



Vancouver Landfill

Access: Challenges & Opportunities

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- Problem Statement
- Context
- Problems ➡ Implications
- Opportunities

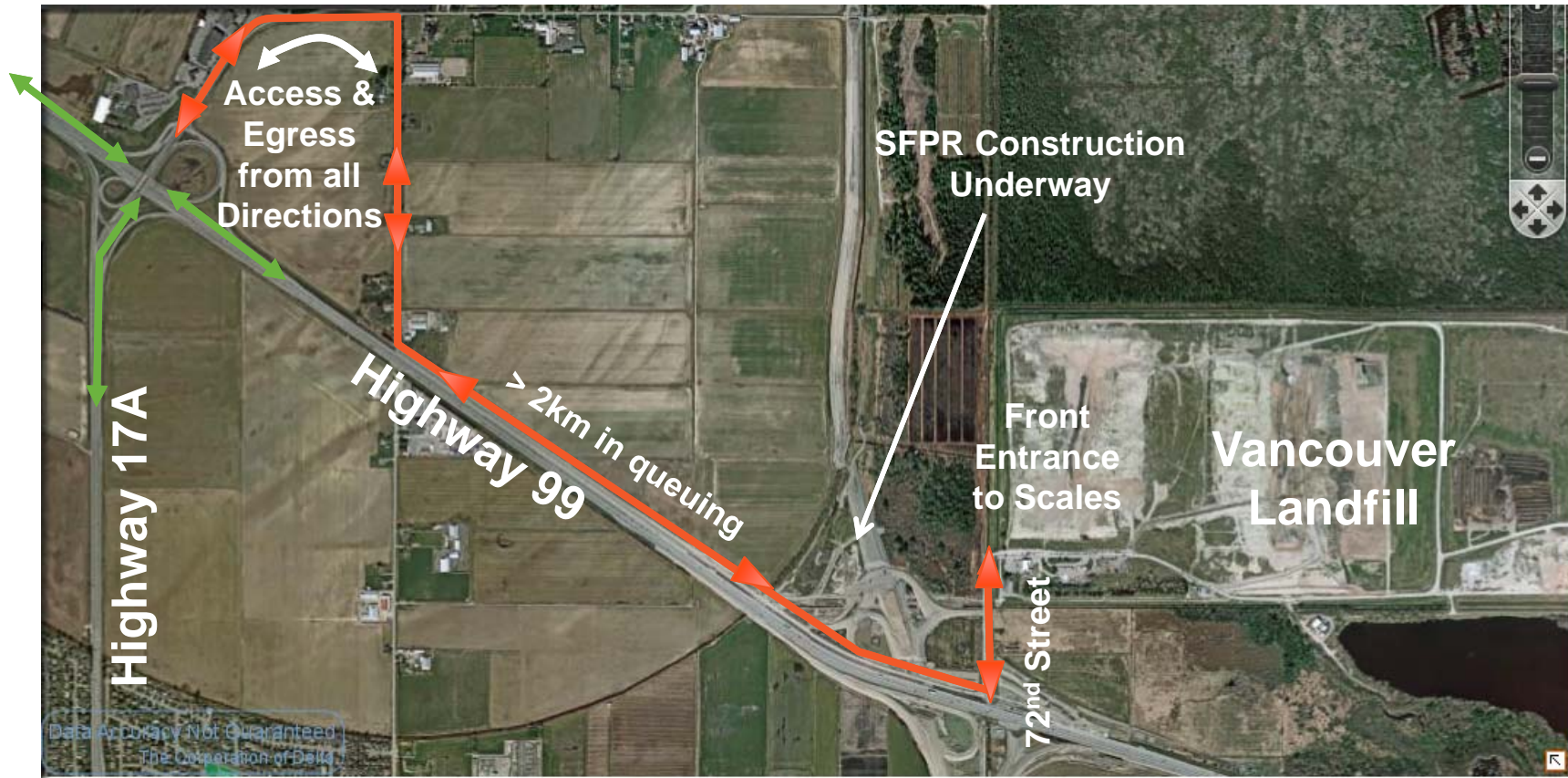
- Current configuration of South Fraser Perimeter Road (“SFPR”) and Highway 99 (“99”) is causing the following access-related problems for customers of the Vancouver Landfill (“VLF” or “Landfill”):
 1. Queuing on SFPR and 99
 2. Limited Access increasing Risk of Accidents

Context



- Owned and operated by the City of Vancouver (“COV”) since **1966**
- Provincial Operating Certificate in place to 2037
- Serves approximately **1 million people** from Vancouver, Delta, Richmond, White Rock, University Endowment Lands, and parts of Surrey (**40% of Metro Vancouver**)
- Located in southwest corner of Burns Bog @ 99 & SFPR
- New long-term uses possible with improved access

