



June 2021

Transit Improvement Process & Expansion Evaluation Process

The Transit Improvement Program (TIP) and Expansion Evaluation Process is conducted each year. The process is led by the BC Transit Business Development Division and is completed in collaboration with the Finance & Asset Management Divisions and in consultation with Local Government Partners.

The program provides adequate lead-in time for the development and confirmation of provincial and municipal transit expansion budgets. It also includes information to inform the procurement and delivery of new transit vehicles well in advance (approx. 18 months) of the desired service implementation date. The program also highlights capital projects required to support service expansion initiatives.

Transit Improvement Program (TIP) – Description

The TIP tracks the expansion requests from local government partners for the next three fiscal years. These expansion requests are informed by priorities identified within planning documents such as Transit Future Plans, Service Reviews, Local Area Transit Plans, Service Discussion Documents, or major capital initiatives necessary for the development of a transit system¹.

The TIP process seeks local government partner commitment to their expansion requests, thereby allowing BC Transit to proceed with securing sufficient funding within the Provincial Budget to support the expansion, and sufficient lead time to procure new transit vehicles².

The TIP is communicated to local government partners through an Expansion Memorandum of Understanding (MOU) letter that is issued to partners each year. The MOU ensures that there is alignment with local governments on their 3-year expansion priorities and seeks a local funding commitment on the year 1 expansion request to move forward with Provincial funding approval, vehicle procurement and any additional operational needs that may be required to support the expansion. **The MOU includes:**

- **Service expansion description**
- **Total annual hours**
- **Estimated costs, including Local Government contribution**

¹ Priorities can often be included where plan development or review is underway during the TIP process time and the local partner would like to include future investment for draft service expansion initiatives that will be finalized before the following fiscal.

² The shift to Battery Electric Buses and the development of the Provincial wide Electrification roll out strategy is taking shape in 2021/22. Business Case and procurement timelines for new vehicle purchases may lead to a modification of the TIP timeline approval process.

- **Estimated in service date (establishes part year hours and date is determined by scheduled delivery of new vehicles)**
- **Vehicle requirements**

Expansion hours are for increased service levels (increased frequency, service span or coverage), and/ or addressing issues of reliability and on-time performance where additional service hours are required to add travel and recovery time to a system.

When planning for expanded transit service, corresponding investments in new transit infrastructure are often required. Once identified in a planning document, potential infrastructure projects are incorporated into the BC Transit Long-Term Capital Plan. It is BC Transit's intention to also begin incorporating these potential projects into the TIP process. In coming years, local governments can expect to begin seeing infrastructure projects in their TIP MOU, as well as the forecasted year of delivery and estimated lease fee.

Expansion Evaluation Process – Description

BC Transit is often faced with municipal requests for expansion of transit service that exceed the availability of matching Provincial funds. As a result, it is necessary to evaluate all year 1 expansion requests and determine where available Provincial expansion funding should be allocated. An expansion evaluation process based on standard transit measures and alignment with provincial strategic objectives allows BC Transit to:

- Monitor, compare, and prioritize expansion requests
- Address value for investment by being performance focussed
- Reduce unpredictability regarding new service requests
- Ensure funding availability is better aligned with local needs and provincial funding
- Develop a three-year plan with confidence

The process is a performance based multiple account evaluation (MAE). The evaluation uses a mixture of qualitative and quantitative criteria to measure the proposed service expansion. Each criterion is allocated a value and weight. The evaluation is specific to the expansion request, not the system-wide performance. **The MAE considers the following when allocating provincial expansion funds:**

- **Alignment to the goals and objectives in the Minister's mandate letter**
- **Identification in a transit planning document, such as a Transit Future Plan or service review**
- **Ridership productivity**
- **Operational performance**
- **Planning, land use and environmental context**
- **Vehicle and facility capacity, utilization, and availability**
- **Social and economic value**

The quantitative indices focused on ridership productivity include the following:

- **Boardings per service hour** - (a boarding is an entry to a transit vehicle. A trip may consist of several boardings where transfers are used). This measures the effectiveness of a service.
- **Boardings per service kilometre** - monitors the level of productivity of a route. Longer regional services or systems that have a spread-out urban form will not perform as well compared to compact urban communities.
- **Cost per Passenger trip** - is a measure of how expensive a service is to operate relative to the volume of people using the service.
- **Cost Recovery** - is a measure of the cost of providing the service versus the rate of return through the fare box.
- **Passengers per Capita** – this is a relative measure of the overall service level.

