



Regional Transportation Model

Stakeholders Meeting

Prepared by
TransLink's Forecasting Group
October 30, 2018

General Meeting Objectives



Share information about
the RTM



Advance local modelling
knowledge



Provide information
about development plans

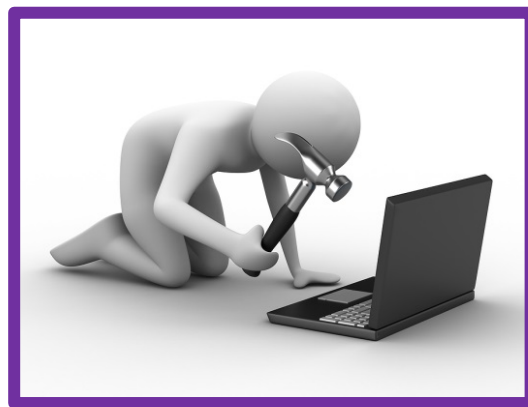


Strengthen the modelling community

Objectives of this Meeting



Update about
regional surveys



Share information about
current and future
developments



Discuss experiences
from RTM applications

Previous Development Phases

Original Model

- AM Peak only

2011-2012

RTM Phase2

- 24h demand
- AM/MD assign

2015-2016

1990's-2011

RTM Phase1

- Improved AM peak assign
- TD'11

2013-2014

RTM Phase3

- TAZ & network
- AM/MD/PM
- MC in PA
- MC-Dist access

RTM Development 2017-2019

Phase 3.1*

- Updated infrastructure
- Network fixes

Aug 2018

RTS Version*

- CAV
- TNCs

Fall 2019

Dec 2017

Phase 3.2*

- New horizon years
- Network fixes
- Documentation

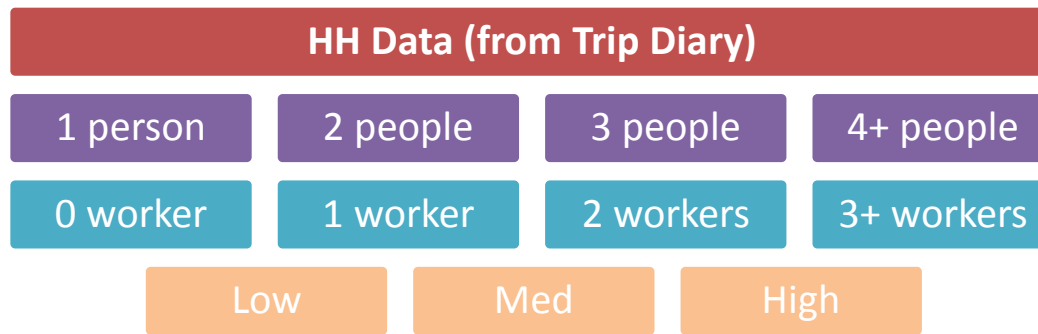
Spring 2019

Phase 4

- Population Synthesis
- Service and visitor
- TD' 2017

Population Synthesis Problem

Currently model is based on market segments



No information about household composition, ages etc.

This information could have benefited

- Auto ownership
- Generation (by purpose)

