EDMONTON REGION EXTERNAL TRUCK/COMMODITY SURVEY

Published: July, 2003

Revised: July, 2004

Alberta TRANSPORTATION

THE CITY OF Edmonton

Economic Development **Edmonton**

EDMONTON REGION EXTERNAL TRUCK/COMMODITY SURVEY

REPORT AND RESULTS

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July 2003

SYNOPSIS

In the fall of 2001, Alberta Transportation and the City of Edmonton undertook an External Truck/Commodity Survey to allow them to study the movement of commercial goods by the truck mode into and out of the Edmonton Region. The survey was structured similar to the survey undertaken by the City of Calgary in 2000. The intent of the study is to provide planners with information to assess the transportation needs of both Alberta Transportation and the City of Edmonton.

Roadside interviews were conducted between September and November 2001 at 24 sites on provincial highways entering the study area (Exhibit 1.2.1 Section 1.2) between the hours of 8:00 AM and 4:00 PM.

In all just, over 6,500 truckers transporting commodities into and out of the Edmonton Region were interviewed entering and exiting the region on various provincial highways. The information gathered from the survey was scaled up to represent daily truck and commodity movement into and out of the study area. Findings of the study indicate:

- Almost 16,000 trucks enter or exit the region on a typical weekday on a 24-hour basis;
- Approximately 16,200 Commodity trips are made on a typical weekday on a 24-hour basis;
- The highways that carry the majority of the trips into and out of the region include Highway 2 South (20%), Highway 16W (13%), Highway 43 (10%), Highway 16E (9%) and Highway 21 (7%);
- For highways where 24-hour truck counts were conducted it was observed that
- 40 percent of all truck travel occurs between 8:00AM and 4:00PM;
- Truck traffic peaks between 5:30PM and 6:00PM
- Highway 43 carries the highest proportion of trucks, followed closely by Highway 2 South, Highway 16 West and Highway 16 East;
- 72% of the trucks were owned by the company producing goods being shipped;
- Total tonnage or Gross Vehicle Weight amounted to 660,000 metric tons on the highways;
- 77% of all trucks were Multi Unit trucks and 23% were Single Unit trucks;
- 36% of all trucks were empty, 19% carried manufactured goods, machinery, equipment and transportation related items;
- 62% of the trucks carried a single commodity and only 2% carried more than one commodity
- 42% of the trips originated or were destined to the City of Edmonton, 37% originated or were destined to rest of the Edmonton Region and 21 % were external to external trips;

A summary of the commodity trip origins and destinations grouped into various regional locations is shown on Table S1 below. Details of the study findings are contained in Section 4 of the report.

Table S 1 – Commodity Origin/Destination by Locality

Edmonton Region External Truck Commodity Survey
Commodity Origin / Destination by Locality – Weekday 24 Hour Daily

Destined To → Originating In ↓	Edmonton	Edmonton Region	Calgary Region	Northeast Alberta	Northwest Alberta	Southeast Alberta	Southwest Alberta	British Columbia	Sask. & Manitoba	Rest of Canada	United States	Total
Edmonton		15	545	505	775	918	228	205	198	38	100	3,525
Edmonton Region	20	95	210	465	678	918	388	95	133	15	38	3,053
Calgary Region	358	165		90	105	28	5	40	8	5		803
Northeast Alberta	610	413	38	38	50	90	45	20	3		3	1,308
Northwest Alberta	763	768	113	38	118	288	568	13	45	10	30	2,750
Southeast Alberta	908	943	13	80	180	195	58	30	5	3		2,413
Southwest Alberta	245	448	8	65	433	43	103	28	3		5	1,378
British Columbia	220	95	38	15	13	28	20	8	28	8	5	475
Saskatchewan & Manitoba	140	80	5	13	45	5	3	28			3	320
Rest of Canada	30	10	10	3	8	5		18				83
United States	58	15	5		8	3		5			15	108
Total	**3,350**	**3,045**	**983**	**1,310**	**2,410**	**2,518**	**1,415**	**488**	**420**	**78**	**198**	**16,213**

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ACKNOWLEDGEMENTS

1. Introduction

In the fall of 2001, Alberta Transportation and the City of Edmonton undertook a Commodity Flow Survey to allow them to study the movement of goods and services in the Edmonton Region and the City of Edmonton. The survey was broken into two distinct components. The first, the External Truck/Commodity Survey, deals with movement of commercial goods by the truck mode into and out of the Edmonton Region including the City of Edmonton. The second deals only with the shipment of commercial goods and services originating in the City of Edmonton and the Region. Both surveys were structured similarly to the surveys undertaken by the City of Calgary in 2000.

This study deals with the first component i.e. the movement of commercial goods by the truck mode into and out of the Edmonton Region including the City of Edmonton. The survey was conducted at the outskirts of the study area on provincial highways entering the study area (Exhibit 1.2.1 Section 1.2). The study is intended to provide planners with information to assess the transportation needs of both Alberta Transportation and the City of Edmonton.

1.1. Overview of the External Truck/Commodity Survey

Between September and November 2001, over 6500 truckers transporting commodities into and out of the Edmonton Region were interviewed entering and exiting the region on various provincial highways. The survey gathered the following information:

- the commodities that entered the Edmonton Region, their origins and destinations;
- how those goods reach their destinations;
- what type of vehicles are being used, including all sorts of multi and single unit trucks, light trucks, vans etc;
- the stops being made in the region;
- the time of day of travel
- the highways used to transport the commodities; and
- the ownership of the vehicles

The results of the survey were coded and entered into an electronic database and scaled up to represent daily trips for the purposes of analysis. The information will be used in complementing the expansion of the Edmonton Region Personal Travel Model and to project the future transportation needs based upon various assumptions about the type and magnitude of regional growth and the location of these developments.

1.2. Study Area

Exhibit 1.2.1 shows the extent of the study area incorporated into the strategic Expanded Edmonton Region Travel Analysis Model.

It corresponds to the Edmonton Census Metropolitan Area (CMA) and portions of the County of Lamont and includes:

- The Cities of Edmonton, St. Albert, Spruce Grove, Fort Saskatchewan and Leduc
- The Towns of Stony Plain, Devon, Calmar, Beaumont, Morinville, Bon Accord, Gibbons, Redwater, Legal, Bruderheim, New Sarepta
- Leduc County, Parkland County, Sturgeon County and Strathcona County and the urban municipalities therein, and
- A portion of Lamont County that falls into the Industrial Heartland.

Exhibit 1.2.1 – Study Area and Interview Location
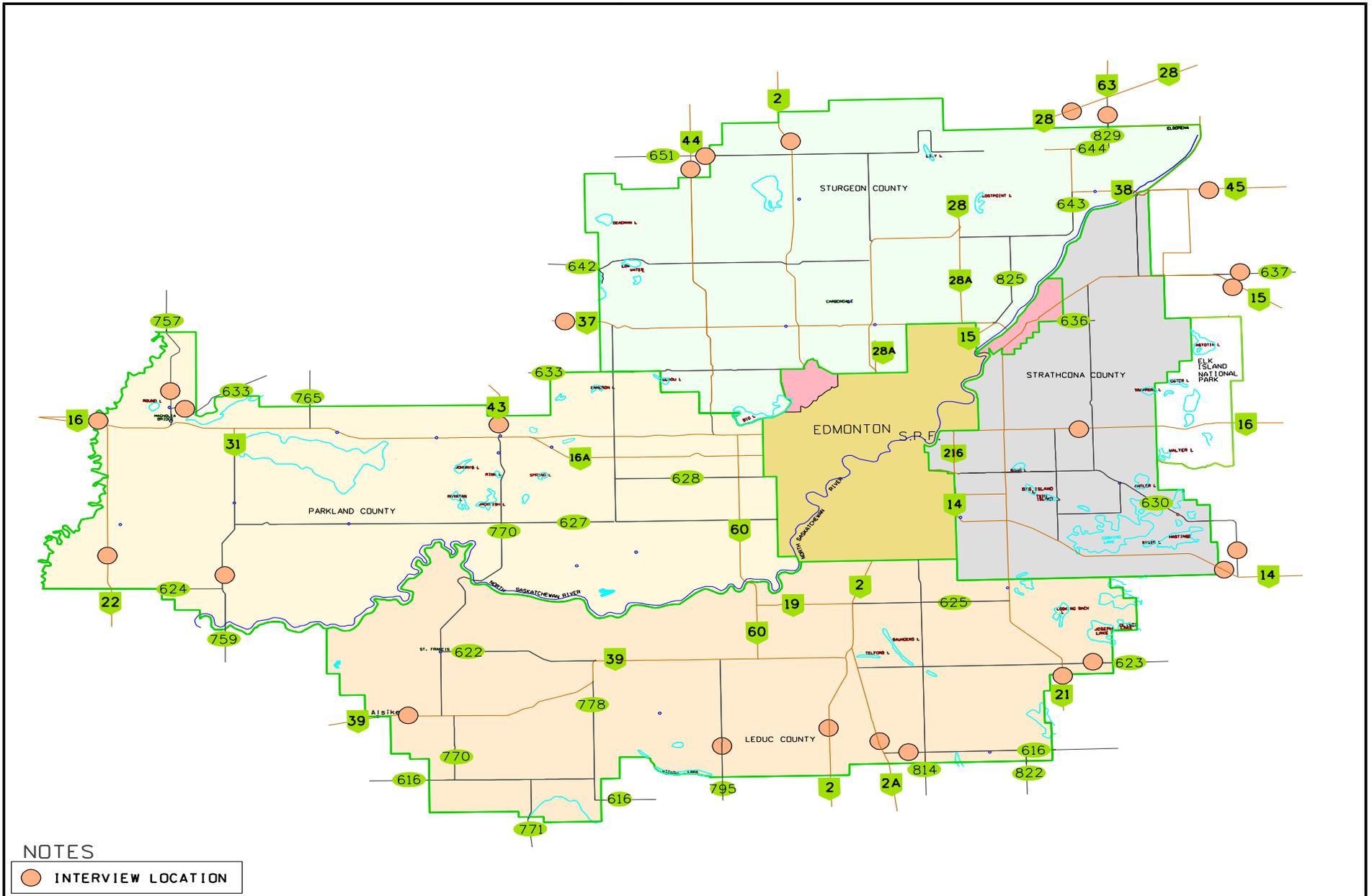
1.3. Report Content and Organization

This report provides an overview of the information collected from the External Truck/Commodity Survey. It is intended to illustrate a pattern of commodity and truck movements into and out of the Edmonton Region at the time of survey.

In addition to this introductory section, there are three other sections of the report as follows:

- *Types of Truck Surveys and Uses of Truck Survey Data*

This section (Section 2) describes the comprehensive freight movement surveys, the survey methodologies and the particular methodologies used in the collection of the External Truck/Commodity Survey and the Commodity flow Survey. It also discusses the need for the survey data and how this data can be used. Factors influencing freight movements and the impacts of freight movements are discussed in relative detail in Appendix D.

- *External Truck Commodity Survey*
  Details of data collection are discussed in Section 3.

- *Study Findings*
  Findings of the study are described here (Section 4).

2. Types of Truck Surveys

There are two ways of looking quantitatively at freight movement; the first is to analyze trips, where a trip is the one – way movement of a truck from origin to destination, and the second is to analyze consignments, where a consignment is the movement of a commodity from point of loading to point of unloading. The essential difference between a consignment and a trip is that a consignment may comprise any number of trips. Therefore a study of consignments tracks the movement of commodities through the study area and a study of trips investigates the movement of vehicles on the road network.

Due to the complexity and cost of collecting consignment data most freight movement data collection is based on commercial vehicle trips. Road freight movement within a study area can be split into three main movements: internal – internal, external – external and internal – external (or external – internal). They are described as follows:

- ♦ internal – internal (I – I) movements have both origin and destination in the study area,
- ♦ External – external (E – E) movements constitute movements where both the origin and destination are outside of the study area and move through the study area,
- ♦ Internal – external (I – E) or external – internal movements have one end outside the study area and one end inside the study area. They are significant to the study area (includes the urban areas), because they take goods to or take from the study area and in many cases pass through specialized terminals resulting in more regulated movements.

In order to capture the most information and depending on the objectives of the study, literature indicates that the best outputs, for freight studies, are achieved using a combination of the following survey methodologies:

- ♦ Employer surveys of (origin) generation rates,
- ♦ Mail – out mail – back questionnaires,
- ♦ Surveys and interviews with company officials truck drivers and terminal operators,
- ♦ Truck counts,
- ♦ Truck origin – destination surveys, and
- ♦ "Expert groups" comprising trucking operators, police forces, and industry representatives.

The most common survey method for conducting truck travel surveys in urban areas is the combined *telephone – mailout – mailback* method. It is quite cost effective and yields a reasonably high response rate. The Commodity Flow Survey for goods shipped from the City of Edmonton and the Edmonton Region utilized a hybrid of the telephone – mailout – mailback method coupled with personal contact and with assisting company

officials in filling out the survey forms using records of the shipment information. The survey was outsourced to International Results Group who had completed a similar survey for the Calgary Region in 2000.

The second most used survey method is the *roadside interview* method. Roadside interviews produce very high response rates with complete information. They are ideal for cordon surveys or for surveying trucks travelling in from outside the survey area. The External Cordon Commodity Flow Survey utilized this method for the collection of data at the entry and exit points into the study area.

2.1. The Need and Uses for Truck Travel Data

Being essential to the economic vitality of a nation, trucks not only act as the "supply-line" from warehouses to points of consumption, they connect intermodal freight facilities (seaports, airports, railroad and freight terminal facilities). As important as truck travel is to a region, it also has negative effects such as traffic congestion, truck related accidents, air pollution, noise, and pavement deterioration. These factors are discussed later in the report. In order to undertake comprehensive truck/freight planning, accurate and reliable truck travel data is needed for analysis.

