

MEMO

Date: August 25, 2021

From: Mike McLellan, Vice President, Project Development, GCT Global Container Terminals Inc.

To: Stefan Crampton, Project Manager, Impact Assessment Agency of Canada
Brendan Mather, Project Assessment Director, BC Environmental Assessment Office

Subject: Road and Rail activities incidental to the proposed GCT Deltaport Expansion Berth Four Project

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1 OVERVIEW

This memo supplements information provided in the Detailed Project Description (DPD) (GCT 2021) and Incidental Activities Memo (submitted May 10, 2021) on road and rail activities incidental to the proposed Global Container Terminals (GCT) Deltaport Expansion Berth Four Project (DP4 or the Project). It reaffirms GCT's position that:

- Road and rail are outside of GCT's care and control;
- GCT has no jurisdiction for these activities outside the DP4 Project lease boundary, unlike Vancouver Fraser Port Authority (VFPA) as the proponent of the Robert's Bank Terminal Two Project (RBT2) used for comparison; and
- Safety and environmental management requirements for road and rail at the municipal, provincial and federal level are anticipated to be appropriate for future proposed container growth at Robert's Bank.

The additional information is provided to the Impact Assessment Agency of Canada (IAAC) and the British Columbia Environmental Assessment Office (EAO) to enable their decision on the spatial extent of these incidental activities for the DP4 Impact Assessment, as requested by both agencies. Project-related incidental road and rail activities involve the movement of containers via truck and rail as described in the DPD (GCT 2021), submitted to the IAAC and EAO for review on July 9, 2021. The anticipated container transportation routes for road and rail are shown in Figure 1.

The Incidental Activities memo submitted to EAO and IAAC on May 10, 2021, states that *"The movement of trucks and railcars outside of the anticipated lease boundary are incidental activities because they are not under GCT's care and control, and GCT has no ability to direct or influence third party operators, including Canadian Pacific (CP) and Canadian National (CN) for rail operations, and the various independent trucking companies. [In addition] Future incremental changes in road and rail activities associated with Project operations but outside of GCT's care and control may be assessed as part of the regional assessment area (RAA) or a cumulative effects assessment area, which encompasses the [Local Assessment Area] LAA and a larger spatial boundary within which the measurable residual effects of the Project are likely to interact cumulatively with the effects of other past, present and reasonably foreseeable future projects and activities."* The DP4 lease boundary is shown with a black dashed line in Appendix 1.

Figure 1: Container Transportation Routes.



Source: Detailed Project Description (DPD) (GCT 2021), Figure 6.

1.1 EAO/IAAC Request for Additional Information

This memo provides a preliminary estimate for road and rail activities related to Project operations. It provides information on the contributions of overall traffic associated with the Project on key roads and rail tracks leaving Deltaport, and “at which point these increases may cease to become measurable” (as requested via email from IAAC), and as a result be close to imperceptible.

1.2 Objectives and Approach

GCT has leveraged existing information, largely based on the analysis completed for the Roberts Bank Terminal Two (RBT2) Project proposed by VFPA, with assumptions to approximate the road and rail activities from the DP4 Project. Road-related traffic is presented in relation to peak traffic (highest potential impact), while rail traffic is more constant and does not have as pronounced of a peak and so averages are presented.

While it is not possible for GCT to complete the analysis required for a detailed Traffic Impact Study (TIS) and a detailed Rail Impact Study (RIS) at this early stage in the Project, GCT has referenced key relevant information from multiple traffic-related analyses and data sources in proximity to DP4 that can be used by the agencies in their determination of the spatial extent of road and rail traffic for the DP4 Impact Assessment. This information provides an overview of the contribution from the proposed RBT2 Project to overall road and rail traffic in the Lower Mainland due to the similar location and scope to the DP4 Project.

Road traffic references used in this memo include:

1. GCT DeltaPort Expansion, Berth Four Project (DP4)—Detailed Project Description (DPD) (GCT 2021)
2. 2020 Translink Regional Road Performance Monitoring Report (Translink 2020)
3. Container Capacity Improvement Program: Road Traffic Distribution Report (Worley Parsons 2012)
4. George Massey Tunnel Replacement Project: Traffic Data Overview DRAFT (BC MoTI 2015)
5. Roberts Bank Terminal 2 – Traffic Assessment Review (Delcan 2015)
6. Roberts Bank Terminal 2 (RBT2): Working Group – Workshop #2 (April 15, 2014) (VFPA 2014)

Rail traffic references used in this memo include:

1. GCT DeltaPort Expansion, Berth Four Project (DP4)—Detailed Project Description (DPD) (GCT 2021)
2. Container Capacity Improvement Program: Road Traffic Distribution Report (Worley Parsons 2012)
3. Roberts Bank Terminal 2 (RBT2): Working Group – Workshop #2 (April 15, 2014) (VFPA 2014)

1.3 Scope Considerations for RBT2 and DP4

When comparing the scope of the assessment for RBT2 with DP4 it is important to note the differences in the proposed project proponents. Namely, GCT for DP4 and VFPA for RBT2. In the meeting record from the RBT2 Working Group – Workshop #2 (VFPA 2014), VFPA described the scope of RBT2 project-related transportation as including “the marine, road, and rail transportation within the areas for which the proponent [VFPA] has jurisdiction”. GCT recognizes and agrees that VFPA has jurisdiction over certain aspects of the proposed DP4 Project and ancillary activities such as road and rail transportation. GCT is the DP4 proponent, and unlike VFPA, does not have jurisdiction over these activities outside the lease boundary.

So, while GCT will adhere to all VFPA requirements, and assumes that all road and rail transport operators will also follow requirements, GCT has no ability to implement mitigation for activities outside GCT's care and control.

