

# Surrey Langley SkyTrain

surreylangleyskytrain.ca





### Demand for transit is growing

↑ **7.1%** 

System-wide ridership 2017 – 2018

↑ **13.9**%

South of Fraser ridership 2017 – 2018





### More Bus Service

- ↑ 13% south of Fraser since 2017
- ↑ 125,000 service hours

#### **Double-Decker Buses**

- Route 301 and 620 in October
- Route 555 in January

#### **Battery-Electric Bus Pilot**

Testing on Route 100 between 22nd
 Street Station and Marpole Loop







### Introducing RapidBus

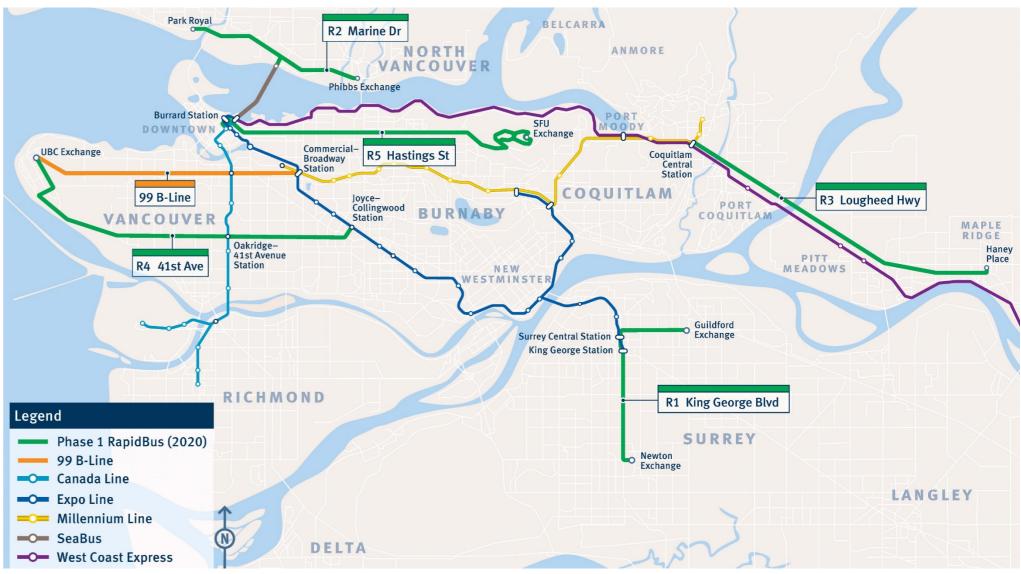
#### Launching 2020

- R1 King George Blvd
- R2 Marine Dr
- R3 Lougheed Hwy
- R4 41st Ave
- R5 Hastings St

