

Public Transit



A How to Guide For Small Urban Centers

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1. Background on Public Transit in the City of Bathurst

Bathurst New Brunswick, located in Northern New Brunswick, Canada, is a small City with a population of close to 13,000 citizens. For many years, the City and Bathurst Sustainable Development, a local non profit environmental organization, have been receiving requests from citizens to establish a bus/ transit service in the City. As a result, the City requested that BSD work on public transit.

Rising fuel and insurance and cost, air pollution and Climate Change have been mentioned as reasons for the request and interest in having public transit available. As well working citizens find that the rising cost of living coupled with the high cost of taxi fares are hindering their ability to financially support themselves and their families. Rates by taxi can vary in Bathurst from \$8.00 to \$30.00 return fare depending on traffic congestion, your point of departure and destination.

Bathurst Sustainable Development voluntarily began the long process of writing applications for funding on behalf of the City to conduct first a Transit Feasibility Study followed by a Transit Test Project. Successful funding was secured from several partners. The entire process from the project funding application stage, conducting the Feasibility Study, writing applications for additional funding to conduct the Test Project until its completion took four years. The transit test began service to the public on June 6, 2005 and completed the test project on March 15, 2006.

This transit initiative was the first time the City has had bus service since 1973, which was 35 years ago. In 1947 Samuel Branch started North Shore Transport in Bathurst. The fleet of 10 buses of various types serviced four main routes: East, South and West and with the fourth route servicing Tetagouche Crossroads to Vallée Lourdes Sanitarium. Other routes were also provided which linked a medley of other communities. One led South to Beaubois, Veniot, Allardville, St. Sauveur. Another linked Bathurst with Carron Point and St. Mary's while still one more linked Bathurst with Youghall Beach and followed the shore to Petit-Rocher. In 1956, North Shore Transport acquired the bus business of Jed Blackmore whose route led about 37 km north to St.-Thérèse, St. Louise, St. Rosette, St- Lawrence, Upper Nigadoo, Tremblay, LaPlant and Madran.

At this time fisheries, lumbering and a pulp mill drove the local economy. The population of the City of Bathurst at that time in 1953 was only 4500.

In 1961, Morley Brance succeeded his father at the helm of the company. Most routes remained the same until Mr. Branch became ill in 1973. Operations ceased on Tuesday 27 February 1973. When the service ended the fleet consisted of 28 buses.

At the end of the Test Project, March 15, 2006, the City chose to shut down the bus service, and not permit it to continue into the next fiscal year. One of the major reasons was that the Federal Transit funding agreement with the Government of Canada had not yet been signed by the Province of NB and a new Federal government had just come into power so there was uncertainty about the funding for transit in Bathurst. The funding was needed in order to purchase buses and rolling stock so that Bathurst could remove \$111,000 in leasing fees from its transit operating budget.

One of the other concerns expressed by the Councilor's who voted no was that 100% of the budget for the next year had not been secured and that we had no means of confirming in advance the revenue from potential advertising and rider fares at the beginning of the fiscal year. The City also expressed concerned that they would end up having to cover some of the cost and so voted to not

take a chance that they would have to make a cash contribution to transit services. The Council vote was 4 to 3 in favor of shutting transit down with one Councilor absent. Some of the Councilor's remained unconvinced of the need for bus service and the benefit back to the City from any monetary contribution they might make.

Several alternatives and options for service types and size for the coming year were presented to the City Council. One service option including as small an option as just one bus in service traveling on an hourly schedule in an attempt to keep at least some form of affordable bus transportation in the City. This "one Bus/ Hourly Service" option would only require a budget of approximately \$157,000 for the year.

Since this year is the 40th birthday of the Incorporation of the City of Bathurst we had hoped to be able to add the implementation of bus service to the list of accomplishments to celebrate. We hope that perhaps, before our birthday is over, this will become a reality.

This guide tells the story of our journey and is intended to provide assistance and insight to other small Municipalities and community organizations who want to work together to encourage economic development, social and environmental health, reducing greenhouse gas emissions and ensuring sustainable development in their community through the implementation of a public transit bus service.

2. The Partner's for Climate Change Program

In 1999, Bathurst Sustainable Development encouraged the City to become the 83 rd Canadian Municipality to join the Partner's for Climate Change program by signing an international resolution acknowledging the impacts of climate change. The voluntary commitment states that the City will work to address reducing the level of greenhouse gas emissions, produced Citywide, to 20% below 1990 levels before 2010.

The Implementation of public transit is a cornerstone of successfully meeting our PCP target.

On behalf of the City and with the assistance of the City BSD volunteered to conduct an energy inventory to establish baseline greenhouse gas emissions produced in 1990 from the following sectors of the community: Waste, Municipal Operations, Streetlights, Residential Energy, Transportation, and Municipal Buildings/ Fleets.

A basic Plan of Action for reducing GHG emissions was written for the City by BSD. Opportunities for funding and partnerships by the City and BSD on local action to reduce our GHG emission have allowed us jointly to begin to implement the Action Plan.

In some Municipalities, City Hall and local environmentalists are still not working together as partners to address Climate Change and often work independently. This is unfortunate since they are a complimentary partnership match for many local initiatives. Our City has been supportive in addressing Climate Change and assisting BSD to complete joint local projects that target reducing emissions.

3. Climate Change and Sustainable Development

Climate Change is the most critical threat to our ability to continue to support life for both humans and all species on this planet. The massive release of carbon dioxide into our atmosphere created by the burning of fossil fuels is adversely affecting our planet's surfaces, such as snow/ ice levels, melting of

permafrost, water levels, ocean temperatures, habitats, increased coastal flooding, and loss of food supplies for species and destruction of agricultural lands. In addition to the structural changes of surface covers, the warming of the planet is also increasing risk to human health, since the burning of fossil fuels creates air quality contaminants. As the earth's oceans continue to warm, coupled with the gorging of melting glaciers the reduction in sea ice is increasing the impact on the Atlantic Ocean as well as resulting in a slowing of the North Atlantic current. Warmer ocean temperatures contribute to increased intensity of global storms causing destruction to coastal communities resulting in huge financial cost from property and infrastructure damage.

In 2005 leading scientists working on behalf of the Intergovernmental Panel on Climate Change, which reports to both the United Nations and the Countries who are signatories of the Kyoto Protocol released their

3rd scientific update on the "climate change situation" on planet earth. Once again, they express serious alarm at the increasing rate of impacts climate change is having on the planet. Global warming is escalating and at an alarming rate. The changes visually confirmed by local communities, data collection and earth observatory satellites give us a visual of the rapid changes.

No community regardless of their location, no inhabitant of the planet regardless of their economic situation, race, creed, religion or their belief or rejection of credible climate change science will be left unaffected by the occurring changes. What we do know for certain, is that it is the activities of man and his impact on the earth that has caused this "imminent threat" and that it will take a global change to a carbon free world, with the active participation of all of humanity to avert disaster. Currently Earth has moved into a period of our history called: "the global experiment". From here on in, how drastic the changes will be, how permanent, and at what costs can only be modeled. The intensity of these impacts will only be confirmed as we experience them.

By 2030, 75% of all inhabitants of the planet will live in Cities. Therefore, 75% of all greenhouse gas emissions (GHG), produced by human activities, will be produced within Cities. Municipal governments have both an opportunity and a social responsibility to address controlling the release of GHG emissions from activities in the City as well as enacting policies, by-laws, and regulations which help to protect citizens from placing themselves in harms way, such as allowing additional residential homes to be built at or below sea level and need to move quickly to identify and implement adaptation and emergency measures to protect both critical infrastructure and human life. This means ensuring that land use planning is based on 500 year or longer plans which have factored in the impacts on fresh water availability, sea level rise, infrastructure positioning, emergency response, food production and the principles of modern sustainable development.

