

There is no GPS-based dispatching system in place and taxi companies do not share dispatching resources.

3.1.2 Charlottetown Transit / Trius Tours

Charlottetown Transit serves the City of Charlottetown and is operated by Trius Tours. The routes were designed by Trius Tours and approved by the City's Transit Advisory Committee. Service commenced in September 2005 and has grown in use from 8,000 to 12,000 passengers per month. Trius Tours conducts all the marketing and is interested in discussing the possibility of expanding to serve Stratford and Cornwall.

Trius Tours operates a transit fleet consisting of:
- One 32' vehicle (Thomas Dennis)
- Four 30' vehicles (Bluebird)
- Two 40' spare buses (1993 and 1994 GM Classics)

During peak hours, five buses are placed in operation while during off-peak hours, four buses and a Community Bus continue service. These buses provide the equipment needed to operate Charlottetown Transit's five routes of which three are one-way.

The cost associated with providing service to meet Charlottetown's transit needs is $2.75 per kilometre, or about $950,000 per year for 350,000 kilometres of service. There is a five year transit agreement in which Trius Tours believes they accepted considerable risk.

The only service outside the Charlottetown Transit service area is a shuttle between Charlottetown and Stratford designed for CGI employees.

3.1.3 City Officials (Stratford, Cornwall, and Charlottetown)

The TFG for city officials included representatives from the City of Charlottetown and Towns of Stratford and Cornwall. The officials agreed that the creation of a Regional Transit Authority would be the best approach to meet the needs of Charlottetown, Stratford, and Cornwall residents.

Issues to be addressed include:

- Stratford and Cornwall were not approached when Charlottetown Transit services were introduced or when a study was recently initiated by the P.E.I. Public Transit Coalition (a non-profit advocacy group).
- Lack of transit has meant that many low income people have to live in downtown Charlottetown.
- Bus passes are available to those on Social Assistance.
- The advantages / disadvantages of introducing school buses for high school students in Stratford will be reviewed.
- Cornwall has a junior high school; however high school students in Grades 10-12 are transported by school bus to a rural school outside of Cornwall.
- High school students were identified by iTRANS as the future transit market.

3.1.4 Stratford Community Representatives

The Stratford Community Transit Focus Group included the following representatives:

- Stratford Hospital
- Veterans' Affairs Canada
- The Eastern School Board
- Andrews Lodge (for seniors)
- The Council of the Disabled
- The Chamber of Commerce
- CGI
- Stratford Council

The members of the group outlined that public transit to the following key areas needs to be available:

- **Hospitals**: Hillsborough Hospital in Charlottetown receives 600 patients each day and employs 1,200 people who work on five shifts. These numbers traditionally suggest a potential for transit, however hospital staff shift scheduling could present transit scheduling challenges.
- **Large Employers**: The Department of Veteran Affairs employs 1,200 people of whom 150 live in Stratford. There are two shifts each of which need transit services. CGI is also an important employer with 125 staff, and the company is adding another 130 staff. About 20 of the 125 current employees live in Stratford. About 35 staff from Charlottetown travel to CGI on the special Trius Tours shuttle service. Lack of transit services has caused hiring problems.
- **Schools / University**: Transit may be able to provide senior high school student service more cheaply than the yellow school buses, while the University of Prince Edward Island (UPEI) students could be accommodated as well for both travel to and from school and for other after-school activities. High school students are seen as the transit users of the future. Although liability issues were identified as a concern, the concept and business case was considered worth exploring.
- **Senior Homes**: Andrews House accommodates 66 people. The residents depend on transit. In general, seniors need space for their walkers on buses, a service for buying groceries, etc., and many depend on a subsidized taxi service for travelling to medical appointments.

The Stratford Community representatives recognized that transit is important as many residents cannot afford a first or a second vehicle, but they also recognized that transit cannot meet all needs.

The representatives identified the following desirable characteristics of a transit system based on priorities:

- Services for employees
- Off-peak travel for seniors
- Affordability
- More services to Charlottetown, the major destination for Stratford residents with seamless travel between Stratford and Charlottetown

3.1.5 Cornwall Community Representatives

The Cornwall Community Transit Focus Group included representatives from:

- The University of Prince Edward Island (UPEI) in Charlottetown
- Cornwall Seniors Alive
- Cornwall Council
- Local residents
- The Queen Elizabeth Hospital (QEH)
- PEI Inc.

The representatives pointed out numerous problems attributed to the absence of transit service, including:

- The lack of transit for workers is a problem for employees, many of whom cannot afford a car, and for employers who struggle to attract and retain staff.
- Many newcomers to the areas are forced to reside in Charlottetown over Cornwall.
- There is a lack of transit for seniors.
- There is a lack of transit to UPEI in Charlottetown.
- UPEI students are unwilling to pay $80 for a University Pass (U-Pass) program since there is no bus service outside of Charlottetown. The U-Pass program would provide steady and sizeable revenue for transit services.
- Operating a stand-alone Cornwall bus service was discussed and dismissed.

The representatives felt that Save Easy Mall could be a focal point for a Cornwall transit service and there was a need to accommodate late retail closing times for shoppers and employees.

The transit priorities were:

- Making Cornwall competitive with other towns that have bus services
- Services to Charlottetown Mall, Charlottetown industrial areas, and UPEI
- Seamless travel between Cornwall and Charlottetown with fully integrated services offering direct service or connections to downtown Charlottetown for transfers to other routes

3.2 Summary of the Transit Focus Group Discussions

Charlottetown has been served by Charlottetown Transit (operated by Trius Tours) since September 2005 whereas nearby Stratford and Cornwall residents depend mainly on taxis for trips where an automobile is not available. The growth of Charlottetown Transit ridership is assumed to have a direct impact on the number of taxis operating in Charlottetown, which has been reduced significantly.

Meeting the transportation needs of the following markets were identified:

- Low income residents.
- Residents without a first or a second car.
- Industrial employees working in Charlottetown.
- Employees of the hospitals, and other major employers such as Veterans' Affairs Canada (Stratford), CGI (Stratford) and businesses in the Charlottetown industrial areas. Local employers report problems hiring and retaining staff.
- Seniors.
- Students and employees of UPEI.
- High school students, who are regarded as the future transit market.

Transportation must be affordable and must meet the needs of the community to the extent possible regarding, for example, seniors' travel to hospitals and travel to medical appointments.

The creation of a Regional Transit Authority designed to meet the needs of Charlottetown, Stratford and Cornwall residents is seen as the best way of providing seamless travel with fully integrated services between the three communities.

4. RESIDENTS' AND BUSINESSES' SURVEYS

After receiving feedback from the various Stakeholders, a community-wide web-based survey was conducted to determine potential transit demand, destinations, and opinions from both the residents and businesses of the Towns of Stratford and Cornwall.

In order to gather feedback from as large a segment of the population as possible, the consultant team undertook a web-based survey. This was done to complement consultations with the Transit Focus Groups.

4.1 Purpose

The purpose of the data collection was to help obtain a community perspective to assist the Project Team in determining the level of interest and community need for transit service.

4.2 Methodology

The survey questionnaire was developed by iTRANS with input from the Towns of Stratford's and Cornwall's staff and this study's Steering Committee.

The survey was advertised on both the Towns of Stratford's and Cornwall's website from May 4, 2007 to May 13, 2007. For those that did not have internet access during the survey period, paper surveys were made available by the Towns.

4.3 Survey Results

There were 438 resident responses to the survey, 253 were from Stratford and 185 were from Cornwall. The results of the survey are summarized in **Appendix B** (**Figure 14** to **Figure 26**).

There were 17 business responses to the survey. Of the 17 business survey responses, 13 were from Stratford, three were from Cornwall and one was unidentified. The results of the Stratford business survey are summarized in **Appendix C** (**Figure 27** to **Figure 31**).

4.4 Summary of Key Observations

A summary of the key observations from the survey of the residents of the Towns of Stratford and Cornwall are with respect to:

- *The survey's result is representative of the Towns' interest:*
  - **Age:** It is interesting to note that the survey's distribution of respondents mirrors the towns' distribution of citizens. This means that there is approximately an equal percentage of interest among each of the age groups identified. Reciprocally, not one age group dominated the survey.
- *Transit is of greatest concern to those that are unemployed and retired:*
  - **Occupation:** As one would suspect, the respondents that are considered statistically unemployed (unemployed, homemakers, and students) and the retired represent a large percentage of total responses at a cumulative 34%. Together, the unemployed and retired population represent a greater percentage of total respondents in this survey than they do in the Towns' population.
- *Public transit is a real option for those that do not have access, when necessary, to a private vehicle:*
  - **Household Car Ownership and Persons Living in Household:** When Car Ownership is juxtaposed to Persons Living in Household, 76% of respondents live in households where there are more people than cars.
- *The lack of public transit prevents mobility and hinders the ability of many to conduct personal business, be it travelling to shops, schools, medical appointments or whatever it may be:*
  - **Lack of Public Transit Prevents Mobility:** 32% of respondents answered that the lack of public transit prevents them from travelling more often. This 32% mirrors the 34% that are either statistically unemployed or retired and are thus, one would assume, limited financially.
- *The lack of public transit prevents residents from accessing employment opportunities and hinders the employers from attracting employees:*
  - **Charlottetown is where the majority of Stratford and Cornwall residents work:** Over 90% of employed residents reported they work in Charlottetown and 25% of the businesses stated that the provision of public transit will help them attract employees.
- *The availability of public transit will help businesses attract customers:*
  - **Businesses need to be accessed by customers that do not have access to cars:** Approximately 25% of Stratford businesses responded that the provision of transit to their place of business will help attract customers.

What is interesting to note is that while the web-based survey was not intended to be statistically significant, the analysis is sufficiently accurate to clearly confirm the information, issues and concerns expressed during the initial Stakeholder consultations.

5. TRANSIT GOALS AND OBJECTIVES

5.1 Transit Focus

Transit goals and objectives provide a general policy direction for the Towns of Stratford and Cornwall to follow with respect to the provision of transit service.

Transit service standards are needed to guide the Towns in determining if or when transit service will be provided, how often it will be provided and how it will be provided through:

- A framework for making rational decisions on the level and quality of service in the community.
- Increased public awareness of the philosophy of service and growth.
- A strong commitment by Council to maintain service standards within the context of balancing social and environmental objectives with fiscal responsibility.
- A high degree of acceptance for transit expenditures since the decision-making process will be perceived as fair.

Through the community surveys and analysis and the consensus-building process that iTRANS advocated throughout the study, a number of goals and objectives have been developed based on the following vision and mission statements.

Vision Statement
The preferred future of public transit in the Towns of Stratford and Cornwall:
"The Towns of Stratford and Cornwall provide a local public transportation system that is supported by residents and the business community".

Mission Statement
The purpose of Transit:
"To provide safe, efficient and environmentally friendly public transportation services that support the economic vitality, growth, environmental sustainability, and health of the community".

To support the transit vision, a number of goals and objectives were developed.

Service Goals
To provide a public transit service as a viable alternative to the automobile in the Towns of Stratford and Cornwall:

- Improve the quality of life of residents who do not have access to an automobile.
- Meet the travel demand generated by various target markets in the employment academic, commercial, medical, and service industries.
- Recognize that transit is an integral component of urban growth.

Performance Goals
Transit performance targets have been established for the next five years:

- **Effectiveness**: To increase transit use to five passengers per capita within five years.
- **Efficiency**: To increase service utilization to 50% of the City of Charlottetown passengers per hour of service within five years.
- **Financial**: To increase the revenue to cost (R/C) ratio of Charlottetown Transit service within five years.

The performance targets identified can be adjusted, as required, and are designed to be slightly out of reach to ensure continuous improvement is sought to ensure ridership growth initiatives are balanced with fiscal responsibility.

Service Area Objective
The Towns of Stratford and Cornwall should provide service outside the urbanized area of Charlottetown and within the Towns' respective boundaries.

Service Objective
The minimum frequency of service and service hours to be provided shall be adequate to meet the various target markets within the community.

5.2 Land Use Design Guidelines For Residential Development

The efficiency and effectiveness of public transportation (Conventional and Specialized) is dictated by the degree to which land use design policies support transit operations and sustainable development initiatives. By applying proven transit supportive land use guidelines, the Towns of Stratford and Cornwall will be able to avoid the costly mistakes of other larger municipalities.

The guidelines address:

- Acceptable walk distances from developments to existing and future transit services
- Accessibility infrastructure
- Incorporating transit-supportive guidelines in the development approval process

Highlights of the guidelines are:

- *Bus Stop Locations:*
  - That the location of bus stops be co-coordinated with the design of walkways, intersections and development in order to minimize walk distances and provide for reasonable bus stop spacing.
- *Walk Distances:*
  - 90% of all dwelling units should be within a 450 metre walk distance of an existing or future bus stop with 66% of the dwelling units within a 300 metre walk distance of the bus stop.
  - All multiple dwelling units should be within a 300 metre walk distance of an existing or future bus stop.
  - Estate-type residential developments should be excluded from meeting walk distance guidelines.
- *Walkway Locations:*
  - That walkways be provided such that walking distances from the residences of a subdivision to existing or future transit routes are minimized.
- *Acceptable Transit Routes:*
  - Transit routes can be provided on arterial roads and major collectors which have reasonable through access, not on crescents or cul-de-sacs. A nine metre pavement width is the minimum acceptable for transit routes.
  - Major 'through' roads should be spaced no more than 900 metres apart to allow adequate transit route coverage of future residential developments.
  - Provision should be made to minimize the length of one-way transit loops. One directional loops longer than two kilometres are unacceptable.
  - Provision for temporary transit vehicle turning circles must be provided, where necessary, to allow transit route phasing to coincide with development phasing. A minimum 15.2 metre radius is required for the turning circle.
- *Transit Route Length:*
  - Road layouts in residential developments should be designed such that transit routes require a maximum of one kilometre of transit route per 1,000 residents served.
- *Trade-Offs:*
  - That land use / transit co-ordination is a necessary and valuable goal recognizing that, in the implementation of the design objectives, trade-offs may exist in some instances with other planning, engineering and environmental considerations.
  - That all land use plans recommended by staff shall reflect efforts used in trying to achieve the transit guideline objectives.

6. SERVICE DELIVERY CONCEPTS

iTRANS has developed a series of service delivery concepts that can provide transit service to the Towns of Stratford and Cornwall.

The service delivery concepts evaluated include:

- Fixed Route Conventional Transit Service
- Fixed Route Shared-Ride Taxi Service
- Dial-a-Ride Bus Service

6.1 Fixed Route Conventional Transit Service

Fixed Route Conventional Transit mirrors the service provided by Charlottetown Transit and other transit systems across Canada where buses operate along fixed routes on a defined schedule. Variations in scheduling frequency and routing lead to different names for this service such as Conventional Transit (Peak) and Conventional Transit (Community Bus).

6.2 Fixed Route Shared-Ride Taxi Service

Fixed Route Shared-Taxi service is generally employed in areas of low demand, that is, where Conventional Transit service is not warranted. The taxis, usually a van, would follow a fixed route and schedule and stop only at designated points, or bus stops. Passengers would board the taxi van, pay the normal fare and be issued transfers, if required. In essence, a taxi is used in place of a bus. The significant benefit is that of cost. The portion of an hourly fee can be negotiated based on the interest level obtained from the Taxi Association. For example, if the hourly fee is $40 and the taxi van is only needed for 30 minutes of each hour, then it would cost $20 per trip. Shared ride taxis are used in conjunction with Conventional Transit fixed routes and are applied as an interim solution until Conventional Transit service is warranted.

Since taxis would not offer a door-to-door service, the service is not viewed as competing with the regular taxi service provided.

6.3 Dial-a-Ride Bus Service

Dial-a-Ride Service is a demand-responsive door-to-door service whereby residents would call into a dispatch centre and a van or small bus would be deployed. Service can be provided on a frequency basis (e.g. every hour) and a resident would be given an approximate arrival time. Similar to a fixed route shared ride taxi; the customer would be able to transfer to Conventional Transit vehicle, if required, to complete their trip. On the return trip, the customer would also be required to call the dispatch operator.

Dial-a-Ride Service is generally used in place of Conventional Transit but is far more inconvenient for the customer; it competes directly with the taxi industry and, if used in conjunction with Conventional Transit, is more expensive than fixed route shared ride taxis.

6.4 Comparison of Service Delivery Concepts

A comparison of each of the service delivery concepts is provided in **Exhibit 3**.

Exhibit 3: Service Concept Summary

SERVICE CONCEPT	VEHICLE OPTIONS	DISADVANTAGES	ADVANTAGES	RELATIVE RIDERSHIP	RELATIVE OPERATING COST
Status Quo	N/A	Reduced quality of life compared to those than can afford to own a car or take taxis	No change	N/A	N/A
		Forces some residents to move to Charlottetown where service is available	No cost		
		Businesses experience difficulty retaining employees and attracting new employees			
		Forces higher car ownership			
Conventional Transit (all day fixed route service)	Heavy duty buses (as per Charlottetown Transit)	Most expensive to purchase and operate	Highest capacity	Medium	Highest
		Hourly peak service limits accommodation of most work trips	Mobility aid accessible		
			Can be incorporated into Charlottetown Transit fleet		
Conventional Transit (peak hour trips)	Heavy duty buses (as per Charlottetown Transit)	Minimal service during peak hour	1.5 hours per peak only but accommodates most work trips	Highest	Medium
			Trips can be added as demand dictates (flexible)		
Conventional Transit (school specials)	Older heavy duty buses (as per Charlottetown Transit)	Agreement with school board is mandatory	High return on investment with sustainable revenue source	Highest	N/A
		Perceived safety issue	Provides students with free service during all service hours		
			Shorter travel times to school		
			Can be used by other residents		
Community Bus	Heavy duty buses (as per Charlottetown Transit)	Does not meet work trip needs	Serves more origins and destinations	Lowest	Highest
		Infrequent service	Mobility aid accessible		
			Can be incorporated into Charlottetown Transit fleet		
Dial-a-Ride (must connect to conventional transit route)	Van, small bus or heavy duty bus	Customer must call in	Applicable to more remote areas	Lowest	Highestest
		Dispatcher required	Flexible hours of operation		
		Vehicle must be available (full hourly rate applies)			
		Longer wait times for customer			
		Indirect routes			
Fixed Route Shared-Ride Taxi	Small to large van	Minimal vehicle capacity – limited to off-peak or peak feeder services	Feeder service for remote areas	Medium	Medium
			Costs apply to portion of hourly cost		
			Ideal for new residential areas or feeder services		
			Low cost for added late evening trips		
			Flexibility; can add trips as needed		
			Can evolve into conventional transit as business case dictates		

7. TRANSIT SERVICE OPTIONS

Transit service options are made up by either the individual or collective employment of the service options described in Section 6. Upon assessing Charlottetown Transit's current operation, conducting a peer review of transit service in similar sized towns and cities, analyzing the web-based survey results, and assembling Transit Focus Group input, iTRANS assessed the following five transit service options, including a 'do nothing' option.