In terms of planning needs, improved truck travel data could be used for the following purposes:

i)   Truck Travel Model Development
   ♦ Truck trip generation
   ♦ Origin and destination analysis
   ♦ Local and freeway route assignments
   ♦ Congestion and speed simulations
   ♦ Travel time analysis
   ♦ Analyze impact of toll facilities
   ♦ Spatial and temporal (time – of – day, day – of – week, and season) analysis

ii)   Corridor/Route Analysis
   ♦ Evaluate route/corridor traffic management proposals for freight impacts
   ♦ Provide information on truck travel to formulate traffic management plans during roadway reconstruction
   ♦ Assess impact of truck route reassignments or closures

iii) Air Quality Modelling
   ♦ Estimate truck emissions

iv)   Intermodal Freight Planning
   ♦ Facilitate seaport planning
   ♦ Facilitate airport planning

♦ Intermodal rail facilities
♦ Understand competition and demand of different freight modes

v) Pavement Management Planning
♦ Evaluate and design road geometrics
♦ Help calibrate pavement deterioration models

vi) Truck Restrictions and Enforcement
♦ Route restriction analysis
♦ Dangerous goods movement regulation and enforcement analyses
♦ Truck driver safety programs

vii) Facilitate Public – Private Partnership
♦ Open dialogue with private freight industries in gathering data
♦ Provide truck travel data to public and the freight industry for research and analysis
♦ Freight – economic analysis
♦ Development of business cases for Private/Public Partnerships.

3. External Cordon Commodity Flow Survey

Truckers were interviewed to solicit information on the commodities being transported into and outside the study area. The collection of data was limited to the external entry points into the Region as shown on Exhibit 1.2.1 (Section 1.2). There are a total of 33 provincial highways entering the expanded Edmonton Regional Travel Model study area, of which, surveys were undertaken on 24 of the entry points. Information on Internal – external (external – internal) and external – external movements were collected.

3.1. Selection of Survey Locations

A criterion of a minimum of 100 trucks per day was used for the selection of the provincial highways, at which surveys would be conducted. This was consistent with the selection of interview locations established in Calgary. To determine the locations, data shown on Table 3.1.1, was obtained from the Highway Asset Management Section of Alberta Transportation.

Table 3.1.1 – Average Annual Daily Traffic and Screen Point Traffic Composition

Screen Point	Highway	Control Section	TCS	2000 AADT	% Pass Veh	# of Pass Veh	% Rec Veh	# of Rec Veh	% Bus	# of Buses	% SU Trucks	# of SU Trucks	% Trac Trailer	# of Trac Trailers	Total # of Trucks
1	2	36	12	4580	0.830	3801	0.032	147	0.007	32	0.051	234	0.080	366	600
2	28	4	12	3420	0.881	3013	0.004	14	0.005	17	0.027	92	0.082	280	373
3	45	4	8	1190	0.732	871	0.018	21	0.007	8	0.078	93	0.165	196	289
4	15	8	8	2980	0.887	2643	0.018	54	0.006	18	0.027	80	0.062	185	265
5	16	20	12	9600	0.808	7757	0.050	480	0.005	48	0.025	240	0.111	1066	1306
6	14	6	10	2930	0.812	2379	0.026	76	0.008	23	0.051	149	0.104	305	454
7	21	24	12	3970	0.791	3140	0.011	44	0.003	12	0.073	290	0.123	488	778
8	2A	26	16	6050	0.907	5487	0.009	54	0.004	24	0.041	248	0.039	236	484
9	2	30	8	19270	0.812	15647	0.029	559	0.009	173	0.041	790	0.109	2100	2891
10	39	8	4	2370	0.796	1887	0.002	5	0.005	12	0.073	173	0.125	296	469
11	22	30	12	3890	0.835	3248	0.008	31	0.009	35	0.063	245	0.085	331	576
12	16	10	8	6800	0.740	5032	0.052	354	0.009	61	0.041	279	0.157	1068	1346
13	43	22	12	8720	0.833	7264	0.053	462	0.004	35	0.033	288	0.078	680	968
14	37	2	8	2080	0.857	1783	0.042	87	0.008	17	0.045	94	0.049	102	196
15	829	2	4	730	0.834	609	0.030	22	0.008	6	0.059	43	0.069	50	93
16	637	2	4	2280	0.803	1831	0.058	132	0.007	16	0.047	107	0.085	194	301
17	630	2	24	870	0.899	782	0.017	15	0.020	17	0.051	44	0.013	11	56
18	623	4	4	760	0.849	645	0.022	17	0.005	4	0.057	43	0.068	52	95
19	616	10	8	130	0.798	104	0.017	2	0.027	4	0.128	17	0.031	4	21
20	822	6	8	140	0.876	123	0.000	0	0.015	2	0.075	11	0.033	5	15
21	814	1	4	1220	0.910	1110	0.002	2	0.004	5	0.047	57	0.037	45	102
22	795	6	12	1540	0.836	1287	0.031	48	0.010	15	0.057	88	0.066	102	189
23	616	6	8	1190	0.876	1042	0.029	35	0.013	15	0.054	64	0.028	33	98
24	771	6	4	540	0.855	462	0.067	36	0.002	1	0.051	28	0.026	14	42
25	616	4	4	810	0.865	701	0.009	7	0.019	15	0.069	56	0.039	32	87
26	759	2	4	480	0.756	363	0.032	15	0.016	8	0.095	46	0.101	48	94
27	757	2	8	400	0.763	305	0.032	13	0.002	1	0.029	12	0.174	70	81
28	633	2	4	350	0.920	322	0.012	4	0.021	7	0.024	8	0.023	8	16
29	765	2	4	610	0.889	542	0.041	25	0.009	5	0.041	25	0.019	12	37
30	633	4	4	320	0.556	178	0.000	0	0.000	0	0.07	22	0.374	120	142
31	642	2	8	1200	0.925	1110	0.005	6	0.009	11	0.046	55	0.015	18	73
32	794	4	16	2450	0.789	1933	0.028	69	0.006	15	0.06	147	0.118	289	436
33	651	2	12	780	0.840	655	0.039	30	0.002	2	0.067	52	0.052	41	93

Notes:
* Control Section – This is a section of highway defined by Alberta Transportation. Each highway has one or more control sections
** TCS – Traffic Control Section is a section of roadway, which has similar traffic characteristics. Each control section has one or more traffic control sections.
The shaded rows represent highways that have 100 or more trucks per day

The data comprises of the screen line entry point, the Average Annual Daily Traffic (AADT), and the percentage of traffic composition. Based on these percentages, the total numbers of single unit and tractor-trailer combination trucks were determined for each of the screen line entry points. Only 19 of the 33 provincial highways at the cordon qualified under the criteria of 100 trucks per day.

Given the logistics of stopping trucks on the side of the road, the Inspection Services Branch (ISB) of Alberta Transportation was contacted to solicit their input regarding safety and identification of safe locations where the surveys could be undertaken. At the

outset of the discussions with ISB, preference for the interview locations to be at the entry points into the study area was communicated.

Following site visits, ISB indicated that with the exception of a few, most of the provincial highways identified for the survey interviews could be accommodated at locations at the study area boundaries. The southbound movement on Highway 43 and the northbound movement on Highway 2 were two of the locations, which could not be done at the study area boundary. Both of these had to be accommodated well outside off the study area for safety reasons. Furthermore, Highway 37 had to be dropped from the list due to inadequate shoulder width to accommodate roadside interviews safely. The other positive development from the site visits was an addition of some of the lower truck volume provincial highways at the study area boundary. ISB officials indicated that while they were in the vicinity of the higher truck volume highways, they could set up survey locations on the lower truck volume highways at locations where truckers could be interviewed safely. Hence the lower truck volume highways were added to the list of survey locations. Table 3.1.2 shows the final list of the locations where roadside surveys were undertaken.

Table 3.1.2 – List of Survey Locations

Screen Point/Site ID	Highway	Direction	Location	Description
1	2N		Legal	Hwy 2 North of Hwy 651
2	28		Radway VIS	Hwy 63 – 1 km North of Hwy 28
3	45		Hwy 45 East of Jct. Of Hwy 38	Hwy 45 East of Jct. Of Hwy 38
4	15		Lamont	Hwy 15 West of Hwy 637
5	16E		Ardrossan	Hwy 16 at Ardrossan VIS
6	14		Tofield	Hwy 14 East of Hwy 630
7	21		New Sarepta	Hwy 21 S of Hwy 623
8	2A		Kavanagh	Hwy 2A at Hwy 616
9	2S	SBD	Leduc	Hwy 2S VIS
9	2S	NBD	Bear Hills Truck Stop	Hwy 2S NBD
10	39		Alsike	Hwy 39 East of Hwy 20
11	22		Rocky Rapids	Hwy 22 North of Hwy 621
12	16W	EDB	Entwistle	Hwy 16 Service Road West of Hwy 22
12	16W	WBD	Wildwood	Hwy 16 cut – off to Wildwood
13	43	NBD	Hwy 43 North of Hwy 16	Hwy 43 North of Hwy 16
13	43	SBD	Gunn	Hwy 43 East of Hwy 33
14	37	EBD	Gunn	Hwy 43 East of Hwy 33
15	829		Radway VIS	Hwy 63 – 1 km North of Hwy 28
16	637		Lamont	Hwy 15 West of Hwy 637
17	630		Tofield	Hwy 14 East of Hwy 630
18	623		New Sarepta	Hwy 623 East of Hwy 21
19	616		Kavanagh	Hwy 2A at Hwy 616
20	822		Kavanagh	Hwy 2A at Hwy 616
21	814		Kavanagh	Hwy 2A at Hwy 616
22	795		Hwy 795 South of Jct. Hwy 616	Hwy 795 South of Jct. Hwy 616
26	759		Tomahawk	Hwy 759 North of Hwy 624
27	757		Magnolia	Hwy 757 North of Hwy 633
28	633		Magnolia	Hwy 633 East of Hwy 757
32	794		Hwy 44 South of Jct. Hwy 651	Hwy 44 South of Jct. Hwy 651
33	651		Hwy 651 East of Jct. Hwy 44	Hwy 651 East of Jct. Hwy 44

3.2. Allocation of Staff Resources

To determine staffing for the survey, it was assumed that approximately 45% of the daily truck movements would occur between the hours of 8:00 AM and 4:00 PM. This gave an indication of the expected number of interviews that would have to be undertaken at each of the locations. Given that the delay to the truckers had to be minimized, Calgary's experience with regard to the actual interview time of between 90 seconds and 2 minutes was utilized in determining the survey staff. Where a minimum number of trucks during the eight – hour time frame was anticipated, four interviewers were scheduled for the site, two per direction of travel. Table 3.2.1 shows the staffing resources per site.

Table 3.2.1 – Allocation of Staff Resources

HWY	Location	Direction	Truck Volumes 2000 Daily	Truck Volumes 8 Hour @ 45%	Truck Volumes Hourly	# Staff
28 & 829	Radway VIS Hwy 63 1 Km North of Hwy 28	N/S	466	127	27	12
2A, 616,814 & 822	Hwy 2 A North of Millet	N/S	622	240	35	12
15 & 637	West of Jct. 15 & 637 Lamont	E/W	566	306	32	10
14 & 630	East of Jct. 14 & 630 Tofield	E/W	510	294	29	10
39	Hwy. 39 – ½ Km East of Hwy 20 Alsike Turn out	E/W	469	240	27	10
22	North of Jct. 22 & 621 Drayton Valley	N/S	576	472	33	10
37 & 43	Hwy 43 Pull out N Hwy 16 Hwy 43 East of Hwy 33 – Gunn	N/S	1,164	343 356	43 43	8 8
759	South of Jct. 759 & 624 5 Km South of Tomahawk	N/S	94	75	9	4
16W	Entwistle (Service Road) Wildwood	E/W	1,346	515 374	50 47	10 7
757	North of Jct. 757 & 633	N/S	81	39		
633	East of Jct. 757 & 633	E/W	16	17		
2N	North of Jct. 2 & 651 North of Legal Corner	N/S	600	182	23	8
21	South of Jct. 21 & 623	N/S	778	426	54	9
623	East of Jct. 21 & 623	E/W	95	46	6	2
2S SBD	Hwy 2 VIS	South	1,445	805	82	19
2S NBD	Hwy 2 Bear Hills Rest Stop	North	1,445	722	82	19
45	East of Jct. 45 & 38	E/W	289	199	17	5
16E	Ardrossan. VIS Opposite VIS to the West	E/W	1,306	278 295	74	16
795	South of Jct. 795 & 616 2 Km. South	N/S	189	105	11	5
44	South of Jct. 44 & 651	N/S	436	197	25	6
651	East of Jct. 44 & 651	E/W	93	42	6	3

3.3. Safety

Where possible, vehicle inspection stations on the highways were utilized for interviewing truckers. This allowed for the trucks to be isolated from the fast moving through traffic for safety reasons. On two lane roadways, traffic cones were set up along the pavement markings delineating the through lane and shoulder. On four lane highways, through traffic was restricted to one lane in each direction with part of the outside lane blocked off with traffic cones to facilitate the interviewing process safely. ISB officers instructed the interviewers on the appropriate safety measures for stopping the trucks and approaching the truckers. The ISB officers directed truck traffic into the survey lanes. Traffic control was left to the ISB officers

3.4. Survey Methodology and Questionnaires

- *Methodology*

The mandate of ISB is to conduct inspection on all vehicular traffic with a Gross Vehicle Weight of 4500 kg or more. This then restricted the type of vehicles that could be directed for interview purposes, to single unit trucks with dual tires on the rear axles and tractor–trailer combinations. Subsequent discussions with ISB officers resulted in ISB's cooperation to pull in pick–ups with trailers. This was done where ISB officers were out on the road directing the traffic. Pick–up trucks with trailers could not be interviewed at weigh scale locations. Trucks over 4500 kg are automatically required to report to the weigh scales when the lights on the signs are flashing.

Interviews were scheduled between Monday and Thursday with no more than three days in any week. Although the preference was to have the interviews conducted for a full 24-hour period, ISB staff were limited to the number of hours allowed to be worked on a given day. Conducting interviews in daylight hours increased the safety of the interviewers. Furthermore, the available budget limited the manpower that could be hired for the survey. The duration of the survey was therefore limited to daylight hours between 8:00 AM to 4:00 PM allowing for 8 hours of interviews. This excluded travel time to get to and from the sites for which a further 2 hours were allowed to the staff.

Where feasible, surveys were conducted at two or more sites on any given day with the cooperation of ISB. Their resources were staffed from their Edmonton, Radway, Edson and Stony Plain Divisions. In total 20 survey staff were available to undertake the surveys, allotted according to the requirements for each site.

