

Trans Mountain Expansion Project Socio-Economic Monitoring Report - Lower Mainland Region

April to June 2023



Introduction

This report presents the quarterly socio-economic monitoring results for the Lower Mainland Region related to construction of the Trans Mountain Expansion Project (TMEP or the Project). The monitoring approach and indicators are discussed in detail in the TMEP Socio-Economic Effects Monitoring Plan (SEEMP) approved by the Canadian Energy Regulator (CER) pursuant to CER Condition 13 (see link below). This report presents the Project-specific indicators; these are data that are directly attributable to the Project, reflect the Project's contribution to socio-economic outcomes, and help pinpoint Project actions that may require change. Please refer to Annex 1 - Socio-Economic Context, Lower Mainland for the regional context indicators that reflect the broader socio-economic conditions in which Project construction is occurring.

[Socio-Economic Effects Monitoring Plan \(CER Condition 13\)](#) (link to the CER website where the SEEMP is filed)

For more information contact: info@transmountain.com or 1-866-514-6700

Project-Specific Indicators

Quantitative Indicators

SEEMP Indicator No.	Indicator	Monthly Total			Quarterly Count	% (where applicable)	Threshold Triggered? (Y/N)	If Threshold Triggered, Action Taken
		Apr-23	May-23	Jun-23				
N/A	Total calendar days of construction site work during the reporting cycle	24	28	26	78	N/A	N/A	
	Workers on site per day (average)	2112	1629	1726	1810	N/A		
1	Number of worker-days in field (categorized in two ways: by geographic origin, and also by Indigenous v. non-Indigenous status) <i>Threshold for Action: Number of non-local/regional workers by region/spread is +/- 20% different than estimated in Worker Accommodation Strategy CER Condition 59</i>							
	Total Worker-days	50688	45612	44876	141176	100%	Y (See Note 1) Indicator 5 (below) provides updated anticipated work force number (in worker days) in this region for the next business quarter. These numbers are made available through notification of the online posting of this Report to municipal or regional government authorities, health authorities, social services, police, hotel / tourism associations and chambers of commerce.	
	a) Worker-days, Local or Regional residents	19324	21343	20947	61614	44%		
	b) Worker-days, Other (workers not Local or Regional residents)	31364	24269	23929	79562	56%		
	c) Indigenous	3446	3019	2851	9316	7%		
	d) Non-Indigenous	47242	42593	42025	131860	93%		
2	Number of worker-days in field (categorized by accommodation arrangements of the workers) <i>Threshold for Action: Less than 75% of non-local/regional workers are staying in camps and qualitative feedback received about adverse issue or concern from local authority or tourism /hotel association representative.</i>							
	Total Worker-days	50688	45612	44876	141176	100%	N (See Note 2) N/A	
	a) Worker-days, Local or Regional resident, residing at home	19257	15799	15470	50526	36%		
	b) Worker-days, not Local or Regional, not staying in TMEP camps (i.e., staying in local rental, hotel)	31431	29813	29406	90650	64%		
	c) Worker days, not Local or Regional resident, staying in TMEP camps	0	0	0	0	0%		
3	Living out allowance or related stipend <i>Threshold for Action: An increase in the number of worker-days paid (indicator 3a) from the previous reporting cycle and any qualitative feedback received about adverse issues from local authorities or tourism /hotel associations.</i>							
	a) Number of worker-days paid	31491	29859	29429	90779	N/A	N (See Note 3) N/A	
	b) Total value (\$)	\$ 6,618,633	\$ 6,643,316	\$ 5,438,242	\$ 18,700,191	N/A		
5	Number of worker-days, in field - anticipated in next business quarter <i>Threshold for Action: N/A - this is a forward indicator to assist stakeholders and Indigenous groups in community readiness.</i>							
					Worker days	Worker onsite per day (avg)		
	a) July 2023	N/A			30646	1179	N/A N/A	
	b) August 2023	N/A			27201	1046		
	c) September 2023	N/A			19577	753		