Before SFPR



After SFPR

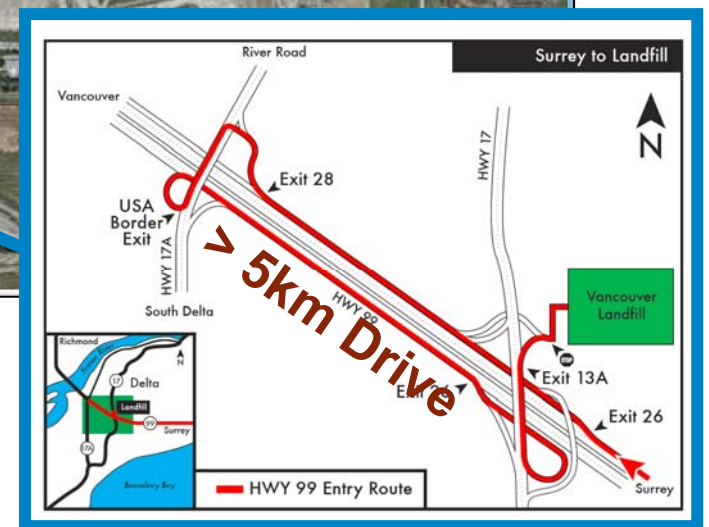
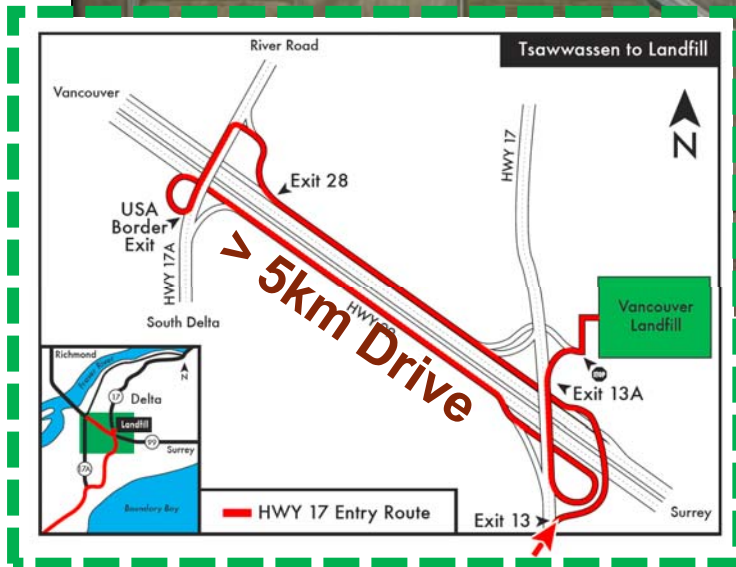
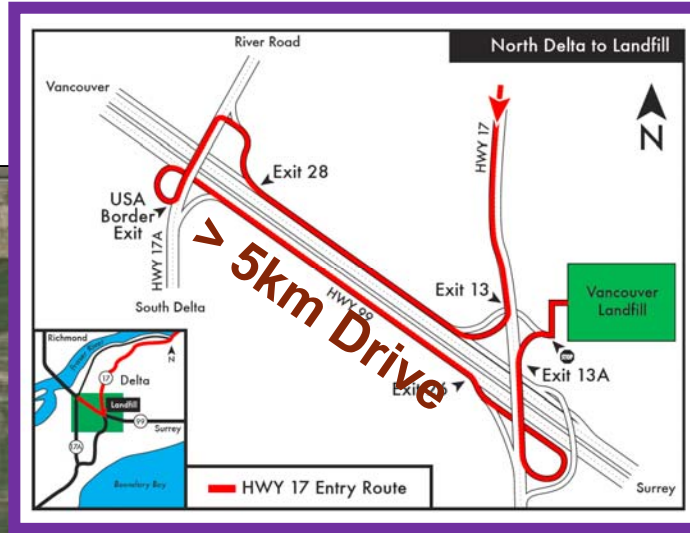
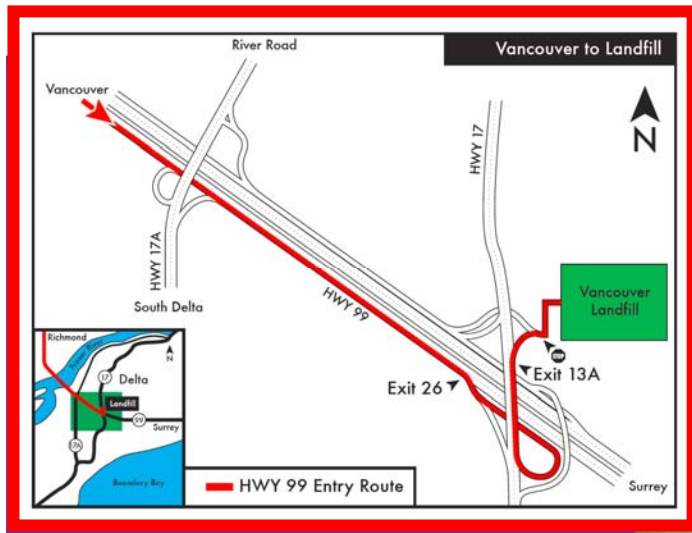


- 500m to block SFPR
- 1.3km to block 99

Circuitous Routes to VLF from South, North, East



Source:
COV Website



Vancouver
Landfill

SFPR

72nd Street

Highway 17 (SFPR)

More Solid Waste Traffic Possible...



Future of Metro Vancouver waste-to-energy facility in doubt after regional waste bylaw rejected

BY LARRY PYNN, VANCOUVER SUN OCTOBER 17, 2014

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STORY

PHOTOS (2)



Garbage at the 225-hectre Vancouver Landfill in Delta. The B.C. government dealt a huge blow Friday to Metro Vancouver's solid waste management plan by refusing to approve a bylaw that would have prohibited waste generated within the region from being transported outside to Abbotsford and beyond to Washington state.