In addition to the 8 hour surveys, additional 16 hour truck classification counts, between 4:00 PM and 8:00 AM, were undertaken at 4 of the locations i.e. Hwy 16 East, Hwy 16 West, Hwy 2 South and Hwy 43. This information was required to determine the distribution of trucks over the 24-hour period. While it would have been preferable to undertake the balance of the 24-hour counts on the same day that the 8-hour surveys were done, they had to be scheduled for different days due to manpower and budgetary

limitations. Similar classification counts could not be performed for the rest of the survey locations due to budgetary constraints.

Prior to the development of the survey questionnaire, meetings were held with the City of Calgary staff involved in a similar exercise in the fall of 2000. Their insight as to what worked for them and what did not was incorporated in the development of the questionnaire. Training was then provided to the staff in the way the forms were to be filled out and a mock exercise done to help with the filling out of the forms. General survey procedures (Exhibit A2, Appendix A) were developed for the survey staff to assist them in filling out the forms.

At certain sites some truckers were involved in gravel hauls, or similar multiple trips during the day. To avoid having to interview the same trucker more than once, placards with numbers were issued to the truckers, if the commodity being carried was the same and the origin and destination were the same. On the next same directional trip, the number given to the trucker was jotted down and the trucker let go. Information about the truck and the commodity were later duplicated in the office.

There were times when, due to inadequate availability of storage on the highways, trucks had to be waived through by the ISB officers in order to maintain safe passageway for other vehicular traffic. In certain instances, there was also a delay in the commencement of the survey due either to adverse weather conditions or late set – ups. In all these cases, the type of trucks and the number let go or bypassed were recorded for the final tally of truck traffic between the hours of 8:00 AM and 4:00 PM.

- *Questionnaires*

The initial questionnaire developed for the survey was used at both the Radway VIS, to collect data for external entry points 2 (Hwy 28) and 15 (SH 829), and at the junction of Hwy 2A and SH 616 (external entry points 8 and 19). Both these sites were used as training platforms for the survey crew allowing for ample time to review the information collected in between interviews.

Particular emphasis was placed on the commodity's origin and destination as opposed to the truck origin and destination. A trip was defined as the one – way movement of a commodity being carried by the vehicle from origin and destination for that day. After the initial set of surveys, the questionnaire was revised to reword certain questions. They included:
- ♦ Change the use of the phrase "type of commodity", to "type of load or service".
- ♦ Specifically ask if the trip was part of a round trip
- ♦ For intermediate stop locations of greater than 15 minutes, drivers were explicitly asked for inbound loads if the load would stop within Edmonton or the Region for longer than 15 minutes, or if it was outbound did the load stop for greater than 15 minutes in Edmonton or the Region.
- ♦ For information pertaining to highways used, the reworded question included "What highway(s) was used to get here and what highway(s) will you use next?"

These changes were implemented to reflect the concerns raised by the survey staff for ease in extracting information from the truck drivers. The final questionnaire is included as Exhibit A1 (Appendix A).

The following data was collected as part of the survey:

- The date and location of the survey
- Direction of travel (entering or leaving the study area)
- Time of survey
- Type of truck, its Gross Vehicle Weight and Occupancy
- The load being carried, could be more than one commodity, its quantity and value. The intent was to capture both commodity and/or service.
- Location (origin) of pick up of the load. If the load was picked up at a distant place, and the pick up date was not the same as the date of survey, then the origin of commencement of the trip on the day of the survey was obtained.
- Location (destination) of delivery of the load. If the final destination of the load was distant and the load could not be delivered on that day, then the location of the stop for the end of the trucker's day was solicited.
- Was the trip part of a round trip?
- The highway(s) used to get to here (the survey location).
- The highways that will be used next.
- For the inbound trip was the load stopping in Edmonton or the Region for longer than 15 minutes?
- For the outbound trip did the load stop in Edmonton or the Region for longer than 15 minutes.
- The location of the intermediate stops of longer than 15 minutes during the day was requested. These included stops for delivery pick up or for service. If the stops pertained to either delivery or pick up, information on the commodity being picked up or delivered as well the quantity and value were also solicited. The arrival and departure time for each of the stops was also gathered.
- Vehicle ownership i.e. was the vehicle owned by the company shipping the goods, leased by the company shipping the goods or was it for hire.

- *Vehicle Types*

Vehicles were categorized into pick–ups, single unit trucks, dump trucks and multi–unit or tractor-trailer combinations. Pick–ups with a trailer hitched were classified as pick–up doubles. Dump trucks with an additional tipping bin were classified as dump truck doubles. The number of axles on the trucks classified both the single unit and multi unit (tractor-trailer combination) trucks. The tractor-trailer combination trucks were further classified into single, double or triple trailer units. Exhibit A3 (Appendix A) depicts the various truck type classifications used.

- *Data Quality*

Data quality is a function of several factors including questionnaire design, collection difficulties, processing procedures and data capture. Most of the factors are largely dependent on the skills and experience of the field staff. Although the survey team were experienced in general traffic and travel time surveys, expertise and experience in interview surveys were limited and as expected the External Truck Commodity Survey has identified minor shortfalls and possible improvements for future data collection.

With the earlier surveys, conducted at the two training sites (external entry points 2, 15, 8 and 19), a successful completion rate of 80 percent was achieved; successful completion being defined as completed questionnaires having all the information captured and useful for data analysis. The other 20 percent lacked origin/destination addresses or company names where the pick up or delivery, within the study area, was made. In most cases, the truck drivers did not want to provide addresses or company names, or were vague in terms of the location. They would provide either the city name or the quadrant of the city for the origin or destination. In other cases, the surveyors did not prod enough to solicit the information. They were instructed that each trucker had to have a manifest, which identified the contents, and the pick up and delivery address. Over time with continual reinforcement for the need to obtain the origin and destination addresses, the surveyors developed techniques to extract the information from the truckers, and the full completion rose to 95 percent.

Apart from the pick up and delivery address, drivers were sometimes reluctant to divulge the contents of the load. It was later learned from the trucking industry representatives, that some drivers were instructed by the owners not to release information about the contents in light of the September 11, 2001 events in the U.S. In cases when a multitude of items were carried, the drivers would identify one or two major items, especially when general merchandise was involved, saying "you name it we've got it". To keep the duration of the interviews to under 2 minutes, and with the recording of the information taking longer, it was decided to forego a complete list of inventory of the cargo and settle for one or two major items.

Drivers were forthcoming with the quantities unless the contents of the load were not provided. However, the most difficult piece of information to obtain was the value of the freight. The persons transporting the freight had no idea as to the value of the contents, and this information was also not reflected in the drivers' manifests.

Finally, there were a few instances where drivers were making a substantial number of stops, longer than 15 minutes, for pick up and/or delivery. After recording one or two of these of these itineraries, it was determined that the duration of interview time considerably exceeded the 2 minute time limit, extending to more than 5 minutes. The drivers interviewed did not appreciate the delay. A decision was made to record no more than 2 stops in order to avoid complaints from irate drivers.

- *Driver Response*

Truckers normally do not like being stopped for vehicle inspection by ISB. Upon finding out ISB officers were pulling them over for a commodity flow survey and not for a vehicular inspection, they were relieved and cooperated with the interviewer. Out of a total of just over 6,500 interviews conducted, only 2 truckers complained and one refused to participate.

Nevertheless, there were truckers determined to avoid the survey sites at all costs. Some of the truckers were already on the CB Radios when they saw ISB vehicle inspection signs on the roadway. As a result some truckers took alternate routes to avoid the survey locations.

4. Study Findings

4.1. Interviews

A total of 6,505 interviews were completed out of a possible cumulative total of 6,771 trucks observed for all survey sites. The numbers of interviews for each individual site are shown on Table 4.1.1

In general completed interviews ranged from 93 percent to 100 percent of the observed truck traffic. There were two exceptions to this; Site number 9, Hwy 2 southbound traffic at the Leduc Weigh Scale, completion rate of 83 percent, and Site Numbers 6 and 17, Junction of Hwy 14 and SH 630 at Tofield, completion rate of 86 percent.

At the Hwy 2 location (Leduc Weigh Scale), because of moderate snow fall, the portion of Hwy 2 south of Millet was closed to approximately 9:00 AM and truck traffic was being diverted to other routes. Also, some double trailer trucks were held at the weigh scale station, until the snow cleared. Hence, the types and number of trucks prior to 11:00 AM may not be representative of the Hwy 2 traffic. The weigh scale was also inoperative between 10:15 AM and 10:30 AM.

The lower completion rate at the Tofield site, Junction of Hwy 14 and SH 630, was a result of a delayed commencement of the survey.

Table 4.1.1 – Interviews by Site

	Survey Location	Sites	Direction	Survey Date	Start Time	End Time	Survey Hours	Interviews Expected	Interviews Returned	Trucks Missed Prior to Set–up	Trucks Missed Bypassed	Total Observed	Interview % of Total	Total Entered	Rejected	Entered % of Total Obs
1	Radway – Hwy 28, 829	2, 15	Both	Wed, Sep 26, 2001	815	1600	7.75	200	128	N/A	0	128	100.0%	119	9	93.0%
	Hwy 28	2							114	N/A	0			111	3	
	Hwy 63	15							14	N/A	0			8	6	
2	Kavanagh	8, 19, 20, 21	Both	Thu, Sep 27, 2001	800	1600	8.00	200	231	N/A	0	231	100.0%	228	3	98.7%
	Hwy 2A	8							225	N/A	0			222	3	
	Hwy 616	19							5	N/A	N/A			5	0	
	Hwy 822	20							0	N/A	N/A			0	0	
	Hwy 814	21							1	N/A	N/A			1	0	
3	Lamont – W of Jct. 15/638	4, 16	Both	Wed, Oct 10, 2001	800	1600	8.00	250	296	N/A	10	306	96.7%	296	0	96.7%
	Hwy 15	4	Both						142	N/A	5			142	0	
	Hwy 637	16							154	N/A	5			154	0	
4	Tofield – E of Jct. 14/630	6, 17	Both	Wed, Oct 10, 2001	900	1600	7.00	230	259	40	0	299	86.6%	248	11	82.9%
	Hwy 14	6							248	38	0			243	5	
	Hwy 630	17							11	2	0			5	6	
5	Alsike – Hwy 39	10	Both	Thu, Oct 11, 2001	800	1600	8.00	210	223	N/A	0	223	100.0%	221	2	99.1%
6	Jct. 22 / 621 (Rocky Rapids)	11	Both	Thu, Oct 11, 2001	800	1545	7.75	260	392	N/A	80	472	83.1%	388	4	82.2%
7	Hwy 43 north of Hwy 16	13	Outbound	Tue, Oct 16, 2001	800	1600	8.00	260	340	N/A	1	341	99.7%	340	0	99.7%
8	Hwy 43 east of Gunn	13, 14	Inbound	Tue, Oct 16, 2001	800	1600	8.00	260	340	16	0	356	95.5%	332	8	93.3%
	Hwy 43	13							324	14	0			318	6	
	Hwy 37	14	Inbound Only						16	2	0			14	2	
9	Tomahawk	26	Both	Tue, Oct 16, 2001	815	1600	7.75	45	70	N/A	5	75	93.3%	70	0	93.3%
10	Hwy 16 @ Entwistle	12	Inbound	Wed, Oct 17, 2001	800	1600	8.00	300	484	22	0	506	95.7%	484	0	95.7%
11	Hwy 16 @ Wildwood	12	Outbound	Wed, Oct 17, 2001	810	1600	7.83	300	371	N/A	4	375	98.9%	360	11	96.0%
12	Magnolia – on 757 N of 633	27	Both	Wed, Oct 17, 2001	800	1600	8.00	50	39	N/A	N/A	39	100.0%	39	0	100.0%
13	Magnolia – on 633 E of 757	28	Both	Wed, Oct 17, 2001	800	1600	8.00	50	17	N/A	0	17	100.0%	17	0	100.0%
14	Hwy 21 – S of 623	7	Both	Thu, Oct 18, 2001	800	1600	8.00	350	444	N/A	0	444	100.0%	444	0	100.0%
15	Hwy 623 – E of 21	18	Both	Thu, Oct 18, 2001	800	1600	8.00	45	46	N/A	0	46	100.0%	46	0	100.0%
16	Legal – N of 651	1	Both	Thu, Oct 18, 2001	800	1600	8.00	270	308	N/A	0	308	100.0%	308	0	0.0%
17	Leduc Weigh Station[1]	9	Outbound	Mon, Oct 22, 2001	820	1600	7.67	650	663	7	142	812	81.7%	659	4	81.2%
18	Bear Hills (Wetaskiwin)[2]	9	Inbound	Tue, Oct 30, 2001	830	1600	7.50	650	672	MIS	MIS	672	100.0%	638	34	94.9%

Table 4.1.1 – Interviews by Site

Survey Location	Sites	Direction	Survey Date	Start Time	End Time	Survey Hours	Interviews Expected	Interviews Returned	Trucks Missed Prior to Set–up	Trucks Missed Bypassed	Total Observed	Interview % of Total	Total Entered	Rejected	Entered % of Total Obs
19 Hwy 45 E of Jct. 38	3	Both	Wed, Oct 31, 2001	800	1600	8.00	130	193	N/A	3	196	98.5%	193	0	98.5%
20 Ardrossan VIS	5	Outbound	Wed, Oct 31, 2001	800	1600	8.00	290	275	N/A	6	281	97.9%	275	0	97.9%
21 Ardrossan VIS[3]	5	Inbound	Wed, Oct 31, 2001	830	1545	7.25	290	294	N/A	0	294	100.0%	294	0	100.0%
22 Hwy 795 – S of Jct. 616	22	Both	Thu, Nov 1, 2001	800	1600	8.00	85	106	N/A	0	106	100.0%	106	0	100.0%
23 Hwy 44 – S of Jct. 651	32	Both	Tue, Nov 6, 2001	815	1600	7.75	200	278	N/A	1	279	99.6%	278	0	99.6%
24 Hwy 651 – E of Jct. 44	33	Both	Tue, Nov 6, 2001	800	1600	8.00	50	36	N/A	0	36	100.0%	36	0	100.0%
Total Interviews							5,625	6,505	85	252	6,842	95.1%	6,419	86	93.8%

1   Moderate snow; Hwy 2 closed S of Millet to approximately 9:00 AM, truck traffic was diverted to other roadways, some double trailer trucks held at Leduc Weigh Station, snow stopped around 11:00 AM. The types and number of trucks prior to 11:00 may not be representative of the "normal" Hwy 2 traffic. Leduc Weigh station doesn't require some of the smaller trucks to pull in therefore we missed some smaller vehicles. Weigh station was Inoperative from 10:15 to 10:30 therefore we had no interviews.