SEEMP Indicator No.	Indicator	Monthly Total			Quarterly Count	% (where applicable)	Threshold Triggered? (Y/N)	If Threshold Triggered, Action Taken
		Apr-23	May-23	Jun-23				
6	Number of motor vehicle collisions or reportable incidents that involve Project vehicles on public roads during work hours or Contractor-owned vehicles during off-work hours <i>Threshold for Action: No minimum threshold. All incidents/accidents will be investigated.</i>							
	Total	5	0	1	6	N/A	N/A	
	a) Number involving injuries	0	0	0	0	N/A		
	b) Number involving fatalities	0	0	0	0	N/A		
7	Workers transported from staging areas per day (average) <i>Threshold for Action: Number, when calculated as a % of total workers on site (average during the month of the count) is less than 75%.</i>							
	Mid-month count	1613	168	1092	958	N/A	Y (See Note 4) Pipeline Contractor confirms it has worker transport strategies, using shuttles to transport workforce from staging areas. There are multiple staging areas to support efforts to transport workers to worksites daily, while some positions require a vehicle to complete their work between multiple sites.	
	End-month count	1956	164	1551	1224	N/A		
	Average	1785	166	1322	1091	N/A		
8	Personal vehicles in staging area per day (average) <i>Threshold for Action: 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.</i>							
	Mid-month count	109	112	738	320	N/A	N (See Note 5) N/A	
	End-month count	692	113	545	450	N/A		
	Average	401	113	642	385	N/A		
9	Number of times a "captive" Project worker was referred to a local health facility or required emergency medical transport ("Captive" workers = workers on a Project premises, i.e., in camp or on work-site) <i>Threshold for Action: Qualitative feedback from local health authority regarding capacity concerns.</i>							
	a) Total number of times a worker was referred or sent to local health facilities	6	16	5	27	100%	N (See Note 6) N/A	
	i. urgent	1	0	0	1	4%		
	ii. non-urgent	5	16	5	26	96%		
	iii. occupational	4	8	3	15	56%		
	iv. non-occupational	2	8	2	12	44%		
	b) Total number of times a worker required ambulance or other emergency transport	1	0	0	1	N/A		
10	Number of medical visits to Project on-site medical facilities <i>Threshold for Action: Number, when calculated as a percentage of average number of workers per month rises from the previous reporting cycle.</i>							
	Total	124	35	83	242	100%	Y (See Note 7) Contractor continuing to evaluate on-site medical services to ensure they are adequate to support Project needs.	
	a) occupational	64	11	9	84	35%		
	b) non-occupational	60	24	74	158	65%		
14	Number of people affected by a notifiable disease in a work camp <i>Threshold for Action: No minimum threshold; all notifiable diseases will be reported to the local health authority</i>							
	Total	0	0	0	0	N/A	N/A	N/A

Qualitative Indicators

SEEMP Indicator No.	Indicator			Threshold Triggered? Y/N	If Threshold Triggered, Action Taken	
4	Qualitative feedback about Project use of local/regional commercial accommodation (e.g., hotels, motels, campgrounds) <i>Threshold for Action: Qualitative feedback received about adverse issues from local authorities, tourism/hotel associations or hotels used by Contractor.</i>					
	None			N	N/A	
11	Number and types of calls/complaints received through TMEP feedback line about construction-related social impacts <i>Threshold for Action: There is no threshold for action as all grievances will be responded to.</i>					
	Month	Number, originating from the region	Common Socio-Economic Impact Themes During the Quarter		N/A	N/A
Apr-23	Total: 23 % Indigenous: 0 % Non-Indigenous: 100	Sensory disturbance - Project-related noise, vibration and light complaints in Langley and Surrey; noise and vibration felt by residents near Redwoods Golf Course; noise from the West Munday HDD; Burnaby resident complained about trees removed that were acting as a noise buffer; Project-related noise and vibration during the week and on the weekend in Surrey; Project-related noise and dust in Surrey and on Government St.; noise in Burnaby during the night; vibration in Redwoods; noise from street sweeper interfering with resident of 88th Ave working from home; dust in Redwoods neighbourhood; Project-related night noise in Burnaby; noise and vibration in Redwoods neighbourhood; Project-related noise vibration and light in Langley; noise from a vacuum truck in Langley; noise, dust and vibration near the Salmon River HDD; noise and vibration in Fraser Heights; weekend noise, dust and vibration in Surrey; noise in Meadowood neighbourhood.		Trans Mountain will follow up on dust, light, noise and vibration complaints to confirm their relation to Project activity. Trans Mountain is monitoring to ensure compliance with bylaws and requirements. Trans Mountain will work with stakeholders to resolve and address such complaints where practical. Each complaint is examined in order to provide additional information and/or appropriate follow-up. For example, regarding the trees removed, reclamation plans have been communicated to the resident. Regarding dust concerns, additional water trucks and sweepers were deployed to enhance with dust management. Regarding the noise at night in Burnaby, Trans Mountain investigated and confirmed crews were operating a hydrovac outside allotted time window. Trans Mountain has apologized and reminded the crew they are not permitted to hydrovac past 8:00 pm.		
May-23	Total: 21 % Indigenous: 0 % Non-Indigenous: 100	Access limitations - complaint about bike lane closures in Burnaby and bike detours in Burnaby and Coquitlam. Human Occupancy and Resource Use - Surrey resident concern about lawn damage from Project-related traffic control; construction sign left on residents lawn in Surrey; Surrey resident concerned about wildlife being pushed off the ROW and entering garage.		Trans Mountain will continue to follow up on any access-related concerns. Each complaint is examined in order to provide additional information and/or appropriate follow-up. Trans Mountain will continue to follow up on any property-related concerns. Each complaint is examined in order to provide additional information and/or appropriate follow-up. For example, regarding the lawn damage, Trans Mountain will ensure the damaged lawn is restored once work in the area is complete.		

