Regional data analysis within & outside the FTN

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Introduction

Objectives:

**Within** and **outside** the FTN:

- Understand differences in socio-economic characteristics
- Inform how transportation performance varies & gain insight on variables that influence it
- **Not** to profile transit users (more complex)

Uses:

- Regional Transportation Strategy
- Area Transit Plans
- Marketing
Description

Metro Vancouver’s urban containment area subdivided in 2, within FTN & outside FTN:

- **Areas within walking distance of the FTN** (400 meters for bus, 800 meters for rapid transit)

- **Areas outside walking distance to the FTN** (the rest of the urban containment)

Get data on demographics, socio-economic and transportation characteristics in/out FTN.
Datasets

The analysis is based on data from:

• 2011 (and some 2006) Census & National Household Survey by Statistics Canada
• 2012 MapInfo - Canada Business Summary by Pitney Bowes
• 2012 CanEx - Canada Expenditure Potential by Pitney Bowes (based on the Survey of Household Spending (SHS) by Statistics Canada)
• 2011 Trip Diary by TransLink
• Other TransLink Data
## Population, Dwellings & Employment

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Within FTN</th>
<th>Outside FTN</th>
<th>Metro Vancouver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,108,000</td>
<td>1,195,000</td>
<td>2,303,000</td>
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<tr>
<td>Dwellings</td>
<td>510,000</td>
<td>435,000</td>
<td>945,000</td>
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<tr>
<td>Employment</td>
<td>647,000</td>
<td>328,000</td>
<td>975,000</td>
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<tr>
<td>Land Area (ha, inside UCB)</td>
<td>28,405</td>
<td>55,613</td>
<td>84,018</td>
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</tbody>
</table>
A Tale of Two Regions

Population, Dwellings & Employment

Share of Region's population
- Outside FTN: 52%
- Within FTN: 48%

Share of Region's dwellings
- Outside FTN: 46%
- Within FTN: 54%

Share of Region's employment
- Outside FTN: 34%
- Within FTN: 66%

Bar graphs show:
- Population density
- Employment density
- Combined density
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Dwellings

% of rented vs. owned

Within FTN | Outside FTN | Metro Vancouver
---|---|---
% of dwelling type

Within FTN
- Detached: 18%
- Townhouses: 9%
- Apartments: 73%

Outside FTN
- Detached: 53%
- Townhouses: 14%
- Apartments: 33%

Metro Vancouver
- Detached: 34%
- Townhouses: 12%
- Apartments: 54%
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Socio-economic characteristics

Family & household composition:

Within FTN
- 17% Lone-parent families
- 83% Two-parent families

Outside FTN
- 14% Lone-parent families
- 86% Two-parent families

Metro Vancouver
- 16% Lone-parent families
- 84% Two-parent families

Graph: Persons per Household vs. Persons per Family with children at home.
Socio-economic characteristics

Population distribution per gender and age

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Socio-economic characteristics

Population distribution per age (indexed)

Metro Vancouver 100

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Socio-economic characteristics

Average yearly personal income (indexed)

*2006 Census data
Socio-economic characteristics

Labour force (15+ years) by occupation (indexed)

*2006 Census data
Socio-economic characteristics

Education attainment (indexed)

*2006 Census data
Socio-economic characteristics

Average household income & transportation expenditure

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<tr>
<th>Within FTN</th>
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<th>$20</th>
<th>$30</th>
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A Tale of Two Regions

Transportation

Vehicle ownership rates

- **cars/capita**
- **cars/HH**
- **bicycles/capita**
- **bicycles/HH**

- Within FTN
- Outside FTN
- Metro Vancouver

- % of HH without a car
- % of HH without a bike

**Vehicle ownership rates**
Transportation

Distance travelled (daily)

- Commuter Trip Distance
- VKT/HH
- VKT/capita

Km. 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

Within FTN  
Outside FTN  
Metro Vancouver
Transportation

Transit performance

<table>
<thead>
<tr>
<th>% of service hours</th>
<th>% of boardings</th>
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<tr>
<td>67%</td>
<td>80%</td>
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<table>
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<th>Boardings/revenue-hour</th>
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<tbody>
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<td>82</td>
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- Within FTN
- Outside FTN
- Metro Vancouver
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Transportation: Sustainable Mode Share