As the world now begins its journey to transfer from fossil fuel dependency through a global energy revolution to a carbon neutral world, the economic opportunities to take advantage of this energy revolution are vast but our attention to the impacts on our life support systems must not be sacrificed during our efforts.

4. The Link between Public Transit and Quality of Life

As a community begins to address the issue of implementing public transit, they will begin to be more aware of the issues facing citizens.

The ability to afford to pay for, maintain, fuel and provide insurance for a personal car is quickly outpacing the incomes of many citizens. There are also many citizens who have challenges that

prevent them from being able to drive. The growing concern by the population concerning how to address and find solutions for climate change and air quality are also convincing many to turn to the option of using public transit.

Economically, the door to door delivery and pick up of customers to commercial businesses and the work place environments greatly increases daily customer counts, sales and increases the ability of low income citizens to find and participate in the work force. The ability of citizens to access affordable transportation to go to appointments, work and shopping reduces their dependency on social service programs and provides a greater sense of independence, pride, motivation and a general sense of relief and freedom. Mental health, physical health and emotional health all benefit from the citizen participating in using public transit.

Poverty and the risk of becoming homeless is a reality that many Canadians face on a daily bases yet all too often they attempt to hide this fact from the local society that can be unsympathetic or indifferent to the needs of the poor. Especially at risk from the long term effects of poverty are our children. Assisting low income parents to access affordable transportation means an opportunity for the entire family to benefit from such things as more frequent outings, trips to the parks, the library, increased literacy rates, to participate in community events, visit more with family and friends on the other part of town, participate in active living, go to medical appointments, go to see a movie or access employment.

Cities without public transit are considered to be cities where there is a barrier to employment and equal opportunities for obtaining employment are not present for all citizens.

When citizens feel "trapped" due to the lack of affordable transportation options, it can lead to more frequent cases of tension, stress, depression and regression. Mental health, physical health and emotional health all benefit from the citizen participating in using public transit.

The more a City can do to assist in improving the well being of its citizens the greater the reward will be for the City. When your population is well, happy, motivated, when they know that their City cares about them by ensuring they are able to access affordable transportation they are stronger contributors to the over all prosperity of the City.

Quality of Life Indicators

The Federation of Canadian Municipalities has developed Quality of Life Indicators for Municipalities. They can be obtained at www.fcm.ca. The indicators report that the gap between the low wage income earners and their ability to afford the basics of everyday life has dramatically worsened in the past few years. The rate of increase in the cost of housing, transportation, soaring vehicle insurance

rates, food, services, the addition of service fees and energy costs has outpaced any cost of living increase by social services and outpaced the minimum and the low income wages.

In December 2004, Infrastructure Canada, with the principal objective of soliciting Canadians' opinions about their issues and priorities for community life, and coordinated by Infrastructure Canada (the Cities Secretariat) on behalf of an interdepartmental group, contracted the **Strategic Counsel** to provide a report on the findings of a national survey on Canadians' views of the quality of life in their communities.

Other contributing departments and agencies included: Canadian Heritage, Social Development Canada, Human Resources and Skills Development Canada, the Atlantic Canada Opportunities Agency, Western Economic Diversification, Canada Economic Development for Quebec Regions, Transport Canada, the Canada Mortgage and Housing Corporation, Environment Canada and Citizenship and Immigration Canada.

The most surprising finding was how strong the consensus was, across regions, community sizes and demographic groups, as to the characteristics of the ideal community - an important starting point for long term policy development. The ideal town or city has high quality education, a thriving economy, green spaces, good transportation and affordable housing. Other characteristics, such as recreation facilities, an arts community, highly educated people and cultural diversity were viewed as secondary, but important, characteristics.

Four areas surfaced as being of most concern to Canadians:

In order, these are:

- the environment,
- the local economy,
- community services and
- infrastructure, including public transit.

Cultural issues and diversity were viewed as less important to overall quality of life.

The four areas that make up a desirable community, and where performance falls short of the ideal, are:

- affordable housing,
- modern infrastructure,
- public transit and
- quality educational institutions.

The study also revealed that Canadians view the **contribution of volunteer groups** as having the biggest impact on the quality of life in their communities, well ahead of the residents themselves, schools and educators and businesses.

Consistent with findings in a later part of the survey, and with growing public cynicism about the efficacy of our elected officials to tackle complex societal issues, governments at all levels were not given terribly high marks with respect to their performance in addressing issues at the local level.

When quality of life declines in Cities, higher numbers of citizens including those citizens who are working at minimum wage or slightly higher live in poverty. In Canada the poverty level in 2006 is identified as earning a total family income of \$30,000 or less and \$31,126 for an urban family of three.

According to the 2001 Census data, there are 3895 families in Bathurst. 735 are lone parent families. The median family income of \$18,786. The average total household family income of a single mother with one child in the City of Bathurst was \$18,760 per year in the last Census. 630 of these are single

female parent families and 105 are single male parent families. The average median household income in Bathurst is \$15,659. The number of rented dwellings (rented houses or apartments) is 2010.

5. The Business Case for Public Transit

The golden rule of business is that it takes between 3-5 years to establish a new business. The same rule should be applied to public transit.

A new transit service must be given the time it needs to grow, time to learn what the needs of the citizens are. It must work hard to build a sense of trust and reliability in its riders, and most of all its drivers, management and Municipality must care about its riders regardless of who they are, what they do, where they live or their economic situation.

The current fuel crisis is not temporary. Already we are starting to hear about gas rationing, shortages, soaring prices and changes in international oil policies. Governments will not be able to sustain the financial cost of regulating the resource for long. Cities that have not invested in energy efficiency, conservation and renewable energy will be hit hard economically as will their citizens and local economy and will be left behind in terms of prosperity. Public transit is considered renewable energy and is critical to the future sustainability of Cities.

The “peek-oil” crisis is forcing the world into implementing the energy options that could have been used years ago had the political and economic will been in place to do so. While citizens in higher paying jobs may continue to be able to fuel vehicles as cost soar beyond \$1.35 per liter, the middle and lower wage working members of society cannot afford to continue absorbing these increases.

The economic crisis of fuel costs will push many citizens to move to Cities that have affordable public transit available. Continuing our dependency on oil and other fossil fuels is not sustainable.

Families and youth are very vulnerable to the soaring energy/ vehicle costs and cost of living impacts. Many families are slipping further down the scale in terms of disposable and household income due to the cost of goods and services, food, energy and transportation and debt. They are repositioning and relocating themselves to urban areas to attempt to lower their cost of living while increasing their quality of life. This would include equal opportunities to be able to work and have access to affordable transportation to and from the work place.

Public transit is the fastest, most economically efficient and easiest way for vast reductions in both air quality pollutants, the greenhouse gases that are threatening our planet, to address the needs of the vulnerable, assist low to middle income citizens with energy and transportation cost relief, stimulate the economic growth, entice new businesses to come to the area, increase population and improve quality of life in communities.

Canadians have reported to a survey conducted for Infrastructure Canada in 2004, that it is the opinion of Canadians that the four areas that make up a desirable community, and where performance falls short of the ideal, are affordable housing, modern infrastructure, public transit and quality educational institutions.

Statistics Canada confirms that the population of the City of Bathurst has consistently declined by 10% over the past 10 years. The National trend which has existed for several years of the outward migration of Canadian citizens to urban centers is strongly evident in Bathurst and Northern NB in general. The larger urban centers are benefiting greatly from this trend through an increase in their population which leads to an increase in their per capita transfers and higher tax base which contributes to a stronger local economy which in turn leads to more employment opportunities and lower unemployment. Some citizens are flocking to the larger urban centers for reasons such as employment, the availability of universities for achieving higher learning, to have greater access to concerts, theatre, events and to have a higher quality of life for themselves and their children.

The availability of affordable public transit is a pivotal key to the success of the other NB urban centers. St. John, NB for example, established public transit bus services in the 1800's. The existence and availability of public transit is part of the foundation services of urbanization and growth. In order to reap the rewards of population growth a community needs to lay the foundation required to encourage it to happen. This would mean ensuring that public transit bus service is available.