The transit service options assessed for the Towns of Stratford and Cornwall are:

- **Option One:** Conventional Transit Service
- **Option Two:** Community Bus Service
- **Option Three:** Combination of Services
  - Conventional Transit (Peak)
  - Community Bus (Off-Peak)
  - Fixed Route Shared-Ride Taxi (peak feeder service plus evening 'trippers')
- **Option Four:** School Service Agreement
- **Option Five:** Do Nothing

The purpose of presenting a variety of service options was to present to the public a range of service and route concepts using order-of-magnitude costing. They are presented as a guide only. In this regard, it should be understood that final routes, the hours and days of service, and the method of service delivery will likely vary based on the level of funding, if any, that would be provided by the respective towns and whether or not external sustained funding (e.g. Provincial or Federal government) would be provided as well.

It is also important to note that throughout the costing exercise, it has been assumed that all costs attributed to Stratford and Cornwall buses travelling within Charlottetown would be borne 100% by the towns. If the services were shared between Stratford, Cornwall and Charlottetown based on vehicle kilometres travelled within each jurisdiction, as is the case in other cross-boundary transit services in Canada, the net cost of service would be less for the towns. In this regard, a detailed review of a more integrated service with Charlottetown Transit would need to be undertaken. The net costs presented in this report would, therefore, be reduced if an appropriate agreement between all parties was reached.

7.1 Option One: Conventional Transit Service

7.1.1 Service Description

Using standard 30-foot (9.1 metre) buses, hourly service connecting Cornwall and Stratford via Charlottetown (e.g. University Avenue) would be provided from 7:00am to 6:00pm, Monday through Saturday.

The route to be followed is designed to link Stratford and Cornwall with two major destination areas:
1. Downtown Charlottetown and the University of Prince Edward Island
2. Retail and commercial areas along University Avenue such as Charlottetown Mall

The route was designed to be no more than 60 minutes long (approximately 25 kilometres one-way) to coincide with Charlottetown Transit round trip times to accommodate timed transfers to other routes. The route option is illustrated in **Exhibit 7**, recognizing that the final route may change based on further public input prior to implementation.

Exhibit 4: Option One – Service Components

	OPTION ONE
Buses Required	2
Daily Coverage	7:00am to 6:00pm
Avg. Daily Revenue Hours	22

7.1.2 Financial Forecast

Exhibit 5 outlines the estimated costs associated with implementing Option One for both the Towns of Stratford and Cornwall[1].The cost-sharing is assumed to be 60% Stratford and 40% Cornwall based on population and the distances travelled within Stratford and Charlottetown. If fully integrated with the Charlottetown Transit system, the portion of travel within Charlottetown may not be charged to Stratford or Cornwall; this would have to be negotiated.

[1] These costs are subject to assumptions that can be found in **Appendix D**.

Exhibit 5: Option One – Financial Forecast[2]

OPTION ONE: FINANCIAL FORECAST STRATFORD					
SERVICE	**2008 Service Level 1**	**2009 Service Level 2**	**2010 Service Level 3**	**2011 Service Level 4**	**2012 Service Level 5**
Conventional Transit					
Population of Stratford Service Area	7,500	7,500	7,500	7,500	7,500
Revenue Hours	4,118	4,118	4,118	4,118	4,118
Annual Operating Cost	$267,670	$267,670	$267,670	$267,670	$267,670
Annual Passenger Ridership	15,000	15,000	18,750	18,750	22,500
Annual Passenger Revenue	$30,000	$30,000	$37,500	$37,500	$45,000
Annual Net Cost	$237,670	$237,670	$230,170	$230,170	$222,670
Net Cost per Capita	*$32*	*$32*	*$31*	*$31*	*$30*

CORNWALL					
SERVICE	**2008 Service Level 1**	**2009 Service Level 2**	**2010 Service Level 3**	**2011 Service Level 4**	**2012 Service Level 5**
Conventional Transit					
Population of Cornwall Service Area	5,000	5,000	5,000	5,000	5,000
Revenue Hours	2,746	2,746	2,746	2,746	2,746
Annual Operating Cost	$178,490	$178,490	$178,490	$178,490	$178,490
Annual Passenger Ridership	10,000	10,000	12,500	12,500	15,000
Annual Passenger Revenue	$20,000	$20,000	$25,000	$25,000	$30,000
Annual Net Cost	$158,490	$158,490	$153,490	$153,490	$148,490
Net Cost per Capita	*$32*	*$32*	*$31*	*$31*	*$30*

7.1.3 Environmental Impact

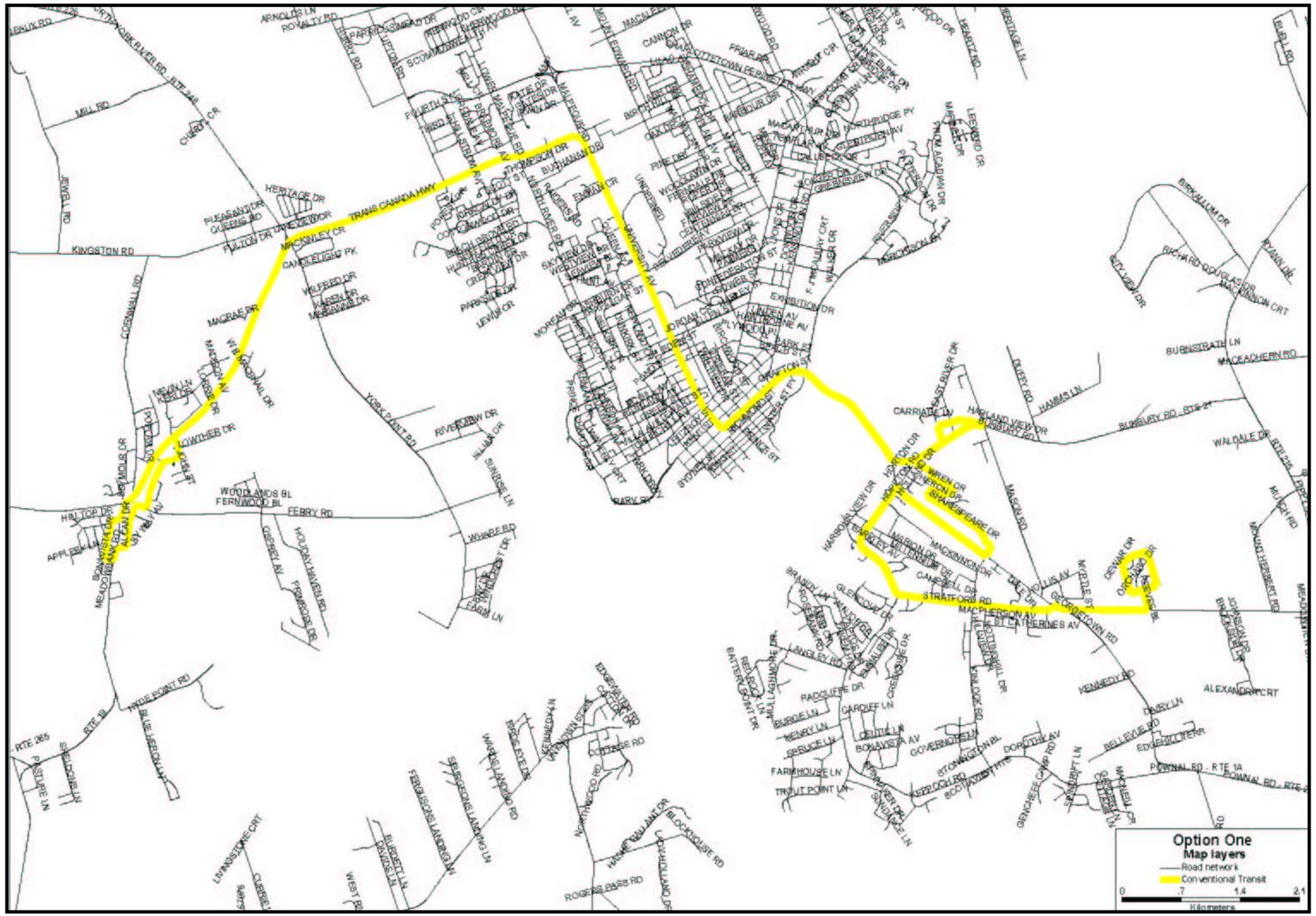
Exhibit 6: Option One – Emission Reductions

OPTION ONE: ANNUAL TOTAL EMISSION REDUCTIONS						
	CAC, Fuel & GHG	**2008**	**2009**	**2010**	**2011**	**2012**
STRATFORD	CO (kg)	3,007	3,007	3,759	3,759	4,511
	HC (kg)	284	284	355	355	426
	Nox (kg)	169	169	211	211	253
	Fuel (litres)	26,960	26,960	33,700	33,700	40,439
	GHG (kg)	66,560	66,560	83,201	83,201	99,841
CORNWALL	CO (kg)	2,005	2,005	2,506	2,506	3,007
	HC (kg)	189	189	237	237	284
	Nox (kg)	112	112	141	141	169
	Fuel (litres)	17,973	17,973	22,466	22,466	26,960
	GHG (kg)	44,374	44,374	55,467	55,467	66,560

2 This financial forecast is based on the assumptions outlined in **Appendix D**.

7.1.4 Route Map

Exhibit 7: Option One – Route Map



7.2 Option Two: Community Bus Service

7.2.1 Service Description

The Community Bus Option is identical to that of Conventional Transit in all regards except service frequency. Specifically, Option One offers one hour service; Option Two offers two hour service. This transit service option is illustrated in **Exhibit 11**.

Exhibit 8: Option Two – Service Components

	OPTION TWO
Buses Required	2
Daily Coverage	7:00am to 6:00pm
Avg. Daily Revenue Hours	11

7.2.2 Financial Forecast

Exhibit 9 outlines the estimated costs associated with implementing Option Two, a Community Bus Service, for both the Towns of Stratford and Cornwall[3].

Exhibit 9: Option Two – Financial Forecast[4]

OPTION TWO: FINANCIAL FORECAST
STRATFORD

SERVICE	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
Community Bus					
Population of Stratford Service Area	7,500	7,500	7,500	7,500	7,500
Revenue Hours	2,059	2,059	2,059	2,059	2,059
Annual Operating Cost	$133,835	$133,835	$133,835	$133,835	$133,835
Annual Passenger Ridership	11,250	11,250	14,063	14,063	16,875
Annual Passenger Revenue	$22,500	$22,500	$28,125	$28,125	$33,750
Annual Net Cost	$111,335	$111,335	$105,710	$105,710	$100,085
Net Cost per Capita	*$15*	*$15*	*$14*	*$14*	*$13*

CORNWALL

SERVICE	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
Community Bus					
Population of Cornwall Service Area	5,000	5,000	5,000	5,000	5,000
Revenue Hours	1,373	1,373	1,373	1,373	1,373
Annual Operating Cost	$89,245	$89,245	$89,245	$89,245	$89,245
Annual Passenger Ridership	7,500	7,500	9,375	9,375	11,250
Annual Passenger Revenue	$15,000	$15,000	$18,750	$18,750	$22,500
Annual Net Cost	$74,245	$74,245	$70,495	$70,495	$66,745
Net Cost per Capita	*$15*	*$15*	*$14*	*$14*	*$13*

7.2.3 Environmental Impact

Exhibit 10: Option Two – Emission Reductions

OPTION TWO: ANNUAL TOTAL EMISSION REDUCTIONS

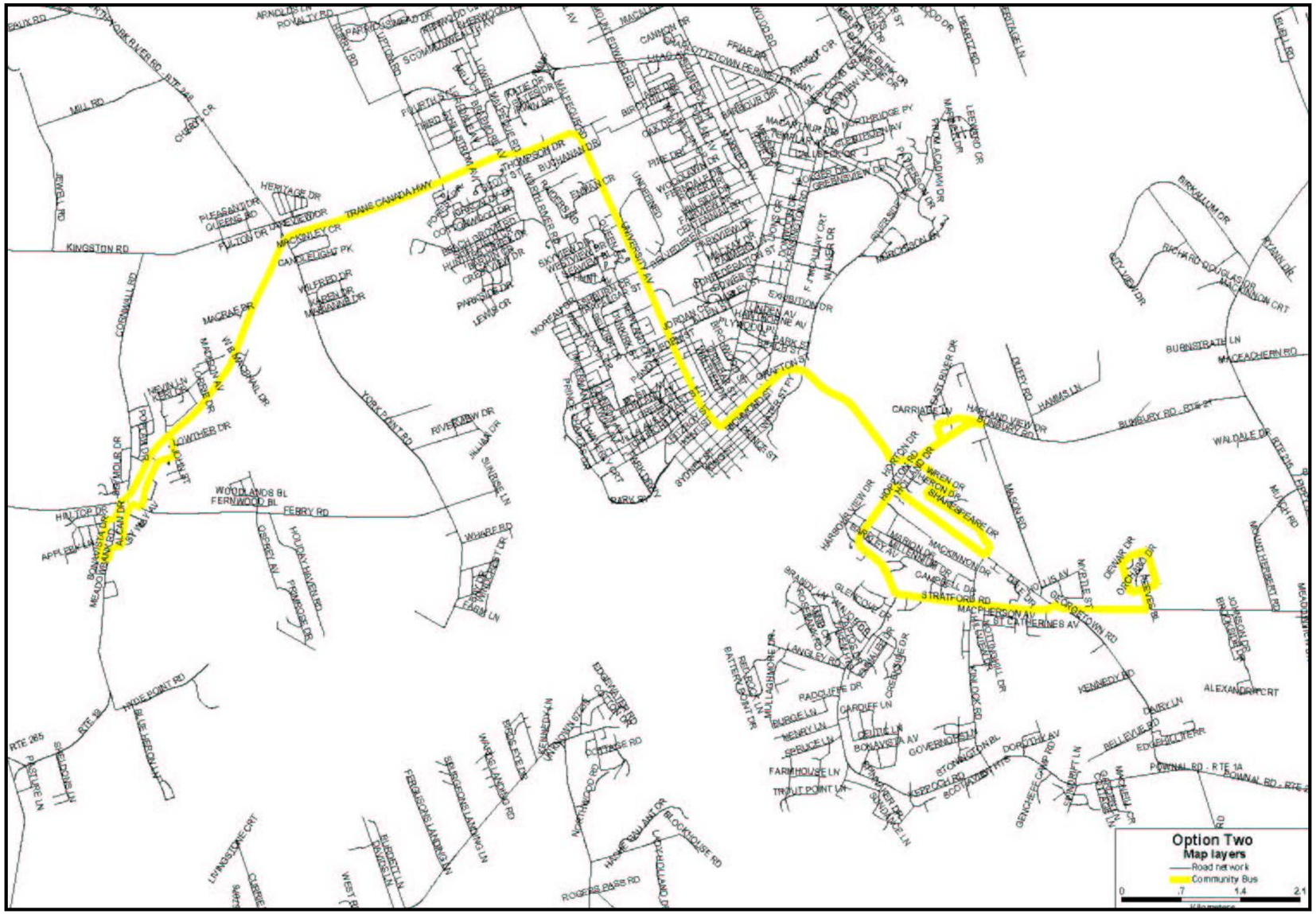
	CAC, Fuel & GHG	2008	2009	2010	2011	2012
STRATFORD	CO (kg)	2,256	2,256	2,819	2,819	3,383
	HC (kg)	213	213	266	266	319
	Nox (kg)	126	126	158	158	190
	Fuel (litres)	20,220	20,220	25,275	25,275	30,330
	GHG (kg)	49,920	49,920	62,400	62,400	74,880
CORNWALL	CO (kg)	1,504	1,504	1,880	1,880	2,256
	HC (kg)	142	142	177	177	213
	Nox (kg)	84	84	105	105	126
	Fuel (litres)	13,480	13,480	16,850	16,850	20,220
	GHG (kg)	33,280	33,280	41,600	41,600	49,920

[3] These costs are subject to assumptions that can be found in **Appendix D**.

[4] This financial forecast is based on the assumptions outlined in **Appendix D**.

7.2.4 Route Map

Exhibit 11: Option Two – Route Map



7.3 Option Three: Combination of Services

7.3.1 Service Description

Option Three is based on a 'family of transit services'. It employs Conventional Transit during the peak morning and afternoon periods, Community Bus during off peak hours, and fixed route shared ride taxi service concepts.

The Conventional Transit peak service would require Charlottetown Transit extending its current service for three trips in the morning and three trips returning in the late afternoon to primarily accommodate the work trip. Existing buses would be used.

Since there would be minimal Conventional Transit coverage in Stratford, it is recommended that a fixed route shared-ride taxi service (van) pick up passengers in areas that are not served and connect with the peak service in Stratford for transfer purposes. In the evening, two late night taxis would transport residents from Charlottetown to Stratford while a third taxi would transport customers to Cornwall. The taxis would follow a fixed route and stop only at designated points designated as bus stops. The normal bus fare would apply and transfers would be issued.

In the off-peak, the two-hour Community Bus service would be in place. **Exhibit 16** illustrates the peak hour service while **Exhibit 17** illustrates the off-peak service. **Exhibit 18** illustrates the same off-peak service, however with the optional addition of an extension along Ferry Road.

Exhibit 12: Option Three – Service Components

	OPTION THREE
Buses Required	2
Daily Coverage	7:30am to 5:30pm
Avg. Daily Revenue Hours	15

7.3.2 Financial Forecast

Exhibit 13 and **Exhibit 14** outline the estimated costs associated with implementing Option Three, a 'family of transit services' option, for both the Towns of Stratford and Cornwall[5].

[5] These costs are subject to assumptions that can be found in **Appendix D**.

Exhibit 13: Option Three – Financial Forecast (Stratford)[6]

OPTION THREE: FINANCIAL FORECAST STRATFORD					
SERVICE	**2008 Service Level 1**	**2009 Service Level 2**	**2010 Service Level 3**	**2011 Service Level 4**	**2012 Service Level 5**
Population of Stratford Service Area	7,500	7,500	7,500	7,500	7,500
Conventional Peak					
Revenue Hours	780	780	780	780	780
Annual Operating Cost	$50,700	$50,700	$50,700	$50,700	$50,700
Annual Passenger Ridership	4,718	4,718	6,290	7,863	9,435
Annual Passenger Revenue	$9,435	$9,435	$12,581	$15,726	$18,871
Annual Net Cost	$41,265	$41,265	$38,119	$34,974	$31,829
Community Bus					
Revenue Hours	1,080	1,080	2,160	2,160	2,160
Annual Operating Cost	$70,200	$70,200	$140,400	$140,400	$140,400
Annual Passenger Ridership	4,899	4,899	6,532	8,165	9,798
Annual Passenger Revenue	$9,798	$9,798	$13,065	$16,331	$19,597
Annual Net Cost	$60,402	$60,402	$127,335	$124,069	$120,803
Fixed Route Shared Taxi					
Revenue Hours	1,000	1,000	1,000	1,000	1,000
Annual Operating Cost	$20,000	$20,000	$20,000	$20,000	$20,000
Annual Passenger Ridership*					
Annual Passenger Revenue	$0	$0	$0	$0	$0
Annual Net Cost	$20,000	$20,000	$20,000	$20,000	$20,000
Total					
Revenue Hours	2,860	2,860	3,940	3,940	3,940
Annual Operating Cost	$ 140,900	$ 140,900	$ 211,100	$ 211,100	$ 211,100
Annual Passengers	9,617	9,617	12,823	16,028	19,234
Annual Revenue	$ 19,234	$ 19,234	$ 25,645	$ 32,056	$ 38,468
Annual Net Cost	$121,666	$121,666	$185,455	$179,044	$172,632
Net Cost per Capita	*$ 16.22*	*$ 16.22*	*$ 24.73*	*$ 23.87*	*$ 23.02*

Notes:
* Fixed Route Shared Taxi Ridership is a linked service to Conventional Peak and thus the passengers are already accounted for.

