

**South of Fraser River Area:  
Transportation Needs and  
Bus Service Concepts Research**

**November/December 1999**

**Presented to:**

TransLink  
Burnaby, B.C.

# Contents

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<b>Executive Overview</b> .....	<b>3</b>
<b>Foreword</b> .....	<b>19</b>
<b>Detailed Findings</b> .....	<b>21</b>
<b>A. Current Usage Habits</b> .....	<b>21</b>
1. Incidence of Regular Transit Use.....	21
2. Bus Routes Currently Use Most Often.....	24
3. Market Potential for Improved Public Transportation.....	26
4. Travel to Selected Destinations in Past 30 Days / Past Seven Days among Target Market .....	28
5. Mode of Transportation Used to Selected Destinations .....	35
6. Time of Travel to Selected Destinations .....	43
<b>B. Improved Bus Service to Selected Destinations</b> .....	<b>51</b>
7. Interest in Bus Service to Selected Destinations among Target Non-users.....	51
8. Changes Required to Consider Bus Service to/from Selected Destinations.....	53
9. Bus Share of Travellers .....	58
<b>C. Reaction to New Bus Service Concepts</b> .....	<b>60</b>
10. Overview of All Concepts.....	62
11. Market Potential for Specific Regional Concepts.....	64
12. Market Potential for Specific Local Concepts .....	74
<b>D. Target Market Profiles</b> .....	<b>81</b>
<b>Appendices</b> .....	<b>87</b>
Methodological Details	
Source Statistics Source Data	
Questionnaire	

# Executive Overview

## Introduction

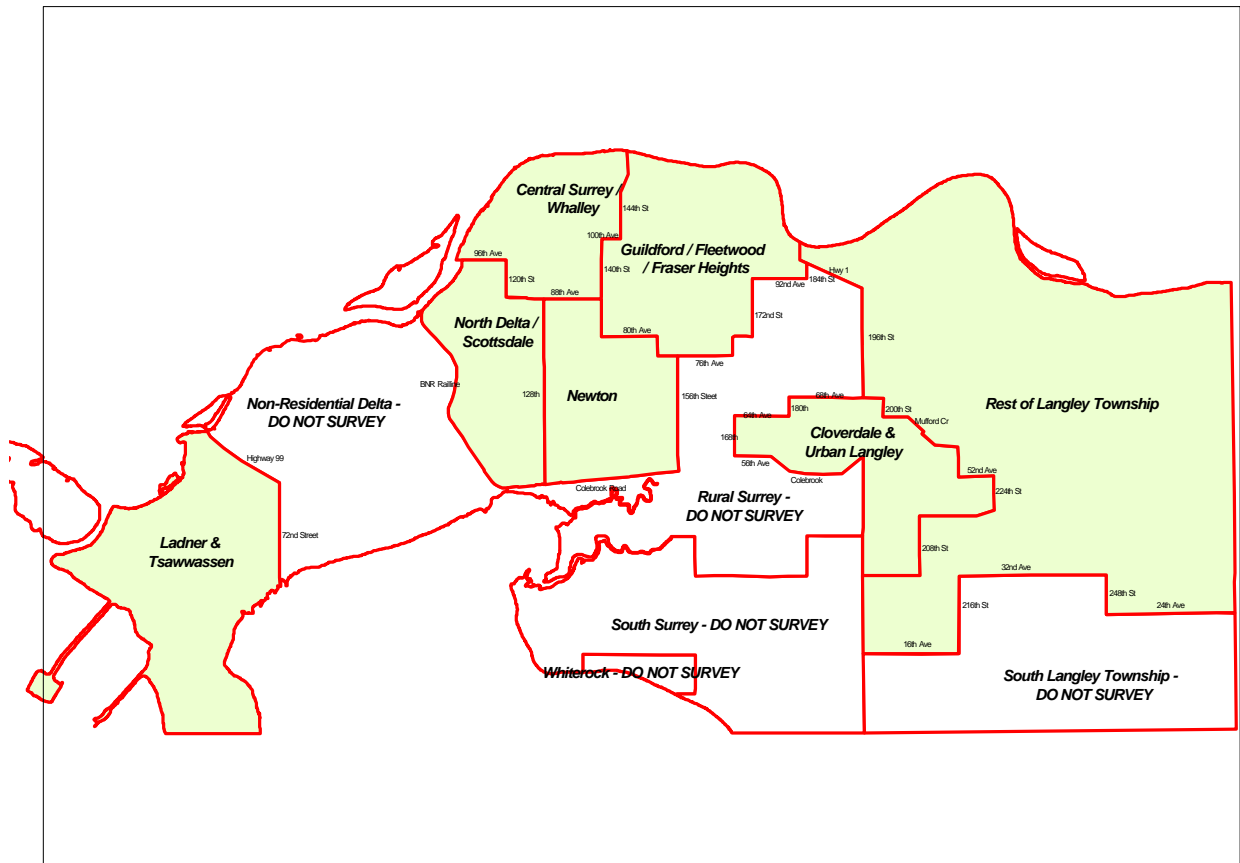
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TransLink would like to expand transit usage and better meet the needs of residents in various communities within the Greater Vancouver Transportation Authority service region. Currently, the area South of the Fraser River is being studied. All Lower Mainland communities south of the river are included with the exception of White Rock/South Surrey, which has been studied separately. TransLink has divided the study area into seven sub-regions (map on following page) and has developed targeted regional and local service options for consumer testing.

Random telephone interviews were conducted November 23 to December 6, 1999 among a representative cross-section of area residents, 16 years of age and over. Within each of the seven sub-regions, a cross-section of residents was screened to identify the **target market**—current regular users of transit and those interested in using improved public transportation. In total, 2,146 cross-section interviews were completed, yielding 1,266 interviews with the target market—of which 626 were with current riders and 640 with potential riders.

The research objectives are: 1) to determine current transportation habits of transit riders and potential riders, 2) to assess potential demand for a number of proposed regional and local service options, and 3) to understand how bus services need to be changed to convert private vehicle users to transit. Key findings are summarized in this *Executive Overview*, with a more comprehensive presentation of results in the *Detailed Findings* section of this report.

### Market Research Sub-Regions for the South Fraser Area Transit Plan



## Key Findings

### **Present and Potential Markets for Transit Services**

- The research reveals the size of the current market and the potential market for improved transit (defined as “adding new express bus and community bus services and making improvements to service frequency”). The following chart summarises these results based on the South of the Fraser River population, 16 years of age and over.
  
- Note that there is overlap in the potential market for the 88<sup>th</sup> Avenue regional and local concepts; some of the same people will be interested in both services.

	Proportion of South of the Fraser Residents	Estimated Actual Population 16+ Yrs (N=369,240) *	Statistical Tolerance Limits **
<b>Present Market</b>			
Currently “take transit at least once a month or more on a regular basis”	33%	122,200	± 2.0
Took any public transit to a key destination within past week	24%	89,700	± 1.8
<b>Conversion Potential</b>			
Non-users who would consider taking improved public transit if service met their needs	28%	104,800	± 1.9
<b>Potential Market for Top 2 Regional Options</b>			
Limited Stop Express along King George Hwy	3% ***	11,000***	± .7
88 <sup>th</sup> Avenue to Richmond to Airport	2% ***	9,100 ***	± .7
<b>Potential Market for Top 2 Local Options</b>			
88 <sup>th</sup> Avenue Local	3% ***	11,800***	± .8
Scott Road Local	2% ***	8,300***	± .7

\* Based on Statistics Canada 1996 Census. (Study area excludes White Rock/South Surrey)

\*\* Statistical tolerance limits (margin of error) at 95% confidence level on a sample of n=2,146.

\*\*\* **TransLink Marketing Research formula** applied to down-weight claimed intentions to use, since there is a tendency for consumers to overstate their intentions in concept testing. The formula used to project potential market population is:

$$[(\% \text{ “very likely”} \times .5) + (\% \text{ “somewhat likely”} \times .25)] \times \text{“Population 16 years and over for survey area”} \times \text{“Proportion of cross-section—i.e., incidence found in study”} = \text{Estimated Potential Market}$$

(All estimates are rounded to the nearest 100.)

### **Profile of Current Riders and Potential Riders**

Current riders are defined as those who regularly use transit—that is, at least once a month on a regular basis. Potential riders are those who currently are not regular users, but who would consider taking improved public transportation more often if the service met their needs. Non-potential riders are those who would not consider improved public transportation.

- The demographic profile of current and potential bus riders in the South of the Fraser study area is relatively balanced by gender.
- Current riders have a greater proportion of 16-24 year olds (30% vs. 9% among potential and 7% among non-potential riders) and of students (19% vs. 6% among potential and 3% non-potential segments).
- In terms of area of residence, current riders are more likely to be from Surrey Central/Whalley (24% vs 12-14% for non-potential and potential riders) and less likely from non-urban Langley/Port Kells (7% vs 17-18% for non-potential and potential).
- Virtually all of potential riders have access to a vehicle (98% versus 84% of current riders). A majority of potential riders (71%) have travelled to one of the key regional or local destinations by single occupancy vehicle (SOV) in the past seven days, but only 7% have used transit to these destinations in the past week.
- Current riders are largely “choice” transit users (as 84% have access to a vehicle on a regular basis). By comparison, only 16% are “captive” users.

Note that the balance of the survey, involving travel habits, attitudes and opinions on various concepts, was conducted among **TransLink’s target market—current and potential transit users**. Those who would not consider using transit did not continue with this section of the survey.

### **Travel to Specific Destinations**

- The most popular destinations (by any mode of transportation) are Downtown Vancouver, Surrey City Centre, Guildford Town Centre and the King George SkyTrain station. These are visited by about one-half of the South of Fraser target population (current and potential transit users) within the past 30 days and by about one-third within the past seven days.
- Other key shopping centres (such as Scottsdale Mall and Willowbrook) and transportation locations (as Scott Road SkyTrain and the Vancouver International Airport) attract 20-25% of target residents within the past 30 days and about 15-25% within the past week.

### **Mode of Travel to Key Destinations**

- For most destinations, single occupancy and shared vehicles are the most common mode of transportation.
- Visitors to the following destinations are most likely to use **single occupancy vehicles**: certain shopping centres/districts (Tsawwassen Town Centre, Ladner Centre, Cloverdale Town Centre), Burnaby-Lougheed area, Vancouver-Broadway area, Richmond-Bridgeport area, institutions (BCIT, Kwantlen in Langley, Delta Hospital) and particularly the industrial areas.
- **Shared vehicle** is the most common mode to the Airport and the Tsawwassen Ferry Terminal and slightly surpasses SOV use to some shopping centres (Guildford, Willowbrook, Langley, Strawberry Hill). It is the most popular mode for activities (as at the Cloverdale Fairgrounds and Fleetwood Centre/Sports Complex, cinema and Surrey Civic Centre).
- In general, **transit usage** is highest to other transit destinations (Scott Road and miscellaneous other SkyTrain stations). SkyTrain emerges as a dominant mode when travelling to Downtown Vancouver and connecting to other SkyTrain stations.

- Most who travel by car to SkyTrain destinations park their vehicles. The proportion being dropped off is greatest at the King George Station (one-third of those arriving by car, or 18% of total travellers to this destination). At the other stations the drop-off rate is much lower (10-15% of car travellers, or 6-7% of all those bound for these destinations).

### ***Time of Travel to Specific Destinations***

- Most travel **to SkyTrain** destinations by bus travellers occurs during peak periods Monday to Friday. In general, car travellers have a less pronounced pattern, but most traffic occurs in the peak hours. The largest volume of travel **to shopping** destinations falls during the weekday 9:30 to 3pm period by car travellers. Traffic **to industrial** areas appears to be greatest by car during weekdays between 9:30am and 3pm, outside the conventional peak traffic hours. This finding may warrant further study by Translink.

### ***Area of Residence for Key Destinations***

- As would be expected, the key regional destinations draw people from across the South of the Fraser region, while local destinations naturally draw more heavily from their primary trade areas. (See Detailed Findings pages 30-31 for specific FSAs.)

### ***Interest in Improved Bus Service/ Conversion Potential***

Car travellers to specific destinations in the past week were asked if they would take the bus to that destination if the service met their needs. Note that this group consisted of both current and potential transit users.

- There is considerable interest expressed in using a bus instead of a private vehicle. Conversion potential is highest among those travelling to SkyTrain stations and /or to Surrey City Centre (60-70% claim they would take a bus).
- Other high volume destinations with considerable potential for conversion are Downtown Vancouver (62%) and Guildford Town Centre (51%).



- Numerous other destinations with moderate to limited car volumes (but which may originate from targeted geographic areas) generally show interest levels in the 30-50% range. (See Detailed Findings section for more information.)
- Interest levels among SOV users are similar to shared vehicle travellers. There seems to be an open attitude to taking the bus among potential users, which bodes well if service improvements can, in fact, meet the customer's needs.

### ***Changes Required to Convert Car Users to Bus Service***

Car/van/truck users in the past seven days were probed to determine what type of improvements are needed to encourage them to consider using a bus to the specific destinations travelled to instead of a private vehicle.

- In general, greater ***frequency of service*** is, by far, the most desired change to bus service. Frequency expectations generally fall in the range of a 10-20 minute interval between buses with 10-15 minutes being mentioned most frequently.
- Secondary improvements are ***direct routes*** and ***routes closer to home***.
- While frequency is a primary factor for the majority of destinations, car users are as likely, and in some cases *more* likely, to cite a need for more direct routes to some distant locations not served by SkyTrain. There is also some mention of express/shuttle service is desired to Downtown Vancouver and the Airport.
- Other tertiary improvements noted are reduced trip length, improved connections and/or better hours of service. However, for travellers to Vancouver International Airport, UBC and Coquitlam Centre trip length reduction is an important factor.

## ***Reaction to Bus Service Concepts***

Both current and potential riders were asked reactions to bus service concepts. Ten regional and seven local bus service concepts were tested, each targeted at different geographic markets within the South of the Fraser study area. Here are highlights of the top concepts for each of the main sub-regions. Keep in mind that the trip estimates presented here are **not official ridership forecasts**, they merely offer an order of magnitude when examining consumer interest in routings. Also note that these trip estimates **do not represent net new ridership**, meaning that some travel may be diverted from existing routes.

### **Surrey/ North Delta**

- The highest trip potential for services in this area is a **Limited Stop Express along King George Highway**. This service could achieve about 27,000 one-way trips weekly. It interests 47% of the market targeted (current and potential transit users in Newton, Surrey Central and Whalley).
  
- Another concept with very high trip potential, is the **88<sup>th</sup> Avenue Local** service, which could generate an estimated 23,000 one-way trips per week. It appeals to 29% of the target market (current and potential riders in selected FSAs in North Delta/Scottsdale, Newton, Surrey Central/Whalley and Guildford/Fleetwood/ Fraser Heights). The high trip potential for this concept indicates demand for routing in the 88<sup>th</sup> Avenue area, which is currently under served.
  
- Trip estimates for three other concepts, aimed at portions of Surrey/North Delta, reach about 11,000 to 14,000 one-way trips per week. These are the **Scott Road Local** service, the **88<sup>th</sup> Avenue Regional** to Richmond and the Airport, and the **Limited Stop Regional from Guildford Exchange to Lougheed Mall**.

Note that the markets for the 88<sup>th</sup> Avenue local and regional concepts overlap, attracting some of the same potential riders.

<b>All Concepts</b>	<b>Key Features</b>	<b>Target Market – Current/Potential Riders in:</b>	<b>% Target Interested</b>	<b>Potential # One-way Trips / Wk.</b>
<b>NORTH DELTA/ SURREY</b>				
Limited Stop Express along King George Highway—Regional <b>R4</b>	<ul style="list-style-type: none"> <li>Limited stop express bus service</li> <li>Along King George Highway between White Rock Ctr &amp; Surrey Central Stn.</li> <li>Service: Mon to Sat, 6am to midnight, every 15 minutes</li> </ul>	Newton and Surrey Central/ Whalley,	47%	<b>About 27,000</b>
88 <sup>th</sup> Avenue Local Service <b>L2</b>	<ul style="list-style-type: none"> <li>Along 88<sup>th</sup> Ave between Fleetwood and Scott Rd to Scottsdale</li> <li>7 days a week, 6am to midnight, every 30 min</li> </ul>	North Delta/ Scottsdale Newton, Surrey Central/ Whalley, Guildford/ Fleetwood/ Fraser Heights – selected FSAs *	29%	<b>About 23,100</b>
Scott Road Local Service <b>L3</b>	<ul style="list-style-type: none"> <li>Scott Rd SkyTrain station via Scott Road past 72<sup>nd</sup> Ave to Hwy 10, then east to Surrey Municipal Hall</li> <li>6am to midnight, every 30 minutes</li> </ul>	North Delta Scottsdale. Newton. Surrey Central/ Whalley	23%	<b>About 13,900</b>
88 <sup>th</sup> Avenue to Richmond-Airport—Regional <b>R2</b>	<ul style="list-style-type: none"> <li>Express along Hwy 91</li> <li>Stops at Annacis Is, along No.6 Rd &amp; Cambie, proposed Airport Exchange</li> <li>10-min. shuttle to YVR/Sea Is. employers</li> <li>Mon- Fri., peak only, every 30 min</li> <li>Estimated trip length = 60 minutes</li> </ul>	North Delta/ Scottsdale, Newton, Guildford/Fleetwood/ Fraser Heights – selected FSAs *	30%	<b>About 13,100</b>
Limited Stop Guildford Exchange to Lougheed Mall—Regional <b>R5</b>	<ul style="list-style-type: none"> <li>Limited stop bus</li> <li>Guildford Exch to Lougheed Mall</li> <li>Service: Mon- Sat, 6am to midnight, every 30 minutes</li> <li>Estimated trip length = 25 minutes</li> </ul>	Guildford/ Fleetwood/ Fraser Heights	40%	<b>About 11,000</b>
72 <sup>nd</sup> Avenue to Richmond-Airport—Regional <b>R3</b>	<ul style="list-style-type: none"> <li>Express along Hwy 91</li> <li>Stops at Newton &amp; Scottsdale Exch., Annacis Is., along No.6 Rd &amp; Cambie, proposed Airport Exchange</li> <li>10-min. shuttle to YVR/ Sea Is. employers</li> <li>Service Mon-Fri, every 30 min. peak</li> <li>Estimated trip length = 65 min. from Newton/ 50 min. from Scottsdale</li> </ul>	North Delta/ Scottsdale, Newton – selected FSAs *	31%	<b>About 8,600</b>
64 <sup>th</sup> Ave Local <b>L4</b>	<ul style="list-style-type: none"> <li>Connecting Scottsdale Exchange, Surrey City Hall, Cloverdale</li> <li>Mon- Sat, 6am to midnight, every hour</li> </ul>	North Delta/Scottsdale, Newton	24%	<b>About 5,500</b>
Limited Stop Guildford Exchange to Coquitlam Centre—Regional <b>R6</b>	<ul style="list-style-type: none"> <li>Limited stop bus service</li> <li>Mon- Sat, 6am to 9pm, every 30 min</li> <li>Estimated trip length = 35 minutes</li> </ul>	Guildford/ Fleetwood/ Fraser Heights	35%	<b>About 5,300</b>

**L = Local concept; R = Regional concept**

*TransLink Marketing Research formula to estimate potential trip volume:*

$$[(\% \text{ "very likely" } \times .5) \text{ potential} + (\% \text{ "somewhat likely" } \times .25)] \times \text{"Population 16 years and over for target geographic area"} \\ \times \text{"Proportion of cross-section—i.e., incidence of transit target group found in study within the target geographic area"} \\ \times \text{"Average no. one-way trips per week using this service option"} = \text{Total one-way trips per week}$$

*All estimates rounded to nearest 100.*

*\* In large districts, selected FSAs were used to create a more targeted market area for some concepts.*

**Cloverdale/ Langley**

- The most popular concepts and those with greatest trip potential in the Cloverdale/ Urban Langley area are the two community bus services—with features resembling the door-to-door convenience of private vehicles. The **Walnut Grove/Fort Langley Community Bus** service has potential to create close to 10,000 one-way trips per week. The **Urban Langley Community Bus** is next with nearly 9,000 one-way trips weekly. Following at some distance are the Walnut Grove to Lougheed Mall Regional, Langley to the Maple Ridge Connector and the White Rock to Langley via 200<sup>th</sup> St. service, with weekly one-way trip estimates in the 3,700 – 4,300 range for each.

All Concepts	Key Features	Target Market – Current/Potential Riders in:	% Target Interested	Potential # One-way Trips / Wk.
<b>CLOVERDALE/ LANGLEY</b>				
Community Bus Walnut Grove/ Ft. Langley <b>L7</b>	<ul style="list-style-type: none"> <li>• Connecting Willowbrook Mall, Kwantlen Coll., Trinity Western, Fort Langley, Walnut Grove, theatres</li> <li>• Every 30 min 8am to midnight</li> <li>• Dial up door-to-door service after 8pm</li> </ul>	Cloverdale, all of Langley, Port Kells	35%	<b>About 9,800</b>
Community Bus Urban Langley <b>L6</b>	<ul style="list-style-type: none"> <li>• Connecting Brookwood, Fernridge, Murrayville with Langley Town Centre and Willowbrook Mall</li> <li>• Small vehicle service</li> <li>• Every 30 min. 8am-midnight</li> <li>• Phone for door-to-door service after 8pm</li> </ul>	Cloverdale, all of Langley, Port Kells	36%	<b>About 8,900</b>
Walnut Grove to Lougheed Mall <b>R9</b>	<ul style="list-style-type: none"> <li>• From Langley Ctr, Walnut Grove to Lougheed Exch. along Hwy 1</li> <li>• Mon-Fri, peak hours only</li> <li>• Estimated trip length = 40 minutes</li> </ul>	Cloverdale/ Urban Langley, Rest of Langley/ Port Kells	14%	<b>About 4,300</b>
Langley to Maple Ridge Connector <b>R10</b>	<ul style="list-style-type: none"> <li>• Langley Ctr, Walnut Grove, Ft. Langley via Albion Ferry to Pt Haney Str/ WCE</li> <li>• Mon.-Fri, peak hours only, every 30 min to meet train schedule</li> <li>• Estimated travel time = 45 minutes</li> </ul>	Cloverdale/ Urban Langley, Rest of Langley/ Port Kells	15%	<b>About 4,100</b>
White Rock-Langley via 200 <sup>th</sup> Street <b>R8</b>	<ul style="list-style-type: none"> <li>• Between Langley Town Centre &amp; White Rock</li> <li>• Stops at Willowbrook Mall and in the Communities along the way</li> <li>• 7 days a week, 6am – 9pm, every hr</li> <li>• Estimated trip length = 40 minutes</li> </ul>	Urban Langley, Rest of Langley/ Port Kells – selected FSAs *	41%	<b>About 3,700</b>
White Rock- Cloverdale – Langley via Hwy 10 <b>R7</b>	<ul style="list-style-type: none"> <li>• From Langley Town Ctr to White Rock Centre</li> <li>• Stops: Willowbrook Mall, in Cloverdale, along Hwy 10 &amp; 152nd Street</li> <li>• 7 days, 6am-9pm, every 60 minutes</li> <li>• Estimated trip length = 40 minutes</li> </ul>	Cloverdale/ Urban Langley – selected FSAs *	28%	<b>About 2,700</b>
Langley to Aldergrove Local <b>L5</b>	<ul style="list-style-type: none"> <li>• Between Langley Town Ctr and Aldergrove along Fraser Hwy for better connections to regional buses</li> <li>• Mon.-Fri, every hour, peak hours only</li> </ul>	Cloverdale/ Urban Langley	16%	<b>About 1,900</b>

**L = Local concept; R = Regional concept**

TransLink Marketing Research formula to estimate potential trip volume:

$$[(\% \text{ "very likely" } \times .5) + (\% \text{ "somewhat likely" } \times .25)] \times \text{ "Population 16 years and over for target geographic area" } \times \text{ "Proportion of cross-section—i.e., incidence of transit target group found in study within the target geographic area" } \times \text{ "Average no. one-way trips per week using this service option" } = \text{ Total one-way trips per week}$$

All estimates rounded to nearest 100.

\* In large districts, selected FSAs were used to create a more targeted market area for some concepts.

**South Delta/ Ladner/ Tsawwassen**

- Target residents in this region appear to be very enthusiastic about the two service concepts tested. Each concept entices over half of target market, who say they are “very or somewhat likely” to use the service. The **Tsawwassen-Ladner Local** has the higher trip volume potential—about 6,800 one-way trips per week. Nevertheless, a regional service between **Tsawwassen-Ladner-Richmond Centre and the Airport** could generate an estimated 5,500 one-way trips per week.

All Concepts	Key Features	Target Market – Current/Potential Riders in:	% Target Interested	Potential # One-way Trips
<b>SOUTH DELTA/ LADNER/ TSAWWASSEN</b>				
Tsawwassen–Ladner Local <b>L1</b>	<ul style="list-style-type: none"> <li>• Circulating within Tsawwassen and Ladner, connecting to Ladner Exch. For transfers to Van, Rmd, Airport</li> <li>• Small vehicle service</li> <li>• Every 60 min. 8am-midnight</li> <li>• Dial up door-to-door service after 8pm</li> </ul>	South Delta/ Ladner/ Tsawwassen	56%	<b>About 6,800</b>
Tsawwassen–Ladner–Richmond Centre–Airport <b>R1</b>	<ul style="list-style-type: none"> <li>• Express bus along Hwy 17 and 99</li> <li>• Stops: Ladner Centre, Richmond Ctr, Lansdowne, proposed Airport Exch.</li> <li>• 10-min. shuttle to YVR/ Sea Is empl.</li> <li>• 7 days a week, 5am-midnight, every 30 min peak/ 60 min off-peak</li> </ul>	South Delta/ Ladner/ Tsawwassen	52%	<b>About 5,500</b>

**L = Local concept; R = Regional concept**

*TransLink Marketing Research formula to estimate potential trip volume:*

$$[(\% \text{ “very likely” } \times .5) + (\% \text{ “somewhat likely” } \times .25)] \times \text{ “Population 16 years and over for target geographic area”} \\ \times \text{ “Proportion of cross-section—i.e., incidence of transit target group found in study within the target geographic area”} \\ \times \text{ “Average no. one-way trips per week using this service option”} = \text{ Total one-way trips per week}$$

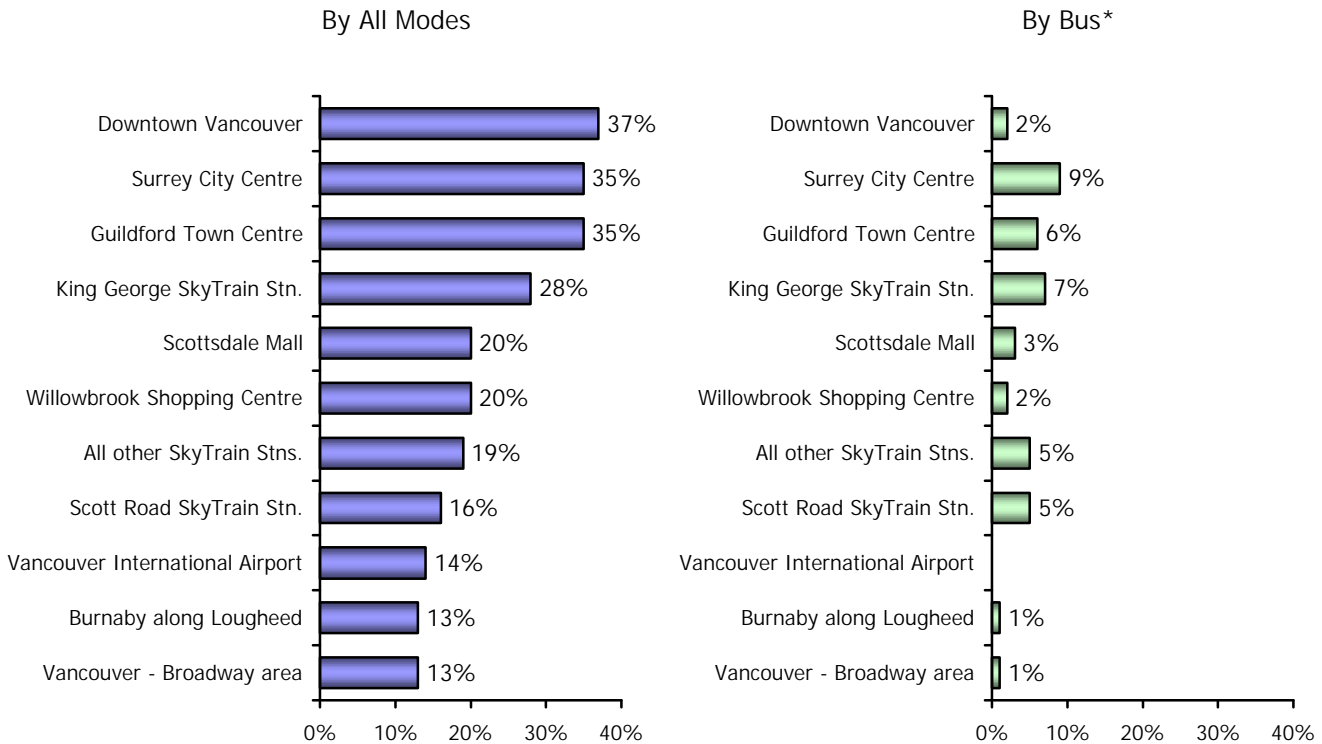
*All estimates rounded to nearest 100.*

## Conclusions and Recommendations

### Service Gap Analysis

- Gap analysis reveals that many key destinations frequented by South of the Fraser River residents are under-served by buses. **Only a fraction of target market travellers to the most highly used destinations take the bus.** This suggests that service deficiencies exist, since the target group are either current users or receptive to bus usage (potential users).