#### Funded and coming soon

- Scott Rd to Newton Exchange
- Richmond to Expo Line







# Moving forward with rapid transit



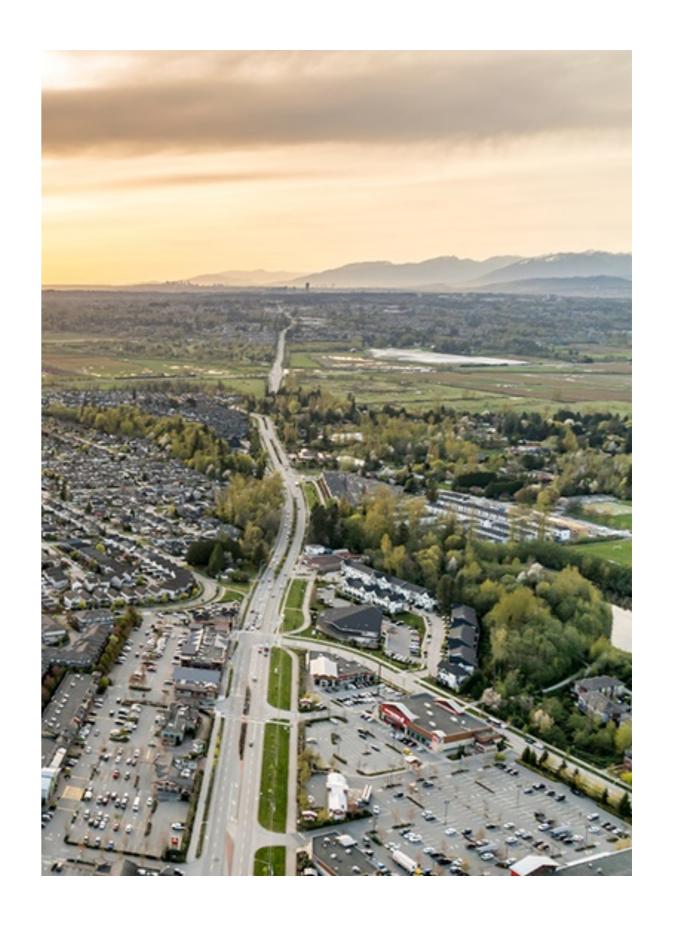


### Project Objectives

- Provide fast, frequent, reliable, and convenient transit
- Increase access to employment, schools, housing, and services
- Advance local and regional prosperity
- Support healthy communities and a healthy environment
- Provide a great transportation user experience

#### While

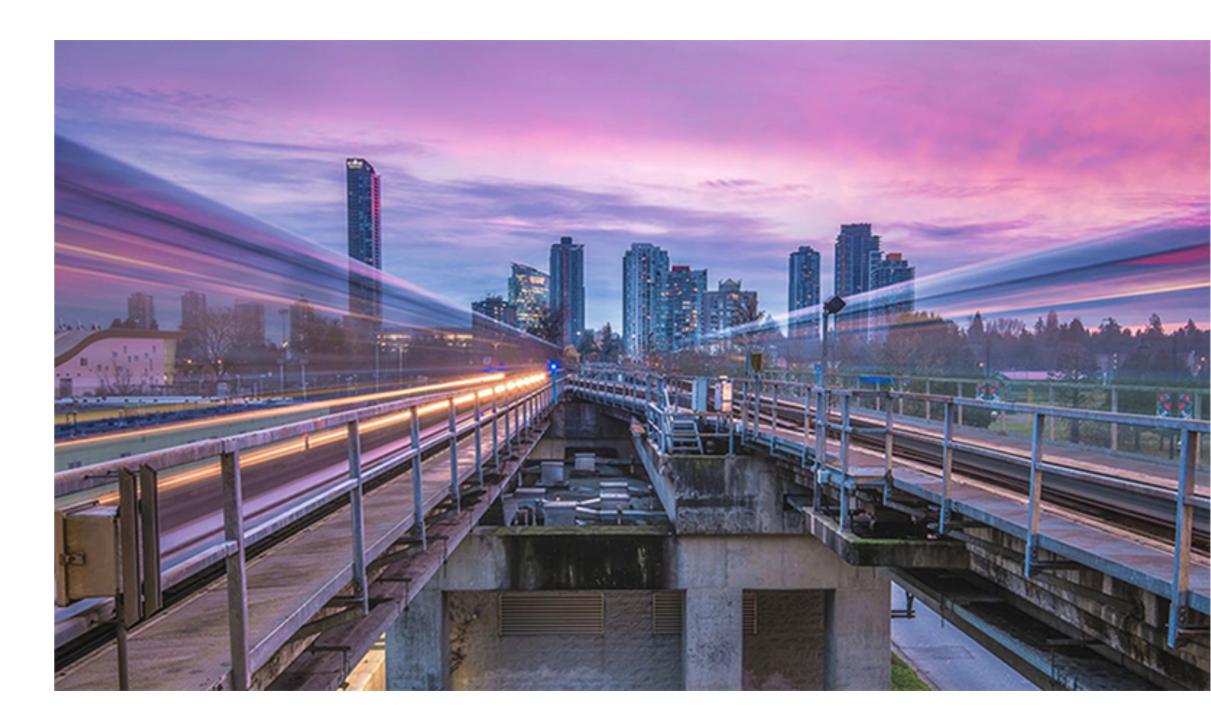
- Spending wisely
- Implementing prudently



