Integrated North Shore Transportation Planning Project (INSTPP) Truth or Fiction Presentation Deck
During rush hour it takes at least twice as long to travel across the North Shore bridges.

A. True
B. False
During rush hour it takes at least twice as long to travel across the North Shore bridges

True
Second Narrows/Highway 1 experiences even longer delays in both peaks

- A 7 km drive from Highway 1 at Lonsdale Ave takes about 5 - 6 minutes during the off-peaks (for example at 6 AM and noon).
- In the morning peak the trip can take three times as long. In the afternoon it is even worse - almost 4 times as long.

Source: Google API
Road congestion is more pronounced in afternoon and mostly related to bridges.

- Screenshots from Google Maps show how afternoon conditions are generally worse.

- It is important to note that the issues are largely related to the bridge heads.
The North Shore added more jobs than workers in the last few years

A. True
B. False
The North Shore added more jobs than workers in the last few years

True
Jobs and working age cohort grew at different rates – labour force import?

Looking at the change in the working age population and jobs between 2011 and 2016 in the North Shore, using Census data we find there’s an imbalance at all three municipalities:

Jobs and working age cohort grew at different rates – labour force import?

![Chart showing change in population and jobs from 2011 to 2016 for different regions.](chart.png)


INTEGRATED NORTH SHORE TRANSPORTATION PLANNING PROJECT (INSTPP)
Trips that cross the Burrard Inlet have similar origins and destinations

A. True
B. False
Trips that cross the Burrard Inlet have similar origins and destinations

False
Second Narrows traffic is regional whereas Lions Gate and SeaBus are more localized

Looking at distribution of trip markets by bridge we reach the following conclusions:

- Second Narrows serves a very large, more regional market that is spread out.
- Lions Gate serves a much smaller market, mainly focused on parts of Vancouver, West Vancouver and Lonsdale.
- SeaBus market is even smaller mostly focused on Lonsdale and downtown/metro core.

Source: Cellint Traffic Solutions & TransLink Compass
The boom in construction is the main reason the Second Narrows is so congested now

A. True
B. False
The boom in construction is the main reason the Second Narrows is so congested now.
The boom has added traffic but there are other factors at play

- Prior to 2012, growth in housing starts and bridge traffic went in different directions.
- Between 2012 and 2014 bridge traffic started to climb while housing starts had a slight drop.

Source: District of North Vancouver & BC MOTI
The toll removal on Port Mann and Golden Ears increased weekday traffic on Second Narrows.

A. True
B. False
The toll removal on Port Mann and Golden Ears increased weekday traffic on Second Narrows.

False
Weekday traffic did not change, weekend traffic increased

- Looking at average weekday traffic on Second Narrows in fall of 2016 and 2017, we find that traffic has mostly remained the same.

- Weekend traffic, on the other hand, has increased.

- It is likely that toll removal opened up the market for people living in outlying areas to travel to the North Shore for leisure.

Source: BC MOTI
Trucks are adding heavily to congestion on Highway 1

A. True
B. False
Trucks are adding heavily to congestion on Highway 1

False
Trucks mostly travel outside the peaks, are a very small share of traffic, and are a much lower share than other major roads and bridges.

- Trucks tend to be a smaller share in the PM peak when traffic volumes and vehicle congestion are highest.
- Grades on the North Shore may contribute to localized delays even at these low volumes.

Source: BC MOTI
Upper Levels Highway carries significant intra-North Shore traffic

A. True
B. False
Upper Levels Highway carries significant intra-North Shore traffic

True
The North Shore has the highest use of freeway for municipal trips

- The Highway 1 section between Lonsdale Ave and the Main Interchange is used significantly by intra-North Shore trip-makers.

- In the afternoon peak, out of 11,000 trips that ‘touch’ that section of the freeway, about 3,000 trips begin and end within the North Shore.

- The reliance on the freeway to make internal trips is higher than other parts of the region.

Source: TransLink Regional Transportation Model
Less than one in four North Shore residents live within walking distance of the frequent transit network.

A. True
B. False
Less than one in four North Shore residents live within walking distance of the frequent transit network.

False
32% live within walking distance to the Frequent Transit Network, City of North Vancouver is especially well served.
During peak travel, SeaBus carries more passengers than buses on the two bridges combined.

A. True
B. False
During peak travel, SeaBus carries more passengers than buses on the two bridges combined.
The numbers are close but buses still carry more passengers.
For many trips, transit has a tough time competing with the car.

A. True
B. False
For many trips, transit has a tough time competing with the car.
Transit competes with the car for some trips but not others.

- **WV City Hall to DNV City Hall (8.2 km)**
  - Driving = 10 to 15 min
  - Transit = 50 min

- **Kitsilano to WV City Hall (12.7 km)**
  - Driving = 25 to 45 min
  - Transit < 55 min
  - Multiple routes to transfer to North Shore: #250, 252 or 253

- **Brentwood Stn to CNV City Hall (12.9 km)**
  - Driving = 20 to 35 min
  - Transit > 1 hr and # 232 is every 30 minutes
A new 10-lane Second Narrows Bridge would have enough capacity to serve travel demand well into the future.

A. True  
B. False
A new 10-lane Second Narrows Bridge would have enough capacity to serve travel demand well into the future.
Future peak hour travel delay would be similar to today

- Increased road capacity induces travel demand, leading to increased congestion in other areas of the network.
- The additional number of vehicles on the road leads to travel time variation similar to today, but at great cost to taxpayers.

Source: High level estimates from the Regional Transportation Model
Rapid transit extension to the North Shore will relieve congestion on the bridges

A. True
B. False
Rapid transit extension to the North Shore will relieve congestion on the bridges
Need a co-ordinated approach with supportive land use, transportation investments & demand management

- Without any investment in roads or rapid transit, in 30 years auto trips across the inlet will increase. However, transit trips will increase at a faster rate, partly due to densification and improvement in transit service.

- Extending Canada Line across the inlet and up Lonsdale will reduce autos across the inlet but not by much - the auto volume will still be higher than today.

- A coordinated approach which focuses on land use, regional demand management and transit investment works best.
Managing demand by some form of pricing could help relieve congestion

A. True  
B. False
Managing demand by some form of pricing could help relieve congestion.

True
Transportation modelling suggests pricing could be influential in addressing person delay

- Combination of demand management and investment provides reduction in travel times for the highest number of people
A small drop in bridge traffic volume could result in noticeable improvement in traffic flow

A. True
B. False
A small drop in bridge traffic volume could result in noticeable improvement in traffic flow.

True
A drop of 5% - 10% in traffic volume results in significant travel time savings

Looking at a hypothetical trip from Highway 1 @ Lonsdale across Second Narrows (to Vancouver) we note the following:

- In the afternoon, this trip takes 22 minutes on average.
- The bridge’s capacity is about 5,000 – 5,300 vehicles per hour.
- A small drop in traffic 200 – 500 vehicles can reduce travel times significantly, by at least 5 minutes.

Source: BC MOTI and Google API