Top Destinations in Past 7 Days



Base: Total South of Fraser River Target Market (n=1266) \* Bus only mode.

- Bus usage is highest for the SkyTrain destinations—as 25-33% of the target market who travel to these station destinations in the past week use the bus most often. Nevertheless, there is room to expand bus travel to/from the SkyTrain stations, as Surrey City Centre and King George SkyTrain station both appear to have considerable potential to further increase bus trip conversions.
- Service gaps are evident for nearly all of the high use destinations. But, the following have especially low bus use (under 10% share of all travellers to the destination) and/or exhibit growth potential (7-13% of the total South of Fraser target market would consider bus mode if the service met their needs). On this basis, it appears that the following should have priority when making bus service improvements: Guildford Town Centre, Downtown Vancouver, Willowbrook Shopping Centre, Vancouver International Airport.
- Other destinations with potential for growth (4-6% of total South of the Fraser target market say they would take a bus if needs are met) include: Langley Mall, Burnaby along the Lougheed Highway, Scottsdale Mall, Scott Road SkyTrain station, Vancouver Broadway area, Richmond Centre.
- Among current SOV or carpool/vanpool users travelling to the high and moderate volume destinations, high proportions tell us that they would consider taking the bus to these locations, if the service met their needs (40-70% range for high and moderate volume destinations). This indicates the possibilities for growth of the bus user base—in fact, at least 40-50% of those who would consider taking the bus instead of a car are potential transit users (currently not a regular rider). Others are current riders that take buses regularly but have traveled by SOV or shared vehicle in the past week to these particular destinations.

### **Service Enhancements**

- Improved services are likely to make a difference and increase the rates of conversion. Service enhancements should mainly be in the form of increased **frequency**—the most requested change that would need to take place for target consumers to consider taking the bus. Secondary improvements should include **more direct routing** (particularly to certain destinations) and **closer bus stops**. As well, trip length reduction for travel to Vancouver International Airport, UBC and Coquitlam Centre.

Many of those who currently use a private vehicle (SOV or shared vehicle) claim they would take the bus if the service met their needs and these improvements are the ones most desired.

- Much travel occurs in the weekday non-peak (9:30am to 3pm). Of course, bus usage reflects the current schedules, which are geared to peak hours. Bus route enhancements and new routes should consider appealing to travel during the daytime non-peak.

### ***Concepts to Best Meet Service Needs***

Concepts that address the service gaps will be most responsive to the needs of the target market. TransLink should consider making these new services available, listed in order by trip potential.

#### **North Delta/Surrey**

- **Limited Stop Express along King George Highway** regional service could achieve about 27,000 one-way trips weekly from target residents in Newton, Surrey Central and Whalley. The express service with high frequency (every 15 minutes) makes it highly appealing, especially to current transit users. Key destinations served are White Rock Centre and Surrey Central Station.
- **88<sup>th</sup> Avenue Local** would serve most of Surrey (but not Cloverdale) and is estimated to generate about 23,000 one-way trips per week. Most trips would come from current users. Scottsdale Mall, a key local destination, would be served by this route (along 88<sup>th</sup> Avenue between Fleetwood and Scott Road to Scottsdale). Note that currently there is no service along 88<sup>th</sup> Avenue.
- **Scott Road Local** service, estimated at about 13,900 one-way trips weekly, would offer access via Scott Road past 72<sup>nd</sup> Avenue, serving destinations between the Scott Road SkyTrain station and Surrey Municipal Hall.



- **88<sup>th</sup> Avenue Regional** is the route to select to give Surrey residents transit service to Richmond and the Airport. It has greater potential than the 72<sup>nd</sup> Avenue alternative. About 13,000 one-way trips per week are anticipated. Key destinations served are Annacis Island and the proposed Airport Exchange. The popularity of service along 88<sup>th</sup> Avenue is likely due to the current lack of service.
- **Limited Stop Regional from Guildford Exchange to Lougheed Mall** would serve residents of Guildford, Fleetwood and Fraser Heights. Over 11,000 one-way trips per week are expected. Guildford Town Centre and the Burnaby-Lougheed Mall area would be key destinations.

#### **Cloverdale/Langley**

- **Walnut Grove/Fort Langley Community Bus** local service would connect Willowbrook Mall with many local destinations between Cloverdale and Fort Langley—including Langley Mall. About 9,800 one-way trips per week are anticipated. Designed to resemble convenience of car with the evening dial-in door-to-door service, this especially appeals to the more remotely-located residents in Langley /Port Kells.
- **Urban Langley Community Bus** is another all day/evening service connecting Willowbrook Mall and Langley Town Centre with numerous small communities (Brookwood, Fernridge, Murrayville). About 8,900 one-way trips weekly are estimated.

#### **South Delta/ Ladner/ Tsawwassen**

- **Tsawwassen-Ladner Local** route has the potential to serve over half of target residents in the localized areas; about 6,800 one-way trips per week are expected. Key destinations in Tsawwassen and Ladner would be served.
- **Tsawwassen-Ladner-Richmond Centre-Airport** regional express service—with an estimated 5,500 one-way trips per week—is appealing to half of targeted consumers. It would offer area residents a connector between Tsawwassen and Ladner Centre and to Richmond Centre and the Vancouver International Airport via a proposed new exchange with shuttle service—beneficial to shoppers, air travellers and employees in Richmond and Sea Island.

### **Other Recommendations**

- Adequate communications to announce and engage the population in the introduction of any new services will be crucial to their success. The new approaches (door-to-door dial-up service in the evenings) and enhanced service (especially the increased frequencies, greater access/ more bus stops, direct routing, reduced trip lengths, etc.) will need to be highlighted and broadly communicated to the public.
  
- Potential transit users will be the hardest to reach, but novel ways to acquaint them with these new services may be necessary to ensure that the service is known and can maximize its trip potential.

# Foreword

## Background and Research Objectives

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TransLink is in the process of assessing transportation needs in specific areas of the Lower Mainland and planning improvements to regional and local transit services. At this time the area of interest is South of the Fraser River (excluding the White Rock/ South Surrey area, which has been studied separately). TransLink planners have developed a number of new regional and local bus service concepts for the South of the Fraser area and would like to evaluate the market potential for these proposed service options.

Marketing research has been commissioned to gather information for the planning process and more specifically, to determine the following:

1. Basic transportation needs and current habits of area residents,
2. Aspects of bus service that would convert *potential* bus users, and
3. Rider and potential rider reaction to the proposed regional and local bus service concepts.

## Methodology

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Random telephone interviews were conducted in the defined study area, as indicated in the map below. The broad region was divided into seven zones, as follows: 1) South Delta/ Ladner/ Tsawwassen, 2) North Delta/ Scottsdale, 3) Newton, 4) Surrey Central/ Whalley, 5) Guildford/ Fleetwood/ Fraser Heights, 6) Urban Langley/ Cloverdale and 7) Rest of Langley/ Port Kells.

Interviews were conducted with a random cross-section of residents in each of the seven zones; a total of 2,146 interviews were completed with South of the Fraser River residents 16 years of age and over. The cross-section samples were screened to identify the target market—i.e., those who currently ride transit on a regular basis or those who would consider taking improved public transportation more frequently if the service met their needs. Disproportionate sampling was employed to ensure adequate interviews with the target market in each of the seven zones.

Industry-standard, multi-stage random selection procedures were used to ensure a representative sample with proper representation of the seven zones. Regional weighting at the data processing stage (as well as age and gender adjustments) was applied to bring the sample into correct relative proportion for the study area in total. Interviewing was completed November 23 to December 6, 1999 from McIntyre & Mustel's CATI (computer assisted telephone interviewing) facility, using trained telephone interviewing staff. Multi-lingual translation was provided, as needed, for Punjabi/Hindi-speaking residents. A pre-test was conducted prior to the start of fieldwork to refine the questionnaire. Further methodological detail can be found in the Appendices.

## Results

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The results are presented in the form of an *Executive Overview*, summarizing the key findings, and a more comprehensive and illustrated *Detailed Findings* section. The complete computer tabulations have been supplied to TransLink in electronic format.

Base sizes shown in graphs and tables reflect the actual (rather than weighted) number of interviews completed. The following notations have been used to indicate numerical differences in summary tables of this report:

Significantly higher ▲      Directionally higher ▲      Significantly lower ▼      Directionally lower ▼

# Detailed Findings

## A. Current Usage Habits

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### 1. *Incidence of Regular Transit Use*

For the purpose of this study, transit users are defined as those taking transit at least once a month on a regular basis.

One-in-three (33%) of South of Fraser River area residents, 16 years of age and over, use any form of public transit. Almost equal proportions use buses and SkyTrain (25% and 27% respectively). Further examination of the results reveals that 19% use *both* bus and SkyTrain regularly.

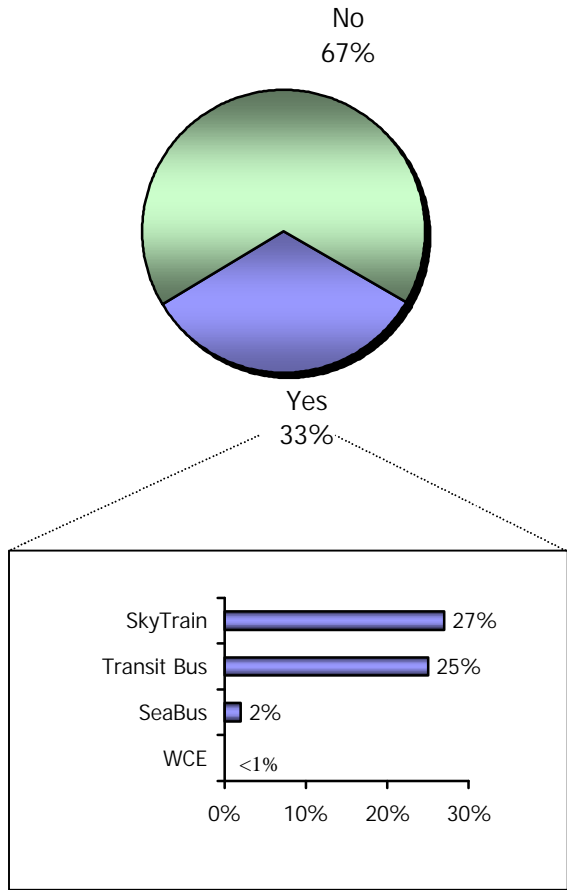
Incidence of transit use is significantly higher among:

- those under 25 years of age (65% are regular riders),
- students (69% usage), and
- those from below average income households (38% usage versus 29% among those from above average income households).

Note that there is no difference in transit usage between men and women.

Q.B: Do you currently take any of the following at least once a month on a regular basis:  
Base: Total South of Fraser River Study Area Cross-Section (n=2146)

Incidence of Using Transit Regularly



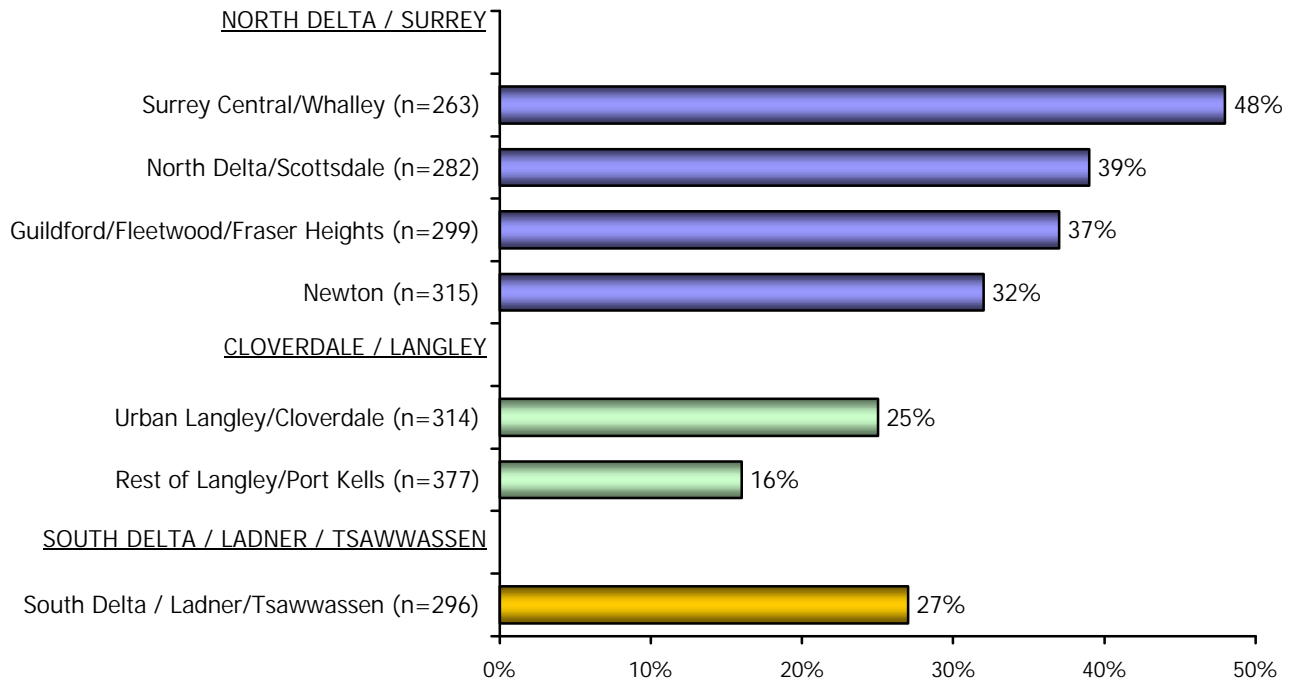
**Transit Use by Area**

The highest rate of regular transit usage is found among residents of Surrey Central/Whalley (48%). Higher than average usage is also found in the North Delta/Scottsdale and Guildford/Fleetwood/Fraser Heights areas.

*Q.B:* Do you currently take any of the following at least once a month on a regular basis:

*Base:* Total Cross-Section in Each Area

Regular Transit Usage by Area



## **2. Bus Routes Currently Use Most Often**

Regular users of public transit were asked which bus routes they travel on most frequently.

Many of the more commonly used routes connect to one of the SkyTrain stations. The most popular, servicing Langley, is Route 320-Langley/Guildford/Surrey/Central Station with 16% of current bus riders reporting this as the route taken most often. Route 501-Langley South/Surrey Central Station is another frequented route connecting with Langley (10%).

For Surrey/North Delta bus service, a number of routes are cited. The more common ones are Route 319 (11%) and Route 312 (7%) connecting the Scott Road Station and Scottsdale, Route 316-Surrey Central Station/Scottsdale (9%), and Route 340-Cloverdale/Newton Exchange/22<sup>nd</sup> Street (8%).

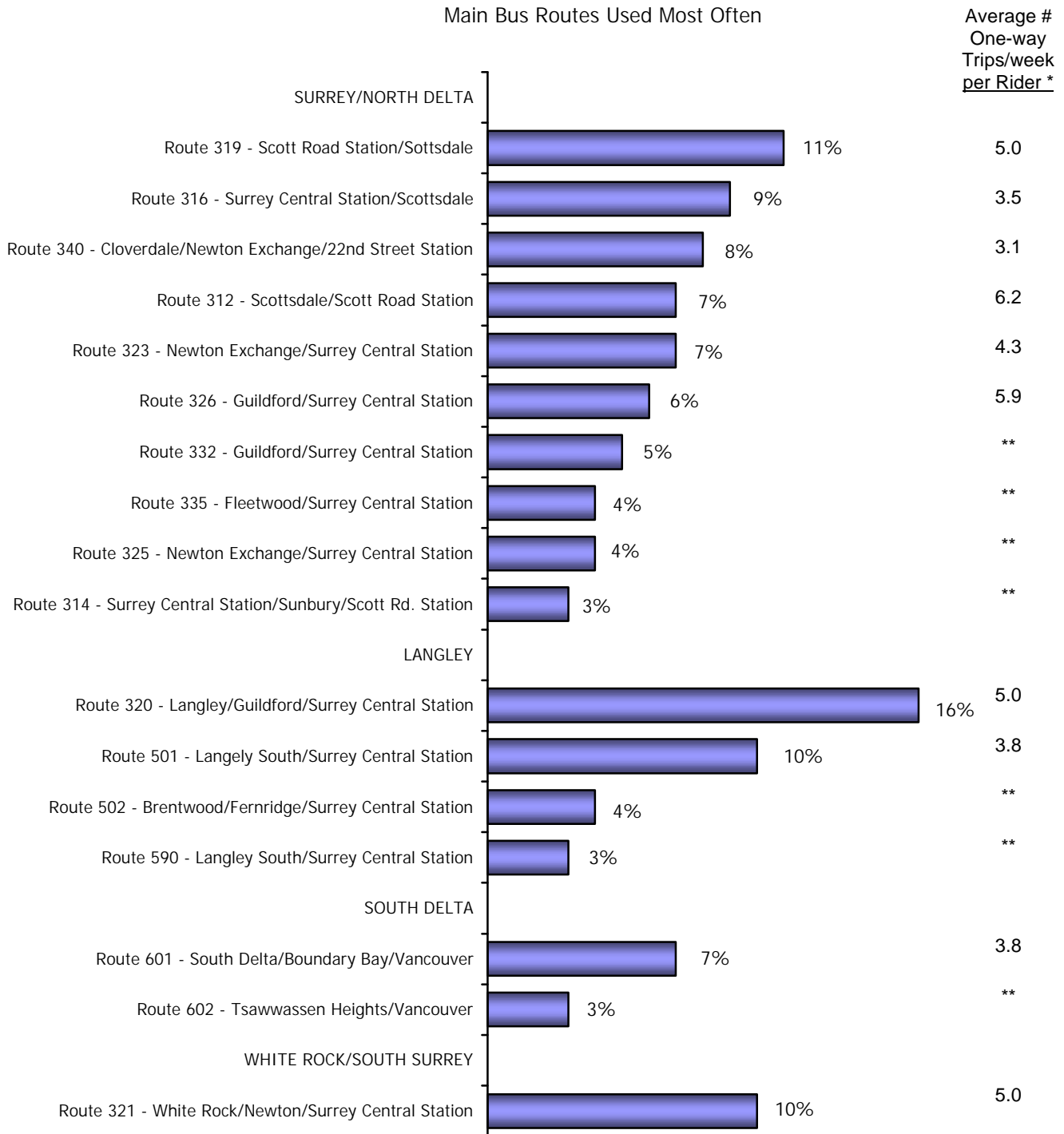
Among South Delta buses, Route 601-South Delta/Boundary Bay/Vancouver is the most used (7%).

For White Rock/South Surrey service, again a connector to SkyTrain, Route 321-White Rock/Newton/South Surrey Station, is the most popular (10%).

The following chart details the routes in each community which are named as the most commonly used by at least 3% or more of residents in the South of Fraser River area. The average number of one-way trips per week by riders is also specified.



Q.C: Which bus route number do you take most often?  
 Q.D: In an average week or month, how many one-way trips do you take on the \_\_\_ bus?  
 Base: Total Current Bus Riders (n=448)



\* Per rider of specific route; all frequencies expressed as "per week"

\*\* Average omitted due to small base size.

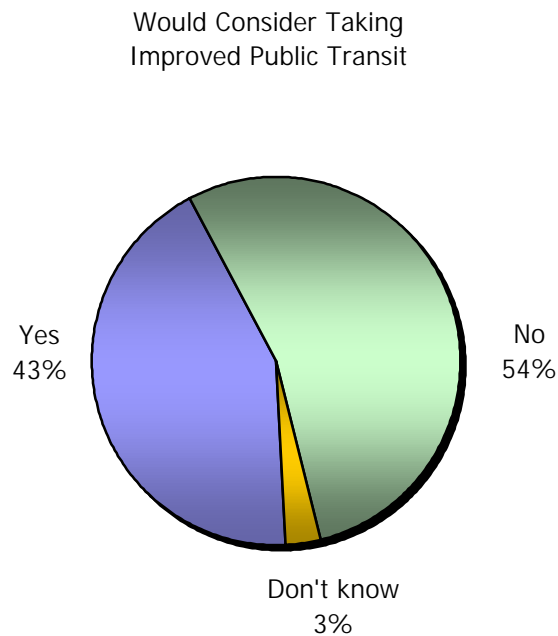
### 3. Market Potential for Improved Public Transportation

Non-users were described possible improvements to the transit system “...adding new express bus and community bus services, as well as making improvements to service frequency.” A total of 43% of non-users report they would consider taking improved public transportation more often if the service met their needs.

Among current non-users, the enhanced public transit service has slightly more appeal to females, and students and those from high income households (\$60k plus).

Q.F: Transit is considering adding new express bus and community bus services, as well as making improvements to service frequency. Would you consider taking improved public transportation more often if the service met your needs?

Base: Total Who Do Not Use Transit Regularly (n=1520)

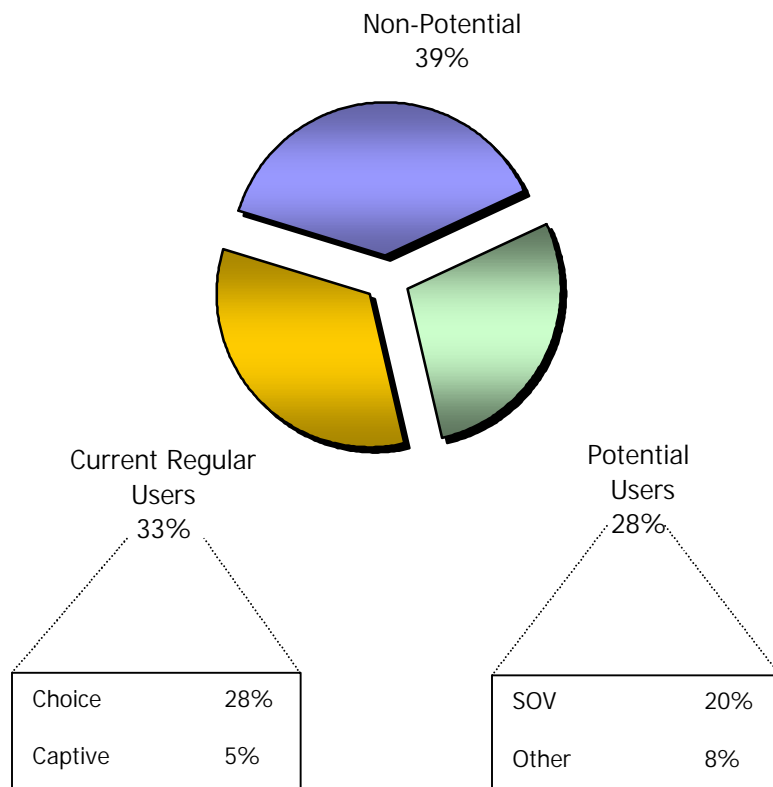


This “potential” new user group translates to 28% of all South of Fraser River area residents and is primarily composed of past week SOV travellers. When combined with current transit users, **the total potential market for improved public transportation reaches 61% of area residents.** This group is hereafter referred to in this report as the “target market,” consisting of “current” and “potential transit users.”

*Q.F:* Transit is considering adding new express bus and community bus services, as well as making improvements to service frequency. Would you consider taking improved public transportation more often if the service met your needs?

*Base:* Total South of Fraser River Study Area Cross-Section (n=2146)

Market Potential for Improved Public Transportation



#### **4. Travel to Selected Destinations in Past 30 Days / Past Seven Days among Target Market**

Travel habits of the target market (current and potential transit users) residing South of the Fraser River were collected for the past 30 and past seven days. This included incidence and frequency of travelling to selected key regional and local destinations within the South of Fraser area, as well as mode and time of travel.

Downtown Vancouver, Surrey City Centre, Guildford Town Centre and King George SkyTrain are by far the most common destinations, each visited by about one-half of the target population within the past 30 days; and by about one-third within the past seven days. On a per-capita basis, these destinations are also the most frequently visited, averaging more than one visit per target resident in the past seven days.

Following somewhat behind these predominant locations is a secondary tier, comprising other key shopping centres – Scottsdale Mall and Willowbrook Shopping Centre – and transportation locations – Scott Road SkyTrain and the Vancouver International Airport. Approximately 20-25% of the region’s target residents have visited these locations within the past 30 days; approximately 15-25% within the past seven days.

Vancouver’s Broadway area from Commercial to Arbutus also is an important secondary destination for target residents, as is Burnaby’s Lougheed Highway corridor (excluding the Lougheed Mall shopping centre). These two regions attract 18-19% of target residents in the past 30 days and 13% within the past seven days.

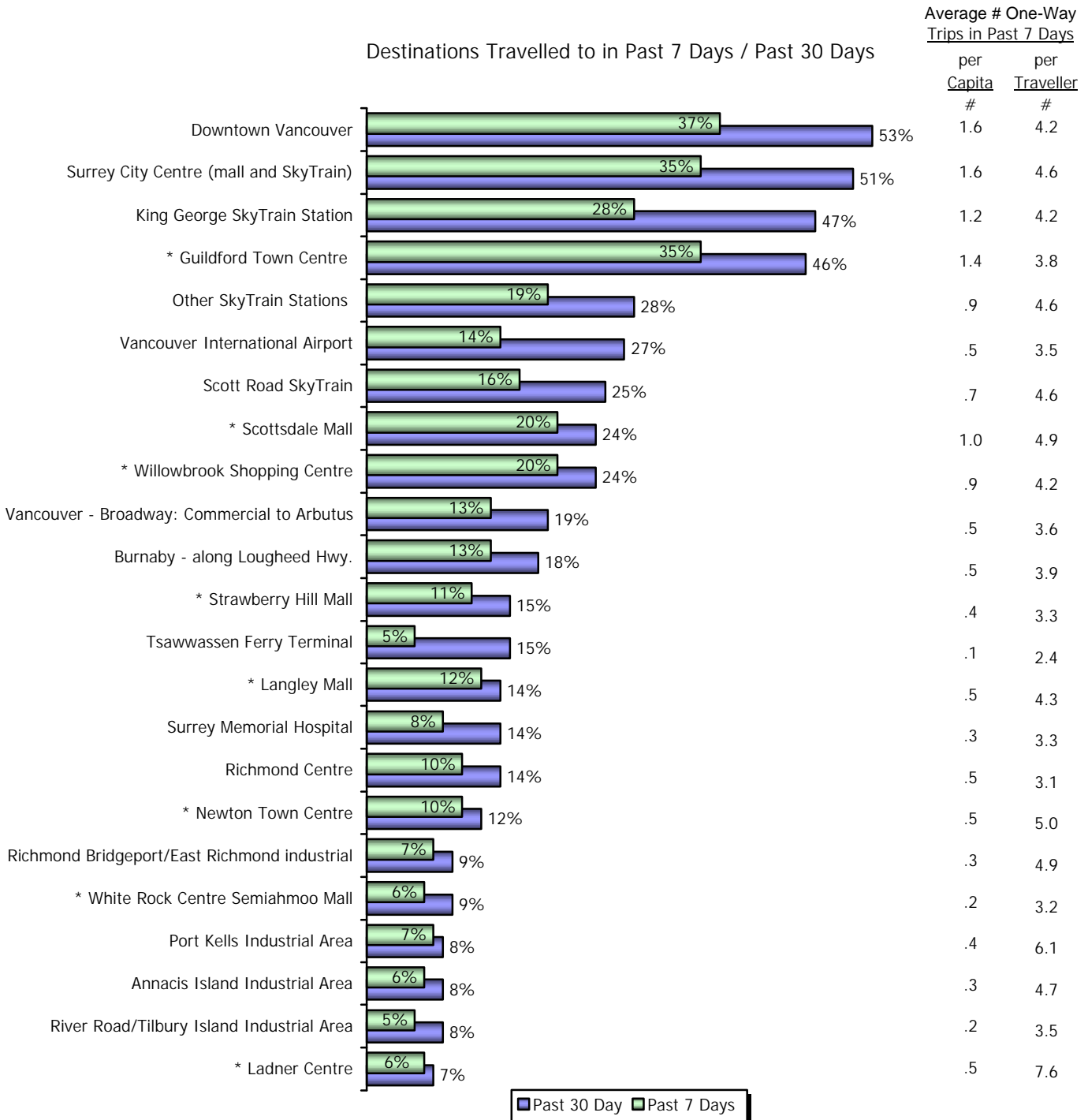
A third tier of destinations, attracting 12-15% of the South of Fraser target residents in the past 30 days, and 5-12% within the past seven days, includes the Tsawwassen Ferry Terminal, Surrey Memorial Hospital, Langley Mall, Richmond Centre, Newton Town Centre and Strawberry Hill Mall.