2   Interviews were conducted on all vehicles although due to the survey location some of these vehicles would not be entering the region. These interviews will be resolved in the office.

3   Truck description prior to set up not available (either not completed or lost in transit).

NB once the surveys have been verified interview numbers will be provided for individual sites rather than aggregated by survey location.

Definitions

MIS	Misplaced Interview Sheets – – not completed or lost in transit
Rejected	Interviews that had no retrievable information or that commodity did not enter the region.
Returned	Number of Interviews returned from the Survey Location
Site	The actual location where the data was required as defined by the regional boundary.
Survey Location	The location where the survey was conducted. May included multiple sites or be some distance form the desired site. The Survey Location was determined by safe interview locations.

4.2. Time of Day Distribution of Trucks

At four of the locations i.e. Hwy 16 East, Hwy 16 West, Hwy 2 South and Hwy 43, 24-hour truck counts were undertaken to determine the distribution of trucks over the 24-hour period.

The time of day distribution of truck traffic observed at the four locations where 24-hour truck counts were undertaken is shown on Exhibit 4.2.1.

Exhibit 4.2.1 – Time of Day Distribution – Inbound/Outbound (Trucks Only)

Time of Day Distribution - Inbound/Outbound (Trucks only)

Hwy 2 South, Hwy 16 East and West, Hwy 43 - Survey September/November 2001 - 24 Hour Interview Period
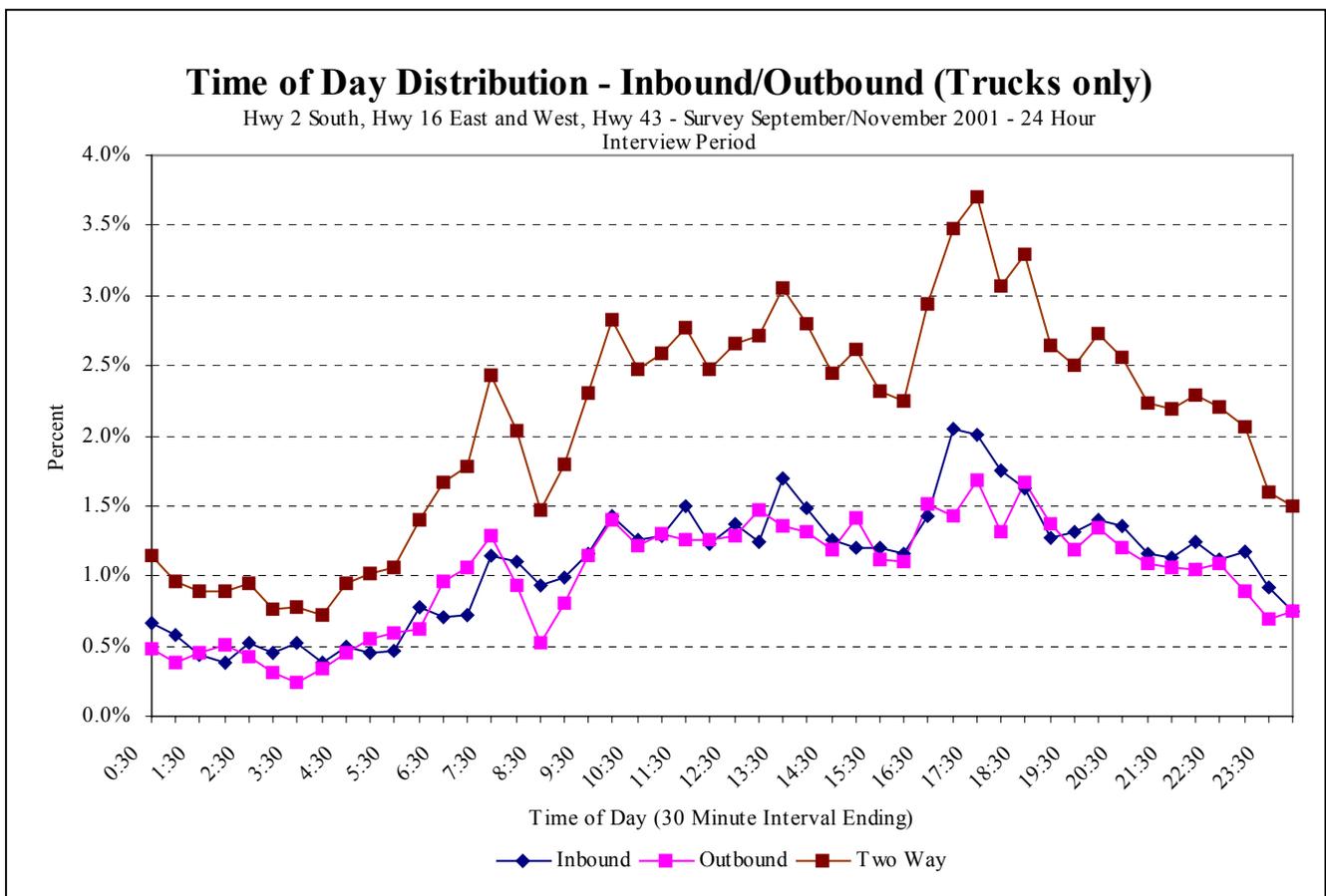
Almost 40 percent of all truck movements occurred during the interview period (8:00 AM to 4:00 PM), with approximately another 40 percent occurring between 4:00 PM and Midnight and the balance, 20 percent, taking place between Midnight and 8:00 AM. The peak period of truck activity happens to be between 5:00 PM and 7:00 PM, and the period of least activity is between 3:30 AM and 4:30 AM.

- *Time of Day Distribution for Trucks and All Other Vehicles*

In comparison approximately 50 percent of all other vehicles travelled during the interview period (8:00 AM to 4:00 PM), with another 40 percent occurring between 4:00 PM and Midnight and the balance, 10 percent, taking place between Midnight and 8:00 AM. The comparison of time of day distribution for trucks and all other vehicles is shown on Exhibit 4.2.2.

Exhibit 4.2.2 – Time of Day Distribution – Trucks, All Vehicles

Time Of Day Distribution -- Trucks, All Vehicles

Hwy 2 Sth, Hwy 16 East & West, Hwy 43 - Survey September/November 2001 - Weekday 24 Hour
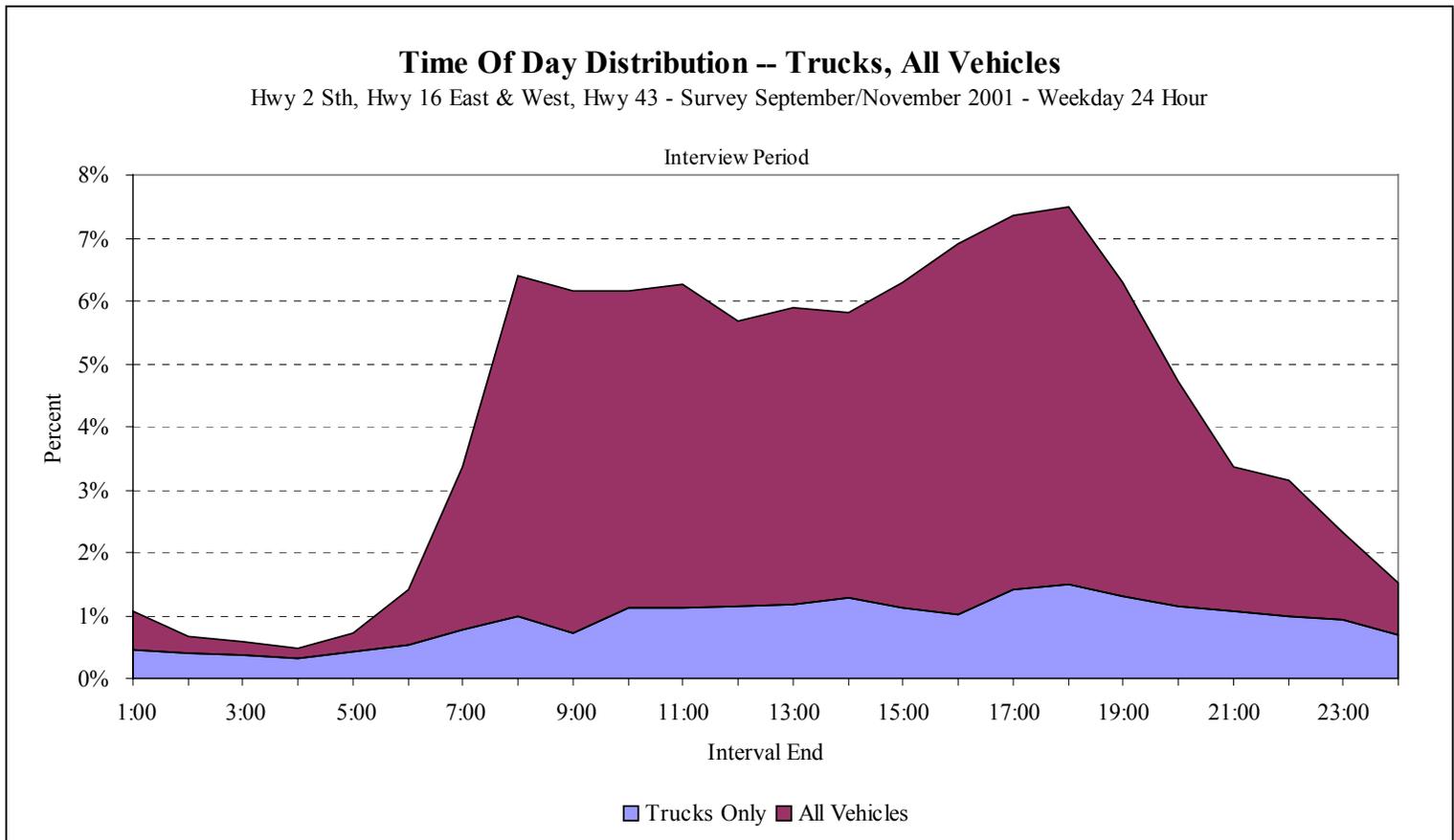
4.3. Scaling

Based on the 24-hour counts, 40 percent of the truck traffic was observed to be on the highways during the interview period. The results of the findings were therefore scaled up by a factor of 2.5 to derive typical Weekday 24-Hour Daily representation. The scaled up Weekday 24-Hour Daily Trips at each surveyed site are shown on Exhibit 4.3.1.

Exhibit 4.3.1 – Weekday 24 Hour Scaled – Up Trips
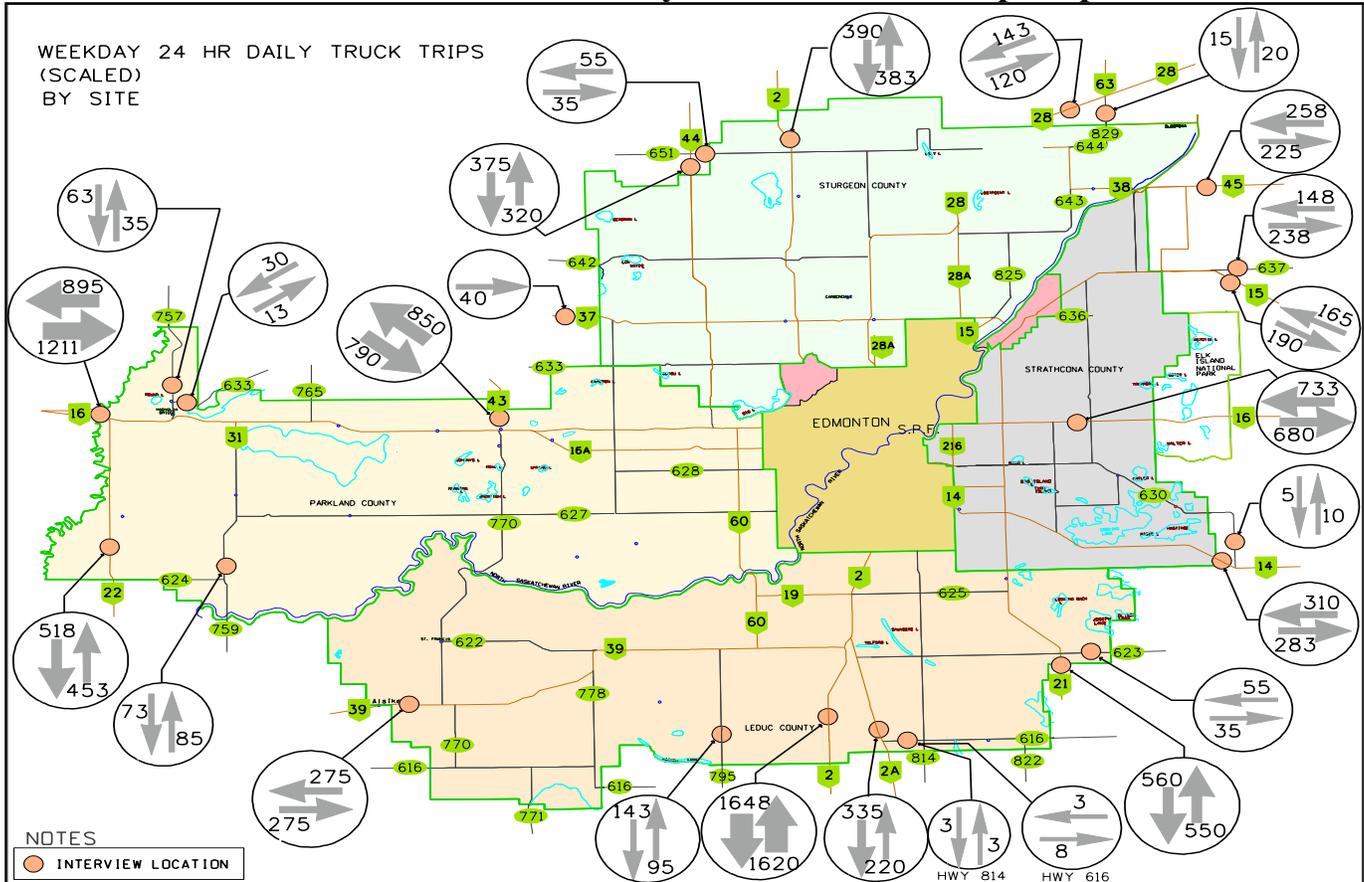
In all the scaled up truck trips amount to 15,975 Weekday 24-hourdaily trips entering or leaving Edmonton Region at the 24 surveyed locations.