Month	Number, originating from the region	Common Socio-Economic Impact Themes During the Quarter			
Jun-23	Total: 28 % Indigenous: 0 % Non-Indigenous: 100	<p>Business impacts - golf course advised of a water leak requiring the City to turn off their water; complaint regarding issues with business underground sprinklers.</p> <p>Traffic/Driving- traffic on Greenwood St. from activity at Bainbridge temporary site; driving conduct (e.g., speed, smoking) as workers access Bainbridge Ave Temporary Group Parking Facility in Burnaby; vehicles idling in Surrey; Project-related trucks using Halston in Burnaby as a turnaround point; Project-related workers parking in bike lanes in Langley; Project-related workers parking in business parking lot and pot holes; drain cover in business parking lot is posing a hazard; business complained about traffic causing delays leaving parking lot; Project-related traffic and dust on Cliff Ave in Burnaby; member of the public complained about damage to vehicle from running over something on the road; Project-related traffic on Government St.; alleged damage to property on Government St. from Project-related vehicles turning around; Project-related truck ran a stop sign in Burnaby; rock from alleged Project-related vehicle broke window of Fraser Heights resident; Langley resident complained of Project-related trucks speeding and using engine retarder brakes; disruption to traffic flow in Langley; lack of traffic control on Sundays in Surrey; complaint about continued closure of Government St. and Broadway.</p> <p>Worker conduct - Project-related worker throwing cigarette butt from work vehicle.</p>	<p>Trans Mountain will continue to follow up on any traffic-related or business impact concerns. Contractors have a Traffic Management Plan that addresses public protection measures, access roads/routes to the construction site and Traffic Control Plans for each work zone which consider potential impacts with mitigation. Trans Mountain follows with the contractor to ensure requirements are being met. Each complaint is examined in order to provide additional information and/or appropriate follow-up. For example, Trans Mountain worked with the business to ensure they had a temporary supply of water until the matter was resolved. Regarding the underground sprinklers, Trans Mountain is addressing the issue. Regarding traffic on Greenwood St, a traffic manager visited the site to view the traffic impacts, there will be a change made in the traffic pattern, and all workers will be reminded to be respectful when driving in the area, including stopping for pedestrians. Regarding rock hitting windshield, the incident is under investigation. Regarding driving conduct at parking facility, management personnel were being stationed at site to monitor the situation and reminders were included in daily safety bulletin.</p>	N/A	N/A

12 **Qualitative feedback themes about community concerns and experienced social effects**
Threshold for Action: Adverse socio-economic issue or concern from an appropriate government authority or service provider or community organization.

Theme	Impact Overview	Trans Mountain Response	Threshold Triggered? Y/N	If Threshold Triggered, Action Taken
Traffic/Road Use (Township of Langley)	Dirt on road in two locations in Langley (around Telegraph Trail; around 216 St and 96 Ave). Workers parking in bike lanes	Trans Mountain will continue to follow up on road and traffic-related complaints to confirm their relation to Project activity. Contractors have a Traffic Management Plan addressing public protection measures, access roads/routes to the construction site and Traffic Control Plans for each work zone. Trans Mountain will work with stakeholders to resolve and address such complaints where practical.	Y	Additional street sweepers added; road cleaned to remove mud and debris. Email sent to Contractor staff to remind them not to park on road.
Sensory Disturbance (Metro Vancouver)	Dust and odour from Burnaby Terminal	Trans Mountain will continue to follow up on dust and odour complaints to confirm their relation to Project activity. Trans Mountain is working to ensure compliance with related bylaws and requirements. Trans Mountain will work with stakeholders to resolve and address such complaints where practical. In this instance, the report occurred when surface preparation work was being done on one of the new tanks and a delivery was occurring at the Terminal.	Y	Wind conditions will be monitored during this kind of activity going forward.