For the centers that are facing the impact of the outward migration, serious decisions need to be made in order to achieve a "turn around". Choosing to implement public transit is critical in assisting Bathurst to achieve this goal.

Governments are now attempting to assist cities to expand their transit capacity to help cushion the "energy price shock" that is happening, that is expected to last for years and as a means of reducing greenhouse gas emissions.

A recent petition received by the City in support of keeping transit services operating produced 1008 signatures from City citizens plus many letters of support and a relentless number of phone calls and personal appeals.

Selling support for public transit to some City Council's can be quite a challenge. Moving from the test project to Phase III, implementing the service may take some convincing. The other transit providers, the Chamber of Commerce, Health Authorities, Municipalities and such national groups as the Canadian Urban Transit Association and the Federation of Canadian Municipalities can provide great assistance in helping a Municipality in their decision by providing the information on understanding the economic gains experienced by other Cities who implemented the critical service. They have experienced that property values increase when transit services are present in a City. They also are aware that Cities are in direct competition with each other and that transit is no longer considered to be a luxury but instead is considered to be simple modern basic services the same as recycling programs.

There can be no economic growth without addressing economic poverty.

As a City we must ensure that our existing population has equal opportunity to have quality of life. This would include equal opportunities to be able to work and have access to affordable transportation to and from the work place.

Transit is now widely viewed by most Municipalities as a real opportunity to grow! Transit should be a very high priority and many opportunities for our City to reap the benefits of having transit will come our way if we can all just help it through its infancy.

Some points to ponder:

- You cannot expect to have economic growth unless you address economic poverty.
- Sustainability means reporting not just financially but also reporting on environmental and social responsibilities.
- Sustainability reporting includes reporting on “the triple bottom line”.
- When factoring success, Municipalities need to identify indicators of success in all three categories: environmental, social and financial sustainability. If you are failing at anyone of these, then you are failing over all.

Making the decision to move from always using your car to using public transit does not happen over night. Behavior change takes time. Rising energy and the increase in the cost of living is giving even those on fairly good incomes a pinch in their pockets.

Economically, the door to door delivery and pick up of customers to commercial businesses and the work place environments greatly increases daily customer counts, sales and is a contributing factor in the decisions of new businesses to “set up shop” in communities with public transit.

Public transit is not just a bus driving around giving people a ride, in today’s modern world, it is considered critical basic infrastructure for successful Cities. In time, transit becomes the heart beat of a City.

Youth, who hope to eventually be able to save a down payment to purchase a house, who have student loans and who begin their careers at entry level pay scales want and need to be able to keep their cost of living low for the first several years of working. When we speak to youth who now live in Moncton and other NB Cities, they tell us that many of them do not own cars and that they use public transit both to travel to and from work, for their errands and social transportation needs.

The availability of public transit in a City, especially if it has transit links that connect with surrounding communities draws citizens to live in the area and encourages them to stay and seek employment in that area because they can have a lower cost of living in that area. It is the same situation with seniors who no longer can afford to own and operate a vehicle or who are no longer capable or feel comfortable driving. They like the fact that they can safely travel independently by public transit.

Finally for both groups, many citizens are very conscience of the need for us all to be environmental stewards and to help address climate change. They want to be able to use public transit since it reduces greenhouse gas emissions and air pollutants.

Transit is a prime example of sustainable development at its finest since it merges societies desire to address environmental concerns with societies goal of economic prosperity.

Public transit is the fastest, most economically efficient and easiest way for vast reductions in both air quality pollutants and the greenhouse gases that are threatening our planet. Most citizens cannot afford to retrofit their homes or install renewables in their home but they can afford a bus fare so that they can contribute to addressing climate change while at the same time reducing their financial burdens and stimulating our economies.

- One transit bus can replace 45 individual vehicles per hour.

In some cases, the Municipality may never agree to operate public transit especially if their City is small, human resources are limited and economic prosperity is uncertain. It will take a deep and fundamental understanding by the Council and City Management of the economic and

social benefits that transit is providing to the City in order for them to agree to go into the next stage. Strong public support will be vital.

Phase I : *The Feasibility Study*

For some Cities, the business case for public transit is a done deal. From the first major discussion on the topic along with the positive impacts on both local employers and commercial businesses they are sold. Their Council's agree to make substantial investment to implement and support the service.

For smaller Cities, the issue of support is not as easy a decision. With the pressure on small cities to maintain their population given the ongoing migration by people to larger cities, or moving away to find employment they are left financially challenged to sustain their existing services let alone find additional resources to support transit.

On the other hand, many smaller cities are realizing that in order to reduce the mass migration they must stop doing "business as usual" and must turn to innovation and fresh ideas to combat this problem. For many smaller cities the only means of implementing public transit is to impose higher taxes on an already over taxed population.

a. Writing and Developing the Proposal

Availability of funding from other sources is critical to their ability to implement the new service. The partnership with their local environmental or health organization can be a very advantageous partnership since the community group can also apply to a series of funding sources for partnership funding for the transit initiative.

Often the community group has the experience and interest to develop, write, successfully obtain funding and manage the project activities for the Municipality with the assistance of a steering committee. Well seasoned community groups especially those who work both at the local as well as at the National level on current issues have a vast list of contacts, colleagues, and network contacts who can assist in the success of the initiative.

The proposal writing phase can be months long and very time consuming. The level of details, background work, forecasts, budget tables and other required documentation can be overwhelming particularly if it is a multi partnership application with various in kind and financial contributions being requested from several sources.

The key is to persevere. Day one, you will sit down with the blank application forms either in paper or electronic format and simply take one line and one requirement at a time. Most of the funding partners are very helpful in assisting you through the various stages. We encourage you though, before you invest your time, to contact the funding source to make a first level inquiry as to what are their identified priorities for that year since they tend to rotate their priorities each year to provide assistance to various social issues.

A challenge can be that each funding partner has different application forms, budget tables and criteria. There are also various project activities that they will consider as either eligible for their funding or not. You must work closely with them to identify these specific items. Once you have identified the needs of the project, who in society will be interested in supporting transit you then can search for National and or Provincial funding partners.

b. Funding and Resources

We have included a list of web sites in the Reference section of this guide where you can begin your search to identify your partners. The confirmation of funding approval from your partners will not arrive all on the same day. It depends on the dates of their individual deadlines for receiving proposals, the time they take to review them, dates that their own committees meet etc...

c. Conducting the Study

The assistance of a consultant who specializes in public transit can be critical to the success of the Feasibility Study but also can be integrated so that duties are shared between the consultant and the partnering community group. During the Bathurst feasibility study BSD conducted the community surveys, consultations, organized a business workshop, assisted the consultant with local knowledge, data collection, and various other administration and public outreach duties. The consultant provided synthesis of data, service options, rider and revenue projections, demographics and implementation recommendations. Because BSD has GIS mapping skills we worked with the consultant using postal code

data to produce a series of City maps depicting the postal code location of the survey respondents.

The consultant worked on providing a series on maps showing several route options and accompanying costs to operate. Both worked in partnership with colleagues and experts on calculating the potential greenhouse gas benefits from implementing the service.

The final report from our Feasibility Study can be found on the BSD web site at:

www.bathurstsustainabledevelopment.com

under the title: The Urban Transportation Project.

Phase II: *The Test Project*

The Feasibility Study is your foundation document for all future transit initiatives. The test project will let you know what you can realistically afford to provide sustainability if your Municipality is not willing to financially assist the new service. As you begin to start the application process to identify funding to allow you to test the conclusions of the study in the actual environment transit will be working in, you will refer back to the Feasibility study document to design your test project.

The applications at this stage can be even longer than for the feasibility study since the funding sources may now require a full three year business plan. We also were required to write a pollution control policy. Again you must persevere and you will succeed!

