



NEW WESTMINSTER

BACKGROUND

A Reasonable Approach: New Westminster's Perspective on the Pattullo Bridge

For more than 75 years, the Pattullo Bridge has been an integral part of New Westminster's history and identity.

Originally constructed as a tolled facility by the provincial government as the only road connection between Vancouver and New Westminster, and the Fraser Valley, the U.S.A. and beyond, the Bridge and its function have been supplemented by other river crossings such as the Massey Tunnel, the Alex Fraser Bridge and the Port Mann Bridge. In 1999, the Pattullo Bridge was transferred to TransLink as part of a reorganization of regional transportation governance and funding. Now it serves primarily as a connection between Surrey and New Westminster and parts of Burnaby.



Rush hour traffic entering the City of New Westminster, over the Pattullo Bridge. The City's road network simply cannot handle additional capacity.

Recently, TransLink has learned about some significant risks associated with the Pattullo Bridge as it stands today. These include its vulnerability in the event of an earthquake, the integrity of the structure and the effect of the Fraser

River in scouring out the Bridge's foundations. In 2006, the TransLink Board responded to these risks by authorizing the preparation of a plan to replace the bridge with a new tolled facility. In the meantime, TransLink approved major expenditures on rehabilitation of the existing bridge to keep it in operation until a decision on a new crossing is made.



Traffic making its way through New Westminster, onto the Pattullo Bridge.

To many, it seems logical to provide expanded capacity if the bridge is to be replaced, in order to respond to past and forecasted growth within the communities on both sides of the river. This increase in capacity would also provide the opportunity for improvement to facilities for pedestrians and cyclists, and to address the perceived safety risks posed by the narrow lanes on the existing structure. A "no-brainer," right?

Not necessarily. As it turns out, a decision about the capacity of a new Pattullo Bridge has important implications for the quality of life in both Surrey and New Westminster. Provincial, regional and municipal plans need to be considered. Also, there is the question of financial priorities.

This a Regional Priority

In a region struggling to find funds to expand transit as its first priority, where would expenditures on additional capacity on the Pattullo Bridge sit?

Traffic on the existing Pattullo Bridge has been stable, at least until the opening of the tolled and expanded Port Mann Bridge. Since 2008, 11 lanes of additional road capacity across the Fraser River has been added at other locations (Figure 1). Rapid population growth in Richmond, Burnaby and Vancouver has not necessitated new road capacity across the river adjacent to those cities. Recent analysis indicates that smaller, smarter cars enable us to get more efficient use of the capacity we have. In addition, a closer look reveals that much of the congestion in and around the Pattullo Bridge is related to New Westminster's historic and built-out streetscape and road network with no physical ability to expand the roads.

FIGURE 1: RECENT EXPANSION OF FRASER RIVER CROSSING CAPACITY ¹



Do the Regional Plans Call for More Pattullo Capacity?

The simple answer is no. Expanded capacity on the Pattullo Bridge is not mentioned in provincial, regional or local transportation plans.

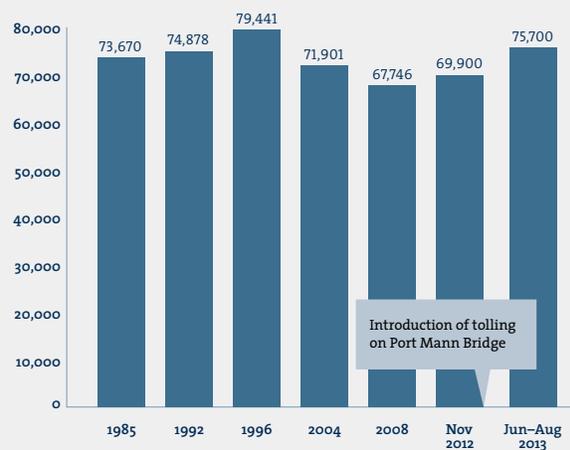
Expanded capacity for Pattullo is not contemplated in either the Official Community Plans for Surrey or New Westminster, nor in Metro Vancouver's Regional Growth Strategy. In fact, all