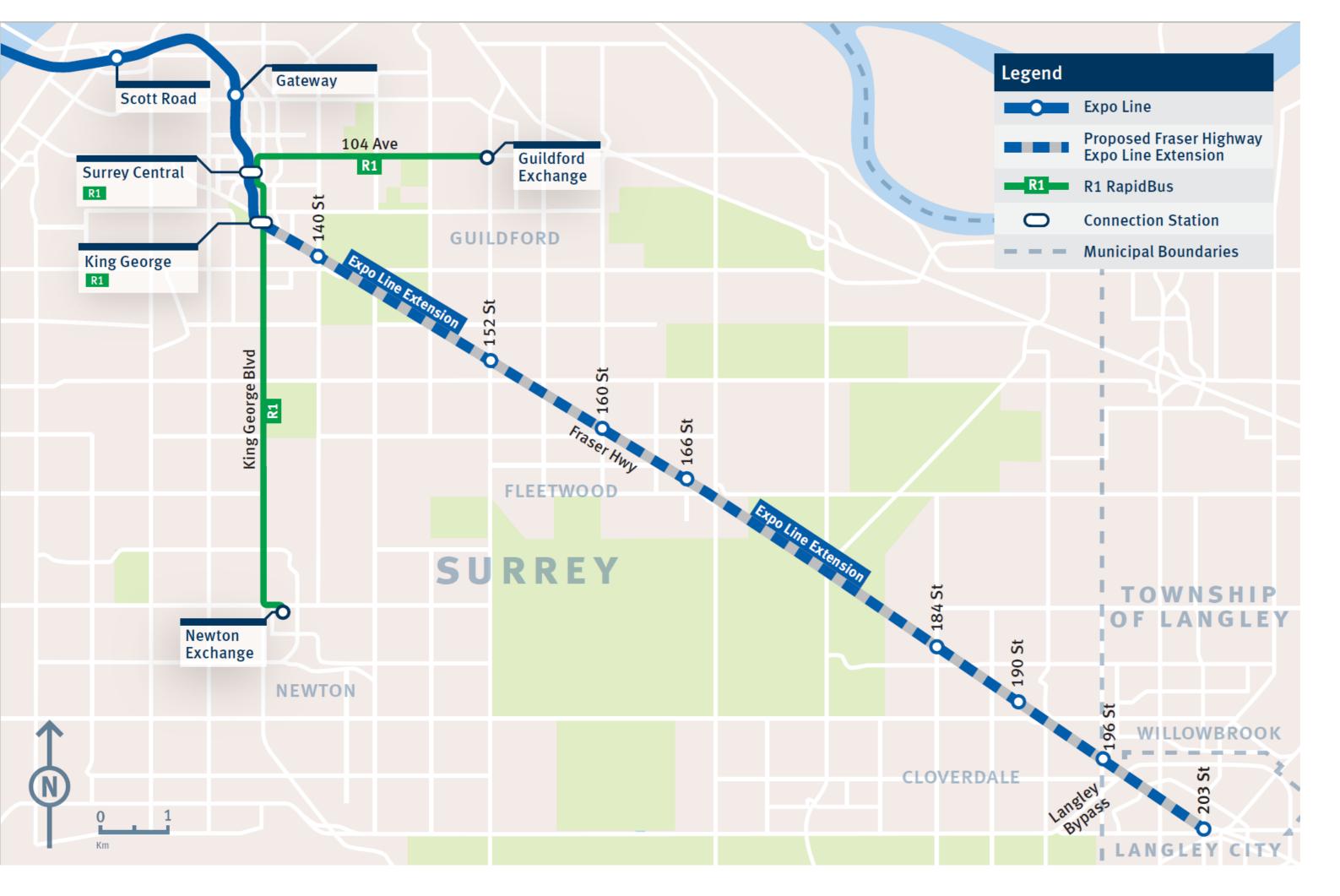


### Project Overview

- Extend the Expo Line from King George Station to Langley City Centre along Fraser Highway
- 16-kilometres of elevated guideway
  - 8 stations
  - Three bus exchanges
  - Park-and-Ride spaces
- 55 additional SkyTrain vehicles
- Operations & Maintenance facilities







#### **Proposed station locations:**

- 140 St (Surrey Centre)
- 152 St (Fleetwood)
- 160 St (Fleetwood)
- 166 St (Fleetwood)
- 184 St (Clayton)
- 190 St (Clayton)
- 196 St (Langley)
- 203 St (Langley)



### Project Outcomes



#### Improve transportation experience



- Increase transit capacity
- Reduce travel time
- Improve reliability
- Improve road safety
- Reduce single vehicle occupancy



#### Support economic development

- Enhance goods and services movement
- Improve access to jobs and labour



- Connect town centres
- Connect people to housing, jobs, schools, and services
- Encourage high-density land use around stations



#### Healthy communities and environment

- Reduce GHGs
- Improve health outcomes from increased active transportation
- Reduced urban sprawl