Photograph by: Mark van Manen , Vancouver Sun

The future of a \$470-million waste-to-energy project is in doubt after the B.C. government Friday rejected a Metro Vancouver bylaw that would have prohibited waste generated within the region from being transported outside to Abbotsford and beyond to Washington state.

MORE ON THIS STORY

- Is there more to this story? We'd like to hear from you
- Environment minister says decision to be made soon on Metro Vancouver's garbage bylaw
- Metro predicts \$6-million waste management deficit unless garbage issue addressed
- Metro fines trash haulers more than \$450,000 for banned recyclables
- Don Cayo: B.C.'s new recycling scheme: Another good idea done badly

What does the Bylaw 280 decision mean?

- No Additional Waste-to-Energy coming online
- 2016 – Cache Creek Landfill Closing

- December 2013, SFPR became operational
- After 10+ months of operation, COV has identified problems, implications and opportunities

The Current Opportunity

- Working with MOTI & Delta through Massey Tunnel Replacement Process and the recently published BC Transportation Plan

Problem

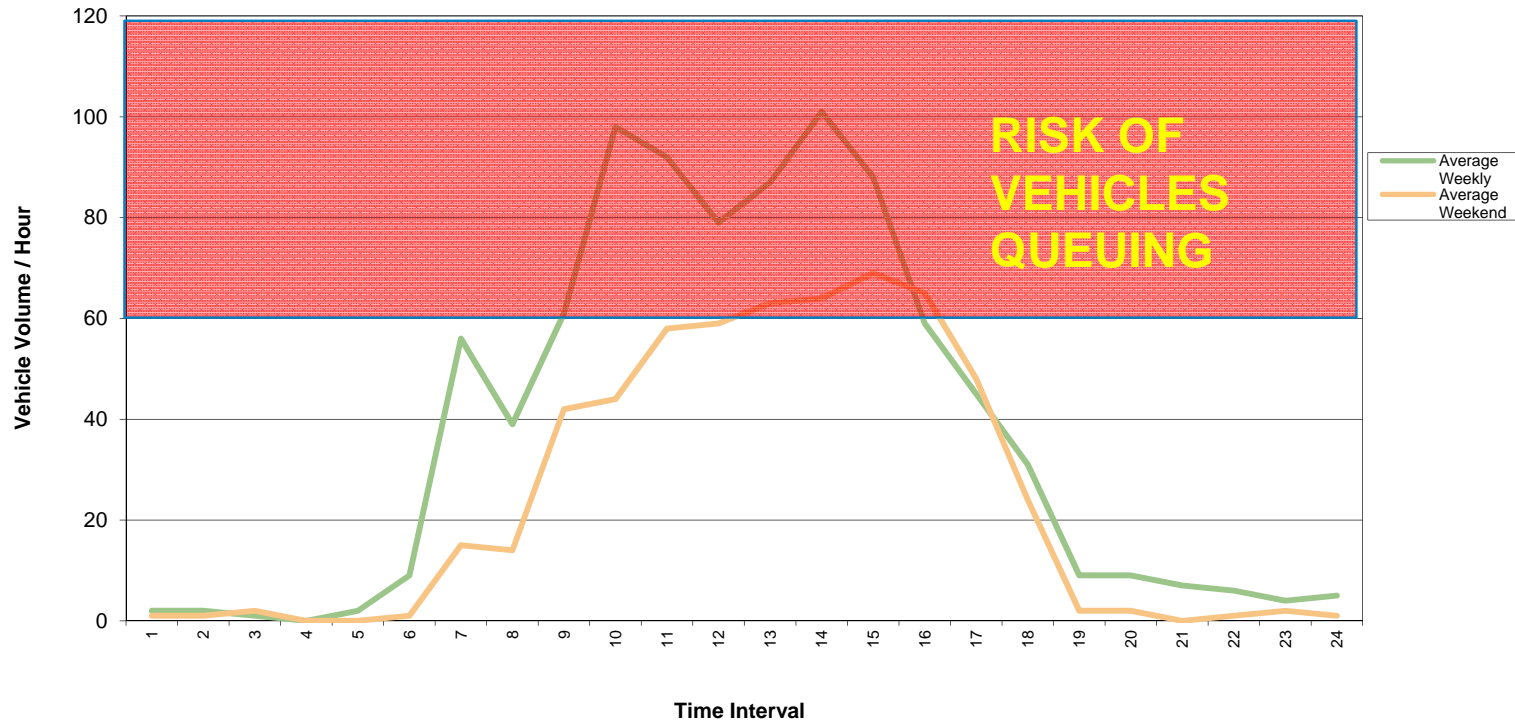
- At times, VLF experiences lineups **> 1/2 km**
- Queues have potential to block SFPR and Hwy 99