[6] This financial forecast is based on the assumptions outlined in **Appendix D**.

Exhibit 14: Option Three – Financial Forecast (Cornwall)[7]

CORNWALL					
SERVICE	**2008 Service Level 1**	**2009 Service Level 2**	**2010 Service Level 3**	**2011 Service Level 4**	**2012 Service Level 5**
Population of Cornwall Service Area	5,000	5,000	5,000	5,000	5,000
Conventional Peak					
Revenue Hours	780	780	780	780	780
Annual Operating Cost	$50,700	$50,700	$50,700	$50,700	$50,700
Annual Passenger Ridership	3,900	3,900	5,200	6,500	7,800
Annual Passenger Revenue	$7,800	$7,800	$10,400	$13,000	$15,600
Annual Net Cost	$42,900	$42,900	$40,300	$37,700	$35,100
Community Bus					
Revenue Hours	720	720	1,440	1,440	1,440
Annual Operating Cost	$46,800	$46,800	$93,600	$93,600	$93,600
Annual Passenger Ridership	2,700	2,700	3,600	4,500	5,400
Annual Passenger Revenue	$5,400	$5,400	$7,200	$9,000	$10,800
Annual Net Cost	$41,400	$41,400	$86,400	$84,600	$82,800
Fixed Route Shared Taxi					
Revenue Hours	125	125	125	125	125
Annual Operating Cost	$2,500	$2,500	$2,500	$2,500	$2,500
Annual Passenger Ridership*					
Annual Passenger Revenue	$0	$0	$0	$0	$0
Annual Net Cost	$2,500	$2,500	$2,500	$2,500	$2,500
Total					
Revenue Hours	1,625	1,625	2,345	2,345	2,345
Annual Operating Cost	$ 100,000	$ 100,000	$ 146,800	$ 146,800	$ 146,800
Annual Passengers	6,600	6,600	8,800	11,000	13,200
Annual Revenue	$ 13,200	$ 13,200	$ 17,600	$ 22,000	$ 26,400
Annual Net Cost	$86,800	$86,800	$129,200	$124,800	$120,400
Net Cost per Capita	*$ 17.36*	*$ 17.36*	*$ 25.84*	*$ 24.96*	*$ 24.08*

Notes:
* Fixed Route Shared Taxi Ridership is a linked service to Conventional Peak and thus the passengers are already accounted for.

7.3.3 Environmental Impact

Exhibit 15: Option Three – Emission Reductions

OPTION THREE: ANNUAL TOTAL EMISSION REDUCTIONS						
	CAC, Fuel & GHG	**2008**	**2009**	**2010**	**2011**	**2012**
STRATFORD	CO (kg)	1,928	1,928	2,571	3,214	3,856
	HC (kg)	182	182	243	303	364
	Nox (kg)	108	108	144	180	216
	Fuel (litres)	17,285	17,285	23,046	28,808	34,569
	GHG (kg)	42,674	42,674	56,898	71,123	85,348
CORNWALL	CO (kg)	1,323	1,323	1,764	2,205	2,646
	HC (kg)	125	125	167	208	250
	Nox (kg)	74	74	99	124	148
	Fuel (litres)	11,862	11,862	15,816	19,770	23,724
	GHG (kg)	29,287	29,287	39,049	48,811	58,573

[7] This financial forecast is based on the assumptions outlined in **Appendix D**.

7.3.4 Route Map

Exhibit 16: Option Three – Route Map (Peak)

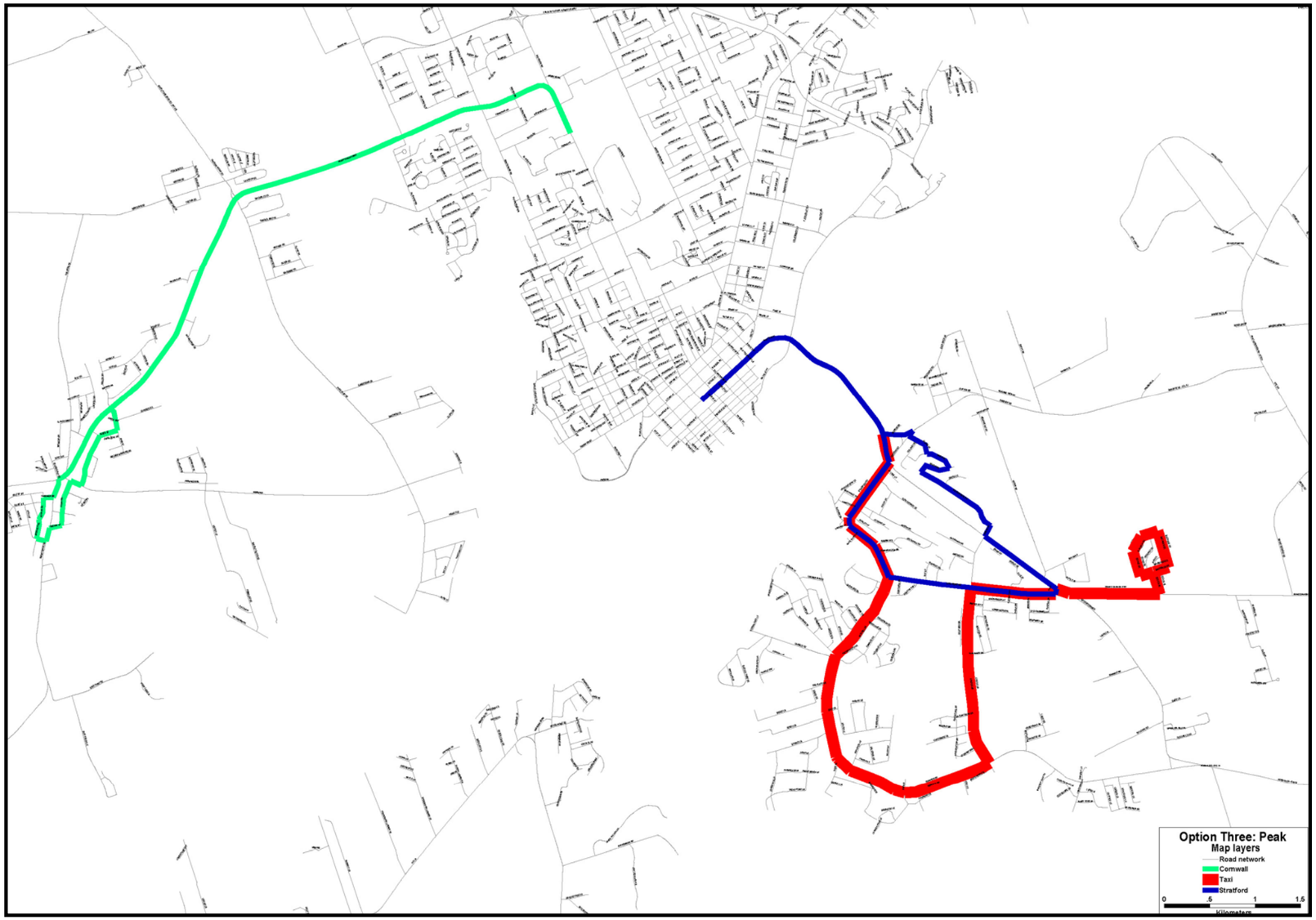


Exhibit 17: Option Three – Route Map (Off-Peak)

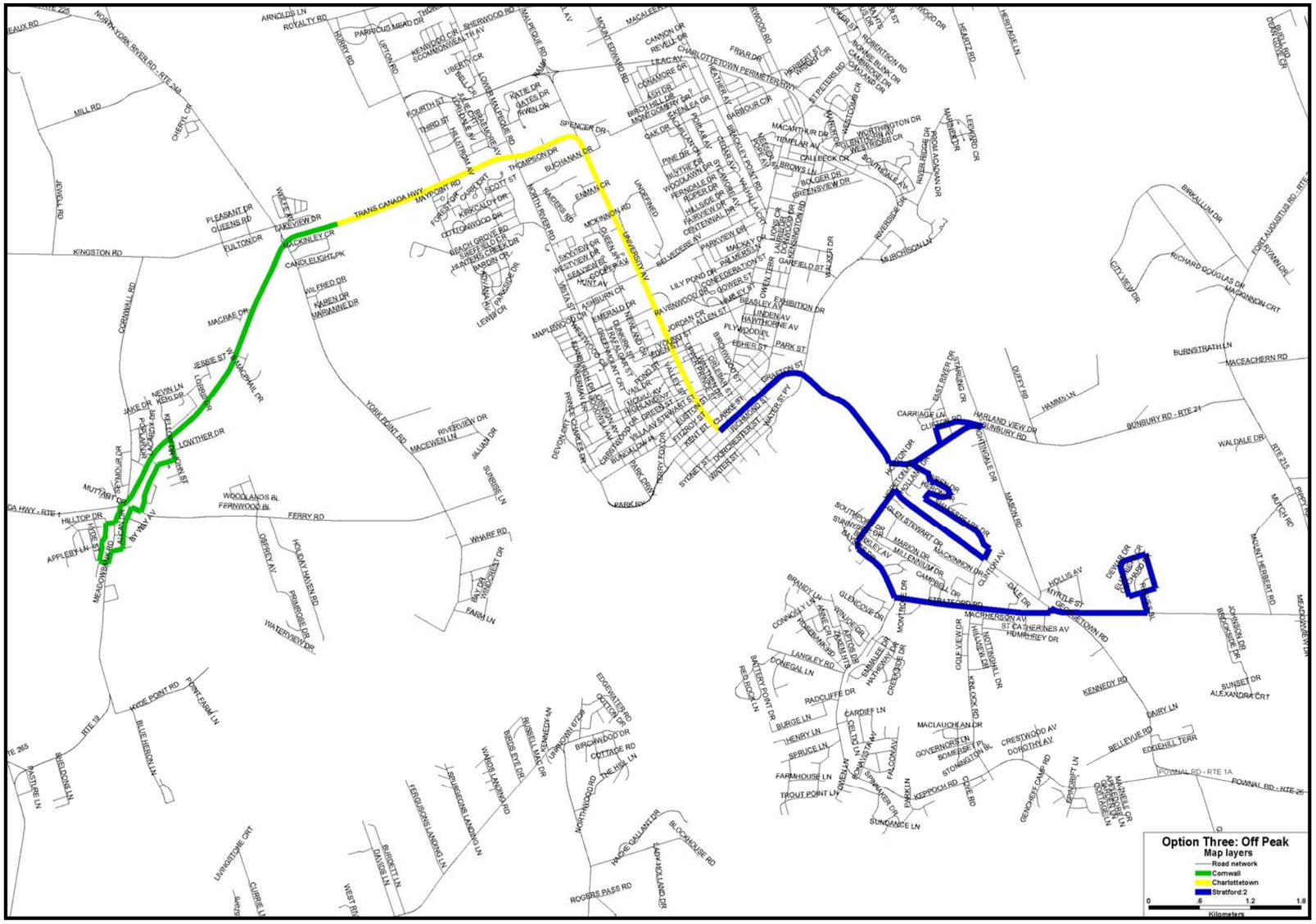
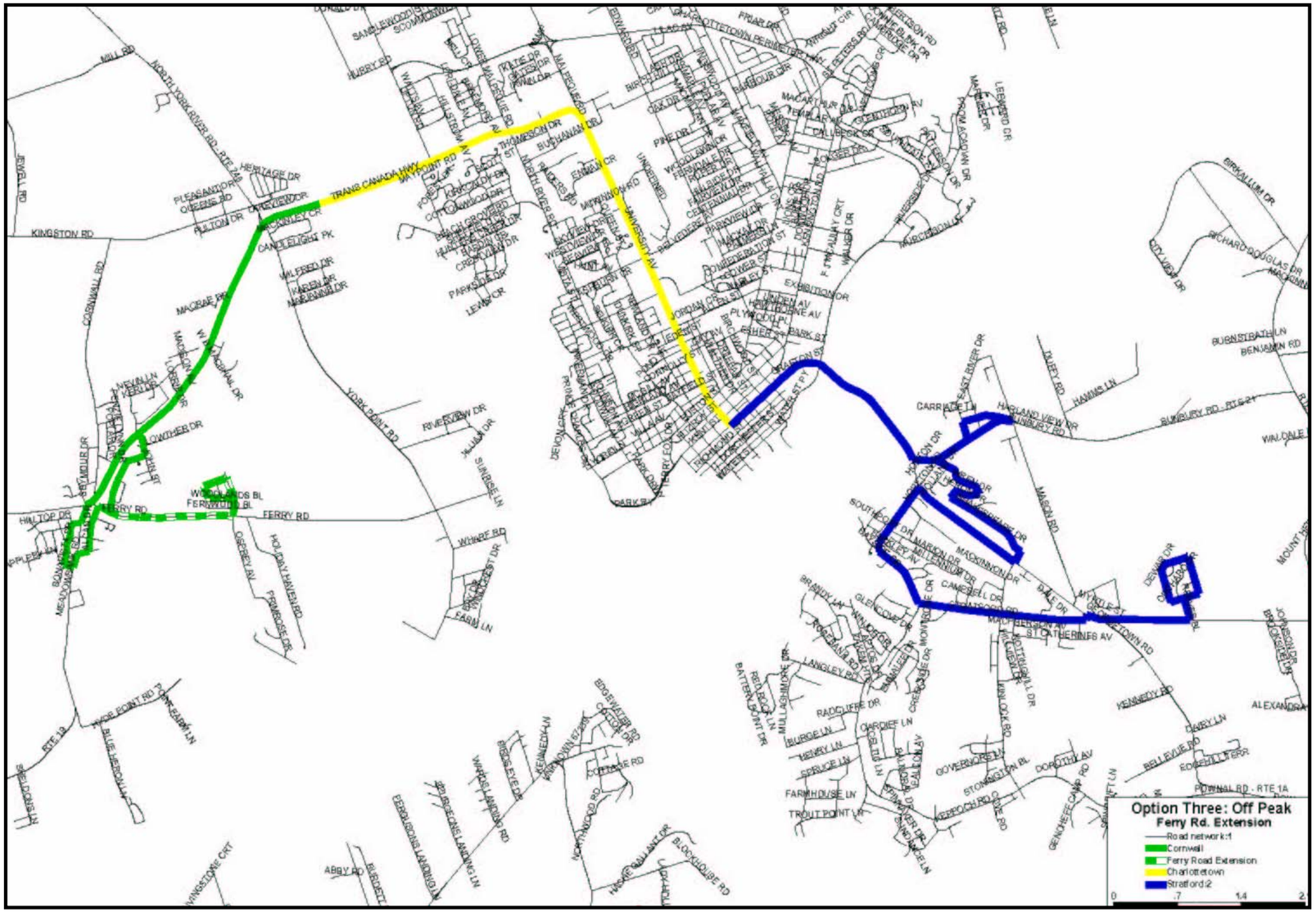


Exhibit 18: Option Three – Route Map (Off-Peak)



7.4 Option Four: School Service Agreement

7.4.1 Service Description

A School Service Agreement, also known as "High School Specials", are generally described as a Conventional Transit vehicle providing fixed route bus service to transport a larger number of students to and from school than one yellow school bus is able to. The transit vehicles can also pick up students and take them to and from school quicker and usually at a lower cost per student. Since High School Specials follow a fixed route, other residents can also use them.

Across Canada, it is recognized that:

- High school students represent the next generation of transit customers.
- The sooner high school students are exposed to public transit; the more likely they are to choose transit as their primary mode of transport after high school.
- It can be less expensive to communities to transport students using Conventional Transit buses than by using yellow school buses.

High school students are a primary transit market and as such, integrating services to meet their needs to and from school and for other after school activities is a ridership growth strategy that offers a financial benefit to the communities and a sustainable revenue source to transit systems.

Charlottetown Transit operates two 40-foot (12.2 metre) transit vehicles, which can be used for High School Specials and as such, are being considered since there is no capital outlay required. For the purpose of this study, High School Specials have been assessed independent of all service options but can be incorporated into any Transit Service Plan.

7.4.2 Financial Forecast

Exhibit 19 outlines the estimated costs associated with implementing Option Four, School Service Agreement, for the Town of Stratford.

Exhibit 19: Option Four – Financial Forecast[8]

OPTION FOUR: FINANCIAL FORECAST STRATFORD					
SERVICE	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
OPTION FOUR: School Service Agreement					
Number of High School (HS) Students	250	250	250	250	250
Revenue Hours	1,080	1,080	1,080	1,080	1,080
Annual Operating Cost	$70,200	$70,200	$70,200	$70,200	$70,200
Annual Student Ridership	90,000	90,000	90,000	90,000	90,000
Annual Student Revenue	$75,000	$75,000	$75,000	$75,000	$75,000
Annual Net Cost	-$4,800	-$4,800	-$4,800	-$4,800	-$4,800
Net Cost per Capita	*-$1*	*-$1*	*-$1*	*-$1*	*-$1*

7.4.3 Environmental Impact

iTRANS assumes that switching from the current practice of using yellow school buses to public transit does not offer significant emission savings.

7.4.4 Route Map

Option Four provides high school service in the Town of Stratford. A route map has not been developed for this option since student home addresses are unavailable.

[8] This financial forecast is based on the assumptions outlined in **Appendix D**.

7.5 Option Five: Do Nothing

7.5.1 Service Description

Option Five is to continue the status quo, which is essentially no transit service. By foregoing implementing transit service, the Towns of Stratford and Cornwall relinquish their share of the $1.7 million funds made available to the Province earmarked specifically for transit via the Public Transit Capital Trust Fund. In addition, the opportunity costs of not implementing a public transit service means that transportation becomes a barrier to those that have no access to a private vehicle or are not able to afford taxi services. The quality of life would not keep pace with resident and business needs.

7.5.2 Financial Forecast

Option Five does not have the Towns of Stratford and Cornwall implementing transit service, thus a financial forecast is unnecessary.

7.5.3 Environmental Impact

Option Five does not have the Towns of Stratford and Cornwall implementing transit service, thus projected Green House Gas (GHG) emission reductions is unnecessary.

7.5.4 Route Map

Option Five does not have the Towns of Stratford and Cornwall implementing transit service, thus a routing map is unnecessary.

7.6 Service Options Summary

The proposed transit service options employ either a single concept or a combination of concepts to meet Stratford's and Cornwall's public transit needs in an efficient and cost-effective manner. **Exhibit 20** intends to graphically illustrate the relationship between service concepts and service options.