1.4 Key Assumptions

Key assumptions for quantification of the DP4 Project incidental road and rail activities, which are primarily modified from traffic analysis studies completed for RBT2, include:

- Rail-Truck Split: 65% rail and 35% truck
- Import-Export Split: 53% import and 47% export
- Departing Import Trains:
 - Deltaport Terminal post-DTRRIP Peak: 5 trains daily
 - DP4 Peak: 4 trains daily (compared to RBT2 – 5 trains)
- Arriving Export Trains:
 - Deltaport Terminal post-DTRRIP Peak: 5 trains daily
 - DP4 Peak: 4 trains daily (compared to RBT2 – 5 trains)
- Total Traffic Volume: DP4, as proposed, will have ~20% fewer road and rail container movements than RBT2
- DP4 road and rail traffic will increase gradually in the first 30 years, with peak “Twenty foot equivalents units” (TEU) throughput capacity anticipated to be reached by approximately 2060
 - This gradual growth will allow for infrastructure to correspondingly grow to meet demand and for traffic management to develop, as required, at the municipal, provincial and federal level
- Incremental (relative) Traffic Volume: Regional baseline road and rail traffic in the Lower Mainland will increase by 10% each decade between 2025 and 2060 (full Project capacity utilization). DP4's road and rail traffic is also expected to increase by ~10% each decade leading to constant, relative traffic contribution over the life of the Project
- As rail volumes ramp up, the 4 trains that are currently in operation can become longer to accommodate more containers. GCT does not anticipate an additional train will be required until ~2034. At peak operations DP4 assumes that no more than 4 additional trains will be required for the Project
- Incremental traffic increases of less than 10% of overall relative traffic will be imperceptible and, as a result, this increase has been used as a threshold based on discussion with regulatory authorities including IAAC and EAO for the purpose of this preliminary traffic analysis

1.5 Safety and Environmental Management

1.5.1 Truck Licensing System

VFPA has the ability to control vehicles destined to or from the proposed DP4 Project through the Truck Licensing System (TLS) approval process.

The [Truck Licensing System](#) states that:

- All container trucking companies and their trucks desiring to serve the port's marine container terminals must meet certain criteria to be eligible for an Access Agreement under the Truck Licensing System to gain access to the federally-owned port property. Criteria include minimum truck age, safety and environmental requirements.
- The Port of Vancouver was the first port in Canada with stringent environmental requirements for port container drayage trucks to reduce air emissions, implemented by the Vancouver Fraser Port Authority in 2008. The key environmental requirement for truck approval in the Truck Licensing System targets truck age restrictions.

GCT would similarly rely on the TLS under VFPA's control to provide safe and environmentally responsible transportation of containers via road when outside of the proposed Project lease boundary and outside GCT's care and control.

1.5.2 Provincial and Municipal Truck Management

The BC [Ministry of Transportation and Infrastructure](#) (MoTI) has a mandate for [vehicle safety and enforcement](#) and maintenance of [transportation infrastructure](#) in BC. In addition, the municipality of Delta has [Roads & Transportation](#) improvement projects to manage and accommodate regional vehicular growth. Trucks associated with DP4 will be managed under existing and future municipal and provincial vehicle management processes and infrastructure upgrades that are outside GCT's care and control.

1.5.3 Rail

Transport Canada is responsible for safe and secure railways, railway operating certificates, incident reporting and investigations, and shipping by rail as detailed on their website ([rail transportation \(canada.ca\)](http://rail.transportation.canada.ca)). Rigorous and recently updated legislation regulates rail movement, this includes:

- [Railway Safety Act \(RSA\)](#)
- [The Safe and Accountable Rail Act](#)
- [Delegation of Authorities Pursuant to Section 45 of the Railway Safety Act](#)
- [Order Declaring Relevant Associations and Organizations in Relation to Federally Regulated Railway Companies](#)
- [Other Transport Canada Acts](#)

Railway operations associated with DP4 will be managed under existing and future CN and CP requirements, other federal management processes, and infrastructure upgrades to railways that are outside GCT's care and control.

2 ROAD TRAFFIC

2.1 GCT Deltaport Roads Overview

The DPD (GCT 2021) includes relevant information for the analysis of road traffic, as follows:

- “Truck traffic leaving/arriving at Deltaport uses Highway 17 and then branches off onto other Lower Mainland roads to their final destination or collection points. Typically, traffic routes will take trucks throughout the lower mainland and depending on their destination, trucks will use Highways 17, 99, 91, 10 and 1. Traffic destined to the USA will utilize Highway 17 to 99 and then to the USA border. Trucks moving containers to other parts of BC or other provinces will typically utilize Highway 17 to Highway 1 eastbound to their destinations. Figure 6 [of the DPD, included as Figure 1 above] provides an overview of road and rail container shipping routes associated with Deltaport.”
- “GCT has not yet undertaken a detailed analysis of road and rail transportation requirements specifically for DP4. However, the Roberts Bank Trade Area (RBTa) study undertaken by the Gateway Transportation Collaboration Forum has examined road and rail traffic impacts from terminal expansions at Roberts Bank, including increased trade through GCT Deltaport Container Terminal and the Westshore Coal Terminal. Table 7 [of the DPD, included as Table 1 below] provides initial estimates of increased rail and road traffic for the Project.”

Table 1: Average Rail and Road Traffic Volumes to/from Roberts Bank Terminal.^{1,2}

Scenario	Rail movements per day	Truck movements per day	Other road movements per day
GCT Deltaport	8	3,500	2,000
Westshore (Delcan 2015)	13	N/A	350
Total excl. DP4	21	3,500	2,350
Estimated DP4	8	2,900	1,700
Estimated Total	29	6,400	4,050

¹ Source: Detailed Project Description (DPD) (GCT 2021), Table 7.