Implications

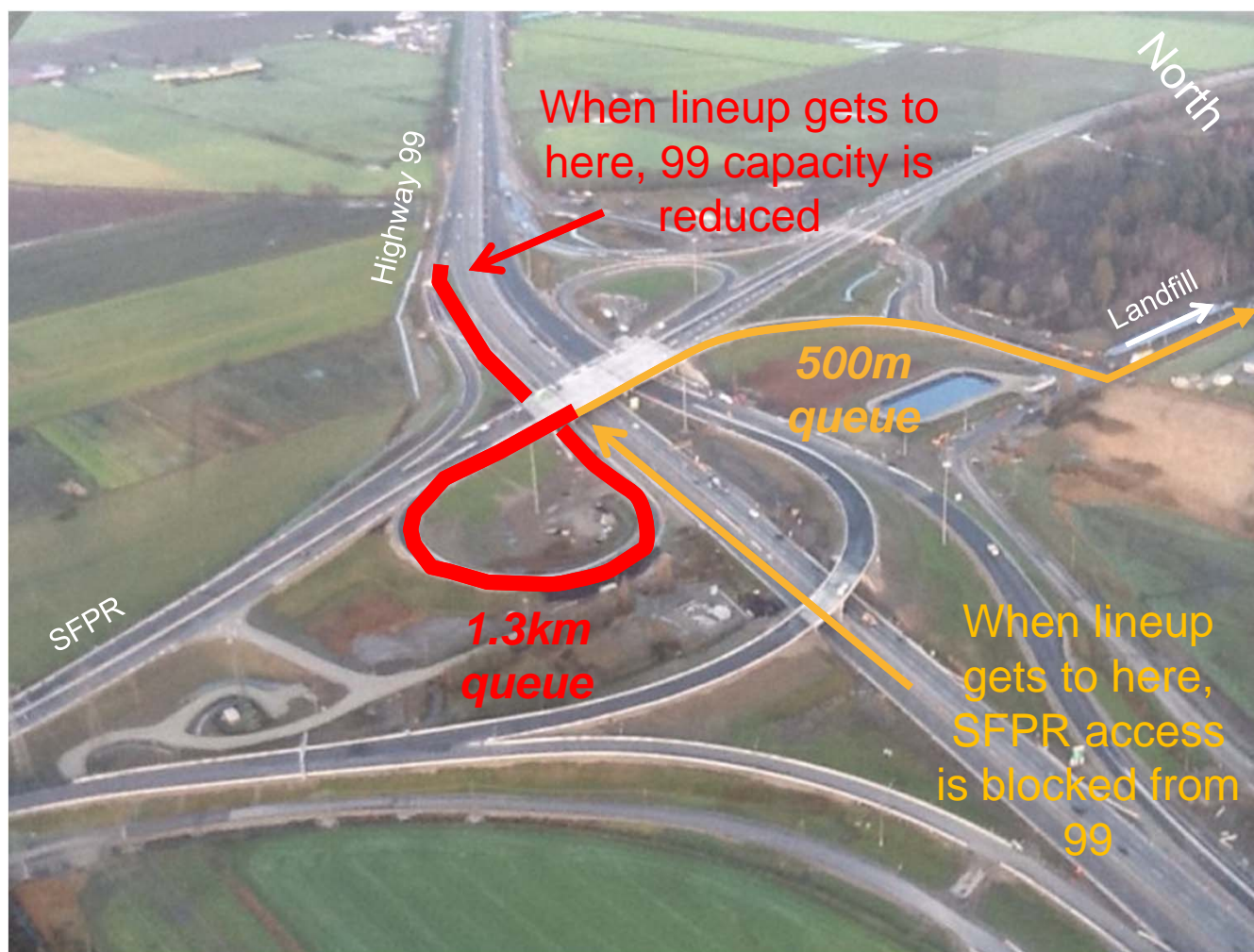
- Wasted time/fuel of residential & commercial customers
- Increased emissions
- Spillover of congested highways to surrounding traffic network

Lineups (Hose-count Data)



- Approximately 100 vehicles/hour at peak into Landfill (instance of 160 during week day)
- Process inbound vehicles at approximately 60 vehicles/hour

Lineups



Problem

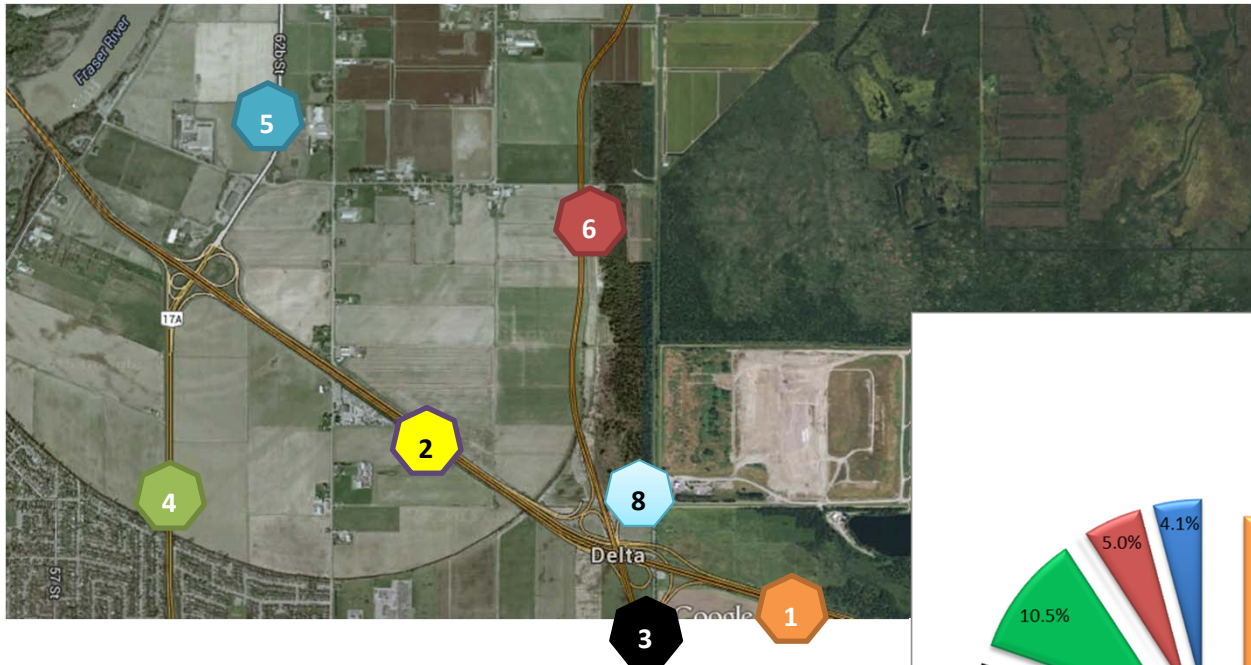
- Having only one entrance and one exit puts further pressure on existing road network.
- When there is an incident, the pressure on existing network is even more significant.
- 10% reduction in traffic to VLF after SFPR (Dec/13 to July/14)



