

Page 001 to/à Page 003

Withheld pursuant to/removed as

s.13;s.17

Page 004 to/à Page 022

Withheld pursuant to/removed as

s.17

Page 023

Withheld pursuant to/removed as

s.13;s.17

**DRAFT**



Ministry of  
Transportation  
and Infrastructure

# **Highway 1 Functional Planning Project Background & Problem Definition**



JULY 2014  
SW1200SWF

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION AND OBJECTIVES .....</b>	<b>1</b>
<b>2.0</b>	<b>BACKGROUND.....</b>	<b>2</b>
2.1	Corridor Description .....	2
2.2	Previous MoTI Studies and Concepts .....	11
2.3	Regional Planning Context .....	13
<b>3.0</b>	<b>AREA CONSTRAINTS AND CHALLENGES.....</b>	<b>17</b>
<b>4.0</b>	<b>TRAVEL DEMANDS .....</b>	<b>20</b>
4.1	Existing Traffic Volumes and Operations.....	20
4.2	Forecast Traffic Volumes and Operations .....	25
4.2.1	Mainline Forecasts.....	27
4.2.2	Interchange and Approach Forecasts.....	28
<b>5.0</b>	<b>TRAFFIC SAFETY PERFORMANCE.....</b>	<b>30</b>
<b>6.0</b>	<b>INFRASTRUCTURE CONDITION .....</b>	<b>35</b>
6.1	Pavement Condition.....	35
6.2	Structure Conditions .....	38
6.3	Structural Clearance .....	40
6.4	Interchange Configuration.....	41
<b>7.0</b>	<b>PROBLEM DEFINITION SUMMARY.....</b>	<b>42</b>
7.1	Capacity Issues.....	42
7.2	Safety Issues.....	42
7.3	Infrastructure Configuration / Design Issues.....	42

## 1.0 INTRODUCTION AND OBJECTIVES

The Ministry of Transportation and Infrastructure is undertaking a planning review to determine the long term needs for the 30 km segment of the Highway 1 corridor between 216 Street and Highway 11. This project background and problem definition report iterates the project goals and objectives, summarizes previous study findings and recommendations, and identifies existing and future operational issues, along with any geometric deficiencies. Site constraints and challenges have been identified to guide the generation of options to mitigate the various operational issues and geometric deficiencies.

Subsequent reports will describe the options generated to address the previously defined deficiencies and the process employed to select a preferred option for further functional design.

As part of a separate supporting document, a business case identifying project benefits and costs is to be prepared. Geotechnical, archaeological, and environmental overviews for the project area will be prepared by Golder and Associates Ltd.

## 2.0 BACKGROUND

This section provides a summary of background conditions along the study corridor, including general configuration and geometry, recent changes, interchange descriptions, the outcomes of previous planning reports and inter-regional planning context.

### 2.1 Corridor Description

As part of the Gateway Program and subsequent Port Mann / Highway 1 project, the Highway 1 corridor between the Port Mann Bridge and 202 Street has been widened to provide a minimum of one additional lane in each direction. Parallel functional planning studies are underway to select a preferred configuration for the remaining 192 Street and 216 Street interchanges, as well as widening of the corridor between 202 Street and 216 Street. These projects are to be completed as per Gateway Program commitments by the year 2021.

East of 202 Street, no corridor-wide modifications have been made along Highway 1 as part of the Port Mann / Highway 1 project, however, over the past three years local improvements have been completed as follows:

- Eastbound truck climbing lane between 232 Street and 264 Street (recently completed – includes the replacement of the 248 Street overpass);
- Westbound truck climbing lane west of the Mount Lehman interchange;
- Expanded and reconfigured Clearbrook Road interchange;
- Expanded and reconfigured McCallum Road interchange (with roundabouts at the ramp terminals);
- Westbound truck climbing lane west of the Highway 11 interchange (through to the McCallum Road interchange).

While the above modifications result in segments with additional lane capacity, the majority of the corridor remains as a four lane divided rural freeway with a posted speed of 100 km/h.

The location of the major junctions and cross streets along the subject 216 Street to Highway 11 corridor are shown with the area context in **Figure 1**.

