

**Attachment 1: Condition 13 Compliance Filing**



# **SOCIO-ECONOMIC EFFECTS MONITORING PLAN FOR THE TRANS MOUNTAIN PIPELINE ULC TRANS MOUNTAIN EXPANSION PROJECT NEB CONDITION 13**

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Prepared for:



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## TABLE OF CONCORDANCE

Condition 13 is applicable to the following legal instruments: OC-064 (CPCN), AO-003-OC-2 (OC2), XO-T260-007-2016 (Temp), XO-T260-008-2016 (Pump 1), XO-T260-009-2016 (Pump 2) and XO-T260-010-2016 (Tanks). Terminology used to describe the legal instruments here matches that used in the NEB Report. Table 1 describes how this Plan addresses the Condition requirements applicable to Project activities.

**TABLE 1**

### LEGAL INSTRUMENT CONCORDANCE WITH NEB CONDITION 13: SOCIO-ECONOMIC EFFECTS MONITORING PLAN

NEB Condition 13	OC-064 (CPCN)	AO-003-OC-2 (OC2)	XO-T260-007- 2016 (Temp)	XO-T260-008- 2016 (Pump1)	XO-T260-009- 2016 (Pump2)	XO-T260-010- 2016 (Tanks)
Trans Mountain must file with the NEB for approval, at least 6 months prior to commencing construction, a plan for monitoring potential adverse socio-economic effects of the Project during construction. The plan must include the following:	Section 3.1 and 3.2 of this Plan	Section 3.1 and 3.2 of this Plan	Section 3.1 and 3.2 of this Plan	Section 3.1 and 3.2 of this Plan	Section 3.1 and 3.2 of this Plan	Section 3.1 and 3.2 of this Plan
a) the factors or indicators to be monitored;						
b) the methods and rationale for selecting the factors or indicators;	Section 1.6 and 3.0 of this Plan	Section 1.6 and 3.0 of this Plan	Section 1.6 and 3.0 of this Plan	Section 1.6 and 3.0 of this Plan	Section 1.6 and 3.0 of this Plan	Section 1.6 and 3.0 of this Plan
c) a description of the baseline, pre-construction socio-economic conditions;	Section 5.0 of this Plan	Section 5.0 of this Plan	Section 5.0 of this Plan	Section 5.0 of this Plan	Section 5.0 of this Plan	Section 5.0 of this Plan
d) the monitoring methods and schedule, including third party data source identification;	Section 3.0 of this Plan	Section 3.0 of this Plan	Section 3.0 of this Plan	Section 3.0 of this Plan	Section 3.0 of this Plan	Section 3.0 of this Plan
e) data recording, assessment, and reporting details;	Section 4.0 of this Plan	Section 4.0 of this Plan	Section 4.0 of this Plan	Section 4.0 of this Plan	Section 4.0 of this Plan	Section 4.0 of this Plan
f) a discussion of how measures will be implemented to address any identified adverse effects, including:	Section 4.2 of this Plan	Section 4.2 of this Plan	Section 4.2 of this Plan	Section 4.2 of this Plan	Section 4.2 of this Plan	Section 4.2 of this Plan
i) the criteria or thresholds that will require measures to be implemented.	Section 4.2.1 of this Plan	Section 4.2.1 of this Plan	Section 4.2.1 of this Plan	Section 4.2.1 of this Plan	Section 4.2.1 of this Plan	Section 4.2.1 of this Plan
ii) how monitoring methods and measures implementation to address adverse effects, as necessary, are incorporated into Construction Execution Plans.	Section 4.2.2 of this Plan	Section 4.2.2 of this Plan	Section 4.2.2 of this Plan	Section 4.2.2 of this Plan	Section 4.2.2 of this Plan	Section 4.2.2 of this Plan
iii) a description of the roles and responsibilities of construction prime contractors, sub-contractors, and community relations staff in monitoring socio-economic effects and implementing measures to address adverse effects.	Section 3.2 and 4.4 of this Plan	Section 3.2 and 4.4 of this Plan	Section 3.2 and 4.4 of this Plan	Section 3.2 and 4.4 of this Plan	Section 3.2 and 4.4 of this Plan	Section 3.2 and 4.4 of this Plan
g) a summary of its consultations with Appropriate Government Authorities, potentially affected Aboriginal groups and affected landowners/tenants. In its summary, Trans Mountain must provide a description and justification for how Trans Mountain has incorporate the results of its consultation, including any recommendations from those consulted, into the Plan; and	Section 2.0; Appendix A, B, C, D of this Plan	Section 2.0; Appendix A, B, C, D of this Plan	Section 2.0; Appendix A, B, C, D of this Plan	Section 2.0; Appendix A, B, C, D of this Plan	Section 2.0; Appendix A, B, C, D of this Plan	Section 2.0; Appendix A, B, C, D of this Plan
h) plans for regular consultation and reporting on effects during construction with potentially affected communities, Aboriginal groups, local and regional authorities, and service providers.	Section 4.3 of this Plan	Section 4.3 of this Plan	Section 4.3 of this Plan	Section 4.3 of this Plan	Section 4.3 of this Plan	Section 4.3 of this Plan

## EXECUTIVE SUMMARY

Trans Mountain Pipeline ULC (Trans Mountain) submitted a Facilities Application (the Application) to the National Energy Board (NEB) in December 2013 for the Trans Mountain Expansion Project (“the Project” or “TMEP”). On May 19, 2016, Trans Mountain received the NEB’s Conditions for the Project. On November 29, 2016, the Government of Canada concluded the Project was in the public interest of Canada. A Certificate of Public Convenience and Necessity (CPCN) allowing the Project to proceed, subject to 157 conditions, was issued on December 1, 2016.

The Socio-Economic Effects Monitoring Plan (SEEMP or the Plan) was prepared to meet NEB Condition 13.

Socio-economic effects monitoring is a tool to evaluate the effectiveness of socio-economic mitigation measures, to manage unintended socio-economic impacts of a project, to optimize positive project impacts, and as a means of communicating with affected stakeholders and Aboriginal groups in an ongoing manner. The SEEMP provides an overview of Trans Mountain’s socio-economic effects monitoring process for construction, including monitoring objectives, approach, indicators, and data collection and review process. It also summarizes Trans Mountain’s Aboriginal and stakeholder engagement related to the SEEMP, and how socio-economic effects monitoring results will be shared as the SEEMP is implemented during construction.

The SEEMP provides a pragmatic and meaningful way to monitor the potential adverse socio-economic effects of the Project during construction, to examine mitigation effectiveness related to such potential effects, to help identify the need and strategies for adaptive socio-economic management as Project construction progresses. The SEEMP forms part of a broader strategy to monitor and report on Project-related socio-economic effects and opportunities reflective of Trans Mountain’s commitments and of the NEB Conditions. For example, socio-economic effects monitoring also involves NEB Condition 12 Training and Education Monitoring Plan; NEB Condition 58 Training and Education Monitoring Reports; and NEB Condition 107 Employment and Business Opportunity Monitoring Reports. Monitoring of environmental resources that are vital to the traditional land and resource use (TLRU), traditional marine resource use (TMRU) and culture of Aboriginal groups are covered in various resource-specific NEB Conditions related to wildlife, vegetation and aquatic/marine resources. Aboriginal group involvement in environmental monitoring activities during construction for the protection of TLRU/TMRU and cultural/heritage resources are discussed in the NEB Condition 98 Plan for Aboriginal Group Involvement in Construction Monitoring.

The SEEMP sets out a process to monitor Project effects and mitigation effectiveness related to the key potential adverse effects identified in the Application and the Project-specific socio-economic effects and concerns identified by stakeholders and Aboriginal groups during TMEP’s comprehensive engagement. Monitoring topic areas are based on the Socio-Economic Management Plan (SEMP) filed in the Application. These monitoring topic areas are reflective of those topics/issues of interest to Appropriate Government Authorities (including local and regional authorities and service providers), potentially affected Aboriginal groups, and affected landowners/tenants. Monitoring topic areas include traffic; worker accommodation; worker health; human occupancy and resource use (traditional and non-traditional); sensory disturbance; other regional infrastructure and services; and Aboriginal and non-Aboriginal community way-of-life. These monitoring topic areas and underlying issues and interests were discussed and confirmed during SEEMP specific engagement with Aboriginal and non-Aboriginal communities that took place along the Project corridor.

Given the dynamic nature of socio-economic issues, the complexities of effect attribution in the context on going social change processes, the geopolitical scale of the Project, and the relatively short-term nature of pipeline construction, Trans Mountain took a consultative approach to the development of the SEEMP. Early in SEEMP development, Trans Mountain conducted nine SEEMP meetings for Appropriate Government Authorities (including some non-governmental and business organizations) in different locations along the Project corridor and presented and discussed the SEEMP four regional Aboriginal EPP workshops. During these engagement initiatives, Trans Mountain presented an overview of the potential socio-economic effects associated with the Project (as per the Application), a proposed approach to socio-economic effects monitoring and draft monitoring indicators. Also during these sessions, Trans Mountain sought feedback and ideas from stakeholders and Aboriginal groups, exploring

interest in community participation or in monitoring and other indicators and topics of interest. The draft SEEMP was released for a 90-day review and feedback with stakeholders and Aboriginal groups in September 2016, and following this Trans Mountain conducted a follow-up webinar in January 2017 to review and discuss the final SEEMP and indicators. The overall monitoring approach presented in the SEEMP considers and incorporates the feedback Trans Mountain received, including addition of new indicators to reflect the concerns and interests identified during engagement. Appendix A provides a summary of feedback received through Trans Mountain's consultation on the SEEMP, well as how results of consultation has been considered and incorporated into the Plan.

Trans Mountain's SEEMP is focused on monitoring factors or indicators that are reflective of the Project's contribution to socio-economic outcomes during the two-year construction window; that is, indicators of the social or economic stressors directly attributable to the Project. These "**Project-specific indicators**" will be used in pinpointing where and when a Project mitigation, policy or program intended to reduce adverse socio-economic effects during construction is working as planned or may need improvement or adaptation. Project-specific indicators will be the key tool that Trans Mountain uses to identify adverse effects of the Project in a timely manner and to develop adaptive social performance management strategies, where needed. The Plan outlines the criteria used to develop monitoring indicators (see Section 3.1).

In parallel, and in consideration of select stakeholder feedback during engagement, the SEEMP also includes broader socio-economic factors that will be tracked and reported over the construction period. Known as "**context indicators**", such broader information, while not meeting the criteria as a "monitoring" indicator for the purposes of this Project-specific SEEMP, will assist in understanding the relative resiliency or vulnerability of different communities and regions in the context of Project-specific stressors. This information will be used to help interpret the relative importance or impact of the Project-specific indicators in the context of a community or region.

The Plan includes 14 Project-specific socio-economic monitoring indicators reflecting the monitoring topic areas where data will be proactively collected and provided during construction. These will be based on data from Contractors, Trans Mountain as well as through participatory qualitative feedback received from communities and Aboriginal groups through construction community liaison roles and Project feedback opportunities such as a phone line and email, community specific engagement processes (such as Technical Working Groups), and Aboriginal Engagement Roundtables. Each of the Project-specific indicators provides information that is reflective of the Project contribution to socio-economic outcomes during construction and can be used to inform mitigation adaptation as required. The Plan also includes nine "context indicators" which will be tracked to reflect the broader socio-economic conditions in which Project construction will occur.

Trans Mountain will collect and compile data and feedback for each indicator. Trans Mountain will aggregate the monthly data collected via Contractors and other data mechanisms, including any updated information on context indicators available through external agencies. Trans Mountain will prepare regional Socio-Economic Monitoring Reports every three months (*i.e.*, quarterly) during construction. Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will also send notification to Appropriate Government Authorities (*i.e.*, local and regional governments, service providers) and Aboriginal groups. Trans Mountain will also follow-up on stakeholder and Aboriginal group enquiries and questions about Socio-Economic Monitoring Reports.

The SEEMP also provides an update of baseline data for the context indicators that will be tracked. Extensive baseline context for the Project was presented in the Application in the Setting discussion in Volume 5B and in Volume 5D Socio-Economic Technical Report, which provides a comprehensive snapshot of baseline pre-construction socio-economic conditions. Only socio-economic context data to be tracked during construction are updated in the SEEMP. Context data will be updated at the start of construction as part of the first monitoring cycle.

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## 1.0 INTRODUCTION

Trans Mountain Pipeline ULC (Trans Mountain) submitted a Facilities Application (the Application) to the National Energy Board (NEB) in December 2013 for the Trans Mountain Expansion Project (“the Project” or “TMEP”). On May 19, 2016, Trans Mountain received the NEB’s Conditions for the Project. On November 29, 2016, the Government of Canada concluded the Project was in the public interest of Canada. A Certificate of Public Convenience and Necessity (CPCN) allowing the Project to proceed, subject to 157 conditions, was issued on December 1, 2016.

The Socio-Economic Effects Monitoring Plan (SEEMP or the Plan) was prepared to meet the requirements of NEB Condition 13. The Plan was submitted to Appropriate Government Authorities, affected landowners/tenants and public stakeholders on September 16, 2016 for a review and feedback period which concluded on December 16, 2016. Aboriginal groups received the plan on September 26, 2016 for a review and feedback period that was subsequently extended to January 16, 2017. Trans Mountain incorporated any feedback into the final Plan or has provided rationale for why input has not been included, as summarized in Appendix A.

Socio-economic effects monitoring is a tool to evaluate the effectiveness of socio-economic mitigation measures, to manage unintended socio-economic impacts of a project, to optimize positive project impacts, and as a means of communicating with affected stakeholders and Aboriginal groups in an ongoing manner. This document provides an overview of Trans Mountain’s socio-economic effects monitoring plan for construction, including monitoring objectives, approach, indicators, and data collection and review process. It also summarizes Trans Mountain’s stakeholder and Aboriginal engagement in relation to the development of the SEEMP, and how socio-economic effects monitoring results will be shared as the Plan is implemented during construction.

### 1.1 Project Description

Trans Mountain filed its Application with the NEB in December 2013. In developing its Application, Trans Mountain commenced a program of extensive discussions with landowners, engagement with Aboriginal groups and consultation with affected stakeholders. This program was intended to gather input from these groups into the Application and supporting Environmental and Socio-economic Assessment (ESA), and to continue to assist Trans Mountain in the design and execution of the Project. Trans Mountain is also working with Appropriate Government Authorities to carry out the necessary reviews, studies and assessments required for the Project.

The physical components of the Project include: the installation of new pipeline segments and reactivation of existing lines that are currently maintained in a deactivated state; construction of pump stations; expansion of existing terminals through the addition of new tanks and other infrastructure and the construction of a new dock complex at the Westridge Marine Terminal; and the addition of new power lines under the jurisdiction of the appropriate provincial authorities. The scope of the Project specifically involves the following applied-for facilities:

- using the existing active 610 mm (NPS 24) and 762 mm (NPS 30) O.D. buried pipeline segments;
- constructing three new 914 mm (NPS 36) O.D. buried pipeline segments totaling approximately 863.5 km:
  - Edmonton to Hinton – 338.6 km;
  - Blue River to Darfield – 153.4 km; and
  - Black Pines to Burnaby – 371.5 km;
- constructing one new 1,067 mm (NPS 42) O.D. buried pipeline segment:
  - Hargreaves to Blue River – 121.4 km;



- reactivating two 610 mm (NPS 24) O.D. buried pipeline segments that have been maintained in a deactivated state:
  - Hinton to Hargreaves – 151.1 km; and
  - Darfield to Black Pines – 41.6 km;
- constructing two, 3.4 km long 762 mm (NPS 30) O.D. buried delivery lines from the Burnaby storage Terminal to the Westridge Marine Terminal (the Westridge Delivery lines);
- installing 25 new sending or receiving traps (18 on the Edmonton-Burnaby mainlines), for in-line inspection tools at nine existing sites and two new sites;
- adding 12 new pump stations (10 at existing Trans Mountain Pipeline [TMPL] site and two units at a new greenfield site);
- constructing new tanks located at the terminals near Edmonton, Sumas and Burnaby; and
- constructing one (1) new dock complex, with a total of three (3) Aframax-capable berths, as well as a utility dock (for tugs, boom deployment vessels and emergency response vessels and equipment) at the Westridge Marine Terminal, followed by the decommissioning of the existing berth, which was assessed in Trans Mountain's ESA.

Trans Mountain has been issued a new CPCN and amendments to two existing CPCNs for the existing TMPL (OC2 and OC49). In addition, a number of Section 58 Orders under the *NEB Act* have been issued for the Project relating to the temporary construction lands, pump stations, tanks, and other infrastructure (Temp, Pump1, Pump2, Tanks, and Deact). Abbreviations used to describe the legal instruments here match those used in the NEB Recommendation Report (Filing ID [A77045](#)). An overview of the work or activity authorized by each legal instrument is provided in Appendix 2 of the NEB Recommendation Report for the Project.

## 1.2 Objectives

The objectives of the TMEP SEEMP are to:

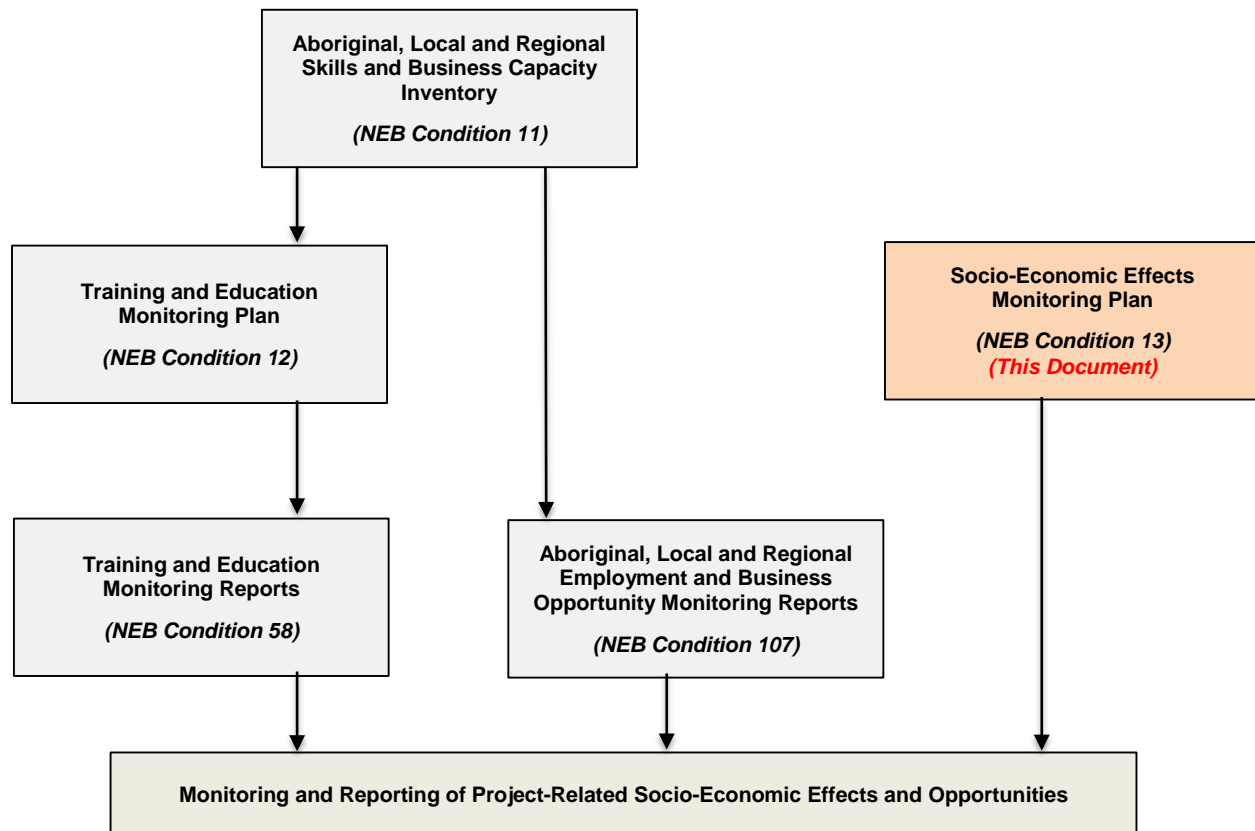
- a) examine the effectiveness of the construction-phase socio-economic mitigation that was proposed during the regulatory ESA process;
- b) identify strategies to adapt /enhance construction-phase mitigation, if required;
- c) identify and respond to unanticipated socio-economic effects and issues during TMEP construction;
- d) provide information to regulators and stakeholders on actual socio-economic influences and outcomes related to the construction of the Project; and
- e) document TMEP's ongoing efforts to respond to and minimize negative socio-economic effects, and support Project benefits.

## 1.3 Links to other Trans Mountain Plans

The SEEMP will form part of a broader strategy to monitor and report on Project-related socio-economic effects and opportunities reflective of Trans Mountain's commitments and of the NEB Conditions. Multiple Conditions focus on monitoring socio-economic effects related to training, employment and procurement (e.g., NEB Conditions 11, 12, 58, and 107) (see Figure 1). Monitoring of environmental resources that are vital to the traditional land and resource use (TLRU), traditional marine resource use (TMRU) and culture of Aboriginal groups are covered in various resource-specific NEB Conditions related to wildlife, vegetation and aquatic/marine resources. In addition, Aboriginal group involvement in environmental monitoring activities during construction for the protection of TLRU/TMRU and cultural/heritage resources

are discussed in NEB Condition 98 Plan for Aboriginal Group Involvement in Construction Monitoring. Further, Trans Mountain's existing commitments beyond the NEB Conditions also involve socio-economic effects related to specific landowner and land user issues which are being addressed at the individual level through direct negotiation and compensation agreements. As such, the TMEP SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual level.

Figure 1 Overview of TMEP Socio-Economic Monitoring Documents



There are other NEB Conditions not related to monitoring of socio-economic outcomes that focus on managing specific issues that are socio-economic in nature, including:

- NEB Condition 47 – Access Management Plan;
- NEB Condition 48 – Navigation and Navigation Safety Plan;
- NEB Condition 59 – Worker Accommodation Strategy;
- NEB Condition 73 – Traffic Access and Control Management Plan;
- NEB Condition 82 – Light Emissions Management Plan – Westridge Marine Terminal;
- NEB Condition 95 – Visual Impact Plan;
- NEB Condition 96 - Reports on engagement with Aboriginal groups – construction;
- NEB Condition 98 – Plan for Aboriginal group participation in construction monitoring, to monitor activities during construction for the protection of traditional land and resource use; and

- NEB Condition 145 – Community Benefits Program progress reports.

NEB Conditions for certain biophysical elements will also play a role in managing socio-economic issues related to aesthetic disturbances, including:

- NEB Condition 74 – Horizontal Directional Drill Noise Management Plan;
- NEB Condition 80 – Noise Management Plan for Construction at Terminals and Pump Stations; and
- NEB Condition 86 – Burnaby Mountain Tunnel Noise Management Plan.

A complete understanding of NEB Conditions that play a role in managing Project-specific socio-economic effects should consider all these plans.

## **1.4 Commitment Management**

Trans Mountain made a number of commitments regarding the Project during the OH-001-2014 proceedings and engagement activities up to May 2016. Commitments were made to improve and optimize planning and mitigation measures. As Trans Mountain has consolidated its commitments into a Commitments Tracking Table in order to make it easier for interested parties to access and reference this information, the table of commitments in each plan has been removed.

The Commitments Tracking Table will be filed with the NEB and will be available on Trans Mountain's web site at [www.transmountain.com](http://www.transmountain.com). Trans Mountain continues to monitor and track compliance with its commitments and will update, post to its website and file with the NEB updated versions of the Commitments Tracking Table according to the timeframes outlined in NEB Condition 6. Commitments with specific relevance to this Plan have been considered and addressed.

## **1.5 Socio-Economic Monitoring – Background**

Changes in the socio-economic environment associated with an industrial development (such as pipelines and facilities) are a function of multiple factors. Socio-economic change can occur related to factors such as increases in the number of local jobs and the associated labour income, the increased use of local and regional suppliers of goods and services, and the influx of non-regional workers to meet workforce demands. The effects can be positive and generally economic in nature, such as through increased labour income and opportunities for economic spin-offs for local and regional businesses. There can also be negative effects typically social in nature, such as higher demands on local services and infrastructure, and effects related to the presence of workers particularly in smaller communities. Effects related to land use, access, and Aboriginal way-of-life may also occur due to Project-related land and natural resource disturbances and sensory disruption. The potential residual socio-economic effects of TMEP are discussed and characterized in Section 7 of Volume 5B of the Application [Filing ID [A3S1S7](#)].

Socio-economic effects monitoring is a tool to evaluate the effectiveness of mitigation measures, to manage unintended socio-economic impacts of a project, to optimize positive project impacts, and as a means of communicating with affected stakeholders and Aboriginal groups in an ongoing manner.

The monitoring of socio-economic effects is particularly useful given the constantly changing nature of socio-economic conditions and the associated challenges of predicting socio-economic outcomes related to projects during the regulatory assessment process.

However, socio-economic effects monitoring is challenging given that socio-economic outcomes at any particular time in a given region will be influenced by multiple factors beyond one particular project or activity (e.g., changing labour market conditions, other projects/developments, government policies and decisions, individual perspectives and behaviour). There are also challenges associated with limited available data, attribution of factors that influence data changes, as well as availability of data that may be held by government/service agencies and collected during timeframes unrelated to a project.

## 1.6 Project Approach

Trans Mountain's approach to socio-economic effects monitoring comprises a meaningful and pragmatic way to identify location-specific effects of the Project, the effectiveness of Trans Mountain's mitigation strategies and the need for adaptive socio-economic management as Project construction progresses. This sub-section outlines the approach and method undertaken related to the selection of indicators or factors to be monitored and the development of the overall monitoring approach.

### 1.6.1 *Process of Consultation and Review*

Trans Mountain took a consultative approach in the development of the SEEMP, including the monitoring approach and indicators or factors to be monitored.

As a first step, Trans Mountain examined socio-economic monitoring approaches used in Canadian jurisdictions for applicability to a pipeline context and the geopolitical context of TMEP. This considered the suite of potential socio-economic effects identified in the ESA; key issues of interests of government authorities, Aboriginal groups and landowners/tenants that had emerged during the Trans Mountain engagement process since 2012; and the relatively short-term and rapid nature of pipeline construction. This also included the examination of available literature and guidance regarding socio-economic monitoring approaches and indicator development, as well as the types of data points that could be helpful to pragmatically inform the need and opportunity for Project adaptive management over a two-year construction window across multiple regions.

Trans Mountain then conducted extensive SEEMP-specific engagement meetings and workshops along the corridor in summer/fall 2015. As discussed further in Section 2.0 and Appendix A, Trans Mountain sought input from Appropriate Government Authorities (e.g., local and regional authorities and service providers), Aboriginal groups and communities. Discussions with these stakeholders and Aboriginal groups focused on a proposed Project-specific socio-economic effects monitoring approach (including draft indicators and indicator criteria); ideas and interest regarding community involvement in the monitoring process; and ideas on metrics where community organizations may want to contribute data. Trans Mountain is grateful for the time and consideration given by Appropriate Government Authorities, Aboriginal groups and other stakeholders to discussions and deliberations regarding early conceptualizations and the evolution of the TMEP SEEMP and the indicators or factors to be monitored.

During that engagement, some common feedback themes emerged that Trans Mountain has taken into consideration in the finalization of the SEEMP and its indicators. These include:

- a) the importance of and preference for qualitative feedback mechanisms and continued engagement as a means of providing feedback to Trans Mountain on issues, effects and mitigation effectiveness during construction;
- b) the importance of including not only data provided by the Project, but also some background or non-Project-specific information that may be relevant for providing context; and
- c) interest in beneficial economic effects that are socio-economic in nature (but some of which are the subject of other NEB Conditions and monitoring Plans).

### 1.6.2 *Key Considerations for the Selection of Indicators*

Trans Mountain's socio-economic monitoring approach has been designed to be appropriate for the nature of the Project. First, it is responsive to the large geographic scale of the Project corridor: multiple geopolitical jurisdictions are crossed by the Project, each of which has a different "sense of place" and may have unique conceptions of what potential impacts may be important to monitor. Second, Trans Mountain's monitoring approach considers the relatively short-term nature of pipeline construction which comprises a two-year window in its entirety, but which also has a continuously moving "construction footprint" as construction activity moves in waves down a corridor. The monitoring approach appropriate for this multi-jurisdictional and relatively short-term context will necessarily look different from that for an industrial project with a focused footprint in one jurisdiction and with a large community-based long-term operations workforce.

A third key factor considered in the approach is the fact that many socio-economic outcomes of interest are influenced by multiple factors, many of which are beyond the influence or control of the Project. For example, although the Project may influence employment, traffic and/or health outcomes, these are also strongly influenced both by other projects taking place in the area, broader societal and economic trends, and/or municipal, regional or provincial policy and individual factors. On its own, information on general socio-economic conditions will not depict reasons for change that may occur, TMEP-specific contribution to change, nor pinpoint where TMEP mitigation or management actions may need to be improved/adapted. Further, there are typically no established thresholds at the government or regulatory level to differentiate acceptable and unacceptable conditions for these societal factors (Salmo Consulting 2006, MacKenzie Valley Environmental Impact Review Board no date). Recent literature and guidance notes the importance for project-specific socio-economic management/monitoring plans to assess and manage social impacts that are within their control and sphere of responsibility (Holm *et al.* 2013), acknowledging a wider context of shared responsibility for socio-economic outcomes; and that plans be based on measuring impacts in ways that management actions can be identified and have input from key stakeholders (Vanclay *et al.* 2015).

### 1.6.3 *Project-Specific and Context indicators*

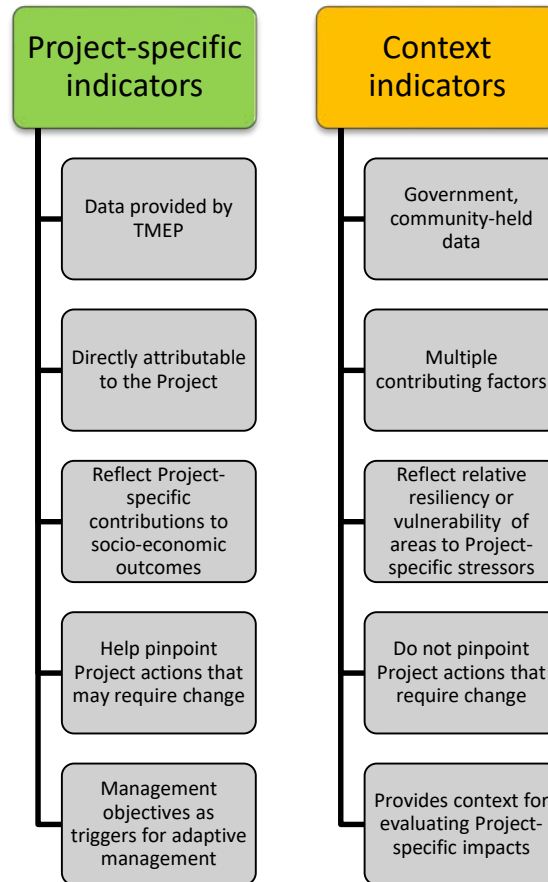
In consideration of consultation feedback and the factors listed above, Trans Mountain has developed a practical and focused approach to socio-economic effects monitoring, with two parallel tracks. Trans Mountain will *monitor* a focused suite of **Project-specific indicators**, while also *tracking* select broader socio-economic information that will provide context for change that may occur during the Project construction timeframe (**context indicators**).

**Project-specific indicators** are data that are a direct reflection of the Project's contribution to socio-economic outcomes. Project-specific indicators will be the key mechanism for identifying adverse effects in a timely manner during construction and identifying adaptive management needs and opportunities. These Project-specific indicators, listed and described in Section 3.2 (Table 3) of this document, comprise data that is provided by Trans Mountain, that is specific and attributable to the Project, and that is amenable to change over a short time period (weeks to months). Examples of Project-specific indicators are: numbers of non-local Project workers residing in a given location; number of Project worker referrals to local health facilities; or number and type of Project-related complaints received in a particular month in a given location.

**Context indicators**, on the other hand, describe broader socio-economic conditions in which Project construction will occur. Examples include local unemployment rates and communicable disease rates. While context indicators do not meet the criteria for project-specific monitoring (see Section 3.1 for discussion of monitoring criteria), they provide information about socio-economic conditions during Project construction, where the Project may be one of many contributing influences but where change in the indicator cannot be solely or accurately attributed to the Project. Context indicators are important for two reasons. First, by providing information about socio-economic factors unrelated to the Project, they may help explain (or provide context for) why observed socio-economic change is occurring. Second, they help establish a picture of the overall socio-economic conditions in the area, which identifies the extent to which a given community or region may be resilient and able to more easily absorb or adapt to Project-related influences; or whether the community or region is likely to be more vulnerable to adverse impacts. This information will be used to help interpret the relative importance or impact of the Project-specific indicators in the context of a community or region.

The distinction between the role and purpose of Project-specific indicators and Context indicators in the SEEMP is shown in Figure 2.

Figure 2: Project-Specific Indicators versus Context Indicators



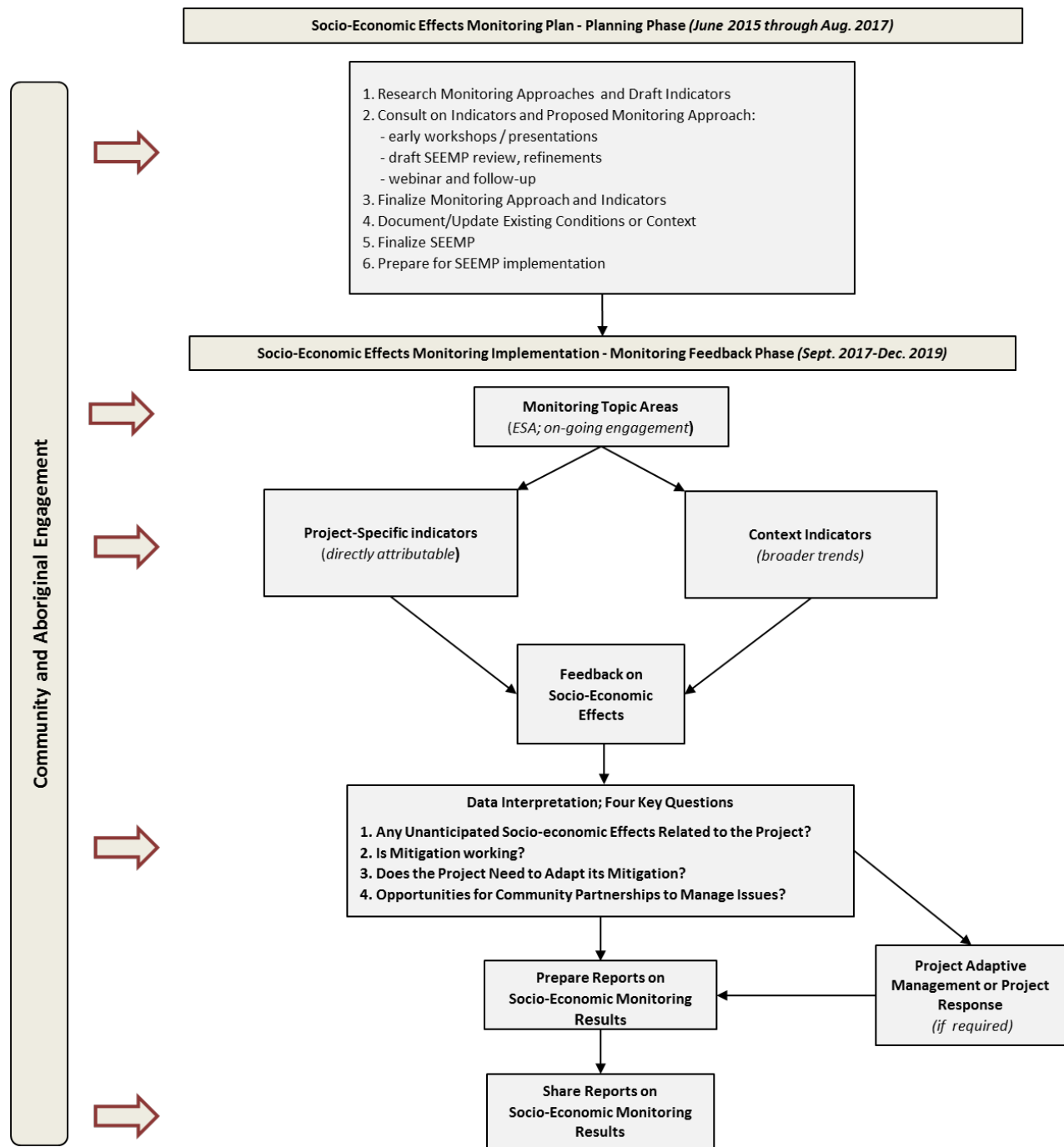
Together, the Project-specific and context indicators will allow Trans Mountain to provide data to communities, government and regulators about the Project's contribution to socio-economic outcomes. This will ensure the Project can take full responsibility for the timely implementation of the monitoring process, particularly given the relatively short duration of construction and the numerous communities along the Project corridor.

The criteria and indicator selection has been guided by literature related to social impact and social performance monitoring and evaluation. Typically, indicators should be specific to the issue under consideration; measurable and achievable in the sense that the data must be available; accurate and time-sensitive; there is also value of including some indicators that are more subjective in that they are based on stakeholders' own experiences and participatory in nature (Vanclay *et al.* 2015, Lennie *et al.* 2011). The importance of both qualitative and quantitative indicators is acknowledged in the TMEP SEEMP approach.

#### 1.6.4 Development and Implementation of the SEEMP

Figure 3 presents an overview of the approach to developing and implementing the SEEMP. In this figure, the Planning Phase represents the phase of developing the SEEMP. The Monitoring Feedback Phase represents how feedback about the socio-economic outcomes related to Project construction will be ascertained and considered during construction.