² Information in Table 1 is derived from the 2015 RBT2 Environmental Impact Statement (Appendix 4-D of the Roberts Bank Traffic Data Matrix (Delcan 2015)). The actual table numbers have been adjusted to reflect the lower capacity of 2.0 million TEUs for the DP4 Project compared to 2.4 million TEUs for RBT2 and the current traffic volumes to/from GCT Deltaport. The increase in throughput and associated traffic can be accommodated through the addition of one berth, due to efficiencies of expanding an existing terminal.

2.2 Regional Traffic Growth

The 2020 Translink Regional Road Performance Monitoring Report (Translink 2020) states that:

- “The overall demand on the region’s roads is increasing across all modes. Overall trips per household have grown by 9% over the past five years, from 2.96 in 2011 to 3.23 overall trips per household in 2017. The largest proportion of this growth is from shopping and personal business trips. There are also more people living in Metro Vancouver now than there were in 2011.”

This report also shows in a variety of maps that the mobility delay during the morning (8:00 – 9:00 AM) and evening (5:00 – 6:00 PM) are at the lowest level presented in proximity to Roberts Bank. Mobility reliability metric shows that roads are reliable during morning and evening and collision frequency metric shows the lowest level of collision frequency and severity at intersections in proximity to Roberts Bank.

This study support's GCT assumption for DP4-related traffic being relatively constant compared to growth in regional traffic, both being conservatively assumed to increase at ~10% per decade between 2025 and 2060.

2.3 Roads and Traffic Routes

VFPA's Container Capacity Improvement Program (CCIP) - Road Traffic Distribution Report (Worley Parsons 2012) shows the estimated distribution of truck traffic from RBT2. Similar to RBT2, the DP4 Project assumes that 50% of traffic from the proposed Project will drive north on SFPR, 35% will transit the Massey Tunnel, and 15% will drive east on Highway 99. The six traffic streams, totaling ~100% of Project-related traffic as shown in Figure 2, diverge at Delta (the intersection of Highway 17 and 99).

Figure 2: Roberts Bank Estimated Truck Traffic Distribution.



Source: VFPA Container Capacity Improvement Program: Road Traffic Distribution Report, Exhibit 2.

2.4 Existing and Future Projected Road Traffic

The Roberts Bank Terminal 2 – Traffic Assessment Review (Delcan 2015) states that:

- “The Deltaport Terminal has an existing assumed throughput of 1.56 Million TEUs. This throughput is conservatively anticipated to increase to 2.4 Million TEUs by 2020. The addition of Roberts Bank Terminal 2 will add an additional 2.4 M TEUs of capacity by 2025 for a combined Roberts Bank terminals (Deltaport Terminal + RBT2) container capacity of 4.8 Million TEUs.”

Based on recent trade volume forecasts, GCT has assumed that container throughput at Robert’s Bank could increase beyond 4.0 Million TEUs between 2050 and 2060 if capacity becomes available.

The addition of DP4 will add 2.0 M TEUs of capacity for a combined Deltaport Terminal + DP4 container capacity of 4.4 Million TEUs. Table 2 below (reproduced from Delcan 2015, Table 9) shows RBT2 having a 63% increase (noted as 1.63 factor) between 2010 baseline and terminal operations by 2025 as reported in 2015. Because DP4 is planned to have 20% less throughput than RBT2, DP4 is expected to represent a ~50% increase in road traffic from Roberts Bank for annual two-way truck movements across the gates (in + out) by 2060.

Table 2: Container Truck Traffic Generation (Peak Day).

Variable / Volume (M TEU)	1.56 (Baseline)	2.4	4.8	Factor	Units
Deltaport Terminal + RBT2 Total	1,560,000	2,400,000	4,800,000		TEU/Year
Containers Across Dock	906,977	1,371,429	2,742,857	1.75	Containers / Year (1.72 in 2011)
Containers Across Gate	1,079,302	1,632,000	3,264,000	1.19	Gate Moves / Dock Moves
Intermodal Rail Split	592,845	896,434	1,792,869	65%	Containers / Year
Containers Moved Across the Gate By Truck	486,457	735,566	1,471,131		Gate Containers by Truck
Annual Two Way Truck Movements Across the Gates (In + Out)	792,925	1,198,972	2,397,944	1.63	Trucks / Year
Net External Two Way Truck Movements East of Causeway (In + Out)	634,340	959,178	1,918,355	80%	Trucks / Year

Source: Delcan 2015, Table 9 (excerpt).

Despite the estimated 50% increase across the gates at Roberts Bank, when DP4 traffic disperses in a variety of directions, Project-related traffic soon becomes imperceptible. This is described further in VFPA’s CCIP report (Worley Parsons 2012) where RBT2 incremental traffic was modelled, resulting in a maximum peak southbound of 3.3% and northbound at 4.5% (Figure 3, from Worley Parsons 2012, Exhibit 5).

DP4 assumes 20% lower maximum peaks, leading to ~2.6% for southbound and ~3.6% for northbound peak traffic at the George Massey Tunnel. So, while the largest proportion of DP4 traffic (35%) can be expected to move through the George Massey Tunnel, this is expected to be a very small relative increase, arguably imperceptible at +/- 3%. This is much lower than the 10% approximate perceptibility threshold suggested to GCT by EAO and IAAC.