Exhibit 20: Concept – Option Matrix

CONCEPT - OPTION MATRIX	OPTION ONE	OPTION TWO	OPTION THREE	OPTION FOUR	OPTION FIVE
STATUS QUO					✓
CONVENTIONAL TRANSIT (ALL DAY FIXED ROUTE)	✓				
CONVENTIONAL TRANSIT (PEAK HOUR TRIPS)			✓		
COMMUNITY BUS		✓	✓		
DIAL-A-RIDE					
FIXED ROUTE SHARED-RIDE TAXI			✓		
SCHOOL SERVICE AGREEMENT				✓	

These service options have been discussed with the Steering Committee and used as an aid to assist in the decision-making process regarding which transit options to shortlist and present to the public. The purpose is to provide a collection of transit service options to the public which allow them to select a transit service delivery option that best meets the communities' needs.

Exhibit 21: Summary of Service Components

	OPTION ONE	OPTION TWO	OPTION THREE
Buses Required	2	2	2
Daily Coverage	7:00am to 6:00pm	7:00am to 6:00pm	7:30am to 4:30pm
Avg. Daily Revenue Hours	22	11	14.4

Exhibit 22: Summary of Financial Forecasts (Stratford)[9]

STRATFORD	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
Population of Stratford Service Area	7,500	7,500	7,500	7,500	7,500
OPTION ONE: Conventional Transit Service					
Revenue Hours	4,118	4,118	4,118	4,118	4,118
Annual Operating Cost	$267,670	$267,670	$267,670	$267,670	$267,670
Annual Passenger Ridership	15,000	15,000	18,750	18,750	22,500
Annual Passenger Revenue	$30,000	$30,000	$37,500	$37,500	$45,000
Annual Net Cost	$237,670	$237,670	$230,170	$230,170	$222,670
Annual Net Cost per Capita	*$ 31.69*	*$ 31.69*	*$ 30.69*	*$ 30.69*	*$ 29.69*
OPTION TWO: Community Bus					
Revenue Hours	2,059	2,059	2,059	2,059	2,059
Annual Operating Cost	$133,835	$133,835	$133,835	$133,835	$133,835
Annual Passenger Ridership	11,250	11,250	14,063	14,063	16,875
Annual Passenger Revenue	$22,500	$22,500	$28,125	$28,125	$33,750
Annual Net Cost	$111,335	$111,335	$105,710	$105,710	$100,085
Annual Net Cost per Capita	*$ 14.84*	*$ 14.84*	*$ 14.09*	*$ 14.09*	*$ 13.34*
OPTION THREE: Combination of Services					
Revenue Hours	2,860	2,860	3,940	3,940	3,940
Annual Operating Cost	$140,900	$140,900	$211,100	$211,100	$211,100
Annual Passenger Ridership	9,617	9,617	12,823	16,028	19,234
Annual Passenger Revenue	$19,234	$19,234	$25,645	$32,056	$38,468
Annual Net Cost	$121,666	$121,666	$185,455	$179,044	$172,632
Annual Net Cost per Capita	*$ 16.22*	*$ 16.22*	*$ 24.73*	*$ 23.87*	*$ 23.02*

[9] This financial forecast is based on the assumptions outlined in **Appendix D**.

Exhibit 23: School Service Agreement (Stratford)

SERVICE	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
OPTION FOUR: School Service Agreement					
Number of High School (HS) Students	250	250	250	250	250
Revenue Hours	1,080	1,080	1,080	1,080	1,080
Annual Operating Cost	$70,200	$70,200	$70,200	$70,200	$70,200
Annual Student Ridership	90,000	90,000	90,000	90,000	90,000
Annual Student Revenue	$75,000	$75,000	$75,000	$75,000	$75,000
Annual Net Cost	-$4,800	-$4,800	-$4,800	-$4,800	-$4,800
Net Cost per Capita	*-$1*	*-$1*	*-$1*	*-$1*	*-$1*

Exhibit 24: Summary of Emission Reductions (Stratford)

EMISSION REDUCTIONS STRATFORD	2008	2009	2010	2011	2012
OPTION ONE					
CO (kg)	1,419	1,419	1,773	1,773	2,128
HC (kg)	134	134	168	168	202
Nox (kg)	83	83	104	104	124
Fuel (litres)	12,221	12,221	15,276	15,276	18,331
GHG (kg)	30,172	30,172	37,715	37,715	45,258
OPTION TWO					
CO (kg)	1,064	1,064	1,330	1,330	1,596
HC (kg)	101	101	126	126	151
Nox (kg)	62	62	78	78	93
Fuel (litres)	9,166	9,166	11,457	11,457	13,748
GHG (kg)	22,629	22,629	28,286	28,286	33,943
OPTION THREE					
CO (kg)	910	910	1,213	1,516	1,819
HC (kg)	86	86	115	144	172
Nox (kg)	53	53	71	88	106
Fuel (litres)	7,835	7,835	10,447	13,059	15,670
GHG (kg)	19,344	19,344	25,792	32,240	38,688

Exhibit 25: Summary of Financial Forecasts (Cornwall)[10]

CORNWALL	2008 Service Level 1	2009 Service Level 2	2010 Service Level 3	2011 Service Level 4	2012 Service Level 5
Population of Cornwall Service Area	5,000	5,000	5,000	5,000	5,000
OPTION ONE: Conventional Transit Service					
Revenue Hours	2,746	2,746	2,746	2,746	2,746
Annual Operating Cost	$178,490	$178,490	$178,490	$178,490	$178,490
Annual Passenger Ridership	10,000	10,000	12,500	12,500	15,000
Annual Passenger Revenue	$20,000	$20,000	$25,000	$25,000	$30,000
Annual Net Cost	$158,490	$158,490	$153,490	$153,490	$148,490
Annual Net Cost per Capita	*$ 31.70*	*$ 31.70*	*$ 30.70*	*$ 30.70*	*$ 29.70*
OPTION TWO: Community Bus					
Revenue Hours	1,373	1,373	1,373	1,373	1,373
Annual Operating Cost	$89,245	$89,245	$89,245	$89,245	$89,245
Annual Passenger Ridership	7,500	7,500	9,375	9,375	11,250
Annual Passenger Revenue	$15,000	$15,000	$18,750	$18,750	$22,500
Annual Net Cost	$74,245	$74,245	$70,495	$70,495	$66,745
Annual Net Cost per Capita	*$ 14.85*	*$ 14.85*	*$ 14.10*	*$ 14.10*	*$ 13.35*
OPTION THREE: Combination of Services					
Revenue Hours	1,625	1,625	2,345	2,345	2,345
Annual Operating Cost	$100,000	$100,000	$146,800	$146,800	$146,800
Annual Passenger Ridership	6,600	6,600	8,800	11,000	13,200
Annual Passenger Revenue	$13,200	$13,200	$17,600	$22,000	$26,400
Annual Net Cost	$86,800	$86,800	$129,200	$124,800	$120,400
Annual Net Cost per Capita	*$ 17.36*	*$ 17.36*	*$ 25.84*	*$ 24.96*	*$ 24.08*

Exhibit 26: Summary of Emission Reductions (Cornwall)

EMISSION REDUCTIONS					
CORNWALL	2008	2009	2010	2011	2012
OPTION ONE					
CO (kg)	946	946	1,182	1,182	1,419
HC (kg)	90	90	112	112	134
Nox (kg)	55	55	69	69	83
Fuel (litres)	8,147	8,147	10,184	10,184	12,221
GHG (kg)	20,115	20,115	25,143	25,143	30,172
OPTION TWO					
CO (kg)	709	709	887	887	1,064
HC (kg)	67	67	84	84	101
Nox (kg)	41	41	52	52	62
Fuel (litres)	6,110	6,110	7,638	7,638	9,166
GHG (kg)	15,086	15,086	18,857	18,857	22,629
OPTION THREE					
CO (kg)	624	624	832	1,040	1,248
HC (kg)	59	59	79	99	118
Nox (kg)	36	36	49	61	73
Fuel (litres)	5,377	5,377	7,170	8,962	10,754
GHG (kg)	13,276	13,276	17,701	22,126	26,551

[10] This financial forecast is based on the assumptions outlined in **Appendix D**.

7.7 Government Funding and Programs

The only current method available to off-set transit operating costs for Cornwall and Stratford are from transit customers through bus fares and through residents in the form of local taxes. In addition to the tax base, a School Board contract that enables public transit buses to transport students also provides an opportunity to off-set costs and reduce the cost to taxpayers.

Charlottetown Transit, which commenced operation in September 2005, off-sets its operating costs from bus fares with the balance funded by the tax base. The estimated Net Cost per Capita for Cornwall and Stratford residents for most of the options approximates $15 per Capita and were estimated as high as $30 per Capita depending on the option. Given that the Net Cost per Capita of the Charlottetown Transit service is about $20, the estimated Stratford and Cornwall taxpayer cost would be in line with that absorbed by taxpayers in the City of Charlottetown.

7.7.1 Federal Funding

For capital programs, the Federal government is encouraging public transit through the Public Transit Capital Trust Fund, which, in the case of Stratford and Cornwall can be used for vehicle purchases.

The Public Transit Capital Trust Fund investment includes two elements:
1. A $400-million Public Transit Fund
2. A $900-million Public Transit Capital Trust Fund

This Public Transit Fund was modeled to build on the Gas Tax Fund. As in the case of Gas Tax, municipalities and transit agencies have a great amount of flexibility to decide on their local priorities. They can use these funds to invest in a wide variety of transit infrastructure. The objective with both funds is simple, that is, to quickly give existing and future public transit authorities funds to grow.[11]

Regardless of the funding available, there is a need for publicly funded transit service in both Stratford and Cornwall. Further, it can be surmised that through economies of scale and more efficient service integration opportunities, that one transit system for Stratford-Cornwall-Charlottetown could further reduce the net costs to taxpayers. This solution was supported by all Stakeholders.

[11] Notes for an address by the Honourable Lawrence Cannon Minister of Transport, Infrastructure and Communities and the Canadian Urban Transit Association (Saskatoon, Saskatchewan; May 28, 2006).

7.7.2 Provincial Funding

In terms of provincial funding, Prince Edward Island is the only province in Canada that currently does not subsidize municipal transit operations. The availability of Provincial subsidies dedicated to transit does, however, seem logical since public transit reduces the congestion and traffic impact on roads, which are funded by the Province, and used for goods and private vehicle transport.

It is recognized that public transit in small communities is not as strong as more populous cities; however, small communities do contribute to road congestion and pollution through forced travel by auto when commuting to work or driving for other trip purposes. If the intent is to subsidize the infrastructure and maintenance costs of roads for the movement of people, then transit is a mode that also moves people while reducing car travel, thereby reducing road costs for all levels of government and, indirectly, the tax payer.

A recent Provincial Transit Study sponsored by the P.E.I. Public Transit Coalition (a non-profit advocacy group) may address the issue of transit funding in P.E.I. and as such, may have potential impact on future Provincial funding debate and policies. It is recommended that the Towns of Stratford and Cornwall initiate further inquiries regarding the status of the report or the study findings.

7.7.3 Tax Credit for Public Transit

As of July 1, 2006, the Government of Canada commenced the Tax Credit for Public Transit program. The program offers Canadians a non-refundable tax credit to help cover the cost of monthly or longer duration public transit passes. Because it is a non-refundable tax credit, anyone who applies does not receive the money in the form of a refund. Instead, the amount claimed is multiplied by the lowest personal income tax rate for the year (15.25% in 2006) and then is deducted from the amount of tax owed for that year.

The Tax Credit for Public Transit will be claimable by the individual or the individual's spouse or common-law partner in respect of eligible transit costs of the individual, the individual's spouse or common-law partner, and the individual's dependent children that are under 19 years of age.

Individuals making claims will be required to retain their receipts or passes for verification purposes. Consultations will take place with transit authorities to develop appropriate receipting practices.[12]

[12] http://www.fin.gc.ca/budget06/bp/bpa3ae.htm (As of August 30, 2007)

7.7.4 Summary of Funding Opportunities

Regardless of the funding available, there is a need for public transit service in both Stratford and Cornwall based on Stakeholder input, community focus group discussions and the Public Open Houses. Further, it can be surmised that through economies of scale and more efficient service integration opportunities, that one transit system for Stratford-Cornwall-Charlottetown could further reduce the net costs to taxpayers. This solution was supported by all Stakeholders throughout the study.

8. PUBLIC OPEN HOUSES

On September 13, 2007 there were two consecutive open houses that were open to residents and businesses from both Stratford and Cornwall, with the open houses held from 4:00 pm to 5:30pm in Stratford and from 7:00 pm to 8:30pm in Cornwall. There were 24 attendees registered in Stratford and 49 registered in Cornwall.

Highlights of the public open house revealed the following:

- The need for Transit service was supported, with few exceptions, by the residents of both Stratford and Cornwall
- There was acceptance that, if implemented, transit use will grow over time
- The performance Charlottetown Transit over the first two years would likely be indicative of the growth that would occur in Town service
- There were no objections to the community support of a regional transit service instead of standalone Town services

9. RECOMMENDATIONS

It was concluded that there is a need for public transit and that the provision of public transit would be an investment in enhancing community quality of life. The degree that the quality of life would be met will depend on the financial investment committed by the respective towns. Further, the service options were only presented in an effort to enable the towns to assess the various service levels and their respective costs and benefits, and to see if they would provide funding for public transit similar to other services funded from taxpayers.

If the Town of Stratford and the Town of Cornwall support the provision of publicly funded transit service, it is recommended that the next steps be undertaken:

- The Town of Stratford and the Town of Cornwall commit funds to support transit service in 2008 to reflect a level of funding similar to that of Charlottetown residents
- The Town of Stratford and the Town of Cornwall should agree that a seamless regional transit system should be explored
- Negotiations commence with the City of Charlottetown to explore cost-sharing opportunities that result in service provided to the towns for the first time while enhanced service would be afforded to Charlottetown residents and businesses
- That the provision of high school student transportation by public transit service be explored where a business case exists
- That the Town of Cornwall and Town of Stratford explore the opportunity to secure sustainable external funding from the Province of Prince Edward Island
- That subject to agreement being reached, a detailed service implementation plan be undertaken to reflect a potential cost-sharing of services between the towns and the City of Charlottetown.

10. SUMMARY

In Summary, the Federal government has made available financial resources for capital expenditures for transit through the new deal Phase 2 funding, of which approximately $3.4 million is available for P.E.I. as well as additional Federal funding, known as the Public Transit Capital Trust Fund, which is identified in the 2006 Federal Budget. The purpose of this study was to assess the feasibility and present optional plans for public transportation services for the Towns of Stratford and Cornwall.

As part of this study iTRANS:

- Conducted a peer review
- Collected data and conducted Stakeholder consultations
- Identified initial policies
- Undertook and analyzed surveys
- Identified initial service concept design options
- Conducted and assessed a public consultation
- Developed five service options, and each option includes:
  - A Service Description
  - A Route Map
  - A Financial Forecast
  - An Environmental Impact

It was concluded that there is a need for public transit and that the provision of public transit would be an investment in enhancing community quality of life. The degree that the quality of life would be met will depend on the financial investment committed by the respective towns.

