Primer on
Design and Implementation
of Transit Services in
Smaller Communities

Recognizing the impacts of limited transportation choices, these specific transit planning guidelines can help to start, expand and sustain transit services in small communities.

Be adaptable, be collaborative, be informed and be prepared - the major planning directions of these guidelines.

Introduction

Transit plays an essential role in improving the social, economic, and environmental conditions of Canada’s cities and communities. While there is greater political attention to serving transit needs in larger urban areas, transit services are increasingly vital for improving the well-being of small communities.

There are unique challenges small and rural Canadian communities face in providing transit services compared to large, more urban areas. The approaches to planning for transit and the range of solutions appropriate for providing transit is broader for small communities compared to larger urban centres.

Recognizing these unique conditions, the purpose of these guidelines is to provide advice and guidance to planning and transportation professionals in planning for transit services in small communities. The guidelines were developed to tailor to a wide range of different stages of a transit service provision in the community:

- starting a new service
- expanding an existing service
- maintaining a service in potential decline

Recognizing the unique characteristics (e.g. land uses, travel patterns, demographics, economic conditions) of small towns and villages, these guidelines are intended to identify the directions and considerations required for planning and implementing new or improved existing transit services for small communities.
These guidelines will be of particular interest to communities with populations under 50,000, but will also be useful to larger municipalities under 100,000 or regions interested in serving a collection of towns and villages.

### Challenge and opportunities for transit in small communities

Small communities across the country face a number of challenges that reinforce the need for transit services to improve community well-being:

**Land use conditions not conducive to conventional transit operation**

Small towns and villages typically contain low residential and employment densities and dispersed land uses. These conditions make it less cost effective to operate conventional transit services because buses must travel longer distances to serve a sufficient number of customers. Due to higher costs for providing services, transit services in these communities tend to have lower levels of service, which in turn, makes it difficult to generate ridership. Small communities need to look beyond conventional transit services to meet their transportation needs.

Despite these realities, there are still opportunities to provide transit services in smaller communities by not only scaling the time span of operation and service frequency, but also offering alternative service options such as demand response and flexible route services.

Smaller municipalities may be reluctant to start or maintain the provision of transit services due to possible low levels of ridership. However, it is important to position communities towards a positive feedback cycle towards greater ridership, service, and intensified land uses by fully integrating transportation planning and planning for community development.

**Limited transportation choices constrain mobility**

Canada’s small towns and villages are often faced with limited transportation choices other than the use of personal vehicles. The lack of transportation choices poses significant implications on mobility—mobility not only in the sense of getting from A to B, but also the mobility to improve community vitality and the economy.
Having limited transportation choices will significantly impact our growing senior populations and people with disabilities who rely on transit services to get around, gain enhanced independence, and to actively participate in an inclusive community.

Today’s youth—who are less inclined to drive compared to the generation before them—have a stronger appreciation for having transportation choices. Transit service provides them with flexibility to travel on their own accord, and allow them to better pursue education, employment, leisure, and social activities.

Finally, limited transportation choices constrain the potential of the local economy, because it limits the opportunities to match people to labour markets, as well as limiting access to local businesses. As municipalities aggressively aim to retain and grow jobs amid an increasingly competitive and global economy, transit is a part of the suite of solutions to improve employment opportunities for people.

**Major transit planning directions for small communities**

**Be adaptable – Develop services that suit your community’s needs**

Planning a transit service is similar to planning any other service or business: there is a need to have a strong understanding of market conditions. That understanding is fundamental to identifying goals and objectives, prioritizing the services to offer, and maximizing the ridership of the transit service.

Developing new or expanded services that suit community needs requires an understanding of the market you are trying to serve. There are three types of market characteristics that require detailed examination.

<table>
<thead>
<tr>
<th>Types of market characteristics</th>
<th>Key activities and considerations</th>
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</table>
| **Demographics (Who should be served?)** | ➤ Identify the key demographic groups to serve/expand:  
  o Seniors  
  o People with disabilities  
  o Youth and students  
  o Commuters  
  o Tourists |
| **Geography (Where should service be provided?)** | ➤ Identify the specific size and area to serve/expand:  
  ➤ Highlight the major geographic connections the selected demographic groups would make |
| **Trip purpose (What types of trips should be served?)** | ➤ Identify service needs for:  
  o Commuting  
  o School  
  o Medical  
  o Shopping  
  o Recreational  
  o Tourism |
Transit services are commonly viewed as a service that operates on a fixed route and arrives at specific points along that route at a specified time. However, this is only one of a number of ways transit services can be provided. There are three major service types that sit on a continuum— the appropriateness of these service types depends on the community characteristics and the selected target markets to serve.