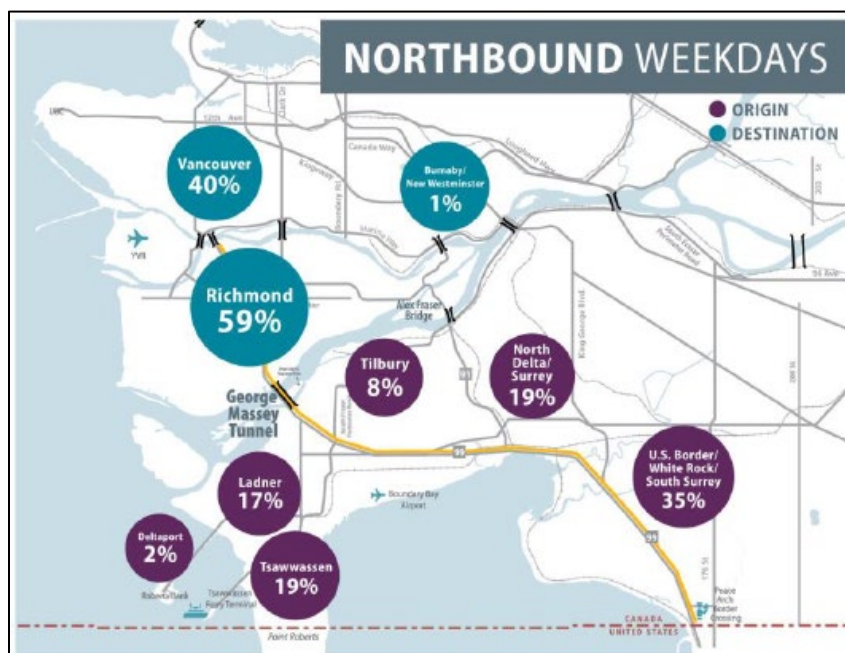
Figure 3 George Massey Tunnel Peak Hour Traffic.



Source: Worley Parsons 2012, Exhibit 5.

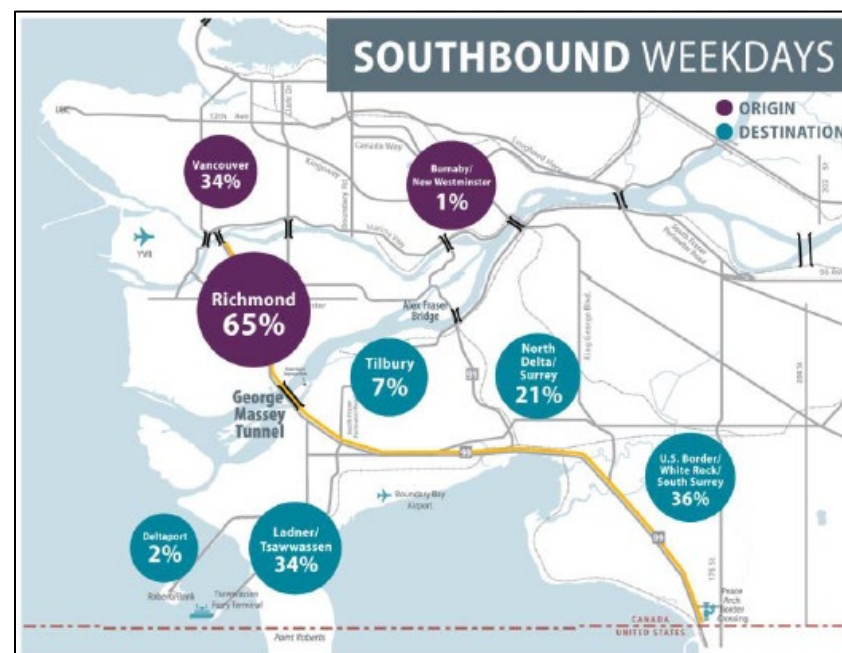
Supporting this information are Figures 4 and 5, taken from the George Massey Tunnel Replacement Project Traffic Data Overview DRAFT (BC MoTI 2015). They show that overall Robert's Bank traffic destined to, or from, the George Massey Tunnel was ~ 2% in 2015. GCT expects that typical weekday traffic from Deltaport will remain at ~2% by 2030 regardless of DP4 related traffic increases. With DP4 assumed to have 20% less container movement than RBT2, the DP4 contribution to traffic can be expected to be imperceptible at the George Massey Tunnel during typical weekday traffic.

Figure 4: Origins and Destinations for Northbound Traffic on a Typical Weekday in 2014.



Source: BC MoTI 2015, Figure 8.

Figure 5: Origins and Destinations for Southbound Traffic on a Typical Weekday in 2014.



Source: BC MoTI 2015, Figure 9.

2.4.1 Traffic by Road Segment

The colour-coded Table 3 and Figure 6 below, from the Roberts Bank Terminal 2 (RBT2): Working Group – Workshop #2 (VFPA 2014), show the predicted RBT2 regional road traffic average daily movements forecast for RBT2 in 2030 across various road segments.