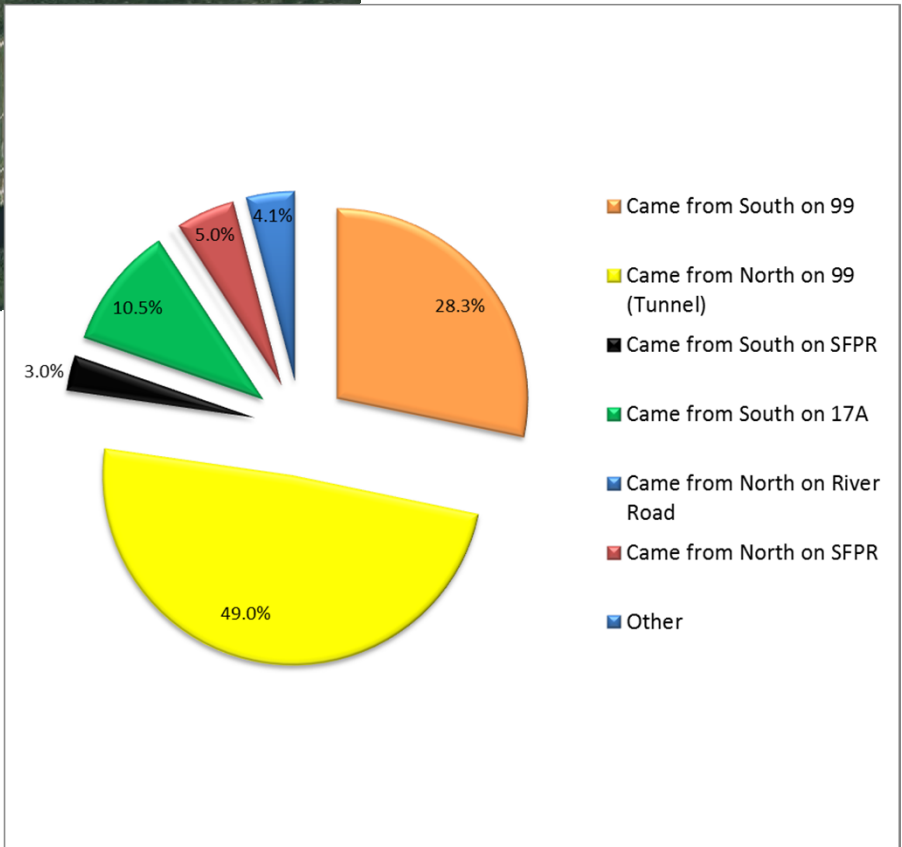
Implications

- Increased risk of accidents
- More aggressive behaviour to avoid circuitous routes if vehicles miss exit
- Increased vehicle emissions
- Complaints to Delta, Metro, MOTI – Staff & Elected Officials
- Increased Risks of Illegal Dumping