Figure 3 Socio-Economic Effects Monitoring – Planning and Feedback Phases



Given the objective of identifying opportunities to improve upon mitigation during construction, Trans Mountain is organizing socio-economic effects monitoring primarily around the management topics identified in the Socio-Economic Management Plan (SEMP) presented in the Application (see Appendix C of the Pipeline Environmental Protection Plan [EPP] in Volume 6B of the Application, Filing ID [A3S2S3](#)). The SEMP summarized key mitigation and management strategies to address anticipated socio-economic effects of the Project emerging from the ESA. The updated SEMP, revised to focus only on Contractor-specific mitigation, is presented in the updated Environmental Plans (Volume 6: Environmental Management Plans, Section 2.6 [Filing ID [A84142-25](#)]). The SEEMP, on the other hand (this Plan, NEB

Condition 13), is the plan to monitor select socio-economic effects and issues during construction to ensure mitigation is working as planned.

The SEEMP also considers the socio-economic effects conclusions discussed in the NEB Recommendation Report. The NEB Recommendation Report requires Trans Mountain carry out previous commitments related to potential socio-economic effects identified within the Application and imposes the creation of this Plan.

**Monitoring topic areas**, based on the SEMP and provided in Table 2 below, are reflective of issues of interest to Appropriate Government Authorities, potentially affected Aboriginal groups, local communities, and landowners/tenants. Some monitoring topic areas such as traffic and worker health, are monitored using discrete (quantitative) data that will be directly available to Trans Mountain. For example, Trans Mountain will have access to data on traffic incidents involving Project vehicles. Other monitoring topic areas are less easily monitored via quantitative measures (e.g., access, sensory disturbance, Project-community interactions, Aboriginal social and cultural wellbeing, etc.), and will rely on qualitative feedback from communities through various Project mechanisms.

**TABLE 2**  
**SOCIO-ECONOMIC MONITORING TOPIC AREAS**

Monitoring Topic Area	Activity/Concern	Relevant Updated SEMP Section
Traffic	Traffic Estimates <sup>1</sup>	Section 3.3
	Traffic Management <sup>1</sup>	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
	Worker Transportation	
	Traffic Routing and Movement <sup>1</sup>	
	Driving Behaviour	
Worker Accommodation	Worker Accommodation Strategy	Section 3.4
	Camp Conditions <sup>2</sup>	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
	Camp Security <sup>2</sup>	
Worker Health	Workplace Hygiene Facilities and Procedures	Section 3.5
	Policies on Infectious Workers	Environmental Plans, PPs, Volume 6: Environmental Management Plans (Section 2.6)
	Worker Mental Health	
Human Occupancy and Resource Use	Notification of Construction and Physical Works	Section 3.6
	Access	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
Navigation and Navigation Safety	Facilitate On-going Navigation	Section 3.10
	Navigation Safety	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
Sensory Disturbance	Nuisance Sensory Disturbance	Section 3.7 Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
Other Regional Infrastructure and Services	Interaction with Local Health, Emergency Medical, and Social Services	Section 3.9
	Interaction with Waste and Water Facility Operations	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
	Linear Infrastructure Crossings	
Community Way-of-Life, Aboriginal and non-Aboriginal	Project-Community Interaction	Section 3.11
	Consequence of Worker Non-Compliance	Environmental Plans, Volume 6: Environmental Management Plans (Section 2.6)
	Aboriginal social and cultural wellbeing related to change related to TLRU/TMRU and cultural sites <sup>3</sup>	N/A

- Note:**
- 1 Data regarding traffic estimates and routing/movement plans is provided through NEB Condition 73 (Traffic Access and Control Management Plan), thus indicators reflective of these issues will not be presented in the SEEMP.
  - 2 Operational details of camps is discussed in NEB Condition 59 Worker Accommodation Strategy, thus indicators reflective of these issues will not be presented in the SEEMP.
  - 3 Mitigation specific to TLRU/TMRU is not addressed in the SEMP, but rather through the protection of environmental and cultural resources mitigation in the various Project EPPs.



### **1.6.5      *Aboriginal-specific Factors***

Many of the socio-economic monitoring topic areas and monitoring indicators outlined in the SEEMP apply to the consideration of adverse socio-economic effects on all people residing the Project study areas, Aboriginal and non-Aboriginal. However, Trans Mountain understands that Aboriginal groups' may experience unique adverse social and cultural well-being effects during construction, given Aboriginal groups' ties to the land and the cultural importance of traditional use practices and cultural sites. Through engagement with Aboriginal groups and the NEB proceedings, Trans Mountain has heard and understands that Aboriginal groups' uses of the lands, waters and resources within their traditional territories are the backbone of their cultures. Trans Mountain also heard and understands Aboriginal groups' concern about effects on their continued ability to access sites in areas of cultural importance such as spiritual sites and gathering places.

Based on the understanding of these unique Aboriginal interests, the SEEMP will seek to identify and report Aboriginal-specific effects related to the social, cultural and experiential aspects of traditional use and cultural resources through a unique qualitative indicator. Trans Mountain will seek to understand and document/respond to Aboriginal-specific social and cultural well-being effects tied to the effects of Project construction on traditional and cultural practices. This will have a unique mechanism as its data source, namely construction phase Aboriginal Engagement Roundtables, from which qualitative data will be generated. Aboriginal Engagement Roundtables are discussed in Trans Mountain's response to NEB Condition 96 (see Section 4.2, Filing ID [A84533](#)).

Trans Mountain will also disaggregate the data it collects from its feedback line (see indicator #11 in Table 3) on an Aboriginal versus non-Aboriginal basis (Aboriginal status will be based on self-identification), such that unique adverse socio-economic effects of construction from an Aboriginal perspective are identified.

## 2.0 CONSULTATION AND ENGAGEMENT

Consultation and engagement activities related to socio-economic effects were completed between May 2012 and January 2017 with Appropriate Government Authorities, potentially affected Aboriginal groups, affected landowners/tenants and other stakeholders. Opportunities to discuss socio-economic effects monitoring and identify issues or concerns were provided to public stakeholders through the Trans Mountain website, workshops, meetings and ongoing engagement activities during the reporting period. Engagement focused particularly on Trans Mountain's proposed socio-economic effects monitoring approach with Appropriate Government Authorities and Aboriginal groups occurred during workshops taking place from June to September 2015.

The approach to developing the SEEMP was consultative. Key consultation and engagement activities specific to the development of the SEEMP include:

- nine SEEMP-specific meetings in communities along the pipeline corridor with Appropriate Government Authorities (including some non-governmental business organizations), to explore approach and indicator ideas;
- four regional Aboriginal Engagement workshops designed to promote a dialogue around draft EPPs and SEEMP;
- wide circulation and a 90-day review period of the draft SEEMP, including follow-up meetings as required;
- a follow-up webinar with Appropriate Government Authorities to discuss overview of final SEEMP and indicators, including circulation of and opportunity for feedback on follow-up responses; and
- posting of the SEEMP on the Trans Mountain website from September 2016 to current day with the invitation to contact Trans Mountain with any additional questions or comments.

The draft Plan was released in September 16, 2016 with the feedback period closing on December 16, 2016 (Aboriginal groups received the plan on September 26, 2016 for a 90-day review and feedback period that was subsequently extended to January 16, 2017). A review of the draft Plan was completed via an online webinar in January 2017, with a follow-up by email.

Feedback and recommendations specific to this Plan that was received during these engagement activities has been considered and included in this Plan, where appropriate. Appendix A includes a comprehensive record of these engagement and consultation activities, stakeholder feedback and Trans Mountain responses and justification for how engagement results have been incorporated.

## 3.0 METHODS

This sections provides further detail on the SEEMP monitoring methods. As noted, Trans Mountain has developed a practical and focused approach to socio-economic effects monitoring, with two parallel tracks of data. Trans Mountain will monitor a focused suite of Project-specific indicators, while also tracking select broader socio-economic information that will provide context for change that may occur during the Project construction timeframe (context indicators). Project-specific indicators will be the key mechanism for identifying adverse effects in a timely manner during construction and identifying adaptive management needs and opportunities.

### 3.1 Indicator Criteria

Trans Mountain used the following criteria to select indicators for TMEP socio-economic effects monitoring. Data for the monitoring indicators should be:

- consistently and regularly available during the Project construction timeframe;
- useful in terms of potentially improving mitigation of socio-economic effects during construction; and
- reflective of the Project contribution to socio-economic outcomes during construction.

In addition, select forward-looking indicators were chosen, as they were deemed useful in terms of providing information that will assist local agencies, organizations and businesses in planning/preparing for upcoming Project activities during construction.

The criteria and indicator selection has been guided by literature and best practice guidance related to social impact and social performance monitoring and evaluation. Typically, indicators should be specific to the issue under consideration; measurable and achievable in the sense that the data must be available; accurate and time-sensitive; there is also value in including some indicators that are more subjective in that they are based on stakeholders' own experiences and participatory in nature (Vanclay *et al.* 2015, Lennie *et al.* 2011). The importance of both qualitative and quantitative indicators is acknowledged in the TMEP SEEMP indicators.

### 3.2 Project-Specific Monitoring Indicators

Trans Mountain has developed a suite of draft Project-specific monitoring indicators that are practical and available. Draft indicators were presented to, and discussed, with potentially affected communities, Aboriginal groups, local and regional authorities and service providers during the development of the SEEMP, and indicators have been refined and added to based on stakeholder input.

Indicators are developed for each monitoring topic area where possible, and meeting the criteria described in Section 3.1. In some instances, more than one indicator may be utilized per topic area, and certain indicators may reflect more than one topic area. Indicators evolved and were added to over time in consideration of specific feedback and ideas received from engagement. Indicators are easily understood, relevant to the objectives of the SEEMP, available and reliable. The Project-specific socio-economic monitoring indicators can be proactively collected and provided during construction, based on data from Contractors and qualitative feedback received from communities through proposed community liaison or construction feedback mechanisms with Aboriginal groups and communities.

Table 3 outlines the proposed Project-specific socio-economic monitoring indicators, and describes the following for each proposed indicator:

- rationale for selection;
- source of data;
- responsibility for data collection; and
- frequency of data collection.

TABLE 3

## PROJECT-SPECIFIC SOCIO-ECONOMIC MONITORING INDICATORS

Indicator	Applicable Monitoring Topic Area	Concern/Issue	Rationale for Indicator	Data Source	Accountability for Data Collection	Frequency of Data Collection
1. Number of worker-days <sup>1</sup> (by location) related to Project construction in field communities categorized by: <ul style="list-style-type: none"> <li>Aboriginal status<sup>2</sup>: Aboriginal v. non-Aboriginal</li> <li>Geographic origin: Local v. regional v. non-regional or local<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Community Way-of-Life</li> <li>Worker Accommodation</li> <li>Regional Infrastructure and Services</li> </ul>	Project-Community Interactions	Provides indication of Project demand for local/regional labour. Provides indication of demographic make-up of labour force. Provides indication of number of workers being brought in from outside the Socio-economic Regional Study Area (RSA) that may create pressure points or opportunities for host communities.	Contractors, Trans Mountain	Trans Mountain	Monthly
2. Number of worker-days (by location) related to construction in field communities categorized by accommodation arrangements: <ul style="list-style-type: none"> <li>Non-local, staying in TMEP camps</li> <li>Non-local, not staying in TMEP camps</li> <li>Local or regional residing at home</li> </ul>	<ul style="list-style-type: none"> <li>Worker Accommodation</li> <li>Regional Infrastructure and Services</li> </ul>	Worker accommodation strategy (e.g., housing demand pressure, opportunities for commercial accommodations and other local businesses)	Provides an indication of Project-related demand for local/regional housing and accommodation. Also provides indication of extent to which Project workers are supporting business opportunities for local/regional commercial accommodation and other retail service providers.	Contractors, Trans Mountain	Trans Mountain	Monthly
3. Living out allowance or related stipend <sup>4</sup> : <ul style="list-style-type: none"> <li>Number of worker days paid</li> <li>Total value (\$)</li> </ul>	<ul style="list-style-type: none"> <li>Worker Accommodation</li> </ul>	Worker accommodation strategy (e.g., housing demand pressure, opportunities for commercial accommodations and other local businesses)	The number of worker days paid provides indication of Project use of local and regional commercial accommodation and contribution to accommodation pressures. Living out allowance, along with any similar stipend to cover incidentals for camp workers, are also a reflection of economic benefit to local/regional business community, as this money is likely to be spent in local/regional communities during the construction period.	Contractors, Trans Mountain	Trans Mountain	Monthly
4. Qualitative feedback about Project use of local/regional commercial accommodation (e.g., hotels, motels, campgrounds).	<ul style="list-style-type: none"> <li>Worker Accommodation</li> </ul>	Worker accommodation strategy (e.g., housing demand pressure, opportunities for commercial accommodations and other local businesses)	Provides indication of Project use of hotel/motel accommodation and feedback about associated benefits and issues. This indicator will provide information about any adverse use patterns by workers.	Contractors; consultation with Contractor-identified hotels/accommodation establishments, and tourism professionals.	Trans Mountain	Quarterly
5. Number of full-time workers related to Project construction in field communities anticipated in next business quarter.	<ul style="list-style-type: none"> <li>Community Way-of-Life</li> <li>Worker Accommodation</li> <li>Regional Infrastructure and Services</li> </ul>	Project-Community Interactions Worker Accommodation Strategy	Provides an indication of anticipated number of workers present in field communities in next business cycle so that communities/agencies are aware of future Project activity and the anticipated number of temporary workers. This will aid in community readiness and planning.	Contractors, Trans Mountain	Trans Mountain	Quarterly
6. Motor vehicle collisions or reportable incidents that involve Project vehicles on public roads during work hours or Contractor-owned vehicles during off work hours specifying: <ul style="list-style-type: none"> <li>total;</li> <li>how many involved injuries; and</li> <li>how many involved fatalities.</li> </ul>	<ul style="list-style-type: none"> <li>Traffic</li> <li>Worker Health</li> </ul>	Driving behaviour Vehicle monitoring Traffic safety	Available data that provides an indication of unsafe driving practices by Project-related vehicles in context of increased traffic volumes. This will provide an indication of effectiveness of traffic safety protocols, which could influence public safety.	Contractors	Trans Mountain	Quarterly

**TABLE 3 Cont'd**

Indicator	Applicable Monitoring Topic Area	Concern/Issue	Rationale for Indicator	Data Source	Accountability for Data Collection	Frequency of Data Collection
7. Total workers transported from staging areas per day (average).	<ul style="list-style-type: none"> <li>Traffic</li> </ul>	Worker transportation	Provides indication of use of shuttle services to reduce Project-related vehicles on public roadways. Provides indication of Project-workers' vehicles not travelling independently to work sites.	Contractors	Trans Mountain	Quarterly / Audited counts only;
8. Personal vehicles in staging area per day (average)	<ul style="list-style-type: none"> <li>Traffic</li> </ul>	Worker transportation	Provides approximate indication of Project-workers' vehicles travelling on public roads at times and number of vehicles not travelling to work sites. It is noted that this will not consider site-inspector vehicles, which are allowed on the work-sites.	Contractors	Trans Mountain	Quarterly / Audited counts only;
9. Number of times (by location) a non-local "captive" Project worker (e.g., in camp, on work-site): a) was referred or sent to local health facilities (specifying urgent/non-urgent, and occupational/non-occupational); b) required ambulance or other emergency transport.	<ul style="list-style-type: none"> <li>Worker Health</li> <li>Regional Infrastructure and Services</li> </ul>	Burden on local health and emergency services	Provides an indication of the absolute and relative burden of the non-local workforce on local health services	Contractors, including camp operators	Trans Mountain	Monthly
10. Number of medical visits to Project on-site medical facilities (occupational vs. non-occupational).	<ul style="list-style-type: none"> <li>Worker Health</li> </ul>	Worker health and potential burden on local health services	Indicator suggested by Northern Health. It demonstrates the success of the Project health and safety protocols by showing the number of workers who are being seen through the Project's private care structure as opposed to placing a burden on the local health care services.	Contractors	Trans Mountain	Monthly
11. Number and types of calls/complaints received through TMEP feedback line (by Aboriginal versus non-Aboriginal, by location, by topic), for example: <ul style="list-style-type: none"> <li>Access limitations</li> <li>Road closures</li> <li>Business impacts</li> <li>Pressure on housing/accommodations</li> <li>Burden on local services/infrastructure</li> <li>Dust/air quality</li> <li>Noise</li> <li>Pollution/emissions</li> <li>Other environmental concerns</li> <li>Traffic and driving</li> <li>Worker conduct</li> <li>Compliments/positive feedback</li> <li>Employment</li> <li>TLRU/TMRU and cultural sites</li> <li>Other</li> </ul>	<ul style="list-style-type: none"> <li>Traffic</li> <li>Worker Accommodation</li> <li>Worker Health</li> <li>Human Occupancy and Resource Use (including marine-related)</li> <li>Sensory Disturbance</li> <li>Emergency Management Planning</li> <li>Regional Infrastructure and Services</li> <li>Navigation and Navigation Safety</li> <li>Aboriginal and non-Aboriginal Community Way-of-Life</li> </ul>	Any	Provides direct indication of issues/concerns /perceptions related to socio-economic effects of Project construction, on an Aboriginal and non-Aboriginal basis	TMEP Feedback Line Records	Trans Mountain	Monthly

**TABLE 3 Cont'd**

Indicator	Applicable Monitoring Topic Area	Concern/Issue	Rationale for Indicator	Data Source	Accountability for Data Collection	Frequency of Data Collection
12. Qualitative feedback themes about community concerns and experienced social effects	<ul style="list-style-type: none"> <li>Traffic</li> <li>Worker Accommodation</li> <li>Worker Health</li> <li>Human Occupancy and Resource Use</li> <li>Sensory Disturbance</li> <li>Emergency Management Planning</li> <li>Regional Infrastructure and Services</li> <li>Navigation and Navigation Safety</li> <li>Community Way-of-Life</li> </ul>	Any	Provides indication of community concerns and experienced social effects, as reported by community members.	TMEP Community Liaison monthly reports, Technical Working Groups and/or other engagement mechanisms	Trans Mountain	Monthly
13. Qualitative feedback themes about effects on the quality and abundance of traditional harvesting resources, or ability of Aboriginal people to harvest resources, within the Project footprint	<ul style="list-style-type: none"> <li>Aboriginal social and cultural wellbeing</li> </ul>	Disruption to Aboriginal cultural practices and places	Provides indication of community concerns and experienced Aboriginal-specific social and cultural wellbeing effects, as reported by Aboriginal groups.	Aboriginal Engagement Roundtables	Trans Mountain	Quarterly
14. Number of people affected by a notifiable disease <sup>5</sup> in a work camp	<ul style="list-style-type: none"> <li>Worker health</li> <li>Regional infrastructure and services</li> </ul>	Worker health and burden on local health services	Provides an indication of extent to which presence of camp and temporary workers are contributing to infectious disease outcomes in communities. Indication of Project contribution to community health outcomes and burden on local health services.	Camp operators	Trans Mountain	Monthly

- Notes:**
- 1 "Workers" include TMEP direct employees, Contractors and sub-contractors. It does not include existing TMPL operations workers.
  - 2 **Aboriginal status:** self-identified by the worker.
  - 3 **Local:** Municipalities, counties or regional districts that are crossed by the Project Footprint. The Footprint of the Project is defined as the area directly disturbed by surveying, construction and clean-up of the pipeline and associated physical works and activities (including, where appropriate, the permanent right-of-way, pump stations, terminals, Westridge Marine Terminal, temporary construction workspace, temporary stockpile sites, temporary staging sites, camps, access routes, and power lines).  
**Regional:** Municipalities, counties or regional districts that are not crossed by the Project Footprint, but that are within the Socio-economic RSA as defined in the Application (see Section 5.0 of Volume 5B), and thus could be a source of labour or services within reasonable commuting distance from the Project.
  - 4 Living out allowance refers to payment or reimbursement to non-local/regional, non-camp workers to cover travel expenses such as accommodation, meals and incidentals. Related stipends may also be considered and monitored depending on level of camp services, for example per-diem for camp residents to cover cost of incidentals.
  - 5 Notifiable diseases are infectious respiratory, gastrointestinal or sexually transmitted diseases (e.g., measles, meningitis, salmonella, e.coli.), where occurrences are required to be reported to health authorities in order to limit their transmission in the community.

Trans Mountain anticipates qualitative feedback regarding community concerns and experienced social effects through Project-specific mechanisms will provide data on all monitoring topic areas identified in Table 2.

### 3.3 Context Indicators

Trans Mountain understands that its activities take place within a broader socio-economic context. Distinct from “monitoring indicators”, Trans Mountain has identified “context indicators” to reflect the broader socio-economic conditions in which Project construction will occur.

While context indicators do not meet the criteria for Project-specific monitoring, context indicators provide information about socio-economic conditions that may occur during the Project construction timeframe, where the Project may be one of many contributing influences and where change in the indicator cannot be solely or accurately attributed to the Project.

Context indicators are important for two reasons. First, by providing information about socio-economic factors unrelated to the Project, they may help explain (or provide context for) why observed socio-economic change is occurring. Second, they help establish a picture of the overall socio-economic conditions in the area, which identifies the extent to which a given community may be resilient and able to more easily absorb or adapt to Project-related influences; or whether the community is likely to be more vulnerable to adverse impacts.

Including context indicators is responsive to feedback received during SEEMP consultation. Through Trans Mountain’s engagement and consultation with potentially affected communities, Aboriginal groups, local and regional authorities and service providers, select participants suggested that it was important to include additional socio-economic indicators to reflect the broader context of communities and regions.

Context indicators are drawn from data sources external to the Project and are grouped into two categories:

1. indicators that describe conditions that may be responsive to the Project (though not solely attributed to the Project) (e.g., rental accommodation vacancy rates, certain crime rates); and
2. indicators that describe conditions not responsive to the Project but which provide context for why socio-economic change may be occurring (e.g., other major projects in the area, general demographic change, changes in unemployment rate).

Table 4 outlines the context indicators that will be tracked as part of the Project socio-economic effects monitoring process. Context indicators will be tracked and presented by socio-economic region, to reflect and update information presented in the Application. Socio-economic regions were defined in the Application (see Volume 5B, Section 5.0, Filing IDs [A3S1R7](#), [A3S1R8](#) and [A3S1R9](#)). These are broad regions, corresponding with existing geo-political and administrative boundaries that may be a source of labour or services within reasonable commuting distance of the Project. Given the length of the Project, six socio-economic regions are identified.

**TABLE 4**  
**CONTEXT INDICATORS**

Context Indicator	Rationale for Indicator	Data Source and Availability
<i>Potentially Responsive to the Project</i>		
Rental vacancy rates	The availability or scarcity of rental accommodation provides an indication of how easily the community may be able to absorb Project workers without displacing other users (e.g., local residents, tourists, etc.). It also signals how likely the Project is to be able to make a positive economic contribution through local housing of workers, which is desired by some communities.	Canadian Mortgage and Housing Corporation (CMHC), bi-annually and annually Government of Alberta, annually

**TABLE 4 Cont'd**

Context Indicator	Rationale for Indicator	Data Source and Availability
Rent by rental type (\$/month)	When additional housing demand is placed on an already-tight housing market, rental prices can start to increase and vulnerable members of the community (e.g., low income, single-parent families, etc.) are at risk of being displaced. Absolute, and changes in, rental prices over time are therefore relevant to identifying whether certain subsets of the population are potentially experiencing economic stress, and provides a context for making decisions about appropriate accommodation for Project workers in different locations.	CMHC, bi-annually and annually Government of Alberta, annually Community-specific data, where available
Rate per 1,000 population, by Police Service Area (Royal Canadian Mounted Police [RCMP] or municipal) <ul style="list-style-type: none"> <li>Total violent Criminal Code Violations <ul style="list-style-type: none"> <li>Sexual assault</li> <li>Commodification of sexual activity</li> </ul> </li> <li>Total Property Crime Violations</li> <li>Total Other Criminal Code Violation (Except Traffic) <ul style="list-style-type: none"> <li>Prostitution</li> </ul> </li> <li>Total Criminal Code Traffic Violations</li> </ul> Total Drug Violations	Crime rates are a strong signal of the overall wellbeing of a community. Changes in crime rates may indicate that a community is experiencing adverse changes in social and economic conditions. This could reflect temporary population influx associated with the Project or may reflect other development activity or population/social changes.	Statistics Canada, annually
Traffic counts in select locations near areas of anticipated Project activity, such as camps or staging areas (Annual or monthly average daily traffic [AADT or MADT] count)	Project-related traffic has a potentially greater impact where existing traffic volumes are low, and a lesser impact where existing traffic volumes are high. This indicator will reflect the total volume of traffic from all sources at counter locations nearest, if available, to anticipated areas of Project activity (e.g., staging/stockpile areas, camp locations), as a comparison point for Project-specific volumes.	BC Ministry of Transportation and Infrastructure, monthly, depending on location Alberta Transportation, annually
Communicable disease rates, by Health Service Delivery Area (HSDA) for reportable respiratory, gastrointestinal and sexually transmitted infections	Communicable diseases have the potential to travel between host communities and mobile worker populations, originating in either one. Outbreaks of these diseases have the potential to place strain on public health care systems. This information will provide a background for understanding the importance and potential impact of any outbreaks that do occur during the timeframe of the Project or in work camps.	British Columbia Centre for Disease Control (BCCDC): 3x/year for certain diseases, annually for others; Alberta Interactive Health Database, annually.
Quantitative and qualitative Valemount hospital utilization data	This is of interest to Northern Health and applies to the Valemount area of the Project. Use of Valemount hospital is reflective of the overall demands on local health services and where there may be pressure points that could exacerbated by the Project.	Northern Health; availability and provision based on Northern Health response.
<b>Not Responsive to the Project</b>		
Total Population	Larger population centres have a greater capacity to absorb Project workforces without creating stress on infrastructure and services. Smaller communities are less resilient to this kind of change. This indicator will provide context for understanding how significant the temporary workforce associated with the Project is likely to be for a given region.	Labour Force Survey (Statistics Canada), monthly for Economic Regions and Census Metropolitan Areas (CMA), based on 2011 Census boundaries
Labour force size	Both labour force size and unemployment are indicators of economic conditions in a host community or region, and are related to the extent to which local economies are resilient or vulnerable to additional stressors such as a new major project. In addition, the size and availability of the local workforce may influence the extent to which the Project is able to draw on local workers which will influence labor influx and associated issues.	Labour Force Survey (Statistics Canada), monthly for Economic Regions and CMAs, based on 2011 Census boundaries
Unemployment rates	See above	Labour Force Survey (Statistics Canada), monthly for Economic Regions and CMAs, based on 2016 Census boundaries
Major projects (\$ capital investment)	Communities that have a larger number of major projects taking place at any one time are likely to be experiencing multiple social, environmental and economic stressors. These major projects may influence changes in the size and composition of the local population, demand on services and infrastructure, community interactions, economic conditions and other social issues and outcomes. The presence of numerous other major projects represents a potential source of socio-economic pressures beyond control of the Project. Provides context for other factors that may be contributing to social issues and outcomes. This will aid in the interpretation of Project-specific indicators related to housing, health services and traffic.	BC Stats, quarterly Alberta Major Projects, daily



In addition to the context indicators listed in Table 4, area-specific context indicators that may emerge and/or be provided by local health authorities, municipalities or other locally-based organizations as the implementation of the SEEMP progresses will be included as appropriate and if data-sharing agreements evolve, but may not be available for all regions.

Additional information emerging through stakeholder feedback and on-the-ground experience during construction may also be included in monitoring context discussions where it helps contextualize Project activity during a reporting cycle (e.g., other developments or community activities occurring in a particular Project area, service/infrastructure issues that emerge unrelated to the Project, etc.).

### **3.4 Third Party Data Discussions**

Trans Mountain had discussions with Northern Health about Northern Health's interest in providing data on the use of diagnostic and treatment centre and/or Emergency Room visits by non-residents for the Valemount area. Northern Health advised this information was not readily available for public dissemination. Northern Health advised they are satisfied with monitoring and feedback via the Project-specific indicators, and if issues emerge either through the Project-specific data or through Northern Health's staff experiences during construction, further discussions and investigation of Northern Health's internal data may be warranted which Trans Mountain welcomes.

Since early 2017, Trans Mountain is working with police services in construction hub communities (Municipalities and RCMP Detachment Commanders) on coordination, protocols and working relationships related to TMEP construction. Trans Mountain is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. However full data details and decision-making will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.

On the suggestion of comments made by Northern Health, Trans Mountain inquired to the Valemount Food Bank about their interest in providing monthly data on food bank usage to Trans Mountain, as this had been suggested as possible context indicator reflective of vulnerable populations in Valemount by Northern Health. If foodbank usage changed during construction it could be reflective of workers' living-out allowance not being used appropriately or lack of awareness of the Workers' Code of Conduct which could have implications for local vulnerable groups relying on support services. A foodbank representative indicated they would discuss it at their Board as that information is usually kept private.

As SEEMP implementation progresses, Trans Mountain will continue to engage with stakeholders and Aboriginal groups; if interest is expressed about providing additional relevant context indicator data, Trans Mountain will work with communities to pursue it. This would be examined on a community-by-community basis to ensure the SEEMP is reflective of community-specific concerns. Trans Mountain will update the Board in future filings if additional data sources are secured.

## 4.0 DATA COLLECTION, REVIEW AND REPORTING

### 4.1 Data Collection and Recording

Trans Mountain will collect and compile data for each indicator as outlined in Tables 3 and 4. Where data is required from Contractors, Trans Mountain will ensure the Project coordination procedures with Contractors will include the reporting of monitoring indicators required by the SEEMP.

Context indicators will be collected from various sources, and data availability will be dependent on these sources, such as federal and provincial government agencies. Data for context indicators vary by source and availability. For example, information on major projects is provided by provincial government departments and is updated quarterly in British Columbia (BC) and daily in Alberta. Housing data is updated bi-annually and annually, and only for certain communities. Data for context indicators, will therefore, be collected and updated at varying intervals. The most recent available data for each context indicator will be included in the Socio-Economic Monitoring Reports done quarterly during construction.

### 4.2 Data Review and Assessment

#### 4.2.1 Thresholds for Mitigation Review

Decisions about mitigation review and adaptive management will be guided by Trans Mountain's management objectives with respect to key socio-economic effect areas. These management objectives are the basis of Project-specific thresholds for action and mitigation evaluation and will be used in the analysis of data and consideration of adaptive management.

Table 5 outlines the management thresholds, criteria for action/mitigation evaluation, and action to be taken in the event the criteria for action/mitigation evaluation are triggered. Particular corrective action will be determined based on the case-specific context of each scenario.

**TABLE 5**

#### **MANAGEMENT OBJECTIVES AND ADAPTIVE MANAGEMENT TRESHOLDS FOR ACTION**

Indicator	Management Objective(s)	Threshold for action/ mitigation evaluation	Action to be taken
1. Number of worker-days (by location) related to Project construction in field communities categorized by: a) Aboriginal status: Aboriginal v. non-Aboriginal b) Geographic origin: Local v. regional v. non-regional or local	To provide timely information to affected communities and stakeholders about numbers and accommodation of non-local Project workers (i.e., labour influx) in hub communities. To limit adverse effects related to the presence of non-local Project workers.	Number of non-local/regional workers by region/spread is +/- 20% different than estimated in Worker Accommodation Strategy NEB Condition 59 (Filing ID [A83569-2]).	Contractors work with Trans Mountain to provide revised forward construction workforce estimates to: - Municipal or regional government authorities - health authorities - social services - police - hotel / tourism associations - chambers of commerce
2. Number of worker-days (by location) related to construction in field communities categorized by accommodation arrangements: a) Non-local, staying in TMEP camps b) Non-local, not staying in TMEP camps c) Local or regional residing at home	Balance minimizing adverse impacts on local accommodation providers and infrastructure/services providers, with also providing positive opportunities for local businesses	Less than 75% of non-local workers are staying in camps (indicator #2a)  and  Qualitative feedback received about adverse issue or concern from local authority or tourism /hotel association representative.	Contractor to evaluate mechanisms to achieve the balance of accommodation mix desired by the local community. Report to Trans Mountain on any adaptive management measures identified.

**TABLE 5 Cont'd**

Indicator	Management Objective(s)	Threshold for action/ mitigation evaluation	Action to be taken
3. Living out allowance or related stipend: a) Number of worker days paid b) Total value (\$).	Balance minimizing adverse impacts on local accommodation providers and infrastructure/services providers, with also providing positive opportunities for local businesses	An increase in the value of indicator 3(a) from the previous reporting cycle  and  Qualitative feedback received about adverse issue from local authority or tourism /hotel association	Contractor to follow up with local authority or tourism/hotel association to identify underlying concern and intersection with accommodation approach. Report to Trans Mountain on any adaptive management measures identified.
4. Qualitative feedback about Project use of local/regional commercial accommodation (e.g., hotels, motels, campgrounds).	Balance minimizing adverse impacts on local accommodation providers and infrastructure/services providers, with also providing positive opportunities for local businesses	Qualitative feedback received about adverse issue from local authority, tourism /hotel association or hotel used by Contractor	Contractor to evaluate and identify corrective action. Report to Trans Mountain on any adaptive management measures identified.
5. Number of full-time workers related to Project construction in field communities anticipated in next business quarter.	Provide timely information to affected communities and stakeholders about numbers and accommodation of non-local Project workers in hub communities.	N/A - this is a forward, informational indicator to assist stakeholders and Aboriginal groups in community readiness.	N/A
6. Motor vehicle collisions or reportable incidents that involve Project vehicles on public roads during work hours or Contractor-owned vehicles during off work hours specifying: • total; • how many involved injuries; and • how many involved fatalities.	Minimize Project-related traffic on local roads and Project-related traffic safety incidents.	No minimum threshold; all incidents/accidents investigated	The Contractor must investigate all accidents/incidents that result in, or have the potential to result in, injury or illness, property damage, process/product loss or harm to the environment. Investigative process must include the identification of root causes or causal factors that contributed to the occurrence. The Contractor must determine the necessary corrective actions and report back to Trans Mountain.
7. Total workers transported from staging areas per day (average).	Minimize Project-related traffic on local roads and Project-related traffic safety incidents.	Number, when calculated as a % of total workers on site (average during the month of the count) is less than 75%	Contractor to evaluate measures to reduce use of Project vehicles. Report to Trans Mountain on any adaptive management measures identified.
8. Personal vehicles in staging area per day (average).	Minimize Project-related traffic on local roads and Project-related traffic safety incidents.	Number is 10% or more of AADT values at locations nearest to staging yards.  and  Qualitative feedback received about adverse traffic volume issues via indicators #11 and #12	Contractor to evaluate and identify possible methods to reduce workers use of personal vehicles. Report to Trans Mountain on any adaptive management measures identified.

**TABLE 5 Cont'd**

Indicator	Management Objective(s)	Threshold for action/ mitigation evaluation	Action to be taken
9. Number of times (by location) a non-local "captive" Project worker (e.g., in camp, on work-site): a) was referred or sent to local health facilities (specifying urgent/non-urgent, and occupational/non-occupational); b) required ambulance or other emergency transport.	Minimize Project burden on local health facilities and services	Qualitative feedback from local health authority regarding capacity concerns.	The Contractor must investigate incidents or occurrences that led to a referral to local health authorities or use of ambulance or emergency transport. Investigative process must include the identification of root causes or causal factors that contributed to the medical occurrence itself. The Contractor must determine the necessary corrective actions to limit the need for medical assistance beyond the Project-provided medical services, and report back to Trans Mountain.
10. Number of medical visits to Project on-site medical facilities (occupational vs. non-occupational).	Minimize Project burden on local health facilities and services	Number, when calculated as % of average number of workers per month (Indicator #1), rises from previous reporting cycle.	The Contractors to evaluate with on-site medical personnel if on-site services need to be adapted. Report to Trans Mountain on any adaptive management measures identified.
11. Number and types of calls/complaints received through TMEP feedback line (by location, by Aboriginal and non-Aboriginal, by topic), for example: - Access limitations - Road closures - Business impacts - Pressure on housing / accommodations - Burden on local services/ infrastructure - Dust/air quality - Noise - Pollution/emissions - Other environmental concerns - Traffic and driving - Worker conduct - Compliments/positive feedback - Employment - TLRU/TMRU, cultural sites - Other	Minimize and respond to grievances related to adverse socio-economic effects related to Project construction.	All grievances will be responded to (no minimum threshold).	Trans Mountain will ensure all inquiries and complaints receive timely complaint resolution and response proportional to level of urgency. Track resolution, or rationale for non-completion, including any adaptive management measures identified.
12. Qualitative feedback themes about community concerns and experienced social effects	Ensure ongoing consultation with affected stakeholders; ensure opportunity to understand experienced social effects during construction	Adverse socio-economic issue or concern from appropriate government authority or service provider or community organization	Contractor discuss and evaluate the cause of the adverse issue with the stakeholder to identify any Project-specific corrective measures. Report back to Trans Mountain.
13. Qualitative feedback themes about effects on the quality and abundance of traditional harvesting resources, or ability of Aboriginal people to harvest their resources, within the Project footprint	Minimize disruption and disturbance to traditional harvesting and Aboriginal cultural practices	Qualitative feedback from Aboriginal group leader/administrator regarding reports of adverse effects on quality and abundance of traditional harvesting resources, or ability of Aboriginal people to harvest their resources or access cultural sites, within the Project footprint	Contractor to evaluate the circumstances, with input from the Aboriginal Field Advisor and Aboriginal Monitor as required. Report back to Trans Mountain.

**TABLE 5 Cont'd**

Indicator	Management Objective(s)	Threshold for action/ mitigation evaluation	Action to be taken
14. Number of people affected by a notifiable disease in a work camp.	Minimize Project burden on local health facilities and services.  Minimize Project-related community health impacts associated with disease transmission.	No minimum threshold: all notifiable diseases reported to the local health authority	All notifiable diseases presenting to the medical facility in a camp or at the worksite will be reported to the appropriate local health authority. Contractor to have follow-up discussion with the health authority about containment and actions to be taken. Provide report back to Trans Mountain.