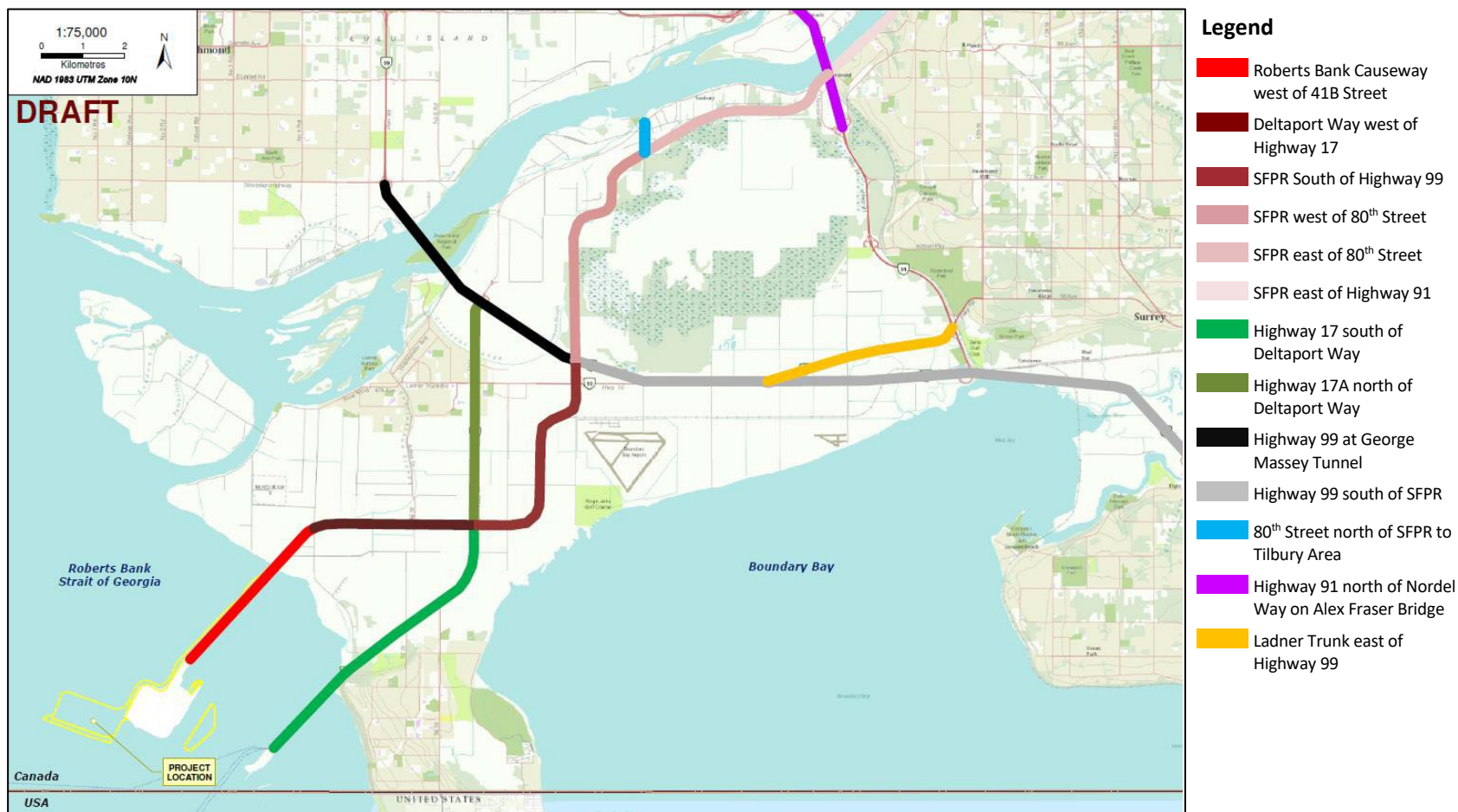
Table 3: Predicted RBT2 Regional Road Traffic Average Daily Movements Forecast for RBT2 in 2030 Across Various Road Segments.

Road / Highway	AVERAGE DAY MOVEMENTS IN YEAR 2030						
	All Traffic Without RBT2	RBT2 Container Trucks	RBT2 Cars & Other Vehicles	Total RBT2 Traffic	All Traffic With RBT2	Net Change (%) Due To Total RBT2 Traffic	% Of All Traffic Due To RBT2 Traffic
	A	B	C	D = B + C	E = A + D	F = D / A	G = D / E
Roberts Bank Causeway west of 41B Street	5,784	3,692	1,741	5,433	11,217	93.9%	48.4%
Deltaport Way west of Highway 17	19,527	3,692	1,741	5,433	24,960	27.8%	21.8%
SFPR south of Highway 99	29,388	3,692	1,552	5,244	34,632	17.8%	15.1%
SFPR west of 80 th Street	41,301	1,846	949	2,795	44,096	6.8%	6.3%
SFPR east of 80 th Street	52,224	923	949	1,872	54,096	3.6%	3.5%
SFPR east of Highway 91	60,324	554	690	1,244	61,568	2.1%	2.0%
Highway 17 south of Deltaport Way	57,840	0	0	0	57,840	0.0%	0.0%
Highway 17A north of Deltaport Way	28,952	0	172	172	29,124	0.6%	0.6%
Highway 99 at George Massey Tunnel	98,750	1,290	172	1,462	100,212	1.5%	1.5%
Highway 99 south of SFPR	61,583	369	172	541	62,124	0.9%	0.9%
80 th Street north of SFPR to Tilbury Area	22,437	923	0	923	23,360	4.1%	4.0%
Highway 91 north of Nordel Way on Alex Fraser Bridge	167,340	369	259	628	167,968	0.4%	0.4%
Ladner Trunk east of Highway 99	26,244	185	431	616	26,860	2.3%	2.3%

Source: VFPA 2014.

The approximate relative contribution of DP4 derived traffic relative to regional traffic is expected to drop to less than 10% (an approximate threshold of where traffic-related impacts from the Project would become close to imperceptible) at the intersection of SFPR and Highway 99 for Northbound and Eastbound traffic, with any traffic diverting to Highway 17A from Deltaport Way being much less than the 10% contribution threshold where traffic-related impacts from the Project are assumed to cease to be measurable.