Other destinations attract generally 10% or fewer target area residents in the 30-day period. The graph below outlines past 30-day and past seven-day usage of the specific destinations of interest. Note, we did ask respondents to volunteer other regular destinations not included in our questionnaire (see Question 2). In total 25% of respondents named other destinations, although no single destination emerged as significant to target residents.

Q.1a: I'm going to read you a list of destinations. As I read each one, please tell me whether you have travelled to that destination by ANY mode of transportation in the past 30 days.

Q.1b: Thinking just of the past 7 days, how many one-way trips did you take to and from (NAME OF DESTINATION)?

Base: Total South of Fraser Current and Potential Riders (n=1266) \*\* Average omitted due to small base size

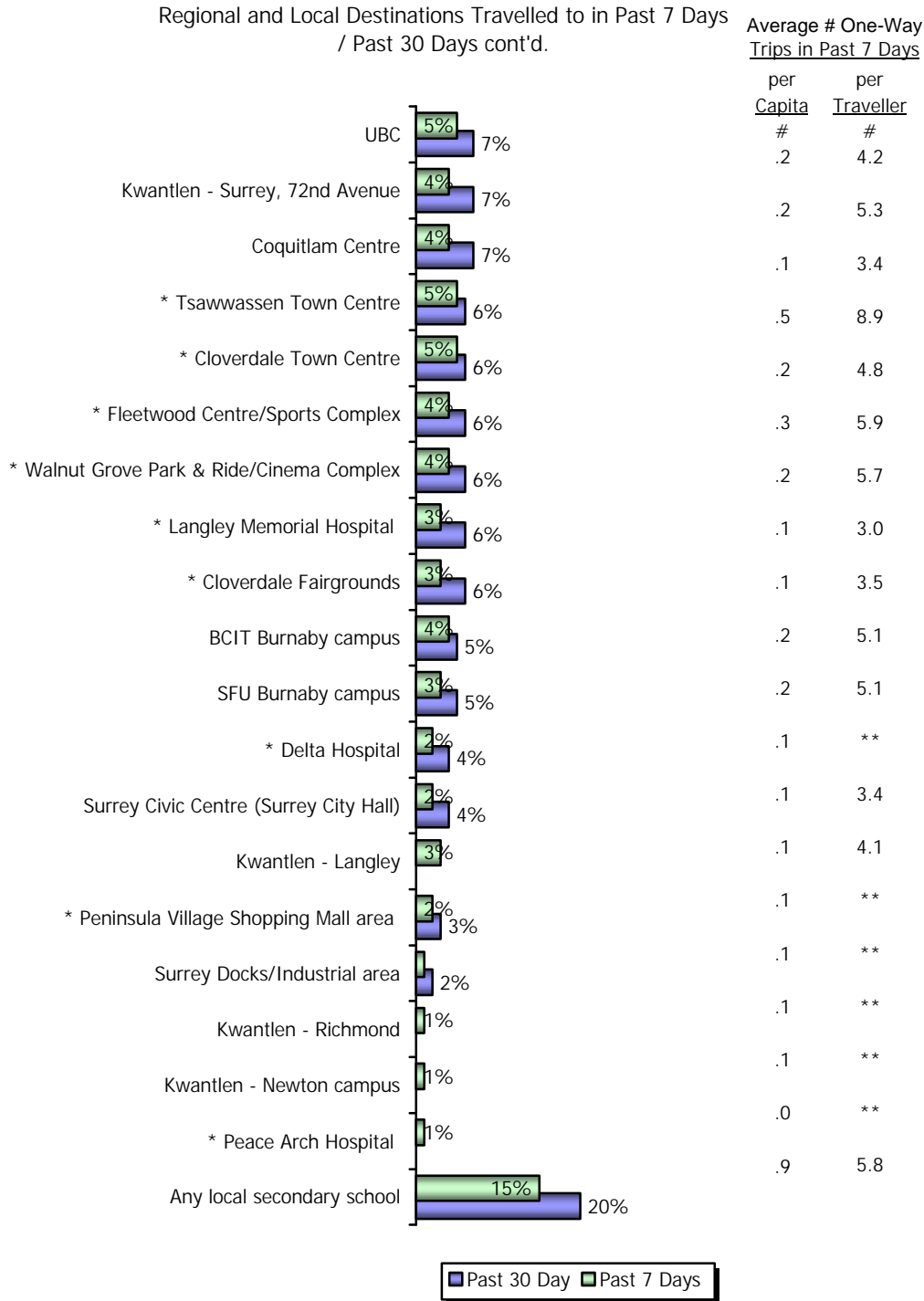


Note: To control questionnaire length, **local destinations (with \*)** were only asked of selected market areas. Results here are re-percentageed on Total South of Fraser target market – assumption being that most traffic originates from the selected local areas.

Q.1a: I'm going to read you a list of destinations. As I read each one, please tell me whether you have travelled to that destination by ANY mode of transportation in the past 30 days.

Q.1b: Thinking just of the past 7 days, how many one-way trips did you take to and from (NAME OF DESTINATION)?

Base: Current and Potential Riders (n=1266) \*\* Average omitted due to small base size



Note: To control questionnaire length, **local destinations (with \*)** were only asked of selected market areas. Results here are re-percentage on Total South of Fraser target market – assumption being that most traffic originates from the selected local areas.

Area of Residence for Top <u>Regional</u> Destinations in Past 7 Days by all Modes						
FSA	S of Fraser Target Mkt (1266) %	Downtown Vancouver (485) %	Surrey City Centre (418) %	Guildford Town Centre (397) %	King George SkyTrain Stn. (336) %	All other SkyTrain Stns. (208) %
V1M	5	4	4	3	4	4
V2Y	2	3	1	2	2	*
V2Z	2	2	1	1	2	1
V3A	8	6	7	4	6	8
V3R	11	10	15	▲ 23	13	16
V3S	8	8	8	11	9	8
V3T	7	7	9	9	10	9
V3V	8	7	12	8	12	12
V3W	13	12	17	12	18	9
V3X	2	3	2	2	2	2
V4C	9	10	8	7	7	9
V4E	4	5	4	2	2	4
V4K	4	5	*	*	1	1
V4L	2	3	1	*	*	*
V4M	3	6	1	*	*	2
V4N	6	7	6	13	8	8
V4W	3	2	2	1	2	3
FSA	Scott Road SkyTrain (182) %	Vancouver Int'l. Airport (181) %	Burnaby- Lougheed area (152) %	Vancouver- Broadway area (159) %	Surrey Memorial Hospital (82) %	
V1M	1	4	3	6	*	
V2Y	1	4	2	2	1	
V2Z	*	3	2	3	1	
V3A	3	5	9	6	3	
V3R	13	9	19	13	16	
V3S	4	9	4	6	11	
V3T	7	2	11	13	13	
V3V	11	14	8	6	11	
V3W	15	14	8	10	▲ 24	
V3X	4	3	2	4	2	
V4C	▲ 26	8	7	4	6	
V4E	7	3	7	5	2	
V4K	2	8	3	4	1	
V4L	*	3	*	2	1	
V4M	*	6	1	7	1	
V4N	5	2	9	6	4	
V4W	2	3	2	1	*	

\* FSAs listed are those with actual base sizes of 30 or more.

The following notations have been used to indicate numerical differences:

Significantly higher ▲      Directionally higher ▲      Significantly lower ▼      Directionally lower ▼

Area of Residence for Top <u>Local</u> Destinations in Past 7 Days by all modes						
FSA	S of Fraser Target Mkt (1266) %	Scottsdale Mall (234) %	Willowbrook Shopping Ctr (289) %	Langley Mall (181) %	Strawberry Hill Mall (128) %	Richmond Centre (144) %
V1M	5	*	15	18	*	*
V2Y	2	*	7	8	*	*
V2Z	2	*	8	9	*	*
V3A	8	*	▲ 27	▲ 39	*	*
V3R	11	*	5	*	*	1
V3S	8	2	17	12	1	1
V3T	7	5	*	*	3	5
V3V	8	13	*	*	14	5
V3W	13	▲ 29	*	*	▲ 26	9
V3X	2	7	*	*	8	5
V4C	9	▲ 29	*	*	▲ 27	14
V4E	4	13	*	*	19	5
V4K	4	*	*	*	*	▲ 25
V4L	2	*	*	*	*	11
V4M	3	*	*	*	*	16
V4N	6	*	10	*	*	1
V4W	3	*	9	10	*	*
FSA	Newton Town Centre (128) %	Ladner Centre (115) %	White Rock Ctr/ Semiahmoo Mall (69) %	Tsawwassen Town Centre (99) %	Cloverdale Town Centre (70) %	
V1M	*	*	3	*	2	
V2Y	*	*	*	*	5	
V2Z	*	*	3	*	3	
V3A	*	*	5	*	9	
V3R	8	*	16	*	13	
V3S	16	*	12	*	▲ 48	
V3T	*	*	9	*	*	
V3V	*	*	3	*	*	
V3W	▲ 48	*	15	*	7	
V3X	11	*	9	*	4	
V4C	8	*	8	*	*	
V4E	7	*	7	*	*	
V4K	*	▲ 46	*	▲ 22	*	
V4L	*	▲ 19	*	▲ 27	*	
V4M	*	▲ 33	*	▲ 47	*	
V4N	1	2	6	3	3	
V4W	*	*	1	*	6	

\* FSAs listed are those with actual base sizes of 30 or more.

The following notations have been used to indicate numerical differences:

Significantly higher ▲ Directionally higher ▲ Significantly lower ▼ Directionally lower ▼





### **Single Occupancy Vehicle Patterns**

Since single occupancy vehicle users are of particular interest, their travel patterns are examined here. The destination patterns of target residents using single occupancy vehicles (and who are not current transit users) generally resemble the target population at large. However, the SkyTrain stations are a less frequent destination for this group (as may be expected), while Tsawwassen Ferry Terminal and Vancouver International Airport are a more frequent destination than found among the target market at large. As well, certain shopping centres/districts are somewhat more likely destinations for single occupancy vehicle travellers than for others.

Compared to the target market in total, those travelling by SOV (single occupancy vehicle) are **more likely** to visit the following destinations in the **past 30 days**:

- Vancouver International Airport (39% of SOV users vs 27% of the total target market)
- Tsawwassen Ferry Terminal (21% vs 15% total target market)
- Willowbrook Shopping Centre (33% vs 24%)
- Langley Mall (21% vs 14%)
- Richmond Centre (19% vs 14%)
- Tsawwassen Town Centre (10% vs 6%)

In the **past 7 days**, single occupancy vehicle travellers are **less likely** than the target population to visit...

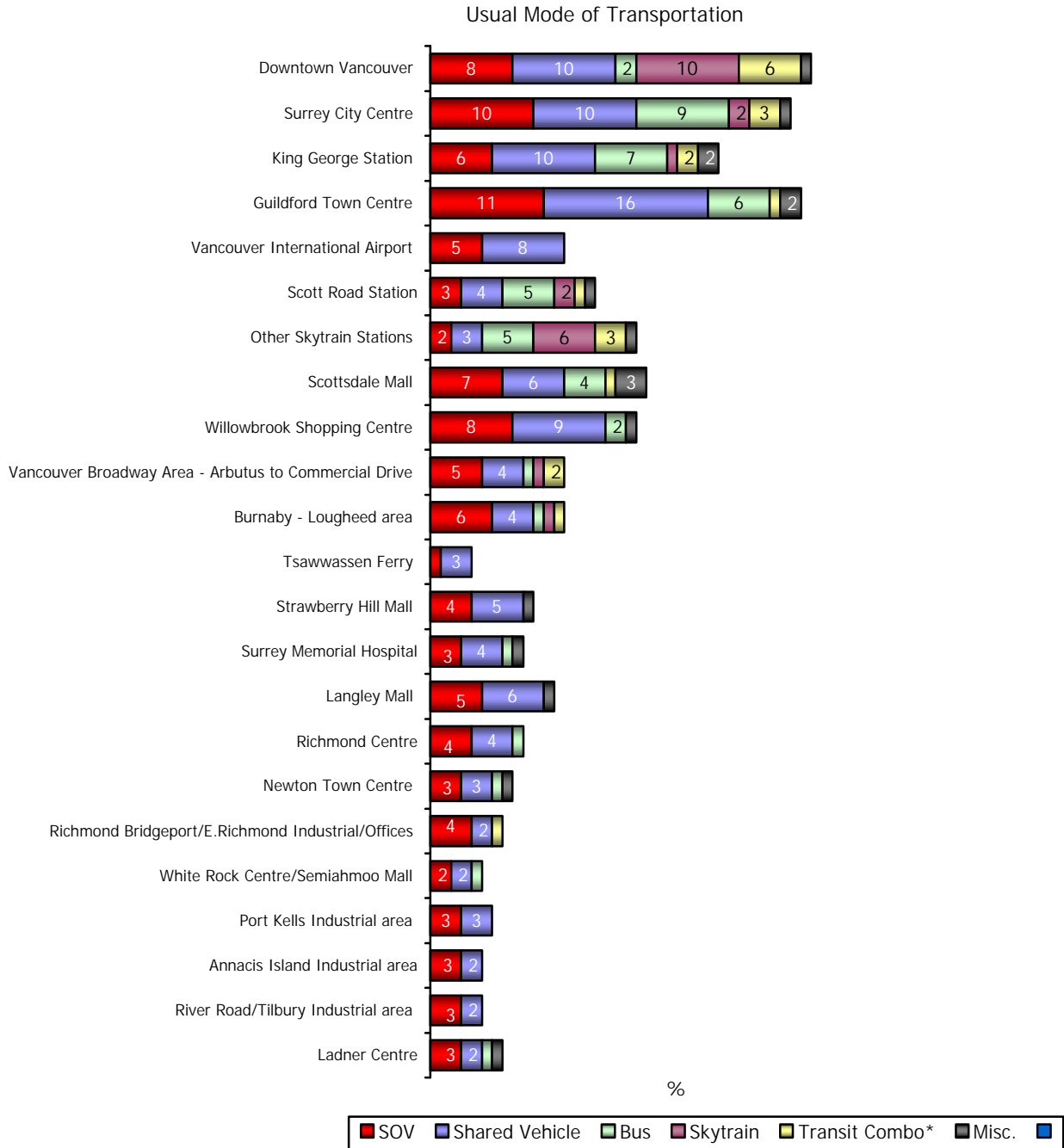
- King George SkyTrain station (20% SOV vs 28% total target market)
- Scott Road SkyTrain station (7% SOV vs 16% total target market)

### 5. Mode of Transportation Used to Selected Destinations

Modal use based on the total South of the Fraser target market is shown below.

Q.1c: What mode of transportation did you most often use to travel to or from (destination)?

**Base:** Total South of Fraser Target Market (n=1266)  
 Note: Destinations with bases under 30 omitted from this graph.



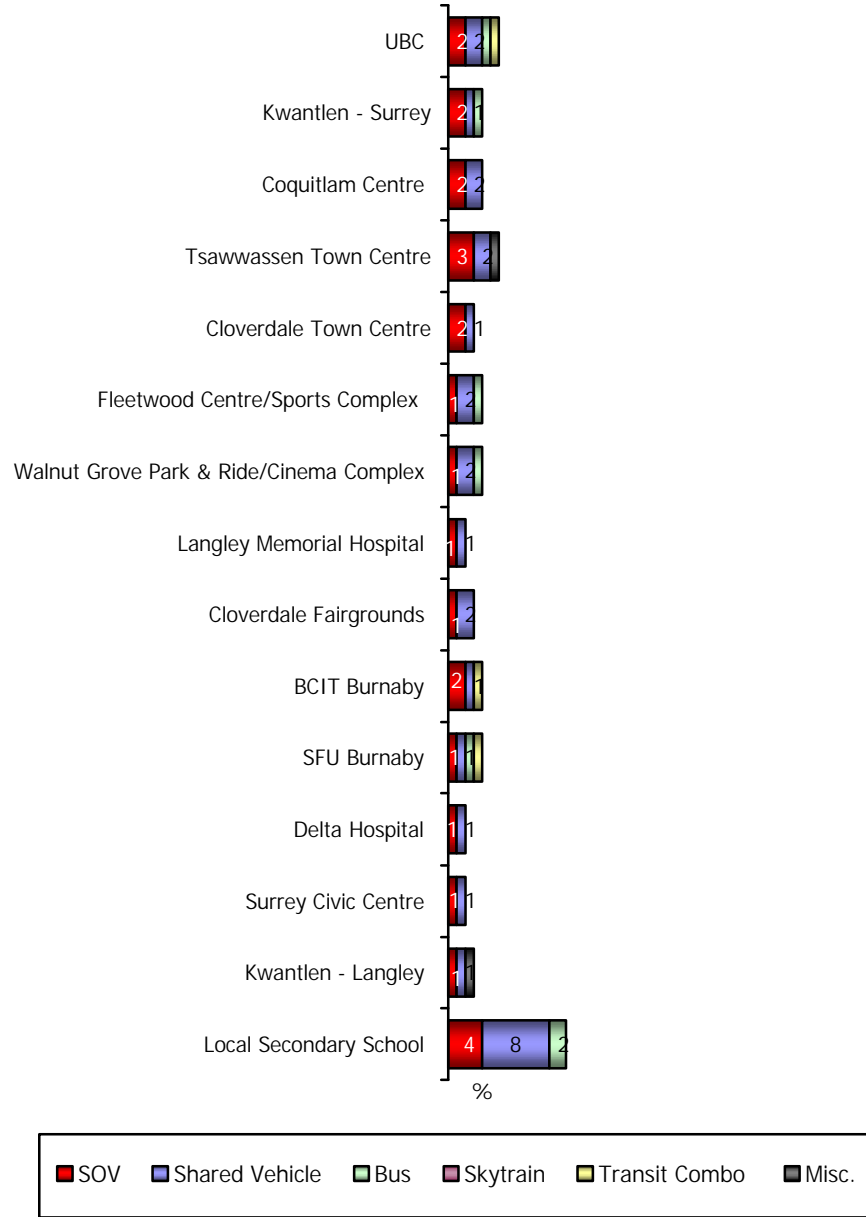
Transit combination mode includes bus & SkyTrain, bus & car, SkyTrain & car, SkyTrain & SeaBus, etc.  
 Misc. = Largely walking, but also pattern varies, bike, taxi, etc.

Q.1c: What mode of transportation did you most often use to travel to or from (destination)?

**Base: Total South of Fraser Target Market (n=1266)**

Note: Destinations with bases under 30 omitted from this graph.

Usual Mode of Transportation cont'd.



Target residents who have visited each destination within the past seven days were asked their usual mode of transportation to this destination. The following analysis summarizes the most common usage patterns. Note that percentages indicated here are **based on target travellers to each destination** (rather than based on total South of the Fraser target market as shown in the preceding graphs).

For most destinations, single occupancy and shared vehicles are the most common mode of transportation.

Visitors to the following destinations are most likely to use **single occupancy vehicles (SOVs)**:

***Shopping Centres / Shopping Districts***

- Tsawwassen Town Centre (55% travelled by SOV)
- Ladner Centre (42%)
- Cloverdale Town Centre (53%)
- Surrey City Centre (28% tied with “shared vehicle” and “bus”)
- White Rock Centre / Semiahmoo Mall (40% tied with “shared vehicle”)
- Burnaby – Lougheed area (46%)
- Vancouver Broadway area, Arbutus to Commercial (40%)

***Institutions***

- BCIT (51%)
- Kwantlen, Surrey campus (43%)
- Kwantlen, Langley campus (53%)
- University of British Columbia (36% tied with “shared vehicle”)
- Delta Hospital (47%)

***Industrial Areas***

- The industrial areas of Annacis Island (60%), River Road / Tilbury (62%), Port Kells (54%)
- Richmond Bridgeport / East Richmond industrial area and offices (59%).

For the following destinations, **shared vehicles** are the most common travel mode, although SOV travel remains quite prevalent for these locations:

***Shopping Centres / Shopping Districts***

- Guildford Town Centre (45%)
- Langley Mall (49% )
- Willowbrook Shopping Centre (48%)
- Newton Town Centre (37% tied with “SOV”)
- Strawberry Hill Mall (44%)

***Transportation Services***

- Vancouver International Airport (60%)
- Tsawwassen Ferry Terminal (60%)

***Transit***

- King George SkyTrain station (36% traveled by “shared vehicle”)

***Institutions***

- Langley Memorial Hospital (47% tied with “SOV”)
- Surrey Memorial Hospital (50%)
- Simon Fraser University (33% tied with “SOV”)

***Other Activity Destinations***

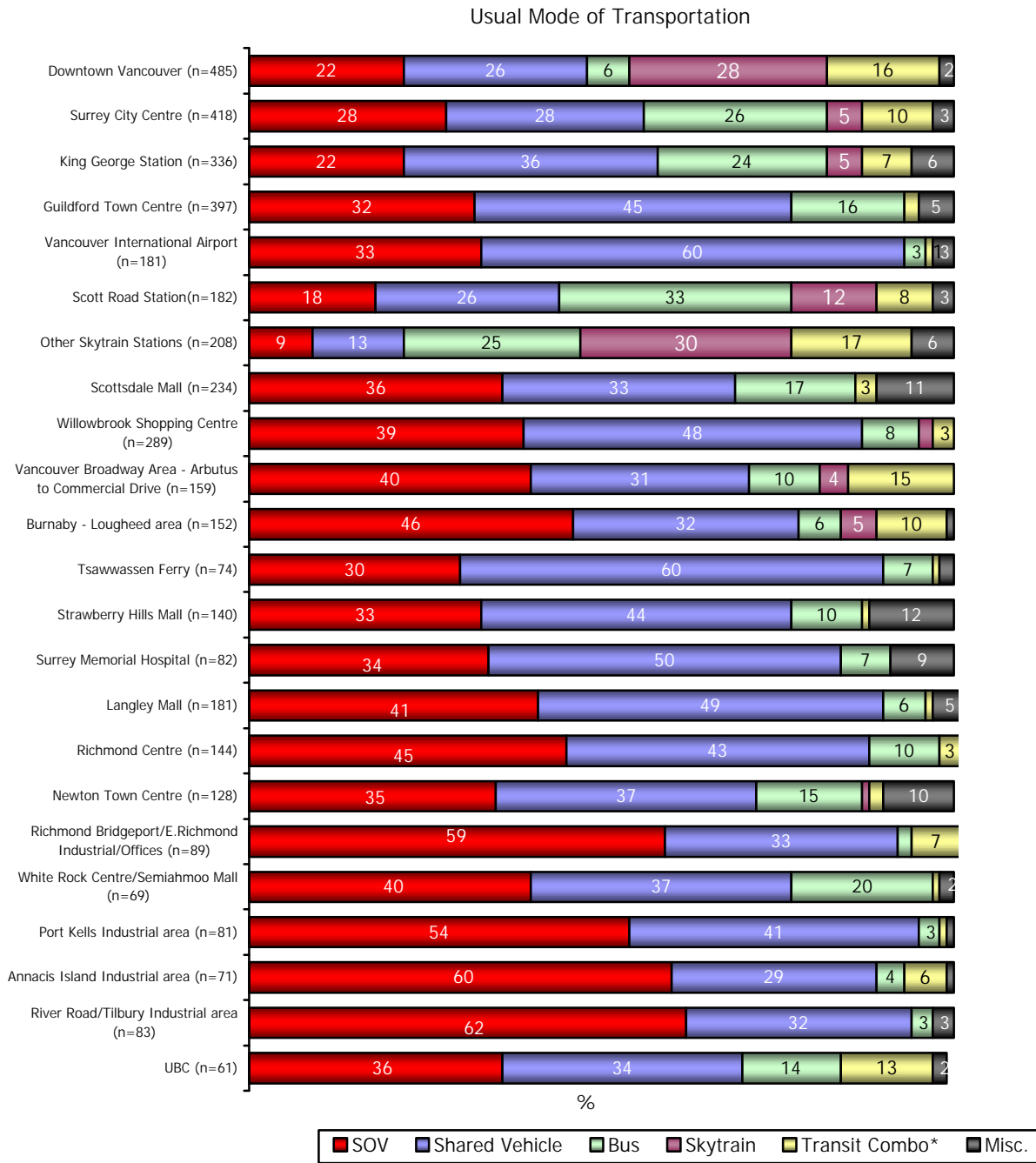
- Downtown Vancouver (26% tied with “SkyTrain”)
- Cloverdale Fairgrounds (58%)
- Fleetwood Centre / Sports Complex (55%)

***Transit and transit combinations*** (e.g., multiple-mode travel involving transit) are more common to some transit destinations. For example, travellers to the Scott Road SkyTrain station and other stations (excluding King George and Surrey City Centre) are most likely to arrive by transit (bus or SkyTrain—26% and 33%, respectively). Notably, only a small proportion (14%) of visitors to Surrey City Centre use SkyTrain alone or in combination—perhaps because this destination includes the mall as well as the SkyTrain station.

Downtown Vancouver is another destination with higher-than-average SkyTrain travel (28% claim it's the usual mode), although similar proportions do visit downtown by single-occupancy or shared vehicle.

Q.1c: What mode of transportation did you most often use to travel to or from (destination)?

Base: Total travelled to or from each destination in past 7 days  
 Note: Destinations with bases under 30 omitted from this graph.



\*Transit combination mode includes bus & SkyTrain, bus & car, SkyTrain & car, etc.

Misc. = Largely walking, but also bicycle, taxi mode varies, etc.

Q.1c: What mode of transportation did you most often use to travel to or from (destination)?

Base: Total travelled to or from destination in past 7 days \*\* Caution small base size

Usual Mode of Transportation cont'd.



\*Transit combination mode includes bus & SkyTrain, bus & car, SkyTrain & car, etc.  
 Misc. = Largely walking, but also bicycle, taxi mode varies, etc.



Mode Used Most Often Top 10 <u>Regional</u> Destinations in Past 7 Days					
	Downtown <u>Vancouver</u> (485) %	Surrey City <u>Centre</u> (418) %	Guildford Town <u>Centre</u> (397) %	King George <u>SkyTrain Stn.</u> (336) %	All other <u>SkyTrain Stns.</u> (208) %
Mode					
SOV	22	28	32	22	9
Shared Vehicle	26	28	45	36	13
Bus	6	26	16	24	25
SkyTrain	28	5	*	5	30
Transit Combo	16	10	2	7	17
Walk	1	3	5	5	5
Miscellaneous	1	1	*	1	1

	Scott Road <u>SkyTrain</u> (182) %	Vancouver Int'l. <u>Airport</u> (181) %	Burnaby- <u>Lougheed area</u> (152) %	Vancouver- <u>Broadway area</u> (159) %	Surrey <u>Memorial Hosp.</u> (82) %
Mode					
SOV	18	33	46	40	34
Shared Vehicle	26	60	32	31	50
Bus	33	3	6	10	7
SkyTrain	12	-	5	4	-
Transit Combo	8	1	10	15	-
Walk	1	-	-	-	6
Miscellaneous	1	3	1	-	3

Mode Used Most Often for Top 10 <u>Local</u> Destinations in Past 7 Days					
	Scottsdale Mall (234) %	Willowbrook <u>Shopping Ctr</u> (289) %	Langley Mall (181) %	Strawberry <u>Hill Mall</u> (128) %	Richmond <u>Centre</u> (144) %
Mode					
SOV	36	39	41	33	45
Shared Vehicle	33	48	49	44	43
Bus	17	8	6	10	10
SkyTrain	-	-	-	-	-
Transit Combo	3	2	1	1	3
Walk	8	3	2	10	-
Miscellaneous	3	1	1	2	-

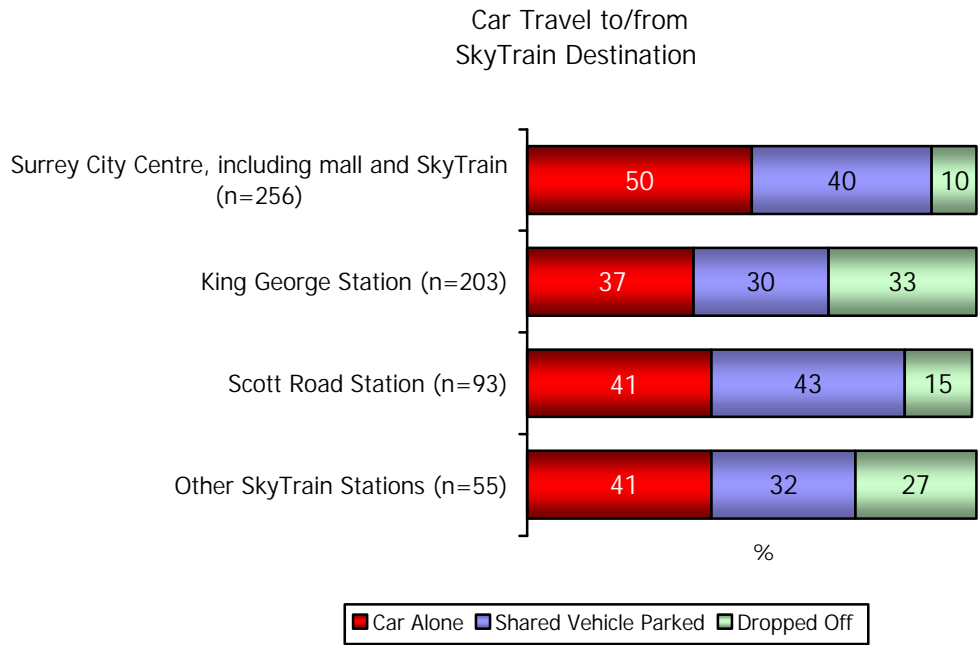
  

	Newton Town <u>Centre</u> (128) %	Ladner Centre (115) %	White Rock Ctr <u>Semiahmoo</u> (69) %	Tsawwassen <u>Town Centre</u> (99) %	Cloverdale <u>Town Centre</u> (70) %
Mode					
SOV	35	42	40	55	53
Shared Vehicle	37	33	37	30	32
Bus	15	7	20	1	6
SkyTrain	1	-	-	-	-
Transit Combo	2	3	1	-	-
Walk	10	13	-	12	7
Miscellaneous	1	2	2	2	2

Most car travel to or from SkyTrain destinations tends to be in shared vehicles, but the proportion being “dropped off” varies. While the shared vehicle is most likely to be parked at Surrey Centre and Scott Road stations, the proportion of car travellers being dropped off is highest at King George (33%) and other SkyTrain stations (27%).