During our test project we took full advantage of the opportunity to test various items and obtain real time costs and facts such as variations in:

- *Revenues, costs and rider counts from hourly vs. 30 minute service.*
- *Seasonal variations in driving times of the schedule.*
- *Issues with positioning of bus stops.*
- *Variations of printed schedule formats.*
- *Rider responses to "turnarounds".*
- *Rider support at various off route areas that have been demanding or lobbying for service.*
- *Best options for hours of service.*
- *Physical and social barriers for potential riders.*
- *Fuel efficiency and maintenance requirements of specific vehicles,*
- *Realistic growth rates.*
- *Driver and public policies required.*
- *Options for transit links to neighboring communities.*
- *Optimum positioning and direction of buses to peak work force locations.*
- *Vendor Sales Locations and formats.*
- *Public opinion about bus options.*
- *Accounting requirements.*
- *Public safety issues.*
- *Variations in driver skills and abilities.*
- *Variations in driver public relations skills: "attitude matters".*

The partnership of an excellent company such as Dupont Industries, who supplied our buses, maintenance agreement, training for our drivers and manager and technical assistance, provided us with high quality support.

Having the opportunity during the test project to actually be able to operate provides you with the "reality check" you need so that when you move into Phase III, actually implementing the service you can design it so that you can work within available funding, peak routes, scheduling needs and realistic targets.

a. Setting Up and Operating the System during the Test Project

Here is an outline of the Milestones we covered during our set up process:

Milestones

- *Initiate a multi venue press release of project application success, sponsors, and objectives.*
- *Become a member of the CUTA- Canadian Urban Transit Association.*
- *Contract Professional Services in the form of Project Management/ Transit Management who will conduct administration, data collection, meeting coordination, transit statistics reporting, web site hosting, and management, publicity, printing, design and graphics, community liaison and presentations, environmental.*
- *performance reporting and monitoring, writing project reports, rider incentive programs, bus stop implementation, quality control, supervises the over all field test management and revenue processing.*
- *Contract a transit bus supplier who submitted a successful bid from the RFP previously conducted, and who will supply the buses and*
- *provide training to the Fleet Manager, drivers, City and Transit Manager.*
- *Hire the fleet maintenance manager and drivers.*
- *Finalize the locations of all bus stop signs, maps, benches, bus pass outlets and schedules.*
- *Finalize graphics and order all temporary bus stop signs.*
- *Prepare communication plan materials to be mailed to every mailing address in the City (bus schedule, map, ticket venues...).*
- *Prepare materials for and attend weekly transit meeting with operator, City, staff, bus operator, BSD and project partners and Steering committee members.*
- *Take delivery of transit buses.*
- *Prepare and distribute monthly publicity materials for ads, logo and name contest materials and rider incentive materials.*
- *Conduct detailed testing and timing of routes, prepare schedules to be printed on brochures, maps, time summer route, conduct training with drivers, Fleet Manager, Transit Manager and City.*
- *Set up all ticketing outlets at previously approved locations, place transit schedules and maps in all sites and at bus stops.*
- *Begin installing signage, map and route signage; prepare bus stops, print route maps, schedules, bus passes*
- *Complete development of and launch transit web site and the voice activated information line.*

b. The Bathurst Fleet

Rarely do transit bus companies lease buses for just a one year period. Most bus companies either want you to purchase the buses or finance the purchase through the Municipality over a 5 to 10 year period. For the test project, we were in no position, nor did we want to purchase the necessary buses. We were fortunate to find Dupont Trolley's Inc. who is willing to lease buses by the month. The

buses we used for our test project were 1995 Classics which had been refurbished by Dupont. They seat 42 passengers.

To our great surprise, the size of these buses stirred thousands of complaints from non riders in our City. Public perception was that these buses were too big. The public seemed to be very troubled about the fact that they could only see a few riders at the front of the bus and that the rest of the bus appeared to be empty. Most of these complaints were coming from citizens who had never used the bus or ever viewed the inside of the bus. It is apparent that these complaints were coming from citizens who were unaware of the capacity of the Family Section at the front of the bus to hold 9 riders plus when just the first two regular rows of seats are added in the total count in this front section is 18 riders, yet from the outside of the bus the length of this section is only as long as the first window on the bus. Also, when two riders are sitting side by side in the same row, from outside the bus the passenger in the isle seat becomes a silhouette of the passer sitting in the window seat so the person on the outside looking into the bus only sees only one passenger in that row, the one sitting in the window seat.

Other citizens actually began complaining that the buses were polluting the environment because they were operating on diesel fuel and at less than capacity. Some citizens tried to make the case that less pollution would be produced if each of the bus riders would travel in a small car, which of course is completely false. Each bus, once we reach maturity, has the potential to remove as many as 45 cars off of the roads per hour resulting in a major reduction in greenhouse gas emissions produced than if each of those citizens had traveled by individual car in the form of a personal automobile or taxi.

c. What We Learned

Staff time

Count on needing at least 30% more support staff time than what you think you will need during the test project. BSD had to have one of our staff on the buses for several hours per day for about the first three months. When people have not had experience with transit and reading schedules there is a large learning curve. In order for riders not to distract drivers and reduce driver attentiveness to road safety you need to plan on having support staff on the bus to answer riders questions and help hundreds learn to understand the system, where the bus stops are and how to read the schedule or find a way to know when to wait for the bus if the rider has literacy challenges. You will need a dedicated project/ transit manager since that position, during the test project, will require being on duty as a Supervisor for 12 hours per day 6 days per week if you also operate on Saturdays.

Routing Options

Things may not go as planned. You may plan your route to service an area of the City or a specific large building or senior's complex that had actively lobbied for bus service to their building only to find that they end up not riding for various reasons or that due to seasonal conditions you need cannot continue servicing that area.

Depending on the size of your buses, some exits and entrances to properties and or streets in your City May not be accessible to you. You will then have to modify your route.

Not all areas of your City may be priorities for snow removal or street maintenance in your City. It is important that the City understand the need to prioritize transit routes during snow clearing season otherwise the buses will not be able to access those areas for service.

The time it takes to travel a route in the winter months with snow and ice will be very different than in the spring, summer and fall. The times in the schedule will have to be modified with a summer and a Winter Schedule or with enough resources to allow all buses to be scheduled so as to allow time in their Annual schedule that is adequate during winter snow load months.

Access for Seniors:

The dream of taking the bus can often be very different to seniors than the actual reality of taking the bus. Some seniors find it difficult to access the bus if it has stairs and is not low floor, to hold parcels while getting on and off the bus, waiting for the bus at stops that have no benches or shelters and the difference between the smooth ride in a smaller vehicle such as a taxi to the reality of riding in a bus on a brisk schedule on less than optimum road conditions. Low floor buses and buses with fabric seats will assist seniors however, cloth seats, while less slippery for sitting on are a problem for sanitization for small transit services.

Negative Public Perception:

Positive public confidence and verbal support of a bus service is critical to its success; as one citizen said to us: "You cannot expect citizens to have confidence in a service if it is always on probation. The City needs to make a commitment to help the service operate for another year or two".

The positive support of all City Councilor's and City Management is critical. Our Council was divided on transit operating next year. The general public was also divided on the issue. As we provide more clarification on the correct financial figures for next year became better known, as we helped to increase understanding of the all to often forgotten needs of the "silent ones", those whose voices and faces are so seldom heard or seen, those who are oppressed and vulnerable in or City, the children living in poverty, those who are experiencing that the cost of living has outpaced their household incomes, and continued to impress upon our citizens the positive environmental benefits of public transit, it is hoped that Council's opinion will turn in support of keeping transit services operating.

The Design of the City:

You will quickly discover areas of your City that are not designed to provide access to full size transit buses and traffic control barriers that hinder efficiency of the bus service. It is important that your City begin to work with you on transit priority measures.