4.4. Trucks As A Percentage of All Traffic

For reasons indicated in Section 3.4 under Methodology, the 8-hour surveys and the balance of the 24-hour trucks classification counts were conducted on different days to obtain 24-hour truck classification counts. Table 4.4.1 below identifies the dates for the 8:00 AM to 4:00 PM truck counts and the 4:00 PM to 8:00 AM truck counts. Total

vehicular counts at the four locations i.e. Hwy 16 East, Hwy 16 West, Hwy 2 South and Hwy 43 were not undertaken due to manpower and budgetary limitations.

To obtain relative truck percentages on these highways daily EPCU's (Equivalent Passenger Car Units) were obtained from the closest Alberta Transportation's Automatic Traffic Recorders. Table 4.4.1 identifies the locations of the ATR's used to calculate the percentage of trucks.

Table 4.4.1 – 24-hourSurvey Locations and Count Dates

Highway	Survey Location	Date of 8:00 AM to 4:00PM Count	Date of 4:00 PM to 8:00 AM Count	Nearest ATR Location Used for Daily Traffic Information
2S SBD	Leduc VIS	Oct 22, 2001	Nov 5/6, 2001	2 km S. of Jct. Hwy 2 and Old 2A
2S NBD	Bear Hills Truck Stop	Oct 30, 2001	Nov 5/6, 2001	1.4 km N. of Jct. Hwys 2 and 53 Ponoka
16E EBD	Ardrossan VIS	Oct 31, 2001	Nov 8/9, 2001	7.8 km E. of Jct. Hwys 16 and 21 Ardrossan
16E WBD	Ardrossan VIS	Oct 31, 2001	Nov 8/9, 2001	7.8 km E. of Jct. Hwys 16 and 21 Ardrossan
16W EBD	Entwistle	Oct 17, 2001	Nov 7/8, 2001	2.6 km E. of Jct. Hwys 16 and 22
16W WBD	E. of Wildwood	Oct 17, 2001	Nov 5/6, 2001	11.9 km E. of Jct. Hwys 16 and 32
43 NBD	N. of Hwy 16W	Oct 16, 2001	Nov 6/7, 2001	1.4 km E. of Jct. Hwys 22 and 43
43 SBD	Gunn	Oct 16, 2001	Nov 6/7, 2001	1.4 km E. of Jct. Hwys 22 and 43

Truck share of all traffic at Highways 2S and 16E compares favourably with Alberta Transportation's observations.

Using truck classification counts from one location and using the total 24-hour vehicular counts from another location did not yield the same percentage of trucks for Highways 16W and 43 when compared to the numbers Alberta Transportation has for the individual Traffic Control Sections at the locations. Table 4.4.2 below compares the truck percentages obtained using the surveys with Alberta Transportation's observations.

Table 4.4.2 – Comparison of Percentage of Trucks Derived from Survey and Those Observed by Alberta Transportation

Highway	Percent of Trucks Derived From Survey	Percent of Trucks Alberta Transportation
2S	22%	20%
16E	12%	10%
16W	32%	18%
43	33%	23%

One possible explanation is the high volume of gravel trucks during the interview period at the Highways 2S and 16W sites. As for Highway 43 there does not seem to be any logical explanation as to why the survey observations and Alberta Transportation's observations would differ significantly, other than the 24-hour total vehicular counts were obtained from a different location than the truck survey location to derive the truck percentages.

In hindsight it would have been useful to have Automatic Traffic Recorders set up temporarily at the survey locations to give a more realistic estimate of truck share of all traffic.

Results of the calculated truck percentages are depicted on Exhibit 4.4.1.

Exhibit 4.4.1 – Truck Share of all Traffic

Note: please use the percentages on the chart with caution. Refer to description under Section 4.3 and Table 4.3.2.

Truck Share of all Traffic - Weekday 24 Hour Daily
Hwy 2 Sth, Hwy 16 East & West, Hwy 43, All Sites - Survey September/November 2001
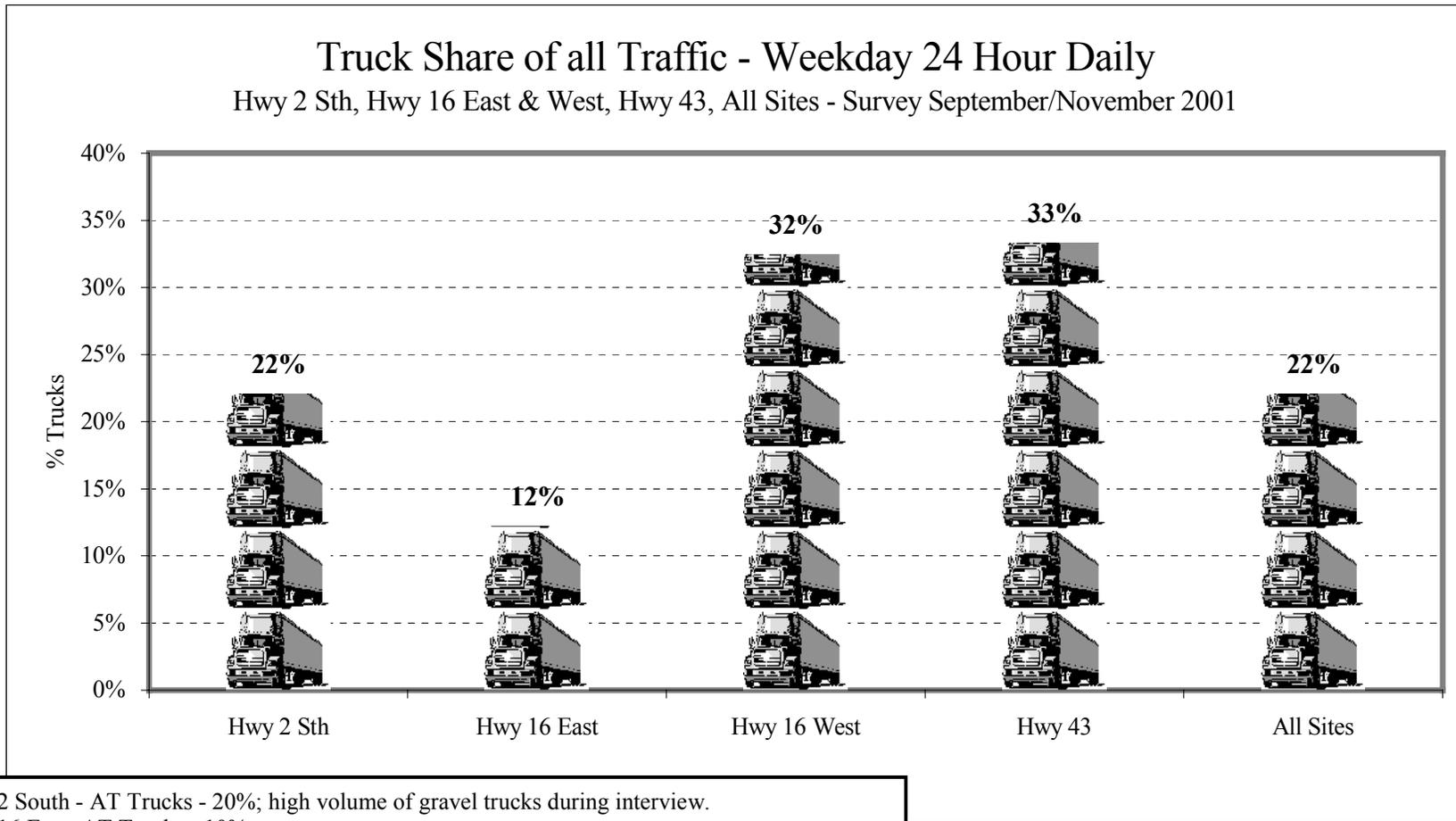
Hwy 2 South - AT Trucks - 20%; high volume of gravel trucks during interview.
Hwy 16 East -AT Trucks - 10%.
Hwy 16 West - AT Trucks - 18% (interview location). ATR report E of Hwy 22 used to derive truck % for study; high volume of gravel trucks at interview location.
Hwy 43 - AT Truck 23%.

4.5. Truck Ownership

The ownership of trucks is illustrated in Exhibit 4.5.1 below.

Exhibit 4.5.1 – Trucks by Ownership

Trucks by Ownership

All Sites - Survey September/November 2001 - 8:00 to 16:00

72%

18%

10%

- ☐ Owned by company producing goods being shipped
- ☐ Leased and operated by company producing goods being shipped
- ☐ For Hire: Owned by a different company or driver
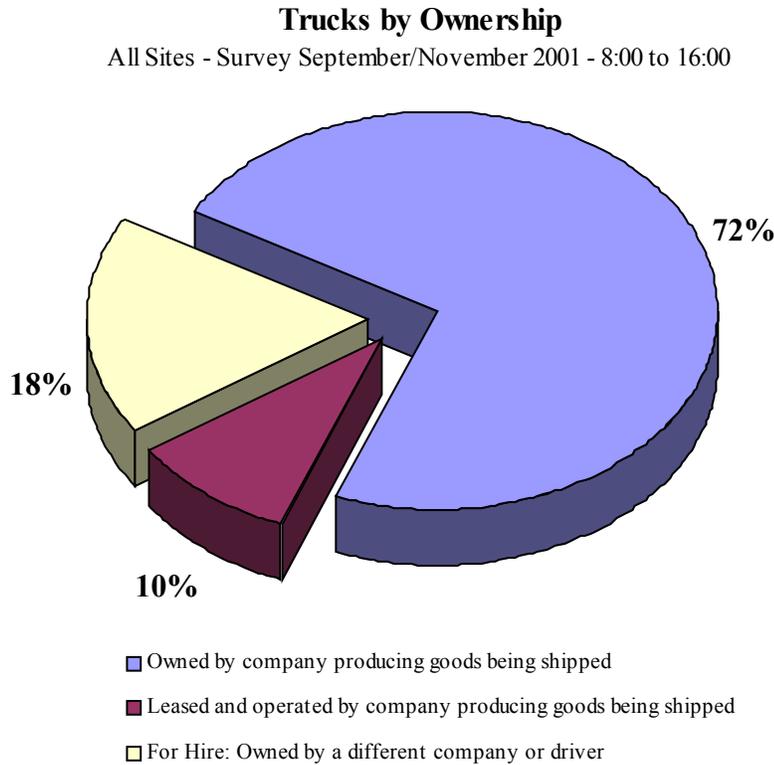
The majority of the trucks, 72 percent, are owned and operated by the company producing the goods being shipped. Trucks owned and operated by a different company or driver i.e. for hire comprise of 18 percent. Only 10 percent of the trucks are leased and operated by the company producing the goods being shipped.

4.6. Gross Vehicle Weight

Almost 58 percent of all trucks surveyed have a gross vehicle weight (GVW) in the range of between 40,000 kg and 70,000 kg. Of these, approximately 28 percent have a GVW of between 60,000 kg and 70,000 kg. and 21 percent have a GVW of between 40,000 kg and 50,000 kg. The rest of the trucks, approximately 42 percent, have a GVW of less than 40,000 kg. Trucks greater than 70,000 kg comprise of lees than 0.4 percent. Exhibit 4.6.1 shows the percent of trucks by the gross vehicle weight.

Exhibit 4.6.1 – Gross Vehicle Weight

Gross Vehicle Weight
All Sites -- Survey September/November 2001 - 8:00 to 16:00

Gross Vehicle Weight (kg)	% of Trucks
greater than 70,000	0.4%
60,000 - 70,000	27.6%
50,000 - 60,000	8.7%
40,000 - 50,000	21.3%
30,000 - 40,000	10.5%
20,000 - 30,000	5.8%
10,000 - 20,000	9.2%
4,500 - 10,000	7.0%
less than 4,500	5.7%
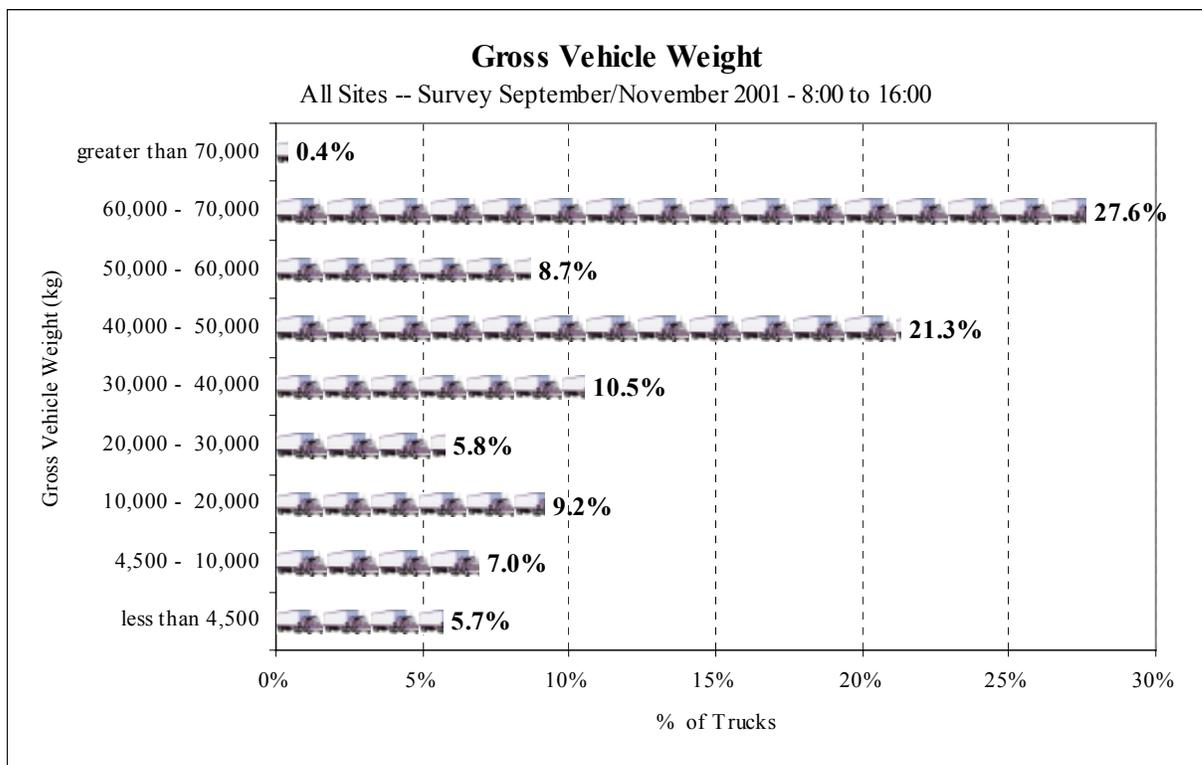
4.7. Trucks by Type

Trucks were classified into two categories, Single Unit Trucks and Multi Unit Trucks. The Single Unit Trucks comprised of 23 percent of all trucks compared to 77 percent Multi Unit Trucks.