### Project Metrics



Capacity: 600 people per train every 4-5 minutes



#### **Expected daily boardings:**

- o 62,000 in 2035
- o 71,200 in 2050



#### Frequency:

- 4 5 minutes peak periods in both directions
- o 10 minutes off-peak



Travel time: 22 minutes from Langley City Centre to King George SkyTrain Station



Benefit-Cost Ratio (BCR): 1.24

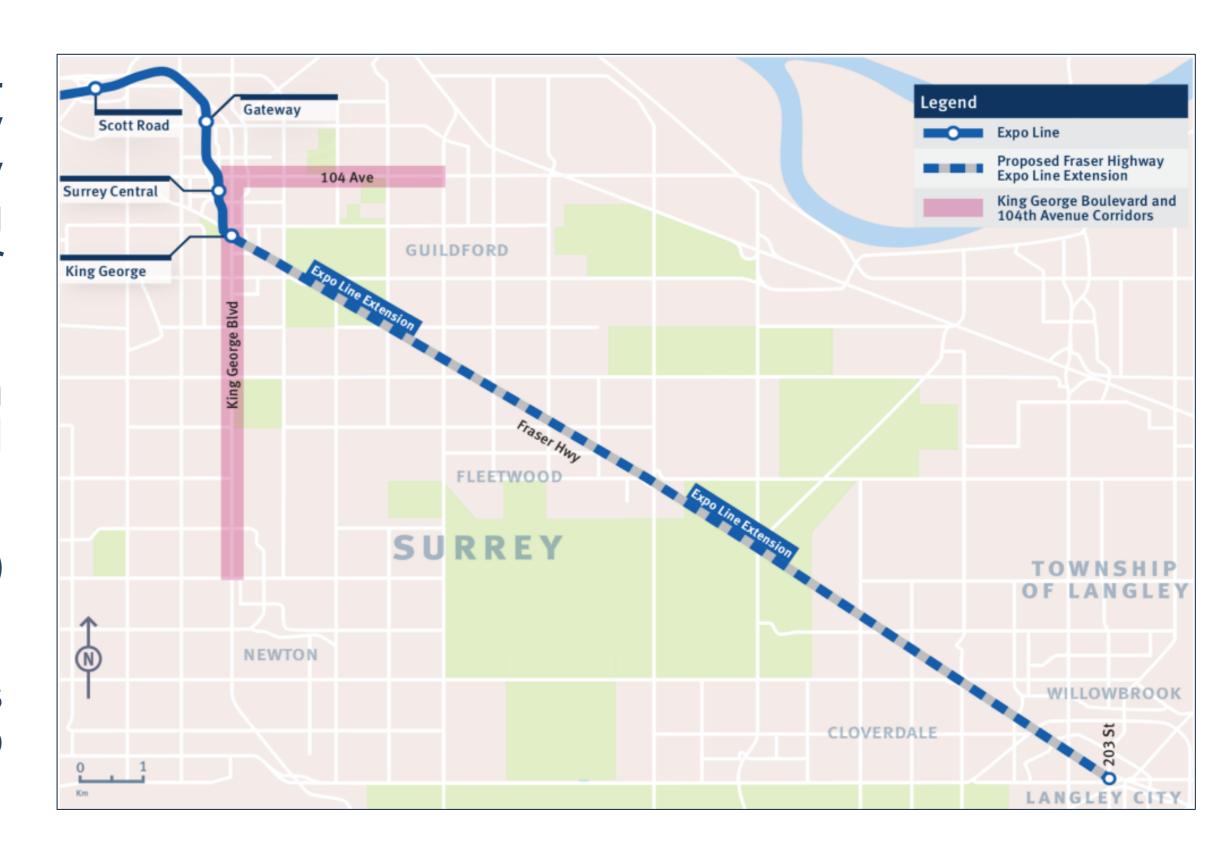


Cost: \$3.12 billion



# Funding Context

- In 2014, the regional mayors' 10-Year Vision identified three priority corridors for rapid transit in Surrey and Langley: 104 Avenue, King George Boulevard, and Fraser Highway.