¹ Steer Davies Gleave, "Forecasting Impacts of Tolling on Demand and Surrey Growth/Rapid Transit Implications," Memorandum prepared for the City of New Westminster, June 24 2013. p. 2.

of these plans call for priority to be given to transit, walking and cycling over the private automobile. TransLink's recently adopted Regional Transportation Strategy highlights two of their target goals for 2045 as having more than half of the region's trips to be by means other than the private auto and for kilometres driven by auto to be reduced by one third. New Westminster's official policy is to "work towards the principle of no new added capacity in the transportation system for vehicles passing through the City". As shown in Figure 2 below, historical data indicates a declining or stable trend in daily traffic on the Pattullo Bridge over the last decade, until tolls were introduced to the Port Mann Bridge (Figure 2). Expanding capacity on the Pattullo Bridge would take us in the wrong direction.

Traffic – particularly truck traffic – travelling through New Westminster is a nightmare for our residents. It is now worse since the opening of the Port Mann Bridge as a tolled facility. This has been compounded by the failure of the Province to provide a time- and fuel-efficient access for trucks to Highway 1 and the Port Mann Bridge in Surrey, which has resulted in an incentive for trucks to cut across the Pattullo Bridge and through New Westminster to reach Highway 1 westbound without paying a toll. Expanding the capacity of the free alternative Pattullo Bridge would only worsen these problems, not only in the short term by attracting more of today's traffic, but also over the longer term by encouraging people to settle further away from their jobs.

FIGURE 2: HISTORICAL PATTULLO BRIDGE WEEKDAY DAILY TRAFFIC

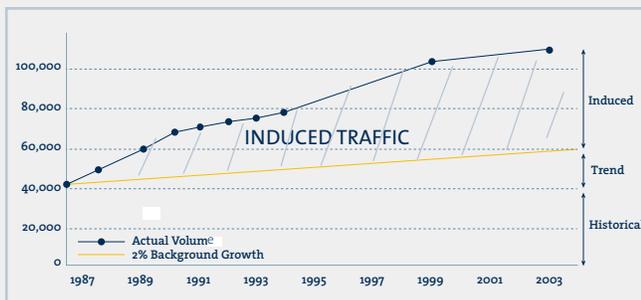


Sources: GVRD 1996 Vehicle Volumes, Classifications & Occupancies
GVRD 1992 Greater Vancouver Travel Survey;
TransLink 2008 Regional Screenline Survey
TransLink Pattullo Bridge Count

Inducing More Cars on the Road?

Adding bridge capacity without a clear demonstration of the need will induce more auto-dependent developments resulting in more vehicles on our streets. New road and bridge capacity encourages people to settle in more distant suburbs and commute by car under the assumption that travel-time savings will result from the new capacity. Figure 3 illustrates the effects of induced traffic from the Alex Fraser Bridge experience. The actual traffic on the bridge grew far beyond the regional population trend and associated projections. The largest share of traffic growth is from induced traffic from surging development in areas served by the Alex Fraser Bridge.²

FIGURE 3: INDUCED TRAFFIC ON THE ALEX FRASER BRIDGE



A Reasonable Approach

All of this brings us back to the original problem, which is how can TransLink deal most effectively with the existing structure's risks due to seismic vulnerability, lack of structural integrity and exposure to river scour?

There are 6 remaining options in TransLink's Strategic Review Process:

1. Rehabilitated Pattullo Bridge – 3 lanes;
2. Rehabilitated Pattullo Bridge – 4 lanes;
3. New 4-lane bridge at existing location;
4. New 5-lane bridge at existing location;
5. New 6-lane bridge at existing location; and
6. New 4-lane Surrey-Coquitlam Bridge, with a 2- or 3-lane rehabilitated Pattullo Bridge.