Q.1c: What mode did you most often use to travel to or from (station)?  
 (IF CAR/VAN/TRUCK) Was that alone or with someone else? Did you park the car or did someone drop you off?

Base: Travelled by car to/from each station.



## **6. Time of Travel to Selected Destinations**

Respondents were probed for time periods they most often travelled to or departed from each destination. To control for questionnaire length, time of travel was only asked of car/van/truck users and of bus users for each destination.

The SkyTrain stations tend to be used by bus travellers during the peak periods, Monday to Friday before 9:30am and 3:00-6:30pm. The patterns of travellers using vehicles are somewhat less predictable, but tend to fall into these same time periods. However, note that Surrey City Centre patterns follow the shopping centre pattern of greater mid-day vehicle traffic (9:30am-3:00pm) on weekdays.

Travel to the shopping destinations tends to occur most frequently weekdays from 9:30 to 3:00pm, and most typically by car travellers. Base sizes for bus travellers to shopping destinations generally are too small for analysis.

The industrial areas are most frequented by car, Monday to Friday between 9:30am and 3:00pm. Translink may wish to study this car traffic pattern further. Base sizes for bus travellers are too small for separate analysis.

Note that much travel occurs in the weekday non-peak (9:30 to 3pm). Bus usage reflects the current schedules, which are geared to peak hours. Consideration should be given to improving service during the daytime non-peak to attempt to capture more of this travel, especially to the shopping malls and districts.

The following tables fully detail the time periods reported for travel to or from specific destinations, with results for total bus, SOV and shared vehicle users; as well, SOV/shared vehicle travellers and bus travellers are shown separately (for base sizes of at least 30). Percentages add to more than 100% due to multiple responses – as travel to and from a destination may occur in different time periods.

Q.1d: At what times of day did you most often travel to and depart from (NAME OF DESTINATION)? DO NOT READ. PROBE IF NEEDED FOR "to" AND "depart from" and DAYS OF WEEK AS LISTED

Base: Travelled by car/van/truck or by bus to/from each station.

Time of Travel (Most Often)												
	King George Sky Train			Surrey City Centre (incl. SkyTrain)			Scott Road Sky Train			Other Sky Train		
	Total Bus, SOV, Carpool (289) %	By SOV, Carpool (188) %	By Bus (101) %	Total Bus, SOV, Carpool (380) %	By SOV, Carpool (238) %	By Bus (142) %	Total Bus, SOV, Carpool (152) %	By SOV, Carpool (88) %	By Bus (65) %	Total Bus, SOV, Carpool (136) %	By SOV, Carpool (54) %	By Bus (82) %
<b>Monday to Friday:</b>												
Before 9:30am	▲43	38	▲50	23	15	35	▲43	39	▲47	36	22	▲44
Between 9:30am and 3pm	32	32	33	▲44	▲50	35	30	34	26	27	25	29
Between 3pm and 6:30pm	▲43	40	▲47	▲41	31	▲57	▲44	38	▲51	▲46	36	▲51
After 6:30pm	19	20	19	22	19	26	24	27	21	24	23	25
<b>Saturday:</b>												
Before 6pm	19	16	24	23	24	21	10	7	12	15	13	17
After 6pm	9	6	14	9	8	11	4	4	3	5	2	6
<b>Sunday / Holidays:</b>												
Before 6pm	13	14	12	11	13	7	10	11	8	14	16	13
After 6pm	6	5	6	5	4	6	1	1	2	8	6	10
Various times / Depends/ D.K.	2	3	1	3	4	2	2	1	2	4	7	3

Time of Travel (Most Often)												
	Downtown Vancouver			Vancouver International Airport*			UBC Campus			BCIT Campus		
	Total Bus, SOV, Carpool (335) %	By SOV, Carpool (249) %	By Bus (86) %	Total Bus, SOV, Carpool (168) %	By SOV, Carpool (159) %	* %	Total Bus, SOV, Carpool (58) %	By SOV, Carpool (45) %	* %	Total Bus, SOV, Carpool (47) %	By SOV, Carpool (38) %	* %
<b>Monday to Friday:</b>												
Before 9:30am	32	27	▲46	33	34		35	37		▲47	38	
Between 9:30am and 3pm	34	34	31	41	▲41		▲47	40		23	31	
Between 3pm and 6:30pm	42	39	▲50	28	27		37	29		▲56	43	
After 6:30pm	23	26	16	24	24		19	17		31	32	
<b>Saturday:</b>												
Before 6pm	17	18	15	8	8		15	13		2	3	
After 6pm	11	12	7	4	4		10	13		1	1	
<b>Sunday / Holidays:</b>												
Before 6pm	13	14	8	10	11		12	8		4	5	
After 6pm	5	7	2	6	6		7	2		5	6	
Various times / Depends/ D.K.	4	3	7	1	2		2	3		-	-	

\* Bus Users omitted due to insufficient base size (n<30 interviews).  
 Note multiple response due to different time periods for arriving and departing.  
 In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

Time of Travel (Most Often)												
	Tsawwassen Ferry Terminal			Scottsdale Mall			Tsawwassen Town Centre			Ladner Centre		
	Total Bus, SOV, Carpool (69) %	By SOV, Carpool Vanpool (62) %	*	Total Bus, SOV, Carpool (205) %	By SOV, Carpool Vanpool (162) %	By Bus (43) %	Total Bus, SOV, Carpool (81) %	By SOV, Carpool Vanpool (79) %	*	Total Bus, SOV, Carpool (95) %	By SOV, Carpool Vanpool (89) %	*
<b>Monday to Friday:</b>												
Before 9:30am	28	29		9	9	10	20	19		18	19	
Between 9:30am and 3pm	25	24		▲43	43	41	▲41	41		▲51	49	
Between 3pm and 6:30pm	21	24		▲36	33	45	▲35	35		23	25	
After 6:30pm	29	29		22	24	18	17	16		14	16	
<b>Saturday:</b>												
Before 6pm	21	20		28	29	25	21	20		20	22	
After 6pm	11	13		8	6	13	8	8		10	11	
<b>Sunday / Holidays:</b>												
Before 6pm	11	12		12	14	6	15	15		10	10	
After 6pm	3	2		4	5	3	5	5		1	1	
Various times / Depends/ D.K.	5	5		2	1	3	18	18		11	9	

Time of Travel (Most Often)												
	Surrey Memorial Hospital			Guildford Town Centre			Langley Memorial Hospital			Langley Mall		
	Total Bus, SOV, Carpool (75) %	By SOV, Carpool Vanpool (70) %	*	Total Bus, SOV, Carpool (366) %	By SOV, Carpool Vanpool (303) %	By Bus (63) %	Total Bus, SOV, Carpool (37) %	By SOV, Carpool Vanpool (36) %	*	Total Bus, SOV, Carpool (171) %	By SOV, Carpool Vanpool (159) %	*
<b>Monday to Friday:</b>												
Before 9:30am	22	21		9	9	9	12	12		6	6	
Between 9:30am and 3pm	▲46	44		▲41	42	41	▲34	35		▲48	49	
Between 3pm and 6:30pm	28	27		▲37	36	42	21	22		38	36	
After 6:30pm	22	23		22	20	29	27	29		21	22	
<b>Saturday:</b>												
Before 6pm	6	6		24	24	26	12	12		32	35	
After 6pm	8	8		7	6	11	11	11		6	7	
<b>Sunday / Holidays:</b>												
Before 6pm	14	15		11	11	13	10	10		15	16	
After 6pm	11	11		3	3	4	9	10		4	4	
Various times / Depends/ D.K.	1	1		4	4	3	11	7		2	2	

\* Omitted due to insufficient base size (n<30 interviews).

Note multiple response due to different time periods for arriving and departing.

In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

Time of Travel (Most Often)									
	Willowbrook Shopping Centre		Cloverdale Fairgrounds		White Rock Centre / Semiahmoo Mall		Cloverdale Town Centre		*
	Total Bus, SOV, Carpool (270) %	By SOV, Carpool Vanpool (249) %	Total Bus, SOV, Carpool (35) %	By SOV, Carpool Vanpool (32) %	Total Bus, SOV, Carpool (67) %	By SOV, Carpool Vanpool (54) %	Total Bus, SOV, Carpool (65) %	By SOV, Carpool Vanpool (61) %	
<b>Monday to Friday:</b>									
Before 9:30am	5	6	22	18	9	11	21	21	
Between 9:30am and 3pm	▲50	51	▲39	36	33	35	32	33	
Between 3pm and 6:30pm	35	34	18	20	37	37	40	36	
After 6:30pm	19	21	30	30	14	15	24	22	
<b>Saturday:</b>									
Before 6pm	27	28	17	16	20	15	26	26	
After 6pm	6	7	13	12	7	1	6	6	
<b>Sunday / Holidays:</b>									
Before 6pm	18	20	13	14	16	17	21	18	
After 6pm	3	3	4	4	5	6	1	1	
Various times / Depends/ D.K.	2	1	4	4	3	1	3	3	

Time of Travel (Most Often)									
	Fleetwood Centre/ Sports Complex		Newton Town Centre		Strawberry Hill Mall		Walnut Grove Park & Ride / Cinema Complex		*
	Total Bus, SOV, Carpool (43) %	By SOV, Carpool Vanpool (37) %	Total Bus, SOV, Carpool (107) %	By SOV, Carpool Vanpool (86) %	Total Bus, SOV, Carpool (125) %	By SOV, Carpool Vanpool (107) %	Total Bus, SOV, Carpool (58) %	By SOV, Carpool Vanpool (48) %	
<b>Monday to Friday:</b>									
Before 9:30am	5	-	15	13	4	2	26	27	
Between 9:30am and 3pm	▲30	34	▲41	40	36	34	12	12	
Between 3pm and 6:30pm	▲29	21	33	33	29	26	▲40	31	
After 6:30pm	▲28	22	29	32	26	28	30	36	
<b>Saturday:</b>									
Before 6pm	10	11	24	26	20	20	22	24	
After 6pm	10	11	5	4	10	10	25	31	
<b>Sunday / Holidays:</b>									
Before 6pm	13	15	12	15	11	11	11	13	
After 6pm	-	-	4	5	6	5	4	4	
Various times / Depends/ D.K.	16	19	4	4	5	5	-	-	

\* Bus Users omitted due to insufficient base size (n<30 interviews).

Note multiple response due to different time periods for arriving and departing.

In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

Time of Travel (Most Often)												
	Annacis Island Industrial Area			River Road / Tilbury Island Industrial Area			Port Kells Industrial Area			Richmond Centre		
	Total Bus, SOV, Carpool (70) %	By SOV, Carpool (64) %	*	Total Bus, SOV, Carpool (81) %	By SOV, Carpool (77) %	*	Total Bus, SOV, Carpool (78) %	By SOV, Carpool (74) %	*	Total Bus, SOV, Carpool (143) %	By SOV, Carpool (127) %	*
<b>Monday to Friday:</b>												
Before 9:30am	35	30		22	21		38	38		15	15	
Between 9:30am and 3pm	▲52	56		▲52	53		39	40		▲44	43	
Between 3pm and 6:30pm	29	28		32	32		31	29		27	29	
After 6:30pm	18	18		18	16		20	19		21	20	
<b>Saturday:</b>												
Before 6pm	7	4		7	7		13	13		22	21	
After 6pm	3	4		2	2		1	-		10	8	
<b>Sunday / Holidays:</b>												
Before 6pm	5	4		6	6		10	10		10	11	
After 6pm	1	1		-	-		-	-		1	2	
Various times / Depends/ D.K.	-	-		2	2		3	3		1	2	

Time of Travel (Most Often)												
	Richmond Bridgeport/ East Industrial/Offices			Burnaby – All Destinations Along Lougheed Hwy			Coquitlam Centre			Any Local Secondary School		
	Total Bus, SOV, Carpool (89) %	By SOV, Carpool (84) %	*	Total Bus, SOV, Carpool (144) %	By SOV, Carpool (121) %	*	Total Bus, SOV, Carpool (43) %	By SOV, Carpool (37) %	*	Total Bus, SOV, Carpool (148) %	By SOV, Carpool (129) %	*
<b>Monday to Friday:</b>												
Before 9:30am	33	33		23	22		17	19		▲56	▲56	
Between 9:30am and 3pm	42	44		▲40	45		30	31		41	37	
Between 3pm and 6:30pm	34	35		32	29		36	33		40	37	
After 6:30pm	11	11		24	21		29	22		12	14	
<b>Saturday:</b>												
Before 6pm	14	12		15	15		28	24		3	3	
After 6pm	1	1		7	6		23	18		2	2	
<b>Sunday / Holidays:</b>												
Before 6pm	9	10		4	4		20	20		4	5	
After 6pm	1	1		2	2		12	10		1	1	
Various times / Depends/ D.K.	6	6		3	3		2	2		-	-	

\* Bus Users omitted due to insufficient base size (n<30 interviews).

Note multiple response due to different time periods for arriving and departing.

In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

<b>Time of Travel (Most Often)</b>			
	<b>Vancouver – Broadway Area Between Commercial &amp; Arbutus</b>		
	Total Bus, SOV, <u>Carpool</u> (152) %	By SOV, Carpool <u>Vanpool</u> (118) %	<u>By Bus</u> (35) %
<b>Monday to Friday:</b>			
Before 9:30am	26	23	36
Between 9:30am and 3pm	43	▲46	34
Between 3pm and 6:30pm	37	36	41
After 6:30pm	23	22	24
<b>Saturday:</b>			
Before 6pm	11	12	9
After 6pm	8	8	8
<b>Sunday / Holidays:</b>			
Before 6pm	6	6	5
After 6pm	3	2	5
Various times / Depends/ D.K.	2	2	3

Note multiple response due to different time periods for arriving and departing.

In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.



The following tables summarize time of travel for the top 10 regional and top 10 local destinations.

<b>Times of Day Most Often Travel to and Depart from: Top 10 Regional Destinations in Past 7 Days*</b>					
<b>Time</b>	<u>Downtown Vancouver</u> (335) %	<u>Surrey City Centre</u> (380) %	<u>Guildford Town Centre</u> (366) %	<u>King George SkyTrain Stn.</u> (289) %	<u>All other SkyTrain Stns.</u> (136) %
<b>Monday-Friday:</b>					
Before 9:30am	32	23	9	▲43	36
9:30am to 3pm	34	▲44	▲41	32	27
3pm to 6:30pm	42	▲41	▲37	▲43	▲46
After 6:30pm	23	22	22	19	24
<b>Saturday:</b>					
Before 6pm	17	23	24	19	15
After 6pm	11	9	7	9	5
<b>Sunday:</b>					
Before 6pm	13	11	11	13	14
After 6pm	5	5	3	6	8
<b>Time</b>	<u>Scott Road SkyTrain</u> (152) %	<u>Vancouver Int'l. Airport</u> (168) %	<u>Burnaby-Lougheed area</u> (144) %	<u>Vancouver-Broadway area</u> (152) %	<u>Surrey Memorial Hospital</u> (75) %
<b>Monday-Friday:</b>					
Before 9:30am	▲43	33	23	26	22
9:30am to 3pm	30	▲41	▲40	▲43	▲46
3pm to 6:30pm	▲44	28	32	▲37	28
After 6:30pm	24	24	24	23	22
<b>Saturday:</b>					
Before 6pm	10	8	15	11	6
After 6pm	4	4	7	8	8
<b>Sunday:</b>					
Before 6pm	10	10	4	6	14
After 6pm	1	6	2	3	11

\*Time among total who traveled to this destination by bus, SOV or shared vehicle (carpool/vanpool).  
 Note multiple response due to different time periods for arriving and departing.  
 In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

Times of Day Most Often Travel to and Depart from: Top 10 Local Destinations in Past 7 Days*					
	<u>Scottsdale Mall</u> (205) %	<u>Willowbrook Shopping Ctr</u> (270) %	<u>Langley Mall</u> (171) %	<u>Strawberry Hill Mall</u> (125) %	<u>Richmond Centre</u> (143) %
<b>Time</b>					
<b>Monday-Friday:</b>					
Before 9:30am	9	5	6	4	15
9:30am to 3pm	▲43	▲50	▲48	36	▲44
3pm to 6:30pm	▲36	35	38	29	27
After 6:30pm	22	19	21	26	21
<b>Saturday:</b>					
Before 6pm	28	27	32	20	22
After 6pm	8	6	6	10	10
<b>Sunday:</b>					
Before 6pm	12	18	15	11	10
After 6pm	4	3	4	6	1
	<u>Newton Town Centre</u> (107) %	<u>Ladner Centre</u> (95) %	<u>White Rock Ctr Semiahmoo</u> (67) %	<u>Tsawwassen Town Centre</u> (81) %	<u>Cloverdale Town Centre</u> (65) %
<b>Time</b>					
<b>Monday-Friday:</b>					
Before 9:30am	15	18	9	20	21
9:30am to 3pm	▲41	▲51	▲33	▲41	▲32
3pm to 6:30pm	▲33	23	▲37	▲35	▲40
After 6:30pm	29	14	14	17	24
<b>Saturday:</b>					
Before 6pm	24	20	20	21	26
After 6pm	5	10	7	8	6
<b>Sunday:</b>					
Before 6pm	12	10	16	15	21
After 6pm	4	1	5	5	1

\*Time among total who traveled to this destination by bus, SOV or shared vehicle (carpool/vanpool).  
 Note multiple response due to different time periods for arriving and departing.  
 In these tables ▲ merely highlights the leading volume time periods – not necessarily statistically higher.

## **B. Improved Bus Service to Selected Destinations**

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Those who have traveled to a particular destination within the last seven days by car, van or truck (either alone or with someone else) were asked if they would take the bus to that destination, if the service met their needs. Respondents consisted of both regular transit users and non-users with potential to use improved transit more often. Keep in mind that non-transit users who earlier in the survey had indicated they would *not* consider taking improved public transit more often, were screened out.

### **7. Interest in Bus Service to Selected Destinations among Target Non-users**

Interest is highest in converting to public transit among those travelling to SkyTrain stations and/or to Surrey City Centre. Between 60% and 70% would consider bus usage if it met their needs.

Travellers to Downtown Vancouver, Willowbrook Shopping Centre, and Guildford Town Centre, three destinations with high vehicle usage, show considerable interest in improved transit--between 50% to 60% claims they would take the bus if it met their needs.

To destinations with a moderate number of private vehicle travellers—Vancouver International Airport, Scottsdale Mall, Richmond Centre, Burnaby/Lougheed area, Vancouver/Broadway area—approximately half (50%) of car/van/truck travellers would use improved transit. Note interest is slightly lower for Scottsdale Mall - only 40%.

Among other destinations with more limited car volume (although note that the volume may originate from a very targeted geographic area), interest in improved bus service tends to range from 30% to 50%.

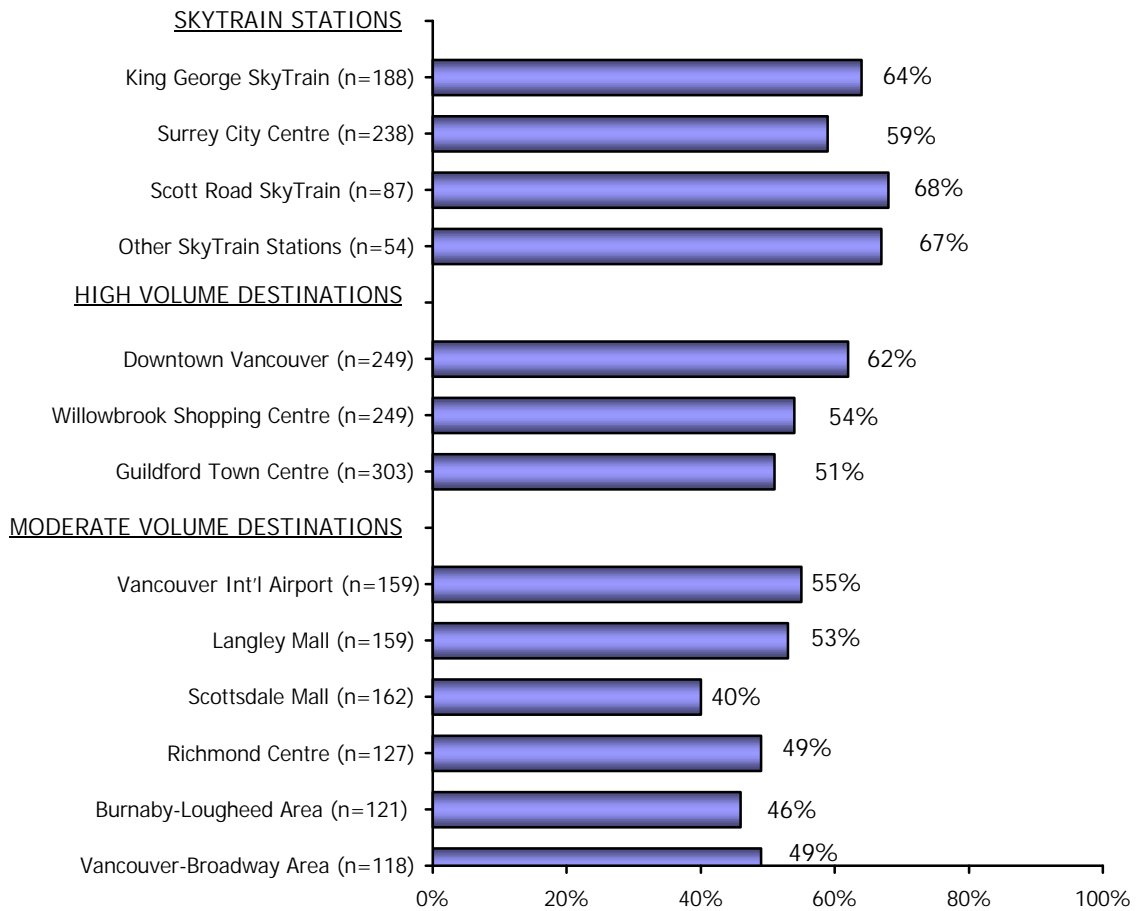
Note that SOV travellers to most of these destinations show similar levels of interest in improved bus service as those in shared vehicles.

The graph following details the proportions who would take the bus, if it met their needs when travelling to particular destinations. Note that destinations with limited usage by car (base size of less than 30) have been omitted.

*Q.1e: Would you take the bus to (NAME DESTINATION) if bus service met your needs?*

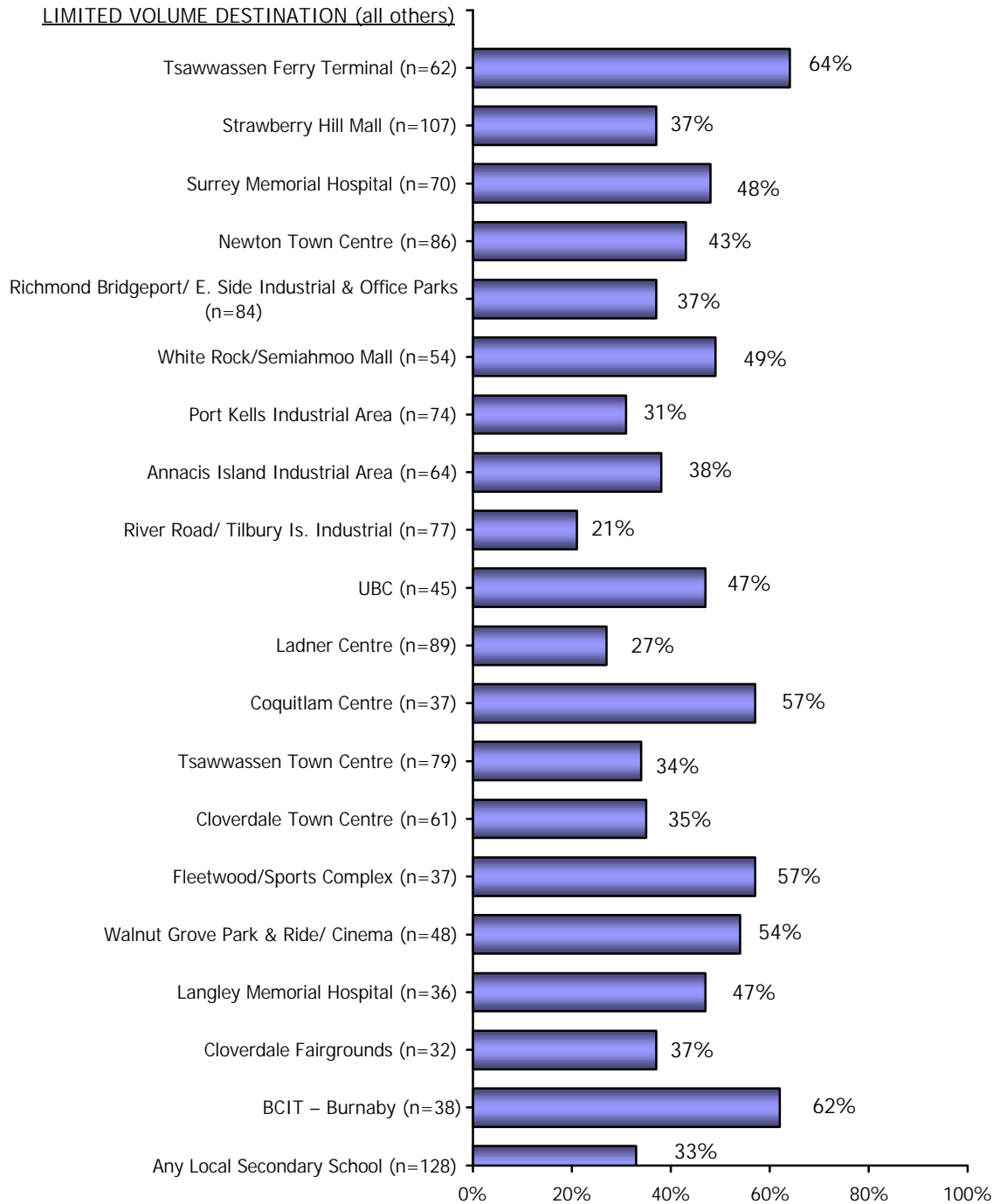
*Base: Total Car Alone or with Someone to/from Specific Destination.*

Would Consider Taking Bus to/from This Destination



Q.1e: Would you take the bus to (NAME DESTINATION) if bus service met your needs?  
 Base: Total Car Alone or with Someone to/from Specific Destination.

Would Consider Taking Bus to/from This Destination cont'd.



## **8. Changes Required to Consider Bus Service to/from Selected Destinations**

Bus service changes that would encourage car users to consider transit usage were probed for each destination.

For the majority of destinations, improvements to **frequency of service** are required, first and foremost.

Having more **direct routes** and/or **routes closer to home** are secondary changes requested for most destinations.