Each expansion has a maximum number of available points, and each expansion request is evaluated against others regardless of system or community size³. Regardless of score, **some factors can prevent expansion from being feasible. These may include:**

- **Capacity of the operational facility**
- **Unfunded critical infrastructure** - requirements to enable the expansion to occur (for instance a new exchange)
- **Vehicle availability**

The expansion evaluation process flags these issues so that consideration can be given as to whether they can be addressed in time to enable expansion to occur within the fiscal year being evaluated. If not, the expansion request would be passed over in favour of the next highest rated expansion request and the priority would be moved to the following fiscal year TIP process. This then allows time for the factors preventing expansion to be suitably addressed.

The intent is to provide municipalities with the information regarding their expansion requests in early fall each year to allow for insertion into the municipal or regional budgeting process. This is the same information that BC Transit includes into the draft Service Plan each September to solicit matching provincial funding.

During the year of implementation, there is the possibility that not all provincial expansion hours and budget are fulfilled. This could be due to several factors, including:

- The development of schedules resulting in less hours being required than originally projected
- A local partner can no longer commit to the expansion hours and budget agreed to

Should this occur, provincial expansion funding would be offered to the next highest rated expansion request. **However, any expansion within the first budget year requiring additional vehicles where the local partner determines that expansion is no longer required, will result in the local partner being billed the lease fees related to the new buses for a minimum of a one-year period.**

³ Depending on the scope of the expansion requests, BC Transit may do mutually exclusive evaluation processes for conventional and custom services.

7 Step TIP & Expansion Evaluation Process⁴

Step 1: Identify

February to March – In collaboration with local governments, BC Transit identifies appropriate and approved expansions for each transit system. Asset Management commences the draft business case for vehicle purchase based on the early estimates from the initial TIP list.

Step 2: Costing and MOU Letters

April – The BC Transit Finance Department forecasts costs associated with each expansion request and this information is incorporated into the MOU letter. BC Transit then distributes the Expansion MOU letters to local partners.

Step 3: Review & Approve

June to August – Amendments to the MOU's (if required), presentation to Committees/Boards or Councils for official approval/commitment and signing.

Step 4: Draft 3 Year Service Plan

Mid-August to December – Signed MOUs (memorandum of understanding) inform the:

- Draft 3-year Service Plan to present to the province for budget commitment of their share.
- 3-year BC Transit Capital Plan
- Confirm the fleet business cases for vehicle procurement
- Confirm capital business cases to secure funds for infrastructure needed to support the expansions.

Step 5: Expansion Evaluation


September – Year 1 expansion requests identified in the signed MOU's are evaluated using the multiple account evaluation to prioritize the local government partner requests for expansion.

Step 6: Final service Plan

December – Amendments are usually made to the draft 3-year Service Plan following information provided by the Province regarding available funding. Should the local expansion requests exceed the funding identified in the provincial budget, the completed MAE process is used to identify those expansion requests that will be funded in the following year.

Step 7: Confirmation

⁴ Months specified against each step are the typical process undertaken prior to 2019. The TIP and evaluation process has been augmented in 2020 & 2021 due to the planning and funding impacts of the pandemic.



February – Provincial budget finalized, and the Service Plan Budget & Prioritized Expansion Projects are communicated with Local Partners. Service implementation planning commences, and critical paths determined for confirmed service priorities⁵.

⁵ Implementation for approved expansions typically occurs in the fall or January of the following year to allow sufficient time for detailed service planning and vehicle delivery.