² City of Burnaby Report to Council, Port Mann/Highway 1 Project, Planning & Building Department, August 22, 2007

New Westminster's preferred option is a new tolled 4-lane bridge.

New Westminster will support a new tolled 4-lane bridge based on the following prerequisites. The first prerequisite is a toll. Tolling is not only a means of financing the project, but is also a critical measure of discouraging discretionary travel across the river. Secondly, that structures and connections will be designed to reflect New Westminster's urban context and dense, cohesive neighbourhoods, repairing some of the ugliness of the present facilities and approaches where possible. Direct highway style loop ramps connecting the South Fraser Perimeter Road to the Pattullo Bridge will not be supported since they would produce an unacceptable burden of truck traffic on the Pattullo Bridge and in New Westminster.

New 4-lane bridge between Surrey and Coquitlam combined with a 2- or 3-lane rehabilitation of the Pattullo Bridge

New Westminster could also support this option. This may respond to a number of concerns within the community about through traffic, particularly truck traffic, but this option also adds additional capacity across the Fraser River, which would encourage more traffic. This option may be worthy of further consideration on how it may address the region's long-range regional goals.

Rehabilitated 4-lane Pattullo Bridge

This option responds well to the problem statement and objectives. TransLink has, however, made it clear that they will not support a 4-lane rehabilitation option due to perceived safety issues. The City views this decision with some concern because of the capital cost increment of \$500 million or more between this option and options involving a new bridge.

Rehabilitated 3-lane Bridge

While the option for a three-lane rehabilitated bridge would respond to the risks identified by TransLink, New Westminster is concerned that the proposed counterflow system (similar to the Lions Gate Bridge or the Massey Tunnel at rush hour) would produce unacceptable additional queuing and rat-running in our city.



New 5-lane and 6-lane bridge

New Westminster believes that the two options that would increase capacity are not preferred – the options for a new five-lane or a new six-lane bridge. Table 1, illustrates the nominal service capacity³ benefits of a new 5 or 6 lane crossing compared to a new 4 lane crossing at a significantly higher capital cost.

Goods movement considerations

Finally, we believe that with the recent expansion of capacity on facilities that are suitable for truck traffic, consideration should be given to a partial or total ban on heavy trucks on the Pattullo Bridge and adjacent streets in New Westminster.

In particular, there needs to be a direct connection from the South Fraser Perimeter Road (SFPR) to Highway 1. The existing connection at 176 Street in Surrey is too circuitous.

Conclusion

The City acknowledges that TransLink must act in response to the risks of seismic safety, structural integrity and river scour associated with the Pattullo Bridge that have been identified. We believe that the response should be approached reasonably, with attention paid to demonstrated need, the policies and plans of the agencies involved and the need to conserve financial resources to enable the region to meet its priorities for transit infrastructure.

TABLE 1: PATTULLO BRIDGE TRAFFIC FORECAST AND COSTS³

| OPTIONS | ESTIMATED OPENING DAY (WEEKDAY) VOLUME IF IN PLACE TODAY | ORDER OF MAGNITUDE COST |
|--|--|-------------------------|
| Current 2013, untolled | 76,000 | |
| Rehabilitated 3-lane Bridge | 44,500 | \$250M |
| Rehabilitated 4-lane Bridge | 44,500 | \$250M |
| New 4-lane Bridge | 49,000 | \$850M |
| New 5-lane Bridge | 51,500 | \$1.45B plus |
| New 6-lane Bridge | 52,000 | \$1.5B plus |
| New 4-lane Surrey Coquitlam Bridge with rehabilitated 3-lane Pattullo Bridge | 34,000 + 28,000 | \$1.75B |

Source: TransLink forecast dependent on model calibration accuracy and modeling limitations. Forecast volumes are provided for comparative purposes of the options only.

³ TransLink Pattullo Review – Delcan Traffic Forecasts, January 2014

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