- The assumed cost of \$3.55 billion is notional, based on the projected cost of 27-kilometres of LRT.
- Surrey Langley SkyTrain (SLS) would cost \$3.12 billion.
- Approximately \$1.65 billion is currently available, subject to business case approval.





### Stage 1: King George Station to 166 Street (Fleetwood)



#### Overview:

- 7 km
- 4 stations
- 25 vehicles



#### **Expected daily boardings:**

- o 39,900 in 2035
- o 44,200 in 2050



Travel time: 9.5 minutes to Fleetwood



**Benefit-Cost Ratio (BCR):** 1.12

Cost: \$1.63 billion



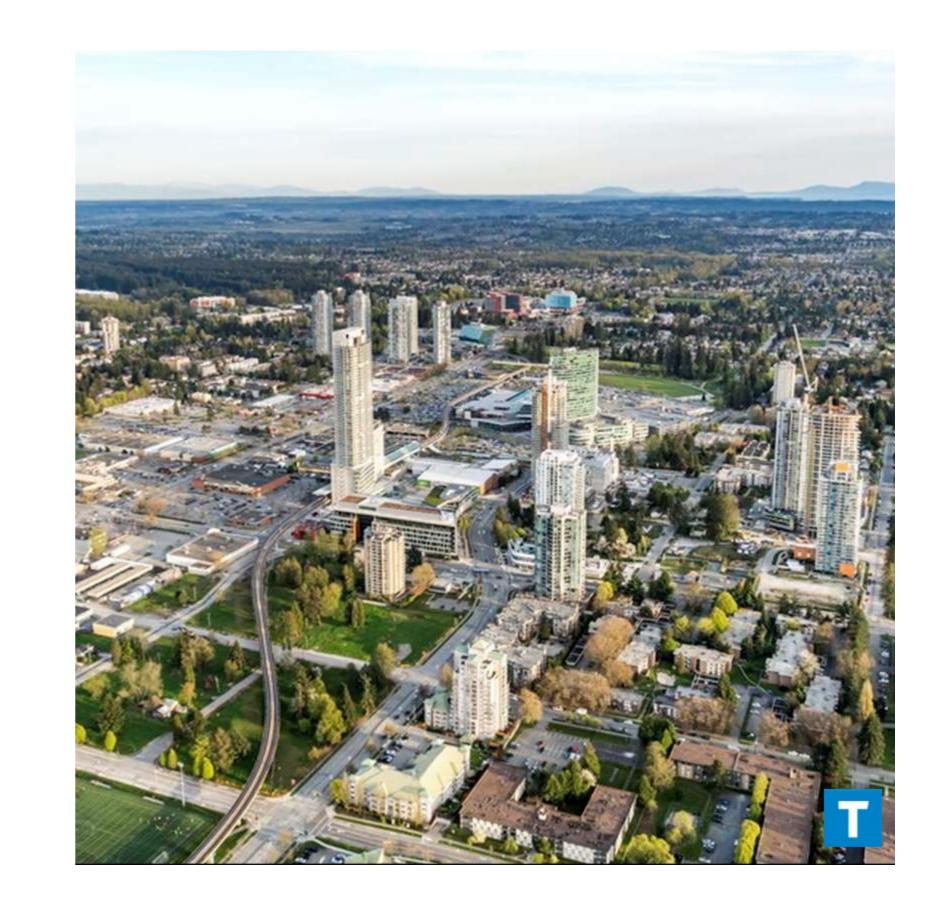
In-service date: 5.5 years from project approval