**Fixed route**

- Serves on a regular route, at specific stops, and at scheduled times

**Flexible route**

- Serves a combination of flexible routing and scheduling

**Demand response**

- Services no fixed alignment or scheduling

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**Be collaborative – Work closely with your community**

**Public and stakeholder consultation**

Operating a successful transit service requires knowing what the service needs are in the community. Like any product or service, transit needs to be valued and supported by the community, and that requires having opportunities for stakeholders and the public to be part of the transit planning process.

Regardless of the status of transit operations in a community, the consultation process typically follows four stages. The first three stages occur through the course of a planning process, while the fourth-stage process relates to facilitating the ongoing dialogue with citizens and passengers.

<table>
<thead>
<tr>
<th>STAGE 1: Background and Context</th>
<th>STAGE 2: Assessment of Options</th>
<th>STAGE 3: Confirmation of Recommendations</th>
<th>STAGE 4: Ongoing Monitoring</th>
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<tbody>
<tr>
<td>Present current issues for transit improvements in the community</td>
<td>Present options for the new or improved service, identifying the benefits and costs</td>
<td>Present the assessment leading to the identification of a preferred option</td>
<td>Assess feedback for continuous improvement upon implementation of new/revised service</td>
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</tbody>
</table>
Different engagement activities may be appropriate depending on the stage of the consultation process. There are a number of different consultation approaches depending on who is to be consulted, how formal the process is, and the communication means used. Organizing public meetings, completing survey research, conducting stakeholder discussion groups, and leading social media and other web-based consultations are some of the more common consultation methods.

**Fostering community partnerships**

Being collaborative also means fostering partnership opportunities that could benefit the transit service. There are many partnership opportunities to consider as described in the table below.

<table>
<thead>
<tr>
<th>Partnership areas</th>
<th>Description</th>
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<tbody>
<tr>
<td>Service integration</td>
<td>Integrate services and pool available resources together to assist in improving service and cost effectiveness.</td>
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<tr>
<td>Operations and maintenance</td>
<td>Partner with nearby third-party public or private agencies to operate services and maintain the fleet to capitalize on already established expertise.</td>
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<tr>
<td>Information provision</td>
<td>Work with other nearby transit agencies providers to share planning data and service information with the goal of improving services for everyone.</td>
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<tr>
<td>Customer service</td>
<td>Collaborate in organizing training programs to combine customer service functions to allow for a seamless and consistent passenger experience.</td>
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**Be informed – Present an informed case for service changes and improvement**

In the simplest terms, what local officials and public want to know when starting or improving a transit service comes down two main questions: What does the service look like? How much is it going to cost?

Planning and transportation practitioners should be equipped to develop an informed case for any transit service changes. This requires first designing the new or improved service. The following flowchart summarizes the major processes for developing service designs.
Regardless of the type of transit service (fixed route, flexible transit, or demand response), a service design outlines where and when services are provided. With the service design structure in place, all other analytical components come into place, including estimating revenues and costs associated with the new service or service change. The following outlines the major components for revenues and costs of the planned service.

<table>
<thead>
<tr>
<th>Account</th>
<th>Account components</th>
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| Revenue | • Fare revenue (from ridership forecasts and fare assumptions)  
          • Government contributions  
          • Community contributions |
| Cost    | • Operating costs (e.g. fuel, operation, maintenance, administration)  
          • Capital costs (e.g. fleet, infrastructure, garage facility) |

**Be prepared – Identify all the activities that need to be completed before implementation**

With the approval to proceed with a service initiation or change, it is important to establish a clear roadmap for implementation. Setting out the specific tasks and timeline targets will be important to enable a successful launch of any service changes and improvements.

The figure below illustrates the common implementation activities that need to be completed prior to launching the service. Agencies starting a new service will need to complete all of the listed activities, while those expanding or sustaining an existing service will typically complete a subset of the checklist. Some of the checklist components will vary depending on the type of service provided (e.g. fixed route, flexible transit, demand response).
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Starting a new service
- Establish and implement governance structure
- Secure capital and operating funding
- Develop standard operating procedures and practices
- Execute procurement activities
- Develop detailed route and schedules
- Establish and implement stop and related infrastructure
- Establish call centre for requesting demand response services
- Develop fare media and establish fare sales outlets
- Conduct marketing activities to promote the service
- Launch the service

Expanding an existing service
- Sustaining an existing service

Applies to fixed route and demand response services
Applies to fixed route services only
Applies to demand response services only
Flexible route services need to undertake from all coloured tags

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More Information

This primer is based on the Transportation Association of Canada publication *Design and Implementation of Transit Services: Guidelines for Smaller Communities*, which readers can purchase from TAC’s online bookstore at [www.tac-atc.ca](http://www.tac-atc.ca).

Disclaimer

Every effort has been made to ensure that this primer is accurate and up-to-date. The Transportation Association of Canada assumes no responsibility for errors or omissions. The primer does not reflect a technical or policy position of TAC.