TR-02-24 COW Dec 2 2024 Consultant presentation



### **Burlington Transit** Study to explore Fare-Free Transit

Committee of the Whole Presentation

December 2, 2024



### **Our Approach to the Fare-free Study**



### **Fare Free Transit Initiatives**

Free transit investments have been made by Burlington City Council to grow ridership:



## **Regional Fare Integration**

#### **Customer Journey: Regional Trips**



### **Other Fare-free Initiatives**

#### Canada

#### **Bow Valley (Canmore/Banff)**

- Local routes/residents only
- Driving/parking restrictions in Banff
- Still maintains > 50% cost recovery
- Orangeville
- \$1.1M annual operating budget
- ±10% cost recovery in 2022

### United States

Wide variety of systems

• Mix of full / limited fare-free or temporary pandemic response

- Typical cost recovery <20%, many in low teens or single digits
- Broader revenue sources

### **Fare-Free Experiences**

**Revenue Loss** 

Overall impact depends on current cost recovery

#### **Customer experience risk**

Unless implementation is paired with effective planning and strategic service increases



#### **Ridership Increases** ~30-60% increase in ridership

**Service Efficiency** 

Greater service efficiency (more people per bus)

Key Takeaway: The success of fare-free transit depends on effective service planning to meet growing demand.

## Approach

#### Ridership Projection

- Fare-free
  - Population growth
  - Elasticity research
  - Demographic factors
- Service expansion
  - Developed prototype network
  - Assessed service elasticities

#### Service and Load Analysis

- Identify capacity by routes times and trips
- Identify trips that will exceed capacity
- Identify required service increases
- Iterative ridership projection from service increase

#### Resource and Cost Estimates

- Additional service hours
- Operators
- Other operations staff
- Fare collection costs
- Capital costs
  - New vehicles
  - Fare collection costs

## Layers to Financial Complexity



1<sup>st</sup> Level

Savings from eliminating fare collection requirements

- · Cost to maintain service quality to keep up with demand
- Better service efficiency = higher marginal maintenance and fuel costs
- 2<sup>nd</sup> Level Specialized costs increase disproportionately less spare capacity to absorb increases
  - Ontario gas tax fund calculations moderate increase
  - Alternative funding can not be relied upon
- 3<sup>rd</sup> Level Capital cost estimates

## **Comparison Highlights**

|                              | 2029         |                   | 2034         |                   |
|------------------------------|--------------|-------------------|--------------|-------------------|
|                              | Fare-Free    | Service expansion | Fare-Free    | Service expansion |
| Ridership                    | 6,200,000    | 5,469,000         | 6,947,000    | 7,941,000         |
| Boardings                    | 7,303,000    | 6,442,000         | 8,198,000    | 9,358,000         |
| Net Municipal Operating Cost | \$43,080,000 | \$33,999,000      | \$53,734,000 | \$47,140,000      |
| Net Municipal Operating Cost | \$5.90       | \$5.28            | \$5.75       | \$5.04            |
| per Boarding (inc. gas tax)  |              |                   |              |                   |
| Capital Cost                 |              |                   |              |                   |
| (5-year totals with 63%      | \$24,285,000 | \$30,159,000      | \$11,434,000 | \$42,700,000      |
| subsidy)                     |              |                   |              |                   |

#### Notes:

- Both alternatives exceed DC study pro-rated targets
- Fare-free has higher net municipal cost: total and per boarding
- Fare-free transit generates more transit use than service expansion (but only until 2031)

# **Boardings Target**



- DC interim target for 2034 is about 7.7 million boardings to stay on track to 2051 modal share objective
- Both fare-free and service investment exceed this interim target through 2034
- From about 2031, service expansion begins to outperform fare-free boardings
- From about 2037, fare-free will begin to track below DC interim target

# Sample of Estimated Theoretical Annual Fare-Free Transit Economic Benefits

| Transit Benefit                       | Description                              |  |
|---------------------------------------|--|--|
|                                       |  |  |
| Individual transportation savings     | Fare-free transit has no financial       |  |
|                                       | transportation cost for riders           |  |
| Business productivity gain from       | Increased employment participation by    |  |
| enhanced workforce access             | non-drivers.                             |  |
| Reduction in road traffic (congestion | Mode shift can create shorter travel     |  |
| reduction)                            | times for everyone                       |  |
| Active travel health benefits         | Promotes a more active lifestyle for     |  |
|                                       | transit passengers i.e. walking to a bus |  |
|                                       | stop                                     |  |
| Enhanced Road Safety                  | Reductions in collisions from mode shift |  |

# **Community benefits are greater for service investment**

### Where is fare-free ridership coming from?

- More from inducing trips from existing riders
- More from walking/cycling = greater negative benefit
- Lower mode shift rate than service expansion

#### What is the local economic impact?

- Less benefit from federal and provincial funding
- Less benefit due to decline in funding from external users

# Sustainability – Fare-Free has higher risks

#### Risk

- Service deterioration
- Planning direction and control
- Financial sustainability
  - Greater future funding commitment
  - Systems with less fare revenue less likely to adapt service to demand

#### Political and community support considerations

- Rapid cost increase could create backlash
- Rapid ridership increase could increase community support
- Faster youth ridership growth improves sustainability

### What about Gas Tax?



A municipality's gas tax allocation is based on its share of provincial population and ridership totals.

- If an agency grows at the average provincial rate, it's allocation will not increase.
- If population and ridership change at more or less than the provincial average, then allocations will balance between "gainers" and "losers"

#### With fare-free, Burlington's share should increase by up to \$1 million over time

Hamilton

3%

Otttawa

9%



York /

**Brampton** /

**MiWay** 

16%

### **PRESTO Implications**



Fare payment (92% of rides)
Regional integration
Metrolinx subsidy transfers (One Fare)
Detailed data collection
Passenger identification/classification

Annual fee (portion of revenue) Hardware costs for new buses

PRESTO costs to Burlington:

# Conclusion

**Financial:** Fare-free transit is costlier than service investment for similar benefits.

**Community Benefits:** Fare-free transit increases ridership and provides community benefits, but its effectiveness compared to service investments is uncertain.

**Higher Risk:** Fare-free transit has greater potential for service and funding challenges compared to service investment.

**Sustainability:** Foregoing revenue threatens service sustainability when additional funding is required

### A final word . . .

- Sounds good, but only if it doesn't replace investments in the system to improve it. Given a choice between eliminating fares and increasing frequency to make the service convenient, I would choose to invest in service improvements over fare-free transit.
  - Community survey response