Maintenance Personnel and Maintenance Options

All drivers must have a minimum level of mechanical knowledge and competency. Usually, these features are basic requirements of their licensing approvals.

The value of an excellent maintenance person who is also a “Mechanical Mr. Fix it”, can help to reduce general maintenance costs. If the maintenance personnel can also drive part- time this is an added budget bonus for small transit systems.

For the general maintenance, we opted to contract Dupont to provide us 100% of our maintenance requirements for our three buses at a pre agreed upon per kilometer rate. A hub o meter of the wheels of the buses records the exact mileage the buses travel.

Despite our best attempts to research and obtain exact cost estimates from other transit providers on what maintenance for refurbished 1995 Classic transit buses would be per bus, we still lacked confidence that we would not have “surprises” in the final maintenance costs during the project. We quickly learned that “refurbishment” is a relative word since there are various levels of refurbishment. Since there are so many variable and “things” that can happen from electrical issues, transmissions letting go to engines blowing, which are the big cost items, and due to the fact that the project had a limitation of available revenues, we thought that it was best to contract maintenance out for our first year. This gave us the opportunity to see what actually occurred with each bus, hours of labor, parts requirements and other items.

Signage

For our test project, we used temporary, corrugated yellow plastic signs that were 12“x 8”. We received permission from the Power Company and businesses to post them along the routes on power poles and other available posts. This is very economical and these signs are practically indestructible and in fact are sufficient to use for many years.

Storage of Buses

When the sun is shinning and temperatures warm such as in spring, summer and early fall storing buses outside with no shelter works. When the bitter cold, freezing rain, snow and sub zero temperatures come along at the extremes they do, as we say at Bathurst transit in Northern New Brunswick: “The girls need shelter” (our pet names for the buses). The drivers also need shelter and light in the winter in order to perform their daily check list, fluid checks, maintenance and cleaning of the buses”.

In Nova Scotia, their buses stay outside at Kings Transit year round but the general temperatures in the Annapolis Valley are also usually between 5-10 degrees Celsius warmer than in Northern New Brunswick during December to March.

In order to wash the buses in this extreme cold and have the windows able to be defrosted properly for use the next day each bus after washing needs to be in a heated room otherwise the inside of the widow are covered in ice the next morning and for half the day making it a safety issue for using the bus.

Saturday service Anyone?

We opted to test Saturday service for 6 months. We averaged between 70- 85 riders per Saturday with one bus operating on hourly service. This level of Saturday service in our transit system, with one bus operating, will cost \$16,000 over 52 weeks of service. Our decision was that in order to include Saturday service in our future transit plans that we would have to have our weekday service increase enough to cover the \$16,000 additional cost.

Who are the people in your neighborhood?

It is amazing how in a small community one can think that they know everyone in the City or at least recognize their faces, that is, until a service such as public transit is implemented. When this happens, people start saying: "Who are these people? I have never seen them before?" or you hear one rider saying to another: "I haven't seen you in years!". Still other riders can be heard stating: "I haven't seen this part of the City for years!".

Only when you do not have affordable transportation can you understand what it means to a person and or a family to finally have access to it and to have it available. It is like a huge weight is lifted off of their chests and they can finally breath and fully participate in the life, sights and activities of the City.

Transit riders are from a wide range of demographics: students, seniors, middle and low income workers, environmentally conscience citizens, those who can not longer drive, citizens with disabilities, citizens with several children (taxi's will only allow four passengers at one time), and those who have made the economic link between being cash strapped paying for vehicle costs and the saving they gain by using the bus.

Homelessness and Vulnerability

People in smaller urban centers often think that we do not have homeless people or people who are at risk of becoming homeless because they do not see them sleeping on the sidewalks like they do in the mega urban centers. This could not be more incorrect. Out of sight out of mind does not mean that homelessness does not exist in our City. It does exist and at an even greater level are citizens who are "at risk of becoming homeless". Citizens who are just hanging on, barely making it, who have experienced great trauma and hardship, increasing poverty or youth at risk face the prospect of becoming homeless everyday.

Communities and their inhabitants need to care about this issue. We need to ensure that all citizens have and are given equal opportunities. Public transit helps in so many ways. It helps them be able to move around the City to access services and opportunities, to obtain food and supplies, to access employment, literacy courses and to help them feel less vulnerable.

Transit Pass Vendors

Statistic's from the Canadian Urban Transit Association show that the more locations transit passes are available for sale the more it encourages rider numbers. Security is of concern. Therefore it is important to find facilities and or partners in your City who have security at their buildings and who are

willing to be transit pass vendors. For the test project we sold our passes at City hall, the cities K.C. Irving Civic Center and at Jean Coutu. The City has an internal electronic accounting service that is linked by GL code to the financial transactions of their front desk counters at both City Hall and K.C. Irving. When transit passes were sold the sale was entered into the Cities accounting programs. Jean Coutu, a local pharmacy also had a coding system so that cashiers could enter the sale of the passes into their electronic sales programs.

Revenue Processing

Cash revenues can be processed by contracting a bonded security service however this can cost between \$6000 to \$10,000 or more per year depending on the amount of revenue that needs to be processed. During the test project, teams of two or three Transit Management staff would come together once per week to empty the coin collection vaults on the buses; roll the coins and make the weekly deposit. We developed weekly deposit sheets that required three verifications by two transit staff and one City employee. In this manner there was a verification, proper account and security of all cash revenues.

The Value of In-kind Support

Community partnerships and in-kind contributions are critical for all projects. We were very fortunate to have strong in-kind support from our Municipality to assist us with general accounting and payroll processing programs, discount fuel and insurance rates, the contribution of access to a small storage room and other assistance. We obtained in-kind support for summer storage of our buses from Ace Hydraulic, communication devices from Aliant, vendor sales in-kind from Jean Coutu and “naturally occurring bus stop locations from many major public buildings.

Advertising Revenues and Bus Shelters

Only when you have experienced first hand waiting for the bus at a bus stop that has no shelter or benches can you completely appreciate the incentive that bus shelter provide for increased use of the bus service.

When the temperatures drop below minus 15, with a wind chill factor of minus 30 or more, any structure that blocks the wind helps riders. When it is pouring rain and windy, shelters keep them dry. Many citizens have physical reasons why they need temporary seating when waiting for a bus such as a late term pregnancy, back and leg problems and over all health conditions.

Many transit systems generate revenues from selling advertising poster space both on and inside the buses as well as on their bus shelters. One, 3 x 6 commercial poster on a bus stop can generate between \$4000 and \$6,000 in yearly revenue.

The investment of installing bus shelters with advertising space available is that it can provide steady, long term funding to partially support the transit service.

The Impact of Free Passes

During our test project we were very generous with complimentary passes since the cash value of these passes were part of the over all contribution to the project by the City. In this way the City did

not have to contribute any actual cash to the project. They did however; contribute well over \$150,000 in in-kind support that was critical to the success of the service.

However, there now is no question about the fact that every free ride you give away is a not paid ride. We quickly learned that our little transit system in its infancy stage could not financially sustain large amounts of free rides. The end result is that it directly impacts your rider revenues especially during your test project. Low rider revenues, during the tests project sends negative messages to your City Councilor's on the financial ability of the service to be sustainable without Municipal support as it proceeds into Phase III since everyone looks at the cash revenues collected and seems to be so focused on the cash fares you brought they tend to over look the fact that thousands of dollars in complimentary passes were distributed throughout the community as part of the Municipal contribution to the project.

During the various service types tested during our test project we maintained and exceeded much of the time 125 riders a day and when 30 minute service was implemented we averaged 225- 320 riders per day however, there were so many free passes distributed during the test project that this level of riders was not reflective of the actual amount of cash revenues collected weekly or transit passes sold. We still have much uncertainty as to exactly how many of those riders would have paid cash to ride or would had their fares paid by one of the various social programs if the free pass program had not been in place

The free pass program was only 50% completed November 30, 2005. The last four months of the test project we still had a substantial number of free single ride tickets being distributed. The various social assistance services in our community were very hesitant about purchasing large numbers of transit passes after November 30 since they were uncertain about if the service would still be here after March 31 and were aware that if funding ran out the City would abruptly stop the project and bus service. Their caution was warranted, Council did shut the project down two weeks early despite the fact that additional project funding to compensate for the free pass impact had been obtained.