### **Economic Development: Enhanced Accessibility**

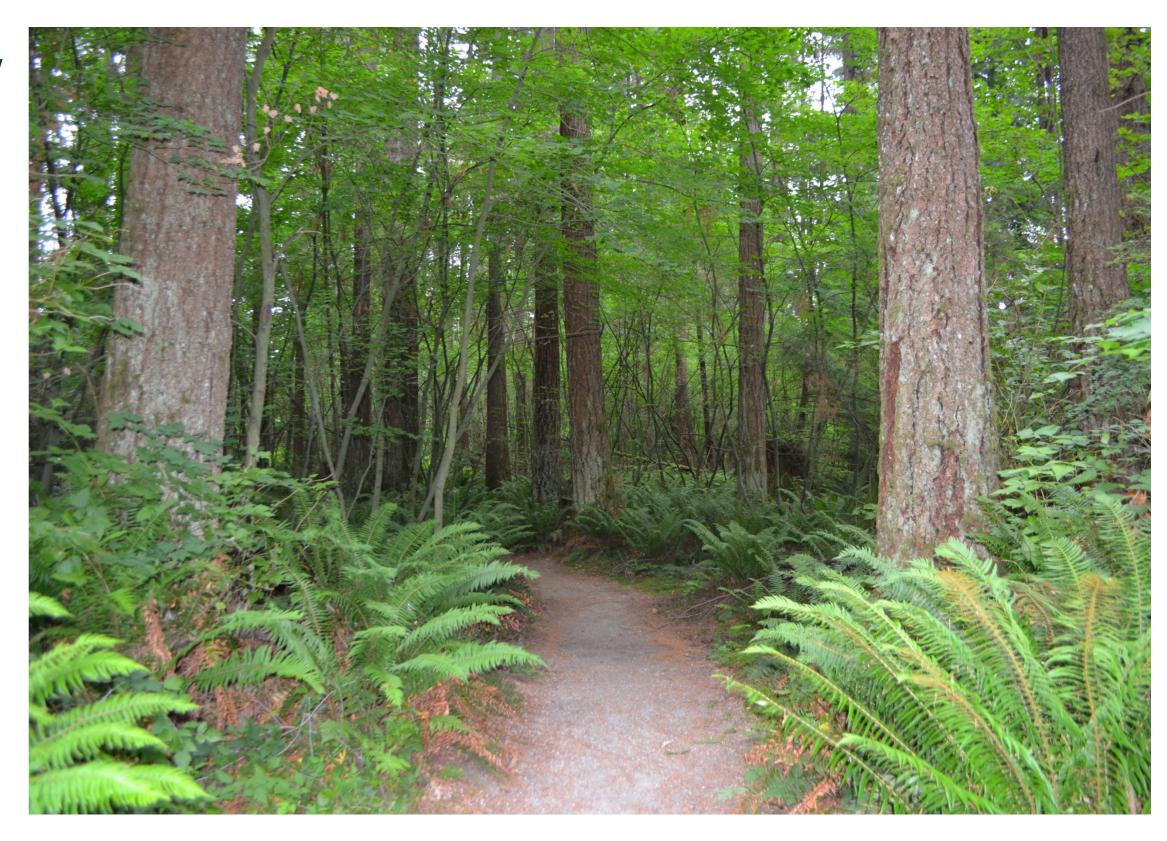
- 22 minute travel time from Langley Centre to Surrey Centre (9.5 minutes from Fleetwood)
- 2 million residents within 60 minutes by transit from Surrey Centre
- The project increases the number of jobs accessible by transit from Fleetwood by nearly 500,000 to more than 800,000 in total
- More than \$250 million in agglomeration benefits