Appendix A
Peer Review Graphs

PEER REVIEW GRAPHS

Figure 1: Cost per Capita

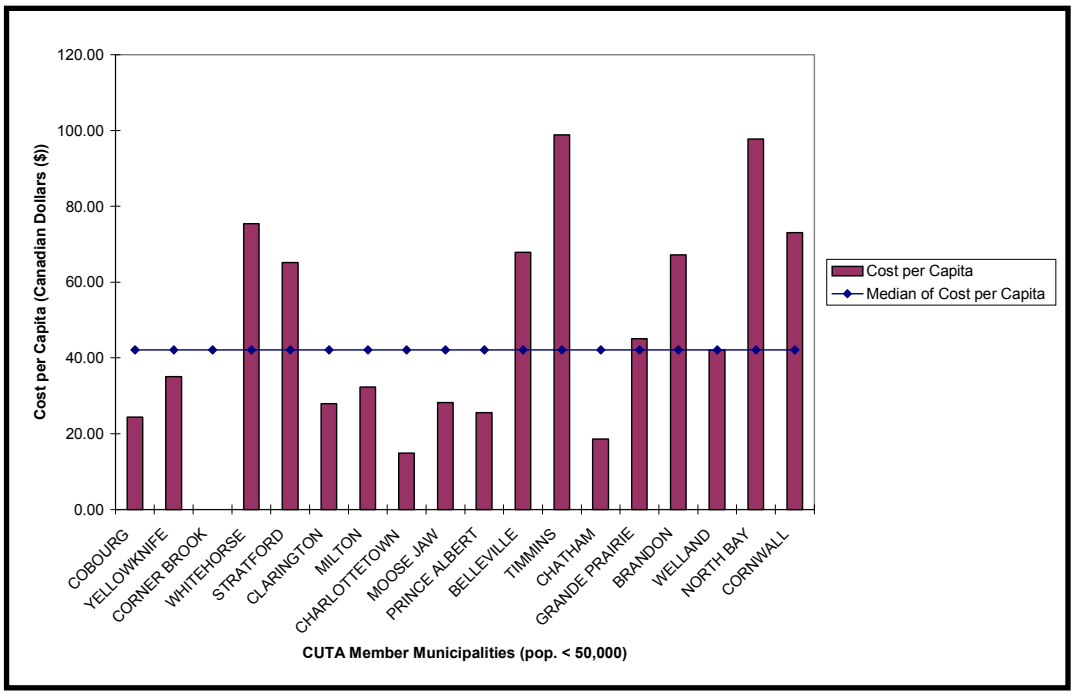


Figure 2: Service Hours per Capita

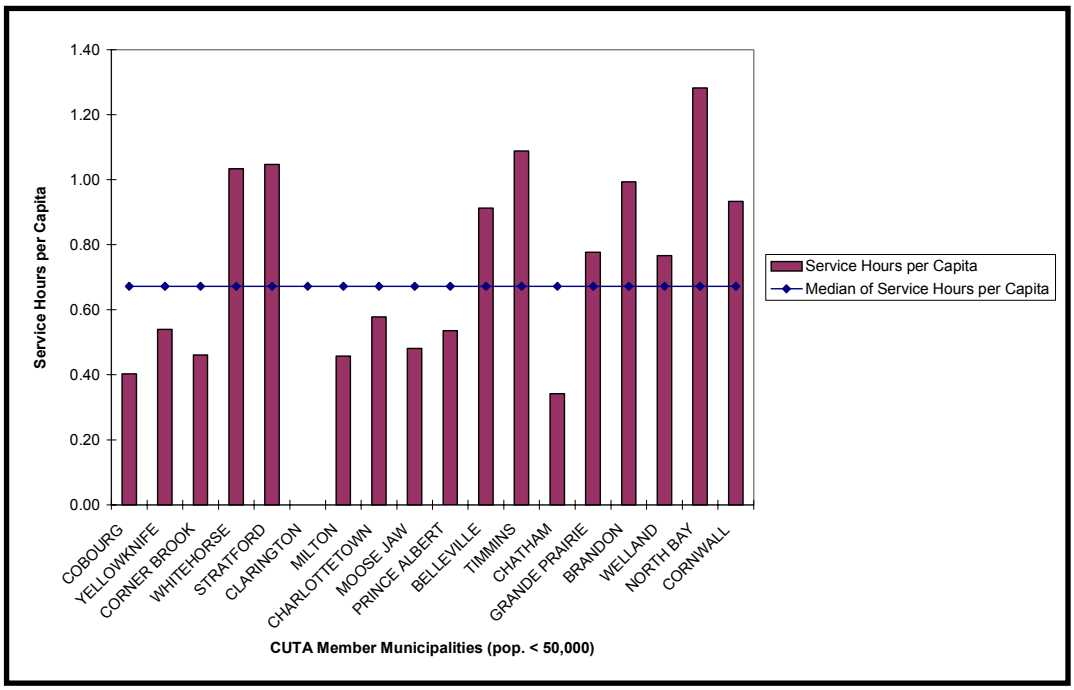


Figure 3: Passengers per Capita

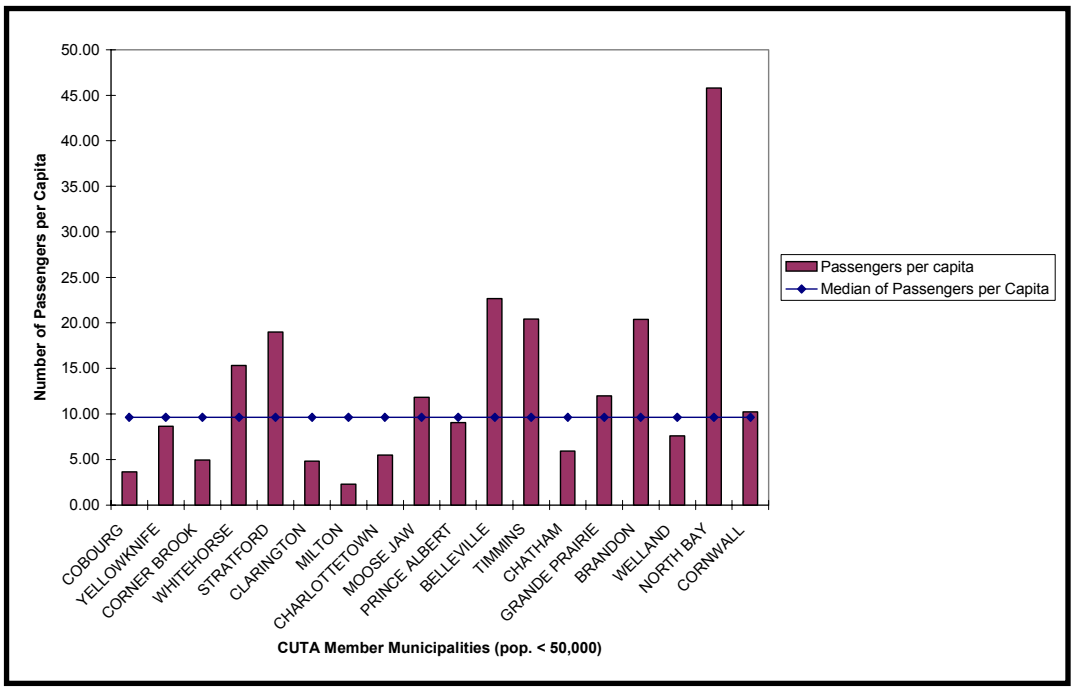


Figure 4: Revenue / Cost Ratio

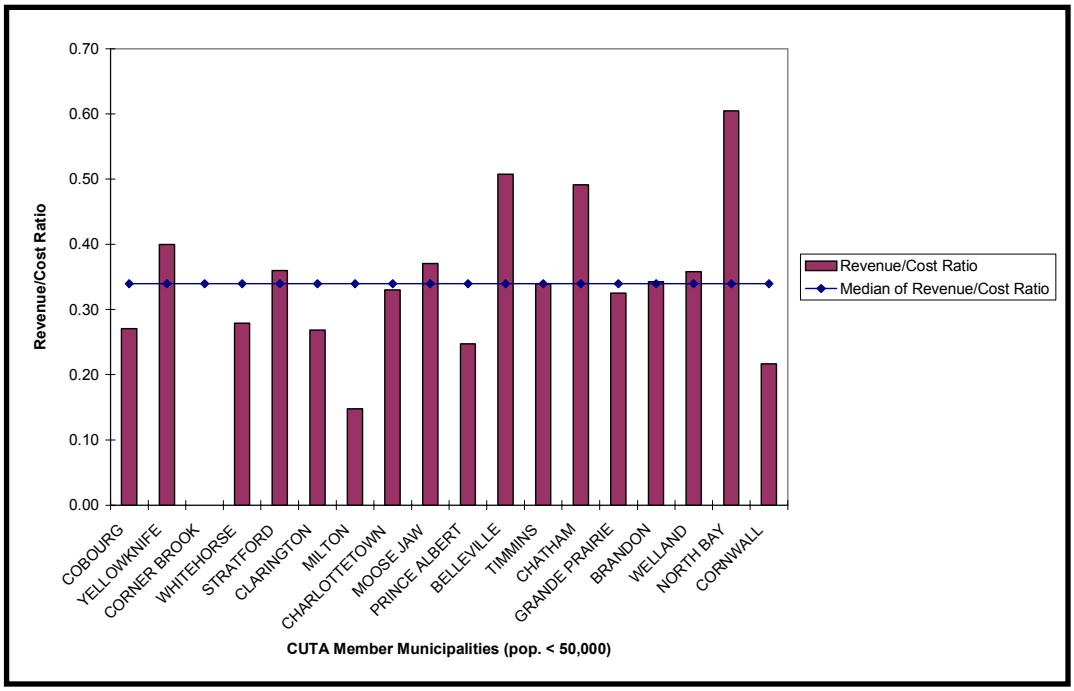


Figure 5: Adult Cash Fare

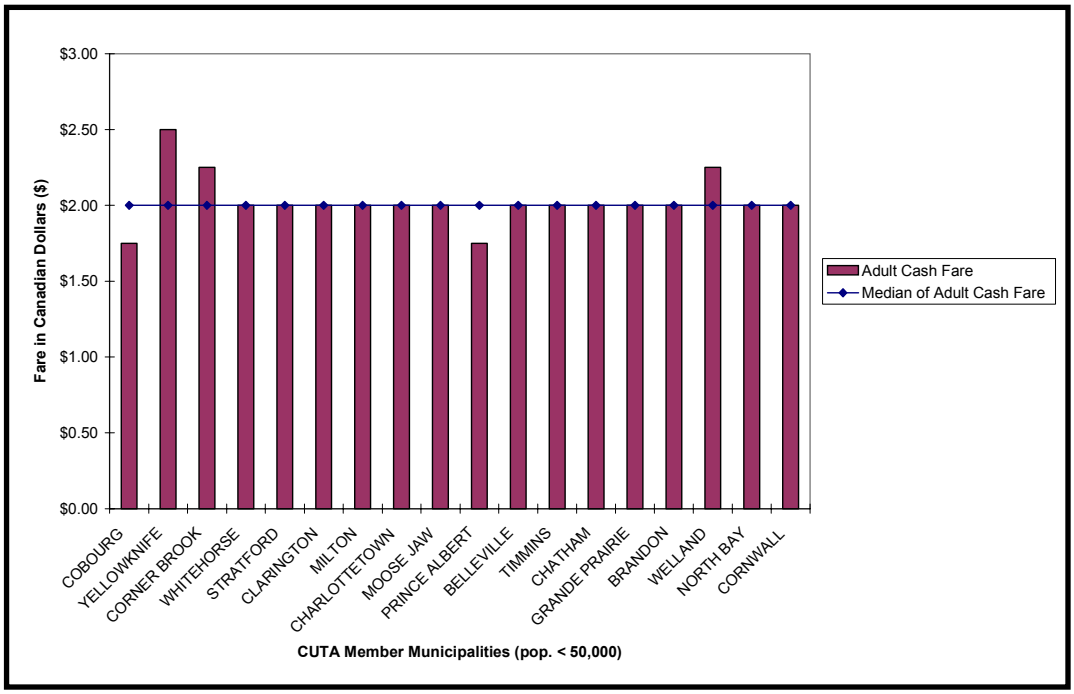


Figure 6: Cost per Hour

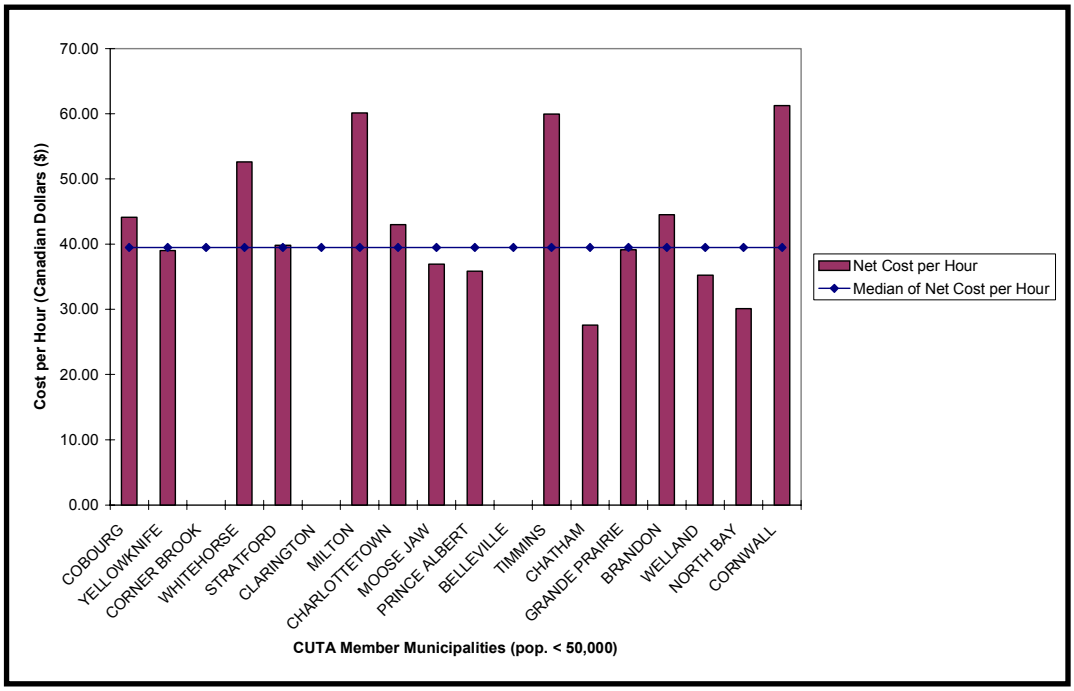


Figure 7: Net Cost per Capita

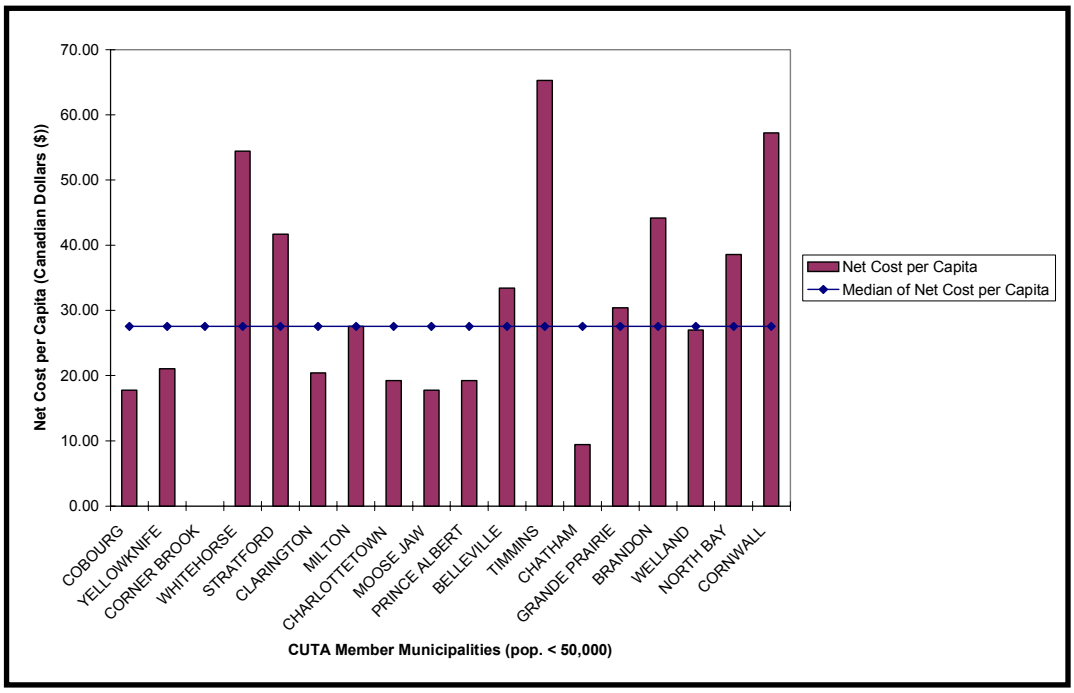


Figure 8: Passengers per Capita vs. Service Hours per Capita