Figure 6: Predicted RBT2 Regional Road Traffic Average Daily Movements Forecast for RBT2 in 2030 Across Various Road Segments.



Source: VFPA 2014.

3 RAIL TRAFFIC

3.1 GCT Deltaport Rail Overview

GCT recently completed its rail expansion project in early 2021, densifying Deltaport and increasing its overall terminal capacity to 2.4 million TEUs or 1,400,000 million container lifts. Overall container traffic (Import & Export) as a percentage of overall traffic through Deltaport is approximately 65% rail and 35% truck traffic. Today, Deltaport handles on average 4 rail trains per day, two for CN rail and 2 for CP rail. Total daily train output averages between 28,000 to 38,000 feet of Import traffic each day. The Deltaport rail train plan is shown in Table 4.

Table 4: Deltaport Rail Train Plan.

Deltaport Train Plan – August 2021			
RAILWAY	TRAIN	RELEASE TIME	* PLANNED FOOTAGE
CN	116	0600 hours	11,800 feet
CP	198	1200 hours	10,500 feet
CN	102/106/126	1800 hours	12,700 feet
CP	100	2359 hours	10,000 feet
		Total planned footage	Up to 45,000 feet / day

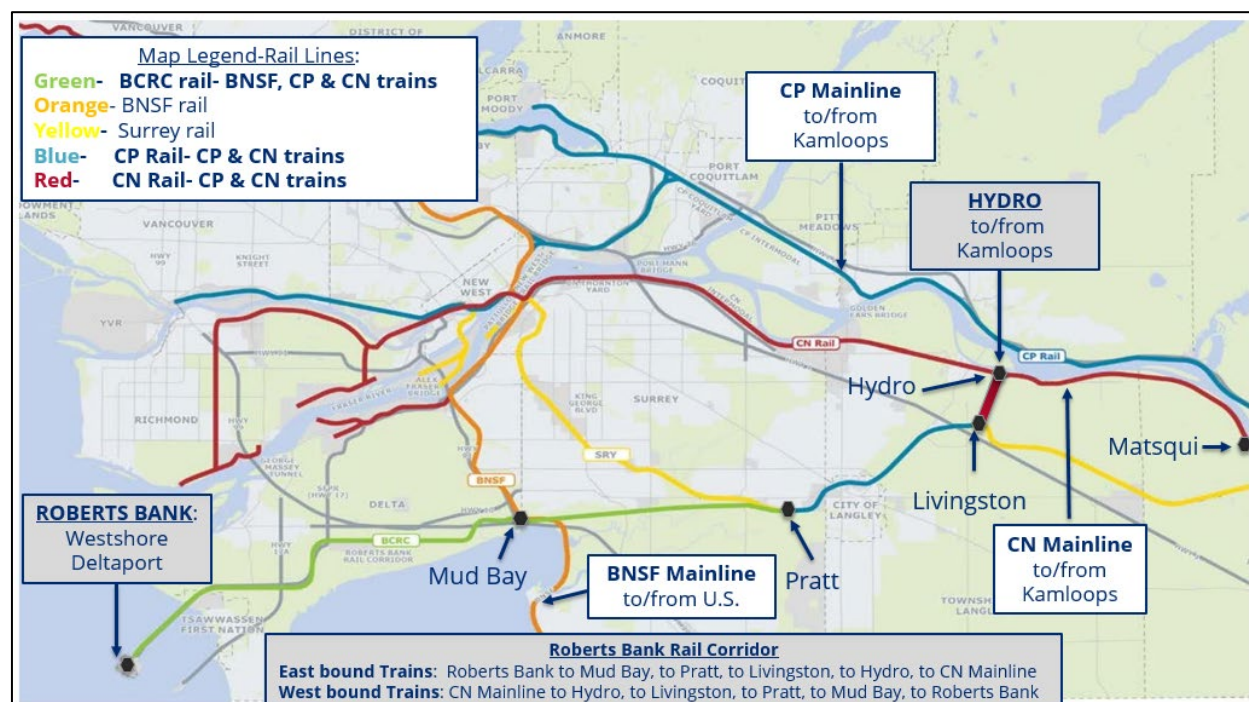
*Train length depends on rail car demand, rail car supply and other factors.

Source: GCT.

3.2 Rail Carriers and Routes

CN Rail and CP Rail are the two Canadian rail carriers that move container trains into/out of GCT Deltaport via the Roberts Bank Rail Corridor (RBRC) shown in Figure 7 below. In addition, CP Rail also moves “coal trains” into/out of Westshore Terminal along the RBRC. Westbound coal trains head southbound off the CN Mainline at Hydro and transit along the full length of the RBRC into Westshore Terminal. BNSF rail line also moves U.S. “coal trains” northbound from the U.S. border along their own rail line to Mud Bay, and then connect westbound onto the RBRC to Westshore.

Figure 7: Metro Vancouver Rail Map & RBRC.



Source: GCT.

CN Rail and CP Rail are the only two railways that move container trains into/out of the Metro Vancouver area at this time. Both rail carriers have their own rail lines or rail running rights across other companies' rail lines that cross Canada and cover most major cities. Both rail carriers also have rail lines or running rights that enter into the U.S. from Eastern Canada. These rail lines travel from the Canada/U.S. border down as far south as the Gulf of Mexico.

CN and CP trains carry a variety of commodities in individual commodity trains in both directions across Canada and into the U.S. Trains may be moving containers, bulk coal, bulk sulphur, bulk grain products, automobiles, lumber, and other commodities.