#### **4.2.1 Data Assessment and Adaptive Management Process**

In general, adaptive management will address uncertainty related to the effectiveness of mitigation measures, and the possible occurrence of unexpected effects, both positive and negative. Adaptive management is a cycle in which the effectiveness of mitigation measures are evaluated based on monitoring results, and adjusted if needed, to achieve desired objectives.

Each quarter, Trans Mountain will compile socio-economic effects monitoring information and do an evaluation of emerging issues and themes related to socio-economic effects of the Project (as specifically as possible with respect to pipeline spread/facility and community location).

While adaptive management will be a continual process (i.e., response will often happen in the short-term as an issue emerges in real-time), each SEEMP assessment and reporting period becomes an opportunity for reflection and course correction. The examination of issues and themes, in addition to a reporting of adaptations/improvements made during the monitoring cycle, allows for a process of continuous assessment and application of lessons learned across other regions or components of the Project or for the next wave of TMEP construction activity in a particular region.

Should unexpected effects occur, they will be reviewed with the appropriate Project personnel, with Project subject matter experts as needed, and with appropriate input/engagement by the affected community/stakeholder representative, so that locally-appropriate and scenario-specific adaptive management opportunities can be explored and implemented. Any adverse effects during construction that trigger mitigation review will be escalated to the Trans Mountain Project Manager (for local issues) or Project Director (for Project-wide issues) to implement the mitigation review process.

Issue or incident-specific adaptive management reviews and outcomes conducted by Contractors will be reviewed and key changes in mitigation/management approaches that have occurred during each monitoring cycle will be documented. If an adverse effect escalates beyond being a specific local issue that cannot be quickly resolved with the correct implementation of an existing measure, it could lead to a revision of the Construction Execution Policies, Procedures and Plans or other construction-related plans. If response to an effect or issue requires modification to the Construction Execution Plans or other construction-related plan, the required changes will be communicated to the Contractor.

#### **4.3 Public Reporting and Engagement**

Trans Mountain will aggregate the monthly data collected internally, via Contractors and via other data mechanisms, including any updated information on context indicators that maybe available through external agencies. Trans Mountain will prepare regional Socio-Economic Monitoring Reports every three months (i.e., quarterly) during construction, with the first Socio-Economic Monitoring Reports to be published within four months after the commencement of construction. A final Socio-Economic Effects Monitoring Report will be published within six months of the Project being in service. Along with the indicator data, the Socio-Economic Monitoring Reports will also provide discussion of any adaptive management strategies Trans Mountain and/or its Contractors have undertaken to improve socio-economic performance during construction as a response to the monitoring feedback.

Trans Mountain will continue to work with potentially affected communities, Aboriginal groups, local and regional authorities and service providers to develop ongoing engagement opportunities during construction. Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will send notification to Appropriate Government Authorities (i.e., local and regional governments, service providers) and Aboriginal groups with a web link to the pertinent regional Socio-Economic Effects Monitoring report. Trans Mountain will follow-up on stakeholder and Aboriginal group inquiries and questions about Socio-Economic Effects Monitoring Reports.

#### **4.4 Roles and Responsibilities**

Generally, the roles and responsibilities of Contractors, sub-contractors, construction community liaisons and Trans Mountain related to data collection, analysis and reporting are as follows:

- Contractors will be responsible for ensuring Project-specific socio-economic monitoring indicators are understood, communicated to sub-contractors, and appropriate internal processes are established to collect accurate data for provision to Trans Mountain. They will collate and provide data on a monthly basis to Trans Mountain, including a summary of issues investigations/responses or adaptive management undertaken.
- Sub-contractors will be responsible for ensuring their socio-economic monitoring requirements are understood and appropriate internal processes are established to collect accurate data for provision to Contractors.
- Construction community liaisons will be responsible for collecting, understanding and summarizing qualitative feedback on socio-economic effects through on-going day-to-day consultation activities on the ground in a monthly report format, including any adaptive/corrective management measures that have been implemented.
- Trans Mountain will be responsible for aggregating all Project-specific indicator data from Contractors and from Trans Mountain sources; updating context indicators; reviewing themes from feedback mechanisms (e.g., phone lines, Aboriginal Engagement Roundtables, community liaison monthly reports; other consultation activity, etc.); reviewing all data for themes, issues and opportunity for further adaptive management; preparing the socio-economic monitoring reports.

An internal plan for operationalizing the SEEMP during construction is being developed within Trans Mountain. This will include steps such as:

- developing guidance for Contractors with respect to SEEMP-related data requirements that is to be included in monthly Project reporting;
- establishing SEEMP-related data in the internal Project controls management system and a monthly internal reporting protocol;
- assigning a specialist(s) within the Project team to coordinate and review SEEMP data received through Project feedback mechanisms, to update regional context data, to work with the Stakeholder Engagement and Communications team on consultation related feedback and qualitative data, to work with Aboriginal Engagement Team on feedback and qualitative data emerging from the Aboriginal Engagement Roundtables, and to analyze data for key themes and trends during each quarterly reporting cycle;
- establishing a process with Project Managers to review key themes and trends, including identifying adaptive management actions and needs and Contractor feedback; and
- establishing a SEEMP reporting format in light of other reporting requirements.

## 5.0 BASELINE SOCIO-ECONOMIC CONTEXT

Extensive baseline context for the Project was presented in the Application in the Setting discussion in Volume 5B (Filing IDs [A3S1R7](#), [A3S1R8](#), [A3S1R9](#), [A3S1S0](#), [A3S1S1](#), [A3S1S2](#), [A3S1S3](#), [A3S1S4](#), [A3S1S5](#), [A3S1S6](#)) and in Volume 5D Socio-Economic Technical Report (Filing IDs [A3S2H2](#) through [A3S2J5](#)). This information provides a comprehensive snapshot of baseline pre-construction socio-economic conditions.

The section below provides an update of data for the select context indicators that will be tracked through the SEEMP (see Table 4 in Section 3.3). As the SEEMP is focused on the two-year construction phase, data is presented where it can be updated to some degree during the relevant timeframe. It focuses on data that presents a picture of the overall social and economic vulnerability or resiliency of the host regions related to monitoring topic areas.

Statistics Canada data at the community or census subdivision level, which was used for the precise socio-economic study area defined in the Application, is in process of being updated by Statistics Canada. At the time of this submission, the 2016 Census of Canada is in the midst of staged release. Updated community-level data points on population, labour force and housing will be reflected in the first SEEMP monitoring cycle (based latest staged-release data at that time). This will serve as a static updated community-level snap shot of key context conditions, though this data will not be updated regularly during the Project construction window.

Context information is summarized in tabular format by corresponding socio-economic region. This data will be updated at the start of construction as part of the first monitoring cycle.

### 5.1 Edmonton Region

The Edmonton Region of the socio-economic Regional Study Area (RSA) corresponds most closely with the Edmonton Census Metropolitan Area (CMA) and the Edmonton Economic Region in terms of updated population and labour force data. Table 6 outlines pre-construction information for key context data points in the Edmonton Region

**TABLE 6**  
**EDMONTON REGION, BASELINE CONTEXT**

Context Indicator	Date	Baseline Data
<b>Population</b>		
Population (No.)		
• Edmonton Economic Region <sup>1</sup>	December 2016	The total population was 1,154,200 which is a 2.9% increase from July 2016.
• Edmonton CMA <sup>2</sup>	December 2016	The total population was 1,127,400, which is a 0.5% increase from July 2016.
<b>Labour Force</b>		
Labour force size (No.):		
• Edmonton Economic Region	December 2016	The labour force size was 820,600, which is a 3.3% decrease from July 2016.
• Edmonton CMA	December 2016	The labour force size was 803,400, which is a 3.1% decrease from July 2016.
Participation Rate (%)		
• Edmonton Economic Region	December 2016	The participation rate was 71.1%, which is lower than the participation rate reported in July 2016 (73.9%).
• Edmonton CMA	December 2016	The participation rate was 71.3%, which is lower than the participation rate reported in July 2016 (73.9%).
Unemployment Rate (%)		
• Edmonton Economic Region	December 2016	The unemployment rate was 7.0%, which is lower than the unemployment rate reported in July 2016 (7.7%).
• Edmonton CMA	December 2016	The unemployment rate was 7.0%, which is lower than the unemployment rate reported in July 2016 (7.7%).

**TABLE 6 Cont'd**

Context Indicator	Date	Baseline Data				
Major projects (\$ capital investment)	January 2017	In the communities in the Edmonton region, 121 major projects were identified as under construction, with a total capital cost of approximately \$22.1 billion. The majority of the projects (84) are located in the City of Edmonton. Key projects with large (> or = \$1 billion) capital costs include the Blatchford Field Redevelopment in Edmonton, the Valley Line Light Rail Transit (LRT) in Edmonton, Fibre-Optic Internet in Edmonton and the North West Bitumen Refinery Phase 1 in Sturgeon County.				
Accommodation						
Rental vacancy rates (%)						
• City of Edmonton	October 2016	The vacancy rate was 7.0% in private apartments, which is greater than the rate reported in October 2015 (4.0%).				
• Strathcona County	October 2016	The vacancy rate was 3.2% in private apartments, which is greater than the rate reported in October 2015 (2.0%).				
• City of Spruce Grove	October 2016	The vacancy rate was 4.2% in private apartments, which is lower than the rate reported in October 2015 (12.0%).				
• Town of Stony Plain	October 2016	The vacancy rate was 14.5% in private apartments, which is greater than the rate reported in October 2015 (10.0%).				
Rent by rental type (\$/month, by unit type)						
• City of Edmonton	October 2016	The average rents for a private apartment range from \$851 for a bachelor, to \$1,385 for 3 bedroom +. The total average rent for a private apartment was \$1,107..				
• Strathcona County	October 2016	The average rents for a private apartment range from \$1,143 for a 1 bedroom3, to \$1,359 for 2 bedroom3. The total average rent for a private apartment was \$1,298.				
• City of Spruce Grove	October 2016	The average rents for a private apartment range from \$1,051 for a 1 bedroom3, to \$1,084 for 3 bedroom +. The total average rent for a private apartment was \$1,168.				
• Town of Stony Plain	October 2016	The average rents for a private apartment range from \$890 for a 1 bedroom3, to \$1,198 for 3 bedroom +. The total average rent for a private apartment was \$1,021.				
Crime/Policing						
Incident Category		Rate per 1,000 population, by Police Service Area				
		Edmonton Municipal	Spruce Grove RCMP – Municipal	Stony Plain RCMP – Municipal	Stony Plain RCMP – Rural	Strathcona County RCMP - Rural
Total violent Criminal Code Violations	2015	12.4	13.3	12.4	14.5	4.6
• Sexual assault, level 1,2 and 3	2015	0.902	0.390	0.630	0.870	0.190
• Total commodification of sexual activity violations	2015	0.050	0.000	0.000	0.000	0.000
Total Property Crime Violations	2015	48.9	47.2	65.7	52.2	24.2
Total Other Criminal Code Violation (Except Traffic)	2015	20.7	18.9	14	13.0	6.7
• Total prostitution	2015	0.000	0.000	0.000	0.000	0.000
Total Criminal Code Traffic Violations	2015	3.2	3.5	5.5	6.3	4.1
Total Drug Violations	2015	2.2	3.4	3.2	3.4	4.0
Traffic <sup>4</sup>						
AADT Count – Location 52160630, Highway 216 (Transportation Utility Corridor [TUC])	2015	The two-way AADT at this traffic count site was 76,340. From the Stony Plain stockpile site, Project vehicles may travel along the TUC to access construction sites.				
AADT Count – Location 50161610, Highway 16A	2015	The two-way AADT at this traffic count site was 29,012. From the Stony Plain stockpile site and Acheson CN station siding, vehicles may travel along Highway 16A to access the right construction sites near Spruce Grove and Stony Plain.				
AADT Count – Location 51604259, Highway 16	2015	The two-way AADT at this traffic count site was 53,668. From the Stony Plain stockpile site, Project vehicles may travel east on Highway 16 to access the TUC.				
AADT Count – Location 51604019, Highway 16	2015	The two-way AADT at this traffic count site was 26,989. From the Stony Plain stockpile site and Acheson CN station siding, Project vehicles may travel west on Highway 16 to access construction sites at western points of the spread.				
Communicable Diseases						
Disease	Surveillance Date	Edmonton Health Zone				
Amoebiasis	2016	32 cases (2.35 per 100,000)				
Campylobacteriosis	2016	260 cases (19.07 per 100,000)				



**TABLE 6 Cont'd**

Context Indicator	Date	Baseline Data
Cryptosporidiosis	2016	23 cases (1.69 per 100,000)
E. Coli	2016	12 cases (0.88 per 100,000)
Giardiasis	2016	104 cases (7.63 per 100,000)
Haemophilus Influenzae-Non-Serotype B Invasive	2016	23 cases (1.69 per 100,000)
Hepatitis A	2016	21 cases (1.54 per 100,000)
Hepatitis B Acute Cases	2016	9 cases (0.66 per 100,000)
Hepatitis B Carrier Status Unknown	2016	0 cases (0 per 100,000)
Hepatitis B Chronic Carriers	2016	342 cases (25.08 per 100,000)
Hepatitis C Acute Cases	2016	69 cases (5.06 per 100,000)
Hepatitis C Carrier Status Unknown	2016	3 cases (0.22 per 100,000)
Hepatitis C Chronic Carriers	2016	596 cases (43.71 per 100,000)
Malaria	2016	39 cases (2.86 per 100,000)
Meningococcal Disease (Invasive)	2016	4 cases (0.29 per 100,000)
Mumps	2016	2 cases (0.15 per 100,000)
pertussis	2016	46 cases (3.37 per 100,000)
Pneumococcal Disease (Invasive)	2016	155 cases (11.37 per 100,000)
Salmonellosis	2016	383 cases (28.09 per 100,000)
Shigellosis	2016	22 cases (1.61 per 100,000)
Streptococcal Disease-Group A (Invasive/Severe)	2016	97 cases (7.11 per 100,000)
Varicella (Chickenpox)	2016	90 cases (6.6 per 100,000)
Chlamydia	2016	5,772 cases (423.27 per 100,000)
Gonorrhea	2016	1,756 cases (128.77 per 100,000)
Infectious Syphilis	2016	190 cases (13.93 per 100,000)

**Sources:** Alberta Transportation 2015, CMHC 2016a, Government of Alberta 2016, 2017, Statistics Canada 2015a, 2016a,b

- Notes:**
- 1 The Edmonton Economic Region consists of the City of Edmonton and surrounding counties (6), cities (5), towns, villages and summer villages (30), and Indian Reserves (7). It is a grouping of complete census divisions created by Statistics Canada as a standard geographic unit for analysis of regional economic activity.
  - 2 The Edmonton CMA consists of neighbouring municipalities, situated around the City of Edmonton as the core. It includes fewer census divisions than the Edmonton Economic Region: 4 counties; 3 cities; 22 towns, villages and summer villages, and 4 Indian Reserves.
  - 3 Data for some rents was suppressed to protect confidentiality or data not statistically reliable.
  - 4 Traffic count locations were identified based on Project sites identified in the Stock Pile Sites and Camp Locations Report (September 6, 2016). Traffic count locations may be updated at the start of construction during the first monitoring cycle to reflect the final project stock pile sites and/or staging areas.

All numbers are approximate. In certain instances (e.g., gender-based crimes), additional decimal spaces are shown in order to capture small numbers.

## 5.2 Rural Alberta Region and Jasper National Park Region

The Rural Alberta Region of the socio-economic RSA corresponds most closely with the Banff-Jasper-Rocky Mountain House Economic Region, which also covers the Jasper National Park area. As such, information is presented for the Rural Alberta Region and Jasper National Park Region in a combined manner in Table 7.

**TABLE 7**

**RURAL ALBERTA REGION AND JASPER NATIONAL PARK REGION, BASELINE CONTEXT**

Context Indicator	Date	Baseline Data
<b>Population</b>		
Population (No.)		
<ul style="list-style-type: none"> <li>Banff-Jasper-Rocky Mountain House Economic Region<sup>1</sup></li> </ul>	December 2016	The total population was 276,500, which is a 0.2% decrease from July 2016.
<b>Labour Force</b>		
Labour force size (No.):		
<ul style="list-style-type: none"> <li>Banff-Jasper-Rocky Mountain House Economic Region</li> </ul>	December 2016	The labour force size was 194,800, which is a 0.6% decrease from July 2016.
Participation Rate (%)		
<ul style="list-style-type: none"> <li>Banff-Jasper-Rocky Mountain House Economic Region</li> </ul>	December 2016	The participation rate was 70.5%, which is lower than the participation rate reported in July 2016 (70.7%).
Unemployment Rate (%)		
<ul style="list-style-type: none"> <li>Banff-Jasper-Rocky Mountain House Economic Region</li> </ul>	December 2016	The unemployment rate was 6.2%, which is lower than the unemployment rate reported in July 2016 (7.7%).
Major projects (\$ capital investment)	January 2017	Six major projects were identified as under construction in the Rural Alberta Region, with a total capital cost of approximately \$181 million. These projects are the Simonette Gas Plant Modifications, Frac Sand Transfer Facility, Highway 16/Highway 47 Pave and Evansburgh Emergency Services Facility in Yellowhead County; and the Edson Wastewater Treatment Plant and AH Dakin School Replacement Building located in Edson.
<b>Accommodation</b>		
Rental vacancy rates (%)		
<ul style="list-style-type: none"> <li>Town of Edson</li> </ul>	2015	The vacancy rate was 5.6% in private apartments.
<ul style="list-style-type: none"> <li>Town of Hinton</li> </ul>	2015	The vacancy rate was 7.8% in private apartments.
<ul style="list-style-type: none"> <li>Municipality of Jasper</li> </ul>	2015	The vacancy rate was 0.2% in private apartments.
Rent by rental type (\$/month, by unit type)		
<ul style="list-style-type: none"> <li>Town of Edson</li> </ul>	2015	The average rents for a private apartment range from \$823 for a bachelor, to \$1,276 for 3 bedroom +.
<ul style="list-style-type: none"> <li>Town of Hinton</li> </ul>	2015	The average rents for a private apartment range from \$608 for a bachelor, to \$1,094 for 3 bedroom +.
<ul style="list-style-type: none"> <li>Municipality of Jasper</li> </ul>	2015	The average rents for a private apartment range from \$7330 for a bachelor, to \$1,252 for 4 bedroom +.
<b>Crime/Policing</b>		
Incident Category		Rate per 1,000 population, by Police Service Area
		Edson RCMP, municipal      Edson RCMP, rural      Hinton RCMP, rural (2014) <sup>3</sup> Jasper RCMP, rural
Total violent Criminal Code Violations	2015	29.1      13.8      24.0      19.7
<ul style="list-style-type: none"> <li>Sexual assault, level 1,2 and 3</li> </ul>	2015	1.340      0.930      0.000      0.000
<ul style="list-style-type: none"> <li>Total commodification of sexual activity violations</li> </ul>	2015	0.110      0.000      0.000      0.000
Total Property Crime Violations	2015	97.0      75.4      81.0      52.8
Total Other Criminal Code Violation (Except Traffic)	2015	24.2      8.8      18.0      23.5
<ul style="list-style-type: none"> <li>Total prostitution</li> </ul>	2015	0.000      0.000      0.000      0.000
Total Criminal Code Traffic Violations	2015	9.6      8.5      43.0      12.8
Total Drug Violations	2015	6.2      5.7      25.0      42.8
<b>Traffic<sup>2</sup></b>		
AADT Count – Location 50160610, Highway 16	2015	The two-way AADT at this traffic count site was 8,174. From the Edson stockpile site 1 and Edson camp site, Project vehicles may travel east along Highway 16 to access construction sites.

**TABLE 7 Cont'd**

Context Indicator	Date	Baseline Data
AADT Count - Location 50160650, Highway 16	2015	The two-way AADT at this traffic count site was 9,378. It is located between the proposed Edson stockpile sites on Highway 16.
<b>Communicable Diseases</b>		
Disease	Surveillance period	North Health Zone (North Health Zone Southwest for Sexually Transmitted Infections)
Amoebiasis	2016	4 cases (0.82 per 100,000)
Campylobacteriosis	2016	90 cases (18.56 per 100,000)
Cryptosporidiosis	2016	25 cases (5.16 per 100,000)
E. Coli	2016	7 cases (1.44 per 100,000)
Giardiasis	2016	41 cases (8.45 per 100,000)
Haemophilus Influenzae-Non-Serotype B Invasive	2016	12 cases (2.47 per 100,000)
Hepatitis A	2016	21 cases (4.33 per 100,000)
Hepatitis B Acute Cases	2016	2 cases (0.41 per 100,000)
Hepatitis B Carrier Status Unknown	2016	1 cases (0.21 per 100,000)
Hepatitis B Chronic Carriers	2016	31 cases (6.39 per 100,000)
Hepatitis C Acute Cases	2016	18 cases (3.71 per 100,000)
Hepatitis C Carrier Status Unknown	2016	17 cases (3.51 per 100,000)
Hepatitis C Chronic Carriers	2016	151 cases (31.14 per 100,000)
Malaria	2016	2 cases (0.41 per 100,000)
Meningococcal Disease (Invasive)	2016	0 cases (0 per 100,000)
Mumps	2016	0 cases (0 per 100,000)
pertussis	2016	38 cases (7.84 per 100,000)
Pneumococcal Disease (Invasive)	2016	63 cases (12.99 per 100,000)
Salmonellosis	2016	129 cases (26.6 per 100,000)
Shigellosis	2016	10 cases (2.06 per 100,000)
Streptococcal Disease-Group A (Invasive/Severe)	2016	26 cases (5.36 per 100,000)

**Sources:** Alberta Transportation 2015, Government of Alberta 2015, 2016, 2017, Statistics Canada 2015a, 2016a,b

**Notes:**

- 1 The Banff-Jasper-Rocky Mountain House Economic Region consists of: 11 towns, specialized municipalities, villages and summer villages, including Edson, Hinton and Jasper; 8 counties and improvement districts; and 4 Indian Reserves.
- 2 Traffic count locations were identified based on Project sites identified in the Stock Pile Sites and Camp Locations Report (September 6, 2016). Traffic count locations may be updated at the start of construction during the first monitoring cycle to reflect the final project stock pile sites and/or staging areas.
- 3 2015 data for this Police Service Area was suppressed by Statistics Canada to meet the confidentiality requirements.

All numbers are approximate. In certain instances (e.g., gender-based crimes), additional decimal spaces are shown in order to capture small numbers.

### 5.3 Fraser-Fort George/Thompson-Nicola Region

The Fraser-Fort George and Thompson-Nicola Regions of the socio-economic RSA correspond most closely with the Caribou Economic Region and Thompson-Okanagan Economic Region in terms of updated population and labour force data. Table 8 below outlines pre-construction information for key context data points in the Fraser-Fort George and Thompson-Nicola Regions.

**TABLE 8**

#### **FRASER-FORT GEORGE/THOMPSON-NICOLA REGION, BASELINE CONTEXT**

Context Indicator	Date	Baseline Data
<b>Population</b>		
Population (No.)		
• Caribou Economic Region <sup>1</sup>	December 2016	The total population was 127,900, which is a 0.1% increase from July 2016.
• Thompson-Okanagan Economic Region <sup>2</sup>	December 2016	December 2016/The total population was 438,600, which is a 0.5% increase from July 2016.

**TABLE 8 Cont'd**

Context Indicator	Date	Baseline Data				
Labour Force						
Labour force size (No.):						
<ul style="list-style-type: none"><li>Cariboo Economic Region</li></ul>	December 2016	The labour force size was 87,400, which is a 0.9% increase from July 2016.				
<ul style="list-style-type: none"><li>Thompson-Okanagan Economic Region</li></ul>	December 2016	The labour force size was 275,300, which is a 2.0% increase from July 2016.				
Participation Rate (%)						
<ul style="list-style-type: none"><li>Cariboo Economic Region</li></ul>	December 2016	The participation rate was 68.3%, which is greater than the participation rate reported in July 2016 (61.9%).				
<ul style="list-style-type: none"><li>Thompson-Okanagan Economic Region</li></ul>	December 2016	The participation rate was 62.8%, which is lower than the participation rate reported in July 2016 (67.8%).				
Unemployment Rate (%)						
<ul style="list-style-type: none"><li>Cariboo Economic Region</li></ul>	December 2016	The unemployment rate was 7.4%, which is lower than the unemployment rate reported in July 2016 (8.3%).				
<ul style="list-style-type: none"><li>Thompson-Okanagan Economic Region</li></ul>	December 2016	The unemployment rate was 8.2, which is greater than the unemployment rate reported in July 2016 (6.9%).				
Major projects (\$ capital investment)	March 2016	In the communities in the Fraser-Fort George/Thompson-Nicola Region, 12 major projects were identified as under construction, with a total capital cost of approximately \$2.0 billion. The projects are concentrated in the Kamloops and Merritt areas. Key projects with large (>\$100 million) capital costs include the Sun Peaks Ski Resort (Sun Peaks), the Sun Rivers Community residential development, the Merritt Green Energy Project, Juniper West residential development (Kamloops), and Orchards Walk residential development (Kamloops). A new hospital expansion was also announced in Kamloops in February 2017, construction starting in 2018.				
Accommodation						
Rental vacancy rates (%)						
<ul style="list-style-type: none"><li>Kamloops (Census agglomeration)</li></ul>	October 2015	The vacancy rate was 2.3% in private apartments (rental apartment structures of three units and over)				
Rent by rental type (\$/month, by unit type)						
<ul style="list-style-type: none"><li>Kamloops (Census agglomeration)</li></ul>	October 2015	The average rents for a private apartment range from \$744 for a bachelor, to \$1,124 for 3 bedroom +.				
<ul style="list-style-type: none"><li>Valemount</li></ul>	January 2016	The average rents for a private apartment range from \$490 for a bachelor, to \$1,025 for a 4 bedroom.				
Crime/Policing						
Incident Category		Rate per 1,000 population, by Police Service Area				
		Valemount RCMP, rural	Clearwater RCMP, rural	Kamloops RCMP, municipal	Merritt RCMP, municipal	Merritt RCMP, rural
Total violent Criminal Code Violations	2015	29.4	13.4	12.5	28.9	18.1
<ul style="list-style-type: none"><li>Sexual assault, level 1,2 and 3</li></ul>	2015	0.610	0.000	0.510	1.100	1.030
<ul style="list-style-type: none"><li>Total commodification of sexual activity violations</li></ul>	2015	0.000	0.000	0.030	0.000	0.000
Total Property Crime Violations	2015	55.7	32.9	63.1	79.5	41.3
Total Other Criminal Code Violation (Except Traffic)	2015	11.6	10.1	22.1	33.0	14.7
<ul style="list-style-type: none"><li>Total prostitution</li></ul>	2015	0.000	0.000	0.000	0.000	0.000
Total Criminal Code Traffic Violations	2015	8.6	7.6	4.0	4.8	7.2
Total Drug Violations	2015	18.3	10.1	7.4	13.0	16.2
Traffic <sup>3</sup>						
MADT Count – Location P-23-3NS, Highway 5	September 2016	The MADT at this traffic count site was 3,285 in September. From the Project sites located near Valemount, Project vehicles may travel north on Highway 5 to access construction sites. From May to September 2016, the MADT at this traffic count site ranged from 2,734 (May) to 4,652 (August).				
MADT Count – Location P-21-4EW, Highway 5/1	September 2016	The MADT at this traffic count site was 18,142 in September. From the Project sites located near Kamloops, Project vehicles may travel south on Highway 5 to access construction sites. From May to September 2016, the MADT at this traffic count site ranged from 16,943 (May) to 21,526 (August).				
MADT Count – Location P-17-8NS, Highway 5	September 2016	The MADT at this traffic count site was 19,014 in July. From the Project sites located near Merritt, Project vehicles may travel south on Highway 5 to access construction sites. (traffic count data for May, August and September were unavailable).				

**TABLE 8 Cont'd**

Context Indicator	Date	Baseline Data	
Communicable Diseases			
Disease	Surveillance Period	Number of cases	
		Thompson Cariboo Shuswap HSDA	Northern Interior HSDA
Amebiasis	Jan to Apr 2017	1	1
Campylobacter Infection	Jan to Apr 2017	14	3
Cryptosporidium Infection	Jan to Apr 2017	6	1
Giardia Infection	Jan to Apr 2017	5	3
Hepatitis A	Jan to Apr 2017	0	0
Hepatitis B: Acute	Jan to Apr 2017	0	0
Hepatitis B: Chronic Carrier	Jan to Apr 2017	1	0
Hepatitis B: Undetermined	Jan to Apr 2017	3	1
Hepatitis C: Acute	Jan to Apr 2017	3	3
Hepatitis C: Chronic/Unknown	Jan to Apr 2017	33	39
Malaria	Jan to Apr 2017	2	0
Measles	Jan to Apr 2017	0	0
Mumps	Jan to Apr 2017	1	2
pertussis	Jan to Apr 2017	3	1
Salmonella Infection	Jan to Apr 2017	17	4
Shigella Infection	Jan to Apr 2017	0	0
Typhoid Fever	Jan to Apr 2017	0	0
Yersinia infection	Jan to Apr 2017	10	3
Genital chlamydia	2014	709 (320.5 per 100,000)	575 (405.2 per 100,000)
Genital gonorrhea	2014	57 (25.8 per 100,000)	61 (43.0 per 100,000)
Infectious syphilis	2014	4 (1.8 per 100,000)	1 (0.7 per 100,000)

**Sources:** BC Ministry of Jobs, Tourism and Skills Training 2016, BC Ministry of Transportation and Infrastructure 2016, CMHC 2015a, Statistics Canada 2015b, 2016a,b, BCCDC 2015, 2017, Housing Strategies Inc. 2016

- Notes:**
- 1 The Cariboo Economic Region consists of: 2 regional districts; 2 cities; 5 villages and district municipalities, including Valemount; and 67 Indian Reserves.
  - 2 The Thompson-Okanagan Economic Region consists of: 5 regional districts; 9 cities, including Kamloops and Merritt; 22 towns, district municipalities and villages; and 95 Indian Reserves.
  - 3 Traffic count locations were identified based on Project sites identified in the Stock Pile Sites and Camp Locations Report (September 6, 2016). Traffic count locations may be updated at the start of construction during the first monitoring cycle to reflect the final project stock pile sites and/or staging areas.

All numbers are approximate. In certain instances (e.g., gender-based crimes), additional decimal spaces are shown in order to capture small numbers.

## 5.4 Fraser Valley Region and Metro Vancouver Region

The Fraser Valley Region and the Metro Vancouver Region of the socio-economic RSA correspond most closely with Mainland/Southwest Economic Region, and contain the Abbotsford-Mission CMA and Vancouver CMA in terms of updated population and labour force data. Table 9 outlines pre-construction information for key context data points in the Fraser Valley Region and Metro Vancouver Region.

**TABLE 9**

### FRASER VALLEY REGION AND METRO VANCOUVER REGION, BASELINE CONTEXT

Context Indicator	Date	Baseline Data
<b>Population</b>		
Population (No.)		
• Lower Mainland / Southwest Economic Region <sup>1</sup>	December 2016	The total population was 2,472,700 which is a 0.6% increase from July 2016.
• Abbotsford-Mission CMA <sup>2</sup>	December 2016	The total population was 148,400, which is a 0.7% increase from July 2016.
• Vancouver CMA <sup>3</sup>	December 2016	The total population was 2,177,200, which is a 0.6% increase from July 2016.

**TABLE 9 Cont'd**

Context Indicator	Date	Baseline Data
<b>Labour Force</b>		
Labour force size (No.):		
• Lower Mainland / Southwest Economic Region	December 2016	The labour force size was 1,619,800, which is a 1.9% decrease from July 2016.
• Abbotsford-Mission CMA	December 2016	The labour force size was 100,700, which is a 4.2% increase from July 2016.
• Vancouver CMA	December 2016	The labour force size was 1,424,800, which is a 2.6% decrease from July 2016.
Participation Rate (%)		
• Lower Mainland / Southwest Economic Region	December 2016	The participation rate was 65.5%, which is lower than the participation rate reported in July 2016 (67.2%).
• Abbotsford-Mission CMA	December 2016	The participation rate was 67.9%, which is greater than the participation rate reported in July 2016 (65.5%).
• Vancouver CMA	December 2016	The participation rate was 65.4%, which is lower than the participation rate reported in July 2016 (67.6%).
Unemployment Rate (%)		
• Lower Mainland / Southwest Economic Region	December 2016	The unemployment rate was 5.0%, which is lower than the unemployment rate reported in July 2016 (5.5%).
• Abbotsford-Mission CMA	December 2016	The unemployment rate was 6.0, which is lower than the unemployment rate reported in July 2016 (6.4%).
• Vancouver CMA	December 2016	The unemployment rate was 4.8%, which is lower than the unemployment rate reported in July 2016 (5.5%).
Major projects (\$ capital investment)	March 2016	<p>In the communities in the Fraser Valley Region, 11 major projects were identified as under construction, with a total capital cost of approximately \$1.4 billion. The projects are located throughout the Fraser Valley Region. Key projects with large (&gt;\$100 million) capital costs include the Abbotsford Airport Expansion, the Garrison Crossing Residential Development (Chilliwack) and the Ruskin Dam Safety and Powerhouse Upgrade (Mission).</p> <p>In the communities in the Metro Vancouver Region, 169 major projects were identified as under construction, with a total capital cost of approximately \$30.8 billion. The projects are located throughout the Metro Vancouver Region. Key projects with large (&gt;\$1 billion) capital costs include the False Creek Condominium Development, King George Station Mixed Use Development, Tsawwassen First Nation Mixed Use Development, Central City Neighbourhood, Skytrain – Evergreen Line, River District Development, Roberts Bank Container Expansion Program Terminal 2 and Deltaport 3rd Berth, Brentwood Town Centre Redevelopment, and Vancouver International Airport Expansion.</p>
<b>Accommodation</b>		
Rental vacancy rates (%)		
• Chilliwack (census agglomeration)	October 2015	The vacancy rate was 2.7% in private apartments.
• Abbotsford-Mission (CMA)	2016	The vacancy rate was 0.5% in private apartments, which is lower than the rate reported in 2015 (0.8%).
• Langley <sup>4</sup>	October 2015	The vacancy rate was 1.5% in private apartments.
• City of Surrey	October 2015	The vacancy rate was 1.9% in private apartments.
• Tri-Cities <sup>5</sup>	October 2015	The vacancy rate was 1.2% in private apartments.
• City of Burnaby	October 2015	The vacancy rate was 1.2% in private apartments.
Rent by rental type (\$/month, by unit type)		
• Chilliwack (census agglomeration)	October 2015	The average rents for a private apartment range from \$539 for a bachelor, to \$806 for 3 bedroom +.
• Abbotsford-Mission (CMA)	2016	The average rents for a private apartment range from \$619 for a bachelor, to \$1019 for 3 bedroom +.
• Langley <sup>4</sup>	October 2015	The average rents for a private apartment range from \$685 for a bachelor, to \$1,137 for 3 bedroom +. The total average rent for a private apartment was \$895.
• City of Surrey	October 2015	The average rents for a private apartment range from \$671 for a bachelor, to \$1,098 for 3 bedroom +. The total average rent for a private apartment was \$874.
• Tri-Cities <sup>5</sup>	October 2015	The average rents for a private apartment range from \$712 for a bachelor, to \$1,212 for 3 bedroom +. The total average rent for a private apartment was \$951.
• City of Burnaby	October 2015	The average rents for a private apartment range from \$806 for a bachelor, to \$1,431 for 3 bedroom +. The total average rent for a private apartment was \$1,031.