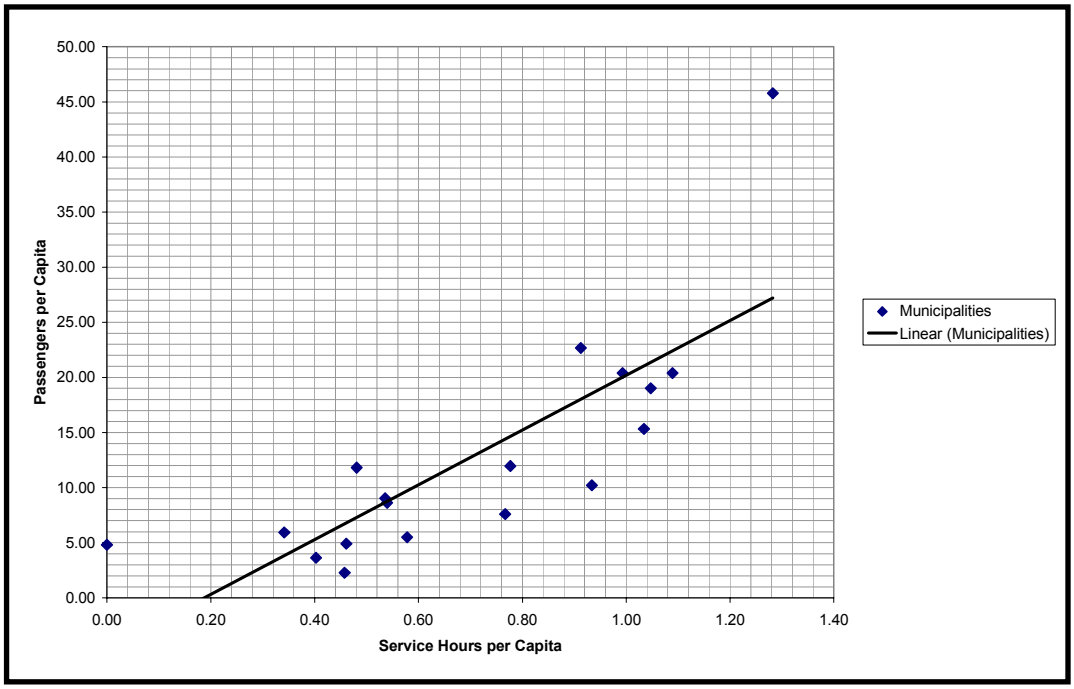


Figure 9: Buses vs. Population

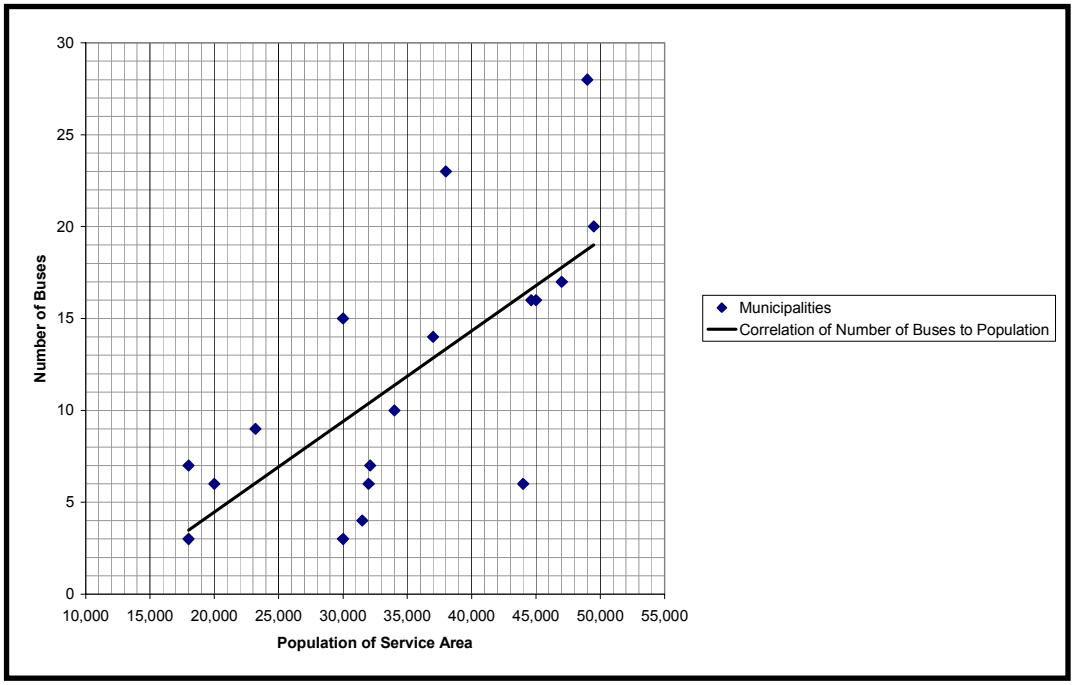


Figure 10: Kilometres of Service per Passenger

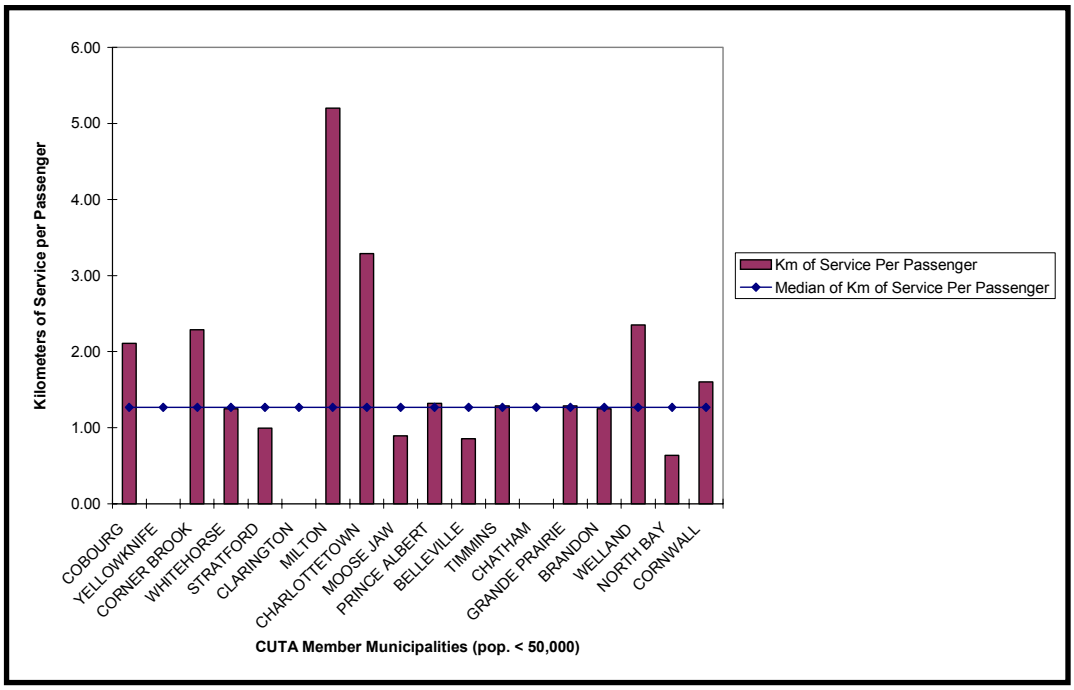


Figure 11: Average Fare

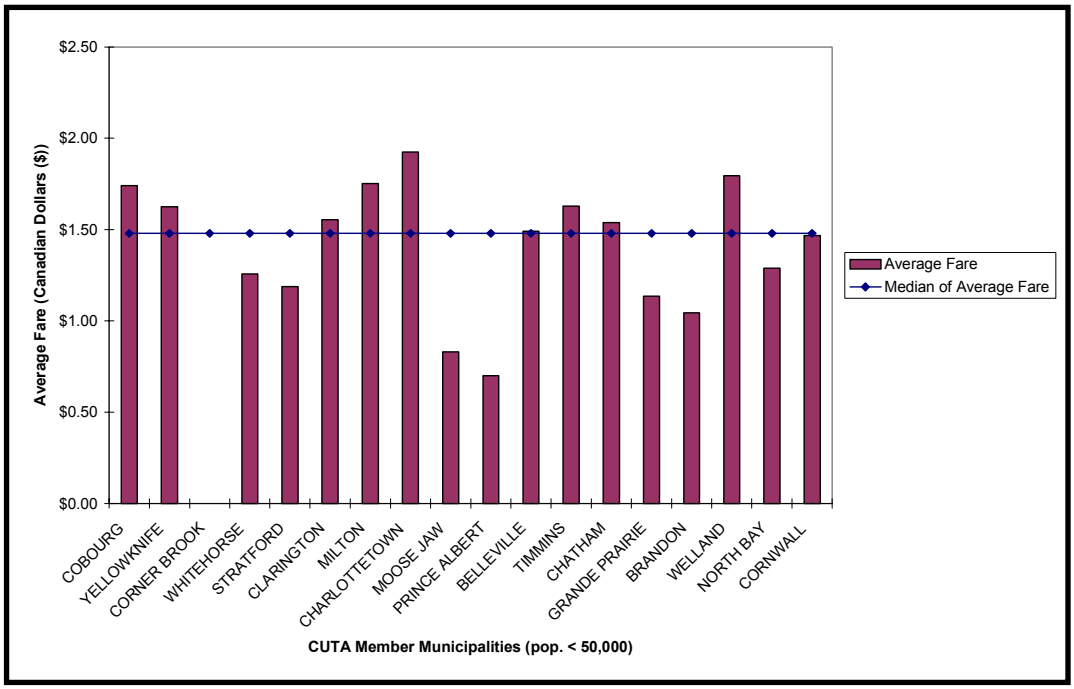


Figure 12: Percentage of Accessible Buses

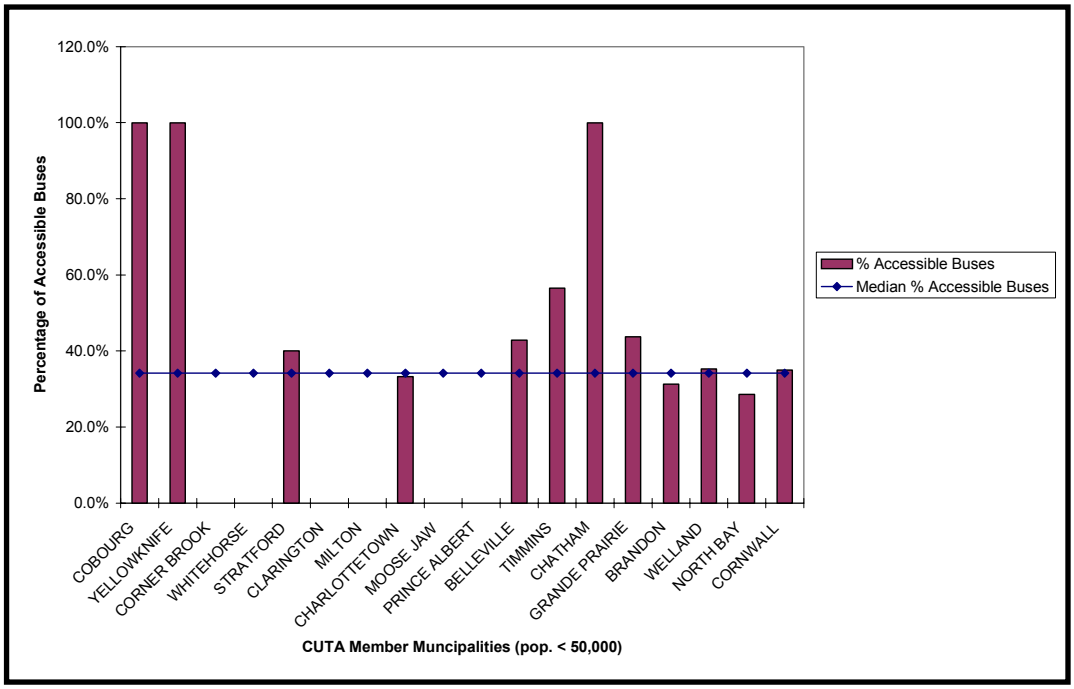
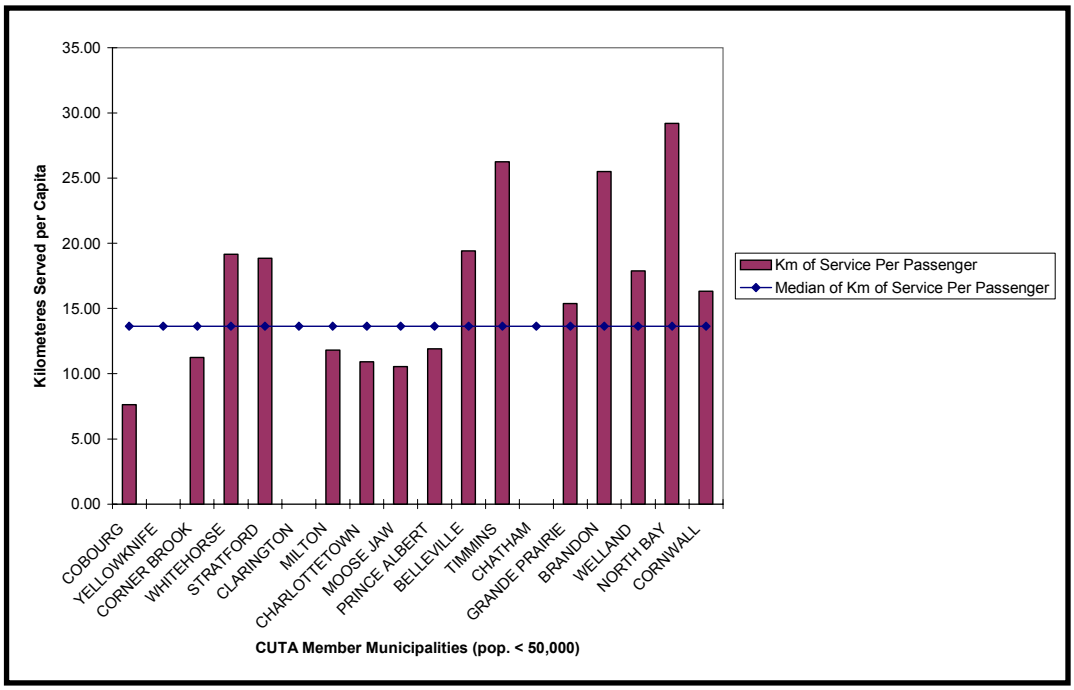


Figure 13: Annual Kilometres Served per Capita



Appendix B
Community Survey For Stratford and Cornwall Residents

COMMUNITY SURVEY FOR STRATFORD AND CORNWALL RESIDENTS

Survey raw data is available upon request.