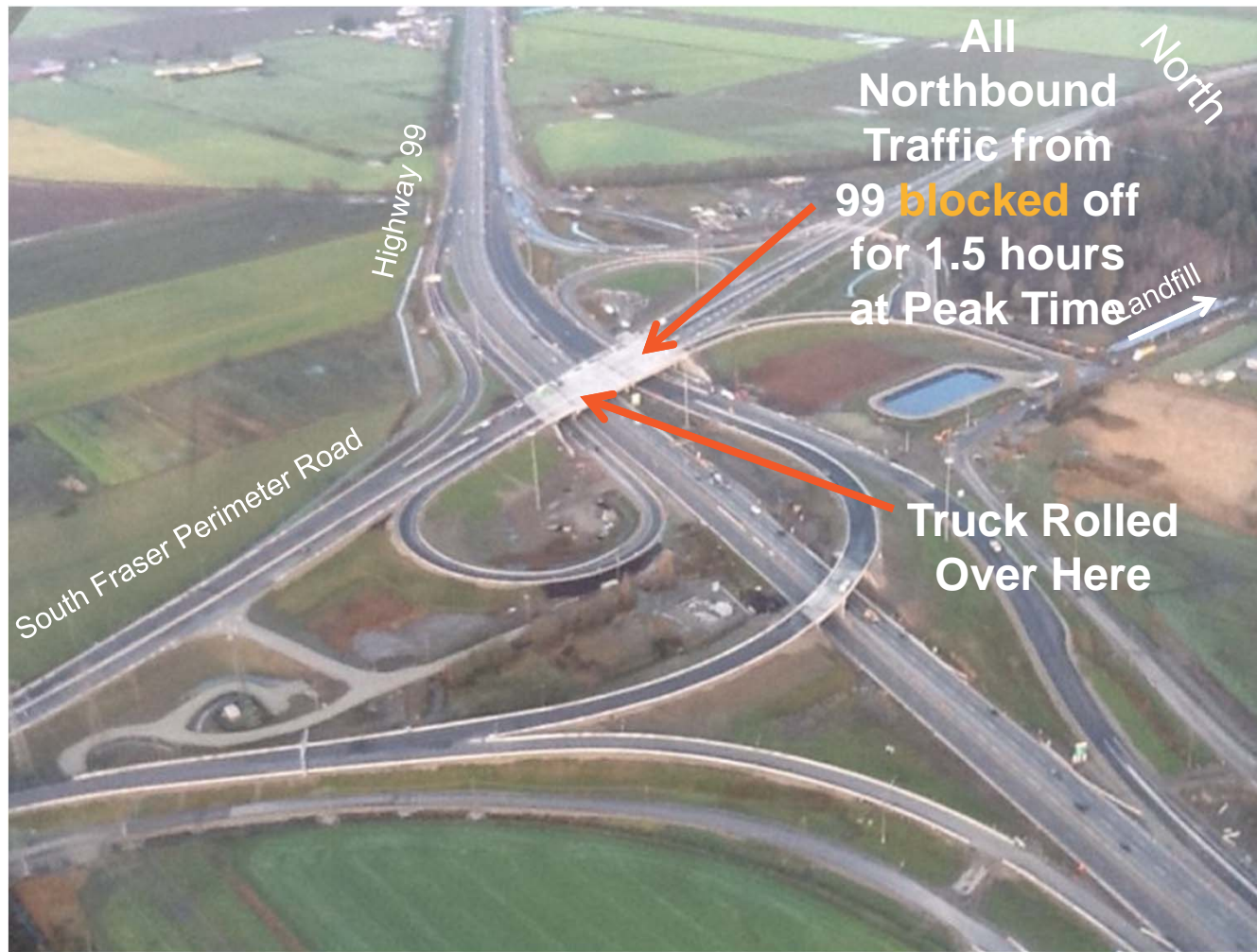
Significant Traffic coming from other Directions



In December, a survey was taken for a week and of the approximately 1800 transactions that spoke to a weighmaster at the scale (doesn't include vehicles that bypass due to agreements in place), almost 40% of traffic comes from 1, 3 & 6.



Access-Related Incident



- Sept. 4th, 2014 , Demo Truck tipped over at off-ramp
- When overturned vehicle finally flipped over the result was major backups and delays to highway network