**Work/Study Trips:**
- Within FTN: 45.5%
  - Transit: 3.8%
  - Bike: 8.2%
  - Walk: 33.5%
  - Rest: 54.5%
- Outside FTN: 21.3%
  - Transit: 1.3%
  - Bike: 17.5%
  - Walk: 78.7%
- Metro Vancouver: 33.1%
  - Transit: 2.5%
  - Bike: 5.3%
  - Walk: 66.9%

**Other Trips:**
- Within FTN: 33.0%
  - Transit: 2.1%
  - Bike: 17.6%
  - Walk: 13.3%
  - Rest: 67.0%
- Outside FTN: 15.8%
  - Transit: 0.8%
  - Bike: 10.4%
  - Walk: 84.2%
- Metro Vancouver: 23.5%
  - Transit: 1.4%
  - Bike: 8.5%
  - Walk: 76.5%

**All Trips:**
- Within FTN: 37.6%
  - Transit: 2.7%
  - Bike: 14.2%
  - Walk: 20.7%
  - Rest: 62.4%
- Outside FTN: 17.6%
  - Transit: 1.0%
  - Bike: 7.8%
  - Walk: 8.8%
  - Rest: 82.4%
- Metro Vancouver: 26.8%
  - Transit: 1.8%
  - Bike: 10.7%
  - Walk: 14.3%
  - Rest: 73.2%
Sustainable Mode Share by Sub-Region

% of total trips by sustainable mode share

- **Within FTN**
  - 45% (45%)
  - 32% (34%)
  - 25% (29%)
  - 25% (27%)
  - 26% (26%)
  - 25% (25%)
  - 23% (17%)
  - 18% (16%)
  - 15% (15%)
  - 12% (12%)
  - 13% (10%)

- **Outside FTN**
  - 0% (40%)
  - 3% (35%)
  - 5% (30%)
  - 10% (25%)
  - 15% (20%)
  - 20% (17%)
  - 25% (16%)
  - 30% (15%)
  - 35% (12%)
  - 40% (10%)
  - 45% (13%)
Initial observations

- The population density within FTN (39 persons/ha) almost double that of outside FTN (21.5 person/ha).  
- **Within FTN is 54%** of the Metro Vancouver region’s dwellings, **outside FTN is the remaining 46%**.  
- A majority of **73% of dwellings within FTN are apartments**, the same share of the region’s rentals.  
  Outside FTN has predominantly detached houses (53%), with the remaining 27% rentals.  
- Four age cohorts defined, 0-19 predominantly **outside FTN**, 20-44 **within FTN**; 45 to 74 **outside FTN** and 75+ **within FTN** roughly corresponding to dwelling/transit preferences and affordability.
Initial observations

• The average household income within FTN is $54K, with $1,550 expenditure in private cars and $430 in transit. Higher figures for outside FTN, with an average income of $74K, $2,200 spent in cars and a much lower $310 spent in transit.

• Despite a lower number of bicycles per capita within FTN (0.48), its cycling mode share for all trips is 2.7% as opposed to higher bicycles per capita outside FTN (0.54) with a cycling mode share of only 1%.

• VKT per household outside FTN (75 km) is almost double that of within FTN (41 km), and a commuter trip of 11 km is 50% lower that of outside FTN (16 km).
Initial observations

- **Within FTN holds 2/3** of transit service hours (tsh) and accounts for **80% of the ridership**. **Outside FTN** has **1/3** tsh, with only **20% of the ridership**.
- Boardings/revenue hour within FTN (82) is almost double outside FTN (43).
- The sustainable mode share for all trips within FTN (38%) is more than double outside FTN (18%).
- The higher % of sustainable mode share within FTN is consistent for all the sub-regions.
- The number of vehicles per household is significantly **lower for within FTN (1.08)** than outside FTN (1.78) and also against the **Metro Vancouver Region (1.40)**.
Thank you!
Questions?