Population Synthesis Solution

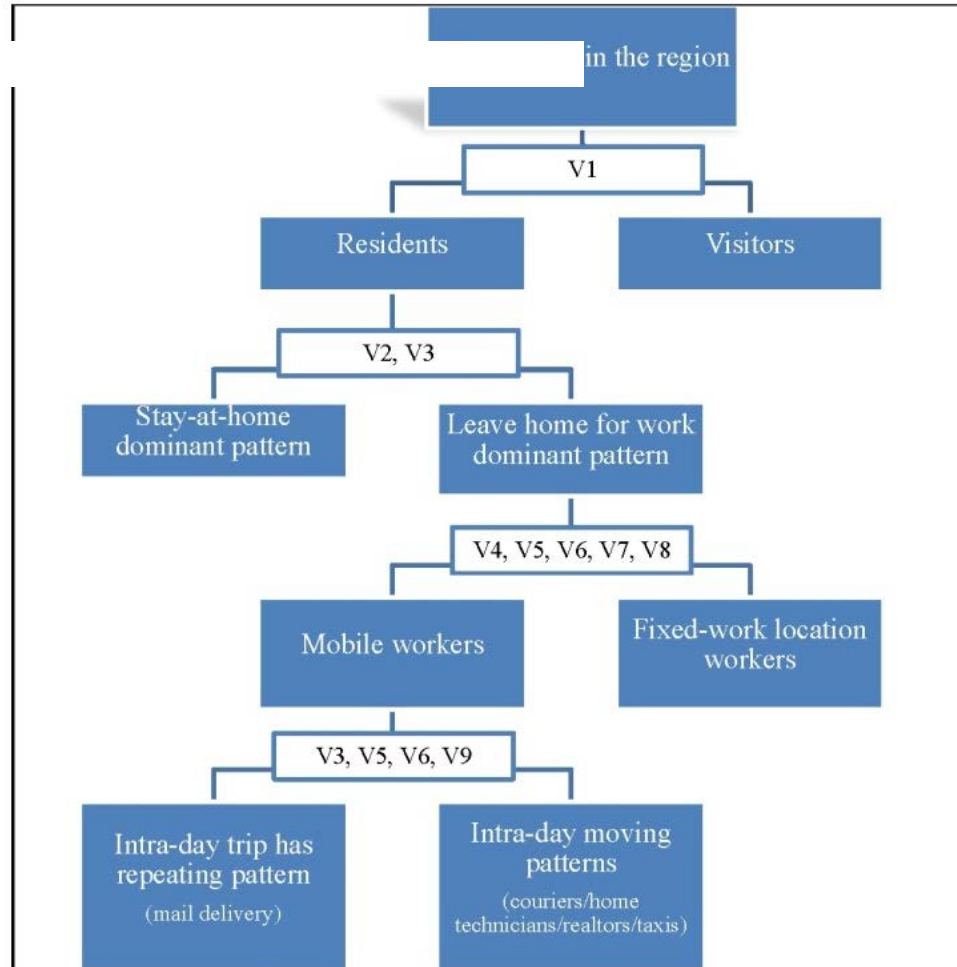
New model is based on population synthesis

Household	Person	Income	Location	Age	Gender	Worker Status	Student Status
1	1	Low	13540	42	M	FT	nonstudent
1	2	Low	13540	41	F	FT	nonstudent
1	3	Low	13540	10	M	nonworker	Student
1	4	Low	13540	8	M	nonworker	Student
2	1	Medium	43250	32	M	FT	nonstudent
2	2	Medium	43250	29	F	PT	Student
3	1	High	32410	27	F	FT	nonstudent
...