Also, there were many in our City who kept making very negative public statements throughout the test project stating that: "as soon as the transit funding is used up that's it, were shutting it down!". They seemed to not be considering the needs of the low income citizens in our City to have access to affordable transportation.

d. Transit Links and the Regional Fleet

BSD has received funding from Moving on Sustainable Transportation to conduct what is called "A Regional Fleet Assessment", in which we will identify the potential, conduct consultations, prepare service options and route options as well as cost projection to provide a transit link to five municipalities near Bathurst where many of the citizens of these Municipalities work and come for appointments to the City of Bathurst. Family and Community Services have expressed a great interest in us extending future bus services to these areas.

Project Goals

To identify and assess all necessary information, opinions, needs, financial data, routes, service types, user demographics and all other information necessary to ensure the successful

implementation of a new sustainable transportation system in the form of a Regional Fleet Urban Transit Bus service for the citizens of Beresford, Petit Rocher, Pointe Verte, Nigadoo and Belledune.

We have received unanimous written support from all five Municipalities along route 134 (which is a straight line route) near Bathurst for this initiative.

If the Regional Fleet service, of most likely one or two buses, which may also include a series of park and ride facilities, is implemented then it is possible that rider counts could increase to over 350,000 at maturity for the entire transit service. It is expected that the Bathurst transit service would operate service to these areas. One other option may be a community bus that brings riders from Belledune and Pointe-Verte to Petit Rocher to meet and transfer onto the City bus.

Total population for these combined Municipalities is approximately 12,000. Average fuel costs to travel to and from the City range between \$40 per round trip to \$10 per round trip. Average taxi fares are between \$30.00- \$60.00 return fare. The majority of the residents of these communities commute to the City of Bathurst daily for work, shopping and appointments.

e. GHG Emissions Reductions

Obtaining absolute GHG emissions is a critical target of public transit. A qualitative summary of climate change benefits/greenhouse gas reductions/pollution savings resulting from the test project is given below.

Our work was both directly and in-directly responsible for providing the encouragement, information, skills, knowledge and encouragement required for citizens taking 32,538 single rides on the Bathurst Transit buses.

32,538 rides times 5 km per ride = 162,690 km ridden.

Average transit GHG = 0.069 kg CO₂ per km.

Difference (GHG savings) = 0.308 kg CO₂ per km times 162,690 km = 50,043 kg CO₂ or 50 tonnes.

Doing it the simple way: 32,538 rides = 68 full-time daily riders (32,538/5 days a week/48 weeks/two for a return trip) times 50% of a tonne = 33,894 kg CO₂ or 34 tonnes.

Total Tonnes of CO₂ reduced 34 tones in 9.5 months

Phase III Moving Forward

- a. The Recommended Preferred Option for Bathurst

In Bathurst, the reality is that it will be at least two to three years before our rider levels and revenues will grow to where they can sustain the costs to operate the Preferred Option 1 and probably will

require an increase in population or a heightening of the energy crisis before they would be able to sustain Option 2.

The only affordable option for transit for our City at our current stage of development, with no financial assistance from our City was identified to be Option 3, hourly service but in fact depending on exactly where you are located in the City some areas such as the heavy commercial area on St. Peter's Ave. would still receive 30 minute service while areas on the ends of each route would experience 60- 90 minute service during other times of the day. The annual operating cost, before partnership funding, would be \$157,928 which would require a total of 52,642 riders per year at a cash fare of \$3.00 each to financially sustain the service independently, based on no partnership funding.

b. Financing the Implementation Project

Partial funding from various external sources in Year 1-3 would help the service while it grows. Sources of yearly partnership funding could come from the Municipality choosing to assist transit with covering the cost of fuel, from Family and Community Services guaranteeing to purchase a specific number of passes, from advertising and from projects that are developed. Other sources could be the Federation of Canadian Municipalities Green Municipal Fund, The National Homelessness Initiative and the Restigouche Chaleur Economic Development Fund.

The anticipated 15.5 tax credit on monthly transit passes is expected to generate an increase in rider counts and revenues however it is impossible to anticipate how much of an increase would be achieved.

The benefits of transit are huge to commercial businesses, health and wellness programs, in terms of jobs that transit creates, the stimulation to the local economy, economic spin offs and population growth. Often, transit is a deciding factor in whether or not a new business decides to locate in your City which means if they do the Municipality will reap the rewards of the increase in business taxes and levies. Some communities partially fund their transit systems through business levies.

Some Cities still tend to do everything they can to make more and more parking lots and use these as sources of revenue for the Municipality. Cities with public transit often use this money to obtain sustained support for public transit by placing a tax on these parking spaces.

The Federal Gas Tax Transit funding will provide the financing to purchase buses and bus parts and to remove the leasing costs and bus parts costs from our proposed yearly operating budget in all three options.

There are some creative solutions which may be able to be developed to assist in establishing a Community Transit Association or a Commission, who can incorporate and operate the service with some assistance from the Municipality. The Municipality can then still access and be eligible for any major funding programs for transit and can assist the Community Transit Association to obtain lower rates for such large and high cost items as Public Liability Insurance, purchasing or leasing costs of buses and offering access to Municipal fuel rates. Another option is of course is for the partnering NGO community group to be contracted to manage the service on behalf of the City and or finally that the City itself for a Transit Department internally.

The benefit of these three options is that the service remains not for profit and under the umbrella of the Municipality and therefore is eligible for funding.

If the little transit service did not reach its cash fare targets, the risk to the 8300 commercial and residential tax payers in our City would be equal to that of 3 cups of take out coffee and 3 donuts per year each.

With partial funding from various external sources each year the required amount of cash fares could be much lower. Sources of yearly partnership funding could come from the Municipality choosing to assist transit with covering the cost of fuel, from Family and Community Services guaranteeing to purchase a specific number of passes, from pre contracted advertising and from projects that are developed.

Fuel costs for transit could also be assisted by providing transit with a small portion of the funds from the new gas tax transfers by the Federal/ Provincial governments to the City.

c. Municipal Environmental Performance

The following list of documents and plans help a Community work towards sustainability. The process of completing these plans and items, in order to be accepted by the public and credible, need to be conducted which broad and extensive input and meaningful consultation with the citizens of the community.

These plans and indicators help Municipalities make decision based on the “**triple bottom line**” principal of including economic, social and environmental targets and considerations in all decisions made by the Municipality to ensure long term sustainability of the community and quality of life of its residents.

a. "Integrated Community Sustainability Plan”: needs to be developed. It is a criteria of accepting the Transit Gas Tax revenues.

An "Integrated Community Sustainability Plan" means any existing or new long-term plan, developed in consultation with community members, for the community to realize sustainability objectives it has for the environmental, cultural, social and economic dimensions of its identity.

b. Quality of Life Indicators: need to be developed. Many Municipalities also have not yet done this exercise. It is a very informative process and provides assistance when developing priorities for sustainability. It will be important that a broad spectrum of representation from all walks of life in our community engage in the development of the long term vision and plan.

c. Environmental Sustainability Guidelines: need to be developed in terms of future water resources, land use planning and climate change impacts on infrastructure and properties.

d. Transportation Demand Management System: needs to be developed with long term goals and objectives that will assist in supporting the transit initiative and multi- modal transportation options.

d. Expected Environmental Benefits

A qualitative summary of climate change benefits/greenhouse gas reductions/pollution savings resulting from the test project is given below. Our work was both directly and in-directly responsible for providing the encouragement, information, skills, knowledge required for citizens taking 32,538 single rides on the Bathurst Transit buses. The calculation below includes factoring in the emissions produced by the diesel powered buses.