**TABLE 9 Cont'd**

Context Indicator	Date	Baseline Data				
Crime/Policing						
Incident Category		Rate per 1,000 population, by Police Service Area (Fraser Valley Region)				
		Hope RCMP, municipal	Hope RCMP, rural	Chilliwack RCMP, rural	Chilliwack RCMP, municipal	Abbotsford municipal
Total violent Criminal Code Violations	2015	25.3	27.1	18.6	13.9	11.2
• Sexual assault, level 1,2 and 3	2015	0.300	0.820	0.760	0.390	0.517
• Total commodification of sexual activity violations	2015	0.000	0.000	0.000	0.010	0.020
Total Property Crime Violations	2015	79.4	95.4	92.9	69.0	46.5
Total Other Criminal Code Violation (Except Traffic)	2015	48.0	32.9	51.9	30.2	5.1
• Total prostitution	2015	0.000	0.000	0.000	0.000	0.007
Total Criminal Code Traffic Violations	2015	4.1	10.7	3.6	1.6	2.6
Total Drug Violations	2015	12.9	18.1	7.6	3.8	2.0
Incident Category		Rate per 1,000 population, by Police Service Area (Metro Vancouver Region)				
		Langley Township RCMP, municipal	Surrey RCMP, municipal	Coquitlam RCMP, municipal	Coquitlam RCMP, rural	Burnaby RCMP, municipal
Total violent Criminal Code Violations	2015	7.6	15.1	7.2	5.9	7.5
• Sexual assault, level 1,2 and 3	2015	0.220	0.528	0.180	0.350	0.430
• Total commodification of sexual activity violations	2015	0.000	0.030	0.000	0.000	0.004
Total Property Crime Violations	2015	53.5	61.3	42.6	23.7	48.7
Total Other Criminal Code Violation (Except Traffic)	2015	14.0	21.0	15.2	3.5	5.2
• Total prostitution	2015	0.000	0.050	0.007	0.000	0.010
Total Criminal Code Traffic Violations	2015	2.7	4.4	2.3	0.7	2.5
Total Drug Violations	2015	3.6	5.5	2.8	4.5	3.3
Traffic <sup>6</sup>						
MADT Count – Location P-17-1EW, Highway 1	September 2016	The MADT at this traffic count site was 24,185 in September. From the Project site located near Popkum, Project vehicles may travel east on Highway 1 to access construction sites. From May to September 2016, the MADT at this traffic count site ranged from 21,706 (May) to 30,907 (August).				
MADT Count – Location P-17-99EW, Highway 1	September 2016	The MADT at this traffic count site was 56,545 in September. From the Project site located near Popkum, Project vehicles may travel west on Highway 1 to access construction sites. From May to August 2016, the MADT at this traffic count site ranged from 54,428 (May) to 61,615 (July).				
MADT Count – Location P-17-9EW, Highway 1	September 2016	The MADT at this traffic count site was 46,156 in September. From the Project site located near Popkum, Project vehicles may travel west on Highway 1 to access construction sites. From May to August 2016, the MADT at this traffic count site ranged from 44,561 (May) to 52,178 (July).				
Communicable Diseases						
Disease	Surveillance period	Fraser East HSDA	Fraser North HSDA	Fraser South HSDA	Richmond HSDA	Vancouver HSDA
Amebiasis	Jan to Apr 2017	7	19	32	5	54
Campylobacter Infection	Jan to Apr 2017	23	67	78	17	77
Cryptosporidium Infection	Jan to Apr 2017	4	1	5	0	10
Giardia Infection	Jan to Apr 2017	17	19	42	3	47
Hepatitis A	Jan to Apr 2017	0	1	1	0	0
Hepatitis B: Acute	Jan to Apr 2017	0	0	0	0	1
Hepatitis B: Chronic Carrier	Jan to Apr 2017	7	85	69	54	123
Hepatitis B: Undetermined	Jan to Apr 2017	1	9	9	0	1
Hepatitis C: Acute	Jan to Apr 2017	3	7	2	0	18
Hepatitis C: Chronic/Unknown	Jan to Apr 2017	85	96	102	12	146
Malaria	Jan to Apr 2017	0	1	1	0	1
Measles	Jan to Apr 2017	0	1	0	0	0
Mumps	Jan to Apr 2017	0	12	15	3	10

**TABLE 9 Cont'd**

Context Indicator	Date	Baseline Data				
pertussis	Jan to Apr 2017	32	18	21	2	5
Salmonella Infection	Jan to Apr 2017	23	52	63	14	56
Shigella Infection	Jan to Apr 2017	5	1	13	2	16
Typhoid Fever	Jan to Apr 2017	3	4	10	0	2
Yersinia infection	Jan to Apr 2017	23	51	56	11	56
Genital chlamydia	2014	540 (187.4 per 100,000)	1,500 (233.7 per 100,000)	1,518 (195.4 per 100,000)	578 (281.6 per 100,000)	3,166 (480.8 per 100,000)
Genital gonorrhea	2014	73 (25.3 per 100,000)	208 (32.4 per 100,000)	264 (34.0 per 100,000)	38 (18.5 per 100,000)	819 (124.4 per 100,000)
Infectious syphilis	2014	7 (2.4 per 100,000)	55 (8.6 per 100,000)	34 (4.4 per 100,000)	11 (5.4 per 100,000)	378 (57.4 per 100,000)

**Sources:** BC Ministry of Jobs, Tourism and Skills Training 2016, BC Ministry of Transportation and Infrastructure 2016, CMHC 2015a,b, 2016b, Statistics Canada 2015b, 2016a,b, BCCDC 2015, 2017

- Notes:**
- 1 The Lower Mainland / Southwest Economic Region consists of: 4 regional districts; 14 cities, including Chilliwack, Abbotsford, Surrey, Coquitlam and Burnaby; 12 district municipalities, including Hope and Langley; 6 towns and villages; an Island Municipality; 96 Indian Reserves; and an Indian Government District. It is a grouping of complete census divisions created by Statistics Canada as a standard geographic unit for analysis of regional economic activity.
  - 2 The Abbotsford-Mission CMA consists of neighbouring municipalities, including the City of Abbotsford, the District of Mission, and Matsqui Main 2 and Upper Sumas 6 Indian Reserves.
  - 3 The Vancouver CMA consists of: 1 regional district (Metro Vancouver); 12 cities, including Surrey, Coquitlam and Burnaby; 5 district municipalities, including Langley; 3 villages; an Island Municipality; and 17 Indian Reserves.
  - 4 CMHC presents data for Langley which consists of the City of Langley and the Township of Langley.
  - 5 CMHC presents data for Tri-Cities which consists of City of Coquitlam, City of Port Coquitlam and City of Port Moody.
  - 6 Traffic count locations were identified based on Project sites identified in the Stock Pile Sites and Camp Locations Report (September 6, 2016). Traffic count locations may be updated at the start of construction during the first monitoring cycle to reflect the final project stock pile sites and/or staging areas.

All numbers are approximate. In certain instances (e.g., gender-based crimes), additional decimal spaces are shown in order to capture small numbers.



## 6.0 SUMMARY

The SEEMP provides a pragmatic and meaningful way to monitor the potential adverse socio-economic effects of the Project during construction, to examine mitigation effectiveness related to such potential effects, to help identify the need and strategies for adaptive socio-economic management as Project construction progresses.

The SEEMP is one of several NEB Condition plans focused on socio-economic issues (e.g., see also Training and Education Monitoring Plan NEB Condition 12; Aboriginal, Local and Regional Employment and Business Opportunity Monitoring Reports NEB Condition 107; Traffic Access and Control Management Plan NEB Condition 73; Light Emissions Management Plan for Westridge Marine Terminal NEB Condition 82; Visual Impact Plan NEB Condition 95; Noise Management Plan for Construction at Terminals and Pump Stations NEB Condition 80; Access Management Plan Condition 47; Worker Accommodation Strategy NEB Condition 59; and Navigation and Navigation Safety Plan NEB Condition 48).

Trans Mountain's SEEMP is focused on monitoring factors or indicators that are reflective of the Project's contribution to socio-economic outcomes during the two-year construction window; that is, indicators of the social or economic stressors directly attributable to the Project. These "Project-specific indicators" will be used in pinpointing where and when a Project mitigation, policy or program intended to reduce adverse socio-economic effects during construction is working as planned or may need improvement or adaptation. Project-specific indicators will be the key tool that Trans Mountain uses to identify adverse effects of the Project in a timely manner and to develop adaptive social performance management strategies, where needed. In parallel, the SEEMP also includes broader socio-economic factors that will be tracked and reported over the construction period. Known as "context indicators", such broader information will assist in understanding the relative resiliency or vulnerability of different communities and regions in the context of Project-specific stressors.

Feedback from the monitoring process will be used by the Project to:

- a) examine the effectiveness of the construction-phase socio-economic mitigation;
- b) identify strategies to adapt and enhance construction-phase mitigation, if required;
- c) identify and respond to unanticipated socio-economic effects and issues during TMEP construction;
- d) provide information to regulators and stakeholders on actual socio-economic influences and outcomes related to the construction of the Project; and
- e) document TMEP's ongoing efforts to respond to and minimize negative socio economic effects.

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## APPENDIX A

### CONSULTATION AND ENGAGEMENT

Consultation and engagement activities related to the SEEMP were completed with Appropriate Government Authorities, potentially affected Aboriginal groups, landowners/tenants. Opportunities to discuss socio-economic effects and identify issues or concerns were also provided to public stakeholders during meetings, workshops and ongoing engagement activities.

Consultation and engagement opportunities began in May 2012 with the Project announcement and are ongoing.

The approach to developing the SEEMP was consultative. Key consultation and engagement activities specific to the development of the SEEMP include:

- nine SEEMP-specific meetings in communities along the pipeline corridor with Appropriate Government Authorities, to explore approach and indicators;
- four regional Aboriginal Engagement workshops designed to promote a dialogue around draft EPPs and SEEMP;
- wide circulation and a 90-day review period of the draft SEEMP, including follow-up meetings as required;
- a follow-up webinar with Appropriate Government Authorities to discuss overview of final SEEMP and indicators, including circulation of and opportunity for feedback on follow-up responses; and
- posting of the SEEMP on the Trans Mountain website from September 2016 to current day with the invitation to contact Trans Mountain with any additional questions or comments.

#### 1.0 Consultation and Engagement Overview: Draft Plan Development

Reports on public consultation activities completed between May 2012 and June 30, 2015 were filed with the NEB and are available in the Application (Volume 3A: Stakeholder and Volume 3B: Aboriginal) as well as in Consultation Update No. 1 and Errata, Technical Update No. 1 / Consultation Update 2, Consultation Update 3 and Consultation Update 4. These reports include identification of issues and concerns as well as Trans Mountain's response and are included below. Where appropriate, Trans Mountain's response has been updated to reflect information developed since the original response was provided during the NEB proceedings for the Project.

Consultation and engagement activities completed between July 2015 and January 2017 have not been filed on the public record with the NEB. Any new issues and concerns identified during this period, as well as Trans Mountain's response, are described below.

#### 2.0 Consultation and Engagement Overview: Draft Plan

The draft Plan was released for review and feedback on September 16, 2016. The comment period closed on December 16, 2016. In some instances, that period that was subsequently extended to January 16, 2017. Email or mail notification regarding the Plan was sent to 141 public stakeholders, 17 Appropriate Government Authorities, 131 Aboriginal groups and all affected landowners. The notification included a summary description of the Plan, a request for review, the timing of the comment period and contact information. Aboriginal groups were offered the opportunity for an in-person meeting to review the Plan. See Appendix B for a complete list of notified stakeholders.

In addition to direct notification, the online posting of each Plan was promoted through Trans Mountain's weekly e-newsletter, Trans Mountain Today, which provides Project updates, regulatory information, stories and interviews to more than 6,000 subscribers. Each week Trans Mountain Today included a focus on a specific plan, or group of plans, as well as a reminder of all plans available for review.

#### 2016

- September 22 - Wildlife Mitigation and Habitat Restoration Plans
- September 29 - Pipeline Environmental Protection Plans

- October 6 - Air Quality Management Plans
- October 13 - Watercourse and Water Ecosystems Plans
- October 20 - Vegetation Management Plans
- October 27 - Air Quality Plans
- November 3 - Socio-Economic Effects Monitoring Plan
- November 10 - Access Management Plan
- December 22 - General promotion all plans
- December 29 - General promotion all plans

2017

- January 5 - General promotion all plans
- January 12 - General promotion all plans

Trans Mountain is committed to ongoing engagement throughout the life of the Project. The start and end date for the review and comment period for each environmental management plan is defined. These timelines are required to allow time for preparation of the final Plan in order to meet regulatory requirements and NEB submission dates. Although a formal review period may be closed, each plan remains available for review on [transmountain.com](http://transmountain.com). Trans Mountain welcomes questions and feedback by email through [info@transmountain.com](mailto:info@transmountain.com) or by mail or phone and will continue to consider any additional feedback, where practical.

### 3.0 Consultation and Engagement: Activities and Feedback

Consultation and engagement activities completed with identified stakeholder groups are described below, including: public stakeholders (Section 3.1); Appropriate Government Authorities (Section 3.2); Aboriginal groups (Section 3.3); and landowner/tenants (Section 3.4).

Feedback on the draft Plan, Trans Mountain's response, and where each issue or concern is addressed in the Plan has been outlined in each section according to stakeholder group.

#### 3.1 Public Consultation

##### *3.1.1 Public Consultation Summary – May 2012 to June 2015*

Feedback regarding socio-economic issues pertinent to the SEEMP received during public consultation and engagement activities between May 2012 and June 30, 2015 is summarized in Table A-1

##### *3.1.2 New Interests, Issues, Concerns and Response - July 2015 to January 2017*

No new issues or concerns were identified during public consultation and engagement activities between July 2015 and January 2017.

**TABLE A-1**

**SUMMARY OF PUBLIC CONSULTATION - MAY 2012 TO JUNE 30, 2015**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
<b>Recreational Use</b>		
Potential impacts to water-based recreation and tourism	<p>There are no designated recreational sites along the proposed Alberta segment. Outdoor recreational activities, such as hunting, camping, hiking, mountain biking and snowmobiling are expected to occur at numerous locations along the Alberta segment. Recreational fishing occurs on the large watercourses and lakes. During construction, Trans Mountain will provide advanced and ongoing notification to users of the area to ensure they are fully aware of the activities that will and are occurring.</p> <p>The effectiveness of mitigation related to recreational use during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.</p>	<p>Application Volume 5B-ESA - Socio-Economic</p> <p>Section 3.2, Table 3 of this Plan</p> <p>Navigation and Navigation Safety Plan (NEB Condition 48)</p>
Use of TMEP right-of-way as a recreational trail in Yellowhead County	Trans Mountain is open to discussing recreational use of the right-of-way. Walking, hiking and biking are all great activities for the right-of-way. Trans Mountain does restrict motorized vehicle access like snowmobiles and ATVs because they can cause disturbance to the ground. Trans Mountain is open to discussing opportunities to leave infrastructure post construction to benefit recreational users in Yellowhead County. This is post-construction issue and thus not pertinent to the SEEMP.	Application Volume 5B - ESA - Socio-Economic
Potential opportunity to leave infrastructure (e.g., swamp mats, crossing structures) behind to benefit recreational trails.	Should TMEP impact recreational user's infrastructure during construction, mitigation processes will ensure the infrastructure is left in the same, if not better condition. Actual methods will be discussed with landowners and or permit holders, prior to construction. This is post-construction issue and thus not pertinent to the SEEMP.	Application Volume 5B-ESA - Socio-Economic
<b>Social and Cultural Well Being</b>		
Impacts to outdoor recreation and tourism; Historical sites, sport fishing	<p>Outdoor recreational activities, such as hunting, camping, hiking, mountain biking, canoeing, trail rides; wildlife viewing and snowmobiling are expected to occur at numerous locations along the proposed pipeline corridor. Recreational fishing occurs on the large watercourses and lakes. During construction Trans Mountain will provide advanced and ongoing notification to users of the area to ensure they are fully aware of the activities that will occur and are occurring. Should the Project impact recreational user's infrastructure during construction, mitigation processes will ensure the infrastructure is left in the same, if not better condition. Actual methods will be discussed with landowners and or permit holders. Trans Mountain is open to discussing opportunities to leave infrastructure post construction to benefit recreational users. The social, economic, cultural, and physical well-being of local residents along the proposed expansion route are important to Trans Mountain. Forthcoming socio-economic studies will examine potential impacts related to a range of different factors of the human environment including the extent to which project-related activities, toxic components, nuisances and environmental changes could have human health effects (Human Health Risk Assessment [HHRA]), and the consideration of community health and wellbeing. Archaeology studies will also be undertaken to examine potential impacts related to archaeological, paleontological and historical sites. Trans Mountain is committed to best practices in reclamation, always striving for opportunities leading to advancement. As with all of its construction projects, Trans Mountain will reclaim any areas that are affected by the proposed pipeline Project including the pipeline right-of-way and surrounding areas following construction. This could include adding new footpaths, developing new habitats, improving water crossings or bettering migration corridors. Post-construction monitoring and ongoing right-of-way maintenance will continue following construction. Project-related impacts on recreation use are being addressed in the ESA. This will include development of mitigation plans to reduce impacts and optimize opportunities to enhance recreational use. The effectiveness of mitigation related to recreational use during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.</p>	<p>Application Volume 5B-ESA - Socio-Economic</p> <p>Section 3.2, Table 3 of this Plan</p> <p>Navigation and Navigation Safety Plan (NEB Condition 48)</p>
Use of infrastructure and services by construction crews (e.g., roads, hotels, food services) and potential impacts or use.	Trans Mountain recognizes that the Project is a major infrastructure project and, as such, the public will have an interest in the Project's scope, environmental assessment and routing. Trans Mountain has begun and will continue to engage in meaningful consultation with affected stakeholders regarding socio-economic impacts and benefits. The Project's objective, where feasible, is to maximise local sourcing and content. This will be undertaken in discussion with local communities and businesses. Worker accommodation strategies, including use of hotels, will be outlined in NEB Condition 59 Worker Accommodation Strategy. The SEEMP includes several indicators that are reflective of the use of regional infrastructure and services by Project workers (see Table 4)	<p>Application Volume 5B -ESA - Socio-Economic</p> <p>Section 3.2, Table 3 of this Plan</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Residential areas	Where practical, the alignment of the proposed expansion route will parallel the existing TMPL. Trans Mountain recognizes that many regional changes have occurred since the pipeline was installed 60 years ago and that some routing decisions made in 1952 would be different if made today. Where new roads and infrastructure have been built, and patterns of land use have changed with the growth of communities, Trans Mountain is listening to landowners and will consider deviating from the existing route while balancing operational, engineering, environmental, community and economic factors. It is Trans Mountain's intention to find a route for the proposed pipeline, which minimizes impact to residences and communities. Where privately-held land is needed for the proposed new route, land agents from Trans Mountain will discuss proposed locations of the pipeline with landowners. Our goal is to reach mutually-acceptable agreements with landowners to allow Trans Mountain to build and maintain the TMEP. The effectiveness of mitigation related to residential land use during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan
Agricultural and resource extraction land uses (human occupancy and resource use - disruption to agricultural and grazing activities and farm productivity)	Agricultural land uses such as grazing pastures, field crops, organic and specialty crops (e.g., blueberries, raspberries, nurseries) and livestock facilities are located along the proposed pipeline corridor. Trans Mountain is working with landowners to reduce the potential disturbance to agricultural lands and disruption of agricultural practices during construction. Appropriate mitigation (e.g., soil handling, erosion control) and monitoring activities will be implemented during construction to maximize reclamation success. Additional special reclamation measures will be applied, as required, to return the disturbed areas to a stable and maintenance-free condition. As part of the proposed post-construction environmental monitoring (PCEM) program, Trans Mountain will monitor revegetation growth on the construction right-of-way and implement remedial measures where necessary. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.	Application Volume 5B - ESA - Socio-Economic  Agricultural Management Plan (Volume 6 of the Environmental Plans)
Awareness/mitigation of potential social issues with influx of workers into communities, and increase in traffic. Does Trans Mountain have a traffic management plan?	Socio-economic studies are being undertaken to assess existing conditions and types of land use in the Project area, as well as possible impacts. Mitigation strategies and management plans will be developed through discussions with regulators, Aboriginal communities, municipalities and stakeholders to help minimize the potential effects of the Project on biophysical and human environments. All of these reports will be posted on the Project's website and the NEB website once Trans Mountain's Facilities Application is submitted in late 2013. Trans Mountain's engagement process will continue throughout the development of the Facilities Application to the NEB, and after it is filed in late 2013. Opportunities for stakeholders to provide feedback, express concerns and submit suggestions will be available through the entire process until the proposed expanded pipeline operations begin, if the Project is approved. Numbers of non-local workers will be monitored through the SEEMP. The SEEMP will also have indicators related to traffic. The effectiveness of mitigation related to influx of workers during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms. Further, TMEP will have a Traffic Access and Control Management Plan.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan  Traffic Access and Control Management Plan (NEB Condition 73)
Sexually-transmitted diseases and teen pregnancies are associated with an influx of temporary male residents and participants asked about impacts on health in the community.	Trans Mountain recognizes that the construction of the Project will require a large workforce and may exert an influence on health in nearby communities. The effects of an influx in temporary workers would primarily manifest in those communities acting as a construction hub for construction workers and in particular, those communities that have relatively small resident populations compared to the size of the temporary Project workforce. As the Project Team continues its detailed design of the Project, community readiness discussions will be part of the ongoing engagement. The effectiveness of mitigation related to influx of workers during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan
<b>Community Capacity Building</b>		
Trans Mountain support for local communities	Trans Mountain is exploring opportunities to provide and support education and training initiatives along the pipeline route, and has begun dialogue with local training institutions. Education and training in areas such as trades, maintenance, operations and environmental management will enhance the capacity of the local labour force to participate in Project opportunities. This will also build transferrable skills that can be used across other industries, and enhance the overall community capacity. The Kinder Morgan Foundation has donated almost \$2 million in grants to youth organizations which support education and arts programs in many communities where they operate. Additionally, Trans Mountain has a history of supporting education and training. One example is Trans Mountain's Skill Builder program, which offers condensed utility classes for Aboriginal workers.	Application Volume 5B - ESA - Socio-Economic  Training and Education Monitoring Plan (NEB Condition 12)  Training and Education Monitoring Reports (NEB Condition 58)  Community Benefits Program progress reports (NEB Condition 145)

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Impacts to community recreation areas on existing TMPL right-of-way	Trans Mountain is open to discussing recreational use of the right-of-way. Walking, hiking and biking are all great activities for the right-of-way. Trans Mountain does restrict motorized vehicle access like snowmobiles and ATVs because they can cause disturbance to the ground. Trans Mountain is open to discussing opportunities to leave infrastructure post construction to benefit recreational users. The effectiveness of mitigation related to recreational use during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan
Raft River crossings and impact to traditional lands and disruption of pristine forests	As a long-time industry and community member, Trans Mountain is committed to working with residents, regulatory authorities and other stakeholders on environmental initiatives. Trans Mountain helped stabilize the Raft River near the pipeline right-of-way in Clearwater, BC. This enhancement Project involved stabilizing more than 700 m of river bank to prevent erosion, improving the local fish habitat, as well as planting native trees and shrubs. When Trans Mountain was seeking certification through Wildlife Habitat Council, work began with a landowner on the right-of-way who was interested in being involved. Trans Mountain determined ways to improve the landowner's land to provide a more hospitable environment for local species. With respect to traditional lands, Trans Mountain will monitor and report on information submitted to the Aboriginal team Field Advisor or through other processes agreed upon with each First Nations community.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan.  Plan for Aboriginal group participation in construction monitoring (NEB Condition 98)
Disruption to residential areas and business	It is Trans Mountain's intention to find a route for the proposed pipeline, which minimizes impact to residences and communities. Where privately-held land is needed for the proposed new route, land agents from Trans Mountain will discuss proposed locations of the pipeline with landowners. Our goal is to reach mutually- acceptable agreements with landowners to allow Trans Mountain to build and maintain the Project. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.	Application Volume 3C - Landowner Relations  Application Volume 5B - ESA - Socio-Economic
Impacts to landscaping along edge of right-of-way	Trans Mountain is responsible for maintaining the right-of-way to such a degree that it remains visible and accessible for Trans Mountain safety patrol teams. Trans Mountain is also responsible for the pipeline remaining safe from damage and hazards. Trans Mountain takes responsibility for returning any lands disrupted during construction to the same, or better condition than existed before construction (within the confines of safe right-of-way management). To minimize impacts to the urban landscape and landowners, the proposed route of the new pipeline would follow existing linear infrastructure, such as municipal streets or highway, railway or utility corridors, or in some cases parklands. The proposed pipeline corridor will be selected to minimize impacts to the environment, maximize worker and public safety, and minimize other social impacts.	Application Volume 4B - Project Design and Execution - Construction  Application Volume 5B - ESA - Socio-Economic  Weed and Vegetation Management Plan (NEB Condition 45)
How will Trans Mountain work with trade schools on skills development?	Trans Mountain is exploring opportunities to provide and support education and training initiatives along the pipeline route, and has begun dialogue with local training institutions. Education and training in areas such as trades, maintenance, operations and environmental management will enhance the capacity of the local labour force to participate in Project opportunities. This will also build transferrable skills that can be used across other industries, and enhance the overall community capacity. Trans Mountain has a history of supporting education and training. One example is Trans Mountain's Skill Builder program, which offers condensed utility classes for Aboriginal workers. Trans Mountain is also committed to working with the marine industry to ensure the safe movement of vessels that travel in BC waters and call on the Westridge Marine Terminal in Burnaby. Trans Mountain joined the Government of Canada, Transport Canada and various local West Coast marine entities in 2011 to upgrade the multi-million dollar marine simulation centre at the British Columbia Institute of Technology (BCIT) Marine Campus in North Vancouver, BC. The centre offers a variety of navigation training and safety programs. The simulation training takes place on all vessel types from tug boats to large cargo ships and oil tankers. The centre includes a ship's main bridge simulator which duplicates many scenarios a ship's crew and captain would encounter, such as rolling seas and high winds. Although Trans Mountain is not directly involved in marine shipping, our support of the centre helps train crews who ensure vessels move safely along our coast.	Application Volume 5B - ESA - Socio-Economic  Training and Education Monitoring Plan (NEB Condition 12)
Trans Mountain Commitment to Communities	As a long-time industry and community member, Trans Mountain is committed to working with residents, regulatory authorities and other stakeholders on environmental and other initiatives. The SEEMP will be another mechanism to report back to communities on the Project contribution to socio-economic outcomes during construction, and monitoring outcomes will be shared publicly and consider feedback received from communities via various mechanisms.	Application Volume 5B - ESA - Socio-Economic  Section 4.3 of this Plan.
Impacts to recreational areas, trails, and sport fishing	Project-related impacts on recreation use are addressed in the ESA. This includes development of mitigation plans to reduce impacts and optimize opportunities to enhance recreational use. The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan



**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Use of the right-of-way as greenspace	Trans Mountain is aware that people use the right-of-way for recreational purposes. Walking, hiking and biking are all great activities for the right-of-way. Trans Mountain does restrict motorized vehicle access like snowmobiles and ATVs because they can cause disturbance to the ground. This is post-construction issue and thus not pertinent to the SEEMP.	Application Volume 5B - ESA - Socio-Economic
<b>Economic Impact/Benefit</b>		
Availability of insurance for Landowners against an oil spill	Trans Mountain is aware the public seems to have little confidence in the insurance sum available for spills and is working with all agencies and parties involved to address spill response capabilities. However, Trans Mountain also believes that this needs to be done in the context of a regulatory sanction, not independently by industry. Trans Mountain would be active at a community level and rely on its website to make information available. Trans Mountain carries liability insurance to provide coverage for all aspects of spill management, including compensation and remediation. To ensure there are sufficient funds to remediate a spill, Trans Mountain is covered by insurance necessary to respond to all spills or releases from our pipelines and facilities. Trans Mountain monitors the insurance program continuously, and makes annual adjustments as necessary to ensure adequate coverage. As part of an ongoing commitment to safety and environmental protection, Trans Mountain takes responsibility for the cleanup and remediation of spills by responding immediately to any release from the pipeline system. Trans Mountain works with pre-qualified and trained consultants and Contractors to ensure any spill is cleaned up as quickly as possible, while ensuring the safety of the public and minimizing impacts to the environment. Although ultimately, liability for an oil spill depends on the cause of the spill, Trans Mountain will always initiate and cover costs for cleanup and restoration. Depending on circumstances, Trans Mountain will then seek to recover costs from insurance or from a third party. This is a post-construction issue and thus not pertinent to the SEEMP.	Application Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills
Impacts to local business activity	<p>Expanding the TMPL system will create both short- and long-term job opportunities in BC communities along the pipeline route and an increase in tax revenue for the BC and local governments. Of the total construction and long-term operating expenditures related to the Project, about 63 per cent (or \$7.0 billion) is to be spent in BC. The estimated job impact is 32,000 person-years (full-time equivalents) of employment in BC during construction and operations. For example, during the peak construction period of the TMPL and associated facilities, construction hubs are to be established along the route hubs will be filled with construction workers who will spend money on accommodation, meals and other local goods and services. The Project is also anticipated to generate substantial provincial and municipal tax revenue for BC. Over the life of the Project (based on an assumption of 6 years of design and construction and 30 years of operations), approximately \$355 million in increased provincial tax revenues are anticipated in BC, as well as additional municipal tax revenues of about \$600 million (\$22 million annually). The proposed expanded operations are anticipated to create 50 new full-time permanent roles in BC.</p> <p><i>Note: All figures are based on the proposed expansion of the TMPL at a proposed capacity of 890,000 bbl/d. These estimates will change as economic impact figures are updated to reflect Project design changes and economic conditions.</i></p> <p>The SEEMP proposes track the number of non-local/regional workers in field communities, categorized by accommodation arrangements, and also proposes to track living out allowances and related stipends. These data will provide an indication of Project-related demand for commercial accommodation and the extent to which Project workers are supporting business opportunities for accommodation providers and other retail services.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Section 3.2, Table 3 of this Plan</p>
Private Land - Loss of property value	<p>Operating and building pipeline infrastructure affects many along the route, and Trans Mountain recognizes the potential impact to its neighbours and communities in proximity to operating areas. Trans Mountain works with landowners along its pipeline network. A key objective is to treat each landowner fairly and equitably. For those who may be directly affected by the Project, Trans Mountain will identify and address landowners' concerns and questions about the Project. These landowners will then work with the Lands Teams to reach jointly equitable solutions.</p> <p>Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.</p>	Application Volume 3C – Landowner Relations

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Awareness of positive benefits of the Project	<p>As the world's third-largest oil producer, Canada benefits greatly from the export of national resources. Twinning the TMPL will increase Canada's capacity to export these resources by facilitating the movement of oil to the West Coast for marine transport to market. It will further secure the supply of oil products to the Lower Mainland for use by BC's residents and businesses. The Project will also lead to new jobs in the short and long term, job-related training opportunities, and increases in taxes collected through all three levels of government. Overall, the proposed expansion will enhance Canada's ability to reach diversified markets with its oil, while also increasing tax revenues that can be used to fund government projects and services Canadians depend on such as health care, education, roads and infrastructure. Trans Mountain plans to spend \$5.4 billion by the end of 2017 to construct the line and associated facilities, and a further \$2.4 billion to operate it for the first 20 years. British Columbia's economy is forecasted to grow by \$2.8 billion (GDP) through construction-related spending, and up to \$11.3 billion including Project operations through to 2037. The Project is also anticipated to generate substantial provincial and municipal tax revenue. Provincial governments revenues associated with the Project are anticipated to be in the order of \$1.7 billion, with BC provincial government receiving \$1 billion in provincial taxes and Alberta receiving over \$0.4 billion in provincial taxes. Municipal tax revenues which can support community services and infrastructure are estimated to increase approximately \$23 million annually or \$460 million over 20 years of operations. In Alberta, municipal property taxes are estimated to increase approximately \$3.4 million annually or \$68 million over 20 years of operations. In communities along the pipeline route annual property tax payments to more than 20 local governments and more than 24 Aboriginal communities would jump to \$52.4 million from \$25.9 million per year at present. The estimated tax revenues to the Government of Canada are \$2.1 billion over the life of the proposed project. Expanding the TMPL system will create both short- and long- term job opportunities in BC communities along the pipeline route. Construction is scheduled in 2017 to 2019 with an estimated 5,300 workers at peak manpower. Trans Mountain expects to create 108,000 person years of employment, from construction and the first 20 years of operations across Canada. Of this, 66,000 person years of employment will be in BC and 25,000 will be in AB (related to direct project spending as well as supply chain effects and spending of wages). In communities where construction activities concentrate, the economic impacts will be significant. During the peak construction period of the TMEP and associated facilities, construction hubs will be established along the route for the staging of work and accommodation of workers. Construction workers residing in construction hub communities will spend money on accommodation, meals and other goods and services, which will create spin-off benefits for local businesses and economies. A large number of the total construction workforce will come from the communities directly along the route, including nine in BC. In larger communities it is estimated up to 30 per cent of the workforce will be local hires. The proposed expanded operations are anticipated to create 40 new full-time permanent positions in Alberta and 50 new full-time permanent positions in BC.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Application Volume 2 - Economics</p>
Potential decreases in property values and marketability of houses near the right-of-way	<p>Treating landowners – the people who have land agreements with Trans Mountain – and neighbours fairly and equitably is a cornerstone of the relationships Trans Mountain has developed and maintained in communities along the TMPL system. Through respectful dialogue, Trans Mountain's goal is to negotiate mutually-agreeable arrangements with each landowner who may be impacted by the Project. In cases where Trans Mountain is unable to reach a mutually-agreeable arrangement, the NEB has a multi-step process that the Company will follow to address differences of opinions as part of the routing review and approval process. More information about the process from the NEB is available here: <a href="http://www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtcptn/pplnrgltnrnd/pplnrgltnrndndx-eng.html">www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtcptn/pplnrgltnrnd/pplnrgltnrndndx-eng.html</a> &gt; Pipeline Regulation in Canada: A Guide for Landowners and the Public. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.</p>	<p>Application Volume 3C – Landowner Relations</p>
Increases in municipal taxes	<p>The Project is anticipated to generate substantial provincial and municipal tax revenue. Provincial governments revenues associated with the Project are anticipated to be in the order of \$1.7 billion, with BC provincial government receiving \$1 billion in provincial taxes and Alberta receiving over \$0.4 billion in provincial taxes. Municipal tax revenues which can support community services and infrastructure are estimated to increase approximately \$23 million annually or \$460 million over 20 years of operations. In Alberta, municipal property taxes are estimated to increase approximately \$3.4 million annually or \$68 million over 20 years of operations. In communities along the pipeline route, annual property tax payments to more than 20 local governments and more than 24 Aboriginal communities would jump to \$52.4 million from \$25.9 million per year at present.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Benefits to Canada as a whole and to communities/municipalities along the route (e.g., Hope)	<p>As the world's third-largest oil producer, Canada benefits greatly from the export of national resources. Twinning the TMPL will increase Canada's capacity to export these resources by facilitating the movement of oil to the West Coast for marine transport to market. It will further secure the supply of oil products to the Lower Mainland for use by BC's residents and businesses. The Project will also lead to new jobs in the short and long term, job-related training opportunities, and increases in taxes collected through all three levels of government. Overall, the proposed expansion will enhance Canada's ability to reach diversified markets with its oil, while also increasing tax revenues that can be used to fund government projects and services Canadians depend on, such as health care, education, roads and infrastructure. Trans Mountain plans to spend \$5.4 billion by the end of 2017 to construct the line and associated facilities, and a further \$2.4 billion to operate it for the first 20 years. British Columbia's economy is forecasted to grow by \$2.8 billion (GDP) through construction-related spending, and up to \$11.3 billion including Project operations through to 2037. The Project is also anticipated to generate substantial provincial and municipal tax revenues. Provincial governments revenues associated with the Project are anticipated to be in the order of \$1.7 billion, with BC provincial government receiving \$1 billion in provincial taxes and Alberta receiving over \$0.4 billion in provincial taxes. Municipal tax revenues which can support community services and infrastructure are estimated to increase approximately \$23 million annually or \$460 million over 20 years of operations. In Alberta, municipal property taxes are estimated to increase approximately \$3.4 million annually or \$68 million over 20 years of operations. In communities along the pipeline route annual property tax payments to more than 20 local governments and more than 24 Aboriginal communities would jump to \$52.4 million from \$25.9 million per year at present. The estimated tax revenues to the Government of Canada are \$2.1 billion over the life of the proposed project. Expanding the TMPL system will create both short- and long- term job opportunities in BC communities along the pipeline route. Construction is scheduled in 2016 and 2017 with an estimated 4,500 workers at peak manpower. Trans Mountain expects to create 108,000 person years of employment, from construction and the first 20 years of operations across Canada; of this 66,000 person years of employment will be in BC and 25,000 will be in Alberta (related to direct Project spending as well as supply chain effects and spending of wages). In communities where construction activities concentrate, the economic impacts will be significant. During the peak construction period of the TMEP and associated facilities, construction hubs will be established along the route for the staging of work and accommodation of workers. Construction workers residing in construction hub communities will spend money on accommodation, meals and other goods and services which will create spin-off benefits for local businesses and economies. A large number of the total construction workforce will come from the communities directly along the route, including nine in BC. In larger communities it is estimated up to 30 per cent of the workforce will be local hires. The proposed expanded operations are anticipated to create 40 new full-time permanent positions in Alberta and 50 new full-time permanent positions in BC.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Application Volume 2 - Economics</p>
Trans Mountain investment in community infrastructure and facilities	<p>Trans Mountain is developing a community investment strategy. Trans Mountain recognizes the importance of local community benefits as part of this Project, and continues to define benefits through stakeholder input.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Community Benefits Program progress reports (NEB Condition 145)</p>
Concern about inadequate power supply in North Thompson Valley	<p>From initial discussions with BC Hydro, Trans Mountain understands that additional power infrastructure will be required in the North Thompson Valley. Trans Mountain is also aware some community residents have expressed concerns about the power supply in the North Thompson Valley and that BC Hydro has addressed the issue with local governments. By the end of 2013, BC Hydro will inform Trans Mountain what infrastructure is required in the North Thompson Valley to supply the additional power while maintaining the public utility's existing customer service standards and commitments. It is anticipated the required infrastructure will be a combination of additions and upgrades to the current BC Hydro system, primarily within BC Hydro's existing rights-of-way. Trans Mountain is not participating directly in any major new power infrastructure projects in the North Thompson Valley.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Uninterruptible Power Supply (UPS) and battery systems (NEB Condition 101)</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Lack of long-term jobs as a result of this Project	<p>Expanding the TMPL system will create both short- and long-term job opportunities in BC communities along the pipeline route. Construction is scheduled in 2016 and 2017 with an estimated 4,500 workers at peak manpower. Trans Mountain expects to create 108,000 person years of employment, from construction and the first 20 years of operations across Canada; of this 66,000 person years of employment will be in BC and 25,000 will be in Alberta (related to direct project spending as well as supply chain effects and spending of wages). In communities where construction activities concentrate, the economic impacts will be significant. During the peak construction period of the TMPL and associated facilities, construction hubs will be established along the route for the staging of work and accommodation of workers. Construction workers residing in construction hub communities will spend money on accommodation, meals, and other goods and services, which will create spin-off benefits for local businesses and economies. A large number of the total construction workforce will come from the communities directly along the route, including nine in B.C. In larger communities it is estimated up to 30 per cent of the workforce will be local hires. The proposed expanded operations are anticipated to create 40 new full-time permanent positions in Alberta and 50 new full-time permanent positions in BC. As per NEB requirements, the SEEMP focuses on construction phase socio-economic effects.</p> <p><i>Note: All figures are based on the proposed expansion of the TMPL at a proposed capacity of 890,000 bbl/d. These estimates will change as economic impact figures are updated to reflect Project design changes and economic conditions.</i></p>	Application Volume 5B - ESA - Socio-Economic
Effect of proposed expansion on local gas prices	<p>Gasoline prices are affected by a large number of global factors. The prices of crude oil are neither controlled nor directly influenced by the development of any specific pipeline. There are some valuable resources online that explain the factors that influence gas prices, including the following links:</p> <ul style="list-style-type: none"> <li>• <a href="http://www.neb.gc.ca/clf-nsi/rcmmn/hm-eng.html">http://www.neb.gc.ca/clf-nsi/rcmmn/hm-eng.html</a></li> <li>• <a href="http://www.capp.ca/Pages/default.aspx">http://www.capp.ca/Pages/default.aspx</a></li> </ul>	N/A
Economic impact and opportunity related to construction crew hosting	Preliminary planning is underway to determine the location of host communities and the anticipated size of construction crews. Economic impacts associated with construction crew hosting were modelled and presented in the ESA. The SEEMP proposes track the number of non-local/regional workers in field communities, categorized by accommodation arrangements, and also proposes to track living out allowances and related stipends. These data will provide an indication of Project-related demand for commercial accommodation and the extent to which Project workers are supporting business opportunities for accommodation providers and other retail services. Details of worker housing will be presented in the Worker Accommodation Strategy (NEB Condition 59).	Application Volume 5B - ESA - Socio-Economic  Section 3.2, Table 3 of this Plan
Benefits to Canada as a whole and to communities/municipalities along the route (e.g., Hope)	As the world's third-largest oil producer, Canada benefits greatly from the export of national resources. Twinning the TMPL will increase Canada's capacity to export these resources by facilitating the movement of oil to the West Coast for marine transport to market. It will further secure the supply of oil products to the Lower Mainland for use by BC's residents and businesses. The Project will also lead to new jobs in the short and long term, job-related training opportunities, and increases in taxes collected through all three levels of government.	Application Volume 5B - ESA - Socio-Economic  Application Volume 2 - Economics
Golf course disruption, construction and remediation (Abbotsford)	Trans Mountain is currently evaluating ways to reduce the impact to the Ledgeview Golf Course. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.	Application Volume 5B - ESA - Socio-Economic  Application Volume 3C - Landowner Relations
Concern about decreased property values near Terminals	Treating landowners – the people who have land agreements with Trans Mountain – and neighbours fairly and equitably is a cornerstone of the relationships Trans Mountain has developed and maintained in communities along the TMPL system. Through respectful dialogue, Trans Mountain's goal is to negotiate mutually-agreeable arrangements with each landowner who may be impacted by the Project. In cases where Trans Mountain is unable to reach a mutually-agreeable arrangement, the NEB has a multi-step process that the Company will follow to address differences of opinions as part of the routing review and approval process. More information about the process is available on the NEB website. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.	Application Volume 3C - Landowner Relations
Will the Project contribute to increased price at gas pump?	Gasoline prices are affected by a large number of global factors. The prices of crude oil are neither controlled nor directly influenced by the development of any specific pipeline.	N/A