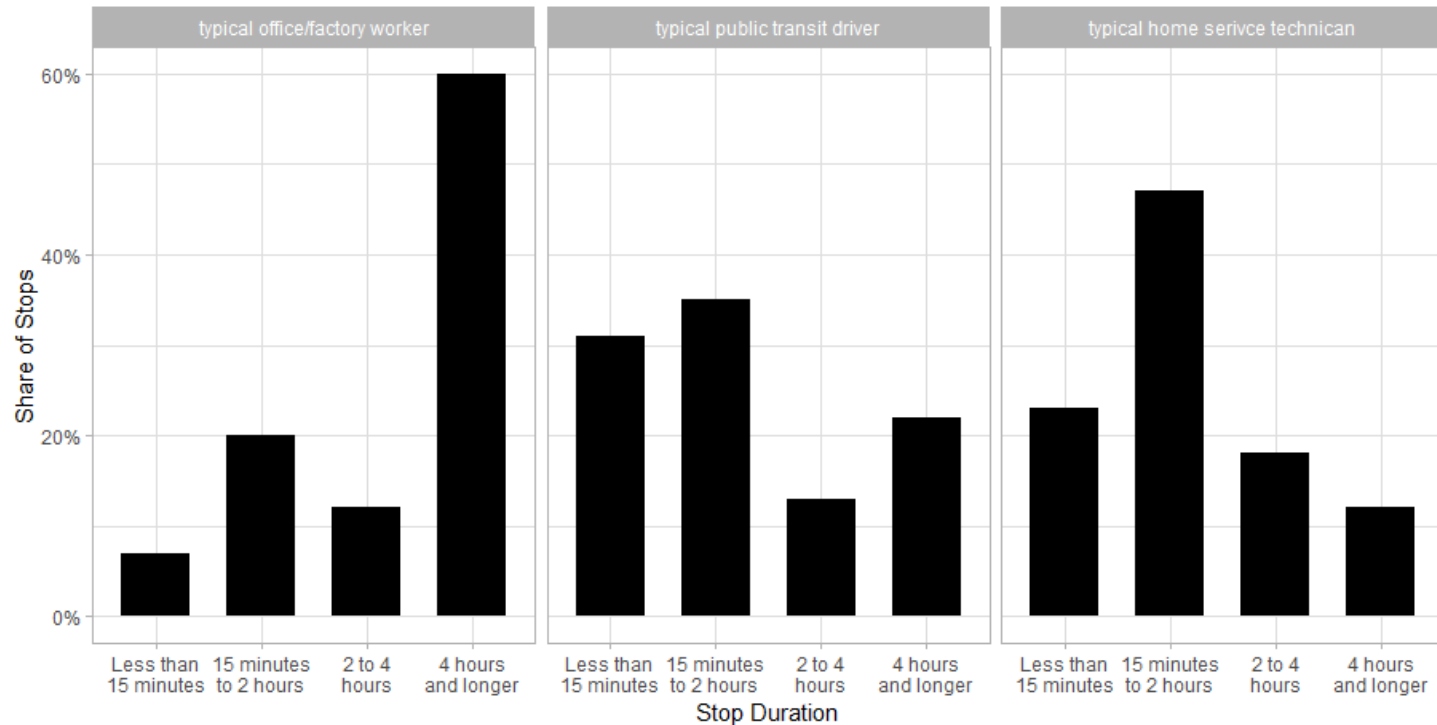
Service and Visitor Trips Problem



Service and Visitor Trips Solution



Service and Visitor Trips Solution



Trip Diary



27,000 Households

Additional information

Household – composition, tenure type, vehicle details

Person – occupation, car-share program membership

Trip – Route level information

- Auto – regional bridges crossed

- Rapid Transit – access & egress stations

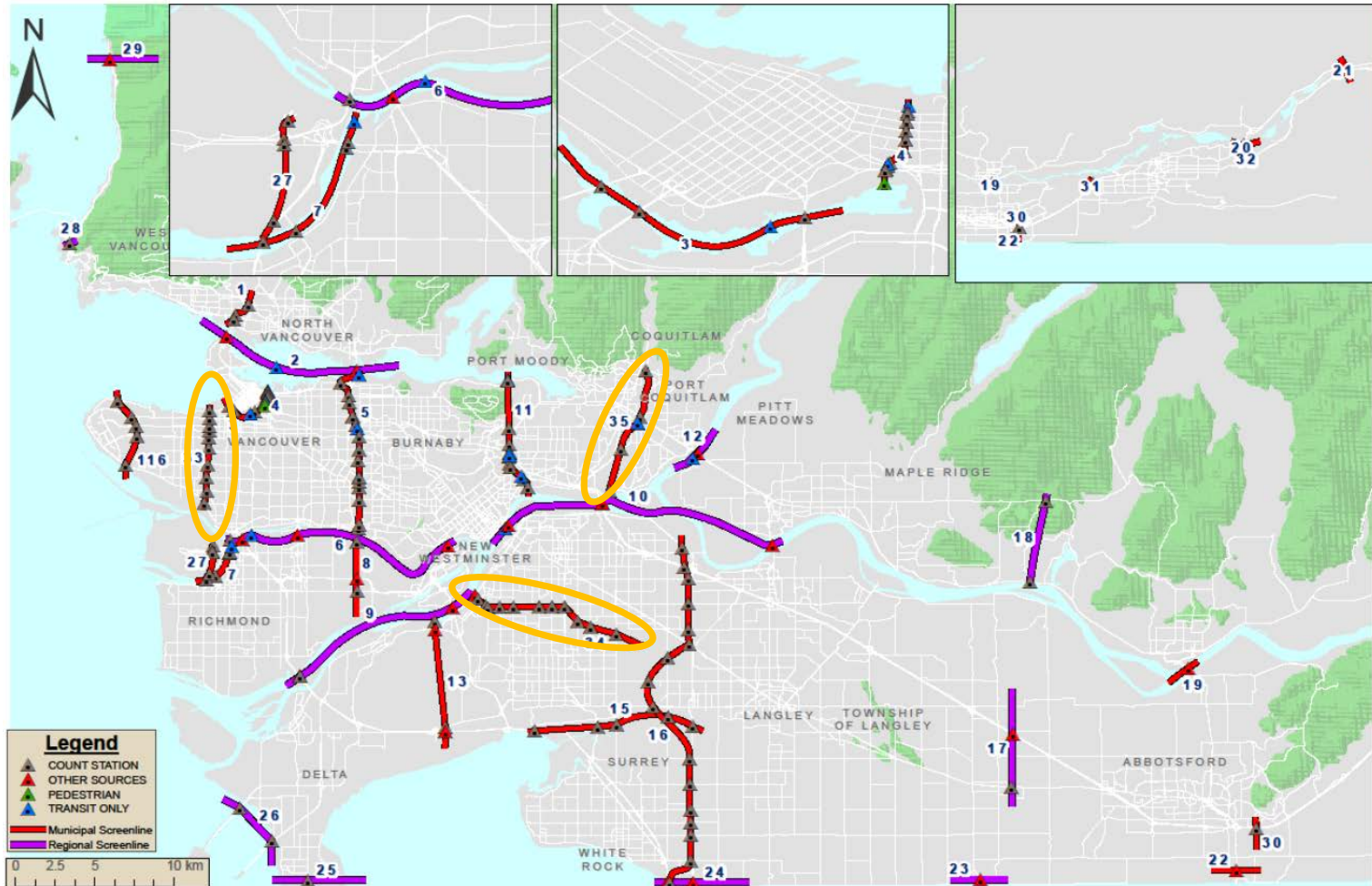
- Bus – route(s)