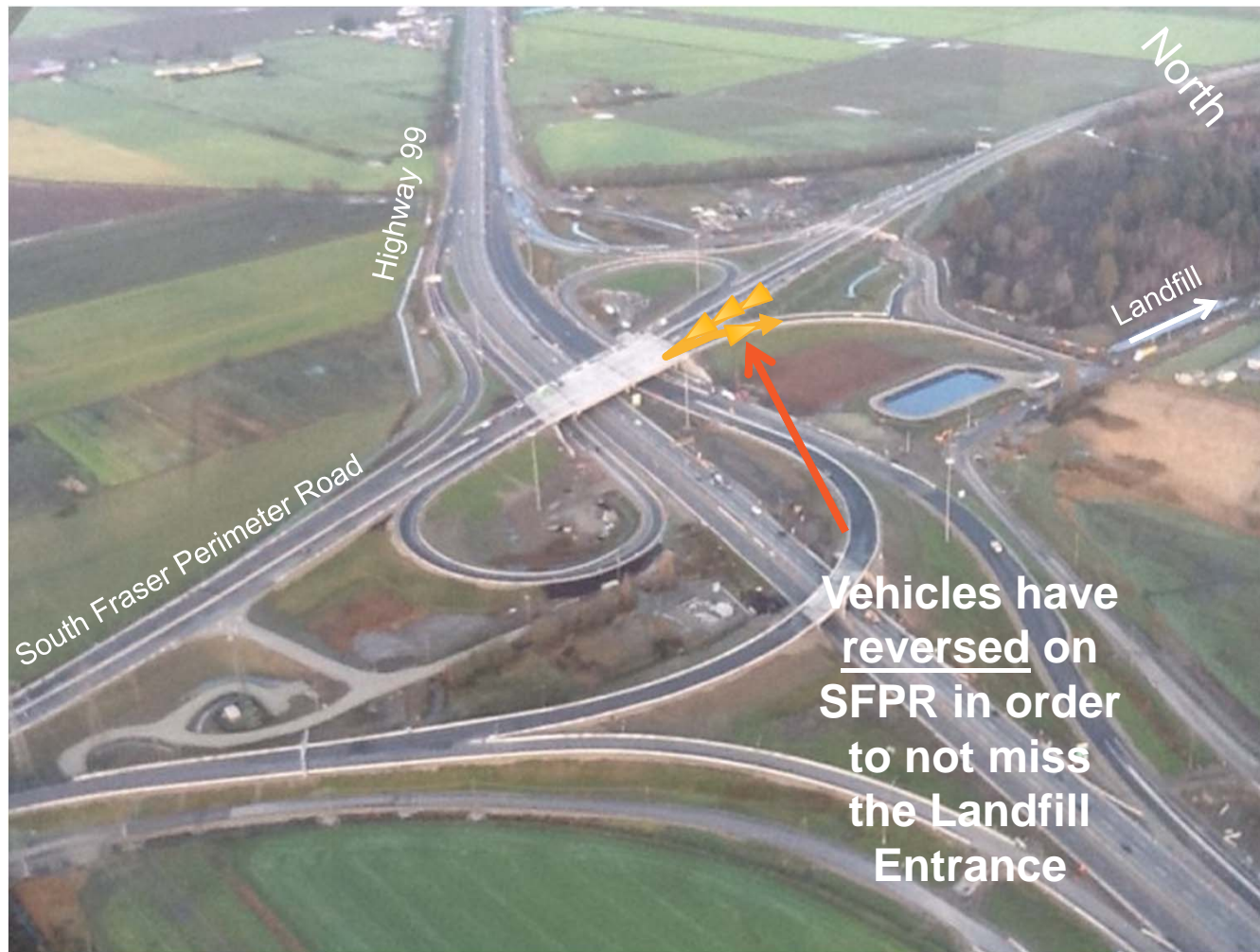


The Result: 1.5+ hours of Queuing on 99



Source: MOTI Webcams

Dangerous Vehicle Movements

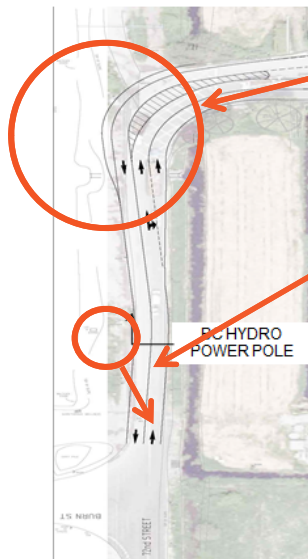


Problem	Opportunity
Lineups (Queuing)	<ul style="list-style-type: none">• Add queuing capacity by having separate routes to VLF wherever possible
Limited Access	<ul style="list-style-type: none">• Adding access points from other directions.• Signage currently being addressed jointly with MOTI Operations• Reduce landfill related traffic at Highway 17A Interchange by 50%

Ongoing Landfill Entrance Work



Conceptual Design Options – Entrance Road



Issues and constraints to be overcome

- Relocate BC Hydro Power Pole
- Tight turning radius at the northeast corner
- Separation of commercial and residential vehicles
- Impacts on adjacent ditches

City of Vancouver Landfill Entrance, RDO and Weigh Scales November 14, 2014

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Options being Considered

- COV looking at what it can do within site
- Not a lot of options
- Cannot gain the type of queuing space needed internally
- Some options to consider to increase queuing capacity and access...