Figure 14: Community of Residence

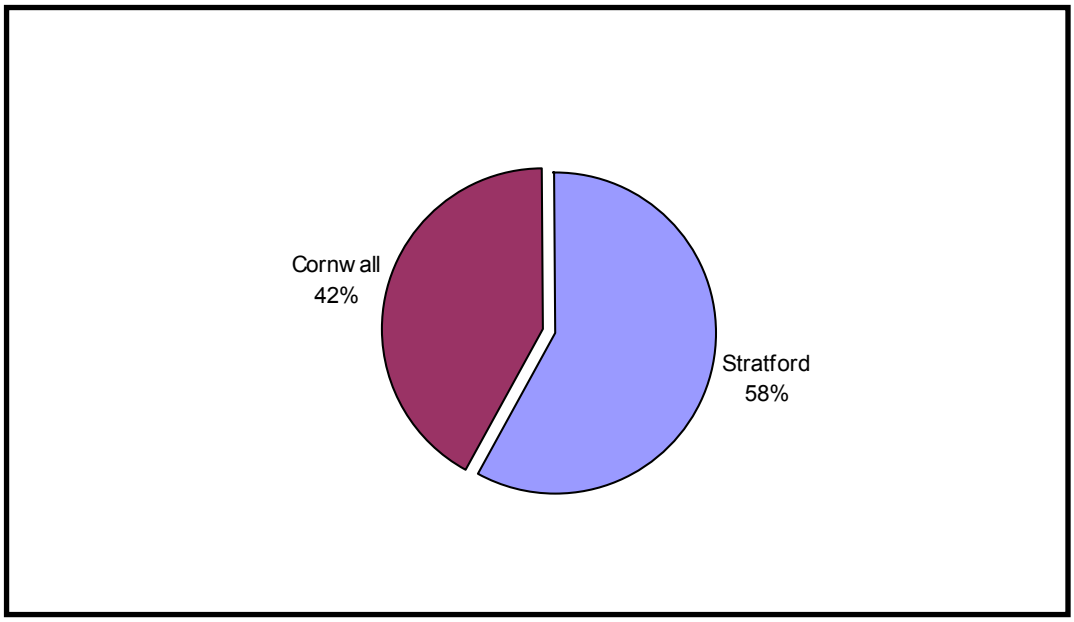


Figure 15: Gender

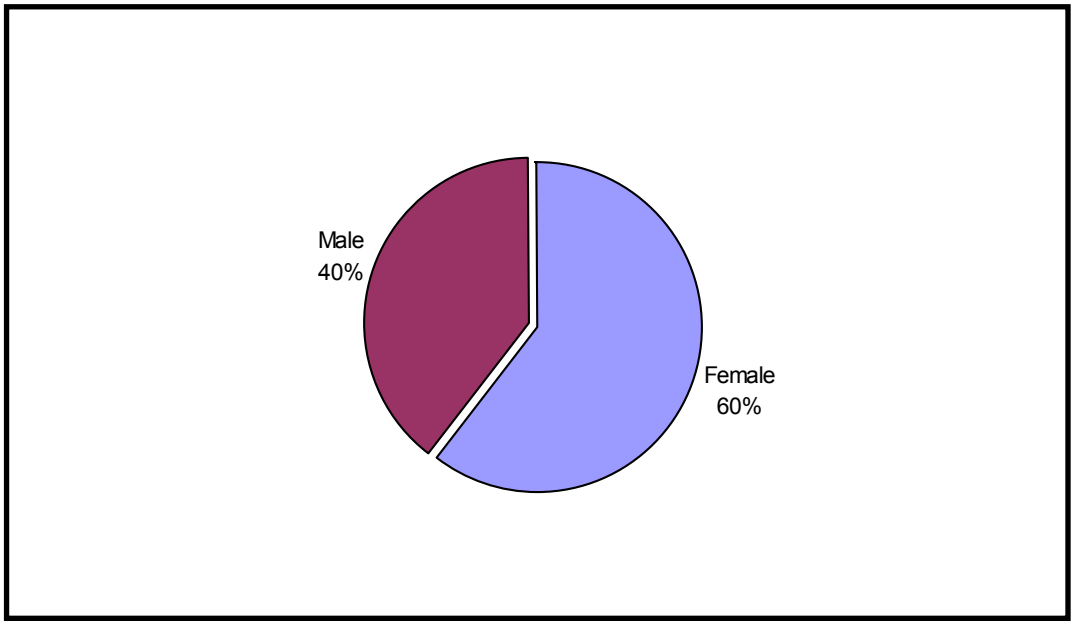


Figure 16: Age of Respondents

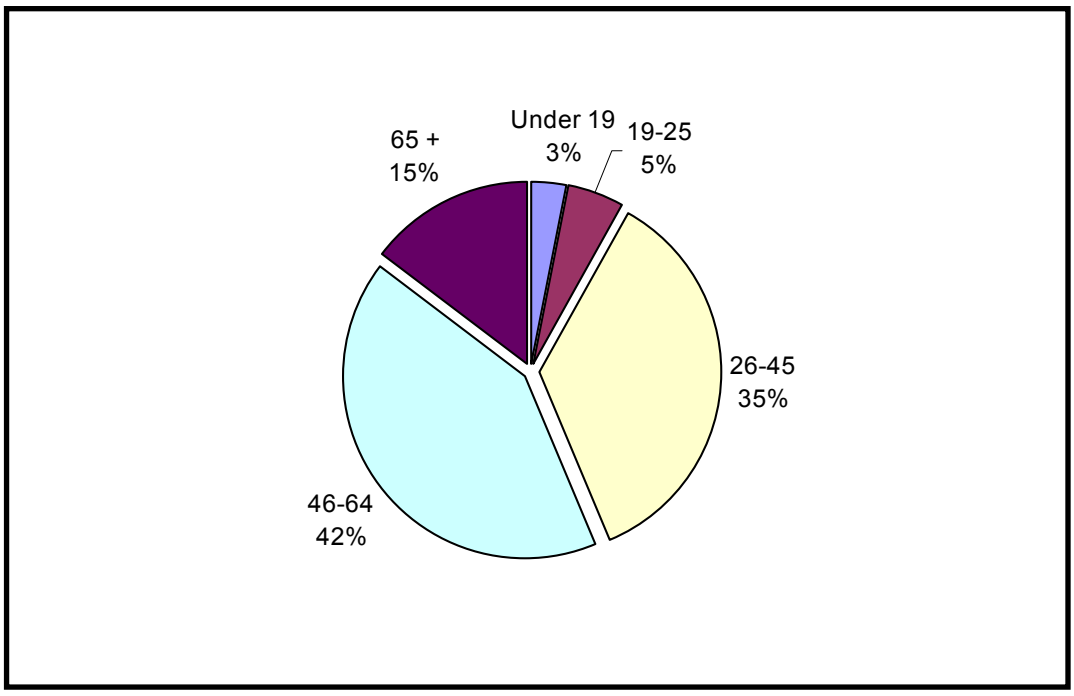


Figure 17: Household Car Ownership

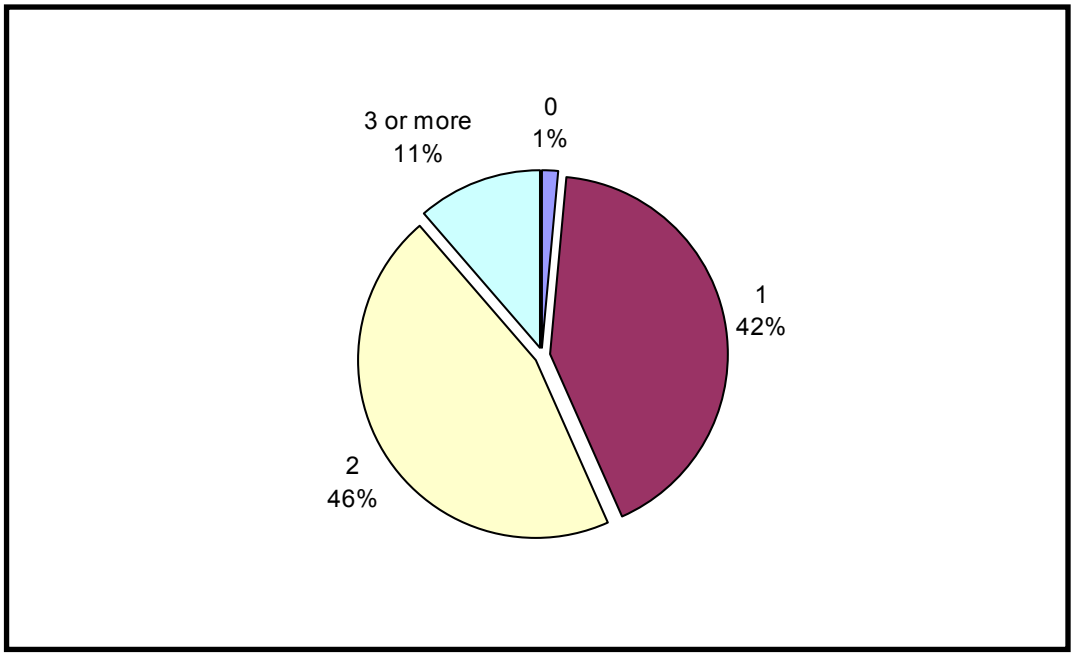


Figure 18: Number of Persons Living in the Household

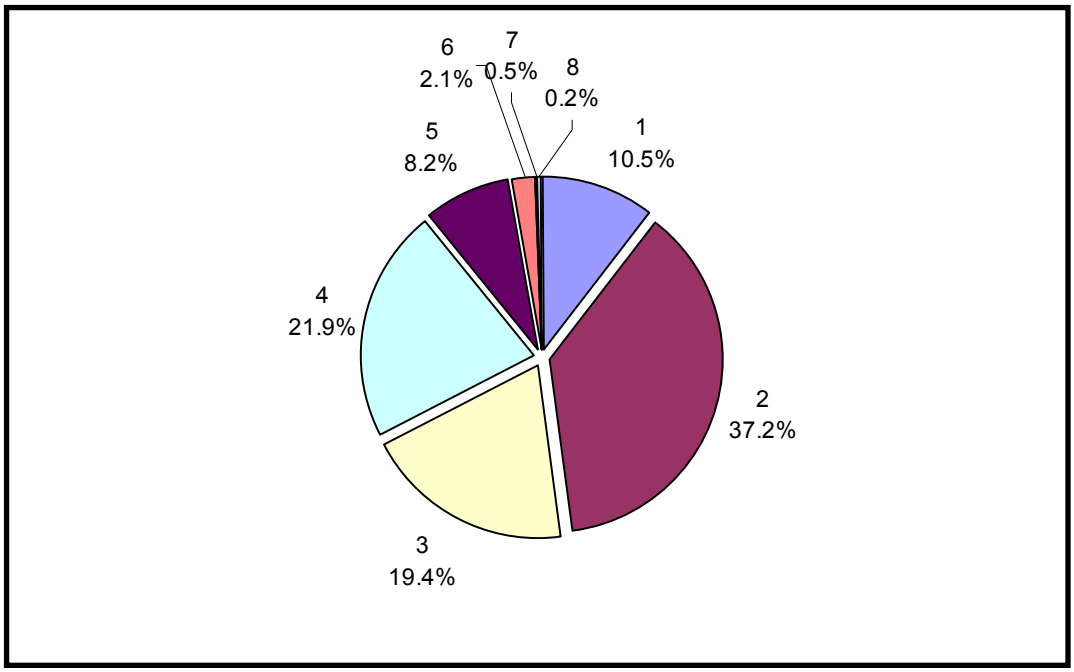


Figure 19: Occupation of the Respondents

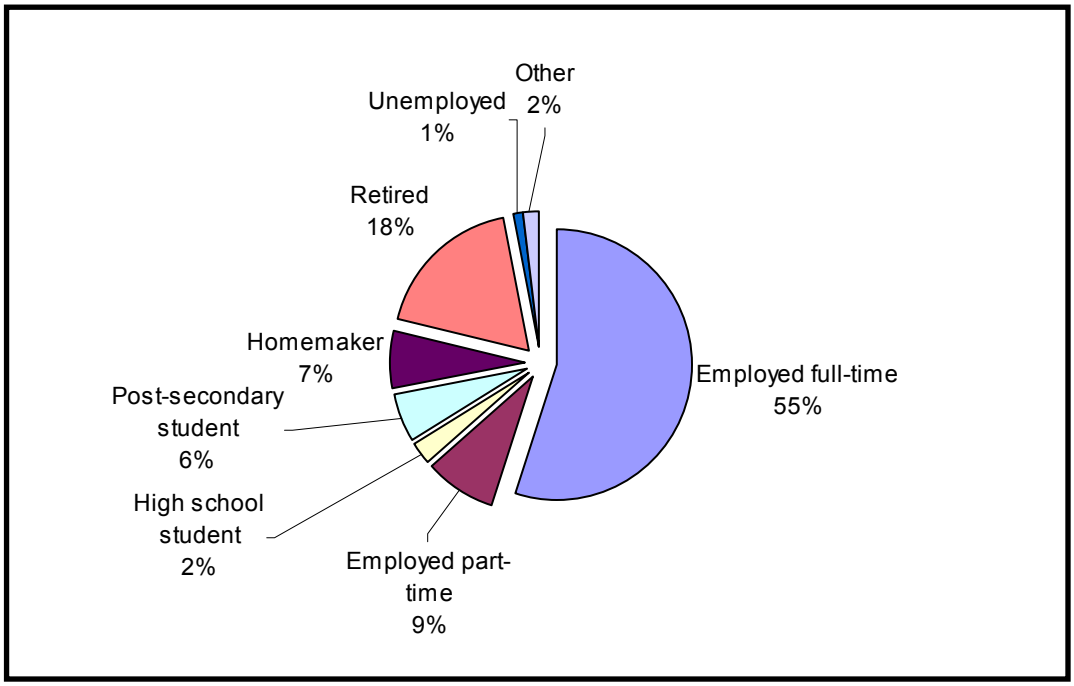


Figure 20: Trip Purpose (During the Last Seven Days)

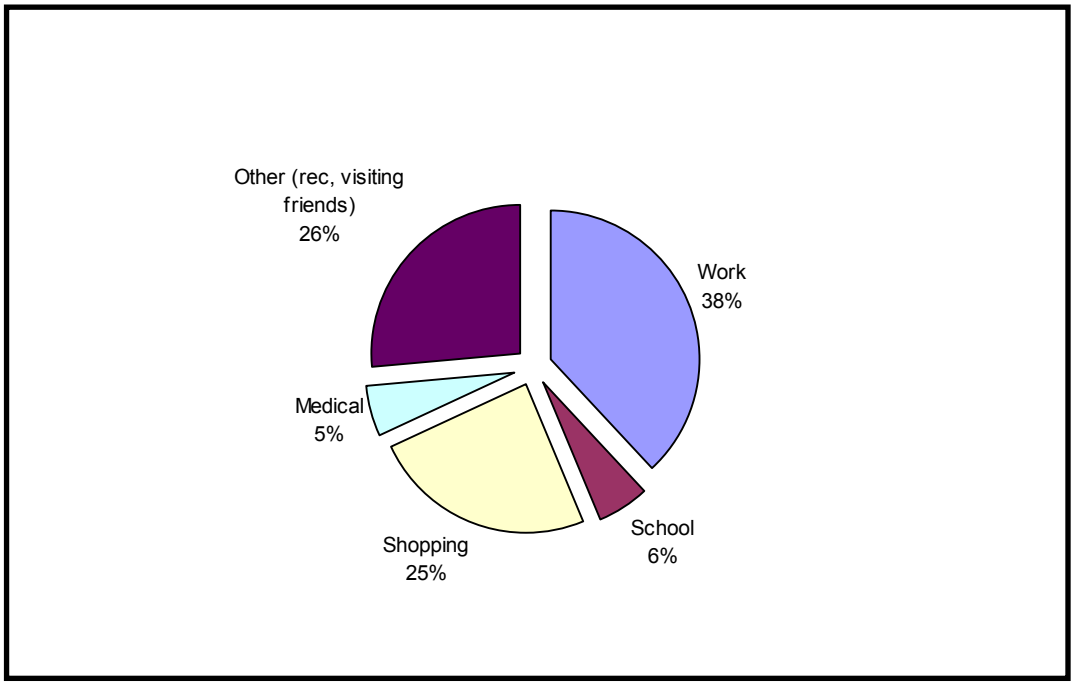


Figure 21: City of Employment

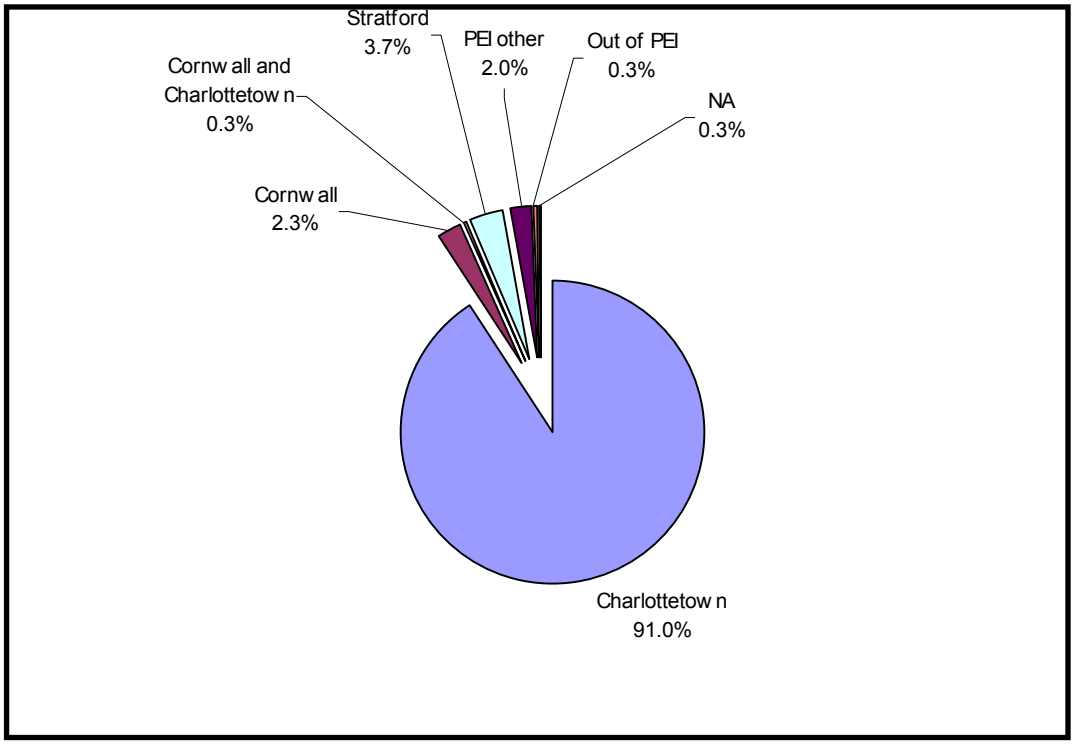


Figure 22: School Name (High School or Post-Secondary Students Only)

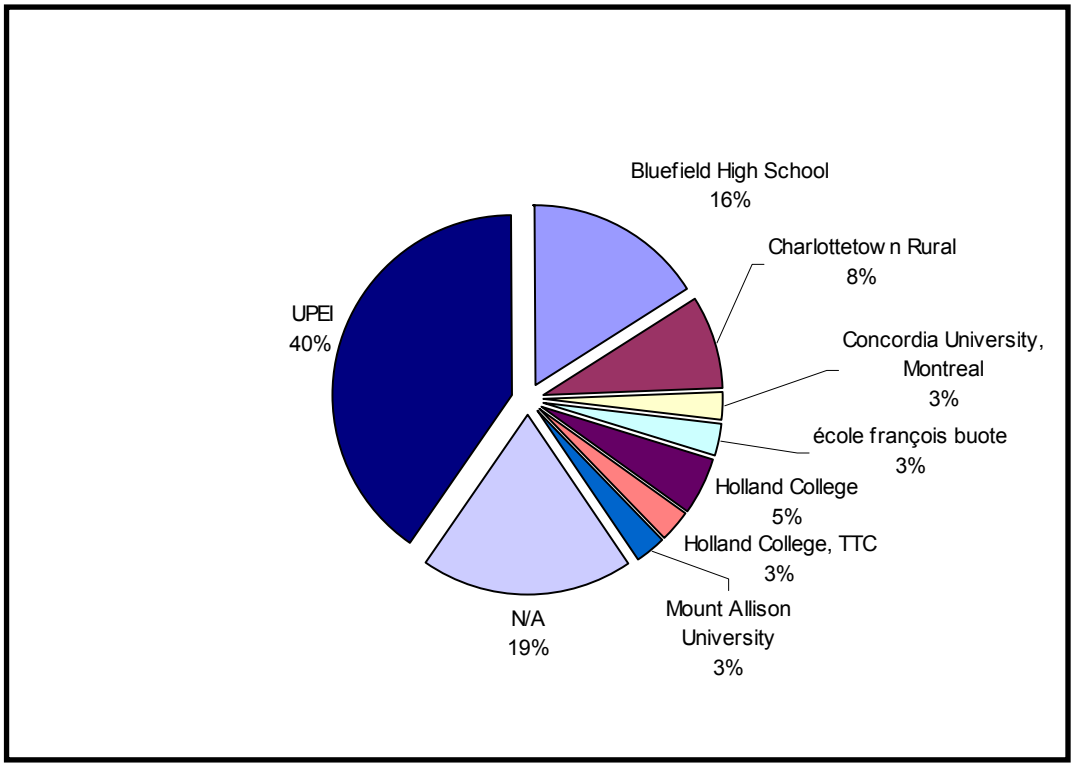


Figure 23: Travel Modes to Work and School

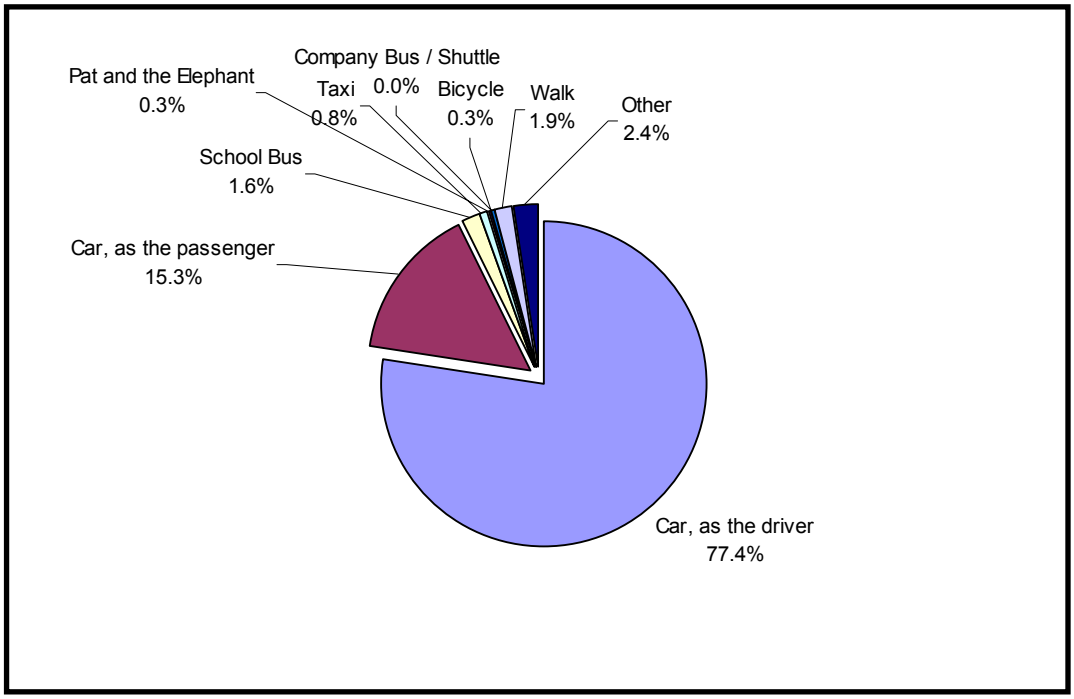


Figure 24: Travel Modes for Other Trips

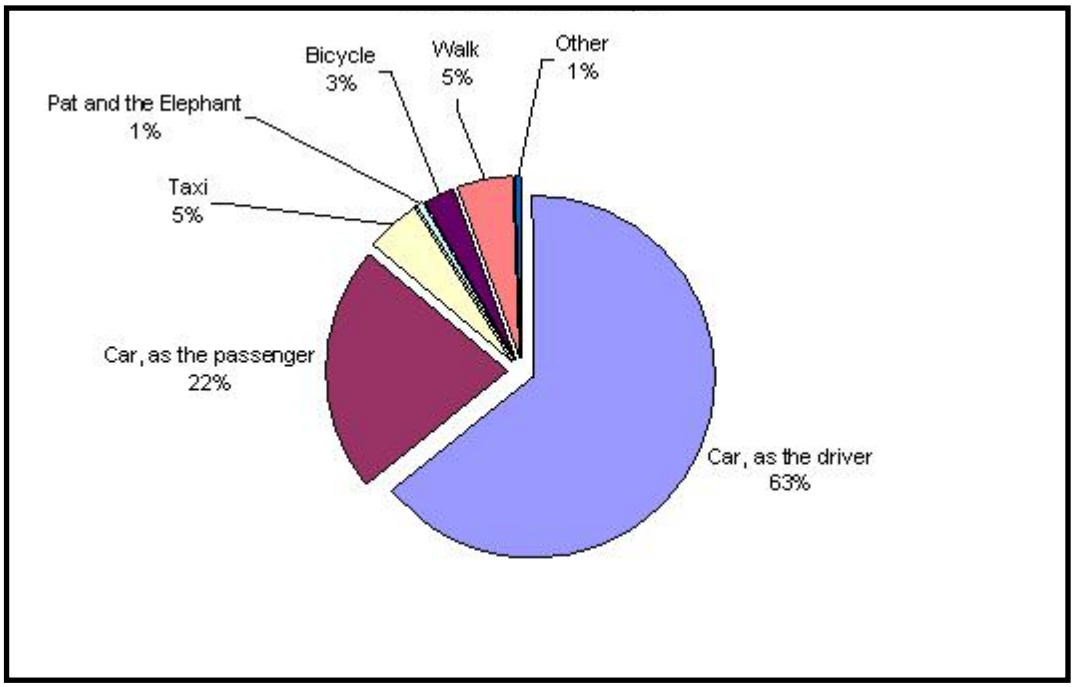


Figure 25: Does the Lack of Public Transit Prevent You From Travelling More Often?

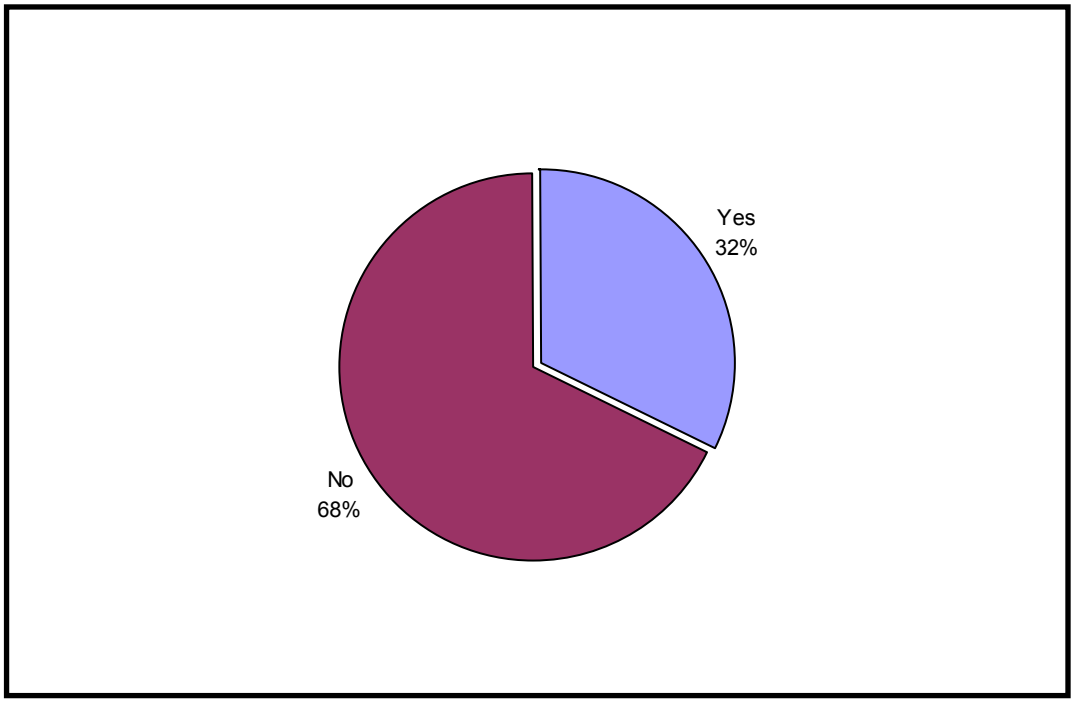
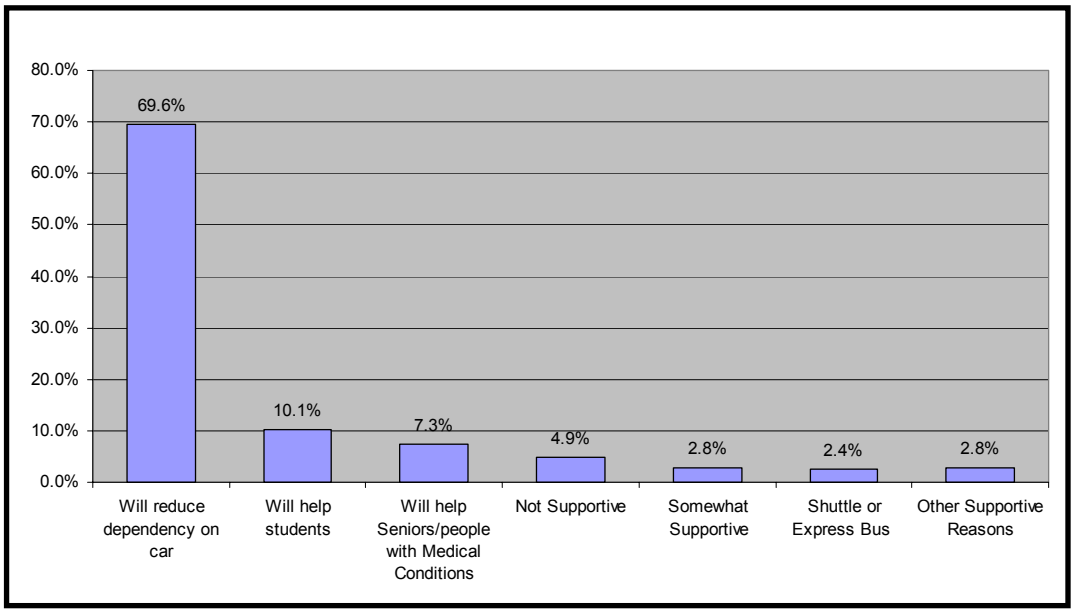