The Multi Unit Trucks were further broken down by the number of axles. The vast majority of the Multi Unit Trucks had 5, 6 or 8 axles, and comprised of 88 percent of the Multi Unit category.

Exhibit 4.7.1 shows the breakdown of trucks by type and by number of axles.

Exhibit 4.7.1 – Trucks by Type

Trucks by Type

All Sites - Survey September/November 2001

8:00 to 16:00

All Trucks

Multi Unit
77%

Single Unit
23%

Mult Unit - Number of Axles

M8
27%

M9
1% M3
3%

M7
6%

M4
2%

M6
30%

M5
31%
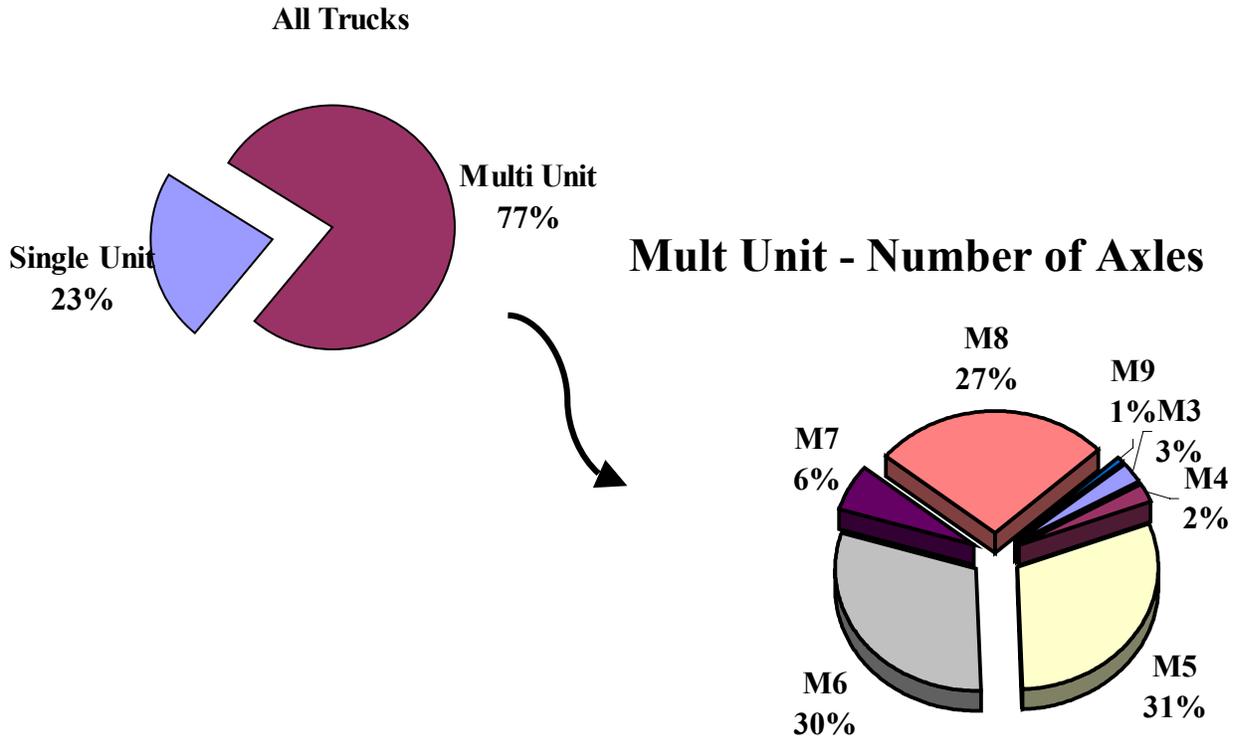
4.8. Trucks by Commodity

Commodities carried were classified using Statistics Canada – Standard Classification of Transported Goods (SCTG). However, Statistics Canada does not have classification codes for services. Therefore additional codes were established to code the services component. With respect to the hazardous goods, the codes collected in the field were assigned to the commodity.

The majority of the trucks, 62 percent, carry only one commodity. Those carrying two or more commodities represent less than 2 percent of all trucks. The rest of the trucks, 36 percent, are classified as empty as they did not carry any load. Exhibit 4.8.1 shows the percentage of trucks by the number of commodities carried.

Exhibit 4.8.1 – Percentage of Trucks by Number of Commodities

Percentage of Trucks by Number of Commodites
All sites - Survey September/November 2001 - 8:00 to 16:00 - Trucks: 6,389 Commodities: 6,490
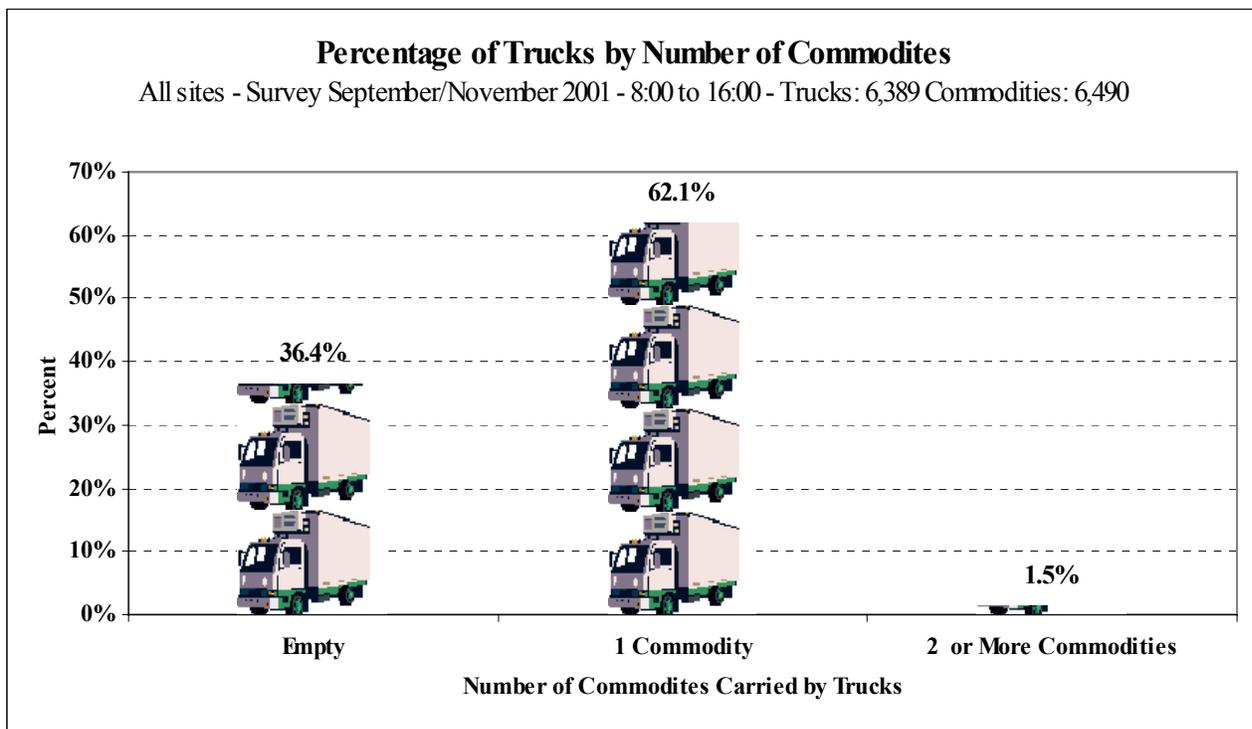
The Trucks by Commodity Type are presented on Exhibit 4.8.2. This exhibit relates to both inbound and outbound traffic. A relatively high proportion of trucks, 36 percent, did not carry any commodity. The proportion of trucks that carried manufacturing, machinery, equipment and transportation related commodities accounted for 19 percent of all trucks. Trucks carrying miscellaneous goods accounted for 11 percent of all trucks, those carrying farm and food related commodities accounted for 10 percent, while trucks carrying waste material, energy products, and wood and lumber products each accounted

for 8 percent of all trucks. A description of the miscellaneous commodities is listed in Appendix A as Exhibit A4.

The breakdown of trucks by commodity type by direction of travel is shown on Exhibit 4.8.3. While the percentage of different commodities may differ by direction of travel, they are relatively close to those identified in the above paragraph.

Exhibit 4.8.2 – Trucks by Commodity Type

Trucks by Commodity Type
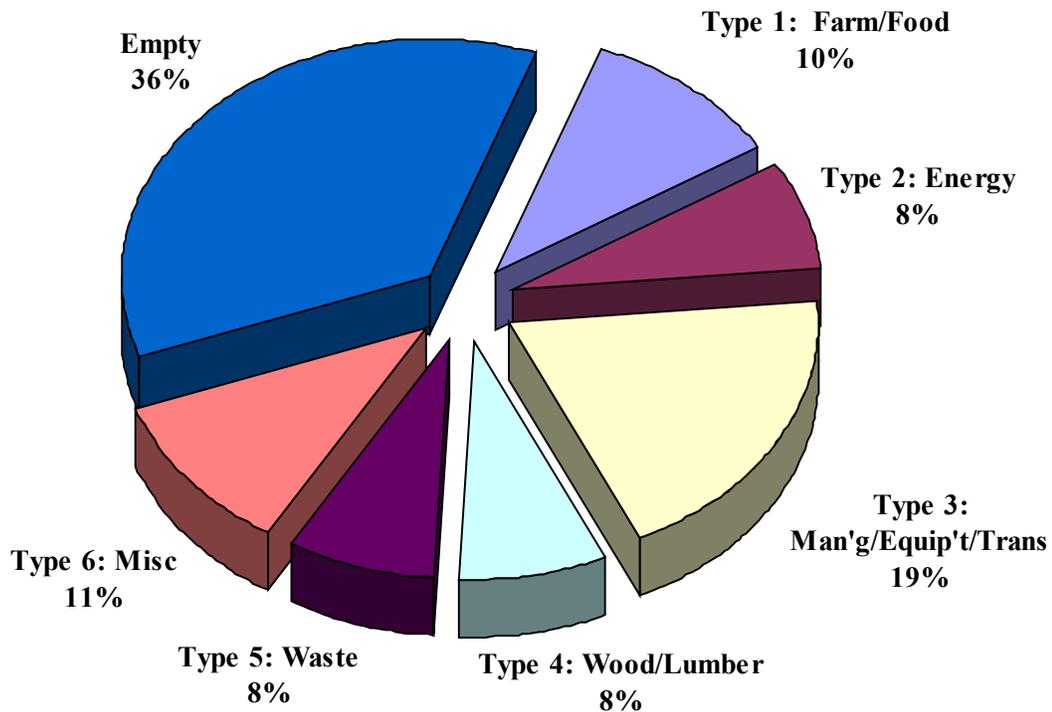
All Sites - Survey September/November 2001 - 8:00 to 16:00

Empty 36%
Type 1: Farm/Food 10%
Type 2: Energy 8%
Type 3: Man'g/Equip't/Trans 19%
Type 4: Wood/Lumber 8%
Type 5: Waste 8%
Type 6: Misc 11%

Type 1: Farm, Food Industry
Type 2: Energy Industry (oil, mining chemical mineral, stones)
Type 3: Manufacturing, Machinery, Equipment, Transportation
Type 4: Wood, Lumber Industry
Type 5: Waste, Hazardous Materials, Waste hazardous Substances
Type 6: Miscellaneous
Empty

Exhibit 4.8.3 – Trucks by Commodity Type by Direction of Travel

Inbound Trucks by Commodity Type
All Sites - Survey September/November 2001 - 8:00 to 16:00

Type 1
11%

Type 2
7%

Type 3
18%

Type 4
9%

Type 5
6%

Type 6
10%

Empty
39%

Outbound Trucks by Commodity Type
All Sites - Survey September/November 2001 - 8:00 to 16:00

Type 1
10%

Type 2
9%

Type 3
21%

Type 4
7%

Type 5
9%

Type 6
12%

Empty
32%
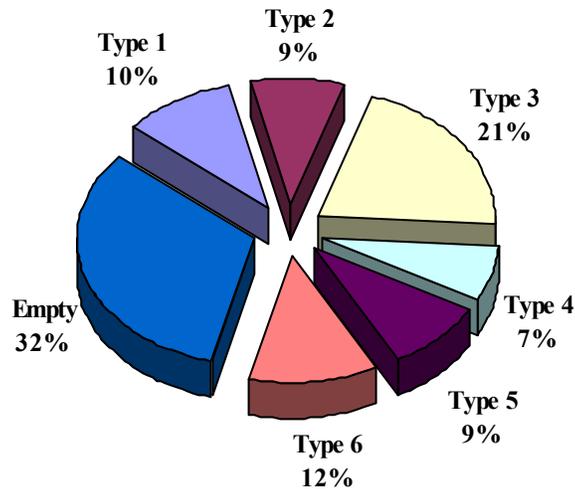
Type 1: Farm, Food Industry
Type 2: Energy Industry (oil, mining chemical mineral, stones)
Type 3: Manufacturing, Machinery, Equipment, Transportation
Type 4: Wood, Lumber Industry
Type 5: Waste, Hazardous Materials, Waste hazardous Substances
Type 6: Miscellaneous
Empty

4.9. Commodity Origins and Destinations

In total, there are about 16,213 scaled up daily commodity trip origins and an equivalent number of commodity destinations occurring on a typical 24-hour weekday. The commodity origins and destinations are grouped into 12 different areas or regions. Within the study area the regions include the City of Edmonton and the Edmonton Region. Trips originating from or destined to the rest of Alberta are grouped into 5 distinct areas: Calgary region, Northeast Alberta, Southeast Alberta, Northwest Alberta and Southwest Alberta. The northern and southern areas of Alberta are split along Highway 16 and the eastern and western sections are split along Highways 2 and 88.