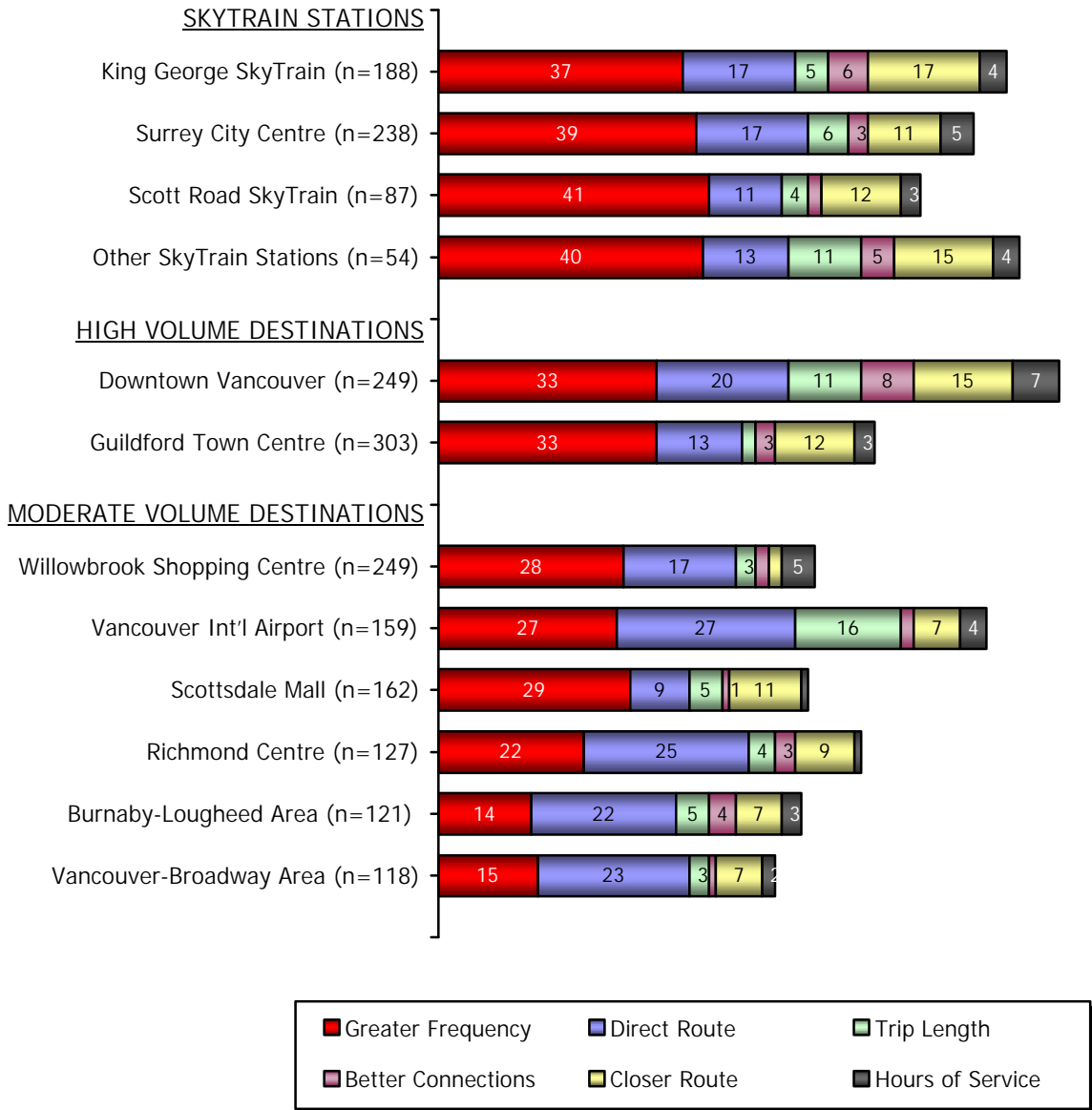
For more distant locations currently not served by SkyTrain, such as the Vancouver International Airport, UBC, BCIT, Tsawwassen Ferry Terminal, Richmond locations, Burnaby-Lougheed area, Coquitlam Centre and Vancouver-Broadway area, there is equal, and in some cases greater need, for more direct routes, along with some suggestions (from across the region) of express/shuttle service for the airport and Downtown Vancouver.

Reducing the trip length, improving connections and/or improving the hours of service tend to be tertiary needs for most destinations. The exception is for travellers to the Vancouver International Airport, UBC and to Coquitlam Centre, for which reducing the trip length is relatively important.

Q.1f: How would bus services need to change for you to consider taking the bus to or from that destination?

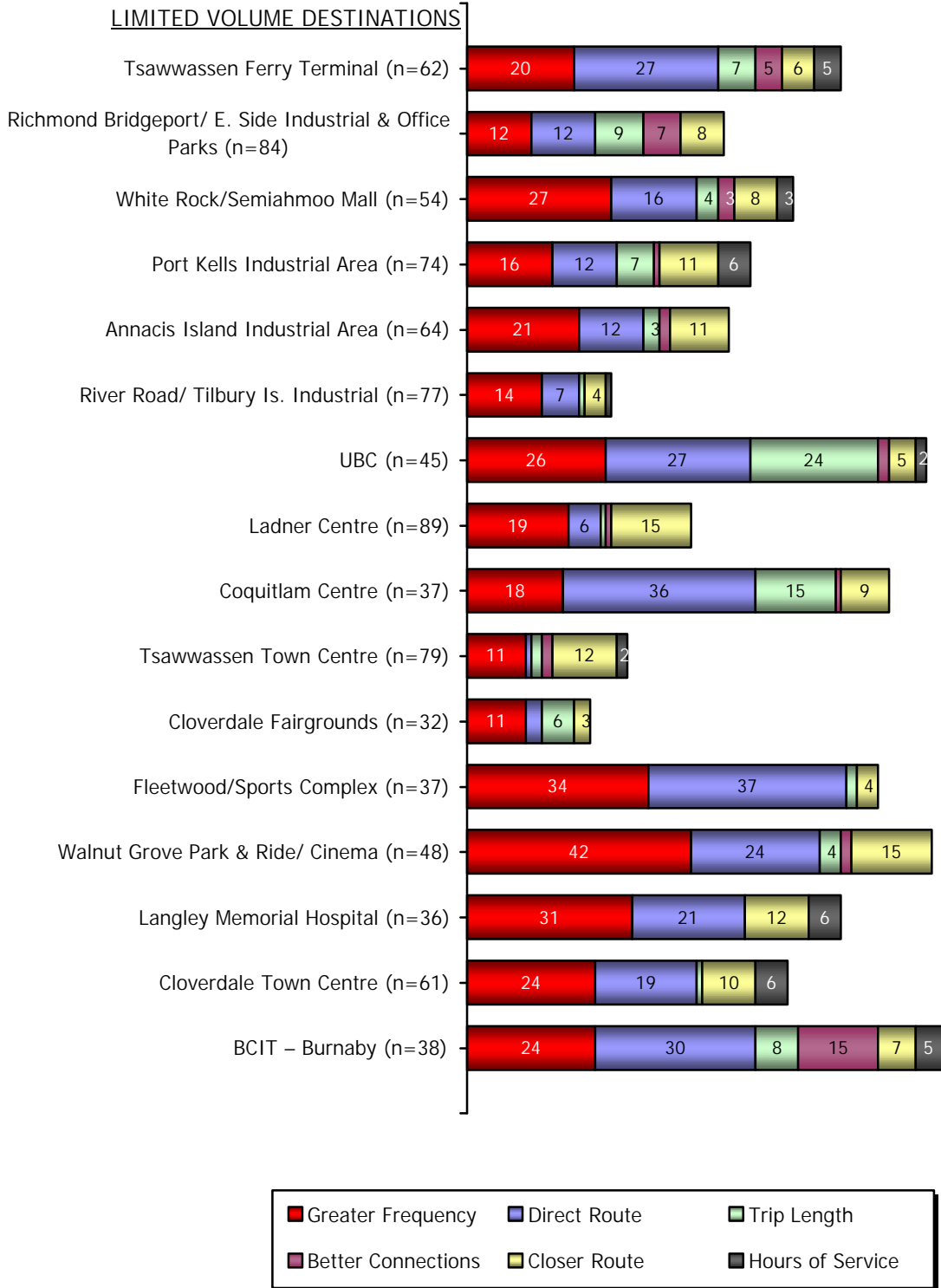
Base: Total Car Alone or with Someone to/from Specific Destination.

How Would Bus Service Need to Change



Q.1f: How would bus services need to change for you to consider taking the bus to or from that destination?  
 Base: Total Car Alone or with Someone to/from Specific Destination.

How would Bus Service Need to Change cont'd.





Users of private vehicles who say they require “greater frequency” before considering bus use were probed further, in an attempt to define more clearly what consumers mean by more frequent service. The most popular time intervals mentioned are every 10-20 minutes—and most of those fall into the 10-15 minute range.

Q.1f: *How would bus services need to change for you to consider taking the bus to or from that destination? IF “MORE FREQUENT”, PROBE: How frequently? During what time period?*

*Base: Total Car Alone or with Someone to/from Specific Destination*

<b>Main Volunteered Comments about Frequency Needed to Consider Using Bus *</b>				
<b>Key Selected Destinations</b>	<b>Greater frequency (interval not specified)</b>	<b>10-20 min. (all day/+ peak)</b>	<b>30 min. (all day/+ peak)</b>	<b>60 min. Mon-Sat</b>
<b>SkyTrain</b>				
King George SkyTrain Stn. (n=188) %	6	18	13	2
Surrey City Centre (n=238) %	12	18	7	1
Scott Road Station (n=87) %	10	24	5	2
Other SkyTrain stations (n=54) %	17	20	7	-
<b>High Volume</b>				
Downtown Vancouver (n=249) %	10	15	7	3
Guildford Town Centre (n=303) %	12	14	6	2

## 9. **Bus Share of Travellers**

In this section we will discuss the share of target group travellers who use buses and the potential to convert users of private vehicles to the bus mode. If we look at the proportion of the target market travelling to or from a particular destination by **any** mode and compare this to the proportion who take the bus (in the past 7 days), the “bus share” of target travellers is revealed.

Past week bus usage is highest for Surrey City Centre (9% of total South of the Fraser target market), followed by King George SkyTrain station (7%), Guildford Town Centre (6%), Scott Road station (5%) and all other SkyTrain stations (5%). To all other main destinations 3% or less travel by bus most often (see graph page 14).

Currently, buses capture anywhere from 1% to 33% of the target group who travels to a specific key destination (i.e., the share of travellers). Not surprisingly, the greatest use of buses is found among travellers to/from the SkyTrain stations, which undoubtedly are the best serviced at this time. 24-33% of target market travellers to these destinations usually travel there by bus.

Aside from the SkyTrain stations, past week bus usage reaches 15-20% for a few high volume destinations (Guildford Town Centre, Scottsdale Mall) and for some popular local destinations (White Rock Centre/Semiahmoo Mall, Newton Town Centre). But in general, the bus share tends to fall at or below 10% of travellers for many destinations.

Among those who currently take SOV or shared vehicles to the destination, there appears to be sizable potential for buses to be considered an option, if the person’s “needs are met.” Note that this is merely a gauge of interest, not a forecast of conversion.

Destinations with the largest potential to attract SOV or shared vehicles users to bus are:

- ◆ **Guildford Town Centre**—twice as many people as now riding the bus say they would consider using it if their needs were met (or 13% of the total South of the Fraser target market);
- ◆ **Downtown Vancouver**—most transit travel to/from Downtown is via SkyTrain, however, 11% of the total target market in the South of the Fraser region would consider taking the bus downtown. Note that a majority (over 70%) of these are “potential” rather than “current” riders, indicating that downtown bus service is particularly attractive to new customers.
- ◆ **Surrey City Centre**—a group about 20% larger the current base of bus riders to this destination say they would consider bussing to/from Surrey City Centre instead of taking a car (or 11% of the total South of the Fraser target market).
- ◆ **King George SkyTrain Station**—a group about 40% larger than the current base of bus riders would consider converting from car to bus if the service met their needs (or 10% of the total South Fraser target market).
- ◆ **Willowbrook Shopping Centre**—over five times as many people as now ride the bus to/from Willowbrook would consider it if the service met their needs (or 9% of the total South of the Fraser target market). There appears to be high potential to capture new users with this type of service improvement—nearly 70% of the “willing to consider” group are potential transit users.
- ◆ **Vancouver International Airport**—current usage is virtually non-existent (less than 1%). This is another destination with growth potential (7% of the total South of Fraser target group appear receptive to the idea).
- ◆ **Other destinations** (with 5-6% of the South of Fraser target group willing to consider bus use) are:
  - Langley Mall, Scottsdale Mall, Scott Road SkyTrain, Burnaby Lougheed area.

The table below illustrates these results for the top 10 regional and top 10 local destinations.

Top Regional Destinations	Past 7 Day Usage		Bus Share of Travellers	SOV/ Car/Vanpool would consider bus if service met needs*
	By All Modes	By Bus		
	(1266) % **	(1266) % **		(1266) % **
1- Downtown Vancouver	37	2	6%	◆ 11
2- Surrey City Centre	35	9	26%	11
3- Guildford Town Centre	35	6	16%	13
4- King George SkyTrain Station	28	7	24%	10
5- All other SkyTrain Stations	19	5	25%	1
6- Scott Road SkyTrain Station	16	5	33%	5
7- Vancouver International Airport	14	<1	3%	7
8- Burnaby along Lougheed Hwy	13	1	6%	5
9- Vancouver-Broadway area	13	1	10%	4
10- Surrey Memorial Hospital	7	1	7%	◆ 3
<b>Top Local Destinations</b>				
1- Scottsdale Mall	20	3	17%	5
2- Willowbrook Shopping Centre	20	2	8%	◆ 9
3- Langley Mall	12	1	6%	◆ 6
4- Strawberry Hill Mall	11	1	10%	3
5- Richmond Centre	10	1	10%	◆ 4
6- Newton Town Centre	9	2	15%	3
7- Ladner Centre	6	<1	7%	◆ 1
8- White Rock Ctr/Semiahmoo	6	1	20%	2
9- Tsawwassen Town Centre	5	<1	1%	1
10- Cloverdale Town Centre	5	<1	1%	1
Any local secondary school	15	2	11%	4

\*\* % based on Total South of Fraser River Target Market (n=1266 actual/ 1321 weighted).

“Bus Share of Travellers” = Bus mode travellers divided by all mode travellers in past 7 days.

◆ means >60% of this group are “ Potential” transit users (currently not regular users).

Reference: Questions 1a, 1c, 1e.

## C. Reaction to New Bus Service Concepts

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TransLink planners have developed ten regional and seven local bus service concepts for specific geographic markets within the South of the Fraser River study area. Each concept was tested among the *transit target market* — *current regular transit riders and potential riders* within a designated geographic market.

A description of each service concept was read to respondents, who were then asked to indicate their likelihood of using the proposed bus service. In addition, those who were at least somewhat interested in each service option were asked to estimate the number of one-way trips they would take using this service and which, if any, bus routes currently used would be replaced by the new service.

Results are presented first in the **Concepts Overview** section for all service concepts combined within each of three geographic sub-regions. More detail on the regional concepts and then on the local concepts follow in subsequent sections. The analysis is based on the concept's capability to attract the targeted market and on weekly one-way trip volume estimates. TransLink Marketing Research uses a specific calculation<sup>1</sup>, which down-weights claimed usage intentions, in order to assess the magnitude of consumer appeal. This method is used to get a more realistic picture of usage, since experience has shown that people tend to overstate their intentions to use a service concept.

The formula assumes that, among the target market, 50% of those who are “very interested” and 25% of those “somewhat interested” will become users of the service. These proportions are then projected to the estimated population, represented by these target markets in the South of Fraser River region. To estimate total anticipated trip volumes, the population projections are multiplied by the average number of one-way trips per week that interested respondents claim they would use the new service. Note that these are **not official forecasts**, they are merely used to provide input to TransLink planning.

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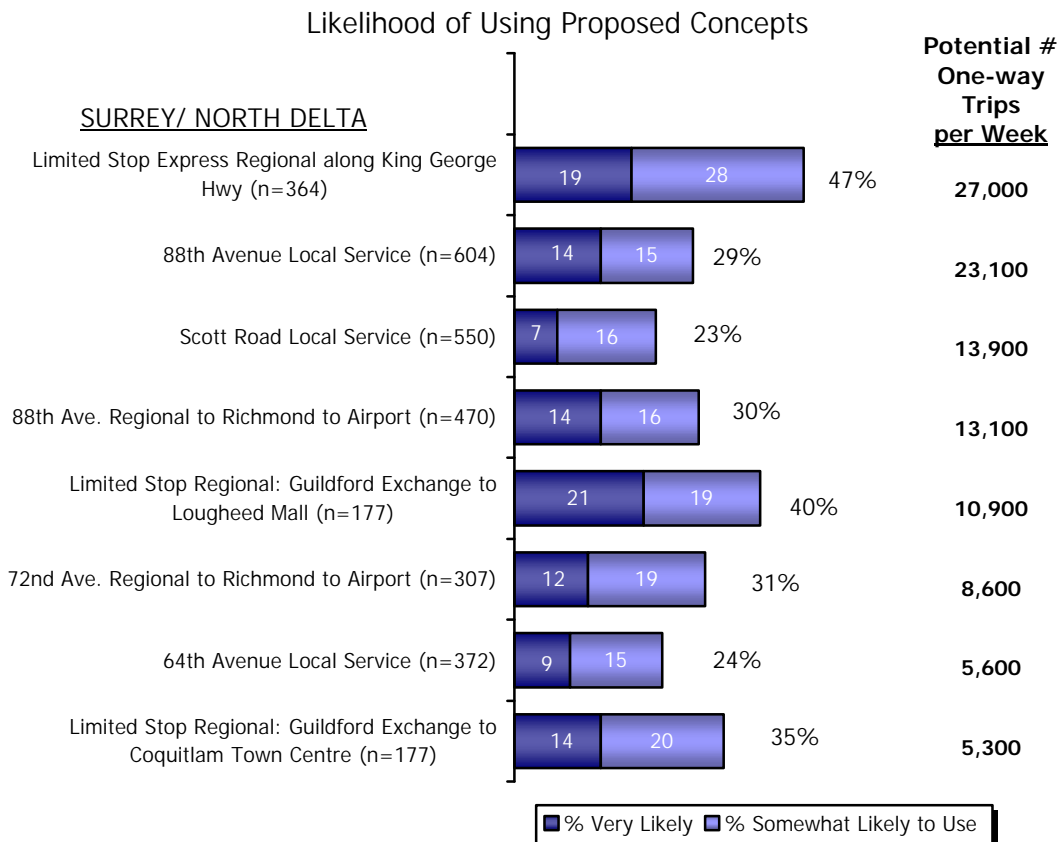
<sup>1</sup> TransLink Marketing Research formula to estimate potential for trip volume:  

$$[(\% \text{ “very likely”} \times .5) + (\% \text{ “somewhat likely”} \times .25)] \times \text{“Population 16 years and over for survey area”} \times \text{“Proportion of cross-section—i.e., incidence found in study”} \times \text{“Average no. one-way trips per week using this service option”} = \text{Total one-way trips per week}$$

## 10. Overview of All Concepts

### Surrey/ North Delta

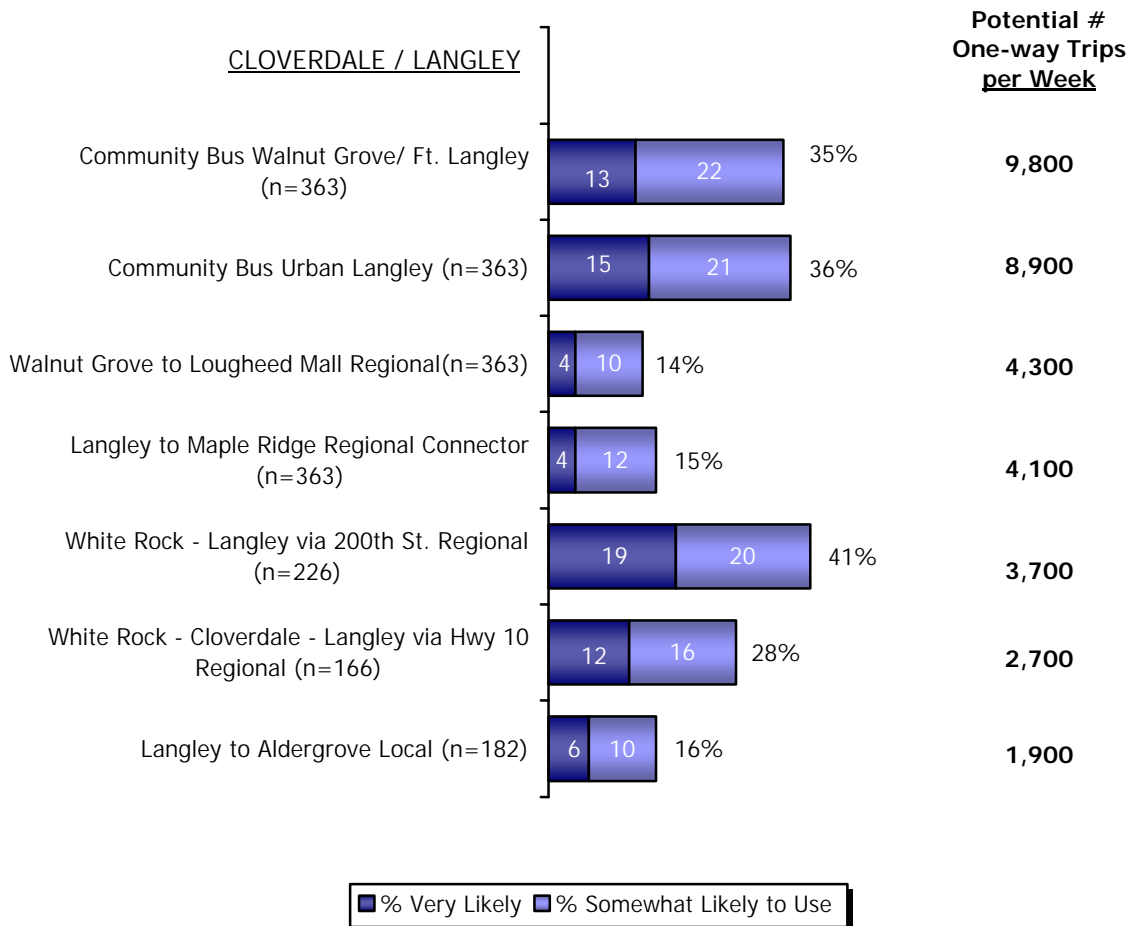
- The highest trip potential is for a **Limited Stop Express along King George Highway**, estimated at about 27,000 one-way trips weekly. It has broad appeal, among the targeted market (47% Newton, Surrey Central and Whalley current and potential transit users), but would cannibalize some of its ridership from existing routes. While a 15-minute service already exists, the particular attraction of this concept is likely the “limited stop” feature, which would result in shorter trips.
- Another concept with very high trip potential is the **88<sup>th</sup> Avenue Local** service, which could generate approximately 23,100 one-way trips per week. It appeals to 29% of the target market (current and potential riders in selected FSAs within North Delta/Scottsdale, Newton, Surrey Central/Whalley and Guildford/Fleetwood/Fraser Heights. This concept would fill a service gap, since there is no service on 88<sup>th</sup> Avenue.
- Trip estimates for three other popular concepts, aimed at portions of Surrey/North Delta, reach about 11,000 to 14,000 one-way trips per week. These are the **Scott Road Local** service, the **88<sup>th</sup> Avenue Regional** to Richmond and the Airport, and the **Limited Stop Regional from Guildford Exchange to Lougheed Mall**.



**Cloverdale/ Langley**

- The most popular concepts and those with greatest trip potential in the Cloverdale/ Langley area are the two community bus services. Consumer interest indicates that the **Walnut Grove/Fort Langley Community Bus** service has the potential to create about 9,800 one-way trips per week. The **Urban Langley Community Bus** comes in second, estimated at about 8,900 one-way trips weekly.
- Following in third place are **Walnut Grove to Lougheed Mall** and the **Langley to Maple Ridge Connector** with just over 4,000 one-way trips estimated per week for each route. The **White Rock to Langley regional service via 200<sup>th</sup> street** appeals to 41% of its target market with potential for about 3,700 trips per week.

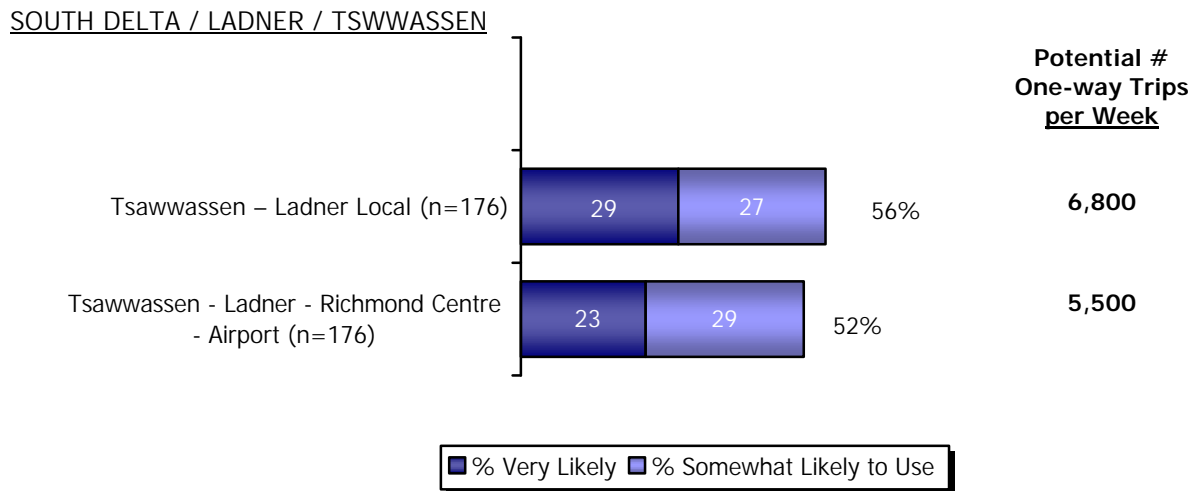
Likelihood of Using Proposed Concepts



**South Delta/ Ladner/ Tsawwassen**

- Target residents in this region appear to be very enthusiastic about the two service concepts tested. Each concept entices over half of target market., who say the are “very or somewhat likely” to use the service. The **Tsawwassen-Ladner Local** has highest trip volume potential—about 6,800 one-way trips per week. It appears that regional service between **Tsawwassen-Ladner-Richmond Centre and the Airport** could generate an estimated 5,500 one-way trips per week.

Likelihood of Using Proposed Concepts





## 11. Market Potential for Specific Regional Concepts

### 11a. Surrey/ North Delta

#### **Concept R2: Regional Service from 88<sup>th</sup> Avenue to Richmond and to Airport**

*Target region: North Delta/Scottsdale, Newton, and Guildford/Fleetwood/Fraser Heights - selected FSAs (V3R, V3S, V3V, V3W, V4C, V4N)*

- The regional concept with the second highest volume potential;
- **About 13,100 one-way trips** per week are estimated— more than found for the alternate route to Richmond and the Airport via 72<sup>nd</sup> Avenue;
- This concept has much more appeal than the 72<sup>nd</sup> Avenue route to Richmond;
- Slightly more trips would come from current users (7,900);
- Same level of appeal for current and potential users, including SOVs (in 30% range);
- Only a tiny fraction of current bus riders in the area (2%) would divert trips from another bus route to use this service.
- Predicted user base: 11% of current/potential users in the target region

#### **Concept R4: Limited Stop Express along King George Highway (between White Rock Centre and Surrey Central Station)—Regional Service**

*Target region: Newton, Surrey Central/Whalley*

This is the most appealing of all the concepts tested, particularly to current transit users who are more abundant in these target regions (48% regularly use transit in Surrey Central/Whalley, 32% in Newton). The proposed route would service popular destinations and offers extended days/hours of service plus a high frequency (every 15 minutes). While a 15-minute service frequency currently exists along this route, the “limited stop” feature is likely to be a major draw, resulting in shorter trip lengths.