Figure 26: Comments Related to Lack of Transit in the Community (Total Respondents: 286)



Appendix C
Business Survey For Stratford

Business Survey For Stratford

Figure 27: Business Type

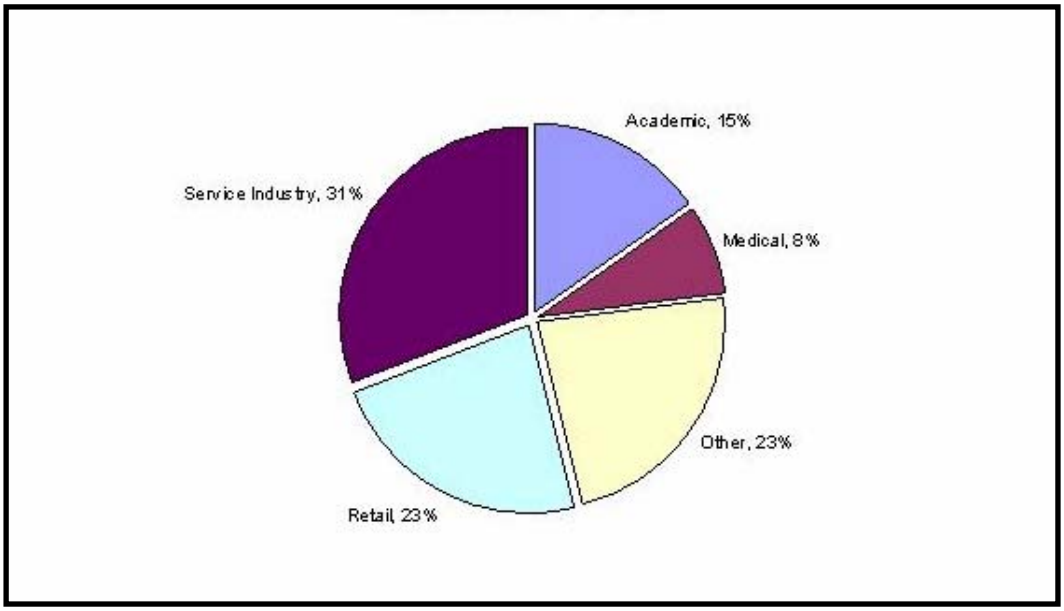


Figure 28: Full Time Employees

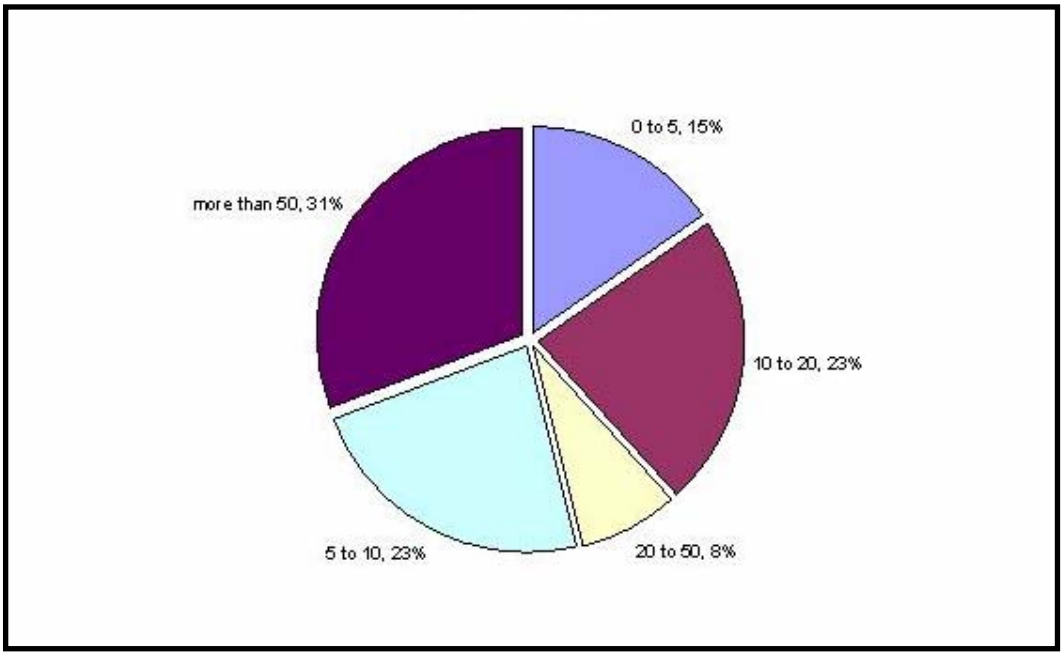


Figure 29: Will Transit attract more customers?

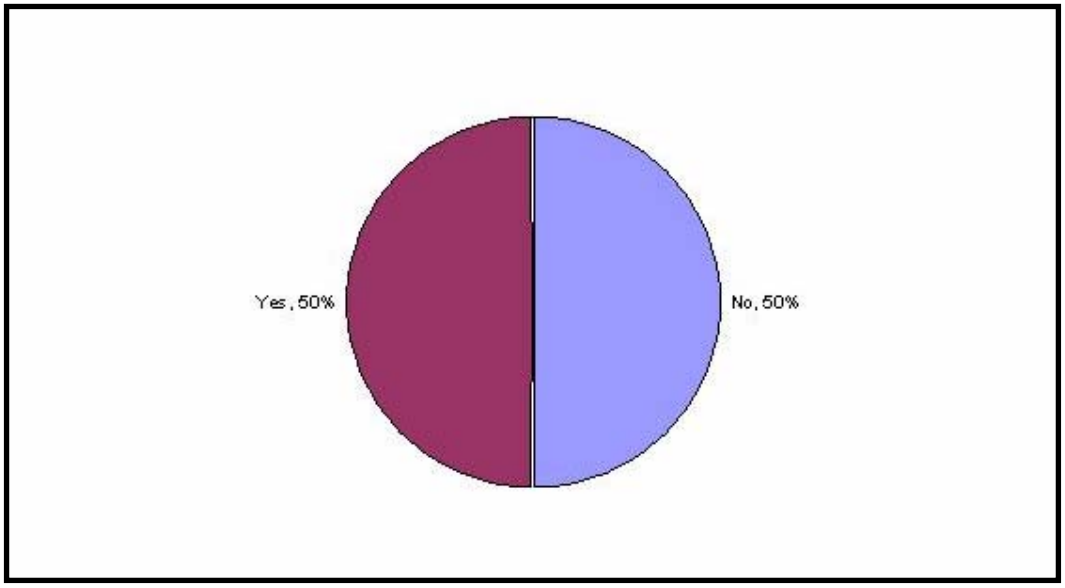


Figure 30: Will Transit attract more employees?

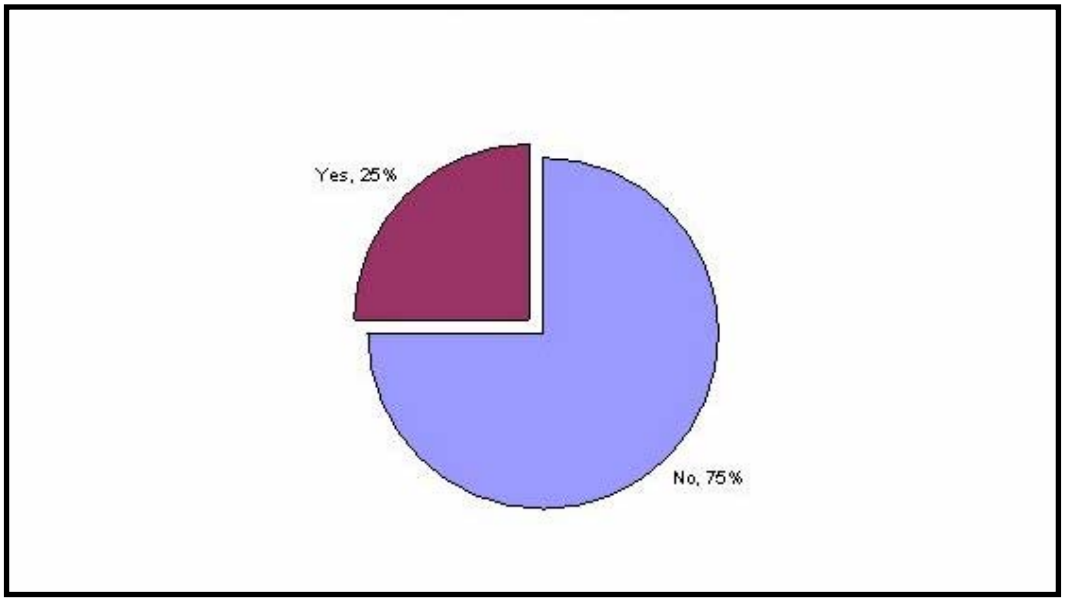
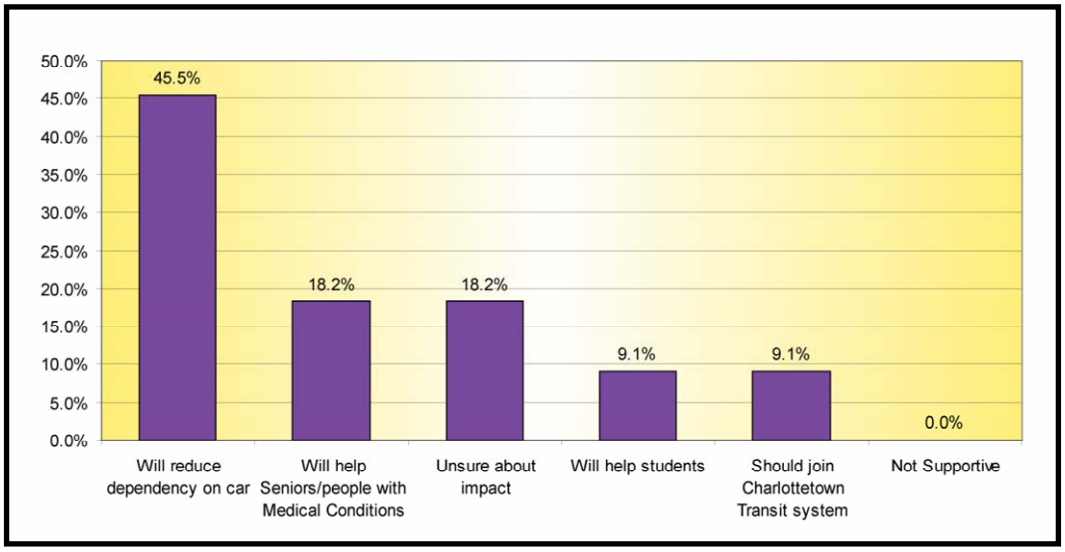


Figure 31: Stratford Business Comments



Appendix D
Financial Forecast: Assumptions

FINANCIAL FORCAST: ASSUMPTIONS

The following section outlines the assumptions used to create the Stratford and Cornwall service options found in **Section 7**. These assumptions are for the years 2008-2012.

General Assumptions

iTRANS assumes that:
- A free transfer agreement is in place between Stratford, Cornwall, and Charlottetown.
- The Service Plan remains the same over the five year period.
- Ridership will increase due to the planned service improvements implemented.

Option One – Conventional Transit Services

Option One, a Conventional Transit service option, assumes:
- Two buses are required to provide this service option.
- Service is offered between Monday and Saturday.
- 22 hours of Conventional Transit service is offered a day.
  - Between 7:00am and 6:00pm.
  - Every hour.
- Each peak is 1.5 hours in duration.
- Service is provided for 250 work days per year.
- The Stratford service runs from Stratford to downtown Charlottetown .
- The round trip from Stratford to downtown Charlottetown is 30 minutes in duration.
- The Cornwall service runs from Cornwall to Charlottetown Mall where transfers are designed to connect with Charlottetown Transit.
- The round trip from Cornwall to Charlottetown Mall is 30 minutes in duration.
- The total round trip for Conventional Transit is 34.52 kilometres.
- Conventional Transit ridership per year is calculated as population multiplied by a factor[13].
  - The factor is the same for peak and off-peak services.
  - The factor changes through the years to reflect increased ridership due to service familiarity.
    - In 2008 the factor is 1.5.
    - In 2009 the factor is 1.5.
    - In 2010 the factor is 2.0.
    - In 2011 the factor is 2.5.
    - In 2012 the factor is 3.0.
- The Conventional Transit fare is $2.00 per trip.
- The contractor's fee is $65 per hour.
- 100% of Stratford's costs are allocated to Stratford.
- 100% of Cornwall's costs are allocated to Cornwall.

[13] For example, a factor of 1.5 implies that a population of 1,000 generates 1,500 transit trips per year.

Option Two – Community Bus Service

Option Two, a Community Bus service option, assumes:

- One bus is required to provide this service option.
- Service is offered between Monday and Saturday.
- 11 hours of Conventional Transit service is offered a day.
  - Between 7:00am and 6:00pm.
  - Every other hour.
- Service is provided for 250 work days per year.
- The Community Bus route runs from Cornwall through Charlottetown to Stratford, and then back through Charlottetown to Cornwall.
- The Stratford service runs from Stratford to downtown Charlottetown.
- The round trip from Stratford to downtown Charlottetown is 60 minutes in duration.
- The Cornwall service runs from Cornwall to Charlottetown Mall where transfers are designed to connect with Charlottetown Transit.
- The round trip from Cornwall to Charlottetown Mall is 60 minutes in duration.
- The total round trip for Conventional Transit is 34.52 kilometres.
- An open door policy is observed through Charlottetown.
- Ridership per year is calculated as the population multiplied by a factor.
  - The factor is the same for peak and off-peak services.
  - The factor changes through the years to reflect increased ridership due to service familiarity.
    - In 2008 the factor is 1.125.
    - In 2009 the factor is 1.125.
    - In 2010 the factor is 1.5.
    - In 2011 the factor is 1.875.
    - In 2012 the factor is 2.25.
- The Community Bus fare is $2.00 per trip.
- The Contractor's fee is $65 per hour.
- 60% of community revenue hours is allocated to Stratford.
- 40% of community revenue hours is allocated to Cornwall.

Option Three – Combination of Services

Option Three, a 'family of transit services', or Combination of Services, assumes the following.

Conventional Transit – Peak Services:

- Each peak is 1.5 hours in duration.
- Each trip is 30 minutes.
- There are six peak trips per day per town.
- Conventional Transit ridership per year is calculated as population multiplied by a factor[14].
  - The factor is the same for peak and off-peak services.
  - The factor changes through the years to reflect increased ridership due to service familiarity.
    - In 2008 the factor is 1.5.
    - In 2009 the factor is 1.5.
    - In 2010 the factor is 2.0.
    - In 2011 the factor is 2.5.
    - In 2012 the factor is 3.0.
- The Conventional Transit fare is $2.00 per trip.
- The contractor's fee is $65 per hour.
- 100% of Stratford's costs are allocated to Stratford.
- 100% of Cornwall's costs are allocated to Cornwall.

Community Bus:

- The Community Bus service is increased from a two-hourly service (three trips per workday off-peak period) for 2008-2009, to a one-hourly service (six trips per workday off-peak period for 2010-2012).
- A Community Bus runs between 10:00am and 4:00pm.
- The off-peak period is six hours.
- Service is provided for 250 work days per year.
- The Community Bus route runs from Cornwall through Charlottetown to Stratford, and then back through Charlottetown to Cornwall.
  - The Cornwall route is the same as the Conventional Transit peak route.
  - The Stratford route is longer than the Conventional Transit peak route.
- Peak kilometres are: Stratford 17.82, Cornwall 12.78, and Stratford Taxi 22.17.
- Off Peak kilometres are: Stratford 13.74, Cornwall 12.78.
- The round trip is two hours.
- An open door policy is observed through Charlottetown.
- Ridership per year is calculated as the population multiplied by a factor.
  - The factor is the same for peak and off-peak services.
  - The factor changes through the years to reflect an increase in ridership.
- The Conventional Transit off-peak fare is $2.00 per trip.

[14] For example, a factor of 1.5 implies that a population of 1,000 generates 1,500 transit trips per year.

- The Contractor's fee is $65 per hour.
- 60% of community revenue hours is allocated to Stratford.
- 40% of community revenue hours is allocated to Cornwall.

Fixed Route Shared Ride Taxi Service:

- A fixed route shared ride taxi service is provided in the evenings.
  - The Cornwall taxi route starts at Charlottetown Mall. The route is the same as the Conventional Transit peak route.
  - The Stratford taxi route starts in downtown Charlottetown. The route is shorter than the Conventional Transit peak route and shorter than the Conventional Transit Community Bus route.
- Service is provided for 250 work days per year.
- The fixed route shared ride taxi service for Stratford provides four trips per evening for 2008-2009, rising to five trips per evening for 2010-2012.
- The fixed route shared ride taxi service for Cornwall provides one trip per evening for 2008-2012.
- Fixed route taxis service ridership per year is calculated as the population multiplied by a factor.
  - The factor changes through the years to reflect increased ridership.
    - In 2008 the taxi factor is 2.0.
    - In 2009 the taxi factor is 2.0.
    - In 2010 the taxi factor is 3.0.
    - In 2011 the taxi factor is 3.0.
    - In 2012 the taxi factor is 3.0.
  - These factors imply a ridership of two passengers per taxi trip for 2008-2009, rising to three passengers per taxi trip for 2010-2012.
- The Conventional Transit taxi fare is $2.00 per trip.
- The Contractor's fee is $20.00 per trip.

Option Four – School Service Agreement

Option Four, a School Service Agreement, assumes:

- School Service for high school students is offered to Stratford students only.
- Conventional Transit vehicles are used.
- Service is provided for 180 school days per year.
- iTRANS assumes that there are 250 student that will use the service.
- Each student makes two trips per day.
- There are three buses in both the morning and afternoon.
- Revenue is based on a fee of $30 per student per month for the duration of ten months per year.

Option Five – Do Nothing

Option Five will continue with the status quo. Thus, a financial forecast was not prepared and subsequently, assumptions are unnecessary.