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Awareness of positive benefits of the Project	As the world's third-largest oil producer, Canada benefits greatly from the export of national resources. Twinning the TMPL will increase Canada's capacity to export these resources by facilitating the movement of oil to the West Coast for marine transport to market. It will further secure the supply of oil products to the Lower Mainland for use by BC's residents and businesses. The Project will also lead to new jobs in the short and long term, job-related training opportunities, and increases in taxes collected through all three levels of government. Overall, the proposed expansion will enhance Canada's ability to reach diversified markets with its oil, while also increasing tax revenues that can be used to fund government projects and services Canadians depend on such as health care, education, roads and infrastructure. Trans Mountain plans to spend \$5.4 billion by the end of 2017 to construct the line and associated facilities, and a further \$2.4 billion to operate it for the first 20 years. British Columbia's economy is forecasted to grow by \$2.8 billion (GDP) through construction-related spending, and up to \$11.3 billion including Project operations through to 2037. The Project is also anticipated to generate substantial provincial and municipal tax revenue. Provincial governments revenues associated with the Project are anticipated to be in the order of \$1.7 billion, with B.C. provincial government receiving \$1 billion in provincial taxes and Alberta receiving over \$0.4 billion in provincial taxes. Municipal tax revenues which can support community services and infrastructure are estimated to increase approximately \$23 million annually, or \$460 million over 20 years of operations. In Alberta, municipal property taxes are estimated to increase approximately \$3.4 million annually or \$68 million over 20 years of operations. In communities along the pipeline route annual property tax payments to more than 20 local governments and more than 24 Aboriginal communities would jump to \$52.4 million from \$25.9 million per year at present. The estimated tax revenues to the Government of Canada are \$2.1 billion over the life of the proposed project. Expanding the TMPL system will create both short- and long- term job opportunities in BC communities along the pipeline route. Construction is scheduled in 2016 and 2017 with an estimated 4,500 workers at peak manpower. Trans Mountain expects to create 108,000 person years of employment, from construction and the first 20 years of operations across Canada; of this 66,000 person years of employment will be in BC and 25,000 will be in Alberta (related to direct project spending as well as supply chain effects and spending of wages). In communities where construction activities concentrate, the economic impacts are significant. During the peak construction period of the TMEP and associated facilities, construction hubs are to be established along the route for the staging of work and accommodation of workers. Construction workers residing in construction hub communities will spend money on accommodation, meals and other goods and services which will create spin-off benefits for local businesses and economies. A large number of the total construction workforce will come from the communities directly along the route, including nine in BC. In larger communities it is estimated up to 30 per cent of the workforce will be local hires. The proposed expanded operations are anticipated to create 40 new full-time permanent positions in Alberta and 50 new full-time permanent positions in BC.	Application Volume 5B - ESA - Socio-Economic  Application Volume 2 - Economics
<b>Human and Environmental Health</b>		
Risk of carcinogenic effects from products in pipeline	There are no known carcinogenic health related risks related to products within the pipeline. In support of the ESA for the Project, a HHRA was commissioned, the principal aim of which was to identify and understand the potential short- and long-term health risks, including carcinogenic risks, to people exposed to the chemicals that could be released to the environment from the pipeline and associated facilities. Supplemental HHRA studies were conducted and filed with the NEB post-Application related to Westridge Marine Terminal, Marine Transportation, Pipeline Spill Scenarios, and Facility and Marine Spill Scenarios.	Application Volume 5B - ESA - Socio-Economic  Supplemental HHRA filings in June 2014
Health impacts of airborne chemicals	Trans Mountain is committed to minimizing impacts to the local environment, health, and community by working openly and co-operatively with all levels of government, Aboriginal groups, and stakeholders.	Application Volume 5B - ESA - Socio-Economic
What are the human health impacts from odours, and pipeline products? Is there a carcinogenic link?	Trans Mountain strives to minimize the impact of our operations on our neighbours by incorporating odour mitigation measures in our day-to-day activities and Project work. In addition, Trans Mountain is taking steps to enhance our early leak detection system and air monitoring/sampling protocol. Trans Mountain is also looking into procuring technology to facilitate automated calls to residents in the area in the event of an emergency and will provide more information on this initiative to local area residents in the coming months. In support of the ESA for the Project, Kinder Morgan Canada (KMC) commissioned a HHRA, the principal aim of which is to identify and understand the potential short-term and long-term health risks, including carcinogenic risks, to people exposed to the chemicals that could be released to the environment from the pipeline and associated facilities. Supplemental HHRA studies were conducted and filed with the NEB post-Application related to Westridge Marine Terminal, Marine Transportation, Pipeline Spill Scenarios, and Facility and Marine Spill Scenarios.	Application Volume 5B - ESA - Socio-Economic  Supplemental HHRA filings in June 2014
An influx of temporary workers into a community and the effects on health and health care services	Trans Mountain recognizes that the construction of the Project will require a large workforce and may exert an influence on health in nearby communities. The effects of an influx in temporary workers would primarily manifest in those communities acting as a construction hub for construction workers and in particular, those communities that have relatively small resident populations compared to the size of the temporary Project workforce. Engagement will be ongoing as the Project Team continues its detailed design of the Project. The SEEMP proposes track the number of non-local/regional workers in field communities, as well as workers' use of emergency departments and ambulance/emergency transport.	Application Volume 5B Sections 5.8 and 7.2.8 Application Volume 5D Community Health Technical Report  Section 3.2, Table 3 of this Plan

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Health effects of airborne chemicals	Working openly and co-operatively with all levels of government, Aboriginal communities and stakeholders, Trans Mountain is committed to minimizing effects to the local environment, health, and community. A screening level human health risk assessment was initiated for the Project to assess potential effects of pipeline operations on human health. A human health risk assessment was submitted to the NEB in 2014.	Application Volume 5B Sections 6.0 and 7.5.8 Application Volume 5D Screening Level Human Health Risk Assessment of Pipeline and Facilities  Supplemental HHRA filings in June 2014
Health effects from odors at Sumas Terminal	<p>New prevention and community notification measures have been established in response to the release of oil at the Trans Mountain storage facility in Abbotsford. On January 24, 2012, oil from a storage tank at the Sumas Terminal spilled and was fully contained within a bermed area on the property that was lined with an impermeable membrane. The containment worked as designed, and all of the oil was recovered on the same day as the release. It was later determined that damage caused by freezing of the internal roof drain system caused the spill. Odors were reported in the area, which caused concern in the community. As a result, Trans Mountain has taken a number of steps to improve air quality monitoring and its process for communicating with local residents. Steps include the following:</p> <ul style="list-style-type: none"> <li>Enhanced Odor Complaints and Investigation Process – Taking steps to minimize odors and investigate their cause is a top priority. Odors can be reported to 1-888-876-6711 around the clock. All odor reports will be thoroughly investigated and addressed. As a result of the January incident, additional measures will include notification of the local fire department dispatch.</li> <li>Air Quality Monitoring and Reporting – An air monitoring station will be installed at the Sumas Terminal by the end of this year and an independent, rapid response service provider will conduct air monitoring sampling and analysis if needed in the event of an incident.</li> </ul> <p>In addition to the measures to improve air quality monitoring and notification processes, the drain system – found to be the cause of the incident – has been repaired and tested. Procedures have been put in place to prevent a similar incident. Later this fall, a heating system will be installed on the valves at each of the six tanks at the Sumas Terminal to prevent potential freezing during the winter.</p> <p>The effectiveness of mitigation related to odors will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.</p>	<p>Application Volume 5B Sections 6.0 and 7.5.8 Application Volume 5D Screening Level Human Health Risk Assessment of Pipeline and Facilities</p> <p>Section 3.2, Table 3 of this Plan</p>
<p>Concern that residents are dealing with ongoing residual effects of 2012 spill (odors) re: Sumas Terminal</p> <p>Potential increase in odors with increase in tankers and/or tank farms</p>	<p>When crude oil arrives at the Sumas Terminal through the TMPL, it is held temporarily in storage tanks before being shipped to its next destination. Since the crude contains sulphur compounds, often described as having a rotten-egg smell, moving oil into and out of the tanks can cause nuisance odors near the terminal. Petroleum odors can be a nuisance for Trans Mountain's neighbours, and can sometimes also signal a problem with operations. Since safe operations and protection of the environment are always top of mind in this line of work, Trans Mountain investigates and follows up on all odor reports. Continuous air monitoring equipment has been installed at the Sumas Terminal and a new air monitoring program has been implemented for monitoring petroleum vapour concentrations in local neighbourhoods in the event of an incident. Additionally, the drain system – found to be the cause of the spill – has been repaired and tested. Procedures have been put in place to prevent a similar incident. These include:</p> <ul style="list-style-type: none"> <li>The installation of a heating system on the external roof drain system valves to prevent potential freezing; and</li> <li>All drainage valves are now maintained in the closed position when the drainage system is not in use.</li> </ul> <p>Finally, changes were made in the control centre process to initiate immediate field response for any observed deviations in tank volume. A tank level monitoring device has been designed to improve the accuracy of tank level changes and minimize false alarms. Trans Mountain strives to minimize the effects of its operations on their neighbors by incorporating odor mitigation measures in its day-to-day activities and project work. In addition, Trans Mountain is taking steps to enhance its early leak detection system and air monitoring/sampling protocol. Trans Mountain is also looking into procuring technology to facilitate automated calls to residents in the area in the event of an emergency and will provide more information on this initiative to local area residents.</p> <p>The effectiveness of mitigation related to odors will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.</p>	<p>Application Volume 5B Sections 6.0 and 7.5.8 Application Volume 5D Screening Level Human Health Risk Assessment of Pipeline and Facilities</p> <p>Section 3.2, Table 3 of this Plan</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
<p>What are the human health effects from odors, and pipeline products? Is there a carcinogenic link?</p> <p>Risk of carcinogenic effects from products in pipeline</p>	<p>There are no known carcinogenic health related risks related to products within the pipeline. In support of the ESA for the Project, Trans Mountain has commissioned a Human Health Risk Assessment (HHRA), the principal aim of which is to identify and understand the potential short-term and long-term health risks, including carcinogenic risks, to people exposed to the chemicals that could be released to the environment from the pipeline and associated facilities.</p> <p>The effectiveness of mitigation related to odors during construction will be monitored in the SEEMP through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms. As per NEB requirements the SEEMP focuses on the construction phase, not long-term operations.</p>	<p>Application Volume 5B Sections 6.0 and 7.5.8 Application Volume 5D Screening Level Human Health Risk Assessment of Pipeline and Facilities</p> <p>Section 3.2, Table 3 of this Plan</p>
<b>Recreation Use</b>		
Is there potential for shared use (recreational) around the Sumas Terminal?	Trans Mountain is open to discussing recreational use of the right-of-way. Walking, hiking and biking are all great activities for the right-of-way. Trans Mountain does restrict motorized vehicle access like snowmobiles and ATVs because they can disturb the ground. As per NEB requirements, the SEEMP focuses on construction phase effects and issues.	Application Volume 5B - ESA - Socio-Economic
Blocking trail access to Kettle Valley Railway. Blocking Coquihalla Summit Recreation Area access points could negatively impact the District of Hope's tourism especially ski touring and snowshoeing. The Recreation Area is the single biggest expansion opportunity for Hope tourism. Clearing of vegetation may result in avalanche hazard on steep slopes if the route traverses popular ski routes. Adjustments to routes and signage as required.	During construction Trans Mountain will provide advanced and ongoing notification to users of the area to ensure they are fully aware of the activities that will occur and are occurring. Should the Project affect recreational users' infrastructure during construction, mitigation processes will ensure the infrastructure is left in the same, if not better condition after construction. Actual methods will be discussed with landowners and or permit holders. Trans Mountain is open to discussing opportunities to leave infrastructure post-construction to benefit recreational users. As with all of its construction Projects, Trans Mountain will reclaim any areas affected by the proposed pipeline including the pipeline right-of-way and surrounding areas following construction. The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	<p>Application Volume 5B, Sections 5.4, 5.6, 7.2.4 and 7.2.6 Application Volume 5D, Socio-Economic Technical Report</p> <p>Section 3.2, Table 3 of this Plan</p>
<b>Routing</b>		
Impact to property values along the pipeline route	<p>Trans Mountain is searching for feasible route alternatives in order to reduce impacts to residential areas. Trans Mountain appreciates that land devaluation is a concern, and Trans Mountain has been investigating potential impacts upon properties for sale – both with easements and without easements. To date, our investigations have not shown a measurable effect; however, Trans Mountain will continue to monitor this situation.</p> <p>Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.</p>	Application Volume 3C – Landowner Relations
<b>Human Occupancy and Resource Use (HORU)</b>		
Mitigations for trail-users during and after construction	Trans Mountain conducted environmental and socio-economic studies along the proposed pipeline corridor to gather data for the ESA. This assessment will consider: the potential environmental and socio-economic effects of the construction, operations and maintenance of the pipeline; ways in which these effects can be minimized or avoided altogether; and mitigation and reclamation strategies that will further reduce these effects. Overall, Project-related effects on recreation use are addressed in the ESA. The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	<p>Application Volume 5B Sections 5.4 and 7.2.4 Application Volume 5D Socio-Economic Technical Report</p> <p>Section 3.2, Table 3 of this Plan</p>
Effects to outdoor recreation and tourism as well as sport fishing	Outdoor recreational activities, such as hunting, camping, hiking, mountain biking, trail rides, wildlife viewing and snowmobiling are expected to occur at numerous locations along the proposed pipeline corridor. Additionally, outdoor water-based recreational activities along the proposed pipeline corridor include canoeing, kayaking, rafting, rowing, tubing and fishing. Recreational fishing occurs on large watercourses and lakes. Outdoor recreation activities are discussed under HORU in Sections 5.4 and 7.2.4. The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	<p>Application Volume 5B Sections 5.4 and 7.2.4 Application Volume 5D Socio-Economic Technical Report</p> <p>Section 3.2, Table 3 of this Plan</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Potential effects to water-based recreation and tourism	<p>During construction Trans Mountain will provide advanced and ongoing notification to users of the area to ensure they are fully aware of the activities that will occur and are occurring. Should the Project affect recreational users' infrastructure during construction, mitigation processes will ensure the infrastructure is left in the same, if not better condition. Actual methods will be discussed with landowners and or permit holders. Trans Mountain is open to discussing opportunities to leave infrastructure post-construction to benefit recreational users. As with all of its construction Projects, Trans Mountain will reclaim any areas that are affected by the proposed pipeline including the pipeline right-of-way and surrounding areas following construction. This could include adding new footpaths, developing new habitats, improving water crossings or bettering migration corridors. Post-construction environmental monitoring and ongoing right-of-way maintenance will continue following construction. Water-based recreation is considered as part of outdoor recreation under HORU in Sections 5.4 and 7.2.4 as well as Navigation and Navigation Safety in Sections 5.6 and 7.2.6.</p> <p>The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.</p>	<p>Application Volume 5B Sections 5.4, 5.6, 7.2.4 and 7.2.6</p> <p>Application Volume 5D Socio-Economic Technical Report Section 3.2, Table 3 of this Plan</p> <p>Navigation and Navigation Safety Plan (Condition 48)</p>
Potential opportunity to leave infrastructure (e.g., swamp mats, crossing structures) behind to benefit users of recreational trails	Project-related effects on recreation use have been addressed in the ESA. This includes development of mitigation measures to reduce effects and optimize opportunities to enhance recreational use. Outdoor recreation use is discussed under HORU in Sections 5.4 and 7.2.4. This is post-construction issue and thus not pertinent to the SEEMP.	<p>Application Volume 5B Sections 5.4 and 7.2.4</p> <p>Application Volume 5D Socio-Economic Technical Report</p>
Future land use	The primary design objective is to construct the Project within or adjacent to the existing TMPL right-of-way and, where this is not possible, minimize any new linear disturbance. The proposed pipeline corridor was selected to minimize effects on the environment, maximize worker and public safety, and minimize other social effects. Appropriate mitigation (e.g., soil handling, erosion control) and monitoring activities will be implemented during construction to optimize reclamation success. Additional special reclamation measures will be applied, as required, to return the disturbed areas to a stable and maintenance-free condition. Primary road and railway crossings will be bored to minimize interference with existing activities and usage. Land use activities are addressed under HORU in Sections 5.4 and 7.2.4.	<p>Application Volume 5B - ESA - Socio-Economic -</p> <p>Pipeline EPP (Volume 2 of the Environmental Plans)</p>
Routing through recreational areas and facilities	Where practical, the alignment of the proposed pipeline corridor will parallel the existing TMPL. Trans Mountain recognizes that many regional changes have occurred since the pipeline was installed 60 years ago and that some routing decisions made today would be different. In some areas, Trans Mountain is looking at options that go beyond the current operational corridor. Alternate routes for the proposed expanded pipeline may be necessary — especially in areas where land use has changed since the pipeline was built nearly 60 years ago. The selection of the proposed pipeline corridor included both field and desktop assessments of the existing TMPL right-of-way and alternative routing locations that resulted in a proposed pipeline corridor. The proposed pipeline corridor will be designed and constructed in accordance with all applicable standards, and was chosen on the basis of minimal new disturbance and public impact. Where land use has changed since the pipeline went into operation in 1953, there may be a need to route parts of the new line away from the existing TMPL right-of-way. In these cases, Trans Mountain will look at alternatives through comprehensive routing studies in combination with its consultation process. To minimize effects to the urban landscape and landowners, the proposed route of the new pipeline would follow existing linear infrastructure to the extent practical, such as municipal streets or highway, railway or utility corridors, or in some cases parklands. The effectiveness of mitigation related to recreational use during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms.	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Section 3.2, Table 3 of this Plan.</p>
Municipal land use and development plans	<p>In communities where routing may deviate from the existing TMPL right-of-way, Trans Mountain will discuss and apply routing considerations and decision-making criteria in discussions with local stakeholders. Trans Mountain will continue to engage and communicate with communities as new information becomes available. Trans Mountain will continue to contact landowners along the existing TMPL right-of-way, and when route alternatives are selected, Trans Mountain will work with landowners to identify mutually agreeable solutions to concerns. Trans Mountain will inform landowners and lessees of the route location and construction schedule to allow sufficient time to plan and implement alternative land use decisions. Particular attention will be paid to specialized agricultural production systems (e.g., poultry, nursery or berry crop operations). Trans Mountain will locate and flag all existing buried utility lines and cables to be crossed by the pipeline prior to the commencement of ground disturbance activities by using "one call" services in addition to direct contact with utility owners. A discussion of routing principles and selection of the proposed pipeline corridor is provided in Section 4.0. Recreational areas, schools and hospitals are considered community assets that contribute to community way-of-life and are discussed under social and cultural well-being in Sections 5.3 and 7.2.3.</p> <p>Details of future land use are outside the scope of the SEEMP, which focuses on construction – related effects.</p>	<p>Application Volume 5B Sections 4.0, 5.3 and 7.2.3</p> <p>Application Volume 5D Socio-Economic Technical Report</p>



**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
Golf course disruption, construction and remediation (Abbotsford)	Trans Mountain is evaluating ways to reduce the effects to the Ledgeview Golf Course and other golf courses potentially encountered along the proposed pipeline corridor. Golf courses are considered a community asset that contribute to community way-of-life and are discussed under social and cultural well-being in Sections 5.3 and 7.2.3. Socio-economic effects related to specific landowner and land user issues are being addressed at the individual level through direct negotiation and compensation agreements. The SEEMP will focus on the socio-economic effects that would be experienced at a community level, not at the individual landowner level.	Application Volume 5B - ESA – Socio-Economic Application Volume 3C – Landowner Relations
<b>Socio-Economic</b>		
Can TMEP speak to how they will deal with social challenges?	<p>Trans Mountain recognizes that the construction of the Project will require a large workforce and may exert an influence on health in nearby communities. The effects of an influx in temporary workers would primarily manifest in those communities acting as a construction hub for construction workers and in particular, those communities that have relatively small resident populations compared to the size of the temporary Project workforce. As the Project Team continues its detailed design of the Project, community readiness discussions will be part of the ongoing engagement. The Socio-Economic Management Plan identifies key mitigation strategies including:</p> <ul style="list-style-type: none"> <li>• Develop and implement an issues-tracking process to monitor and respond to Project-related socio-economic issues</li> <li>• Establish a process by which community members can raise complaints or concerns related to Project activities or workers</li> <li>• Develop a code of conduct for workers</li> <li>• Communicate with local health authorities, emergency medical services and social service authorities on the timing of the Project, duration of stay in local communities, and expected number of people, and on-site health care plans.</li> </ul> <p>The SEEMP will be a key mechanism through which to monitor and respond to on-going social impacts and issues during the construction phase of the Project.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Socio-Economic Effects Monitoring Plan (this Plan)</p>
Access to both Cheam Lake Wetlands Regional Park and Sumas Mountain Inter-Regional Park could be impacted by construction activity. Will residents and other visitors still be able to access the affected parks during construction?	Physical disturbance to community use areas is assessed in Volume 5B, Section 7.2.4. The Project will endeavour to work its construction schedule around such community events to the greatest extent possible. Trans Mountain will be implementing a range of measures to reduce disturbance to community assets and events. Key mitigation measures include: avoiding important community features and assets during right-of-way finalization; narrowing the right-of-way in select areas; scheduling construction to avoid important community events, where possible; communication of construction schedules and plans with community officials; and other ongoing consultation and engagement with local and Aboriginal governments. Even with mitigation measures, there are still likely to be some residual effects in terms of disruption to community use areas, even as it relates to the general presence of construction activities, vehicles and sensory disturbance. Potential effects on transportation infrastructure are assessed in Volume 5B, Section 7.2.5, Infrastructure and Services.	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Access Management Plan (NEB Condition 47)</p>
What steps will be put in place to ensure business continuity where pipeline construction is adjacent to businesses?	It is Trans Mountain's intention to find a route for the proposed pipeline, which minimizes impact to communities. Where privately-held land is needed for the proposed new route, land agents from Trans Mountain will discuss proposed locations of the pipeline and compensation with landowners. Access and Traffic Management Plans will be used to minimize disruption to traffic. Trans Mountain will also develop a communication plan for activities that impact normal traffic flow, such as road closures, detours, etc.	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Traffic Access and Control Management Plan (NEB Condition 73)</p>
What steps will be put in place to ensure that maintenance or upgrading activities related to municipal infrastructure will not be encumbered in the future?	<p>The construction of the Project could affect infrastructure and services through direct physical disturbance to physical infrastructure that exists in the right-of-way or through increased use of certain infrastructure and services related to direct or indirect Project needs. During construction, there may be direct physical disturbance to roads or other community infrastructure that are crossed by the Project or located in areas required for construction lay-down. A range of mitigation and enhancement measures related to infrastructure and services are recommended in Volume 5B, Section 7.2.5, including those related to:</p> <ul style="list-style-type: none"> <li>• Transportation infrastructure (e.g., roads, rail, air and, where applicable, ports);</li> <li>• Linear infrastructure (e.g., subsurface lines) and power supply;</li> <li>• Waste and water infrastructure;</li> <li>• Housing;</li> <li>• Educational services;</li> <li>• Recreational amenities; and</li> <li>• Emergency, protective and social services (health infrastructure and services are discussed in Section 7.2.8 Community Health)</li> </ul> <p>Discussion is focused on infrastructure that may be physically disturbed by the Project, as well as the overall capacity of community infrastructure and services to meet Project-related changes in demand. Trans Mountain will establish Technical Working Groups with in collaboration with municipalities to address specific technical and construction issues with affected municipalities, and Technical Working Group activities will be reported to the NEB.</p>	<p>Application Volume 5B - ESA - Socio-Economic</p> <p>Technical Working Groups – terms of reference (NEB Condition 14)</p> <p>Technical Working Groups – reports (NEB Condition 49)</p>

**TABLE A-1 Cont'd**

Issue or Concern	Summary Trans Mountain Response	Where Addressed
There are only certain access points to United Boulevard. 23 percent of all Coquitlam employment in United Boulevard area, more than 500 businesses, and 8,000 people work in this area. It is a very important business area for Coquitlam.	This topic is addressed in Volume 5B of the Application. Some businesses may, despite best construction practices, experience disruptions due to residual sensory disturbance related to noise and dust from construction activities, including construction-related traffic. In places where certain municipal roads are being crossed or used for construction purposes, nearby businesses may experience disrupted access. These factors could result in changes in customer behavior such that customers choose not to visit, or reduce their visits to these business locations during the construction phase. To the extent such nuisance factors result in reduced customers and business, they could contribute to temporary decline in business income in select locations during specific periods of construction. Standard urban construction mitigation measures will be implemented to reduce noise, dust, and access disturbance, and the assumption of compensation agreements for direct economic loss will reduce effects. Compensation will be negotiated in some form for any proven economic loss due to disturbance of property. Trans Mountain will also develop a communication plan for activities that impact normal traffic flow, such as road closures, detours, etc. The effectiveness of mitigation related to traffic and access during construction will be monitored through information submitted to the construction community liaison role, phone line, or other construction feedback mechanisms. Trans Mountain will also establish Technical Working Groups with in collaboration with municipalities to address specific technical and construction issues with affected municipalities, and Technical Working Group activities will be reported to the NEB.	Application Volume 5B - ESA - Socio-Economic  Traffic Access and Control Management Plan (NEB Condition 73)  Section 3.2, Table 3 of this Plan  Technical Working Groups – terms of reference (NEB Condition 14)  Technical Working Groups – reports (NEB Condition 49)

### 3.2 Appropriate Government Authorities

This section provides a summary of Trans Mountain's consultation with Appropriate Government Authorities specifically regarding the SEEMP. This includes local and regional authorities, select federal authorities, service providers and select non-governmental community organizations.

In June and July 2015, Trans Mountain hosted meetings to review and get feedback on its proposed socio-economic effects monitoring approach and Project-specific indicators. A total of nine SEEMP meetings were held in communities along the pipeline corridor.

In January 2017 Trans Mountain hosted a webinar to update Appropriate Government Authorities and service organizations on the SEEMP, including monitoring indicators, reporting process and how results of consultation on the SEEMP has been incorporated and considered. Table A-2 provides a summary of SEEMP meeting dates and locations. The invitees focused on Appropriate Government Authorities (e.g., local and regional government, service providers, select federal authorities) as well as select non-governmental community organizations (e.g., tourism, recreation, and business organizations).

**TABLE A-2**

#### **SUMMARY OF APPROPRIATE GOVERNMENT AUTHORITY CONSULTATION ACTIVITIES RELATED TO SOCIO-ECONOMIC EFFECTS MONITORING**

Consultation Activity	Date
SEEMP Meeting – Merritt, BC	June 2, 2015
SEEMP Meeting – Clearwater, BC	June 3, 2015
SEEMP Meeting – Kamloops, BC	June 4, 2015
SEEMP Meeting – Stony Plain, Alberta	June 15, 2015
SEEMP Meeting – Edson, Alberta	June 15, 2015
SEEMP Meeting – Jasper, Alberta	June 17, 2015
SEEMP Meeting – Valemount, BC	June 18, 2015
SEEMP Meeting – Chilliwack, BC	July 14, 2015
SEEMP Meeting – Coquitlam, BC	July 15, 2015
SEEMP Webinar	January 16, 2017

Table A-3 provides of summary of potentially affected communities, local and regional authorities and service providers invited to participate in a SEEMP meeting, also noting which organizations attended at meeting.

**TABLE A-3**

**OUTREACH FOR SEEMP CONSULTATION ACTIVITIES: COMMUNITIES,  
LOCAL AND REGIONAL AUTHORITIES AND SERVICE PROVIDERS**

Alberta	
<i>Municipalities and Regional Governments</i>	
City of Edmonton	Summer Village of Point Allison
Strathcona County	City of Spruce Grove*
Town of Hinton*	Town of Edson*
Yellowhead County	Village of Wabamun
Town of Stony Plain*	Municipality of Jasper*
Summer Village of Seba Beach	Summer Village of Kapasiwin
<i>Local and Regional Authorities and Service Providers</i>	
City of Edmonton Police Commission*	Jasper RCMP Detachment*
Spruce Grove RCMP Detachment	Edson Community Policing Office
Stony Plain RCMP Detachment	Hinton Community Policing Office
Alberta Ministry of Human Services (Child and Family Services Authorities)	Parks Canada*
Alberta Family and Community Support Services (Spruce Grove)*	Travel Alberta
Alberta Health Services	Alberta Culture and Tourism
Tourism Jasper	Tri-Region Tourism (Stony Plain, Parkland County, Spruce Grove)
Association for Mountain Parks Protection and Enjoyment	Community Futures West Yellowhead*
Alberta Northern Rockies Tourism Alliance	Trans Canada Yellowhead Highway Association
Jasper Chamber of Commerce*	Stony Plain Chamber of Commerce
Hinton Chamber of Commerce	Spruce Grove Chamber of Commerce*
Edson Chamber of Commerce	Friends of Jasper National Park
Hinton Mountain Bike Association	Edson Kin Slo Pitch
British Columbia	
<i>Municipalities and Regional Governments</i>	
Village of Valemount*	Regional District of Fraser-Fort George*
Thompson-Nicola Regional District*	District of Clearwater*
City of Merritt*	City of Kamloops*
Fraser Valley Regional District*	District of Hope
City of Chilliwack*	City of Surrey
City of Abbotsford	Township of Langley
City of Coquitlam*	Metro Vancouver*
City of Burnaby	
<i>Local and Regional Authorities and Service Providers</i>	
Kamloops RCMP Detachment*	Merritt RCMP Detachment*
Valemount RCMP Detachment*	Kamloops Fire and Rescue*
Abbotsford Police Department*	Clearwater RCMP Detachment*
Township of Langley RCMP Detachment	Upper Fraser Valley Regional RCMP Detachment*
Coquitlam RCMP Detachment	Hope Community Policing Office (RCMP)
Division 'E' RCMP	Surrey RCMP Detachment
Interior Health*	Burnaby RCMP Detachment
Fraser Health*	Northern Health*
BC Ministry of Social Development and Social Innovation*	Vancouver Coastal Health*
BC Ministry of Jobs, Tourism and Skills Training*	Royal Inland Hospital
Clearwater Mental Health and Substance Abuse	BC Ministry of Children and Family Development*
Canadian Mental Health	Kamloops Mental Health and Addiction
Merritt Mental Health and Substance Abuse	Kamloops Mental Health and Substance Use
Valemount Health Centre	Valemount Community Health
Clearwater Chamber of Commerce*	Venture Kamloops*
Clearwater Employment Services*	Kamloops Chamber of Commerce
North Shore Business Improvement Association	Valemount Chamber of Commerce*
Merritt Chamber of Commerce*	Chilliwack Economic Partners
Hope Chamber of Commerce	Abbotsford Chamber of Commerce
Chilliwack Chamber of Commerce*	Tri-Cities Chamber of Commerce
Surrey Board of Trade*	Kamloops Hotel Association*
Burnaby Board of Trade*	Tourism Valemount
Tourism Wells Grey*	Valemount and Area Recreation Development Association* (VARDA)
Valemount Visitor Centre*	Valemount Learning Centre*
Valley District Maintenance*	

Note: \* Organization attended a SEEMP consultation meeting

### 3.2.1 Appropriate Government Authority Consultation Summary – May 2012 to August 2016

Table A-4 provides a summary of feedback received through Trans Mountain's consultation with Appropriate Government Authorities (e.g., local and regional government, service providers, select federal authorities) as well as select non-governmental community organizations (e.g., tourism, recreation, and business organizations) from May 2012 through August 2016 specific to the SEEMP. It should be noted that the SEEMP meetings provided opportunity for general discussion about Project construction and associated community issues and opportunities; only feedback/issues directly related to the SEEMP are presented in Table A-4.

**TABLE A-4**

#### **SUMMARY OF APPROPRIATE GOVERNMENT AUTHORITY CONSULTATION FEEDBACK ON THE SEEMP (MAY 2012 TO AUGUST 2016)**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Stony Plain  June 15, 2015	Volunteering in the community may go up; is there a way to track the # of volunteer hours by workers?	Though Trans Mountain will encourage worker volunteering, Trans Mountain recognizes that workers may have varying degrees of energy and motivation after a long day's work and will not require Contractors to track this in detail. Trans Mountain will report information about workers volunteering if communities provide it as a theme within indicator # 12.	Table 3, Indicator #12
	Tracking of road closures and number of businesses impacted	Trans Mountain appreciates the dialogue and feedback that emerged during the SEEMP meetings, and has considered this idea. Trans Mountain will be working with directly impacted businesses to ensure compensation for proven economic loss during construction. While Trans Mountain could provide data on the number of businesses that were directly affected by Project construction and thus receiving compensation, this data point does not meet all the criteria for a monitoring indicator. In particular, tracking the number of businesses impacted will not in itself be informative regarding how to improve mitigation to limit adverse effects on businesses as construction progresses. It would be an indicator of lagging effect not tied to performance enhancement.  Trans Mountain will include "business impact" and "road closures/access" as issues themes for data tracking for indicator #11. In the event such issues are raised in the context of indicator #11 in particular locations, mitigation designed to reduce such impacts will be checked for efficacy by location (e.g., construction communications plans, detour notifications, traffic control plans, noise reduction, by-law adherence, etc.). Qualitative feedback on these issues will also be tracked through indicator #12.	Table 3, Indicator #11 and #12
	A phone line would be the best method to monitor issues related to traffic/access	Trans Mountain agrees community feedback activities, including a phone line, will be an effective means of identifying traffic and access related issues. Trans Mountain will ensure that "business impact" and "road closures/access" are identified as issues themes for data tracking for indicator #11. In the event such issues are raised in the context of indicator #11 in particular locations, mitigation designed to reduce such impacts can be checked for efficacy by location.	Table 3, Indicator #11
SEEMP Meeting: Edson  June 15, 2015	The worker transportation indicator will also be impacted by local versus non-local worker percentages	Trans Mountain acknowledges this comment; where possible, Trans Mountain will provide daily shuttle services for all workers (local or non-local) from pre-determined staging areas to work sites.	General comment; not specifically addressed in this Plan.
	Project contribution will be challenging to identify, as communities already experience effects from resource sector	Project-specific indicators have been developed to monitor Project-specific contributions to effects and are focused on information specific to TMEP.	Section 1.5, 1.6 and 3.2 (Table 3)

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Edson (cont'd)	Project-specific indicator focus is narrow; people will be interested in more general terms, and will want to know what the community can do to prepare	Regarding more general information, the SEEMP has included context indicators to reflect the general socio-economic conditions in which Project construction will occur and which reflect the general resiliency or vulnerability of regions in terms of ability to absorb Project-specific stressors. Further, indicators #11 and #12 will provide qualitative feedback from communities about experienced social effects, which will provide a more narrative explanation of issues and impacts.  In terms of communities knowing what they can do to prepare, the SEEMP includes a 'forward-looking' indicator (indicator #5, number of full-time workers related to Project construction in field communities anticipated in next business quarter) to communicate anticipated worker numbers to communities as construction evolves. Apart from the SEEMP, Trans Mountain will also be engaging communities in the lead up to construction about issues and opportunities related to workforce hosting.	Table 3, indicators #5, #11, #12 Section 3.3
	Impacts on housing could create effects for vulnerable populations	The SEEMP allows for reporting and exploration of themes about differential impacts for vulnerable groups that emerge through qualitative feedback received, which will be reported via indicators #11 and #12. Context indicators related to rental accommodations will assist in understanding the relative status of rental housing availability in construction regions and thus which regions may have more existing housing pressures to start with.	Table 3, indicators #11 and #12 Table 4
	Water usage data can be provided; it is a good indicator of transient populations	Trans Mountain appreciates the dialogue and feedback that emerged during the SEEMP meetings. Trans Mountain heard that data could be provided by some municipalities about municipal water usage if it would be helpful to Trans Mountain. Water use/demand data would provide general statements of cumulative demand, but would not identify the reasons for change, Project-specific contribution to change, nor pinpoint where TMEP mitigation or procedures need to be improved/adapted. Town of Edson noted that qualitative feedback would be more informative than quantitative data with respect to understanding adverse socio-economic effects. Trans Mountain's relationship and engagement with the Town of Edson is on going and any Project-specific water-related issues will be addressed in direct collaboration with the Town of Edson via the Technical Working Group or other engagement mechanisms. Any feedback about adverse effects on municipal water capacity will be captured qualitatively through indicator #12.	Table 3, Indicator #12.  Municipal water needs will be addressed through Technical Working Groups at municipal level.
	Housing and quality of housing; rental accommodation online listings (views per hour)	Trans Mountain has added a number of indicators in response to interest in Project effects on housing. The SEEMP will monitor the number of worker-days related to construction in field communities by accommodation arrangement (indicator #2), as well as living out allowance (indicator #3) and qualitative feedback about Project use of local/regional commercial accommodation (indicator #4). These indicators will provide a direct reflection of Project-specific pressures on local accommodation. Context indicators related to rental accommodations will also be tracked in order to understand the relative resiliency or vulnerability of certain communities to housing pressures. Any other Project-specific feedback about adverse effects on housing will be reported through indicators #11 and #12.	Table 3 (indicators #2, #3, #4, #11, and #12) Table 4

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Edson (cont'd)	Town may be able to provide information grocery, bulk water use, but that in general Town is reliant on a lot of provincial information.	Response to water use point provided above. Any feedback about adverse effects on grocery store capacity or other services will be captured qualitatively through indicator #12.	Table 3 indicator #12
	Law enforcement topics	Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected. Select crime rates are provided as context indicators to provide information on the relative resiliency or vulnerability of communities to certain types of policing incidents.	Section 3.4 Table 4
	Qualitative feedback will be more informative than quantitative data	The SEEMP has included consideration of information received through qualitative feedback mechanisms. Qualitative feedback about socio-economic effects will be monitored via indicators #11, #12 and #13.	Section 3.2, Table 3, indicators #11, #12 and #13
	Communities would be interested in feedback from workers regarding their experiences in the community	Trans Mountain appreciates the feedback. Trans Mountain will relay any information it receives from workers.	Not specifically addressed in this Plan. This will be managed through broader Project communications channels.
	Suggest meetings with a range of organizations to solicit qualitative feedback	Trans Mountain representatives will be available to meet with stakeholders during construction. Trans Mountain will continue to work with communities and organizations to develop ongoing engagement opportunities during construction. Qualitative feedback received about socio-economic effects through on-going municipal engagement will be tracked and reported via indicator #12.	Trans Mountain will develop a Construction Communications and Notifications Plan for pipeline communities, which is outside of this Plan. Table 3, indicator #12.
SEEMP Meeting: Valemount, BC June 18, 2015	Valemount will have a housing study completed by the end of 2015 and can share it with Trans Mountain	Trans Mountain has reviewed this study and included information from it about average rental prices in Valemount in the Context indicator information for the Fraser Fort George-Thompson Nicola Region.	Section 5.3
	The Learning Centre could track how local hires benefit from TMEP jobs and, when the Project is complete, provide data on who locally worked for the Project, as well as if they are working in Valemount as a result of the Project	Trans Mountain appreciates this information and notes that employment opportunity monitoring will be conducted under NEB Condition 107. Trans Mountain would welcome any community-based information related to local benefits being tracked during construction.	Not addressed in this Plan. See Aboriginal, Local and Regional Employment and Business Monitoring Reports (NEB Condition 107).