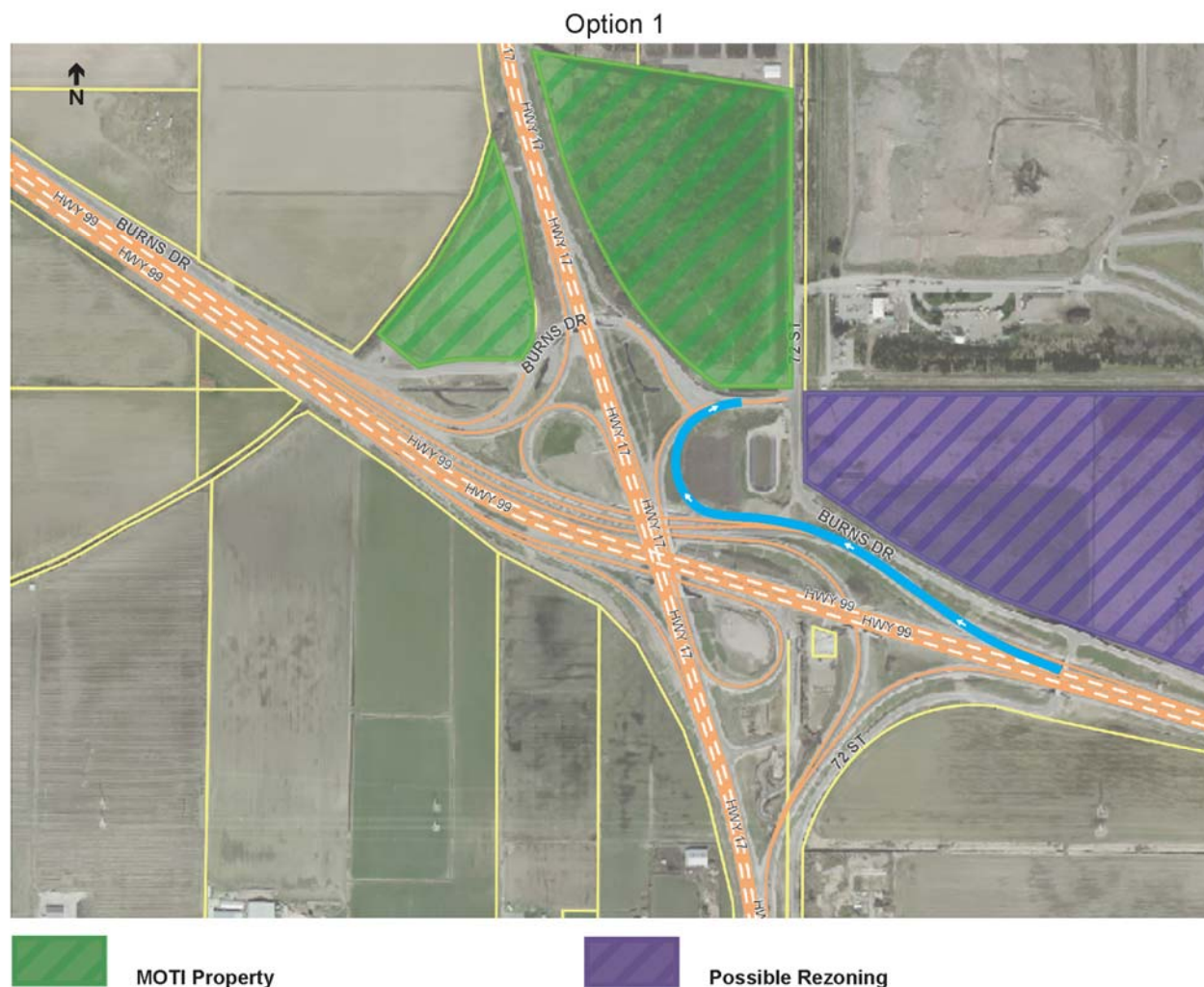
November 14th,
2014,
Town & Country Inn

Front Entrance,
RDO & Weighscale
Redesign Workshop





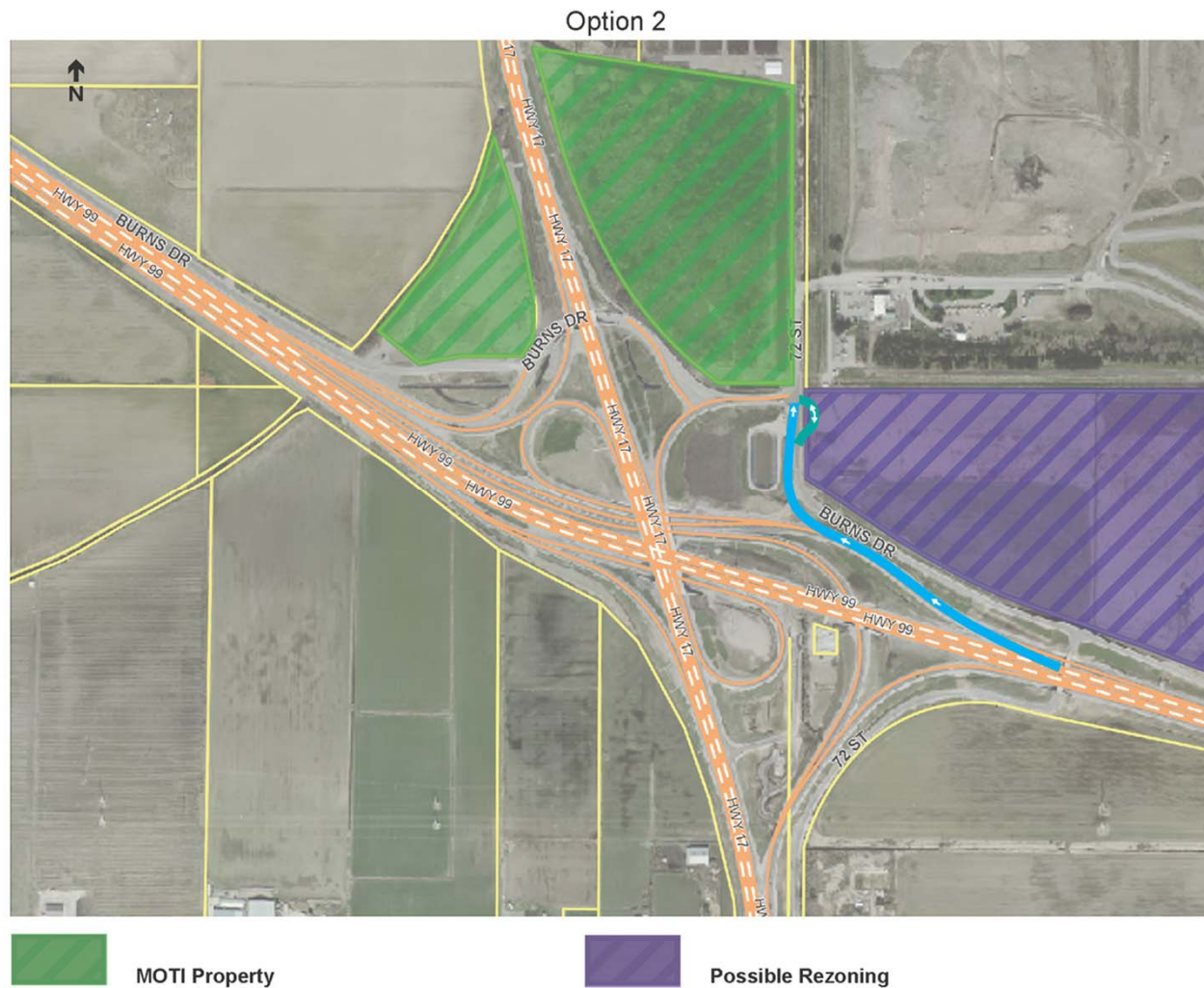
Increasing Access from South - Option 1



- Working within existing SFPR/99 interchange footprint
- Approximately **600m** of extra queuing
- Up to 50% traffic relief of existing off-ramp



Increasing Access from South - Option 2



- Working within existing Delta road network
- Approximately **500m** of extra queuing
- Up to 50% traffic relief of existing off-ramp
- Opportunity to tie intersection in with current rezoning application (eastern property)

For more information relating to Vancouver Landfill access please contact the following:

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