Trains travelling westbound into British Columbia (B.C.) transit CN and CP individual rail lines until they get to Kamloops, B.C. Once trains arrive in Kamloops, the two railways have a **"Co-production Working Agreement"** as follows:

- **Westbound trains** from CN and CP Kamloops rail stations transit onto the CN Mainline (travelling South of the Fraser River), CP Coquitlam destined trains (servicing numerous terminals located on the north shore and south shore of Vancouver, also known as the "inner harbour") once arriving into Matsqui will cross over the CP Mission Bridge. All other trains continue west along the CN Mainline and either go to Thornton Yard (servicing Fraser Surrey docks and the inner harbour) or turn southward at Hydro, if destined for the Roberts Bank terminals.
- **Eastbound trains** from Roberts Bank travel along the RBRC to Mud Bay, then to Pratt, then to Livingston, then to Hydro. At that point, the Eastbound Roberts Bank trains join up with trains from the CN Thornton Yard and travel along the CN Mainline to Matsqui where they will connect onto the CP Mainline at the Mission Bridge, cross Northbound over the Fraser River and then head east to Kamloops on the CP Mainline (North of the Fraser River)

Table 5 below illustrates the approximate travel distances of trains along the RBRC and South to the U.S. border

Table 5: Approximate travel distances of trains along the RBRC and South to the U.S. border.

RBRC- CN & CP Container & Coal Trains				
Section	From/To: West to East	Approximate Distance	Rail Line Owner	Comments
1.	Roberts Bank to Pratt	37 k	BC Rail	Port Subdivision
2.	Pratt to Livingstone	12 k	CP Rail	Page subdivision
3.	Livingston to Hydro	4 k	CN Rail	Rawlinson subdivision
4.	Hydro to Matsqui	22 k	CN Rail	Yale subdivision
	Total:	75 k		*At Matsqui

RBRC & BNSF- BNSF Coal Trains				
Section	From/To: West to East	Approximate Distance	Rail Line Owner	Comments
1.	Roberts Bank to Mud Bay	20 k	BC Rail	Port Subdivision
2.	Mud Bay to CDN. / US border	13 k	BNSF	BNSF mainline from/to US
	Total:	33 k		Canada/US Border

***At Matsqui:** All eastbound trains travel along the CN mainline, then branch off Northbound onto CP Mainline (over Mission bridge) and continues North of the Fraser river to Kamloops. At this point CP trains continue eastbound on CP tracks and CN trains continue on CN tracks

Source: GCT.

3.3 Roberts Bank Rail Corridor and Trade Area

The Gateway Transportation Collaboration Forum commissioned CH2M to provide the “Roberts Bank Trade Area Study (RBTA)” in 2016. The RBTA spans six municipalities (Corporation of Delta, City of Surrey, City of White Rock, City of Langley, Township of Langley, and City of Abbotsford) and several First Nations. In addition to these communities, Translink, the British Columbia Ministry of Transportation and Infrastructure, Transport Canada, and the Vancouver Fraser Port Authority play a role in facilitating the efficient and safe movement of people and goods in this area. The trade area is home to Metro Vancouver’s largest container terminal (GCT Deltaport) and major coal terminal (Westshore) at Roberts Bank. It is also home to the RBRC, an important 75 kilometre (km) rail network connecting the terminals with the rest of the North American rail network. Since 2007, the RBRC Improvement Program has invested hundreds of millions of dollars in a package of road and rail infrastructure improvements funded through a collaboration of 12 agencies representing local, regional, provincial and federal governments, as well as the private sector.

The operation for the two Roberts Bank marine terminals depends heavily on a well-connected and efficient rail and road corridor to bring commodities to and from the terminals.

3.4 Existing and Future Projected Train Traffic

Several reports over the last decade have projected what the future increase in container and coal traffic effect would be on the existing RBRC regional rail network. Table 6 contains information from VFPA 2014. As T2 and the proposed DP4 project are similar in TEU capacity gain, we have used the same analysis to project the change in increased train movements over the 2030 to 2060 time period.

The DP4 projected increase in rail traffic will add an additional four trains (8 movements) over the span of approximately 30 years when nearing capacity. Figure 8 illustrates the “Net change predictions” over the various rail segments of the RBRC.

Table 6: Regional Rail Traffic—Net Change Predictions.