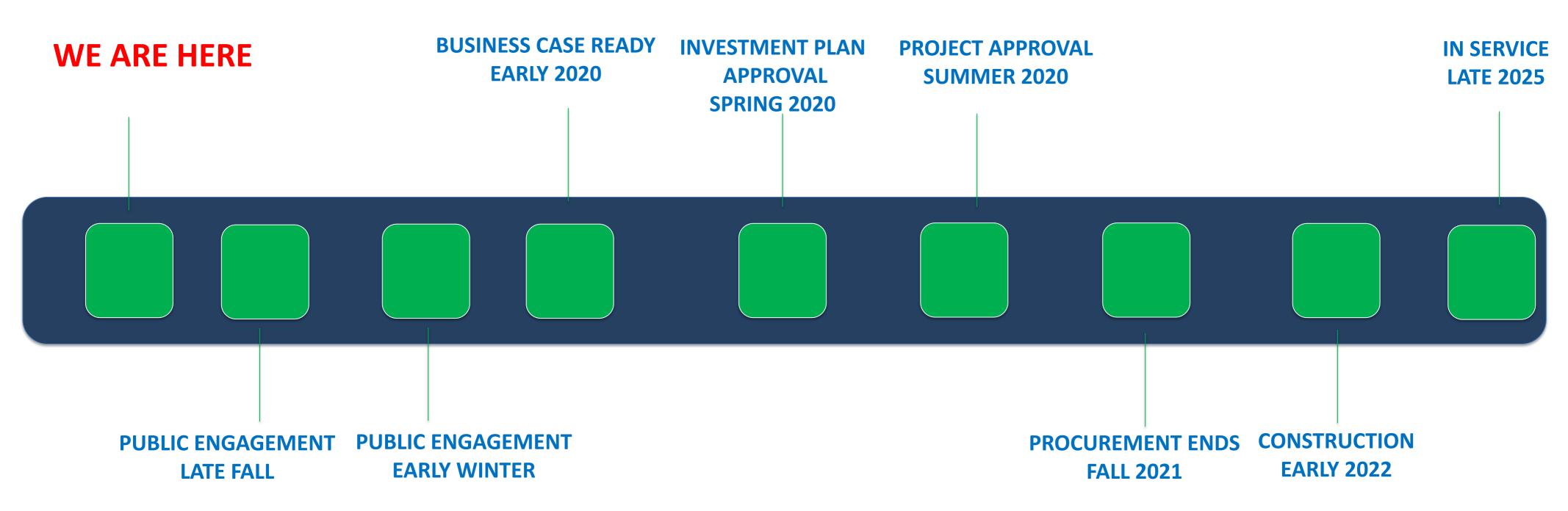
# Caring for the environment

- Environmental Screening Review
  - Informed by First Nations, public, and stakeholder feedback
  - Traffic and transportation
  - Archaeology and heritage
  - Fresh water aquatics
  - Vegetation and wildlife
  - Noise and vibration
  - Land use





# Timeline – Moving Forward





### 104 Avenue and King George Boulevard

In July 2019, regional mayors directed TransLink to explore technology options within the assumed \$3.55 billion funding envelope. RapidBus and BRT are the two options that meet this criteria. Future public engagement opportunities will provide you with additional information and ask you for feedback.