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Valemount, BC (cont'd)	RCMP can collect data on the types of incidents that are happening over a certain period of time but have limited information	Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected..	See Section 3.4
	RCMP could provide data on number of reported files from one year to the next	See above	See above
	Northern Health is interested in tracking of non-urgent care incidents on-site, and how many require a local health services referral/response	Trans Mountain understands the importance of this information to local health providers, and has included monitoring indicators for this topic. Firstly, indicator #9 - number of times (by location) a non-local "captive" Project worker (e.g., in a camp, on work-site): a) was referred or sent to local emergency departments; and b) required ambulance or other emergency transport. Secondly, indicator #10 – number of medical visits to Project on-site medical facilities (occupational vs. non-occupational) .	Table 3, indicators #9 and #10
	Northern Health is doing work on key performance indicators in hospitals. For example: measuring use of emergency rooms for non-urgent issues, those residing in local area compared to non-locals. Will possibly be able to have a means to track this by the fall of 2015.	<p>Since this original comment, Trans Mountain had further discussion with Northern Health about data on the use of diagnostic and treatment centre and/or Emergency Room visits by non-residents for the Valemount area (through written comments in December 2016 and discussion in January 2017).</p> <p>During a January 2017 follow-up call with Northern Health, Northern Health advised that this information is now tracked internally but is not readily available for public dissemination. It was also noted by Northern Health that it is a better indicator of cumulative demand; it would reflect increases due to regular seasonal tourism influx, increases due to other projects, and would not delineate TMEP-specific impacts. Northern Health advised that it would be important for Trans Mountain to include a monitoring indicator on TMEP worker referrals to local health services, which Northern Health can keep an eye on. Trans Mountain has included this in the Plan (see indicator #9), on Northern Health's request and suggestions. Northern Health advised they are satisfied with regular monitoring and feedback via the Project-specific indicators, and if issues emerge either through this data or through Northern Health's staff experiences, further discussions and investigation of Northern Health's own data may be warranted. As suggested by Northern Health, Trans Mountain has listed a context indicator of "quantitative and qualitative Valemount hospital utilization data from Northern Health".</p>	<p>Section 3.3 Table 3, indicator #9</p>

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Valemount, BC (cont'd)	If VARDA had an indicator, such as the number trail passes purchased by Project workers, we could track the amount of snowmobile recreation users. VARDA does not need this information but we could track it if Trans Mountain was interested.	Trans Mountain appreciates the dialogue and ideas that were explored during the SEEMP meetings. Data on number of trail passes purchased by Project workers would not inform Trans Mountain's understanding of if adverse effect were occurring (i.e., it may be positive), signal a need for adaptive management, nor pinpoint where TMEP mitigation or procedures may need to be improved/adapted. Trans Mountain heard from meeting participants in Valemount that regular meetings would be the preferred way to provide feedback and information on issues and challenges during construction. Qualitative feedback themes about trail use and its effect on other users would more expeditiously and directly assist Trans Mountain with adaptive management. Feedback received from VARDA or other stakeholders regarding adverse effects of off-duty patterns of workers will be captured in indicator #11 and 12.	Table 3, indicators #11 and #12
	It would be helpful to have a tracking process for Project hotel use during construction	Trans Mountain understands the importance of this information to temporary accommodation providers, and has included monitoring indicators for this topic: living out allowance (indicator #3) and qualitative feedback about Project use of local/regional commercial accommodation (indicator #4).	Table 3, indicators #3 and #4
	Regular meetings to discuss issues and challenges around construction	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Qualitative feedback received about socio-economic effects through on-going municipal engagement will be tracked and reported via indicator #12.	Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan. Table 3, indicator #12
SEEMP Meeting: Merritt, BC  June 2, 2015	Monitor the potential stress on resources or dollars for extra help, specifically RCMP	Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management/resourcing will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.	Section 3.4
	RCMP would like regular dialogue with TMEP around issues	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain, through its Security Program, is working with police services in construction hub communities (Municipalities and RCMP Detachment Commanders) on coordination, protocols and working relationships related to TMEP construction. This direct working relationship will occur throughout construction.	Addressed through NEB Condition 63 Security Management Programs. Section 3.4
	Have someone accessible to engage in dialogue around community impacts during construction	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities and organizations to develop ongoing engagement opportunities during construction. Qualitative feedback received about socio-economic effects through on-going municipal engagement will be tracked and reported via indicator #12.	Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan. Indicator #12



**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Chilliwack, BC  July 14, 2015)	Lack of established baseline for proposed [Project-specific] indicators; ensuring indicators are meaningful for communities (needs to be accompanied by other data)	Trans Mountain has included a description of the baseline, pre-construction socio-economic conditions (context indicators) in the SEEMP, and will track context indicators as part of each reporting cycle as a way to evaluate the relative resiliency or vulnerability of certain areas to Project-specific impacts. Project-specific monitoring indicators do not have a pre-construction baseline, as they are specific to construction activities, but changes and increases in certain indicators will be evaluated over time. Trans Mountain has adapted the indicators in the SEEMP in response to feedback received during engagement and to ensure socio-economic issues of concern that have been raised are reflected by meaningful and available data.	Section 3.1, 3.3 and Section 5.0 Appendix A
	Communicate concern/complaint, TMEP response/action taken, and whether or not issue is resolved and if not why	Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will also send notification to Appropriate Government Authorities (i.e., local and regional governments, service providers) and Aboriginal groups. This notification will comprise a web link to the pertinent regional Socio-Economic Monitoring Report. Trans Mountain will also follow-up on stakeholder and Aboriginal group inquiries and questions about Socio-Economic Monitoring Reports.  Regarding the feedback line /complaints process specifically, Trans Mountain will track and report on all inquiries and complaints and will report issue resolution, or rationale for non-completion, to stakeholders, regulators and Appropriate Government Authorities as required.	Section 4.3.  Further details on Trans Mountain's complaints process and system are found in Section 9.0 of the response to NEB Condition 53 (Fugitive Emissions Management Plan for Westridge Marine Terminal) [Filing ID <a href="#">A84416-3</a> ].
	Reporting in a timely fashion; communities want to know that feedback is being acted upon and actioned.	Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will also send notification to Appropriate Government Authorities (i.e., local and regional governments, service providers) and Aboriginal groups. This notification will comprise a web link to the pertinent regional Socio-Economic Monitoring Report. Trans Mountain will also follow-up on stakeholder and Aboriginal group inquiries and questions about Socio-Economic Monitoring Reports.	Section 4.3.
SEEMP Meeting: Coquitlam, BC  July 15, 2015	Consider recently published health survey containing baseline information collected for the region (joint report by Fraser and Vancouver Coastal Health Authorities)	Trans Mountain appreciates this suggestion. Trans Mountain reviewed and considered the information in the "My Health My Community" profiles published by Fraser Health Authority and Vancouver Coastal Health Authority. The community health survey was conducted in 2013/2014 and will not be updated and published regularly during the two-year Project construction window. The type of indicators and timing of the data will not assist in informing or contextualizing TMEP-specific adverse socio-economic effects during the 2017-2019 construction period.	Not specifically addressed in this Plan.
	It is important that TMEP consider running a baseline first to have something to compare project indicators to	Trans Mountain has included a description of the baseline, pre-construction socio-economic conditions (context indicators) in the SEEMP, and will track context indicators as part of each reporting cycle. Project-specific monitoring indicators do not have a baseline, as they are specific to construction activities.	Section 5.0

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Coquitlam, BC (cont'd)	TMEP is not including other broader community impact points by proposing Project-specific indicators only. TMEP should consider other impacts, for example increased demand for services and infrastructure or labour shortages within communities and related impact on businesses. There is a disconnect between the types of effects and the monitoring indicators (this comment was from a business organization, not a government authority).	<p>Trans Mountain is considering broader community impact points. Trans Mountain will track context indicators as part of each reporting cycle, to reflect the broader socio-economic conditions in which Project construction activities will occur. The context indicators will provide information on broader community topics, such as labour force size, crime rates, and rental vacancy rates. Context indicators are important for two reasons. First, by providing information about socio-economic factors unrelated to the Project, they may help explain (or provide context for) why observed socio-economic change is occurring. Second, they help establish a picture of the overall socio-economic conditions in the area, which identifies the extent to which a given community may be resilient and able to more easily absorb or adapt to Project-related influences; or whether the community is likely to be more vulnerable to adverse impacts. Broader community indicators alone however will not meet the objective of the SEEMP in terms of examining the effectiveness of the construction-phase socio-economic mitigation and identifying strategies to adapt /enhance construction-phase mitigation – as they do not pinpoint reason for change, how the Project did to influence the change or where TMEP mitigation or procedures may need to be improved/adapted, particularly in large urban centres where many other projects may be occurring at the time of TMEP construction.</p> <p>Qualitative feedback from regarding adverse Project-related effects on services and infrastructure will be captured in indicators #12 and #4.</p> <p>Trans Mountain will ensure that “business impact” and “road closures/access” are identified as issues themes for data tracking in the context of indicator #11. In the event such issues are raised in the context of indicator #11 in particular locations, mitigation designed to reduce such impacts can be checked for efficacy by location (e.g., construction communications plans, detour notifications, traffic control plans, noise reduction, by-law adherence, etc.).</p>	Section 3.3 and Section 5.0 Table 3, indicators #4, #11 and #12

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Coquitlam, BC (cont'd)	Monitoring feedback by complaints does not help health side and does not appear to be an effective way of monitoring. In traffic accidents, if someone rear ends a car as a result of flag person then it is attributable (comment from a business organization).	<p>Trans Mountain has expanded its indicator list based on input from health authorities, and has included monitoring indicators for health topics: indicator # 9) number of times (by location) a non-local "captive" Project worker (e.g., in camp, on work-site): a) was referred or sent to local health facilities; and b) required ambulance or other emergency transport. In addition, indicator #10 has been added – number of medical visits to Project on-site medical facilities (occupational and non-occupational).</p> <p>Trans Mountain understands the concern about increased traffic and traffic safety. NEB Condition 73 (Traffic Access and Control Management Plan) provides further detail on Project-related traffic including current traffic volumes and anticipated traffic volumes during the construction period for both day and night times. Trans Mountain (through its Security Program) is also working with police services in construction hub communities to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.</p> <p>In the SEEMP, a context indicator for traffic criminal violations is included (Table 4), as well as an indicator to track Project specific traffic incidents (indicator #6). In addition, any qualitative community level concerns or feedback about adverse traffic effects will also be monitored and reported through indicators # 11 and #12.</p>	<p>Table 3, indicator #6, #9, #10, #11 and #12.</p> <p>Table 4</p> <p>Section 3.4</p> <p>See also NEB Condition 73 Traffic Access and Control Management Plan</p>
	Trans Mountain should monitor longer than the construction period: two to three years after the Project is built to see the real effects. For example, look at a specific community and see what happens when everything moves out.	Trans Mountain prepared the SEEMP to fulfil the requirements of the NEB Condition 13, which requests that potential adverse socio-economic effects of the Project be monitoring during construction. Monitoring will not extend beyond the construction phase.	Not specifically addressed in this plan. Monitoring will not extend beyond the construction phase, as per NEB Condition 13 requirement.
	TMEP should consider monitoring ahead of time. For example, tracking average prices	Trans Mountain has included a description of the baseline, pre-construction socio-economic conditions in the SEEMP, and will track context indicators as part of each reporting cycle. NEB Condition 13 requires that monitoring focuses on the construction phase.	Section 5.0
	Local government should have direct line to and relationship with community construction Liaisons. The process needs to be simple because any complaints will go to local politicians and it is easier if there is one point person.	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities and organizations to develop ongoing engagement opportunities during construction.	Not specifically addressed in this Plan. Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Jasper, AB  July 17, 2015	Qualitative indicators, such as volunteering in Jasper	Though Trans Mountain will encourage worker volunteering, Trans Mountain recognizes that workers may have varying degrees of energy and motivation after a long day's work and will not require Contractors to track this in detail. Trans Mountain will report information about workers volunteering if it is provided by communities as a theme within indicator #12.	Not specifically addressed in this Plan. Will be managed through broader Project communications channels.
	Do not use open houses to engage the community, small and face to face meetings make for good discussions	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities to develop ongoing engagement opportunities during construction.	Not specifically addressed in this Plan. Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.
	KMC is doing a good job at being transparent and balanced	Trans Mountain appreciates this feedback.	N/A
	There are increases in traffic and policing activities, specifically driving under the influence infractions in other oil communities	Trans Mountain has included monitoring indicators for traffic related topics: motor vehicle collisions or reportable incidents that involve Project vehicles on public roads or Contractor-owned vehicles during off work hours; total workers transported from staging areas per day average; non-Contractor vehicles in staging area per day (average); number and types of calls/complaints received by TMEP (by location, by topic); and qualitative feedback themes about community concerns and experienced social effects. Trans Mountain will also track crime rates.  In addition, Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.	Table 3 and Table 4 Section 3.4
SEEMP Meeting: Clearwater, BC  June 3, 2015	Request: ensure that workers obey the local bylaws, for example no idling	Trans Mountain will have a no idling rule. Regarding worker behaviour, Trans Mountain will monitor and report on information submitted to the construction community liaison, phone line, or through other construction feedback mechanisms, and any adverse effects noted related to worker conduct will be included in indicator #11 and #12. Trans Mountain will note and consider any feedback from direct engagement with communities about these issues of worker behaviour and/or by-law infractions.	Table 3, indicators #11 and #12
	KMC monitor temporary increases to resource needs such as public works, permitting, recreation, fire, bylaw enforcement	Meeting participants from District of Clearwater indicated regular dialogue between TMEP and community representatives would be a preferred method to provide feedback on adverse issues and concerns during construction. Trans Mountain will monitor any concerns about resourcing demands and needs with the District of Clearwater through regular engagement with and qualitative feedback from the District of Clearwater during construction. This will be captured and reported in the SEEMP through indicator #12.	Table 3, indicators #11 and #12

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Clearwater, BC (cont'd)	KMC track its workers hotel nights so that associated economic benefit can be calculated	Trans Mountain has included an indicator in response to this suggestion: indicator #3 - living out allowance or related stipend (total worker days paid and total value). This will be reflective of money spent by non-local/regional, non-camp workers in local/regional communities on accommodation, meals and incidentals. This information can be used by communities or other interested parties to discuss/calculate economic benefits. Trans Mountain has also included an indicator (#4): qualitative feedback about Project use of local/regional commercial accommodation (e.g., hotels, motels, campgrounds). This will provide additional information about Project use of accommodation and feedback about associated benefits and issues.	Table 3, indicator #3 and #4
	Request for regular dialogue with community representatives	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities and organizations to develop ongoing engagement opportunities during construction.	Not specifically addressed in this Plan. Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.
	The District would like reports from TMEP regarding SEEMP outcomes	Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will also send notification to Appropriate Government Authorities (i.e., local and regional governments, service providers) and Aboriginal groups. This notification will include a web link to the pertinent regional Socio-Economic Monitoring Report. Trans Mountain will follow-up on stakeholder and Aboriginal group inquiries and questions about Socio-Economic Monitoring Reports.	Section 4.3
SEEMP Meeting: Kamloops, BC  June 4, 2015	Would like updates for community during construction	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities to develop ongoing engagement opportunities during construction. Trans Mountain will publish each Socio-Economic Monitoring Report on the TMEP website. Trans Mountain will also send notification to Appropriate Government Authorities (i.e., local and regional governments, service providers) and Aboriginal groups. Trans Mountain will follow-up on stakeholder and Aboriginal group inquiries and questions about Socio-Economic Monitoring Reports.	Section 4.3  Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.
	The community is willing to share data on additional noise and dust complaints.	Data received from on these issues will be reported via indicator #12. Trans Mountain will work with communities to include relevant context indicator data from communities that wish to provide it and where it is important to the community to do so.	Table 3, indicator #12
	Community can provide housing schematic, a baseline on housing needs assessment and an annual point in time homeless count	Meeting participants noted they would prefer meetings between TMEP and community representatives around issues and concerns during construction. Any feedback and data received through on-going engagement with the municipality will be captured via indicator #12. As SEEMP implementation progresses, Trans Mountain will work with communities to include relevant context indicator data from communities that wish to provide it and where it is important to the community to do so.	Table 3, indicator #12 Section 3.4

**TABLE A-4 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Meeting: Kamloops, BC (cont'd)	RCMP can provide statistics on past experience with traffic issues as a result of parking staging areas to shuttle works to the worksite	<p>Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.</p> <p>Trans Mountain has included monitoring indicators for traffic related topics in the SEEMP: motor vehicle collisions or reportable incidents that involve Project vehicles on public roads (indicator #6); total workers transported from staging areas per day average (indicator #7); personal vehicles in staging area per day (average) (indicator #8); number and types of calls/complaints received through TMEP feedback mechanisms (by location, by topic) (indicator #11); and qualitative feedback themes about community concerns and experienced social effects (indicator #12).</p>	Table 3 indicators #6, #7, #8, #11, #12 Section 3.4
	Venture Kamloops will have a Workforce Capacity study done in October 2015 that will outline job vacancies in different sectors and accurate numbers needed for skilled and unskilled labor which can be shared	Trans Mountain appreciates this comment. Trans Mountain is developing an Aboriginal, Local and Regional Skill and Business Capacity Inventory through NEB Condition 11, which is distinct from the SEEMP.	<p>Not specifically addressed in this Plan.</p> <p>Aboriginal, Local and Regional Skill and Business Capacity Inventory (NEB Condition 11),</p>
	Consider health and wellness for workers during construction	Trans Mountain has included monitoring indicators for health topics on the recommendation of a health authority: indicator #9 - number of times (by location) a non-local "captive" Project worker (e.g., in camp, on work-site): a) was referred or sent to local health facilities; and b) required ambulance or other emergency transport. Trans Mountain has also included the indicator #10: "number of medical visits to Project on-site medical facilities". Trans Mountain believes that qualitative monitoring will provide important information.	Table 3, indicators #9 and #10.
	Prefer meetings between TMEP and community representatives around issues and concerns during construction	Trans Mountain representatives will be available to meet with stakeholders during construction to discuss topics of interest. Trans Mountain will continue to work with communities to develop ongoing engagement opportunities during construction. Qualitative feedback received about socio-economic effects through on-going municipal engagement will be tracked and reported via indicator #12.	<p>Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.</p> <p>Table 3, indicator #12</p>

The engagement with Appropriate Government Authorities about the SEEMP included early discussion about what sorts of indicators could be considered for the SEEMP in the context of established criteria in SEEMP-specific meetings. Many of the discussions about indicator ideas were exploratory in nature (i.e., not necessarily requests or offers of data). In all cases, Trans Mountain further evaluated each idea brought forward in light of the SEEMP's indicator criteria, availability and timeliness of information, whether there was an offer or strong recommendation to provide or include data from a Government Authority or Aboriginal group or landowner/tenant, and whether the data would substantively and differentially contribute to enhancement of a Trans Mountain management objective or understanding of mitigation effectiveness in light of other indicators related to the same or similar topic. These factors were

considered to ensure that the information collected is meaningful and useful in light of the SEEMP's objectives, and that data is not being collected for the sake of collecting data.

This led to the series of draft indicators and a draft Plan, which was the subject of further engagement (see Table A-5). Proposed indicators were put forward in the draft Plan that was circulated for review to meeting participants and a wider audience, in September 2016. Based on additional feedback received, Trans Mountain made further indicator refinements. An overview of the final plan and final indicators was presented and discussed in a webinar in January 2017, which included a discussion of changes in indicators based on feedback and rationale for inclusion and non-inclusion of ideas that had been brought forward. Trans Mountain followed up with participants after the January 2017 webinar, prior to Plan finalization, with responses to questions and issues raised (questions and issues are summarized in Table A-5, with updated responses). Since this time, Trans Mountain received no further response or feedback in relation to the SEEMP.

### 3.2.2 New Interests, Issues, Concerns and Response – September 2016 to January 2017

Table A-5 includes new interests, issues and concerns, as well as Trans Mountain's response with respect to the SEEMP identified through Appropriate Government Authority consultation activities between September 2016 and January 30, 2017.

As noted above, proposed indicators and monitoring approach subject to discussion in summer 2015 were put forward in the draft Plan that was circulated for review to Appropriate Government Authorities, potentially affected Aboriginal groups and affected landowners/tenants, in September 2016. Based on additional feedback received, Trans Mountain made further indicator refinements. An overview of the final plan and final indicators was presented and discussed in a webinar in January 2017, which included a discussion of changes in indicators based on feedback and rationale for inclusion and non-inclusion of ideas that had been brought forward. Trans Mountain followed up with participants after the January 2017 webinar, prior to Plan finalization, with responses to questions and issues raised (questions and issues are summarized in Table A-5, with updated responses). Since this time, Trans Mountain received no further responses, feedback or suggestions of indicators or data in relation to the SEEMP. There are no outstanding issues or concerns related to the SEEMP identified.

**TABLE A-5**

#### **SUMMARY OF APPROPRIATE GOVERNMENT AUTHORITY CONSULTATION FEEDBACK ON THE SEEMP (SEPTEMBER 2016 TO JANUARY 2017)**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Technical Working Group Dec 15, 2016	You indicate that you will collect the data monthly, how often will you make it available?	Trans Mountain will prepare quarterly reports during construction that will be publicly available.	Section 4.3
	Is the tempo of construction perceived to be 24 hours a day or normal business hours? How will that work? Is it something we need to integrate into noise bylaw, if need to make an exception, then we need to plan for that and some of the public perception and response to construction activities.	Trans Mountain's construction and execution plans assume that summer hours are 12 hours a day to make maximum use of daylight. Winter would be 10 hours. Generally pipeline Contractors break during long weekends.	N/A
SEEMP Webinar January 16, 2017	In reviewing the SEEMP, I do not see any reference to the impact of the Project beyond Burnaby. How do you plan to monitor Project impacts from Burnaby to the 200 mile limit?	The SEEMP encompasses the whole Project and Trans Mountain will also be providing regional specific reports. As the SEEMP is required to focus on the construction-phase, it does not extend to communities along the marine corridor.	N/A
	The key here is that the Project includes shipment of the product through Burrard Inlet, the Strait of Georgia and out through the Strait of Juan de Fuca. How will you monitor the impact of the Project through these areas?	NEB Condition 13 requires the SEEMP to monitor effects during the construction of the Trans Mountain Expansion Project. From a marine perspective, this includes the construction of the Westridge Marine Terminal in Burrard Inlet but does not cover the movement of Project-related marine vessels (i.e., oil tankers, tugs) using the shipping lanes in Burrard Inlet, Georgia Strait, Haro Strait, and Juan de Fuca Strait. Jurisdiction over shipping in marine waterways remains with Transport Canada.	N/A

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Webinar (cont'd)	In our session in Coquitlam we (Burnaby Board of Trade) also wanted you to track motor vehicle accidents in the areas of construction but not every accident will include Project vehicles. How will you track this?	<p>Trans Mountain understands the concern about increased traffic and traffic safety. Trans Mountain is working with police services in construction hub communities (Municipalities and RCMP Detachment Commanders) on coordination, protocols and working relationships related to TMEP construction. Trans Mountain, through its Security Program, is working with police services to determine an internal incident-tracking system that will identify calls for service directly related to TMEP. This data will be a way to evaluate and monitor the Project-specific interaction with police services, and will assist in determining if and when supplemental resources for policing or other adaptive management related to security or public safety may be required. As this working relationship and data-sharing protocol advances, Trans Mountain will explore with police services if elements of this data and its use are appropriate for presentation in the SEEMP. Full data details and decision-making about adaptive management will occur in a confidential manner between police services and Trans Mountain to ensure security and privacy considerations are respected.</p> <p>NEB Condition 73 (Traffic and Access Control Management Plan [Filing ID <a href="#">A84149-2</a>]) provides further detail on Project-related traffic including current traffic volumes and anticipated traffic volumes during the construction period for both day and night times. In the SEEMP, a context indicator for traffic criminal violations is included (Table 5), as well as an indicator to track Project-specific traffic incidents (indicator #6). Concerns about traffic will also be monitored qualitatively through inquiries to Trans Mountain's public information phone line and email, or other qualitative feedback and will be reported as part of indicators #11 and #12.</p>	<p>Section 3.4</p> <p>Table 3, indicators #6, #11 and #12</p> <p>Traffic Access and Control Management Plan (NEB Condition 73)</p>
	Are you able to refine your analysis to local communities? The impacts on the regions could be statistically irrelevant but more severe in the smaller communities.	<p>Trans Mountain understands the importance of obtaining indicators that are sufficiently granular and regularly updated in order to capture the potential socio-economic effects of the Project.</p> <p>Some Project-specific indicators will be evaluated and presented on a community-specific basis within the regional socio-economic monitoring reports, such as themes noted in inquiries to Trans Mountain's public information phone line and email, feedback about Project use of local/regional commercial accommodation, and other qualitative feedback themes. Some context data will be presented on community specific basis as well, such as crime rates, rental vacancy rates, traffic counter locations. Other Project-specific indicators will be presented on Project spread basis, which will also allow for an understanding of effects related to particular communities traversed by that spread.</p> <p>Not all context data is made available from its sources on a community-by-community level during time increments pertinent to the Project. Trans Mountain would be interested in obtaining relevant data from any communities that were able to provide it and where it was important to the community to do so. Trans Mountain is happy to discuss this option on a community-by-community basis in order to ensure that the SEEMP best reflects specific community concerns. Area-specific context indicators that may emerge and/or be provided by local health authorities, municipalities or other locally-based organizations as the SEEMP process progresses will be included as appropriate.</p>	<p>Table 3 and Table 4.</p> <p>Section 3.3 discussed that area-specific context indicators that may emerge and/or be provided by local health authorities, municipalities or other locally-based organizations as the SEEMP process progresses will be included as appropriate.</p>



**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Webinar (cont'd)	In looking at the traffic impact, Highway 1 is a huge corridor and the pipeline does not follow the highway. Could you please pick other highways closer to the Project where your vehicles will be active?	<p>The permanent traffic count locations in Table 9 are selected to document traffic data within the Fraser Valley Region and Metro Vancouver Region where Project vehicles will be active, that is in and around a proposed stockpile site for Spread 6 (Popkum stockpile site). Stockpile sites are areas of concentrated Project-related traffic movement related to both workers and equipment/materials. Located approximately 29 km from the District of Hope, access to the Popkum Stockpile site is along Highway 1 and Halverson Road. It is expected that Project vehicles may travel from sites located near the Popkum Stockpile site west or east on Highway 1 to access construction sites. When baseline data is updated at the start of construction, traffic counter locations may be updated based on the finalized location of Project stockpile sites and/or staging areas, to ensure they are reflective of areas where the Project vehicles will be active.</p> <p>More information regarding Project-related traffic movements will be provided in NEB Condition 73 Traffic Access and Control Management Plan, including information regarding the timing and location of key construction activities and current traffic volumes and anticipated traffic volumes during the construction period for both day and night times.</p>	<p>Table 9</p> <p>See also NEB Condition 73 Traffic Access and Control Management Plan</p>
	Does your insurance cover economic loss for affected landowners and businesses?	<p>Where Trans Mountain does acquire land rights for the Expansion Project, landowners are entitled to compensation for the lands used, for both short-term construction and permanent easement, in addition to damages or inconvenience. This compensation is in addition to Trans Mountain's legal requirement and corporate commitment to minimize damages and restore lands as far as practicable to pre-construction conditions.</p> <p>The Pipeline Safety Act also includes absolute liability for all NEB-regulated pipelines, meaning that companies will be liable for costs and damages irrespective of fault — up to \$1 billion for major oil pipelines; companies continue to have unlimited liability when at fault or negligent. <a href="http://news.gc.ca/web/article-en.do?nid=912989">http://news.gc.ca/web/article-en.do?nid=912989</a></p>	Not addressed in this Plan.
	How many construction community liaisons (staff roles) will you have throughout the Project? I am specifically referring to the City of Coquitlam and also the surrounding municipalities in the metro area.	The Community Liaison role is important for maintaining open lines of communication between communities, Trans Mountain and its Contractors during construction. This role is in development and we expect to share more detail about the number of liaisons and their locations in Q3 2017 as part of Trans Mountain's Construction Communication and Notification Plan.	Not addressed in this Plan. Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities, which is outside of this Plan.
	How often are the socio-economic monitoring reports required by NEB?	NEB Condition 13 does not specify how often Trans Mountain needs to complete socio-economic reports. The condition requires that the SEEMP include reporting details and plans for regular reporting on effects during construction. The Trans Mountain SEEMP states the Project proposes to prepare regional socio-economic monitoring reports on a quarterly basis during construction.	Section 4.3

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Webinar (cont'd)	How might you be responsive to an indicator such as a substantial increase in hotel and housing in an area where there are already limited accommodation for tourism use?	<p>Trans Mountain understands the interest in and concerns about hotel and housing use in construction communities. An important aspect of responding to this concern about increase in hotel use is to ensure the Project is communicating adequately in advance of construction about workforce size and accommodation plans. The Project is communicating in advance of construction about its revised construction workforce estimates and proposed worker accommodation plans. Trans Mountain's Worker Accommodation Strategy pursuant to NEB Condition 59 [Filing ID <a href="#">A83569-2</a>] provides details on the numbers of workers to be housed and accommodation approach, including use of camps (this was circulated in draft in February 2017). As part of that strategy, Trans Mountain will be using temporary work camps in some small communities with limited accommodation capacity in order to offset demand pressures on hotels and housing and effects on other users. As construction planning progresses, and particularly in non-camp communities, Trans Mountain's Contractors will conduct additional investigations with local chambers of commerce, hoteliers, and RV park managers with the aim of identifying interested suppliers. Contractors will prepare guidance and specifications for workers with respect to which accommodation venues may be utilized.</p> <p>If a concern about increase use in hotels and housing in the area is raised through the SEEMP process, Trans Mountain will work with its Contractors to ensure established accommodation-related guidance for workers is being followed. Trans Mountain will also engage in an on-going manner with municipal authorities about any broader community effects.</p>	<p>Table 3, indicators #11 and #12</p> <p>See also NEB Condition 59 Worker Accommodation Strategy</p>
	Will Trans Mountain be setting up unique lines of communications with community representatives for issues that may need a change in mitigation plans?	This will be part of the Construction Communication and Notification Plan. Trans Mountain will have Community Liaisons in communities, a phone number and email as well as other communication mechanisms. Feedback from these mechanisms will feed into the SEEMP.	<p>Table 3, indicator #12.</p> <p>See also Construction Communication and Notification Plan. Trans Mountain will have Community Liaisons in communities.</p>
	Where is the plan located?	You can find the draft SEEMP – and a variety of other draft environmental management plans - at <a href="http://Transmountain.com/environmental-plans">Transmountain.com/environmental-plans</a> . The unique link to the SEEMP is <a href="https://www.transmountain.com/socio-economic">https://www.transmountain.com/socio-economic</a>	N/A
	How soon will communities know about actual jobs and when will you start the hiring process? Training needs to be considered.	<p>Hiring will be mainly through Contractors or sub-contractors responsible for building the pipeline and associated facilities. We hope to announce the Contractors for the Project in the coming months. Until that time, people can register their interest for future employment opportunities and sign up to receive updates on recruitment for the Expansion Project at <a href="http://www.transmountain.com/jobs">www.transmountain.com/jobs</a>.</p> <p>Regarding training, Trans Mountain aims to support training programs that enhance access to employment opportunities. Contractors will be required to submit an Aboriginal, Local and Regional Employment and Training Plan to Trans Mountain for approval. Contractors will also be required to demonstrate activities and processes to achieve employment and training objectives as outlined in Trans Mountain's Training and Education Monitoring Plan (NEB Condition 12).</p>	<p>N/A</p> <p>Aboriginal, Local and Regional Employment and Business Opportunity Monitoring Reports (NEB Condition 107).</p> <p>Training and Education Monitoring Plan (NEB Condition 12)</p>

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
SEEMP Webinar (cont'd)	What will Trans Mountain need in the way of accommodation in Clearwater - this might potentially impact our vacancy rates?	The number of workers to be housed and accommodation approaches are addressed in NEB Condition 59 Worker Accommodation Strategy.	N/A.  Worker Accommodation Strategy (NEB Condition 59)
Northern Health comments during on-line engagement  Dec 12, 2016	<p>We appreciate that Project community liaisons will be responsible for collecting qualitative feedback about Project-related impacts. However, beyond the operation of the TMEP feedback line, it is not clear how the Project will engage with communities and stakeholders.</p> <p>A communication strategy (or similar) should be developed (with input from communities and stakeholders) which identifies how/when communication will happen in each community. We recommend that it allow for:</p> <ul style="list-style-type: none"> <li>regular two-way communication between service providers, the Certificate holder, communities and other stakeholders throughout the project (e.g., the operation of a SEEMP committee);</li> <li>multi-stakeholder participation, especially in communities where multi-stakeholder groups already exist or for issues that pertain to multiple stakeholders;</li> <li>the uniqueness of each community and/or specific group and their preferred methods of communication.</li> </ul> <p>Appropriate representatives should be included to ensure that vulnerable groups are represented (e.g., women, low-income, minority groups, children, etc.). The Plan should specify how the general public (outside of institutional stakeholders or community representatives) or disadvantaged/vulnerable people will be reached directly and their unique concerns incorporated.</p> <p>We recommend the implementation of an Informed Consultation and Participation (ICP) process. ICP involves a more in-depth exchange of views and information, and an organized and iterative consultation, leading to the Certificate holder incorporating into their decision-making process the views of Affected Communities on matters that affect them directly.</p>	<p>Community stakeholder communications will continue to be a key priority for Trans Mountain as the Project progresses. Trans Mountain will develop a Construction Communications and Notifications Plan for Project communities. A separate process and consultation plan will be developed for Aboriginal groups. The Plans will allow for regular two-way communication between the Project, communities and other key stakeholders. The Communications and Notifications Plan will include a Community Liaison role, an issues / complaints process and specifics regarding construction notifications. Trans Mountain will work with communities to establish processes that respect communities' communication preferences and unique needs, in light of the multiplicity of community sizes and interests along the corridor. The separate consultation plan for on Aboriginal groups recognizes and respects their constitutional rights and interests. The Construction Communications and Notifications Plan and consultation plan for Aboriginal groups will be distinct from the SEEMP and will not be housed in the SEEMP document. A number of NEB Conditions require the development of a Construction Communications and Notifications Plan, which will be developed in consideration of all NEB and British Columbia Environmental Assessment Office condition requirements.</p> <p>Currently under development is an approach focused on the construction phase of the Project to understand and respond to Aboriginal-specific questions and issues, including socio-economic effects. Through Aboriginal Engagement Roundtables, during the construction period Trans Mountain will offer to engage with directly affected groups (see response to NEB Condition 96) in a roundtable process to identify, listen, discuss and respond to construction-related questions and issues. This process will be based on a narrative inquiry approach, encouraging community participants to tell stories about project experiences. Outcomes will be a source of qualitative data to understand Aboriginal-specific effects and concerns.</p>	<p>Not address in this Plan</p> <p>The Construction Communications and Notifications Plan and consultation plan for Aboriginal groups will be distinct from the SEEMP.</p> <p>See NEB Condition 96, Reports on engagement with Aboriginal groups – construction for further information on Aboriginal Engagement Roundtables during construction</p>