- Over **27,000 one-way trips** per week estimated—largest volume of the test concepts;
- **Most trip volume** would derive **from current users** (over 23,900 one-way trips);
- Appeals to **47% of the target** current/potential riders;
- Geographic target area for this concept includes Surrey Central/Whalley with the highest incidence of transit users in the South of the Fraser region (48%);
- Stronger attraction for current riders (55%) than for potential riders (32%)—and directionally less for SOV users (27% vs 42% for other potential riders);
- The proposed service would take 26% of bus riders away from existing routes; most affected would be #321.
- Predicted user base: 16% of current/potential users in the target region

**Concept R3: Regional Service from 72nd Avenue to Richmond and to Airport**

**Target region:** North Delta/ Scottsdale and Newton – selected FSAs (V3W, V4C, V4E)

- Expected to yield about **8,600 one-way trips** per week (lower trip volume than from the 88<sup>th</sup> Avenue route concept, as the target region excludes Guildford/ Fleetwood/ Fraser Heights);
- Appeals to **31% of target residents**;
- Note that the 72<sup>nd</sup> Ave and 88<sup>th</sup> Ave route alternatives have a similar level of appeal for target residents of North Delta/Scottsdale (31% and 30%, respectively) and Newton (26% and 29% respectively);
- Attracts more current (35%) than potential users (26%) and predicted trip volumes among current users (over 5,900 one-way trips) are more than double that for potential users;
- Only 7% of current bus riders in this market area would take trips away from an existing route to use this one.
- Predicted user base: 11% of current/potential users in the target region

**Concept R5: Limited Stop Guildford Exchange to Lougheed Mall—Regional Service**

**Target region:** Guildford, Fleetwood, Fraser Heights

- **One-way trips** per week estimated at **nearly 11,000**;
- **Volume** would come **predominantly from current users (nearly 10,000 trips)**;
- **40% of the target market** is attracted to concept;
- Greater interest among current users (48% vs 28% among total potential and 22% among SOV users);
- 17% of all bus riders in the target region would divert trips from a variety of existing routes to this new service.
- Predicted user base: 15% of current/potential users in the target region

**Concept R6: Limited Stop Guildford Exchange to Coquitlam Town Centre—Regional**

**Target region:** Guildford, Fleetwood, Fraser Heights

- Expected to generate over **5,300 one-way trips** per week,
- **More trips** would come **from current users** (about 3,600 trips);
- **35% of the target market** is interested in using the service;
- Both current and potential users are interested (36% and 33%, respectively);
- Just 10% of total bus riders in the region would divert trips from various existing routes to this one.
- Predicted user base: 12% of current/potential users in the target region

**11b. Cloverdale/ Langley**

**Concept R8: White Rock-Langley via 200<sup>th</sup> Street—Regional Service**

**Target region:** all of Langley, Port Kells – selected FSAs (V2Y, V2Z, V3A)

- An estimated **3,700 one-way trips** per week are anticipated;
- **33% of the target market** are attracted to the service concept;
- Current users are more interested (51%) than potential users (34%), but, one-way trip estimates are similar.
- This concept seems to yield more trips (1,000 more) than the Highway 10 route;
- About 10% of all bus users in the target region would divert trips from various existing bus routes if this service were introduced.
- Predicted user base: 16% of current/potential users in the target region

**Concept R9: Walnut Grove to Lougheed Mall—Regional Service**

**Target region:** Cloverdale, all of Langley, Port Kells

- **About 4,300 one-way trips** per week are expected;
- **Only 14% of the target market** is interested in this concept;
- There is no significant difference between current and potential users in interest level or trip volumes predicted;
- 7% of current bus users in the target region would take trips from existing bus routes; #501 and 502 would be affected.
- Predicted user base: 4% of current/potential users in the target region

**Concept R10: Langley to Maple Ridge Regional Connector—Regional Service**

**Target region:** Cloverdale, all of Langley, Port Kells

- The service is expected to yield **4,100 one-way trips** per week;
- Notably more trips would come from current users (about 3,000);
- Concept appeals to just **15% of the target market**;
- Current users are directionally more interested (20% vs 13% of potential users );
- About 13% of bus riders in this market would divert trips from various other existing routes if this service were introduced.
- Predicted user base: 5% of current/potential users in the target region

**Concept R7: White Rock-Cloverdale-Langley via Highway 10—Regional Service**

**Target region:** Cloverdale and Urban Langley – selected FSAs (V2Y, V3A, V3S, V4N)

- About **2,700 one-way trips** per week are anticipated,
- Concept appeals to **28% of current/potential riders** in targeted area;
- No significant difference in interest between current and potential transit users;
- Trip volume is just slightly higher among current users (almost 1,700 trips);
- Existing bus routes would not be affected by addition of this route.
- Predicted user base: 10% of current/potential users in the target region

**11c. South Delta/ Ladner/ Tsawwassen:**

**Concept R1: Regional Service between Tsawwassen/Ladner / Richmond Centre Airport**

**Target region:** Delta/Ladner/ Tsawwassen

- Expected to generate **about 5,500 one-way trips** per week;
- Attracts **52% of current/potential users in target area**;
- Appeals to both current (56%) and potential users (50%)—current users are especially enthusiastic (38% “very likely” to use);
- Has capability of luring SOV users who make up most of the potential user group;
- Potential users could generate over 2,000 trips per week.
- About 31% of total bus riders in the target area would switch trips from existing routes (largely affecting route #404).
- Predicted user base: 19% of current/potential users in the target region

## **REGIONAL CONCEPT DESCRIPTIONS**

### **FOR SURREY/ NORTH DELTA:**

#### **AREAS 2, 3, 5: N. DELTA/SCOTTSDALE, NEWTON & GUILDFORD/FLEETWOOD/FRASER HEIGHTS (R2) ♦**

##### **“Regional Service from 88<sup>th</sup> Avenue to Richmond and to Airport”**

*This new route would operate along 88<sup>th</sup> Avenue and Nordel Way across the Alex Fraser Bridge, stopping on Annacis Island then express all along Hwy 91 making stops on Number 6 Road and Cambie to a new Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. The estimated travel time from King George Highway to the Airport exchange is 60 minutes. Service on this new route would be every 30 minutes, Monday to Friday, peak hours.*

#### **AREAS 3 & 4: NEWTON and SURREY CENTRAL/WHALLEY (R4)**

##### **“Limited Stop Express Service along King George Highway”**

*This new route would operate along King George Highway between White Rock Centre and SkyTrain's Surrey Central Station. This service would operate Monday to Saturday between 6am and midnight, every 15 minutes..*

#### **AREAS 2 & 3: NORTH DELTA/SCOTTSDALE and NEWTON (R3) ♦**

##### **“Regional Service from 72nd Avenue to Richmond – and to Airport”**

*This new route would operate along 72nd Avenue, serving Newton and Scottsdale Exchanges, across the Alex Fraser Bridge, stopping on Annacis Island, then express all along Highway 91 making stops on Number 6 Road and Cambie, to a new Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. The estimated travel time for this trip from Newton to the Airport Exchange is 65 minutes, and from Scottsdale to the Airport Exchange is about 50 minutes. The service would operate every 30 minutes, Monday to Friday, peak hours.*

#### **AREA 5: GUILDFORD, FLEETWOOD/FRASER HEIGHTS (R5)**

##### **“Limited Stop Regional Service between Guildford Exchange and Lougheed Mall”**

*This new service would operate between Guildford Exchange and Lougheed Mall, Monday to Saturday from 6 am to midnight, running every 30 minutes. Assuming bus priority access to the Port Mann Bridge, the estimated travel time from Guildford to Lougheed Mall is 25 minutes.*

#### **AREA 5: GUILDFORD, FLEETWOOD/FRASER HEIGHTS (R6)**

##### **“Limited Stop Regional Service between Guildford Exchange and Coquitlam Town Centre”**

*This new service would operate between Guildford and Coquitlam Town Centre. It would run Monday to Saturday from 6 am to 9 pm, running every 30 minutes. Assuming bus has priority access to the Port Mann Bridge, estimated travel time is 35 minutes.*

REGIONAL CONCEPT DESCRIPTIONS, CONTINUED ON NEXT PAGE...

♦ Selected FSAs.

**REGIONAL CONCEPT DESCRIPTIONS, cont.****FOR CLOVERDALE/ LANGLEY/ PORT KELLS:****AREA 6, 7: ALL OF LANGLEY and PORT KELLS (R8) ♦****“White Rock – Langley via 200<sup>th</sup> Street”**

*This new route would operate between Langley Town Centre and White Rock, using 200<sup>th</sup> Street and 16<sup>th</sup> Avenue. It would make stops at Willowbrook Mall, in White Rock South Surrey, Cloverdale, Fernridge, Brookwood and Murrayville. It would operate seven days a week from 6am to 9pm, running every hour. The estimated travel time between Langley and White Rock is 40 minutes.*

**AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS (R9)****“Walnut Grove to Lougheed Mall Regional Service”**

*This new service would operate between Langley Centre, Walnut Grove to Lougheed Exchange along Highway 1. It would run Monday to Friday in peak hours only. Assuming bus priority access to the Port Mann Bridge, the estimated travel time from Walnut Grove Park & Ride to Lougheed Exchange is 40 minutes.*

**AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS (R10)****“Langley to Maple Ridge Regional Connector”**

*This new service would operate between Langley Centre, Walnut Grove, Fort Langley via the Albion Ferry to the Port Haney Station on the West Coast Express Commuter Rail Line. It would operate Monday to Friday peak hours only, every half hour timed to meet the train schedule. Assuming boarding privileges on the Albion Ferry, the estimated travel time from Langley Centre to the Haney Train Station, is 45 minutes.*

**AREA 6: CLOVERDALE/LANGLEY (R7) ♦****“White Rock – Cloverdale – Langley via Highway 10”**

*This new route would operate between Langley Town Centre and White Rock Centre, making stops at Willowbrook Mall, in Cloverdale and along Highway 10 and 152<sup>nd</sup> Street. It would operate seven days a week, between 6am and 9pm, running every 60 minutes. The estimated travel time between Langley and White Rock is 40 minutes.*

**FOR SOUTH DELTA/ LADNER/ TSAWWASSEN:****AREA 1: S. DELTA/LADNER/TSAWWASSEN (R1)****“Regional Service between Tsawwassen – Ladner – Richmond Centre – Airport”**

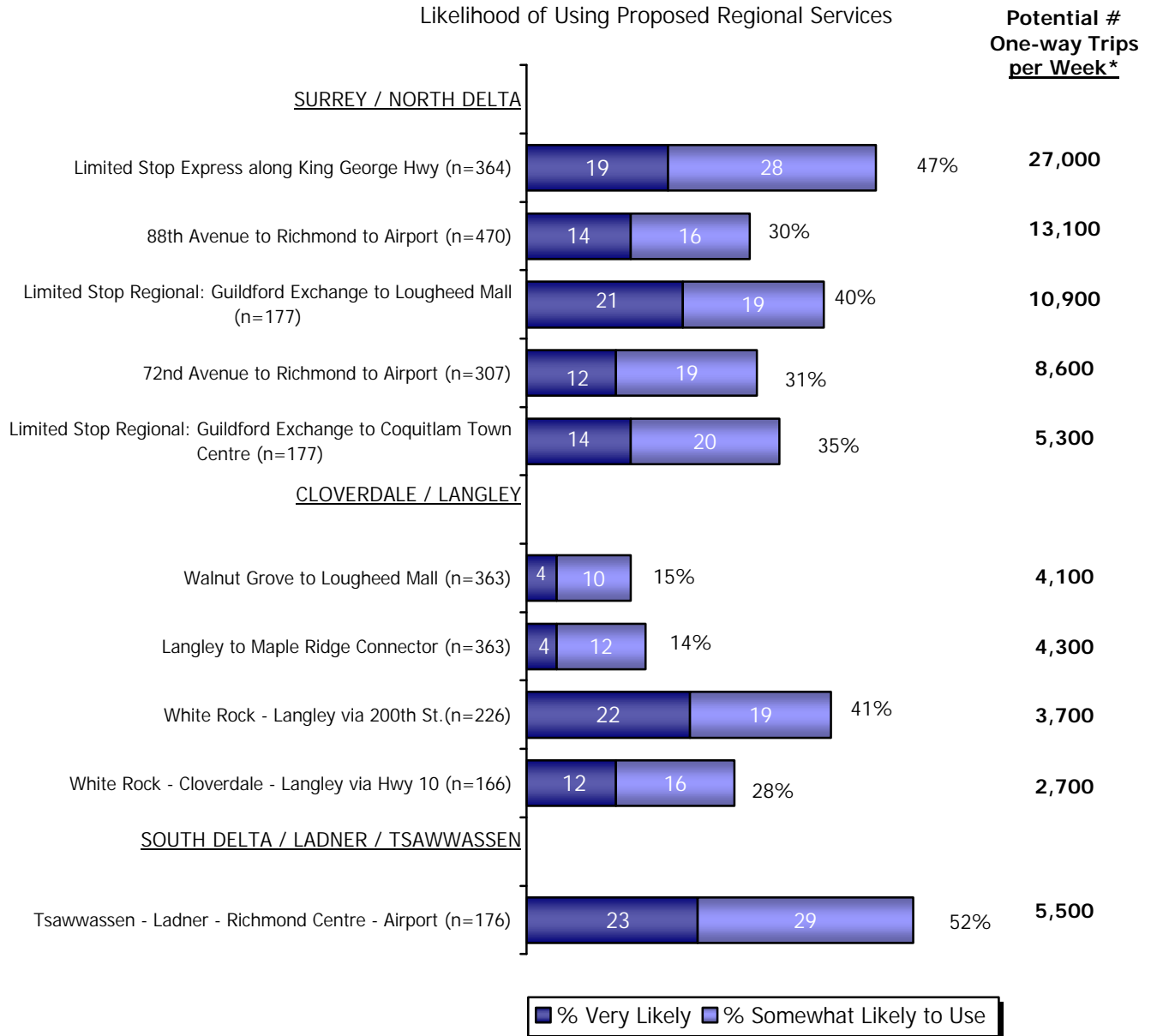
*New express bus service would run along Highways 17 and 99 from Tsawwassen to Ladner Centre and continue on to Richmond Centre and Lansdowne shopping centres; it would then connect to a proposed Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. Travel time from Tsawwassen would be 15 minutes to Ladner; 20 minutes from Ladner to Richmond Centre and then 10 minutes to the proposed airport exchange. Service would operate 5am to midnight, 7 days a week, running every 30 minutes in the peak hours, and every 60 minutes off-peak.*

♦ Selected FSAs.

Q.3a: How likely would you be to use this service at least once a month on a regular basis? Would you say you are: Very likely, somewhat likely, not very likely or not at all likely to use it?

Q.3b: How often in an average week or month do you think you would use the new service?

Base: Total Current and Potential Users in Selected Market Area.



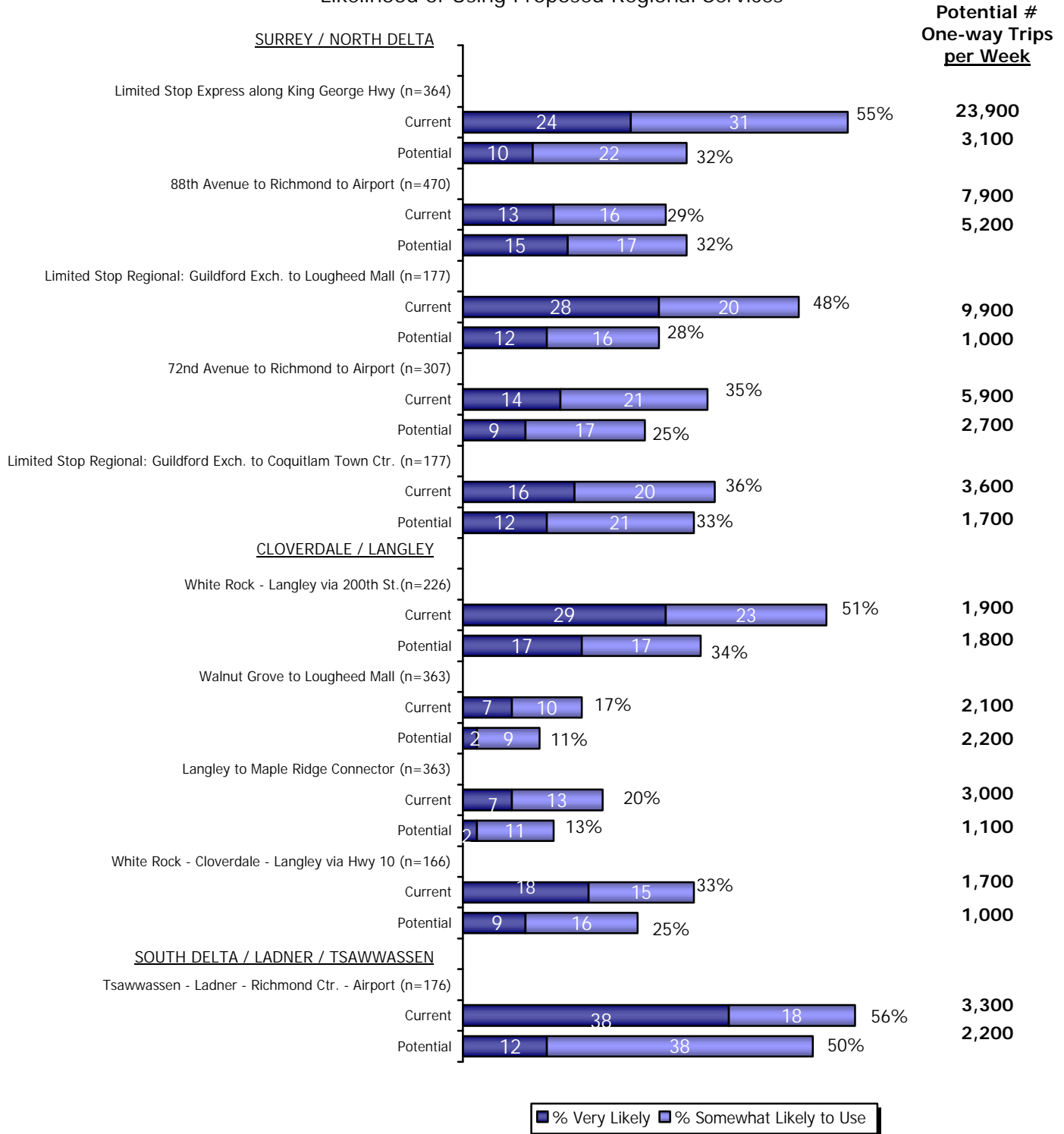
\*Note: Net # new trips accounting for cannibalization cannot be determined.

Q.3a: How likely would you be to use this service at least once a month on a regular basis? Would you say you are: very likely, somewhat likely, not very likely or not at all likely to use it?

Q.3b: How often in an average week or month do you think you would use the new service?

Base: Total Current and Potential Users in Selected Market Area.

Likelihood of Using Proposed Regional Services





<b>Cannibalization of Existing Bus Services</b>				
<b>Regional Concepts</b>	<b>Target Geographic area</b>	<b>Base = Total current bus riders (Q.B)</b>	<b>% of total bus riders who'd switch from existing to new route</b>	<b>Main routes affected **</b>
88 <sup>th</sup> Ave to Richmond to Airport	North Delta/ Scottsdale, Newton, Guildford//Fleetwood Fraser Heights ♦	N=243	<b>2%</b>	Fragmented
Limited Stop Express along King George Hwy	Newton, Surrey Central/ Whalley	N=182	<b>26%</b>	Mainly #321
72 <sup>nd</sup> Ave to Richmond to Airport	North Delta/ Scottsdale, Newton ♦	N=153	<b>7%</b>	Fragmented
Limited Stop Btwn Guildford Exch & Lougheed Mall	Guildford/Fleetwood Fraser Heights	N=104	<b>17%</b>	Fragmented
Limited Stop Btwn Guildford Exch & Coquitlam Twn Ctr	Guildford/Fleet-wood/ Fraser Heights	N=104	<b>10%</b>	Fragmented
White Rock-Langley via 200 <sup>th</sup> Street	all Langley/ Port Kells♦	N=39	<b>10%</b>	#501
Walnut Grove to Lougheed Mall	Cloverdale/ all Langley/ Port Kells	N=76	<b>7%</b>	#502, #501
Langley to Maple Ridge Connector	Cloverdale/ all Langley/ Port Kells	N=76	<b>13%</b>	Fragmented
White Rock-Cloverdale-Langley via Highway 10	Cloverdale/ Urban Langley ♦	N=46	<b>ZERO</b>	NONE
Tsawwassen – Ladner –Richmond Centre – Airport	SouthDelta/ Ladner Tsawwassen/	N=51	<b>31%</b>	Largely #404, but also #601

\*\* See Computer Tables for further details

♦ Selected FSAs within these areas. Bases shown are weighted.

## 12. Market Potential for Specific Local Concepts

Findings for the seven local service concepts are summarized below in geographic order.

### 12a. Surrey/ North Delta

#### **Concept L2: 88<sup>th</sup> Avenue Local Service**

**Target region:** North Delta/ Scottsdale, Newton, Surrey Central/Whalley and Guildford/Fleetwood/Fraser Heights – Selected FSAs (V3R, V3S, V3V, V3W, V4C, V4E, V4N)

This is the local concept with the highest trip volume potential, perhaps not surprisingly, given that the target region encompasses much of the populous Surrey/North Delta area.

- **About 23,100 one-way trips** per week are estimated;
- **Current transit users would generate most of the trips** for this service (about 17,500 vs about 5,600 for potential users);
- Attracts **29% of current/potential riders** in the target region;
- Somewhat more appeal to current users (34%) than potential users (21%);
- 7% of current bus riders in the area would divert trips from another bus route; #326 and #319 receive more mention among a list of many.
- Predicted user base: 11% of current/potential users in the target region

#### **L3: Scott Road Local Service**

**Target region:** North Delta/ Scottsdale, Newton and Surrey Central/Whalley

- Expected to yield about **13,900 one-way trips** per week;
- More trips would derive from current users (about 9,000 vs about 4,900 from potential users);
- Appeals to **23% of target residents**;
- Attracts current (23%) and potential users (24%) equally;
- Just 7% of current bus riders in this market area would take trips away from existing routes; it appears #316 would be more affected than others.
- Predicted user base: 8% of current/potential users in the target region

**Concept L4: 64<sup>th</sup> Avenue Local Service****Target region:** North Delta/Scottsdale and Newton

- Nearly **5,600 one-way trips** per week are estimated;
- Current users would account for somewhat more of the trip volume (about 3,500 one-way trips vs about 2,100 from potential users);
- **24% of the target** current/potential riders are interested in using this service;
- Greater attraction for current riders (28%) than for potential riders (18%)
- Only 6% of total bus riders in the region would divert trips from various existing routes to this one; #340 and #319 are mentioned somewhat more.
- Predicted user base: 6% of current/potential users in the target region

**12b. Cloverdale/ Langley**

Two community bus concepts, designed for Cloverdale/Langley, both receive favourable response. These concepts are of special interest, since they offer features new to public transit and are designed to resemble the convenience of private vehicles—door-to-door and dial-in service in the evenings. The extended hours (8am to midnight) and improved service frequency (every 30 minutes) further attempt to enhance the service and to attract car users.

**Concept L7: Community Bus Walnut Grove/Fort Langley—Local Service****Target region:** Cloverdale, all of Langley, Port Kells

- About **9,800 one-way trips** per week are anticipated,
- Concept appeals to **35% of current/potential riders**;
- Current riders (44%) are more interested than potential transit users (29%);
- Trip volume slightly higher among current users (5,400 trips vs 4,400 for potential);
- Greater appeal to Rest of Langley/Port Kells residents (40%) than Urban Langley/Cloverdale (30%); biggest draw from V1M and V3A.
- 9% of area bus riders would replace trips on existing bus routes with this route; #501 receives more mention.
- Predicted user base: 12% of current/potential users in the target region

**Concept.L6: Community Bus Urban Langley—Local Service**

**Target region:** Cloverdale, all of Langley, Port Kells

- Expected to generate nearly **9,000 one-way trips** per week;
- Only slightly more trips from current riders (4,900 vs 4,000 for potential riders);
- **36% of the target market** is interested in using the service;
- No significant difference between current and potential users, but as expected, Urban Langley/Cloverdale residents (42%) are more interested than Rest of Langley/Port Kells (29%); interested group draws disproportionately more from V3A (55% reside there);
- The proposed service would take 13% of riders away from existing routes; most affected would be #501.
- Predicted user base: 12% of current/potential users in the target region

**Concept L5: Langley to Aldergrove Local Service**

**Target region:** Cloverdale/Urban Langley

- **One-way trips** per week estimated at **just under 2,000**;
- **16% of the target market** expresses interest;
- Greater interest among potential users (20% vs 11% among current users) but, trips estimates are higher for current users (1300 vs. 600)
- 11% of bus riders in the target region would divert trips, largely from #506.
- Predicted user base: 5% of current/potential users in the target region

**12c. South Delta/ Ladner/ Tsawwassen:**

**Concept L1: Tsawwassen – Ladner Local Service**

**Target region:** Delta/Ladner/ Tsawwassen

- **Nearly 6,800 one-way trips** per week are expected;
- Trip volume divided about evenly between current and potential users;
- Attracts **56% of current/potential users in target area**;
- 29% say they're "very likely" to use the service;
- Appeals equally to both current (53%) and potential users (58%);
- Interests SOV users (58%);
- Rate of cannibalization of existing bus riders in the target area is 24%--i.e., would switch trips from existing routes (largely affecting route #601 and #404).
- Predicted user base: 21% of current/potential users in the target region.

## **LOCAL CONCEPTS**

### **FOR SURREY/ NORTH DELTA:**

AREAS 2, 3, 4, 5: NORTH DELTA/SCOTTSDALE and NEWTON and SURREY CENTRAL/WHALLEY and GUILDFORD/FLEETWOOD/FRASER HEIGHTS (L2)

#### **"88<sup>th</sup> Avenue Local Service"**

*This new route would operate along 88<sup>th</sup> Avenue between Fleetwood and Scott Road to Scottsdale. Service would be 7 days a week, from 6 am to midnight, running every 30 minutes. .*

AREAS 2, 3, 4: NORTH DELTA/SCOTTSDALE, NEWTON and SURREY CENTRAL/WHALLEY (L3)

#### **"Scott Road Local Service"**

*This new route would operate from the Scott Road SkyTrain Station via Scott Road past 72<sup>nd</sup> Avenue to Highway 10 and then east to Surrey Municipal Hall. It would operate from 6 am to midnight running every 30 minutes..*

AREAS 2 & 3: NORTH DELTA/SCOTTSDALE and NEWTON (L4)

#### **"64<sup>th</sup> Avenue Local Service"**

*This new route would operate along 64<sup>th</sup> Avenue, connecting Scottsdale exchange, Surrey City Hall, and Cloverdale. It would operate once every hour from 6am to midnight Monday to Saturday, running hourly.*

### **FOR CLOVERDALE / LANGLEY:**

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS (L7)

#### **"Community Bus Walnut Grove/ Fort Langley"**

*This new route would operate during the day and evenings connecting, Willowbrook Mall, Kwantlen College, Trinity Western University, Fort Langley, Walnut Grove & theatres. The service would operate every 30 minutes from 8am till midnight.. After 8 pm you can call a central number to have the service pick you up and drop you off at your door.*

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS (L6)

#### **"Community Bus Urban Langley"**

*This new route would operate during the day and evenings connecting Brookwood, Fernridge, and Murrayville with Langley town centre and Willowbrook mall. The service would use smaller vehicles with seats for 20 passengers. Service would be every 30 minutes from 8am till midnight.. After 8 pm you can call a central number to have the service pick you up and drop you off at your door.*

AREA 6: CLOVERDALE/LANGLEY (L5)

#### **"Langley to Aldergrove Local Service"**

*This route would travel between Langley Town Centre and Aldergrove along Fraser Highway, providing better connections to regional bus services leaving Langley Town Centre. It would operate on an hourly basis during Monday to Friday peak hours.*

### **FOR SOUTH DELTA/ LADNER/ TSAWWASSEN:**

AREA 1: S. DELTA/LADNER/TSAWWASSEN (L1):

#### **"Tsawwassen – Ladner Local Service"**

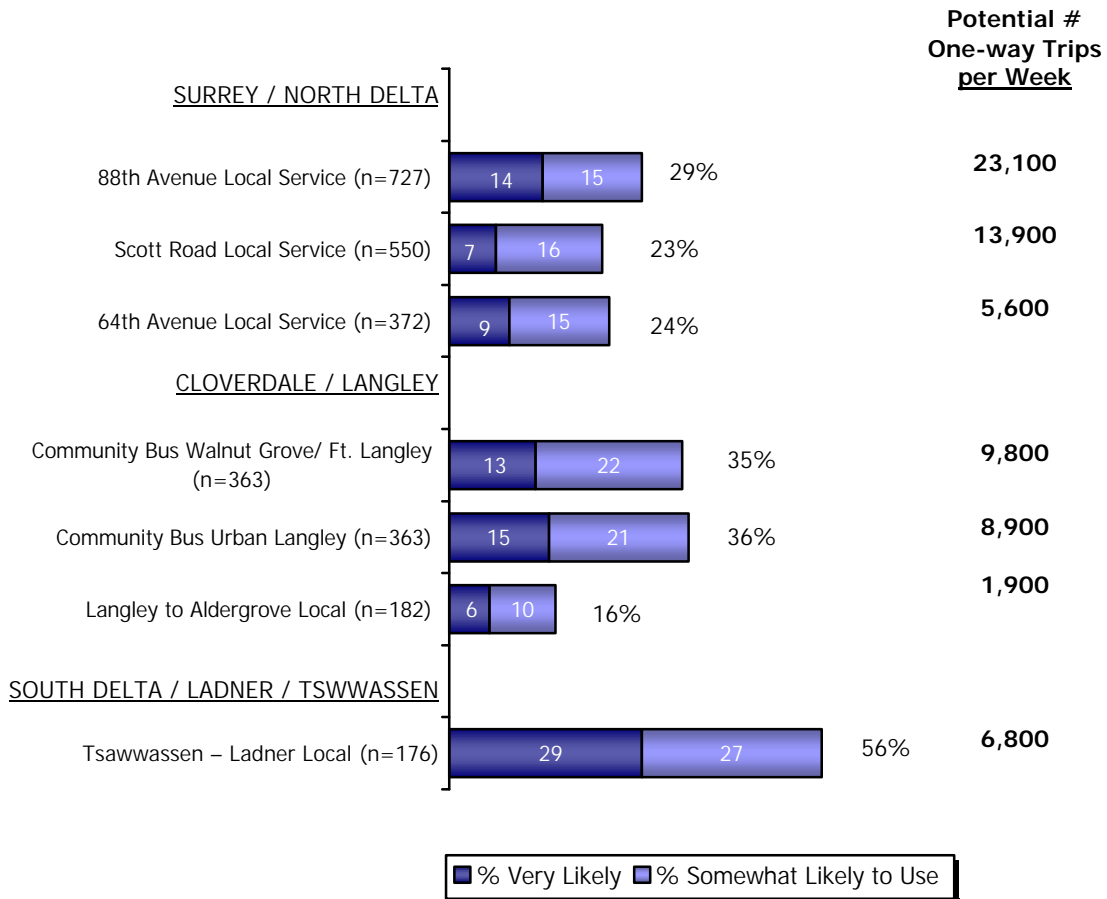
*This new route would provide local service circulating within Tsawwassen and Ladner , and connecting to Ladner exchange. Passengers who wish to go to Vancouver, Richmond or the Airport would transfer at Ladner exchange. The service would use a smaller vehicle seating 20 passengers and would operate from 8am till midnight running every 60 minutes. In the evening between 8pm and midnight, you can call a central number to have the service pick you up and drop you off at your door.*

Q.3a: How likely would you be to use this service at least once a month on a regular basis? Would you say you are: very likely, somewhat likely, not very likely or not at all likely to use it?