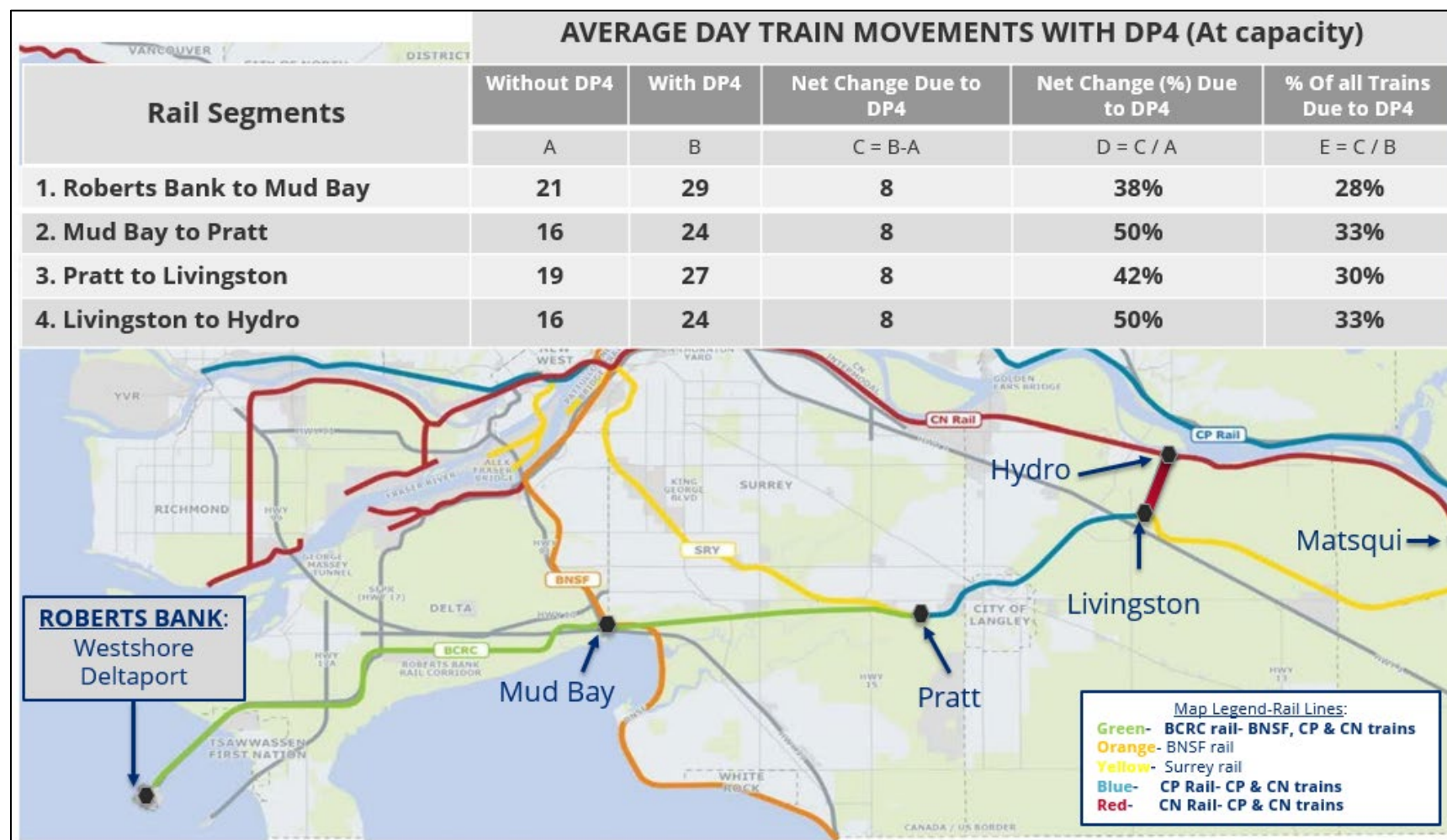
For Regional RBRC rail traffic				
Remarks			Column	
• Without DP4- 21 total average train movements / day (Deltaport with 8 and Westshore with 13)			Column A	
• With DP4 Expansion- +8 train movements (*At capacity)			Column B	
• Net change due to DP4			Column C (B minus A)	
• Net change (%) due to DP4			Column D (C / A * 100%)	
• % of all trains due to DP4			Column E (C / B * 100%)	
AVERAGE DAY TRAIN MOVEMENTS WITH DP4 (At capacity)				
Without DP4	With DP4	Net Change Due to DP4	Net Change (%) Due to DP4	% Of all Trains Due to DP4
A	B	C = B-A	D = C / A	E = C / B
21	29	8	38%	28%
+8 New Train movements				
• Train movements will grow based on demand and train length, with one new train starting in approximately 2034 and then adding one every 4-6 years based on preliminary projected forecast.				

Source: GCT.

3.4.1 Rail Movements by Track Segment

Depending on the RBRC rail segment, the percentage of all trains as a result of DP4 varies between 28% to 33% (Figure 8). Once trains arrive at or leave the CN Mainline at Hydro, the percentage reduces dramatically as a result of the large increase in the number of trains going to and from CNs Thornton yard.

Figure 8: Regional Rail Traffic —Net Change Predictions by Rail Segment.



Source: GCT.

4 CONCLUSIONS AND RECOMMENDATIONS

GCT maintains our position as described in the May 10th “Physical activities incidental to the proposed Deltaport Expansion Berth Four Project – MEMO”, notably that: “trucks and railcars outside of the anticipated lease boundary are incidental activities because they are not under GCT’s care and control, and GCT has no ability to direct or influence third party operators, including Canadian Pacific (CP) and Canadian National (CN) for rail operations, and the various independent trucking companies.”

In consideration of BCEAO and IAAC’s request for additional information to scope the geographic extent of the project, and where project-related traffic is reduced to 10% or less of the overall traffic, GCT is unable to provide the precise location where the proposed DP4 Project traffic represents +/- 10%.

Based on the information referenced in this memo, noting the relatively small (<3%) contribution of road traffic at specific congestion points like the George Massey Tunnel, GCT reaffirms that truck traffic outside the lease boundaries should not be included in the DP4 assessment. DP4 is anticipated to have 40 to 50% net change to various segments of rail track, nevertheless, GCT is confident that existing railway management is sufficient and that rail operations outside GCT’s care and control should be excluded from the DP4 assessment.

GCT suggests that BCEAO and IAAC defer to Delta, BC MoTI, VFPA and Transport Canada for management of traffic-related impacts outside GCT’s care and control. Many comparisons between RBT2 and DP4 are relevant, but the differences between proponents (VFPA and GCT) are noteworthy in consideration of jurisdiction. For RBT2, VFPA was able to assert jurisdiction over port-bound trucks and rail cars. GCT has no such jurisdictions but is committed to advocating adherence to VFPA requirements by trucks and rail cars calling at the DP4 facility. GCT will also work with MoTI to develop more detailed traffic impact analysis information over the coming years to ensure that Delta and MoTI have the necessary time to plan for increased traffic in the local area.

5 REFERENCES

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APPENDIX 1: DP4 PROJECT AREA