Technology	COMTMG SOOM  19040  Raide	
Description	<ul> <li>High-frequency, medium-capacity service</li> <li>Operates on the street, mostly mixed in with other traffic</li> </ul>	<ul> <li>High-frequency, medium-capacity service</li> <li>Operates on the street in its own lane, separated from other traffic</li> </ul>
Consistent with the Vision for 27km of rapid transit	No	Yes
Achievable for \$3.55 billion	Yes	Partly
Estimated capital cost	(modest costs for ongoing improvements)	700 – 900 million
Daily ridership in 2050	22,000 – 24,000	40,000 – 50,000



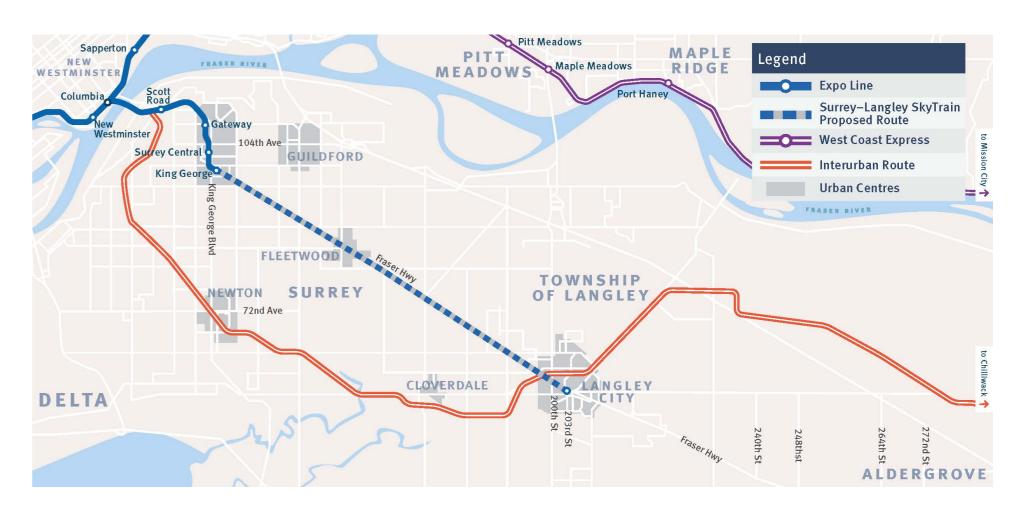


### Interurban Passenger Rail

The Interurban corridor has been studied as a potential route for passenger rail service twice in the past ten years. Those studies highlighted the following:

- The Interurban is not rapid transit
- The route is long, winding and the Interurban would offer slow travel times and infrequent service through low population areas
- It misses key destinations in Metro Vancouver, including Surrey City Centre and much of Langley
- There are twelve at-grade crossings between Newton and Langley City Centre where trains would impact vehicle traffic
- The at-grade rail passes through 4.5-kilometres of Agricultural Land Reserve (ALR) where poor soils present construction challenges and environmental risks
- It conflicts with current and future freight operations, which would negative impact goods movement in the region

Long term potential of freight corridors for passenger services continues to be assessed by TransLink and the provincial governments.



	Interurban (2012 study)	Surrey Langley SkyTrain (2019 study)
Travel time Langley City to Surrey Central	63 minutes	25 minutes
Estimated ridership per day	3,500 to 5,200	62,000 by 2035
Departures per day	About 40	Over 600 (trains running every 4-5mins in peak periods)
Cost per rider	\$110	\$11
Cost per kilometer	\$50-mill to \$85-mill	\$195-million





### Thank You