Q.3b: How often in an average week or month do you think you would use the new service?

Base: Total Current and Potential Users in Selected Market Area.

Likelihood of Using Proposed Local Concepts

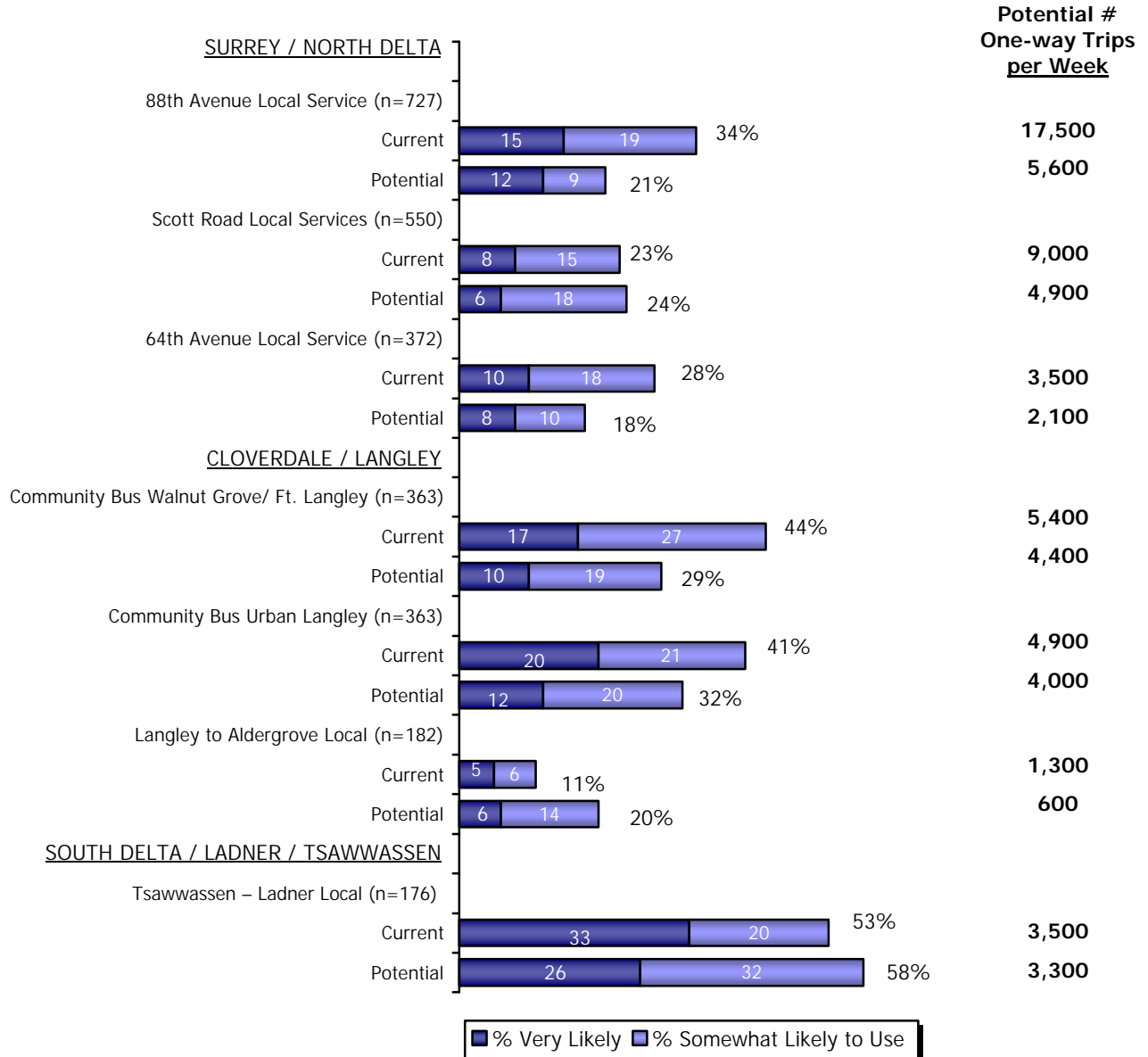


Q.3a: How likely would you be to use this service at least once a month on a regular basis? Would you say you are: very likely, somewhat likely, not very likely or not at all likely to use it?

Q.3b: How often in an average week or month do you think you would use the new service?

Base: Total Current and Potential Users in Selected Market Area.

Likelihood of Using Proposed Local Services  
Current vs Potential Riders



<b>Cannibalization of Existing Bus Services</b>				
<b>Local Concepts</b>	<b>Target Geographic area</b>	<b>Base = Total current bus riders (Q.B)</b>	<b>% of total bus riders who'd switch from existing to new route</b>	<b>Main routes affected **</b>
88 <sup>th</sup> Ave Local	NDelta/Scottsdale, Newton, Surrey Central/Whalley/ Guildfd/Fleet/Fr.Hgt ♦	N=334	<b>7%</b>	#326, #319 are the top 2
Scott Road Local	NDelta/Scottsdale, Newton, Surrey Central/ Whalley	N=293	<b>7%</b>	#316
64 <sup>th</sup> Avenue Local	NDelta/Scottsdale, Newton	N=171	<b>6%</b>	#340, #319
Community Bus Walnut Grove/ Fort Langley	Cloverdale/ all Langley/Pt. Kells	N=76	<b>9%</b>	#501
Community Bus Urban Langley	Cloverdale/ all Langley/Pt. Kells	N=76	<b>13%</b>	#501
Langley to Aldergrove Local	Cloverdale/ Urban Langley	N=46	<b>11%</b>	#506
Tsawwassen-Ladner Local	S.Delta/Tsawwssn/ Ladner	N=51	<b>24%</b>	#601, #404

\*\* See Computer Tables for further details  
 ♦ Selected FSAs



## D. Target Market Profiles

Target Market Profiles				
	South of Fraser River *			
	Total Cross- Section (2146) %	Current Riders (626) %	Potential Riders (640) %	Non-Potential Non Users (880) %
<b>Gender</b>				
Male	49	48	47	52
Female	51	52	53	48
<b>Age</b>				
16-24	15	▲30	9	7
25-34	20	17	22	22
35-44	22	18	23	24
45-54	16	15	19	15
55-64	10	7	11	11
65 and over	11	7	12	14
Refused	6	5	5	7
<b>Access to Vehicle</b>				
Yes	n/a	84	▲98	n/a
No	n/a	16	2	n/a
<b>Education</b>				
High school or less	45	46	▼38	49
College/Tech./Some Univ.	34	36	37	30
Bachelor/Graduate Degree	19	18	▲24	18
<b>Employment Status</b>				
Employed >30 hrs./wk.	51	47	53	53
Employed <30 hrs./wk.	13	15	12	11
Retired	15	10	16	▲20
Student	9	▲19	6	3
Homemaker	8	6	9	9
Unemployed	7	9	7	5
* Study area excludes White Rock / South Surrey.				
(See Basic Data A-1, Q4-9)				

Significantly higher ▲

Directionally higher ▲

Significantly lower ▼

Directionally lower ▼

<b>Target Market Profiles (Continued)</b>				
	South of Fraser River *			
	<u>Total Cross-Section</u> (2146) %	<u>Current Riders</u> (626) %	<u>Potential Riders</u> (640) %	<u>Non-Potential Non-Users</u> (840) %
<b>Household Size</b>				
One	10	9	10	11
Two	25	22	25	27
Three or more	64	▲68	64	60
<b>Income</b>				
Less than \$30k	14	▲17	12	13
30k to less than 60k	26	29	28	22
60k to less than 90k	19	18	23	16
90k and over	14	11	16	15
Refused	28	26	21	34
<b>Area of Residence</b>				
South Delta/Ladner/Tsawwassen	9	8	12	9
North Delta/Scottsdale	16	19	17	14
Newton	11	11	11	12
Surrey Centre/Whalley	17	▲24	12	14
Guildford/Fleetwood/Fraser Heights	18	21	16	19
Urban Langley/Cloverdale	14	10	15	15
Rest of Langely/Port Kells	14	▼7	17	18
* Study area excludes White Rock / South Surrey.				
(See Basic Data A-1, Q4-9)				

Significantly higher ▲

Directionally higher ▲

Significantly lower ▼

Directionally lower ▼

Target Market Profiles										
Very / Somewhat Interested in <b>Regional Concept</b>										
	Tsaw./ Lad./ Rmd./ <u>Airport</u> (86) %	88 <sup>th</sup> Ave to Rmd. <u>Airport</u> (128) %	72 <sup>nd</sup> Ave to Rmd. <u>Airport</u> (95) %	Ltd. Stop Express along King George <u>Highway</u> (168) %	Ltd. Stop Guilford Exchange to Lough. <u>Mall</u> (67) %	Ltd. Stop Guilford Exchange to Coq. <u>Town Ctr</u> (54) %	W.R. Clov./ Langley via <u>Hwy. 10</u> (48) %	W.R./ Clov./ Langley via <u>200<sup>th</sup> St.</u> (69) %	Walnut Grove To Lough. <u>Mall</u> (49) %	Langley to Maple Ridge <u>Connect.</u> (52) %
<b>Gender</b>										
Male	41	52	50	50	48	32	23	30	25	29
Female	59	48	50	50	52	▲68	▲77	▲70	▲75	▲71
<b>Age</b>										
16-24	26	20	21	23	▲38	32	26	19	15	7
25-34	10	22	26	26	19	12	19	14	19	20
35-44	9	18	17	23	12	25	19	15	20	15
45-54	13	20	17	13	19	19	18	16	21	24
55-64	15	10	10	8	5	5	8	13	10	8
65 and over	▲18	6	5	4	3	4	6	12	10	10
Refused	9	5	4	2	5	3	5	11	5	16
<b>Access to Vehicle</b>										
Yes	87	91	87	83	93	94	87	88	95	88
No	13	9	13	17	7	6	11	12	5	12
<b>Regular Transit User</b>										
Choice	33	47	53	▲59	▲65	56	38	41	44	42
Captive	13	9	12	16	7	6	11	11	5	7
<b>Potential Transit User</b>										
S.O.V.	▲41	33	25	14	17	26	32	39	34	35
Other	13	11	10	11	11	12	18	10	17	16
<b>Education</b>										
High school or less	46	43	45	49	▲58	52	35	35	39	30
College/Tech./Univ.	28	34	28	35	35	36	30	31	19	30
Bachelor/Graduate Deg.	25	22	25	15	8	12	30	32	37	37
<b>Employment Status</b>										
Employed >30 hrs./wk.	37	55	50	48	48	43	38	41	50	57
Employed <30 hrs./wk.	14	11	12	15	18	19	20	14	21	19
Retired	▲23	8	7	7	5	7	8	▲21	11	17
Student	14	13	11	15	▲24	▲28	▲25	14	14	3
Homemaker	10	9	10	7	6	11	16	7	4	5
Unemployed	6	8	7	12	4	4	7	7	2	1
Refused	-	-	2	1	1	-	2	2	2	2

(See Basic Data A-1, Q4-9)

Use caution interpreting results based on samples under 100.

**Target Market Profiles (Continued)**

Very / Somewhat Likely to use **Regional Concept**

	Tsaw./ Lad./ Rmd./ <u>Airport</u> (86) %	88 <sup>th</sup> Ave to Rmd. <u>Airport</u> (128) %	72 <sup>nd</sup> Ave to Rmd. <u>Airport</u> (95) %	Ltd. Stop Express along King George <u>Highway</u> (168) %	Ltd. Stop Guilford Exchange to Lough. <u>Mall</u> (67) %	Ltd. Stop Guilford Exchange to Coq. <u>Town Ctr</u> (54) %	W.R. Clov./ Langley via <u>Hwy. 10</u> (48) %	W.R./ Clov./ Langley via <u>200<sup>th</sup> St.</u> (112) %	Walnut Grove To Lough. <u>Mall</u> (49) %	Langley to Maple Ridge <u>Connect.</u> (52) %
<b>Household Size</b>										
One	5	6	8	7	4	7	17	13	16	7
Two	28	12	14	23	21	17	27	24	28	▲38
Three or more	67	▲82	▲78	69	▲75	▲76	56	58	55	51
<b>Income</b>										
Less than \$30k	13	19	18	23	15	24	16	14	15	8
30k to less than 60k	21	30	31	38	35	30	35	30	21	29
60k to less than 90k	21	19	20	17	14	18	10	16	21	19
90k and over	15	11	6	2	10	13	9	14	▲24	17
Refused	31	22	25	19	27	15	30	27	19	27
<b>FSA</b>										
V1M	*	*	*	*	*	*	*	*	30	26
V2Y	*	*	*	*	*	*	5	13	16	9
V2Z	*	*	*	*	*	*	*	19	9	10
V3A	*	*	*	*	*	*	57	69	33	37
V3R	*	16	*	10	50	47	*	*	*	*
V3S	*	13	*	3	9	19	37	*	6	10
V3T	*	*	*	23	*	*	*	*	*	*
V3V	*	2	*	22	3	3	*	*	*	*
V3W	*	34	53	31	1	*	*	*	*	*
V3X	*	*	*	6	*	*	*	*	*	*
V4C	*	22	32	*	*	1	*	*	*	*
V4E	*	*	15	*	*	*	*	*	*	*
V4K	43	*	*	*	*	*	*	*	*	*
V4L	20	*	*	*	*	*	*	*	*	*
V4M	36	*	*	*	*	*	*	*	*	*
V4N	1	14	*	*	36	27	*	*	*	*
V4W	*	*	*	*	*	*	*	*	8	8

(See Basic Data A-1, Q4-9)

Use caution interpreting results based on samples under 100.

Significantly higher ▲ Directionally higher ▲ Significantly lower ▼ Directionally lower ▼

Target Market Profiles							
Very / Somewhat Interested in Local Concept							
	Tsaw./ Ladner (94) %	88 <sup>th</sup> Avenue (157) %	Scott Road (124) %	64 <sup>th</sup> Avenue (84) %	Langley To Aldergrove (27) %	Community Bus Urban Langley (122) %	Community Bus Walnut Gr./ Ft. Langley (119) %
<b>Gender</b>							
Male	41	49	54	39	33	41	35
Female	59	51	47	61	67	59	65
<b>Age</b>							
16-24	19	26	22	35	12	14	14
25-34	13	19	25	23	9	20	20
35-44	16	22	20	18	22	18	24
45-54	12	16	12	12	21	19	17
55-64	16	8	14	6	8	7	9
65 and over	22	3	4	7	16	16	11
Refused	3	5	4		12	6	5
<b>Access to Vehicle</b>							
Yes	85	88	83	83	85	86	90
No	15	12	17	17	15	14	10
<b>Regular Transit User</b>							
Choice	29	▲59	46	50	23	34	40
Captive	12	12	14	16	8	10	9
<b>Potential Transit User</b>							
S.O.V.	▲48	17	30	26	43	32	33
Other	12	13	10	8	27	24	19
<b>Education</b>							
High school or less	36	49	42	51	40	33	30
College/Tech./Univ.	32	32	35	28	31	32	38
Bachelor/Graduate Deg.	32	19	23	19	28	32	30
<b>Employment Status</b>							
Employed >30 hrs./wk.	37	55	56	46	47	43	46
Employed <30 hrs./wk.	13	11	11	10	15	13	16
Retired	24	6	9	10	15	23	15
Student	8	20	12	15	13	9	13
Homemaker	13	8	11	15	9	12	11
Unemployed	9	7	6	6	5	5	5
Refused	-	-	-	2	-	1	1

(See Basic Data A-1, Q4-9)

Use caution interpreting results based on samples under 100.

Significantly higher ▲

Directionally higher ▲

Significantly lower ▼

Directionally lower ▼

Target Market Profiles (Continued)							
Very / Somewhat Interested in <b>Local Concept</b>							
	Tsaw./ Ladner (94) %	88 <sup>th</sup> Avenue (157) %	Scott Road (124) %	64 <sup>th</sup> Avenue (84) %	Langley To Aldergrove (27) %	Community Bus Urban Langley (122) %	Community Bus Walnut Gr./ Ft. Langley (119) %
<b>Household Size</b>							
One	5	5	9	10	11	13	9
Two	40	11	15	11	35	28	24
Three or more	55	83	76	79	54	58	66
<b>Income</b>							
Less than \$30k	16	19	17	14	14	14	13
30k to less than 60k	19	32	41	35	47	28	27
60k to less than 90k	21	20	21	18	8	23	26
90k and over	15	9	7	6	7	11	16
Refused	31	20	15	27	23	24	19
<b>FSA</b>							
V1M	*	*	*	*	*	13	32
V2Y	*	*	*	*	*	5	9
V2Z	*	*	*	*	3	13	6
V3A	*	*	*	*	71	55	32
V3R	*	13	4	*	*	*	*
V3S	*	11	4	7	18	4	9
V3T	*	*	11	*	*	*	*
V3V	*	18	13	*	*	*	*
V3W	*	27	24	42	*	*	*
V3X	*	*	7	8	*	*	*
V4C	*	20	23	29	*	*	*
V4E	*	2	11	15	*	*	*
V4K	49	*	*	*	*	*	*
V4L	20	*	*	*	*	*	*
V4M	29	*	*	*	*	*	*
V4N	2	10	*	*	*	*	*
V4W	*	*	*	*	5	6	9

(See Basic Data A-1, Q4-9)

Use caution interpreting results based on samples under 100.

# Appendices

1. Methodological Details
2. Source Statistics/ Source Data
3. Questionnaire

## Methodological Details

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### ***Questionnaire/ Pre-testing***

The questionnaire used in this study was patterned on past TransLink surveys with current and potential transit users. A pre-test, consisting of 26 interviews, was conducted on November 22, prior to the start of field work. The pre-test, monitored by TransLink representatives and McIntyre & Mustel's project director, resulted in some minor modifications.

### ***Sample Selection***

The sample frame consisted of all households with published telephone listings in the defined study area. The frame was stratified into seven geographic zones, according to the zone street boundaries provided by TransLink. Random samples were drawn for each zone and a representative cross-section of interviews was completed in each zone. A disproportionate sampling plan was used, whereby approximately equal numbers of interviews were completed in each geographic area among the target market (current and potential transit riders). A short qualifying and demographic questionnaire was completed with non-potential transit users (those who would not consider using improved transit), while the target group of qualifiers continued with a more detailed survey. Since the incidence of qualifying for the longer survey varied by zone, more cross-section interviews were conducted in zones with lower incidence. This imbalance was corrected at the data processing stage with sample weighting to bring the zones into correct relative proportion, creating a representative South of Fraser study area total.

Within each household the individual to be interviewed was chosen by a randomized technique (next birthday method). To ensure proper gender balance within the study region, alternate selection of males and females was employed. Probability of selection information was collected to later convert the sample of households into a sample of individuals, projectable to the area population.

Up to five calls were made in an attempt to obtain a completed interview with the selected household/individual, thereby reducing the effect of any possible non-response bias. Interviewing was conducted as evenly as possible over the seven days of the week within the zones.



### **Data Collection**

All interviews were completed November 23 to December 7, 1999 from McIntyre & Mustel's CATI (Computer Assisted Telephone Interviewing) centre, where trained telephone field staff are continuously supervised and monitored. Field work was conducted weekday evenings and Saturday daytime.

To encourage participation among non-English speaking residents, alternate language interviewing was available in Punjabi and Hindi. In total, 69 interviews were completed in these languages (largely in Punjabi).

### **Weighting Procedures**

Minor weighting adjustments have been applied to bring the resulting sample into correct proportion on the basis of zone and key demographics. The following procedures were used to match 1996 Statistics Canada data for the study region/study population. First, the probability of selection at the household level was applied, converting the sample of households into a sample of individuals 16 years of age and over. Next minor adjustments were applied to match the sample to 1996 census figures for the South of Fraser River study area on the basis of age within gender. Finally, adjustments by zone were applied to bring the total South of Fraser cross-section into correct relative proportion geographically. These weights were applied to the cross-section sample (consisting of riders, potential riders and non-potential area residents and therefore, representing the entire population 16 years of age and over in the study area). The resulting sample of riders and potential riders (who completed the full interview) is thereby representative of this target market.

The following table shows the distribution of actual and weighted interviews.

<b>Distribution of Interviews</b>		
	<u>South of Fraser Study Area Cross-section</u>	
	<u>Actual</u> (2146) %	<u>Weighted</u> (2146) %
<b>Gender</b>		
Male	50	49
Female	50	51
<b>Age</b>		
16 – 24	11	15
25 – 34	19	20
35 – 44	24	22
45 – 54	19	16
55 – 64	11	10
65 +	10	11
Refused	6	6
<b>Zone</b>		
South Delta/Ladner/Tsawwassen	14	9
North Delta/ Scottsdale	13	16
Newton	15	11
Surrey Central/ Whalley	12	17
Guildford/Fleetwood/Fraser Heights	14	19
Cloverdale/Urban Langley	15	14
Rest of Langley/ Port Kells	18	14

## Report of Call Summary

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Report of Calls	
	<u>Total</u>
<b>Total Attempted:</b>	<b>11,125</b>
	#
<b>Out of Scope</b>	<b>899</b>
Not in service/number changed/moved	603
Modem/fax line/business	296
<b>Total Potential:</b>	<b>10,226</b>
No answer/busy	1619
Answering machine	854
Respondent not available	809
<b>Contacts</b>	<b>6944</b>
Refused/terminated partway	4442
Language/communication problem	254
<b>Willing participants</b>	<b>2248</b>
Non-qualifier (occupation, another Transit survey)	102
<b>Total Completions (long and short)</b>	<b>2146</b>
Non-user (non-potential rider—short survey)	880
Long completions (current rider or potential rider)	1266
Contacts (% of potential)	68%
Willing to participants (% of potential)	22%

## Source Statistics

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### Translink defined AREA

#### AGE WITHIN GENDER POPULATION

(Source: SM Research 1996 Statistics Canada Census Data)

Age	MALE		FEMALE		TOTAL	
	#	%	#	%	#	%
16-24	30,497	8.26%	30,029	8.13%	60,526	16.39%
25-34	39,486	10.69%	40,218	10.89%	79,704	21.59%
35-44	42,078	11.40%	42,428	11.49%	84,506	22.89%
45-54	31,901	8.64%	31,535	8.54%	63,436	17.18%
55-64	18,936	5.13%	18,315	4.96%	37,251	10.09%
65+	19,454	5.27%	24,363	6.60%	43,817	11.87%
TOTAL	182,352	49.39%	186,888	50.61%	369,240	100.00%

#### SOUTH OF THE FRASER POPULATION 16+

(Source: SM Research 1996 Statistics Canada Census Data)

AREA	POPULATION	
	#	%
1- South Delta/Ladner/Tsawwassen	34,547	9.4%
2- North Delta/ Scottsdale	60,719	16.4%
3- Newton	41,915	11.4%
4- Central Surrey/ Whalley	61,549	16.7%
5- Guildford/ Fleetwood/ Fraser Heights	68,240	18.5%
6- Cloverdale/ Urban Langley	50,725	13.7%
7- Rest of Langley/ Port Kells	51,546	14.0%
TOTAL	369,240	100.00%

<b>Data Used in Application of TransLink Formula for Projections</b>		
<b>REGIONAL CONCEPTS</b>	<u>Current Regular Riders (at least monthly)</u>	<u>Potential Riders for Improved Public Transit</u>
<b>Concept R1: Tsawwassen-Ladner-Richmond Centre-Airport (Regional) Area 1</b>		
Very likely to use	.375	.122
Somewhat likely to use	.182	.373
Average no. trips anticipated	1.54	1.13
<b>Incidence of this group in target area cross-section ACTUAL BASE: (n=296)</b>	.269	.363
<b>Target Area Population = 34,547</b>		
<b>Concept R2: 88<sup>th</sup> Ave to Richmond to Airport (Regional) Areas 2,3,5 selected FSAs</b>		
Very likely to use	.126	.15
Somewhat likely to use	.161	.167
Average no. trips anticipated	1.56	1.27
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=764)</b>	.368	.264
<b>Target Area Population = 133,117</b>		
<b>Concept R3: 72<sup>nd</sup> Ave to Richmond to Airport (Regional) Areas 2,3 selected FSAs</b>		
Very likely to use	.138	.091
Somewhat likely to use	.212	.168
Average no. trips anticipated	1.56	1.40
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=479)</b>	.391	.283
<b>Target Area Population = 78,826</b>		
<b>Concept R4: Limited Stop Express along King George Hwy (Regional) Areas 3,4</b>		
Very likely to use	.244	.099
Somewhat likely to use	.303	.222
Average no. trips anticipated	2.81	1.24
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=578)</b>	.415	.234
<b>Target Area Population = 103,464</b>		

<b>Data Used in Application of TransLink Formula for Projections</b>		
	Current Regular Riders (at least monthly)	Potential Riders for Improved Public Transit
<b>REGIONAL CONCEPTS, cont.</b>		
<b>Concept R5: Limited Stop – Guildford to Lougheed Mall (Regional) Area 5</b>		
Very likely to use	.275	.120
Somewhat likely to use	.201	.159
Average no. trips anticipated	2.11	0.59
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=299)</b>	.368	.244
<b>Target Area Population = 68,240</b>		
<b>Concept R6: Limited Stop – Guildford to Coquitlam Town Centre (Regional) Area 5</b>		
Very likely to use	.156	.124
Somewhat likely to use	.202	.204
Average no. trips anticipated	1.12	0.88
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=299)</b>	.368	.244
<b>Target Area Population = 68,240</b>		
<b>Concept R7: White Rock – Cloverdale – Langley via Hwy 10 (Regional) Area 6 selected FSAs</b>		
Very likely to use	.175	.087
Somewhat likely to use	.150	.159
Average no. trips anticipated	1.22	0.83
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=287)</b>	.245	.327
<b>Target Area Population = 45,239</b>		
<b>Concept R8: White Rock – Langley via 200<sup>th</sup> St * (Regional) Areas 6,7 selected FSAs</b>		
Very likely to use	.278	.174
Somewhat likely to use	.132	.170
Average no. trips anticipated	.96	0.99
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=177)</b>	.235	.331
<b>Target Area Population = 42,563</b>		

\* Note Cloverdale should not have been included in this concept description.

<b>Data Used in Application of TransLink Formula for Projections</b>		
<b>REGIONAL CONCEPTS, cont.</b>	<u>Current Regular Riders (at least monthly)</u>	<u>Potential Riders for Improved Public Transit</u>
<b>Concept R9: Walnut Grove-Lougheed Mall (Regional) Areas 6,7</b>		
Very likely to use	.070	.022
Somewhat likely to use	.104	.093
Average no. trips anticipated	1.61	1.89
<b>Incidence of this group in study cross-section</b> ACTUAL BASE: (n=691)	.205	.331
<b>Target Area Population = 102,271</b>		
<b>Concept R10: Langley-Maple Ridge Connector (Regional) Areas 6,7</b>		
Very likely to use	.068	.020
Somewhat likely to use	.131	.106
Average no. trips anticipated	2.16	0.85
<b>Incidence of this group in study cross-section</b> ACTUAL BASE: (n=691)	.205	.331
<b>Target Area Population = 102,271</b>		

<b>Data Used in Application of TransLink Formula for Projections</b>		
<b>LOCAL CONCEPTS</b>	Current Regular Riders <u>(at least monthly)</u>	Potential Riders for <u>Improved Public Transit</u>
<b>Concept L1: Tsawwassen-Ladner (Local) Area 1</b>		
Very likely to use	.333	.264
Somewhat likely to use	.194	.316
Average no. trips anticipated	1.75	1.24
<b>Incidence of this group in target area cross-section ACTUAL BASE: (n=296)</b>	.269	.363
<b>Target Area Population = 34,547</b>		
<b>Concept L2: 88<sup>th</sup> Ave Local Areas 2,3,4,5 selected FSAs</b>		
Very likely to use	.147	.119
Somewhat likely to use	.189	.089
Average no. trips anticipated	2.16	1.51
<b>Incidence of this group in study cross- section ACTUAL BASE: (n= 965)</b>	.387	.262
<b>Target Area Population = 173,375</b>		
<b>Concept L3: Scott Road Local Areas 2,3,4</b>		
Very likely to use	.084	.057
Somewhat likely to use	.143	.182
Average no. trips anticipated	1.74	1.58
<b>Incidence of this group in study cross- section ACTUAL BASE: (n= 860)</b>	.407	.254
<b>Target Area Population = 164,183</b>		
<b>Concept L4: 64<sup>th</sup> Ave Local Areas 2,3</b>		
Very likely to use	.101	.082
Somewhat likely to use	.182	.101
Average no. trips anticipated	0.97	1.10
<b>Incidence of this group in study cross- section ACTUAL BASE: (n=597)</b>	.362	.286
<b>Target Area Population = 102,634</b>		



<b>Data Used in Application of TransLink Formula for Projections</b>		
<b>LOCAL CONCEPTS, cont.</b>	<u>Current Regular Riders (at least monthly)</u>	<u>Potential Riders for Improved Public Transit</u>
<b>Concept L5: Langley to Aldergrove Local Area 6</b>		
Very likely to use	.055	.063
Somewhat likely to use	.057	.134
Average no. trips anticipated	2.43	0.55
<b>Incidence of this group in study cross-section ACTUAL BASE: (n= 314 )</b>	.251	.319
<b>Target Area Population = 50,725</b>		
<b>Concept L6: Community Bus Urban Langley Areas 6,7</b>		
Very likely to use	.196	.116
Somewhat likely to use	.210	.207
Average no. trips anticipated	1.56	1.08
<b>Incidence of this group in study cross-section ACTUAL BASE: (n=691)</b>	.205	.331
<b>Target Area Population = 102,271</b>		
<b>Concept L7: Community Bus Walnut Grove-Fort Langley Areas 6,7</b>		
Very likely to use	.174	.104
Somewhat likely to use	.266	.189
Average no. trips anticipated	1.68	1.32
<b>Incidence of this group in study cross-section ACTUAL BASE: (n=691)</b>	.205	.331
<b>Target Area Population = 102,271</b>		

## Questionnaire

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**SAMPLING AREAS:** 1) South Delta/Ladner/Tsawwassen, 2) North Delta/Scottsdale, 3) Newton, 4) Surrey Central/Whalley, 5) Guildford/Fleetwood/Fraser Heights, 6) Urban Langley/Cloverdale, 7) Rest of Langley/Port Kells.