Reduction in GHG Emissions

32,538 rides times 5 km per ride = 162,690 km ridden.

Average GHG emissions by car = 0.377 kg CO₂ per km (typical mix of vehicle types)

Average transit GHG = 0.069 kg CO₂ per km.

Difference (GHG savings) = 0.308 kg CO₂ per km times 162,690 km = 50,043 kg CO₂ or 50 tonnes.

Doing it the simple way: 32,538 rides = 68 full-time daily riders
(32,538/5 days a week/48 weeks/two for a return trip) times 50% of a tonne = 33,894 kg CO₂ or 34 tonnes.

Total Tonnes of CO₂ reduced based on 9.5 months of the test project: 34 tonnes

Total Tonnes of CO₂ reduced based on 12 months of operation: 42 tonnes per year

Total Tonnes of CO₂ reduced per year based on maturity projections: 168 tonnes per year

e. A Comparison of Options

Option 1

One is a mix of hourly and 30 minute service operating 12 hours per day from 7am to 7pm. From 7am 9:30 am there are two buses in operation. From 4pm to 6:30 pm there are two buses in operation both providing 30 minute service. From 9:30 until 4pm daily there is just one bus operating on an hourly schedule. During this testing period there was no service on Saturdays. We tested this service from July to September. There are no transfers required. Two buses are required to operate this service with a third bus available for rotation and servicing days. Operating on this schedule requires 3 full-time drivers, one who drives part-time and performs maintenance duties the other hours.

Option 2

In September we began to test an optional service type: 30 minute service all day. We added 4 service times each day to Bridge Street and Rough Waters as far as the former Save Easy and began traveling up to the far end of Vanier to service another call center called Can Jet. We also received approval from the Public Utilities Board to go outside the City so that we may test providing service to a major call center, Client Logic who currently has 350 employees working on various shifts

and is located 2 km past the City line on Route 8 at the Chaleur Mall. There are no transfers required. Two buses are required to operate this service with a third bus available for rotation and servicing days. Saturday service was started, hourly from 9am- 5:15 pm.

We were able to provide service to a larger area raising our coverage to 80% of the City within a 500 meter walking distance to the nearest bus stop including service to Bridge Street and Rough Waters. We had been under enormous pressure from citizens in both the Bridge Street and Rough Waters area to provide service to them. Bridge Street citizens rode fairly well but Rough Water's produced only 1 regular rider. It was not possible to go further up Rough Waters due to the poor quality of the road, the lack of population density within a reasonable distance from the main route and scheduling.

Option 3

In mid March, we were scheduled to make the transition to the next year of service. After compiling the cost of the various service options during the test project and based on available partnership funding that had been secured for April 1, 2006, we concluded in early February that the best service option for Bathurst was Option 1 but we also knew that unless a significant amount of partnership funding could be found to support the cost of operations next year while the service grows, Option 3 would have to be the compromise until our rider counts and revenues mature.

Option 3 consists of one bus in operation on hourly service. Depending on exactly where you are located in the City some areas such as the heavy commercial area on St. Peter's Ave. would still receive 30 minute service while areas on the ends of each route would experience a mix of 60- 90 minute service during other times of the day.

When we were operating on Saturday's we were operating along the same route on the same type of hourly service proposed for Option 3. Rider counts averaged around 85 riders per Saturday. If we extrapolate the data for Saturdays it gives us the true field cost for fuel, maintenance and wages we could anticipate if that service type were to operate 5 days per week.

Transit Link Testing

In January, after having received approval from the Public Utilities Board, we added and began testing the addition of a transit link and the system of transfers which consisted of four runs per day to the Town of Beresford, just past the Bathurst City limits. The route travels along highway 134 in a straight North-western direction for 10 km. The majority of the 4500 population living in Beresford works and commutes by car to the City of Bathurst. We had been receiving a lot of requests for Beresford.

The riders coming from or going to Beresford who are coming from or going to the hospital or Can Jet have to transfer at Superstore. All other riders going to or from Beresford to the down town core or East Bathurst do not need to transfer. Saturday service remained at hourly service from 9am- 5:15 pm, with no Saturday service to Beresford.

There were many who encouraged us to try service to Beresford. Even the Town of Beresford said they couldn't figure out why we did not include service to Beresford in our original design since so many of the residents of Beresford commute to the City for work. Many, many people in Bathurst also told us that they believed that service to Beresford should be included. So we decided to try it. With

only a slight modification to the schedule we were able to slip in 4 runs however they were not at optimal times but at least it gave us an opportunity to see what were the true cost and time required to service Beresford as well as early indications of the potential for rider numbers.

Beresford Service produced an average of 9 - 16 riders per day. If we had been able to provide service at optimum times rider numbers would have been higher. After testing we concluded that in order to service the Town of Beresford properly service to that Town should be part of the Regional Fleet Initiative. Costs to operate one bus to Beresford on an hourly schedule 8 hours per day would be approximately \$105,000 leasing, fuel, maintenance fees and driver included for one bus.

Saturday Service

Saturday service began in September operating from 9am to 5 pm traveling along the same primary route. Service to Bridge Street was reduced to three trips per Saturday. Saturdays cost approximately \$16,000 per year in fuel, maintenance, and driver wage costs.

Cost Comparisons

In order to keep costs down, operations will have to be “bare bones”. No frills and no thrills, very little advertising and promotion, a Transit manager who is willing to work part-time with many hours of voluntary service.

Since the Federal Transit Gas Tax Agreement has been passed and signed by our Province, which was part of Bill C66, the following operating costs comparison chart has at the bottom of each service option column the cost reduction after the leasing fees and bus parts costs, which are eligible expenditures under the Transit Gas Tax Agreement, are removed since they will no longer be incurred the following year so long as the Municipality accepts the Transit funding and uses the funds to purchase the necessary buses and bus parts.

Additional yearly revenues can be raised from advertising. During the test project over \$13,000 in advertising revenues were received. Potential for advertising ranges from \$20,000 per year to \$60,000 or more depending on if there are just 2 buses with exterior and interior ad space in service with no shelters or if there are three buses with several bus shelters installed throughout the City. Each shelter can generate between \$4000 - \$6,000 in National advertising revenue.

Total Costs Per Year

Item	Option 1	Option 2	Option 3
Total km per year	94,380 km	146,436 km	62,920 km
	363 km per day	528 km per day	242 km per day
	22 km per hour	22 km per hour	22 km per hour
	5 days per week	6 days per week	5 days per week
	16.5 hr per day	24 hr per day	11 hr per day
	No Saturdays	Saturdays	No Saturdays
Costs per hour	\$84.59 per hr	\$68.93 per hr	\$85.79 per hr

Drivers	6971	10,816	4647
Transit Manager	1818	1818	1508
Communications	500	500	500
Materials/ Supplies	573	573	200
Printing	321	321	200
Plant Rental	1100	517	517
Leasing Fees	9308	9308	6204
Maintenance (.55 rate)	4325	6711	2883
Fuel	3542	5891	2561
Insurance	1333	1333	888
Dues	100	100	100
Lubricants	50	50	20
Administration	200	200	200
Uniforms	100	100	20

Total Costs			
Monthly Cost	30,241	38,238	20,448
Total Yearly Cost	362,892	458,856	245,376

(Purchase Buses and parts)

Less Leasing Fees	-111,696 (3)	-111,696 (3)	-74,448 (2)
Less Bus Parts	-23,388	-39,096	-13,000

Total Operating Costs Per year	227,808	308,064	157,928
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# of paid rides required per year/day	75,936	102,688	52,642
Adjusted Cost per Hr	53.10 per hr	46.28 per hr	55.21 per hr

g. Bathurst Ridership and Statistics

The pay per ride service began July 1. The following monthly totals have been obtained from on the bus daily rider counts. The data is collected by the bus drivers using a manual, hand held counter. Riders were not divided into age categories for the purpose of the total rider counts per month. The rider numbers were verified by the BSD transit staff during weekly revenue processing of the single ride tickets and cash deposited in the coin boxes on the buses and through the total monthly sales of single ride tickets and monthly passes through the four vendor locations.