- Auto Drivers - parking cost, vehicle used

Trip Diary Cleaning



Screenline Survey



RTM Application Projects

Infrastructure Decisions

- Beyond Arbutus
- Surrey rapid transit
- Massey replacement
- SFU gondola
- Pattullo replacement
- North Surrey Connections
- Coquitlam River Bridge
- Streetcar feasibility
- Traffic analyses on HWY 1 & HWY 91

Region-wide Policies

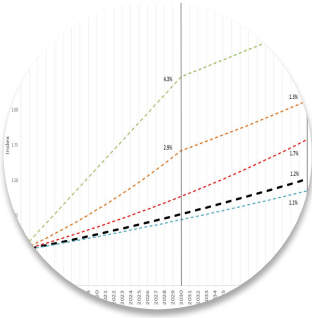
- Toll removal
- Mobility pricing*
- Fare strategy*
- Regional Transportation Strategy (RTS)
- MRN study

Local Plans and Analysis

- INSTP
- Sub-regional models
 - Surrey
 - Vancouver
 - Coquitlam
- Municipality/Town Centres/ neighbourhood area plans

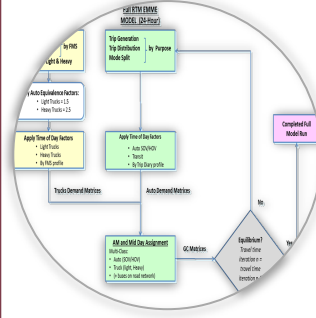
Looking Forward

An ambitious development programme...



Functions

- Review and update VDFs
- Review and update TTFs



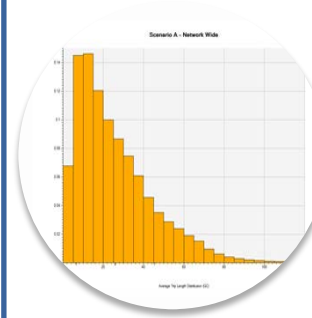
Sub Models

- Full P&R
- Full Transit Crowding
- Full Truck Model Integration



Networks

- Improved Adjustment
- Updated Time Slicing
- PM Assignment



Econometric Models

- Auto Ownership
- Distribution
- Review and update VOT



Long Term...

- Land Use Integration
- Tour Based

Not Yet Considering