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	<p>It is our expectation that the Certificate holder develops a Health and Medical Services Plan (HMSP) in collaboration with NH that aligns with NH's HMSP Best Management Guide for Industrial Camps (HMSP Guide). This HMSP would identify patient transfer protocols, etc. and manage for predictable impacts to health and emergency services. We ask that camps be self-sufficient in delivering their own non-urgent care services (moving beyond the WorkSafe BC requirements) and work collaboratively with Northern Health for trauma care. This has become a standard commitment for large industrial projects to manage their impacts to health services in the northern region. The HMSP should be developed for all camps that are located in the Northern Health region. Ensuring that NH is updated on the health services that will be available on-site is essential to ensuring that appropriate planning can occur to minimize the impact of non-urgent health issues on local services.</p> <p>Additionally, we ask that the mitigation of impacts to communicable disease rates includes the development of an Communicable Disease Control Plan as a subcomponent of the Health and Medical Service Plan, with the inclusion of the following: measures in place to prevent communicable disease outbreaks, protocols that will be adhered to in the event of an outbreak, contact information for persons responsible for carrying out the protocol, communication protocols with local service providers and notification requirements, etc. We advise that NH is in the process of developing a Communicable Disease Control Plan Best Management Guide for Industrial Camps which outlines our expectations; please see a draft of this document enclosed.</p>	<p>Trans Mountain will ensure Camp Operators develop a Health and Medical Services Plan (HMSP) for construction camps and will ensure pipeline Contractors include consideration for health and medical services within their Health and Safety Management and Emergency Management Planning. NEB Condition 64 Construction Safety Manuals requires the filing of a Health and Safety Management Plan (HSMP) for the Project at least 3 months prior to commencing construction and developing elements of the HSMP.</p> <p>It is expected that camp HMSP's developed by Contractors will be adjusted by each Contractor as appropriate, given the large geographic span of the Project.</p> <p>General Health and Safety planning and Emergency Management planning, including the HMSP for camps, and as applicable, will address issues that include:</p> <ul style="list-style-type: none"> <li>• requirements for medical personnel onsite;</li> <li>• medical emergency response protocols (for different scenarios such as a medical emergency, automotive incident or other casualty, toxic exposure, etc.);</li> <li>• communications in a medical emergency;</li> <li>• communicable disease control protocols (including isolation, transport, notification, etc.);</li> <li>• health promotion programming; and</li> <li>• incident investigation.</li> </ul> <p>As there is little external best practice guidance available, we are pleased to have Northern Health's HMSP Best Management Guide for Industrial Camps as a reference document and will build in these best practices as appropriate. However, we note that Northern Health's document describes a process that results in a report to Northern Health to help them understand the Project and its approach (for example, providing information on laundry services and layout of accommodations); our HSMP will instead comprise our guidance to Contractors to ensure that each one adheres consistently to the standards set out by Trans Mountain.</p>	<p>Not addressed in this Plan.</p> <p>Trans Mountain will ensure Camp Operators develop a Health and Medical Services Plan (HMSP) for construction camps and will ensure Pipeline Contractors include consideration for health and medical services within their Health and Safety Management and Emergency Management Planning</p>
	<p>It is stated that "Trans Mountain believes that each identified effect/issue emerging through socio-economic monitoring requires consideration of action and response. As such, Trans Mountain is not setting criteria or thresholds in order to determine when action or measures are to be taken." We acknowledge the decision to not identify specific triggers for mitigation. However, we expect that decision-making on whether action and response is required should be made in collaboration with communities and stakeholders.</p>	<p>Trans Mountain has outlined its triggers for mitigation review in Section 4.2.1 of the Plan, Table 5. Mitigation review will be done on a case-by-case basis and will involve Trans Mountain and/or its Contractors investigating where appropriate with Appropriate Government Authorities, Aboriginal groups or directly affected landowners to find a resolution or corrective action. Trans Mountain anticipates that many issues will require real-time responses with the directly affected stakeholders, and in such circumstances time would not permit opening up the decision for action to a wider community process.</p>	

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	<p>Accordingly, we recommend that a multi-sectoral partnership for mitigation is developed, where issues will be identified and discussed, through which surveillance and monitoring will be conducted and by which mitigation plans are developed and carried out. We recognize that Northern Health is only one stakeholder, and would promote this approach only with the support and collaboration of the local community, First Nations, service providers and others that may be impacted by such a strategy.</p> <p>In addition, we ask that the SEEMP includes a description of how all relevant socio-economic mitigation measures (that were committed to in the Application or during the review process) will be implemented. This will ensure that the proposed mitigation measures are clearly communicated to stakeholders/communities, and that these measures will inform the monitoring and adaptive management processes</p>	The purpose of the SEEMP is to describe how socio-economic effects will be monitored during construction, rather than provide socio-economic mitigation measures. However, proposed mitigation is outlined in the Facilities Application and summarized in the Socio-Economic Management Plan. Further details of mitigation are also spelled out in other NEB Conditions such as: Access Management Plan (NEB Condition 47), Navigation and Navigation Safety Plan (NEB Condition 48), Worker Accommodation Strategy (NEB Condition 59), Traffic Access and Control Management Plan (NEB Condition 73), noise management plans (NEB Conditions 74, 80, 86), Light Emissions Management Plan, Westridge Marine Terminal (NEB Condition 82), Plan for Aboriginal group participation in construction monitoring for the protection of traditional land and resource use (NEB Condition 98).	Table 5
	We recommend that instead of referencing the Application, the SEEMP references the NEB Assessment report which also captures issues brought forward during the Application review as well as NEB's characterization of residual project effects. We recommend that the SEEMP includes a summary of potential risks and impacts that were identified during the NEB review process.	Trans Mountain appreciates this comment and has included consideration of and reference to the NEBs characterization of key residual socio-economic effects in relation to monitoring topic areas in the SEEMP. This is addressed in Section 1.6 of the SEEMP. The NEB report requires that Trans Mountain carry out previous commitments related to potential socio-economic effects identified within the Application and imposes the creation of a SEEMP (Condition 13). No further or additional issues are brought forward.	Section 1.6
	<p>While the proposed role of community liaisons is briefly described, the plan does not provide detail as to who within Trans Mountain is accountable for implementation and monitoring. The plan should clearly identify a team within Trans Mountain that will have the responsibility for data collection, analysis, and an overall review of data and information-sharing from multiple sources which would point to unidentified, emerging impacts and risks. We recommend the following:</p> <ul style="list-style-type: none"> <li>The SEEMP should provide an organizational chart of staff involved in the implementation of the SEEMP. Staff roles should be clarified in relation to implementation efforts and information should be provided on resources required.</li> <li>The SEEMP should outline training and capacity requirements for staff to meet implementation commitments.</li> </ul>	Trans Mountain understands the importance of ensuring the SEEMP implementation is clearly and efficiently operationalized within the TMEP team and Contractors. The SEEMP contains information about steps involved in operationalizing the SEEMP (see Section 4.4). However, the NEB guidance does not suggest or require that the SEEMP spell out internal details of Project staffing such as organization charts or training requirements.	Section 4.4

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	<p>Based on our experience, we stress the importance of including community-level primary data collected in collaboration with communities, including both qualitative and quantitative data. We know that publicly available indicators do not exist for many important socio-economic effects on small communities (such as Valemount) and/or are generally not granular or timely enough to ensure project-related effects would be detected. This is particularly true of official government statistics and census data, and accordingly, these should not be used as the only or primary data sources.</p> <p>Recognizing there are gaps in the availability of data, we recommend that statistical information is further disaggregated into smaller communities which may be particularly vulnerable to impacts. For example, could rental vacancy rates be reported for smaller communities (e.g., Valemount)? Additionally, data should be disaggregated to monitor for impacts to subpopulations and vulnerable groups (i.e., low income earners, women, First Nations groups, etc.). Where data gaps and uncertainties exist, we ask that locally specific knowledge is collected.</p>	<p>Northern Health notes the importance of obtaining indicators that are sufficiently granular and regularly updated in order to capture the potential socio-economic effects of the Project, and that are both qualitative and quantitative in nature. Many standard government statistics do not meet these criteria, as they may cover too large an area or population (for example, health statistics that are available only at the level of the Health Authority or Health Service Delivery Area), or be updated too infrequently (for example, census data that is updated only every five years) to be useful in identifying Project-related changes. Trans Mountain agrees with this observation.</p> <p>The context indicators selected for the SEEMP have been chosen in order to best be able to represent evolving conditions at a local level, and in relation to the Project. Context indicators have been selected to help provide an understanding of the relative resiliency or vulnerability of different communities in the context of anticipated potential TMEP construction-related social and economic stressors. Project-specific indicators, on the other hand, have been selected because they are highly responsive to the Project, amenable to adaptive management, and able to be generated monthly or quarterly, which will enable the effects of the Project to be identified rapidly and for different localities. It is important to note the Project-specific Indicators will be the key data used to identify adverse Project-specific effects and areas for adaptive management. The context indicators will be used to aid in the interpretation and contextualization of Project-specific indicators.</p> <p>As such, we feel that the indicators that have been chosen for the SEEMP fully satisfy the important considerations raised in the original comment.</p> <p>In addition, Trans Mountain will be collecting local knowledge qualitatively through on-going engagement methods, which will be reported on a thematic basis in indicator #12.</p> <p>As SEEMP implementation progresses, Trans Mountain will consider including relevant context indicator data from communities that wish to provide it and where it is important to the community to do so. This would be examined on a community-by- community basis to ensure the SEEMP is reflective of community-specific concerns</p>	<p>Section 1.5, 1.6</p> <p>Table 3, Table 4</p> <p>Section 3.3</p>

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	<p>Please ensure that the SEEMP framework will allow impacts to vulnerable groups to be identified (including First Nations populations, children, youth, women, etc.). The plan should include differentiated measures and approaches for disadvantaged and vulnerable groups, recognizing that these populations are more likely to experience impacts and risks at a heightened level.</p> <p>Recent work suggests women (especially aboriginal women) often disproportionately experience the negative impacts of resource development activities, such as domestic violence, sexual assault/harassment, financial inequity, sexual exploitation, etc. This work includes the Communities and Construction Camps (C3) Workshop (June, 2016, report pending publication) and Amnesty International's Out of Sight, Out of Mind: Gender, Indigenous Rights, and Energy Development in Northeast BC (Nov, 2016). This work highlights the importance of considering gender-related impacts. Accordingly, we recommend that additional indicators are included to monitor for impacts to women. This might include monitoring for sexual assault and harassment, sexual exploitation, sex-trafficking, STI rates, etc.</p>	<p>Understanding differential effects on vulnerable populations is important. In developing the current list of indicators in the SEEMP, Trans Mountain considered where differential effects could be tracked in relation to the indicators proposed.</p> <p>Several indicators track Aboriginal-specific adverse effects. Project-specific indicator #1 disaggregates workforce by Aboriginal status. Indicator #13 has been added (Qualitative feedback themes about quality and abundance of Aboriginal harvesting resources, or ability of Aboriginal people to harvest their resources, within the Project footprint); this new indicator #13 focuses solely on these Aboriginal-specific effects and will have a unique mechanism as its data source (i.e., construction phase Aboriginal Engagement Roundtables, which are discussed in Trans Mountain's response to NEB Condition 96. Data for Project-specific indicator #11 will be tagged and organized by Aboriginal or non-Aboriginal status (Aboriginal status will be based on self-identification), such that unique adverse socio-economic effects of construction from an Aboriginal perspective are identified and monitored. Other Project-specific indicators however (e.g., motor vehicle collisions, number of vehicles present, use of motels, etc.) did not seem to be meaningful when disaggregated by vulnerable population status.</p> <p>Following Northern Health's suggestion, gender-related crimes (e.g., sexual assault, obtaining sexual services, and prostitution) have been added as subsets of crime data that is collected as context data (see Table 5). We will also explore themes about differential impacts that emerge through qualitative feedback received, which will be reported via indicators #11 and #12.</p>	<p>Table 3, indicator #1.</p> <p>Table 4</p>
	<p>We also recommend that the SEEMP includes a framework for adding additional indicators if unforeseen concerns arise that require monitoring and/or if additional data sources emerge.</p>	<p>The SEEMP approach accounts for this. The SEEMP notes in Section 3.3: In addition to the context indicators listed in Table 4, area-specific context indicators that may emerge and/or be provided by local health authorities, municipalities or other locally-based organizations as the SEEMP process progresses will be included as appropriate and if data-sharing agreements evolve.</p>	<p>Section 3.3</p>
	<p>We ask that this indicator is amended to better capture potential health services impacts, including indicators collected by the Certificate Holder. Accordingly, we ask that the following indicators are included:</p> <ol style="list-style-type: none"> <li>The number of non-local project workers that are being referred to and/or presenting to local health facilities (and for what, including urgent/non-urgent and occupational/non-occupational demands.).</li> <li>Aggregated data on type and number of medical visits to the on-site medical facilities. Preference would be given to using a standard "Presenting Complaints List" as is used in emergency departments.</li> <li>Information on the level and types of health services that are available on-site</li> </ol>	<p>For suggested indicator (a), "the number of non-local project workers that are being referred to local health facilities" can and will be included (Table 4 of this Plan). The Project can track workers presenting to local health facilities on their own accord during off hours where workers voluntarily report such information</p> <p>For suggested indicator (b), this can be included in the SEEMP (see Table 3 of this Plan)</p>	<p>Table 3, indicators #9 and #10</p>

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	We note this monitoring approach is being used for other projects, whereby workers report any local health care service utilization to the project health service provider (either before or after their visit). This monitoring should apply to all non-local Project workers, whether they are staying in camp or within the community	For suggested indicator (c), information on the level and types of health services that are available on-site will be made available generally in the Health and Safety Management Plan (HSMP) and for camps in the Health and Medical Services Plan (HMSP). Particulars for each work site location would be outlined in Contractor's site specific plans Emergency Response Plans. This can be shared with health authorities during Contractor engagement. This information will not be included in the SEEMP as it is an information point rather than a monitoring indicator.	
	It might be worthwhile to further disaggregate this. How many collisions involved injuries/fatalities? How many collisions were drug and/or alcohol related? Also, the reviewer is not sure why only accidents involving Project vehicles during work hours will be tracked? Recognizing that the use of Project vehicles by off-duty locals may not represent a change from baseline, what about off-duty non-local worker vehicle use? This monitoring would ensure that issues could be addressed.  Additionally, the rationale given for the inclusion of this indicator is that it "provides an indication of unsafe driving practices for Project-related vehicles". It should be recognized that collision rates do not only reflect unsafe driving practices, but also the volume of traffic.	The indicator focuses on Project vehicles during work hours because the Project has care and custody of vehicles only when they are engaged in Project-related duties. Contractor/company owned vehicles involved in off-hour motor vehicle accidents (MVs) can be tracked and are generally subject to the same driving and safety requirements as during work hours (see Table 3 in this Plan). Private vehicles used on the Project which may be involved in off-hours MVAs can only be tracked on a self-reporting basis due to care, custody and privacy issues. Criminal traffic violations by police detachment will be tracked via context indicator.  Trans Mountain understands and agrees that collision rates are also influenced by volume of traffic. However, the most relevant metric remains the number of incidents, as this represents the undesirable outcome to be managed, rather than traffic volume, which is one of several upstream risk factors.	Table 3, indicator #6  Table 4
	How will qualitative feedback be collected? See comments above regarding the communication plan.	Qualitative feedback will be collected through reports from the construction community liaison role, the Project feedback line, community-based engagement activities, and Aboriginal Engagement Roundtables as noted Table 3 of this Plan.	Table 3
	We recommend also including shift duration (of both work day and work rotation) as a project-specific indicator. It will be important to understand when workers have time off and if they are expected to spend their off-duty time in neighbouring communities. Further, this could provide indication of anticipated family cohesion impacts	Trans Mountain will comply with all provincial and federal regulations regarding shift duration. A typical shift will be 11-12 hrs/day for a maximum of six days per week.  Trans Mountain understands that the movement of large numbers of workers between shifts can impact a host community in terms of traffic, presence of workers in community places and spending of money on a range of activities (positive or negative). Knowing when workers will be moving and off-duty will help the communities prepare. Details of shift duration are not provided in the SEEMP as it is an information point rather than a monitoring indicator.	Not addressed in this Plan.
	We recommend also including an indicator on the health promotion, disease prevention and worker wellness programming being implemented at the camp(s), including information on physical infrastructure, amenities and activities. This would capture important determinants of health that will act as leading indicators for health outcomes.	We recognize that Northern Health is interested in the health promotion activities that take place in in camps, as these activities may have the ability to improve worker wellness and reduce the overall burden of ill health.  Trans Mountain would be happy to engage with Northern Health about the health promotion activities taking place at camps and worksites in order to identify ways to best maintain worker health. However, Trans Mountain views health promotion programming as a mitigation measure rather than a monitoring indicator thus it is not specified in the SEEMP.	Not addressed in this Plan



**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	<p>We advise that the SEEMP also includes communicable disease rates as a context indicator (including the incidence rates of the following: HIV/AIDS, Hep C, Gonorrhea, Chlamydia and Syphilis). There will be an influx of workers from outside of the region, which may result in the introduction/transmission of communicable diseases into the community. As noted in our Health Considerations of Resource Development Projects document, there may be a potential for Projects to increase "communicable disease rates due to such factors as sanitation, drug and alcohol use, and a highly mobile work force dominated by certain demographics</p>	<p>Trans Mountain acknowledges the potential interaction between an influx of workers from outside the region and the potential for introduction and transmission of communicable diseases into the community, and the importance of mitigation to ensure Project-specific impacts are limited as much as possible.</p> <p>Trans Mountain has included communicable disease rates as context indicator in the SEEMP. This data will provide general statement of disease outcomes in several Health Service Delivery Areas that are crossed by the Project, and will be updated on quarterly basis during construction. The data as a whole will provide general statements of change that has occurred, but will not identify the reasons for change, Project-specific contribution to change, nor pinpoint where TMPEP mitigation or procedures may need to be improved/adapted. It will however add to the understanding of the well-being context of the regions where the Project is occurring and how this wider context may be evolving during the construction period, thereby providing context for understanding the significance of Project-specific notifications (see below).</p> <p>In a follow-up meeting with Northern Health in 2017, communicable disease rates were further discussed and Northern Health indicated a metric regarding the number of community camp-based outbreaks may also be useful. As a response to this, Trans Mountain has included a Project-specific monitoring indicator #14 "Number of people affected by a notifiable disease in a work camp".</p> <p>Trans Mountain will ensure camp operators develop an appropriately scaled Health and Medical Services Plan (HMSP) for construction camps. HSMPs will include communicable disease control protocols (including isolation, transport, notification, etc.) and health promotion planning. It is anticipated that camp HSMPs will be developed in Q4 2017 as camp Contractors are selected and will be developed in collaboration with local Health Authorities pertinent to each camp location.</p> <p>Any qualitative feedback received by Northern Health regarding communicable disease concerns in Valemount during construction will also be tracked and reported as part of indicator #12.</p>	<p>Section 5.0 Section 3.2, indicators #12, #14</p>
	<p>We recommend that the SEEMP also tracks locally specific data for communities (if available) such as the number of individuals using food programs, etc.</p>	<p>Trans Mountain will be providing living-out allowance to temporary workers to cover costs of food, so Project workers should not require the use of the Valemount Foodbank. Nonetheless, Trans Mountain is open to collecting community-specific context data from communities where it is important to them, updated on a regular basis during Project construction and could be influenced by the Project. The number of people assisted by local food banks is a relevant data point for smaller communities such as Valemount, as increases in use above usual levels during construction could indicate lack of services/support for workers, or lack of awareness of community orientation program. Trans Mountain has contacted the food bank in Valemount to see if data on number of people assisted can be made available on regular basis during construction. Valemount Foodbank indicated this data is typically kept private and will discuss the idea with their Board of Directors. This organization has not expressed interest in participating in data sharing.</p>	<p>Section 3.3</p>

**TABLE A-5 Cont'd**

Consultation Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback	Addressed in Plan
Northern Health comments during on-line engagement (cont'd)	NH recommends including a context indicator of "number of Diagnostic and Treatment Centre and/or Emergency Room visits by non-residents" to capture the cumulative effects of shadow populations from multiple projects on health services. Please contact NH to access this data. Please note that the Valemount Health Centre operates a Diagnostic and Treatment Centre (not an ER), and would transfer patients requiring a higher level of care to the McBride Hospital or UHNBC in Prince George	During a January 2017 follow-up call with Northern Health, Northern Health advised that this information is now tracked internally but is not readily available for public dissemination. It was also noted by Northern Health that it is a better indicator of cumulative demand; it would reflect increases due to regular seasonal tourism influx, increases due to other projects, and would not delineate TMEP-specific impacts. Northern Health advised that it would be important for Trans Mountain to include a monitoring indicator on TMEP worker referrals to local health services, which Northern Health can keep an eye on. Trans Mountain has included this in the Plan (see indicator #9), on Northern Health's request and suggestion. Northern Health advised they are satisfied with regular monitoring and feedback via the Project-specific indicators, and if issues emerge either through this data or through Northern Health's staff experiences, further discussions and investigation of Northern Health's own data may be warranted. As suggested by Northern Health, Trans Mountain has listed a context indicator of "quantitative and qualitative Valemount hospital utilization data from Northern Health".	Table 3, indicator #9 Table 4
	We suggest adding shadow population size in the local area as a context indicator, which would include temporary worker populations from the project as well as from other projects in the region (such as the proposed Valemount Glacier Resort). This would ensure that the cumulative effects of multiple projects on communities are considered.	Trans Mountain is not aware of a source of data on shadow population stemming from all activities in regions where TMEP will be located. The Project-specific indicator "number of worker days – non-local/regional" (Table 3) will provide information on the Project's contribution to shadow population during the course of construction.	Table 3, indicator #1
	We recommend reporting on additional crime rates to ensure impacts to vulnerable populations are captured. See comments above on impacts to women; we recommend consideration of additional indicators (such as those for sexual assault and harassment, sexual exploitation, sex trafficking, etc.).	Trans Mountain will include context indicators data on crime rates for sexual assault, obtaining sexual services and prostitution as subsets of other crime rates (see Table 4 of this Plan).	Table 4

### 3.3 Aboriginal Groups

Since April 2012, Trans Mountain has engaged with Aboriginal communities that might have an interest in the Project or have Aboriginal interests potentially affected by the Project, based on the proximity of their community and their assertion of traditional and cultural use of the land along the proposed pipeline corridor to maintain a traditional lifestyle. The objectives of Aboriginal engagement are to:

- have an open, transparent and inclusive process that seeks to exchange information in a respectful manner;
- address concerns shared by those who might have an interest in the Project or have Aboriginal interests potentially affected by the Project;
- incorporate feedback into Project planning and execution; and
- provide opportunities to maximize Project benefits to Aboriginal communities and Aboriginal groups.

A comprehensive Aboriginal engagement process is led by experienced engagement advisors in Alberta and BC, specialized in the areas of Aboriginal relations, law, economic development, education, training, employment and procurement. Trans Mountain's engagement process for the Project is flexible, allowing

each community and group to engage in meaningful dialogue in the manner they choose and in a way to meet their objectives and values.

Each community has the opportunity to engage with Trans Mountain, depending on Project interests and potential effects. The following opportunities to engage have been provided:

- Project announcement;
- initial contact with Aboriginal community or Aboriginal group;
- meetings with Chief and Council and meetings with staff;
- host community information session(s);
- conduct traditional land use studies and socio-economic interviews;
- identify interests and concerns; and
- identify mitigation options.

An overview of the proposed SEEMP approach was presented at Trans Mountain Aboriginal Engagement Team (AET) workshops held in September 2015, which were designed to promote a dialogue around draft EPPs and the SEEMP. A total of 130 Aboriginal communities were invited to attend the AET EPP workshops representing Aboriginal groups potentially affected by or interested in the Project. A total of 28 Aboriginal groups participated in these workshops. See Appendix C for a list of invited Aboriginal groups, and see Appendix D for a list of participating Aboriginal groups.

Table A-6 provides a summary of AET meeting dates and locations where the SEEMP was presented and discussed, as well as a summary of feedback received and how it has been considered by Trans Mountain in the SEEMP. Following the EPP Workshops, draft minutes of the workshop were provided to each Aboriginal participant, to ask questions and comment. Feedback received from Aboriginal Groups was incorporated into the draft, and final minutes were distributed to participating Aboriginal Groups.

**TABLE A-6**

**SUMMARY OF ABORIGINAL ENGAGEMENT ACTIVITIES RELATED TO SEEMP**

Engagement Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback
AET EPP Workshop: Abbotsford, BC  September 9, 2015	What percentage of First Nation participation in employment/business opportunities is expected?	Trans Mountain does not have a quota or percentage of First Nation or Aboriginal participation in Project employment/business opportunities, but the Project's goal is to maximize Aboriginal employment and procurement. Trans Mountain has assigned Aboriginal Engagement Advisors (or Field Advisors) responsible for individual communities, and Trans Mountain's employment and procurement policies are communicated within the Project team and Contractors to ensure follow through on objectives. The Project will be monitoring and reporting on Aboriginal participation through NEB Condition 107.
	Will the socio-economic monitoring program address post construction (e.g., spills)	Trans Mountain prepared the SEEMP to fulfil the requirements of the NEB Condition 13, which requests that potential adverse socio-economic effects of the Project be monitored during construction. It does not include monitoring during operations.
	How have children's pathways been considered	The socio-economic assessment (in the ESA in the Application) considered a range of community assets and use areas that may be used by children (e.g., schools, playgrounds) and mitigation in consideration of all pathway and recreational users will be in place. Trans Mountain will monitor and report on information submitted to the Field Advisor or through other processes agreed upon with each First Nations community (i.e., Aboriginal Engagement Roundtables) regarding to Aboriginal-specific adverse socio-economic effects (indicators #11, #12 and #13).

**TABLE A-6 Cont'd**

Engagement Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback
AET EPP Workshop: Kamloops, BC  September 16, 2015	Should have targets for Aboriginal employment tracking	Trans Mountain will maximize local and First Nations employment opportunities. Trans Mountain notes that employment monitoring will be conducted under NEB Condition 107 (Aboriginal, Local and Regional Employment and Business Opportunity Monitoring reports).
AET EPP Workshop: Edmonton, Alberta  September 22, 2015	Your statistics [about estimated local and temporary workers associated with construction] do not take into account First Nation community availability: 85% unemployed in community. Find ways to put people to work. Don't hire outside.	Statistics give a sense of order or magnitude of certain socio-economic conditions. Yet, socio-economic conditions are dynamic and changing. Trans Mountain is developing an Aboriginal, Local and Regional Skill and Business Capacity Inventory (NEB Condition 11), which has included Aboriginal community-based information gathered on skills and labour availability. Trans Mountain will maximize local, regional and Aboriginal hiring. Trans Mountain will monitor Aboriginal, local and regional employment and business opportunities through NEB Condition 107.
	Information on drug and alcohol policy at camps	There will be no tolerance for illicit drug and alcohol use while at work, and alcohol use while in camps will be managed through camp rules. All workers (e.g., Contractors and employees) will be required to adhere to Trans Mountains Drug and Alcohol Policy, which is reflected in the Project Worker Code of Conduct in the Worker Accommodation Strategy (NEB Condition 59).
	More information on the community liaison role	Construction community liaisons will be paid roles as part of the Project team. Details regarding responsibilities and scope of these roles are under development. Paid Field Advisors will support Project information sharing with Aboriginal communities.
	Aboriginal awareness and cultural awareness	Worker behaviour is addressed in the Worker Code of Conduct, including cross-cultural sensitivities and respectful behaviour (NEB Condition 59 Worker Accommodation Strategy).
	Temporary workers aren't vested in the communities that they pass through; need to monitor the outcomes of temporary workers, beyond training	Worker behaviour, including off-duty behaviour, is addressed in the Worker Code of Conduct, including cross-cultural sensitivities (see NEB Condition 59 for the Worker Code of Conduct). The SEEMP will monitor and report on information submitted to the Field Advisor or through other processes agreed upon with each First Nations community (i.e., Aboriginal Engagement Roundtables) related to adverse socio-economic effects of worker conduct through indicators #11, #12 and #13.
AET EPP Workshop: Chilliwack, BC (Stó:lō)  September 24, 2015	Is there a way to track how Trans Mountain is keeping its commitments?	Commitment tracking will occur through NEB Condition 6. Trans Mountain representatives, including Field Advisors, will be available to meet with stakeholders and Aboriginal groups during construction to discuss topics of interest. Aboriginal Engagement Roundtables is an approach under development focused on the construction phase of the Project to understand and respond to Aboriginal-specific questions and issues.
	Mitigation often is not followed by subcontractors (e.g., speeding). Question: Where is the feedback that we are monitoring the subcontractors?	The indicators outlined in the SEEMP apply to the Contractors and the subcontractors. Feedback through the Field Advisor and other processes agreed upon with each Aboriginal group will help the Project understand if mitigation is not being followed by subcontractors. This will be reported via indicators #11 and #12. Aboriginal Engagement Roundtables will be a key mechanism to track and monitor Aboriginal-specific adverse socio-economic effects (indicator #13).
	What are some qualitative socio-economic monitoring measures?	Trans Mountain is proposing three qualitative indicators: number and types of calls/complaints received (by location, by topic), which will be disaggregated on an Aboriginal and non-Aboriginal basis (indicator #11); and qualitative feedback themes about community concerns and experienced social effects (indicator #12). Trans Mountain will also be monitoring qualitative feedback themes about effects on the quality and abundance of traditional harvesting resources, or ability of Aboriginal people to harvest resources, within the Project footprint (indicator #13).
	How is community wellness monitored?	Any adverse effects on community wellness will be identified via qualitative feedback received and reported via indicators #12 and #13. Trans Mountain will also track its effect on local health services via indicators #9, #10 and #14. Aboriginal Engagement Roundtables will be a key mechanism to track and monitor Aboriginal-specific adverse effects related to Aboriginal social and cultural wellbeing (indicator #13).

**TABLE A-6 Cont'd**

Engagement Activity	Feedback on SEEMP Process/Indicators	Response to SEEMP Feedback
AET EPP Workshop: Chilliwack, BC (Stó:lō) (cont'd)	Have you considered looking at examples of social monitoring programs, for example the International Finance Corporation (IFC)?	Trans Mountain considered examples of other socio-economic monitoring programs, understanding that the context of the SEEMP is the NEB requirements. Trans Mountain did not identify guidance on discrete indicators for socio-economic monitoring of pipelines by the IFC. However, Trans Mountain believes that the SEEMP meets some of the guidance in the IFC Performance Standards as they relate to monitoring, for example, the goal of monitoring the effectiveness of client-specific management programs or mitigation measures and reflecting/identifying corrective action (IFC Performance Standard 1).
	Construction traffic is a concern.	Trans Mountain understands that construction-related traffic is a concern in many communities. Trans Mountain has included monitoring indicators for traffic related topics: motor vehicle collisions or reportable incidents that involve Project vehicles on public roads; total workers transported from staging areas per day average; non-Contractor vehicles in staging area per day (average); number and types of calls/complaints received through TMEP feedback line (by location, by topic); and qualitative feedback themes about community concerns and experienced social effects (see Table 3 of this Plan). More detail on traffic management is in NEB Condition 73 Traffic Management Plan for Public Roadways.
	You will be monitoring "Community Way of Life", but it looks like the only things you are monitoring are jobs (how many and where people are hired)	Monitoring effects on community way-of-life would be primarily through the qualitative feedback from the phone line, the construction community liaisons, and other community-specific engagement. Aboriginal Engagement Roundtables will be a key mechanism to track and monitor Aboriginal-specific adverse effects related to Aboriginal social and cultural wellbeing. Qualitative feedback regarding adverse effects on community way-of-life will be monitored and reported via indicators #11, #12 and #13.

### 3.3.1 Aboriginal Consultation Summary – Early 2012 to August 2016

Issues and concerns related to socio-economic effects raised during broader Aboriginal engagement between early 2012 and August 2016 are summarized in Table A-7.