Outside of Alberta and within Canada the origins and destinations are grouped into 3 areas: British Columbia, Saskatchewan and Manitoba, and the Rest of Canada. Commodity origins and destinations to the United States were identified separately. The commodity origins and destinations are shown on Table 4.9.2 in form of a spreadsheet with the origins listed by rows and the destinations by columns, and illustrated on Exhibits B1 through B11 in the Appendix B. Commodity trip origins and destinations by locality at each of the external entry points are summarized in Exhibits C 1 through C 27 in Appendix C. The total commodity trip origins and destinations are summarized in Table 4.9.1 below.

Table 4.9.1 – Summary of Trip Origins and Destinations by Region

Region	Origins %	Destinations %
City of Edmonton	21%	21%
Edmonton Region	19%	19%
Calgary Region	5%	6%
Northeast Alberta	8%	8%
Northwest Alberta	17%	15%
Southeast Alberta	15%	15%
Southwest Alberta	8%	8%
British Columbia	3%	3%
Saskatchewan and Manitoba	2%	3%
Rest of Canada	1%	1%
United States	1%	1%
Total	100%	100%

A small number of trips were observed between contiguous United States and Alaska. Similarly, there were some trips being made from Northern British Columbia to Southern British Columbia through the study area.

Table 4.9.2 – Commodity Trip Origins and Destinations by Regional Localities

Edmonton Region External Truck Commodity Survey
Weekday 24 Hour Daily Commodity Trips

Destined To → / Originating In ↓	Edmonton	Edmonton Region	Calgary Region	Northeast Alberta	Northwest Alberta	Southeast Alberta	Southwest Alberta	British Columbia	Sask & Manitoba	Rest of Canada	United States	Total
Edmonton		15	545	505	775	918	228	205	198	38	100	3,525
Edmonton Region	20	95	210	466	678	918	388	95	133	15	38	3,053
Calgary Region	358	165		90	105	28	5	40	8	5		803
Northeast Alberta	610	413	38	38	50	90	45	20	3		3	1,308
Northwest Alberta	763	768	113	38	118	288	568	13	45	10	30	2,750
Southeast Alberta	908	943	13	80	180	195	58	30	5	3		2,413
Southwest Alberta	245	448	8	65	433	43	103	28	3		5	1,378
British Columbia	220	95	38	15	13	28	20	8	28	8	5	475
Saskatchewan & Manitoba	140	80	5	13	45	5	3	28			3	320
Rest of Canada	30	10	10	3	8	5		18				83
United States	58	15	5		8	3		5			15	108
Total	3,350	3,045	983	1,310	2,410	2,518	1,415	488	420	78	198	16,213

Of the total (16,213) commodity trip origins and destinations, 42 percent or 6,875 trips originate in or are destined to the City if Edmonton. The internal to external and the external to internal component of the commodity trip origins and destinations for the Edmonton Region (excluding the City of Edmonton) amount to 37 percent of the total trips. The balance of the trips, the external to external component, originating in and destined to areas outside of the study area account for 21 percent of all trips. This percentage breakdown is illustrated in Exhibit 4.9.1.

Exhibit 4.9.1 – Internal to External and External to External trip Breakdown

External
Commodity Trips
21%

Edmonton -
External to Internal
& Internal to
External
42%

Edmonton Region -
External to Internal
& Internal to
External
37%
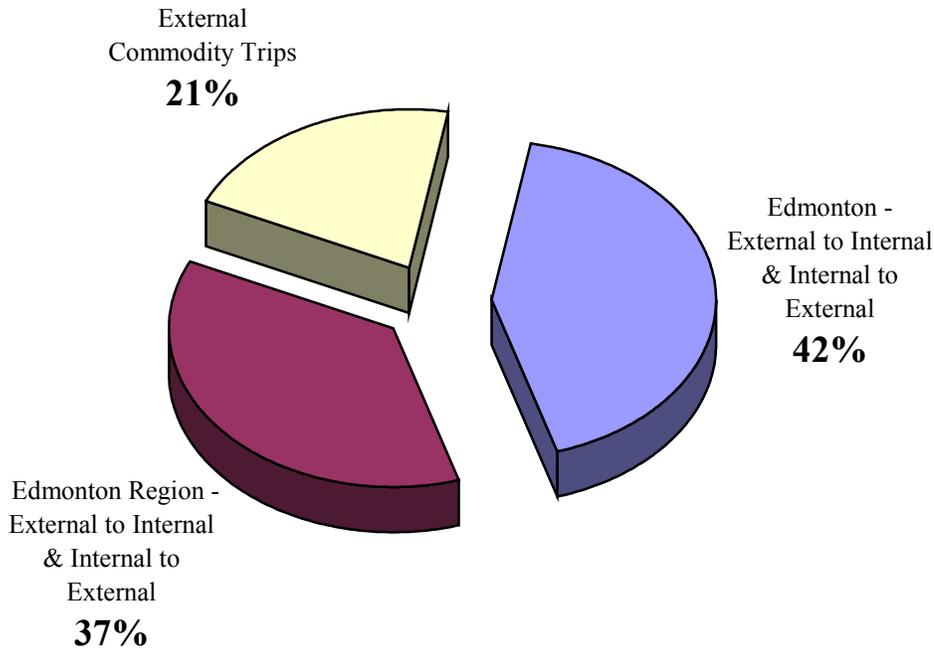
Within the City of Edmonton and the Edmonton Region commodity trip origins and destinations were assigned at the traffic zonal level for the purposes of travel forecasting using the EMME/2 Edmonton Regional Travel Forecasting Model and aggregated at the sector level. The City of Edmonton is divided up into 396 traffic zones whereas the Edmonton Region is divided up into 417 traffic zones. For presentation purposes 15 sectors are identified within the City of Edmonton, including Sherwood Park and the City of St Albert and 7 sectors in the Edmonton Region.

The zonal commodity trip origins and destinations for the City of Edmonton and the immediate area are illustrated on Exhibits 4.9.2 and 4.9.3. Commodity trip origins and destinations at the sector level are illustrated in Exhibit 4.9.4. The highest proportion of commodity trips within the City of Edmonton either originate in or are destined to four sectors i.e. the NW suburb, followed closely by the SE suburb, and then by Sherwood Park and finally the SE Inner area. The rest of the sectors have less than 200 commodity trip origins and 200 commodity trip destinations

Exhibit 4.9.2 – Zonal Commodity Trip Origins (City of Edmonton and the Immediate Area)
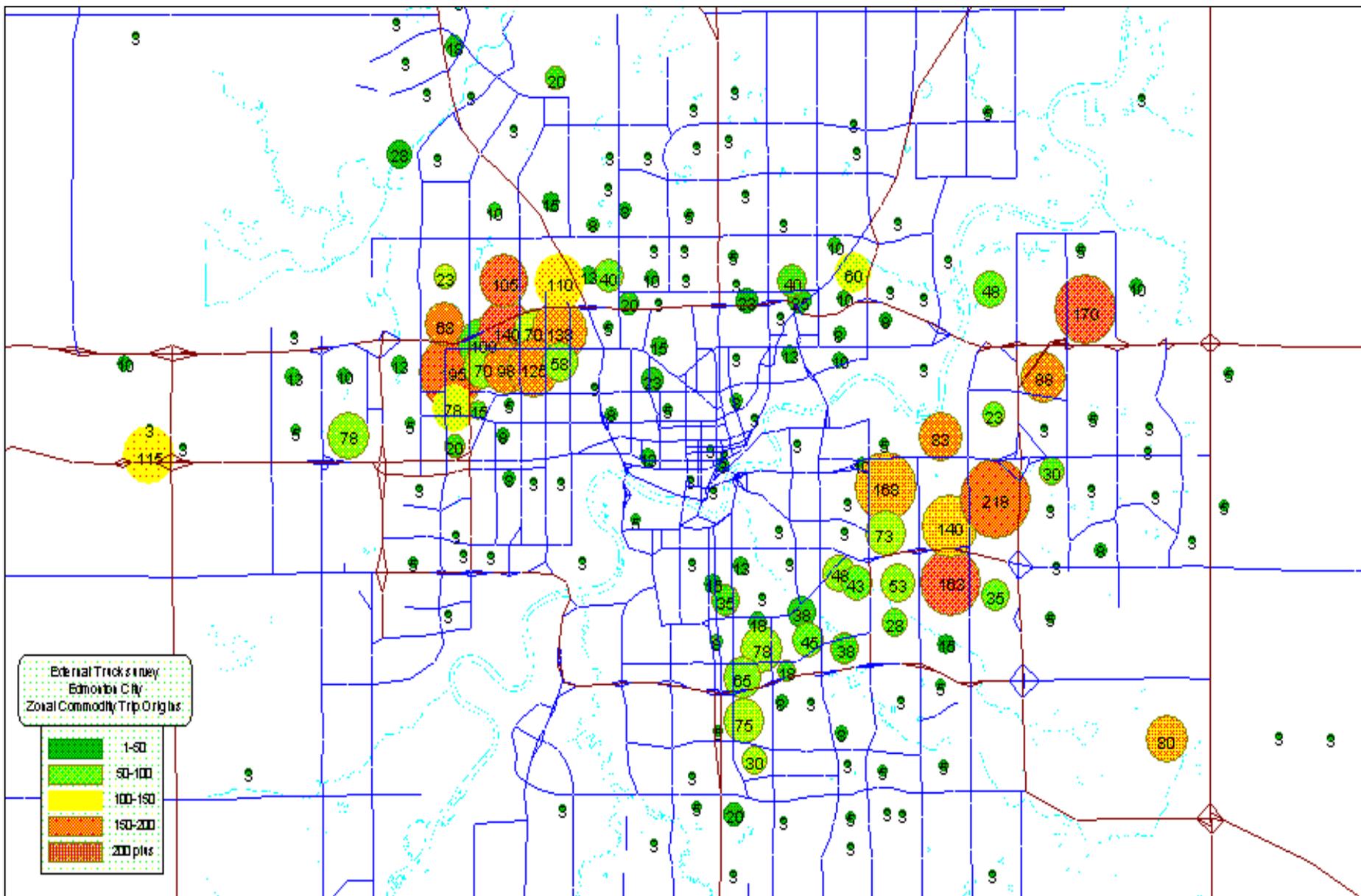
Exhibit 4.9.3 – Zonal Commodity Trip Destinations (City of Edmonton and the Immediate Area)
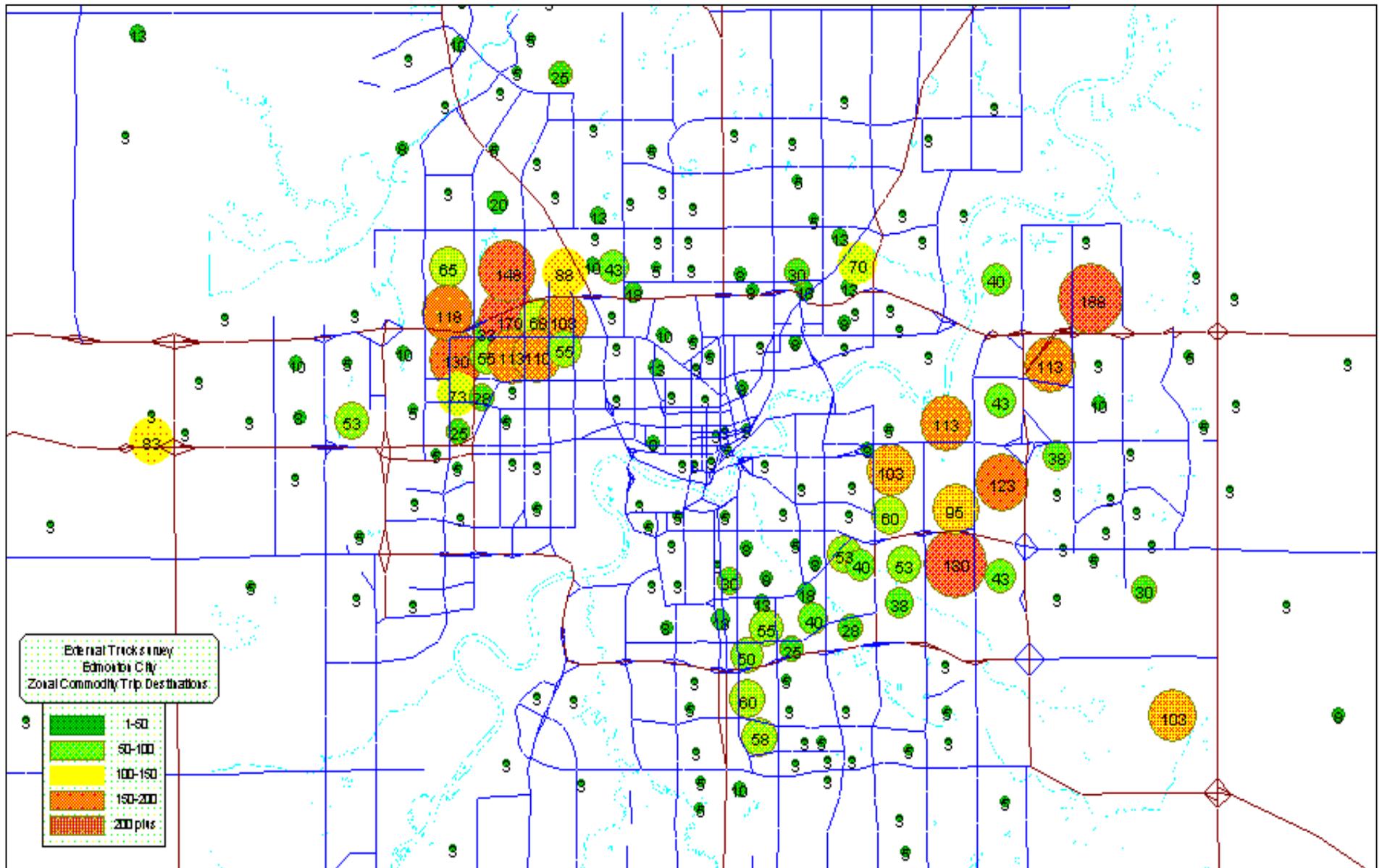
Exhibit 4.9.4 – Sector Commodity Trip Origins and Destinations (City of Edmonton and the Immediate Area)