PEI Transit has a mix of 30, 60 and 90 minute service depending on the time of day and your location. They have 3 times the population of the City of Bathurst and are obtaining approximately 8000 riders per month within their first 6 months of operations.

Therefore it is reasonable to assume that Bathurst did well to achieve a level of 3000 riders per month and that it will both maintain and increase its rider counts as it matures. As rider counts and revenues grow over the next three years it is possible that the service could eventually implement Option 1 which would increase rider numbers.

All transit systems in Canada are experiencing steady, sustained growth in rider numbers.

Month	Year	# riders per month		
June	2005	5821	19 days of service	Free transit!
July	2005	1998	20 days of service	
August	2005	2375	22 days of service	
September	2005	3333	25 days of service	
October	2005	3945	25 days of service	
November	2005	4791	25 days of service	
December	2005	3449	25 days of service	
January	2006	3021	23 days service	
February	2006	2653	24 days service	
March	2006	1286	13 days of service	

Total Rider Count for Test Project: 32, 672

Fuel Consumption and Mileage

Total	km traveled	fuel consumption (litres)
June	8186	4466
July	8523	4477
August	8573	4477
September	12783	6764
October	14244	6783
November	14030	7153
December	13031	7410
January	13872	7163
February	12752	6569
March	5205	2764
Total Km	111,199	58,026

Conclusions and Closing Remarks

On behalf of Bathurst Sustainable Development and the City of Bathurst we wish to take this opportunity to thank our many partners for assisting us with this project. We hope that in the near future our City will reverse their vote and will agree to allow public transit services to restart.

For those of you wishing to undertake a similar testing or study pertaining to implementing public transit we have these words of advice: Do not assume that non-riders and community leaders understand what access to affordable transportation means to citizens who use it and need it or understand the economic benefits of the service to their community and its economic future.

You will need to find a way to get detailed information directly to the public in order to dispel incorrect information and negative rumors that can be damaging to the new service.

Personally attempt to take each of your community leaders out on the buses so that they themselves can better understand first hand who is using the bus and why it is important to have this service. Do not assume that any of them have taken this initiative on their own.

When public transit bus service is available in a community it is incredible how much it improves the lives of its riders. It has the potential, if given the time it needs to grow, to bring new citizens to a small urban center and to assist many current citizens the opportunity to more frequently be involved in active living in their community.

For those of us who are aware of the challenges of our middle and low income families, challenged citizens, seniors, youth and who know our citizens we notice very obviously whenever we are out and about that many of the citizens who live in our community are not present.

Why? They simply cannot afford to “run around” and attend functions, events, participate in daily shopping, to attend our local festivals, etc... by paying the high cost of taxi’s. They are forced by

economics to “stay at home”, do their groceries only once a month, or spend all of their transportation budget on going to and from work. This is not quality of life. This is oppression and suppression.

Loyalty to a community is a thing of the past. We live in the global village and citizens are mobile. They now have options basically to live any where they choose. They also have other communities soliciting them daily to move to their communities.

If citizens feel that a community is not including them in their priorities, if they feel that their community does not want or care about them, that they have a lower quality of life where they are now living, that the community is not inclusive but instead excludes “certain” citizens, they will leave and move to a different community. They will seek a community where they can be free from oppression.

They will seek a community that has a vision of inclusiveness’, that spreads their financial resources and energies equally between the needs of the middle to lower income citizens and the higher income citizens and that focuses on quality of life and shows it by working on improving services such as affordable housing, a clean environment and green spaces and yes ensures that public transit bus service is available.

Citizens should not have to beg for public transit services to be made available. Public transit is one of the four cornerstones of urbanization. Cities of the world are proof of this since many implemented public transit in the 1800’s.

You cannot expect to have a strong community and grow an urban center unless you build and put in place all of the foundation stones required to support and encourage growth. Equality of life for all people is improved by the presence of transit.

The outward migration from smaller communities to urban centers tells us they want to live in Cities with public transit if not for themselves, then at least for their children so that their children can be free to embrace life by having equal opportunity to actively participate in social, recreational and enriching events within the community and can travel to do so on an affordable public transit service.

For small urban centers wishing to enrich the quality of life for their citizens and to work on future sustainability issues, we encourage you to give yourselves and your people the gift of public transit.

Brenda Kelley

Funding and Transit Research Links

Bathurst Sustainable Development: www.bathurstsustainabledevelopment.com

Canadian Urban Transit Association: www.cutaactu.ca

The Federation of Canadian Municipalities: www.fcm.ca

FCM: Quality of Life Indicators: www.fcm.ca

Moving on Sustainable Transportation: www.tc.gc.ca/programs/environment/most/menu.htm

Transport Canada: www.tc.gc.ca

Environment Canada: www.ec.gc.ca

National Homelessness Initiative: www.homelessness.gc.ca

Transportation Association of Canada: www.tac-atc.ca

City of Bathurst: www.bathurst.ca

Infrastructure Canada: www.infrastructure.gc.ca/index_e.shtml

National Overview of Findings from a National Survey on the Quality of Life in Canadian Communities: www.infrastructure.gc.ca/ndcc/cities/cities_study/toc_e.shtml

Climate Change Science

United Nations Intergovernmental Panel on Climate Change:
www.ucsusa.org/global_warming/science/the-intergovernmental-panel-on-climate-change.html

Environnement Canada: www.ec.gc.ca

The David Suzuki Foundation: www.davidsuzuki.org/

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The One Tonne Challenge!

The One-tonne Challenge was a National Climate Change Outreach and Education program that worked to encourage, assist and provide information to individual Canadian's to participate in concrete action items and ways to reduce their annual greenhouse gas (GHG) emissions by one tonne and help address Climate Change. How? Use less energy. Conserve water and resources. Reduce waste. Fewer emissions means protecting our climate and having cleaner air and healthier communities for all Canadians and saving energy puts more money in your pocket! There are quick and easy ways your family can reduce greenhouse gas emissions! Remember, every little bit counts.

Actions you can take to reduce GHG emissions:	Saves/year in CO₂
• Travel to work using Public transit	0.50 T
• Reduce driving by 10 %	0.50 T
• Improve insulation at home	0.20 T
• Compost organic kitchen wastes	0.20 T
• Install energy efficient furnace	0.40 T
• Install storm windows	0.10 T
• Use a block heater on a timer	0.20 T
• Use vehicle air conditioner less	0.20 T
• Give up second vehicle	0.50 T
• Keep vehicle tuned	0.20 T
• Use ethanol blended gas/ biodiesel	0.20 T
• Remove roof racks	0.10 T
• Buy fuel efficient vehicle	0.50 T

Additional Actions	Saves/year
• Set Air conditioner to 24°C	0.20 T
• Perform regular appliance maintenance	0.20 T
• Use dish washer's no heat drying	0.10 T
• Avoid over drying clothes	0.10 T
• Put outdoor lights on a timer	0.10 T
• Set energy savers on computers	0.10 T
• Reduce paper usage	0.10 T
• Upgrade your insulation	0.50 T
• Catch rain water	0.10 T
• Stop bagging grass cuttings	0.20 T
• Avoid chemical pesticides and fertilizers on lawn	0.10 T
• Plant trees as wind breaks around the house	0.10 T
• Get an energy efficient water heater	0.20 T
• Insulate hot water pipes	0.10 T
• Turn off water while brushing teeth	0.10 T
• Buy goods with less packaging	0.10 T
• Unplug the second refrigerator	0.20 T
• Get an energy star refrigerator	0.20 T

****All figures for greenhouse gas savings are estimate values for average Canadians.***