### SCREENER

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Good (morning/afternoon). I'm \_\_\_\_\_, from McIntyre & Mustel Research, a Vancouver public opinion polling company. We're doing a survey on behalf of TransLink, the regional transportation network, about all types of transportation needs of people who live in (AREA NAME). We'd like to speak to the male/female household member who is age 16 or over and whose birthday comes next. RE-INTRODUCE/ ARRANGE CALLBACK IF NECESSARY.

### PERSUADERS:

- This is a survey about transportation needs and your opinions. We are not selling anything.
- All responses are strictly confidential; no names or phone numbers are ever given to anyone not even the client TransLink
- If you wish, you may phone: Sheila Hartmann, Research Manager at TransLink, 453-4610
- It is extremely important that we include the opinions of non-users of transit, of car users, etc....
- It is extremely important that we include all people in our study, regardless of how little you might travel.
- This study is extremely important to ensure that the needs of people in your area are met.
- Survey length varies depending on your answers (ranging anywhere from 3 minutes up to 20 minutes).

A-1. RECORD GENDER (OBSERVE):50/50 MALE FEMALE  
 Male  
 Female

A-2. Does anyone in your household work for a market research company or for BC Transit, TransLink, Coast Mountain Bus Company, SkyTrain, SeaBus or West Coast Express?

### IF YES TO ANY, THANK AND TERMINATE AS OCCUPATIONAL NON-QUALIFIER

A-3. *So that we can be sure we are including every part of town in our survey, could you please tell me your postal code? (TRY TO GET FULL POSTAL CODE)*

\_\_\_\_\_

ASK EVERYONE

**B.** Do you currently take any of the following at least once a month on a regular basis:

- ▼Public transit buses
- ▼SkyTrain
- ▼SeaBus
- ▼West Coast Express

NONE OF THESE SKIP TO Q. F

C. IF BUS RIDER IN Q. B: Which (AREA NAME) bus route number do you take most often? RECORD ONE OR MORE. IF NOT AWARE OF NUMBER, PROBE FOR NAME OF ROUTE.

Surrey/North Delta

1. # 310 Scottsdale/ Vancouver
2. # 311 Scottsdale/ Vancouver
3. # 312 Scottsdale/ Scott Road Station
4. # 314 Surrey Central Station/ Sunbury/ Scott Road Station
5. # 316 Surrey Central Station/ Scottsdale
6. # 317 Guildford/ Scott Road Station
7. # 319 Scott Road Station/ Scottsdale
8. # 322 Newton/ Panorama/ Scottsdale
9. # 323 Newton Exchange/ Surrey Central Station
10. # 324 Newton Exchange/ Surrey Central Station
11. #325 Newton Exchange/ Surrey Central Station
12. #326 Guildford/ Surrey Central Station
13. #328 Grosvenor/ Surrey Central Station
14. #329 Surrey Central Station/ Scottsdale
15. #330 Surrey Central Station/ Scott Road Station
16. #332 Guildford/ Surrey Central Station
17. #334 Newton Exchange/ Guildford
18. #335 Fleetwood/ Surrey Central Station
19. #337 Fraser Heights/ Guildford
20. #340 Cloverdale/ Newton Exchange/ 22<sup>nd</sup> Street Station
21. #391 Scottsdale/ Scott Road Station
22. #393 Newton Exchange/ Surrey Central Station

White Rock/South Surrey

23. #321 White Rock/ Newton/ Surrey Central Station
24. #345 Guildford/ White Rock Centre
25. #351 Crescent Beach/ Vancouver
26. #352 White Rock/ Vancouver
27. #353 Ocean Park/ White Rock Centre
28. #354 White Rock South/ White Rock Centre
29. #355 White Rock Centre/ Ocean Park
30. #356 Cranley/ White Rock Centre
31. #357 White Rock/ Crescent Beach
32. #358 Seaside
33. #390 White Rock Centre/ Surrey Central Station
34. #394 White Rock/ King George Express

South Delta (Ladner, Tsawwassen)

35. #318 Scottsdale/ Ladner Exchange
36. #601 South Delta/ Boundary Bay/ Vancouver
37. #602 Tsawwassen Heights/ Vancouver
38. #603 Beach Grove/ Vancouver
39. #604 English Bluff/ Vancouver
40. #606 Ladner Ring/VANCOUVER
41. #608 Ladner Ring/VANCOUVER
42. #640 Tsawwassen Ferry/ Scott Road Station

Langley

- 43. #320 Langley/ Guildford/ Surrey Central Station
- 44. #395 Willowbrook/ Surrey Central Station
- 45. #501 Langley South/ Surrey Central Station
- 46. #502 Brentwood/ Fernridge/ Surrey Central Station
- 47. #506 Aldergrove/ Langley Centre
- 48. #507 Walnut Grove/ Langley Centre
- 49. #509 Walnut Grove/ Surrey Central Station
- 50. #511 Aldergrove/ Langley Centre
- 51. #590 Langley South/ Surrey Central Station
  
- 52. #404 Airport/ Richmond Centre/ Ladner Exchange

Non-specific codes

- 53. "ANY VANCOUVER BUS" GOING TO/FROM DOWNTOWN
- 53. DON'T KNOW ROUTE # (PROBE FOR NAME OF BUS AND RE-CODE IF POSSIBLE)
- 54. DON'T KNOW/REFUSED
- 55. OTHER (SPECIFY) \_\_\_\_\_

D. FOR EACH BUS ROUTE MENTIONED IN Q. C, ASK: In an average week or month, how many one-way trips do you take on the #(INSERT FROM Q.C) bus? A trip to and from work, for example, would be two one-way trips.

ENTER NUMBER OF ONE-WAY TRIPS: PER WEEK \_\_\_\_ OR PER MONTH \_\_\_\_  
IF NON-RIDER, ENTER '0'

DELETE QUES. E

▼ TRANSIT RIDERS (BUS, SKYTRAIN, SEABUS OR WCE IN Q. B) SKIP TO MAIN QUESTIONNAIRE.

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ASK NON-RIDERS:

F. Transit is considering adding new express bus and community bus services, as well as making improvements to service frequency. Would you consider taking improved public transportation more often if the service met your needs

- YES SKIP TO MAIN QUESTIONNAIRE
- NO GO TO BASIC DATA
- DON'T KNOW/REF GO TO BASIC DATA

## MAIN QUESTIONNAIRE

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IF RESPONDENT QUALIFIES FOR LONG SURVEY, SAY: The rest of this survey takes anywhere from about 10-15 minutes, depending on your answers. Is this a convenient time to complete it? ARRANGE CALLBACK IF NEEDED.

ASK EVERYONE Q1a) ENTIRE LIST IN SEQUENCE (NOT ROTATED).  
THEN ASK b)-d) IN SEQUENCE FOR EACH ITEM ON LIST

1a) I'm going to read you a list of destinations. As I read each one, please tell me whether you have traveled to that destination by ANY mode of transportation in the past 30 days?

YES

NO

DON'T KNOW/REF

PROGRAM LIST ACCORDING TO AREA:

SAMPLING AREAS: 1) South Delta/Ladner/Tsawwassen, 2) North Delta/Scottsdale, 3) Newton, 4) Surrey Central/Whalley, 5) Guildford/Fleetwood/Fraser Heights, 6) Urban Langley/Cloverdale, 7) Rest of Langley/Port Kells.

1. King George SkyTrain Station (ALL)
2. Surrey City Centre (including mall and Surrey Central SkyTrain station) (ALL)
3. Scott Road SkyTrain (ALL)
4. Other SkyTrain Stations – other than King George, Surrey Central and Scott Road stations (ALL)
5. Downtown Vancouver (ALL)
6. Vancouver International Airport (ALL)
7. UBC/ University of British Columbia (ALL)
8. SFU/ Simon Fraser University Burnaby campus (ALL)
9. BCIT/ British Columbia Institute of Technology Burnaby campus (ALL)
10. Tsawwassen Ferry Terminal (ALL)
11. Delta Hospital (1, 2)
12. Scottsdale Mall (2, 3, 4)
13. Tsawwassen Town Centre (1)
14. Ladner Centre (1)
15. Surrey Memorial Hospital (ALL)
16. Kwantlen College (ALL): PROBE: Which campus? READ LIST
17. (Kwantlen) Surrey,
18. (Kwantlen) Richmond,
19. (Kwantlen) Langley or
20. (Kwantlen) Newton campus?
21. Guildford Town Centre (2, 3, 4, 5, 6, 7)
22. Peace Arch Hospital (1, 2, 3, 6)
23. Langley Memorial Hospital (6, 7)
24. Langley Mall (6, 7)
25. Willowbrook Shopping Centre (5, 6, 7)
26. Cloverdale Fairgrounds (3, 4, 5, 6, 7)
27. White Rock Centre/Semiahmoo Mall (152<sup>nd</sup> St and 16<sup>th</sup> Ave) (2, 3, 4, 5, 6, 7)
28. Peninsula Village Shopping Mall area (152<sup>nd</sup> St and 24<sup>th</sup> Ave) (2, 3, 4, 5, 6, 7)
29. Cloverdale Town Centre (3, 5, 6, 7)
30. Fleetwood Centre/Sports Complex (3, 5)
31. Newton Town Centre (2, 3, 5)
32. Strawberry Hills Mall (2, 3, 4)
33. Walnut Grove Park & Ride/ Cinema Complex (5, 6, 7)
34. Surrey Civic Centre – also known as Surrey City Hall (ALL)

35. Surrey Docks/ Industrial area (ALL)
36. Annacis Island Industrial area (ALL)
37. River Road/Tilbury Island Industrial Area (ALL)
38. Port Kells Industrial Area (ALL)
39. Richmond Centre (1, 2, 3, 4)
40. Richmond Bridgeport/ East side of Richmond industrial and office parks (ALL)
41. Burnaby – all destinations along the Lougheed Highway (incl. Lougheed Mall, Brentwood Mall, etc.) (ALL)
42. Coquitlam Centre (ALL)
43. Vancouver— the Broadway area between Commercial and Arbutus (ALL)
44. Any local secondary school in (AREA NAME) (ALL)

FOR EACH DESTINATION IN a), ASK b-e):

1b) Thinking just of the past 7 days, how many one-way trips did you take to and from (read NAME of DESTINATION)? Traveling to and from work, for example, is two one-way trips.

ENTER NUMBER \_\_\_\_\_ CONFIRM NUMBER IN PAST 7 DAYS.

ASK 1c IF Q1b EQUALS 1 OR MORE

1c) What mode of transportation did you most often use to travel to or from (read NAME of DESTINATION)? DO NOT READ; RECORD ONE ONLY; FOR CAR/VAN/TRUCK PROBE IF ALONE OR WITH SOMEONE ELSE. (IF ASKED TO CLARIFY: mode use most often for your first trip of the day to that destination)

CAR/VAN/TRUCK PROBE: Alone or with someone else?

1. \* CAR/VAN/TRUCK ALONE
2. \* CAR/VAN/TRUCK WITH SOMEONE ELSE      PROBE ONLY FOR Q1a CODES 1 - 4:
  - 2i \* Did you park the car or
  - 3i \* Does someone drop you off?
4. \* BUS ONLY
6. \* BUS AND CAR
6. \* BUS AND SKYTRAIN
7. SKYTRAIN ONLY
8. BICYCLE
9. MOTORCYCLE
11. WALK
12. OTHER (SPECIFY) \_\_\_\_\_
13. DON'T KNOW/REF

1d) ASK ONLY IF \* IN Q1c = 1 to 6.  
 At what times of day did you most often travel to and depart from (read NAME of DESTINATION)?  
 DO NOT READ. RECORD ALL TIME PERIODS MENTIONED. PROBE IF NEEDED FOR "to" and "depart  
 from" AND DAYS OF WEEK AS LISTED.

RECORD "2" IF ARRIVE AND DEPART IN SAME TIME PERIOD;  
 OTHERWISE RECORD "1"

MON – FRI:  
 BEFORE 9:30AM.....  
 9:30AM TO 3PM.....  
 3PM TO 6:30PM.....  
 AFTER 6:30PM.....  
 SATURDAY:  
 BEFORE 6PM.....  
 AFTER 6PM.....  
 SUNDAY/HOLIDAYS:  
 BEFORE 6PM.....  
 AFTER 6PM.....  
 OTHER SPECIFY.....  
 DON'T KNOW/REFUSED

1e) IF CAR/VAN/TRUCK ALONE OR WITH SOMEONE (Q1c = 1 OR 2 OR 3): Would you take the bus to  
 (NAME DESTINATION) if bus service met your needs?

- YES
- NO
- DON'T KNOW/REF

1f) IF CAR/VAN/TRUCK ALONE OR WITH SOMEONE (Q1c = 1 OR 2 OR 3): How would bus service need to  
 change for you to consider taking the bus to or from that destination? PROBE FOR SPECIFICS.

MORE FREQUENT: PROBE i) How frequent? \_\_\_\_\_  
 ii) During what time period? \_\_\_\_\_  
 HOURS OF SERVICE: PROBE What hours are needed? \_\_\_\_\_  
 GOOD CONNECTIONS: PROBE i) With which bus routes or SkyTrain station?  
 \_\_\_\_\_  
 ii) FOR EACH ROUTE: At what times of day? \_\_\_\_\_  
 iii) FOR EACH TIME: And how long will you wait?  
 \_\_\_\_\_

DIRECT ROUTE WITH FEW/NO TRANSFERS: PROBE Please describe the routing needed \_\_\_\_\_  
 OTHER (SPECIFY) \_\_\_\_\_

2. ASK EVERYONE: Are there any other major destinations in the Lower Mainland south of the Fraser  
 River that you travel to on a regular basis? RECORD ALL MENTIONS. (PROBE: Any others?)  
 \_\_\_\_\_  
 \_\_\_\_\_

3. ASK EVERYONE: Next I'd like to read some descriptions of possible new bus routes to you, and then ask you how likely you would be to use the service.

Before we begin, note that the phrase "peak hours" means *Monday to Friday from 6am to 930 in morning and from 3 to 6:30pm in afternoon*. "Off-peak" means *all other times*.

USE TRANSITIONS: Here is the first new route description: ... The next new route description is: ...

READ CONCEPT, THEN ASK a)-c) FOR EACH

RANDOMIZE

...INSERT REGIONAL CONCEPTS (CONCEPT SHEET ATTACHED)

END RANDOM

RANDOMIZE

...INSERT LOCAL CONCEPTS (CONCEPT SHEET ATTACHED)

END RANDOMIZE

AFTER EACH CONCEPT DESCRIPTION, ASK:

3a) How likely would you be to use this service at least once a month on a regular basis? Would you say you are...

Very likely	ASK b-c
Somewhat Likely	ASK b-c
Not very likely	SKIP TO NEXT CONCEPT
Not at all likely to use it	SKIP TO NEXT CONCEPT
DON'T KNOW/REF	SKIP TO NEXT CONCEPT

3b) How often in an average week or month do you think you would use the new service?

ENTER NUMBER OF TIMES:     \_\_\_PER WEEK OR \_\_\_ PER MONTH

3c) ASK PRESENT BUS CUSTOMERS (Q.B = 1): Would you switch some of your trips from an existing bus route over to this new service? If yes, from which routes would you switch trips? RECORD ALL ROUTES.

#### Surrey/North Delta

1. # 310 Scottsdale/ Vancouver
2. # 311 Scottsdale/ Vancouver
3. # 312 Scottsdale/ Scott Road Station
4. # 314 Surrey Central Station/ Sunbury/ Scott Road Station
5. # 316 Surrey Central Station/ Scottsdale
6. # 317 Guildford/ Scott Road Station
7. # 319 Scott Road Station/ Scottsdale
8. # 322 Newton/ Panorama/ Scottsdale
9. # 323 Newton Exchange/ Surrey Central Station
10. # 324 Newton Exchange/ Surrey Central Station
11. #325 Newton Exchange/ Surrey Central Station
12. #326 Guildford/ Surrey Central Station
13. #328 Grosvenor/ Surrey Central Station
14. #329 Surrey Central Station/ Scottsdale
15. #330 Surrey Central Station/ Scott Road Station
16. #332 Guildford/ Surrey Central Station
17. #334 Newton Exchange/ Guildford
18. #335 Fleetwood/ Surrey Central Station



19. #337 Fraser Heights/ Guildford
20. #340 Cloverdale/ Newton Exchange/ 22<sup>nd</sup> Street Station
21. #391 Scottsdale/ Scott Road Station
22. #393 Newton Exchange/ Surrey Central Station

White Rock/South Surrey

23. #321 White Rock/ Newton/ Surrey Central Station
24. #345 Guildford/ White Rock Centre
25. #351 Crescent Beach/ Vancouver
26. #352 White Rock/ Vancouver
27. #353 Ocean Park/ White Rock Centre
28. #354 White Rock South/ White Rock Centre
29. #355 White Rock Centre/ Ocean Park
30. #356 Cranley/ White Rock Centre
31. #357 White Rock/ Crescent Beach
32. #358 Seaside
33. #390 White Rock Centre/ Surrey Central Station
34. #394 White Rock/ King George Express

South Delta (Ladner, Tsawwassen)

35. #318 Scottsdale/ Ladner Exchange
36. #601 South Delta/ Boundary Bay/ Vancouver
37. #602 Tsawwassen Heights/ Vancouver
38. #603 Beach Grove/ Vancouver
39. #604 English Bluff/ Vancouver
40. #606 Ladner Ring
41. #608 Ladner Ring
42. #640 Tsawwassen Ferry/ Scott Road Station

Langley

43. #320 Langley/ Guildford/ Surrey Central Station
44. #395 Willowbrook/ Surrey Central Station
45. #501 Langley South/ Surrey Central Station
46. #502 Brentwood/ Fernridge/ Surrey Central Station
47. #506 Aldergrove/ Langley Centre
48. #507 Walnut Grove/ Langley Centre
49. #509 Walnut Grove/ Surrey Central Station
50. #511 Aldergrove/ Langley Centre
51. #590 Langley South/ Surrey Central Station
  
52. #404 Airport/Richmond Centre/Ladner Exchange
53. OTHER \_\_\_\_\_

Finally just a few questions to make sure we have represented all different groups of people in our study.

4. Do you have access to a car, van or truck for your own use either as a passenger or a driver on a regular basis?"

YES  
NO

5. What is the highest level of formal education you have completed? DO NOT READ LIST

Less than high school  
High school  
College or technical  
Some university  
Bachelor Degree  
Graduate Degree  
DON'T KNOW/REFUSED

6. What is your present employment status? (READ LIST-MULTIPLE ANSWERS OKAY)

Homemaker  
Employed less than 30 hours per week  
Employed more than 30 hours per week  
Student  
Retired  
Not employed  
DON'T KNOW/REFUSED

7. Including yourself, how many people reside in your household? \_\_\_\_\_  
IF MORE THAN ONE, ASK FOLLOWING (FOR RESPONDENT'S GENDER ONLY):  
And how many are males/females 16 years of age and over? \_\_\_\_\_

8. Finally, which of the following categories best describes your family income? That is, the total income before taxes of all persons in your household? READ LIST

Less than \$30,000  
\$30,000 to less than \$60,000  
\$60,000 to less than \$90,000  
\$90,000 and over  
DON'T KNOW  
REFUSED

9. In what year were you born? RECORD YEAR

10. LANGUAGE OF INTERVIEW

English  
Punjabi/Hindi  
Other (specify) \_\_\_\_\_

***On behalf of TransLink, thank you very much for your time - the answers you have provided will be very helpful.***

## FINAL CONCEPTS

ROTATION I: **REGIONAL CONCEPTS**

## AREA 1: S. DELTA/LADNER/TSAWWASSEN

**R1** (3.1 Regional):

*"Regional Service between Tsawwassen – Ladner – Richmond Centre – Airport"*

*New express bus service would run along Highways 17 and 99 from Tsawwassen to Ladner Centre and continue on to Richmond Centre and Lansdowne shopping centres; it would then connect to a proposed Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. Travel time from Tsawwassen would be 15 minutes to Ladner; 20 minutes from Ladner to Richmond Centre and then 10 minutes to the proposed airport exchange. Service would operate 5am to midnight, 7 days a week, running every 30 minutes in the peak hours, and every 60 minutes off-peak.*

## AREAS 2, 3, 5: N. DELTA/SCOTTSDALE and NEWTON and GUILDFORD/FLEETWD/FRASER

**R2** (3.3 Regional):

*"Regional Service from 88<sup>th</sup> Avenue to Richmond and to Airport"*

*This new route would operate along 88<sup>th</sup> Avenue and Nordel Way across the Alex Fraser Bridge, stopping on Annacis Island then express all along Hwy 91 making stops on Number 6 Road and Cambie to a new Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. The estimated travel time from King George Highway to the Airport exchange is 60 minutes. Service on this new route would be every 30 minutes, Monday to Friday, peak hours.*

## AREAS 2 &amp; 3: NORTH DELTA/SCOTTSDALE and NEWTON

**R3** (3,3 Regional):

*"Regional Service from 72nd Avenue to Richmond – and to Airport"*

*This new route would operate along 72nd Avenue, serving Newton and Scottsdale Exchanges, across the Alex Fraser Bridge, stopping on Annacis Island, then express all along Highway 91 making stops on Number 6 Road and Cambie, to a new Airport exchange with 10 minute shuttle service to the Airport Terminal and Sea Island employers. The estimated travel time for this trip from Newton to the Airport Exchange is 65 minutes, and from Scottsdale to the Airport Exchange is about 50 minutes. The service would operate every 30 minutes, Monday to Friday, peak hours.*

## AREAS 3 &amp; 4: NEWTON and SURREY CENTRAL/WHALLEYRegional):

**R4** (3.8 Regional):

*"Limited Stop Express Service"*

*This new route would operate along King George Highway between White Rock Centre and SkyTrain's Surrey Central Station. This service would operate Monday to Saturday between 6am and midnight, every 15 minutes..*

## AREA 5: GUILDFORD/ FLEETWOOD/FRASER HEIGHTS

**R5** (3.9 Regional):

*"Limited Stop Regional Service between Guildford Exchange and Lougheed Mall"*

*This new service would operate between Guildford Exchange and Lougheed Mall, Monday to Saturday from 6 am to midnight, running every 30 minutes. Assuming bus priority access to the Port Mann Bridge, the estimated travel time from Guildford to Lougheed Mall is 25 minutes.*

## AREA 5: GUILDFORD/ FLEETWOOD/FRASER HEIGHTS

**R6** (3.10 Regional):

*"Limited Stop Regional Service between Guildford Exchange and Coquitlam Town Centre"*

*This new service would operate between Guildford and Coquitlam Town Centre. It would run Monday to Saturday from 6 am to 9 pm, running every 30 minutes. Assuming bus has priority access to the Port Mann Bridge, estimated travel time is 35 minutes.*

AREA 6: CLOVERDALE/LANGLEY

**R7** (3.11 Regional):

"White Rock – Cloverdale – Langley via Highway 10"

*This new route would operate between Langley Town Centre and White Rock Centre, making stops at Willowbrook Mall, in Cloverdale and along Highway 10 and 152<sup>nd</sup> Street . It would operate seven days a week, between 6am and 9pm, running every 60 minutes. The estimated travel time between Langley and White Rock is 40 minutes.*

AREA 6, 7: LANGLEY and PORT KELLS

**R8** (3.12 Regional):

"White Rock– Langley via 200<sup>th</sup> Street"

*This new route would operate between Langley Town Centre and White Rock, using 200<sup>th</sup> Street and 16<sup>th</sup> Avenue. It would make stops at Willowbrook Mall, in White Rock South Surrey, Cloverdale, Fernridge, Brookwood and Murrayville. It would operate seven days a week from 6am to 9pm, , running every hour. The estimated travel time between Langley and White Rock is 40 minutes.*

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS

**R9** (3.16 Regional):

"Walnut Grove to Lougheed Mall Regional Service"

*This new service would operate between Langley Centre, Walnut Grove to Lougheed Exchange along Highway 1. It would run Monday to Friday in peak hours only. Assuming bus priority access to the Port Mann Bridge, the estimated travel time from Walnut Grove Park & Ride to Lougheed Exchange is 40 minutes.*

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS

**R10** (3.17 Regional):

"Langley to Maple Ridge Regional Connector"

*This new service would operate between Langley Centre, Walnut Grove, Fort Langley via the Albion Ferry to the Port Haney Station on the West Coast Express Commuter Rail Line. It would operate Monday to Friday peak hours only, every half hour timed to meet the train schedule. Assuming boarding privileges on the Albion Ferry, the estimated travel time from Langley Centre to the Haney Train Station, is 45 minutes.*

ROTATION II: **LOCAL CONCEPTS**

AREA 1: S. DELTA/LADNER/TSAWWASSEN

**L1** (3.2 Local):

"Tsawwassen – Ladner Local Service"

*This new route would provide local service circulating within Tsawwassen and Ladner , and connecting to Ladner exchange. Passengers who wish to go to Vancouver, Richmond or the Airport would transfer at Ladner exchange. The service would use a smaller vehicle seating 20 passengers and would operate from 8am till midnight running every 60 minutes. In the evening between 8pm and midnight, you can call a central number to have the service pick you up and drop you off at your door.*

AREAS 2, 3, 4, 5: NORTH DELTA/SCOTTSDALE and NEWTON and SURREY CENTRAL/WHALLEY and GUILDFORD/FLEETWOOD/FRASER HEIGHTS

**L2** (3.5 Local):

"88<sup>th</sup> Avenue Local Service"

*This new route would operate along 88<sup>th</sup> Avenue between Fleetwood and Scott Road to Scottsdale. Service would be 7 days a week, from 6 am to midnight, running every 30 minutes. .*

AREAS 2, 3, 4: NORTH DELTA/SCOTTSDALE and NEWTON and SURREY CENTRAL/WHALLEY

**L3** (3.6 Local):

"Scott Road Local Service"

*This new route would operate from the Scott Road SkyTrain Station via Scott Road past 72<sup>nd</sup> Avenue to Highway 10 and then east to Surrey Municipal Hall. It would operate from 6 am to midnight running every 30 minutes..*

AREAS 2 & 3: NORTH DELTA/SCOTTSDALE and NEWTON

**L4** (3.7 Local):

"64<sup>th</sup> Avenue Local Service"

*This new route would operate along 64<sup>th</sup> Avenue, connecting Scottsdale exchange, Surrey City Hall, and Cloverdale. It would operate once every hour from 6am to midnight Monday to Saturday, running hourly.*

AREA 6: CLOVERDALE/LANGLEY

**L5** (3.13 Local):

"Langley to Aldergrove Local Service"

*This route would travel between Langley Town Centre and Aldergrove along Fraser Highway, providing better connections to regional bus services leaving Langley Town Centre. It would operate on an hourly basis during Monday to Friday peak hours.*

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS

**L6** (3.14 Local):

"Community Bus Urban Langley"

*This new route would operate during the day and evenings connecting Brookwood, Fernridge, and Murrayville with Langley town centre and Willowbrook mall. The service would use smaller vehicles with seats for 20 passengers. Service would be every 30 minutes from 8am till midnight.. After 8 pm you can call a central number to have the service pick you up and drop you off at your door.*

AREA 6 & 7: CLOVERDALE/LANGLEY and REST OF LANGLEY/PORT KELLS

**L7** (3.15 Local):

"Community Bus Walnut Grove/ Fort Langley"

*This new route would operate during the day and evenings connecting, Willowbrook Mall, Kwantlen College, Trinity Western University, Fort Langley, Walnut Grove & theatres. The service would operate every 30 minutes from 8am till midnight.. After 8 pm you can call a central number to have the service pick you up and drop you off at your door.*