**TABLE A-7**

### SUMMARY OF ABORIGINAL ISSUES AND CONCERNS RELATED TO SOCIO-ECONOMIC EFFECTS

Issue or Concern		Summary Trans Mountain Response	Where Addressed
Summary	Aboriginal Community		
Concerned that Aboriginal communities will not have enough employment opportunities	Lheidli T'enneh First Nation Simpco First Nation Neskonlith Indian Band Lower Nicola Indian Band The Stó:lō Collective Yale First Nation Shxw'ówhámél First Nation Popkum First Nation Lhatko Dene Nation Lower Nicola Indian Band Shackan Indian Band Alexis Nakota Sioux First Nation Montana First Nation	Effects related to employment and economy are discussed in Volume 5B, Section 7.2.7 of the Application.  One of the goals of the Aboriginal Engagement Program is to work collaboratively with Aboriginal groups to support access to economic development opportunities that will arise from the Project. These include employment and procurement opportunities and, where possible, education, training and community investments to maximize access to these opportunities. To identify procurement prospects, Project staff work with Aboriginal groups to identify Aboriginal businesses that are interested in contracting opportunities.  Trans Mountain has developed, in partnership with KMC's procurement team, an Aboriginal Procurement Policy to provide guidance and allowances for facilitating Aboriginal participation in the Project.	Training and Education Monitoring Plan (NEB Condition 12)  Aboriginal, local, and regional skills and business capacity inventory (NEB Condition 11)  Training and education monitoring reports (NEB Condition 58)  Aboriginal, local, and regional employment and business opportunity monitoring reports. (NEB Condition 107)
Request for Aboriginal communities to get preferred procurement opportunities	Simpco First Nation Shxw'ówhámél First Nation Popkum First Nation Semiahmoo First Nation Kwantlen First Nation Paul First Nation Alexis Nakota Sioux First Nation Montana First Nation	With regard to employment, Trans Mountain recognizes that the fast growth rate of Aboriginal population will have a substantial effect on the available workforce in the future and there is a need for proactive program development in the areas of education and training to support employment opportunities. Through the Aboriginal Engagement Program, employment opportunities are being shared with each Aboriginal group and a capacity inventory for employment	Community Benefits Program progress reports NEB Condition 145)  Socio-Economic Effects Monitoring Plan (NEB Condition 13) – Table 3, Project-specific indicators #1, #11, #12

**TABLE A-7 Cont'd**

Issue or Concern		Summary Trans Mountain Response	Where Addressed
Summary	Aboriginal Community		
Request for educational opportunities	<p>Foothills Ojibway First Nation Lower Nicola Indian Band Simpco First Nation The Stó:lō Collective Yale First Nation Popkum First Nation Scowlitz First Nation Semiahmoo First Nation Shackan Indian Band Alexis Nakota Sioux First Nation</p>	<p>within the communities is being encouraged. The content will then be used for the realization of employment benefits with both Trans Mountain and Contractors during the Project.</p> <p>The Trans Mountain Aboriginal Engagement Team continues to communicate with Aboriginal groups along the pipeline corridor to identify education, training, employment and procurement opportunities</p> <p>Community Investment, through the Aboriginal Engagement Program, takes the form of sponsorships, cultural events and festivals, cultural awareness workshops and other community development initiatives. Specific to the Project, Trans Mountain will work with Aboriginal groups to support areas of importance that will drive benefits to the community pre-construction, during and post-construction.</p> <p>Through the creation of partnerships and shared goals between Trans Mountain and Aboriginal groups, economic development will take place and all parties can work towards achieving mutually-beneficial Project-based or long-term goals.</p> <p>Trans Mountain will continue to collaborate with regional training providers to identify ongoing opportunities to facilitate, support or participate in delivery of training for Aboriginal groups.</p>	See above
	See above	<p>Information will be provided in a timely manner to educators and governments about the types of Project related jobs that will be available, and the required skills and qualifications, to assist training providers in developing and implementing appropriate training.</p> <p>Trans Mountain will work with Contractors and labour organizations to encourage Contractors to provide training and apprenticeship opportunities related to the work they perform, including opportunities for on-the-job training on the Project.</p> <p>The Project will collaborate with training providers to provide job preparation and Project specific training to Aboriginal residents. All training programs that are supported by the Project will be mutually agreeable with particular training providers.</p> <p>Trans Mountain's Aboriginal Peoples' Training Policy is focused on creating initiatives that increase the long-term capability for Aboriginal people to participate in the economy and to share in the success of the Project.</p>	
Request for Aboriginal monitors during construction	Lower Nicola Indian Band Alexis Nakota Sioux First Nation	<p>Aboriginal Monitors will be retained as part of the TMEP environmental compliance program. Aboriginal monitors' scope of work will be focused on identifying and reporting on traditional land use (TLU)/traditional marine resource use (TMRU), traditional ecological knowledge (TEK) and cultural/heritage values. They will also observe and report on the implementation of mitigation measures specifically intended to mitigate and minimize TLU/TMRU and cultural/heritage impacts. Trans Mountain has developed a plan Aboriginal group participation in construction monitoring, as per Condition 98. Trans Mountain will continue to engage Aboriginal groups through all phases of the Project.</p>	Plan for Aboriginal group participation in construction monitoring (NEB Condition 98)
Stewardship	Tsleil-Waututh Nation Alexis Nakota Sioux First Nation		

**TABLE A-7 Cont'd**

Issue or Concern		Summary Trans Mountain Response	Where Addressed
Summary	Aboriginal Community		
Concerned that Aboriginal communities will not benefit from economic development	Lyackson First Nation Paul First Nation Alexis Nakota Sioux First Nation	<p>One of the goals of Aboriginal Engagement Program is to work collaboratively with Aboriginal Communities to support access to economic development opportunities that will arise from the Project. These include employment and procurement opportunities and, where possible, education, training and community investments to maximize access to these opportunities. To identify procurement prospects, Project staff work with Aboriginal groups to identify Aboriginal businesses that are interested in contracting opportunities.</p> <p>Trans Mountain has developed, in partnership with KMC's procurement team, an Aboriginal Procurement Policy to provide guidance and allowances for facilitating Aboriginal participation in the Project. With regard to employment, Trans Mountain recognizes that the fast growth rate of Aboriginal population will have a substantial effect on the available workforce in the future and there is a need for proactive program development in the areas of education and training to support employment opportunities. Through the Aboriginal Engagement Program, employment opportunities are being shared with each Aboriginal group and a capacity inventory for employment within the communities is being encouraged. The content will then be used for the realization of employment benefits with both Trans Mountain and Contractors during the Project.</p> <p>The Trans Mountain Aboriginal Engagement Team continues to communicate with Aboriginal groups along the proposed pipeline corridor to identify education, training, employment and procurement opportunities.</p>	<p>Aboriginal, local, and regional employment and business opportunity monitoring reports (NEB Condition 107)</p> <p>Community Benefits Program progress reports (NEB Condition 145)</p> <p>Socio-Economic Effects Monitoring Plan (NEB Condition 13) - Table 3, Project-specific indicators #1, #11, #12</p>
	See above	<p>Trans Mountain will:</p> <ul style="list-style-type: none"> <li>• maximize the hiring of on-reserve and off-reserve Aboriginal community members;</li> <li>• liaise with Aboriginal groups appropriate resources and with Contractors;</li> <li>• initiate an Aboriginal Employment and Training Program to support increased access to Aboriginal employment opportunities on the Project;</li> <li>• develop a mentorship program for Aboriginal workers to encourage work site integration and retention;</li> <li>• evaluate Contractors' recruitment and selection processes to ensure opportunities will be available to Aboriginal workers; and</li> <li>• ensure Contractors communicate upcoming employment opportunities directly to Project area employment offices, women's organizations and Aboriginal groups and organizations on a timely basis.</li> </ul> <p>Trans Mountain will continue to collaborate with regional training providers to identify ongoing opportunities to facilitate, support or participate in delivery of training for Aboriginal communities.</p> <p>Information will be provided in a timely manner to educators and governments about the types of Project-related jobs that will be available, and the required skills and qualifications, to assist training providers in developing and implementing appropriate training. Trans Mountain will work with Contractors and labour organizations to encourage Contractors to provide training and apprenticeship opportunities related to the work they perform, including opportunities for on-the-job training on the Project. The Project will collaborate with training providers to provide job preparation and Project specific training to Aboriginal residents. All training programs that are supported by the Project will be mutually agreeable with particular training providers.</p>	See above

**TABLE A-7 Cont'd**

Issue or Concern		Summary Trans Mountain Response	Where Addressed
Summary	Aboriginal Community		
Concerned that Aboriginal communities will not benefit from economic development (cont'd)		Trans Mountain's Aboriginal Peoples' Training Policy is focused on creating initiatives that increase the long-term capability for Aboriginal groups to participate in the economy and to share in the success of the Project. Community Investment, through the Aboriginal Engagement Program, takes the form of sponsorships, cultural events and festivals, cultural awareness workshops and other community development initiatives. Specific to the Project, Trans Mountain will work with Aboriginal groups to support areas of importance that will drive benefits to the community pre-construction, during and post- construction. Through the creation of partnerships and shared goals between Trans Mountain and Aboriginal groups, economic development will take place and all parties can work towards achieving mutually-beneficial Project-based or long-term goals.	
Concerned with increased traffic and transportation	Whispering Pines/Clinton Band Cowichan Tribes Leq'a:mel First Nation Paul First Nation	Trans Mountain understands that construction-related traffic is a concern in many communities. Trans Mountain has included monitoring indicators for traffic related topics: motor vehicle collisions or reportable incidents that involve Project vehicles on public roads; total workers transported from staging areas per day average; non-Contractors vehicles in staging area per day (average); number and types of calls/complaints received through TMEP feedback line (by location, by topic); and qualitative feedback themes about community concerns and experienced social effects, including Aboriginal-specific social and cultural well-being effects. More detail on traffic management is in NEB Condition 73 Traffic Access and Control Management Plan.	Traffic Access and Control Management Plan (NEB Condition 73)  Socio-Economic Effects Monitoring Plan (NEB Condition 13) – Table 3, Project-specific indicators # 6, #7, #8, #11, #12, #13
Increased need for waste management practices	Lower Nicola Indian Band Simpco First Nation Yale First Nation Shxw'ōwhámel First Nation Seabird Island Band Popkum First Nation	The Waste Management Standard outlines specific measures to be followed by all Trans Mountain employees and Contractors involved with the construction of the Project. This plan is designed to ensure wastes generated by the Project are handled, stored and disposed of in an environmentally responsible manner, thereby maintaining ecological and cultural integrity. This Waste Management Standard will reduce the likelihood of an accidental release of potentially hazardous waste products into the environment during pipeline construction.  The Waste Management Standard applies to all employees, Contractors and consultants who conduct work on behalf of Trans Mountain during construction of the Project. All employees, Contractors and consultants will abide by all federal, provincial and local requirements for the storage, handling, transport, disposal and spill reporting requirements of all waste materials that are potentially hazardous to the environment.  Further discussion is provided under infrastructure and services in Section 7.2.5 of the Application. Mitigation measures are provided in the Pipeline EPP (Volume 2 of the Environmental Plans).	Pipeline EPP (Volume 2 of the Environmental Plans)
Concerned with noise pollution	Lheidli T'enneh First Nation Simpco First Nation Shxw'ōwhámel First Nation Upper Nicola Band Samson Cree Nation	Noise from construction of the Project has the potential to affect a variety of land users including users of parks and protected areas, Aboriginal traditional land use (TLU) areas, residential areas and outdoor recreation areas. The potential effects on human receptors are not anticipated to extend beyond the Acoustic Environment local study area. Trans Mountain will ensure equipment is well-maintained during construction to minimize air emissions and unnecessary noise. Additionally, Trans Mountain will restrict the duration that vehicles and equipment are allowed to sit and idle to less than one hour unless air temperatures are less than 0°C.	Pipeline EPP (Volume 2 of the Environmental Plans)  Noise Management Plans (NEB Conditions 74, 80, and 86)



**TABLE A-7 Cont'd**

Issue or Concern		Summary Trans Mountain Response	Where Addressed
Summary	Aboriginal Community		
Concerned with noise pollution (cont'd)		<p>Trans Mountain recognizes that many regional changes have occurred since the pipeline was installed over 60 years ago including urban encroachment near some of its existing pump stations and terminals and is aware that noise during operations is of concern to nearby residents. Ambient sound surveys representative of sound levels at noise receptors and existing facilities were conducted and all noise level results were compared to Alberta Energy Regulator's Directive 038 Noise Control and the BC Oil and Gas Commission's Noise Control Best Practices Guideline.</p> <p>Standard mitigation plus noise-specific mitigation measures will be implemented.</p> <p>Further discussion is provided under acoustic environment in Section 7.2.6 of Volume 5A of the Application. Mitigation measures are provided in the Pipeline EPP (Volume 2 of the Environmental Plans).</p>	
Health and safety of Aboriginal people who consume contaminated resources.	Adams Lake Indian Band Coldwater Indian Band Stz'uminus First Nation (Chemainus)	Trans Mountain agrees that the health of Aboriginal peoples is paramount. In support of the ESA for the Project, Trans Mountain commissioned a screening level Human Health Risk Assessment (HHRA) related to terrestrial aspects, as well as screening level and qualitative HHRA's related to marine transportation and marine transportation spills respectively. Supplemental HHRA studies were conducted and filed with the NEB post-Application related to Westridge Marine Terminal, Marine Transportation, Pipeline Spill Scenarios, and Facility and Marine Spill Scenarios.	HHRAs (Volume 5B and 5D; Volume 8A and 8B; also supplemental HHRA filings in June 2014)
Request for salvageable timber to be provided to communities.	Shxw'ōwhámél First Nation Alexis Nakota Sioux First Nation	<p>Trees, stumps, brush and other vegetation will be cleared from the construction right-of-way; temporary work sites; and permanent facilities that are not located on existing TMPL previously cleared easements. Timber harvesting and/or land clearing and debris disposal activities will be coordinated according to Provincial legislation or agreements.</p> <p>Trans Mountain will apply all mitigation measures pertaining to timber outlined in the Timber Salvage Management Plan of the Pipeline EPP (Volume 2 of the Environmental Plans).</p>	Pipeline EPP (Volume 2 of the Environmental Plans)
Concerned about the effects to community health and well-being.	Adams Lake Indian Band Lheidli T'enneh First Nation Simpcw First Nation Lower Nicola Indian Band Whispering Pines/Clinton Band Yale First Nation Shxw'ōwhámél First Nation Popkum First Nation Cheam First Nation Seabird Island Band Popkum First Nation Tzeachten First Nation Shackan Indian Band Lhtako Dene Nation Katzie First Nation Tsleil-Waututh Nation Neskonlith Indian Band Paul First Nation	<p>Monitoring effects on community way-of-life, including community wellness, would be primarily through the qualitative feedback. Trans Mountain has indicators related to use of local/regional health services by Project workers as part of this Socio-Economic Effects Monitoring Plan.</p> <p>Through Aboriginal Engagement Roundtables during construction, there will opportunity for Aboriginal groups to share stories and experiences related to Project construction. Qualitative feedback themes about effects on the quality and abundance of traditional harvesting resources, or ability of Aboriginal people to harvest resources, within the project footprint will be monitored in the SEEMP through indicator #13.</p>	Socio-Economic Effects Monitoring Plan (NEB Condition 13) – Table 3, Project-specific indicators #11, #12, #13

Trans Mountain provided a copy of this Plan to affected Aboriginal groups for their review. No additional feedback was received.

Trans Mountain continues its liaison with Indigenous and Northern Affairs Canada, the Government of Canada's Major Projects Management Office, the BC Ministry of Aboriginal Relations and Reconciliation,

and the Alberta Ministry of Aboriginal Affairs to provide updates regarding Trans Mountain's engagement activities with Aboriginal groups.

### *3.3.2 Feedback Regarding the Draft Plan*

No new issues or concerns regarding the draft Plan were identified by Aboriginal groups during the comment period.

#### *Identifying Aboriginal Groups for Consultation*

Trans Mountain used the First Nations Consultative Area Database Public Map Service to identify the Aboriginal groups potentially affected by Project construction. Appendix D lists the Aboriginal groups identified for further consultation. Throughout regular engagement with TMEP, any Aboriginal groups were added to the list if they identified socio-economic effects monitoring as a concern.

#### *Consultation Activities*

A letter was sent to the Aboriginal groups listed in Appendix E with a copy of the draft Plan on September 26, 2016. Trans Mountain followed up with Aboriginal groups by telephone, email or in person to ensure that the information was received, and to see if there were initial comments or concerns. Where appropriate and upon request, a follow up meeting was arranged to discuss this Plan in more detail and address any concerns.

Trans Mountain has summarized the feedback received through Trans Mountain's overall engagement related to this Plan in Table A-6 and A-7. The summary includes how Trans Mountain responded to and addressed the concern or issue. It should be noted that although the engagement process also provided for opportunity for general discussion about Project construction and associated Aboriginal issues and opportunities, only feedback/issues directly related to socio-economic effects monitoring are provided in this Plan. Other issues and topics raised have been captured in the corresponding mitigation plan as appropriate.

This final Plan will be shared with the Aboriginal groups at the same time as the report is filed with the NEB in 2017.

### 3.4 Landowners/Tenants

Trans Mountain has implemented a comprehensive landowner engagement process for the TMEP to:

- ensure landowners are informed of the Project and how it may affect them;
- enable landowners to gain an understanding of their rights under the *NEB Act*, and the regulatory process and their opportunities for comment within the NEB regulatory process, and
- have a number of opportunities to discuss the Project, identify my concerns or questions they may have with the Project, and have those questions and concerns addressed by Trans Mountain.

In addition to these opportunities for engagement, Trans Mountain is required to provide formal notifications of landowners under Sections 87 and 34 of the *NEB Act*, and Trans Mountain has or will, at the appropriate time, provide such notices.

Individual landowners and tenants have different preferences with respect to communications, and Trans Mountain tailors its communications as requested. Land representatives working for Trans Mountain have been in discussions with landowners for over three years, and issues or concerns raised with land agents have been documented in the Project landowner database, addressed within site-specific construction plans and documented within the land rights agreements. Trans Mountain has filed reports with the NEB providing details on the landowner engagement program and results to date. In accordance with NEB Condition 99, records of engagement and consultation with landowners and tenants will be filed with the NEB at least two months prior to commencing construction and every six months thereafter until five years after commencing Project operations.

Trans Mountain's landowner/tenant consultation strategy includes the activities described below.

1. Prior to Project approval - obtain landowner permission for survey, provide information on the project and landowner rights, provide copies of land agreement documents to the landowners for their review and consideration, dialogue with each landowner to answer questions and address concerns raised by landowners, provide Project updates, and disseminate any other information necessary to satisfy landowner requests and regulatory requirements. After addressing outstanding questions and issues, obtain land agreements from landowners voluntarily. Land agreements have and will address specific landowner concerns regarding construction and reclamation activity.
2. After obtaining CPCN from the NEB, Trans Mountain will provide Section 34 notices indicating the detailed route for the pipeline and the specific lands affected by the Project, and complete any additional regulatory procedures required prior to commencement of construction, including providing reasonable notice through land agents of commencement date and activities. Trans Mountain land representatives will continue to maintain contact with landowners through construction to answer questions and address any issues that may arise. Following construction, maintain communication with landowners to discuss reclamation activities and timing. Upon completion of reclamation, Trans Mountain will transition the Project land program to operations.

Respecting this report, Trans Mountain notified landowners by letter in September 2016 that NEB Condition plans were being released for consultation and feedback. The landowner notification letter requested that landowners review the reports available on the TMEP website, or alternatively contact their assigned land representative or Trans Mountain directly if they wished to receive hard copies of the reports to review. No responses or requests for copies of the reports were received by Trans Mountain and no concerns or questions about the reports were expressed by landowners.

## APPENDIX B

### RECORD OF STAKEHOLDER NOTIFICATIONS OF PLAN

TABLE B-1

#### RECORD OF NOTIFICATION

Regulator/Stakeholder Group	Contact Name (if applicable)	Date	Method of Contact
Landowners	N/A	September 11, 2016	Letter
Aboriginal Groups (please refer to Appendix E)	N/A	September 26, 2016	Letter
Vancouver Fraser Port Authority	Tim Blair	September 20, 2016	Email
Jasper National Park of Canada	Mayabe Dia	September 20, 2016	Email
Alberta Environment and Parks	Corinne Kristensen	September 20, 2016	Email
Ministry of Transportation and Infrastructure	Lisa Gow	September 20, 2016	Email
BC Parks	Ken Morrison	September 20, 2016	Email
BC Oil and Gas Commission	Brian Murphy	September 20, 2016	Email
Ministry of Natural Gas Development	Linda Beltrano	September 20, 2016	Email
Forests, Lands and Natural Resource Operations	Andrea Mah	December 22, 2016	Email
Forests, Lands and Natural Resource Operations	Susan Fitton	September 20, 2016	Email
FVAQC	Roger Quan	October 21, 2016	Email
ECCC	Phil Wong	October 21, 2016	Email
ECCC	Rachel Mayberry	October 28,, 2016	Email
ECCC	Coral Deshield	December 21, 2016	Email
ECCC	Phil Wong	December 21, 2016	Email
Vancouver Fraser Port Authority	Patrick Coates	September 20, 2016	Email
Department of Fisheries and Oceans	Sandra Hollick-Kenyon	December 3, 2016	Email
Department of Fisheries and Oceans	Alston Bonamis	December 3, 2016	Email
City of Edmonton	N/A	January 19 – 23, 2017	Letter
City of Spruce Grove	N/A	January 19 – 23, 2017	Letter
Municipality of Jasper	N/A	January 19 – 23, 2017	Letter
Parkland County	N/A	January 19 – 23, 2017	Letter
Strathcona County	N/A	January 19 – 23, 2017	Letter
Town of Edson	N/A	January 19 – 23, 2017	Letter
Town of Hinton	N/A	January 19 – 23, 2017	Letter
Town of Stony Plain	N/A	January 19 – 23, 2017	Letter
Village of Wabamun	N/A	January 19 – 23, 2017	Letter
Yellowhead County	N/A	January 19 – 23, 2017	Letter
City of Kamloops	N/A	January 19 – 23, 2017	Letter
City of Kamloops RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Kamloops Hotel Association	N/A	January 19 – 23, 2017	Letter
Kamloops Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Kamloops Ministry of Jobs, Tourism, Skills Training	N/A	January 19 – 23, 2017	Letter
City of Merritt	N/A	January 19 – 23, 2017	Letter
City of Merritt RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Clearwater Employment Services	N/A	January 19 – 23, 2017	Letter
Tourism Wells Grey	N/A	January 19 – 23, 2017	Letter
Clearwater Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
District of Clearwater	N/A	January 19 – 23, 2017	Letter
District of Clearwater RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Interior Health	N/A	January 19 – 23, 2017	Letter
Merritt Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Northern Health	N/A	January 19 – 23, 2017	Letter

**TABLE B-1 Cont'd**

Regulator/Stakeholder Group	Contact Name (if applicable)	Date	Method of Contact
Regional District of Fraser Fort George	N/A	January 19 – 23, 2017	Letter
Thompson Nicola Regional District	N/A	January 19 – 23, 2017	Letter
Town of Blue River	N/A	January 19 – 23, 2017	Letter
Venture Kamloops	N/A	January 19 – 23, 2017	Letter
Village of Valemount	N/A	January 19 – 23, 2017	Letter
Village of Valemount RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Valley District	N/A	January 19 – 23, 2017	Letter
Valemount Learning Centre	N/A	January 19 – 23, 2017	Letter
Work Skills BC- Valemount	N/A	January 19 – 23, 2017	Letter
VARDA	N/A	January 19 – 23, 2017	Letter
Valemount Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Grassland's Conservation Council	N/A	January 19 – 23, 2017	Letter
Abbotsford Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Abbotsford Police Department	N/A	January 19 – 23, 2017	Letter
ASCA	N/A	January 19 – 23, 2017	Letter
BC Invasive Species	N/A	January 19 – 23, 2017	Letter
BC Ministry of Children and Family Development	N/A	January 19 – 23, 2017	Letter
BC Ministry of Social Development	N/A	January 19 – 23, 2017	Letter
BC Nature	N/A	January 19 – 23, 2017	Letter
BC Wildlife Federation	N/A	January 19 – 23, 2017	Letter
Burnaby Board of Trade	N/A	January 19 – 23, 2017	Letter
Burnaby RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Chilliwack Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Chilliwack Economic Partners	N/A	January 19 – 23, 2017	Letter
City of Abbotsford	N/A	January 19 – 23, 2017	Letter
City of Burnaby	N/A	January 19 – 23, 2017	Letter
City of Chilliwack	N/A	January 19 – 23, 2017	Letter
City of Coquitlam	N/A	January 19 – 23, 2017	Letter
City of New Westminster	N/A	January 19 – 23, 2017	Letter
City of Port Coquitlam	N/A	January 19 – 23, 2017	Letter
City of Port Moody	N/A	January 19 – 23, 2017	Letter
City of Surrey	N/A	January 19 – 23, 2017	Letter
Coquitlam RCMP Detachment	N/A	January 19 – 23, 2017	Letter
Corporation of Delta	N/A	January 19 – 23, 2017	Letter
District of Hope	N/A	January 19 – 23, 2017	Letter
Eagle Creek	N/A	January 19 – 23, 2017	Letter
Fraser Valley Invasive Plant Council	N/A	January 19 – 23, 2017	Letter
Fraser Valley Regional District	N/A	January 19 – 23, 2017	Letter
Glen Valley Watershed Society	N/A	January 19 – 23, 2017	Letter
Hope Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Hope Community Policing Office	N/A	January 19 – 23, 2017	Letter
Langley Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
LEPS	N/A	January 19 – 23, 2017	Letter
LFVAQCC	N/A	January 19 – 23, 2017	Letter
Metro Vancouver	N/A	January 19 – 23, 2017	Letter
Newton RCMP Detachment	N/A	January 19 – 23, 2017	Letter
RCMP Division 'E'	N/A	January 19 – 23, 2017	Letter
Sapperton Fish and Game	N/A	January 19 – 23, 2017	Letter
Stoney Creek	N/A	January 19 – 23, 2017	Letter
Surrey Board of Trade	N/A	January 19 – 23, 2017	Letter
Surry Environmental Partners	N/A	January 19 – 23, 2017	Letter
Surrey RCMP Detachment	N/A	January 19 – 23, 2017	Letter

**TABLE B-1 Cont'd**

Regulator/Stakeholder Group	Contact Name (if applicable)	Date	Method of Contact
Township of Langley	N/A	January 19 – 23, 2017	Letter
Township of Langley RCMP Detachment	N/A	January 19 – 23, 2017	Letter
TriCities Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Upper Fraser Valley Regional Detachment	N/A	January 19 – 23, 2017	Letter
Village of Anmore	N/A	January 19 – 23, 2017	Letter
Village of Belcarra	N/A	January 19 – 23, 2017	Letter
Yorkson	N/A	January 19 – 23, 2017	Letter
ACGI Shipping	N/A	January 19 – 23, 2017	Letter
Barnett Marine Park	N/A	January 19 – 23, 2017	Letter
BC Ambulance	N/A	January 19 – 23, 2017	Letter
BC Chamber of Shipping	N/A	January 19 – 23, 2017	Letter
BC Coast Pilots (BCCP)	N/A	January 19 – 23, 2017	Letter
BROKE (Burnaby Residents Opposed to Kinder Morgan Expansion)	N/A	January 19 – 23, 2017	Letter
Canadian Pacific (CP) Rail	N/A	January 19 – 23, 2017	Letter
Canexus- Ero- Newalta-Univar Community Advisory Panel (CAP)	N/A	January 19 – 23, 2017	Letter
Canexus Chemicals	N/A	January 19 – 23, 2017	Letter
Chevron	N/A	January 19 – 23, 2017	Letter
CN Rail	N/A	January 19 – 23, 2017	Letter
Council of Marine Carriers	N/A	January 19 – 23, 2017	Letter
District of North Vancouver	N/A	January 19 – 23, 2017	Letter
Empire Shipping	N/A	January 19 – 23, 2017	Letter
Erco Worldwide	N/A	January 19 – 23, 2017	Letter
First Nation Emergency Services Society (FNESS)	N/A	January 19 – 23, 2017	Letter
First Nation Health Authority	N/A	January 19 – 23, 2017	Letter
Fraser Health Authority	N/A	January 19 – 23, 2017	Letter
Inchcape Shipping	N/A	January 19 – 23, 2017	Letter
Island Tug and Barge	N/A	January 19 – 23, 2017	Letter
Kask Brothers	N/A	January 19 – 23, 2017	Letter
Ledcor Resources and Transportation Limited Partnership	N/A	January 19 – 23, 2017	Letter
Mason Agency (Shipping Service)	N/A	January 19 – 23, 2017	Letter
MLA- Burnaby Lougheed	N/A	January 19 – 23, 2017	Letter
MLA- Burnaby North	N/A	January 19 – 23, 2017	Letter
MLA- Coquitlam – Burke Mountain	N/A	January 19 – 23, 2017	Letter
MLA- North Vancouver Lonsdale	N/A	January 19 – 23, 2017	Letter
MLA- North Vancouver Seymour	N/A	January 19 – 23, 2017	Letter
MLA- Port Moody- Coquitlam	N/A	January 19 – 23, 2017	Letter
MP- Delta	N/A	January 19 – 23, 2017	Letter
MP- North Burnaby Seymour	N/A	January 19 – 23, 2017	Letter
MP- North Vancouver	N/A	January 19 – 23, 2017	Letter
MP- Vancouver Centre	N/A	January 19 – 23, 2017	Letter
MP- Vancouver East	N/A	January 19 – 23, 2017	Letter
MP- Vancouver Quadra	N/A	January 19 – 23, 2017	Letter
MP- West Vancouver – Sunshine Coast – Sea to Sky Country	N/A	January 19 – 23, 2017	Letter
North Shore NOPE	N/A	January 19 – 23, 2017	Letter
North Vancouver Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Pacific Coast Terminal	N/A	January 19 – 23, 2017	Letter
Pacific Pilotage Authority	N/A	January 19 – 23, 2017	Letter

**TABLE B-1 Cont'd**

Regulator/Stakeholder Group	Contact Name (if applicable)	Date	Method of Contact
Pacific Wildlife Foundation	N/A	January 19 – 23, 2017	Letter
Peter Kiewit Infrastructure Co.	N/A	January 19 – 23, 2017	Letter
Seaspan	N/A	January 19 – 23, 2017	Letter
Shell Terminal	N/A	January 19 – 23, 2017	Letter
Simon Fraser University	N/A	January 19 – 23, 2017	Letter
SMIT Marine	N/A	January 19 – 23, 2017	Letter
Suncor Terminal	N/A	January 19 – 23, 2017	Letter
UBC Stellar Sea Lion (Marine Mammal) Research Centre	N/A	January 19 – 23, 2017	Letter
Vancouver Aquarium	N/A	January 19 – 23, 2017	Letter
Vancouver Board of Trade	N/A	January 19 – 23, 2017	Letter
Vancouver Coastal Health Authority	N/A	January 19 – 23, 2017	Letter
Vancouver Pile and Dredge	N/A	January 19 – 23, 2017	Letter
West Vancouver Chamber of Commerce	N/A	January 19 – 23, 2017	Letter
Westward Shipping	N/A	January 19 – 23, 2017	Letter
Wild Bird Trust	N/A	January 19 – 23, 2017	Letter
Metro Vancouver Regional District	Ali Ergudenler	January 19 – 23, 2017	Email
Metro Vancouver Regional District	Roger Quan	January 19 – 23, 2017	Email

## APPENDIX C

### LIST OF ABORIGINAL GROUPS INVITED TO SEEMP WORKSHOPS

- Adams Lake Indian Band
- Aitchelitz First Nation (Stó:lō)
- Alexander First Nation
- Alexis Nakota Sioux Nation
- Aseniwuche Winewak Nation
- Ashcroft Indian Band (Nlaka'pamux Nation)
- Asini Wachi Nehiyawak
- Boothroyd Indian Band (Nlaka'pamux Nation)
- Boston Bar First Nation (Nlaka'pamux Nation)
- British Columbia Métis Federation
- Canim Lake Band (Tsq'escenemc')
- Stswecem'c Xgat'tem(Canoe Creek First Nation)
- Chawathil First Nation (Stó:lō)
- Cheam First Nation (Stó:lō)
- Whispering Pines / Clinton Indian Band
- Coldwater Indian Band (Nlaka'pamux Nation)
- Cook's Ferry Indian Band (Nlaka'pamux Nation)
- Enoch Cree Nation
- Ermineskin First Nation
- Foothills Ojibway Society
- High Bar First Nation
- Horse Lake First Nation (Treaty 8)
- Kanaka Bar Indian Band
- Katzie First Nation
- Kelly Lake Cree Nation
- Kelly Lake First Nation
- Kelly Lake Métis Settlement Society Ktunaxa Nation
- Kwantlen First Nation (Stó:lō)



- Kwaw-kwaw-Apilt First Nation (Stó:lō)
- Kwikwetlem First Nation
- Leq'a:mel First Nation (Stó:lō)
- Lheidli-T'enneh First Nation
- Lhtako Dene Nation
- Little Shuswap Indian Band
- Louis Bull Tribe
- Lower Nicola Indian Band (Nlaka'pamux Nation)
- Lower Similkameen Indian Band
- Lyackson First Nation
- Lytton First Nation (Nlaka'pamux Nation)
- Matsqui First Nation (Stó:lō)
- Métis Nation of Alberta Gunn Métis Local 55
- Métis Nation British Columbia
- Métis Regional Council Zone IV of the Métis Nation of Alberta
- Michel First Nation
- Montana First Nation
- Musqueam Indian Band
- Nakcowinewak Nation of Canada
- Neskonlith Indian Band
- Nicomen Indian Band (NTA)
- Nooaitch Indian Band (Nlaka'pamux Nation)
- O'Chiese First Nation
- Okanagan Indian Band
- Oregon Jack Creek Band
- Paul First Nation
- Pauquachin First Nation
- Penelakut First Nation
- Penticton Indian Band
- Peters Band (Stó:lō)

- Popkum First Nation (Stó:lō)
- Qayqayt First Nation (New Westminster)
- Saddle Lake Cree Nation
- Samson Cree Nation
- Scowlitz First Nation (Stó:lō)
- Seabird Island Band (Stó:lō)
- Shíshálh Nation (Sechelt)
- Semiahmoo First Nation
- Sencoten Alliance
- Shackan Indian Band (Nlaka'pamux Nation)
- Shuswap Indian Band
- Shuswap Nation Tribal Council
- Shxw'owhamel First Nation (Stó:lō)
- Shxwhá:y Village (Skway First Nation) (Stó:lō)
- Simpcw First Nation
- Siska Indian Band (Nlaka'pamux Nation)
- Skawahlook First Nation (Stó:lō)
- Skeetchestn Indian Band
- Skowkale First Nation (Stó:lō)
- Skuppah Indian Band (Nlaka'pamux Nation)
- Skwah First Nation (Stó:lō)
- Soowahlie Indian Band (Stó:lō)
- Splatsin First Nation
- Spuzzum First Nation (Nlaka'pamux Nation)
- Squamish Nation
- Squiala First Nation (Stó:lō)
- St'at'imc Chiefs Council
- Stoney Nakoda First Nation
- Sts'ailes (Chehalis Indian Band) (Stó:lō)
- St'uxwtews (Bonaparte Indian Band)

- Sucker Creek First Nation
- Sumas First Nation (Stó:lō)
- Sunchild First Nation
- Tk'emlúps te Secwepemc (Kamloops)
- Toosey Indian Band
- Treaty 8 First Nations of Alberta
- Tsartlip First Nation
- Tsawout First Nation
- Tsawwassen First Nation
- Tseycum First Nation
- Tsilhqot'in National Government
- Ts'kw'aylaxw First Nation (Pavilion Indian Band)
- Tsleil-Waututh Nation
- Tsuut'ina First Nation
- Tzeachten First Nation (Stó:lō)
- Union Bar Indian Band (Stó:lō)
- Upper Nicola Band (Nlaka'pamux Nation)
- Upper Similkameen Indian Band
- Whitefish (Goodfish) Lake First Nation #128
- T'exelc (Williams Lake Indian Band)
- Xat'süll First Nation (Soda Creek Indian Band)
- Yakwekwioose First Nation (Stó:lō)
- Yale First Nation (Stó:lō)

## APPENDIX D

### LIST OF PARTICIPATING ABORIGINAL GROUPS IN SEEMP WORKSHOPS

Date	Location	Aboriginal Groups
September 9, 2015	Abbotsford, BC	British Columbia Metis Federation Chawathil First Nation Métis Nation of British Columbia Sto:lo Collective Sts'ailes (Chehalis Indian Band) (Stó:lō) Yale First Nation Leq'á:mel First Nation
September 16, 2015	Kamloops, BC	Canim Lake First Nation Coldwater Indian Band (N'laka'pamux Nation) High Bar First Nation Lower Nicola Indian Band (N'laka'pamux Nation) Upper Nicola Band (N'laka'pamux Nation)
September 22, 2015	Edmonton, AB	Alexander First Nation Alexis Nakota Sioux First Nation Aseniwuche Winewak Nation Enoch Cree Nation Ermineskin First Nation Foothills Ojibway Society Métis Nation of Alberta Gunn Métis Local 55 Métis Regional Council Zone IV of the Métis Nation of Alberta Nakcowinewak Nation of Canada O'Chiese First Nation Samson Cree Nation Shackan Indian Band (N'laka'pamux Nation) Sucker Creek First Nation Sunchild First Nation
September 24, 2015	Chilliwack, BC	Stó:lō Collective
February 17, 2016 (SEEMP not presented)	Coquitlam, BC	Kwikwitem First Nation

## APPENDIX E

### ABORIGINAL GROUPS CONSULTED ON THE SEEMP

- Adams Lake Indian Band
- Aitchelitz First Nation (Stó:lō)
- Alexander First Nation
- Alexis Nakota Sioux First Nation
- Aseniwuche Winewak Nation
- Ashcroft Indian Band (Nlaka'pamux Nation)
- Asini Wachi Nehiyawak
- Boothroyd Indian Band (Nlaka'pamux Nation)
- Boston Bar First Nation (Nlaka'pamux Nation)
- British Columbia Métis Federation
- Canim Lake Band (Tsq'escenemc)
- Stswecem'c Xgat'tem (Canoe Creek First Nation)
- Chawathil First Nation (Stó:lō)
- Cheam First Nation (Stó:lō)
- Whispering Pines / Clinton Band
- Coldwater Indian Band (Nlaka'pamux Nation)
- Cook's Ferry Indian Band (Nlaka'pamux Nation)
- Cowichan Tribes
- Ditidaht First Nation
- Enoch Cree Nation
- Ermineskin First Nation
- Esquimalt Nation
- Foothills Ojibway Society
- Halalt First Nation (CNA)
- High Bar First Nation
- Horse Lake First Nation (Treaty 8)
- Huu-ay-aht First Nation
- Hwilitsum First Nation (CNA)

- Kanaka Bar Indian Band
- Katzie First Nation
- Kelly Lake Cree Nation
- Kelly Lake First Nation
- Kelly Lake Métis Settlement Society
- Ktunaxa Nation
- Kwantlen First Nation (Stó:lō)
- Kwaw-kwaw-Aplit First Nation (Stó:lō)
- Kwikwetlem First Nation
- Lake Cowichan First Nation
- Leq'a:mel First Nation (Stó:lō)
- Lheidli-T'enneh First Nation
- Lhtako Dene Nation
- Little Shuswap Indian Band
- Louis Bull Tribe
- Lower Nicola Indian Band (Nlaka'pamux Nation)
- Lower Similkameen Indian Band
- Lyackson First Nation
- Lytton First Nation (Nlaka'pamux Nation)
- Maa-Nulth Treaty Society
- Malahat First Nation
- Matsqui First Nation (Stó:lō)
- Métis Nation of Alberta Gunn Métis Local 55
- Métis Nation of British Columbia
- Métis Regional Council Zone IV of the Métis Nation of Alberta
- Michel First Nation
- Montana First Nation
- Musqueam Indian Band
- Nakcowinewak Nation of Canada
- Neskonlith Indian Band

- Nicola Tribal Association (Shackan Indian Band, Nooaitch Indian Band and Nicomen Indian Band)
- Nicomen Indian Band (NTA)
- Nooaitch Indian Band (Nlaka'pamux Nation)
- Nuu-Chah-Nulth Tribal Council
- O'Chiese First Nation
- Okanagan Indian Band
- Oregon Jack Creek Band (Nlaka'pamux Nation)
- Pacheedaht First Nation
- Paul First Nation
- Pauquachin First Nation
- Penelakut First Nation
- Penticton Indian Band
- Peters Band (Stó:lō)
- Popkum First Nation (Stó:lō)
- Qayqayt First Nation (New Westminster)
- Saddle Lake Cree
- Samson Cree Nation
- Scia'new Indian Band (Beecher Bay)
- Scowlitz First Nation (Stó:lō)
- Seabird Island Band (Stó:lō)
- Shíshálh Nation (Sechelt)
- Semiahmoo First Nation
- Sencoten Alliance
- Shackan Indian Band (Nlaka'pamux Nation)
- Shuswap Indian Band
- Shuswap Nation Tribal Council
- Shxw'ōwhámel First Nation (Stó:lō)
- Shxwha:y Village (Stó:lō)
- Simpcw First Nation
- Siska Indian Band (Nlaka'pamux Nation)

- Skawahlook First Nation (Stó:lō)
- Skeetchestn Indian Band
- Skowkale First Nation (Stó:lō)
- Skuppah Indian Band (Nlaka'pamux Nation)
- Skwah First Nation (Stó:lō)
- Snaw-Naw-As (Nanoose)
- Snuneymuxw First Nation
- Songhees Nation
- Soowahlie Indian Band (Stó:lō)
- Splat sin First Nation
- Spuzzum First Nation (Nlaka'pamux Nation)
- Squamish Nation
- Squiala First Nation (Stó:lō)
- St'at'imc Chiefs Council
- Stó:lō Collective
- Stoney Nakota First Nation
- Sts'ailes Band (Chehalis Indian Band) (Stó:lō)
- St'uxwtews (Bonaparte Indian Band)
- Stz'uminus First Nation (Chemainus)
- Sucker Creek First Nation
- Sumas First Nation (Stó:lō)
- Sunchild First Nation
- Tk'emlúps te Secwepemc (Kamloops)
- Toosey Indian Band
- Treaty 8 First Nations of Alberta
- Tsartlip First Nation
- Tsawout First Nation
- Tsawwassen First Nation
- Tseycum First Nation
- Tsilhqot'in National Government



- Ts'kw'aylaxw First Nation (Pavillion Indian Band)
- Tseil-Waututh Nation
- T'Sou-ke First Nation
- Tsuut'ina First Nation
- Tzeachten First Nation (Stó:lō)
- Union Bar Indian Band (Stó:lō)
- Upper Nicola Band (Nlaka'pamux Nation)
- Upper Similkameen Indian Band
- Whitefish (Goodfish) Lake First Nation #128
- T'exelc(Williams Lake Indian Band)
- Xat'sūll First Nation (Soda Creek Indian Band)
- Yakwekwioose First Nation (Stó:lō)
- Yale First Nation (Stó:lō)