	Sensory Disturbance (Individuals)	Project-related noise, dust and vibration in Surrey and Langley; Project-related lights shining into residents home in Surrey; and dirt and dust on roads in Surrey.	Trans Mountain will continue to follow up on noise, dust and vibration complaints to confirm their relation to Project activity. Trans Mountain will work with stakeholders to resolve and address such complaints where practical.	N	N/A
	Traffic (Local Business, Individuals)	Project-related vehicle parking in business parking lot. Project-related vehicles speeding in Surrey. Vehicle in Surrey allegedly damaged by a Project-related street sweeper.	Trans Mountain will continue to follow up on traffic-related or business impact concerns. Contractors have a Traffic Management Plan addressing public protection measures, access roads/routes to the construction site and Traffic Control Plans for each work zone. Trans Mountain is working to ensure compliance with related bylaws and requirements. Trans Mountain will work with stakeholders to resolve and address such complaints where practical. For example, Trans Mountain requested photos of the vehicle in order to better address the concern. Trans Mountain followed up with the individuals regarding the speeding and damaged vehicle. Trans Mountain assisted the individual regarding how to submit a claim for impact to business revenue.	N	N/A
	Business Impacts (Local Business)	Alleged loss of revenue due to Project construction.		N	N/A
13	Qualitative feedback themes about effects on the quality and abundance of traditional harvesting resources, or ability of Indigenous people to harvest resources, within the Project footprint Threshold for Action: Qualitative feedback from Indigenous group leader/administrator regarding reports of adverse effects on quality and abundance of traditional harvesting resources, or ability of Indigenous people to harvest their resources or access cultural sites, within the Project footprint.				
	None				

Methodology and Notes

- Information in this report was collected through internal sources including labour and incident data from Contractors, TMEP feedback line data, and the review of stakeholder and Indigenous engagement records. Data reflects activity related to TMEP construction only.
- A worker-day is defined as 10 hours of work, by a construction Contractor on-site or in an on-site office.
- The monthly data cut-off is typically the last Saturday of each month; this reporting cycle was March 26, 2023 - June 24, 2023.
- Thresholds are internally assessed on a monthly basis and are considered triggered if a threshold is exceeded for any given month within each quarterly reporting cycle.
- The threshold analysis of Indicator 1 utilizes the estimate of non-local/regional workers estimated in the Worker Accommodation Strategy (WAS) CER Condition 59, based on the corresponding month of construction in an ordered manner. For example, Month 1 predicted in the WAS is compared to Month 1 actual.
- Indicator 11 tallies feedback line calls/queries related to actual socio-economic impact topics related to TMEP construction activity. Socio-economic topics include: access limitations; road closures; business impacts; pressure on housing/accommodations; burden on infrastructure/services; sensory disturbance; traffic and driving; worker conduct; traditional use and cultural sites.
- Employment and business opportunity and training indicators are monitored and reported through separate processes, as per distinct CER Conditions (CER Condition 107 - Aboriginal, Local and Regional Employment and Business Opportunity Monitoring Reports; and CER Condition 58 - Training and Education Monitoring Reports).
- Individual numbers may be rounded to allow for totals to add up.
- For the threshold analysis for Indicator 1, the estimate of non-local/regional workers estimated in the WAS finished in May 2020. While calculations comparing indicator 1 to the estimated workforce in the original WAS are no longer possible due the longer construction timeline, Trans Mountain continues to respond like the threshold for action has been triggered and share forward workforce estimates.
- Indicator 5 includes active Construction contractors only.
- Data may be subject to revisions based on updates from Contractors or ongoing quality reviews.

Quantitative Threshold Analysis Notes:

1. For Indicator 1, data is not available. Construction workforce continues beyond Worker Accommodation Strategy predicted timeframe.
2. For Indicator 2, no adverse feedback was received from local authorities or tourism/hotel associations; therefore, the threshold has not been triggered.
3. For Indicator 3, there was a decrease in the number of worker-days paid for indicator 3a from the previous reporting cycle (quarterly total) and no adverse feedback was received from local authorities or tourism/hotel associations; therefore, the threshold has not been triggered.
4. For Indicator 7, the average workers transported from staging areas per day (1091) is approximately 60% of the average workers on site per day (1810); therefore, the threshold has been triggered.
5. For Indicator 8, the personal vehicles in the staging area per day (average) was less than 10% of the AADT values at locations nearest to staging yards; therefore, the threshold has not been triggered.
6. For Indicator 9, no feedback was received from the local health authority regarding capacity concerns; therefore, the threshold has not been triggered.
7. For Indicator 10, the total as a percentage of average number of workers per month reflected as workers on site per day (average over quarter) (13.4%), is higher than the previous reporting cycle (13.3%); therefore, the threshold has been triggered.