WEEKDAY 24 HR DAILY COMMODITY TRIP ORIGINS AND DESTINATIONS BY CITY SECTOR

85 98
NE SUBURB

83 75
ST. ALBERT

143 128
NW INNER

165 128
NE INNER

1585 1525
NW SUBURB

CENTRAL FRINGE
35 30

18 15
CENTRAL

30 18
WEST INNER

5 13
UNIVERSITY

318 250
SE INNER

618 600
SHERWOOD PARK

15 28
WEST SUBURB

30 43
SW INNER

15 30
SW SUBURB

1085 1048
SE SUBURB

TRIP ORIGINS
618

TRIP DESTINATIONS
600
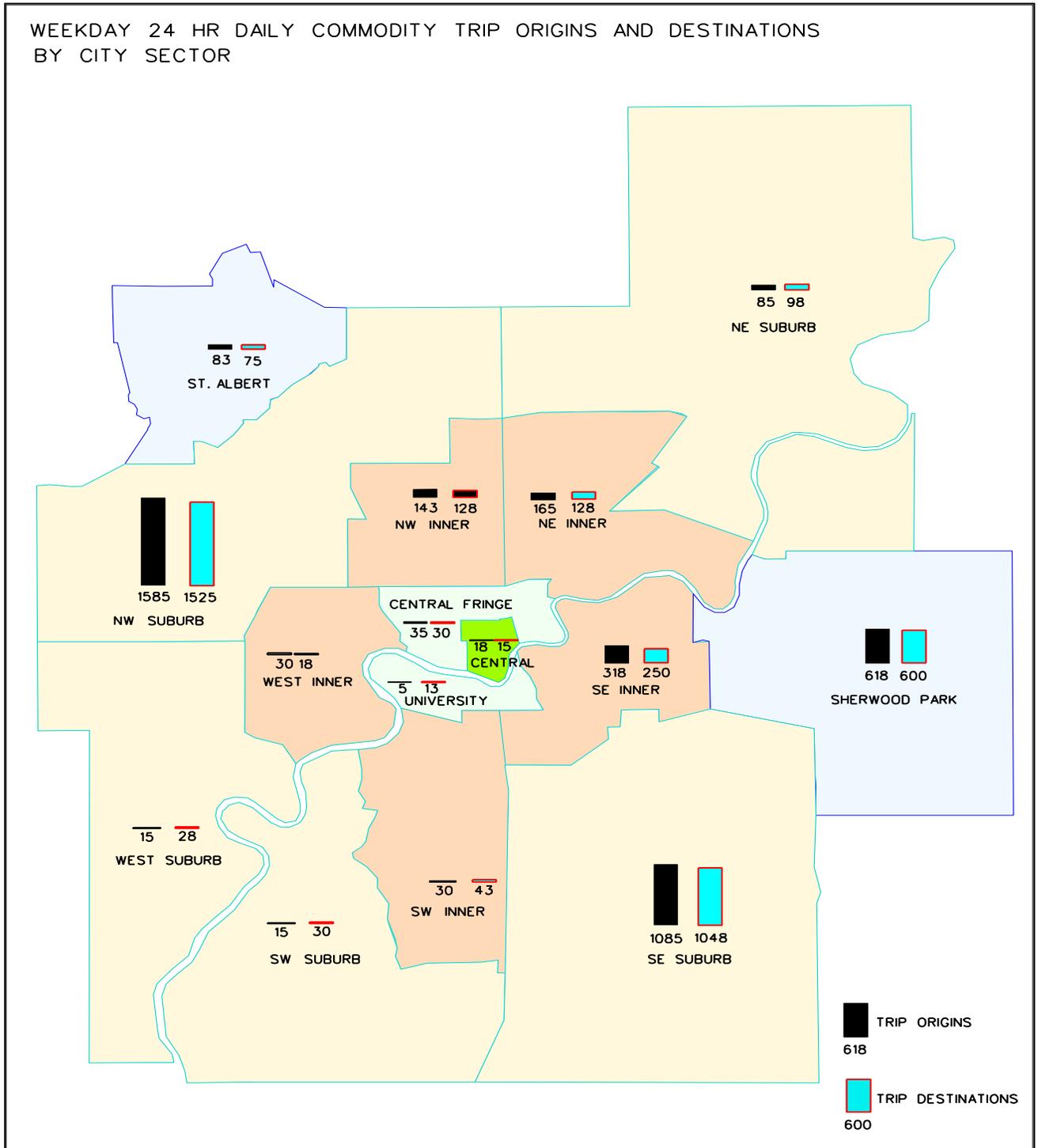
The zonal commodity trip origins and destinations for the Edmonton Region are illustrated on Exhibits 4.9.5 and 4.9.6. Commodity trip origins and destinations at the sector level are illustrated in Exhibit 4.9.7. The highest proportion of commodity trips within the Edmonton Region either originate or are destined to the following five areas:

- the Highway 2 Corridor including the Nisku, City of Leduc and the Edmonton International Airport,
- the County of Sturgeon,
- the County of Parkland,
- the Highways 16 and 16A corridor and
- the rural portion of the County of Strathcona.

The County of Leduc and the City of Fort Saskatchewan have less than 220 commodity trip origins or trip destinations.

Exhibit 4.9.5 – Zonal Trip Origins (Edmonton Region)
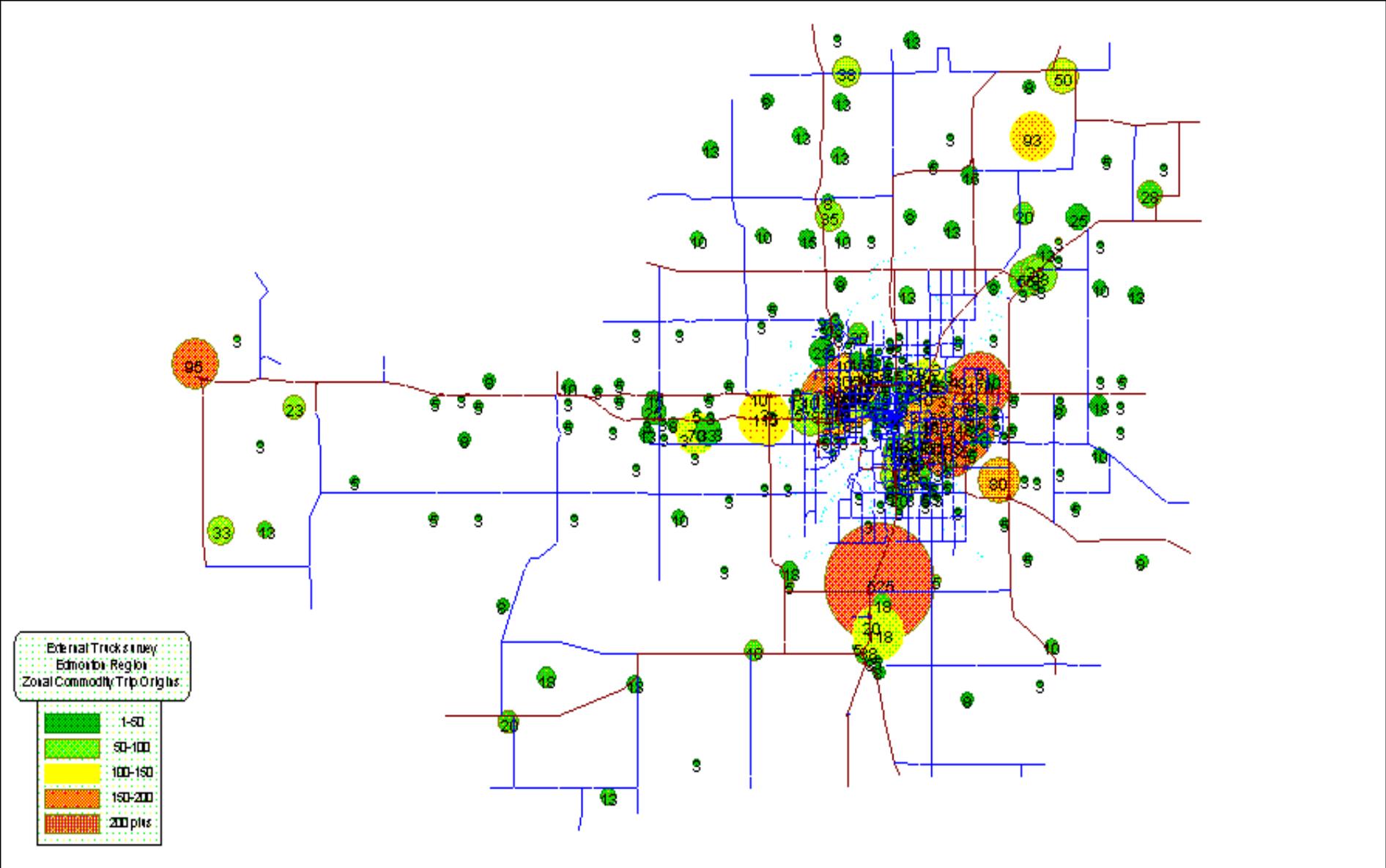
Exhibit 4.9.6 – Zonal Trip Destinations (Edmonton Region)

External Truck survey
Edmonton Region
Zonal Commodity Trip Destinations:

	1-50
	50-100
	100-150
	150-200
	200 plus
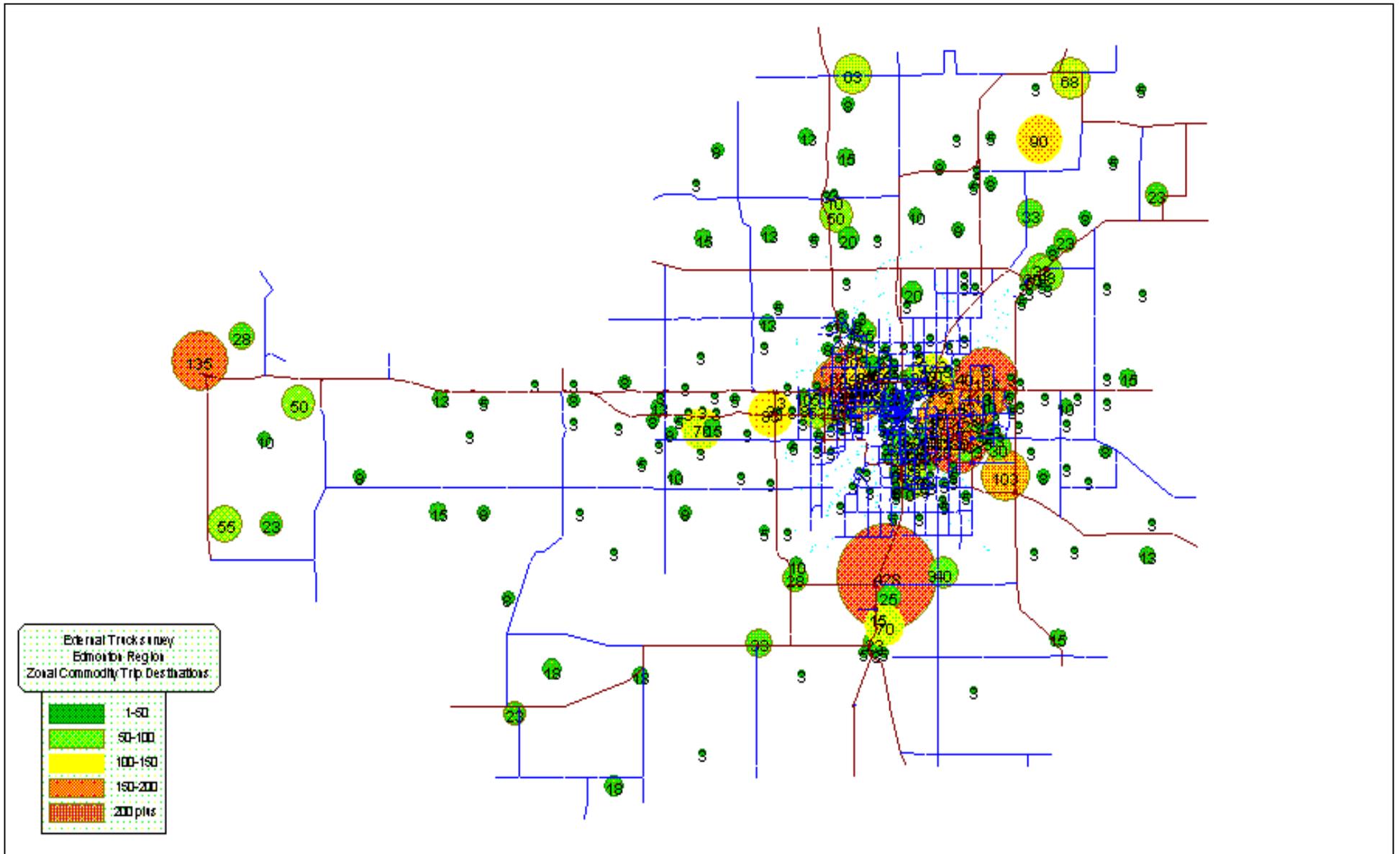
Exhibit 4.9.7 – Sector Trip Origins and Destinations (Edmonton Region)
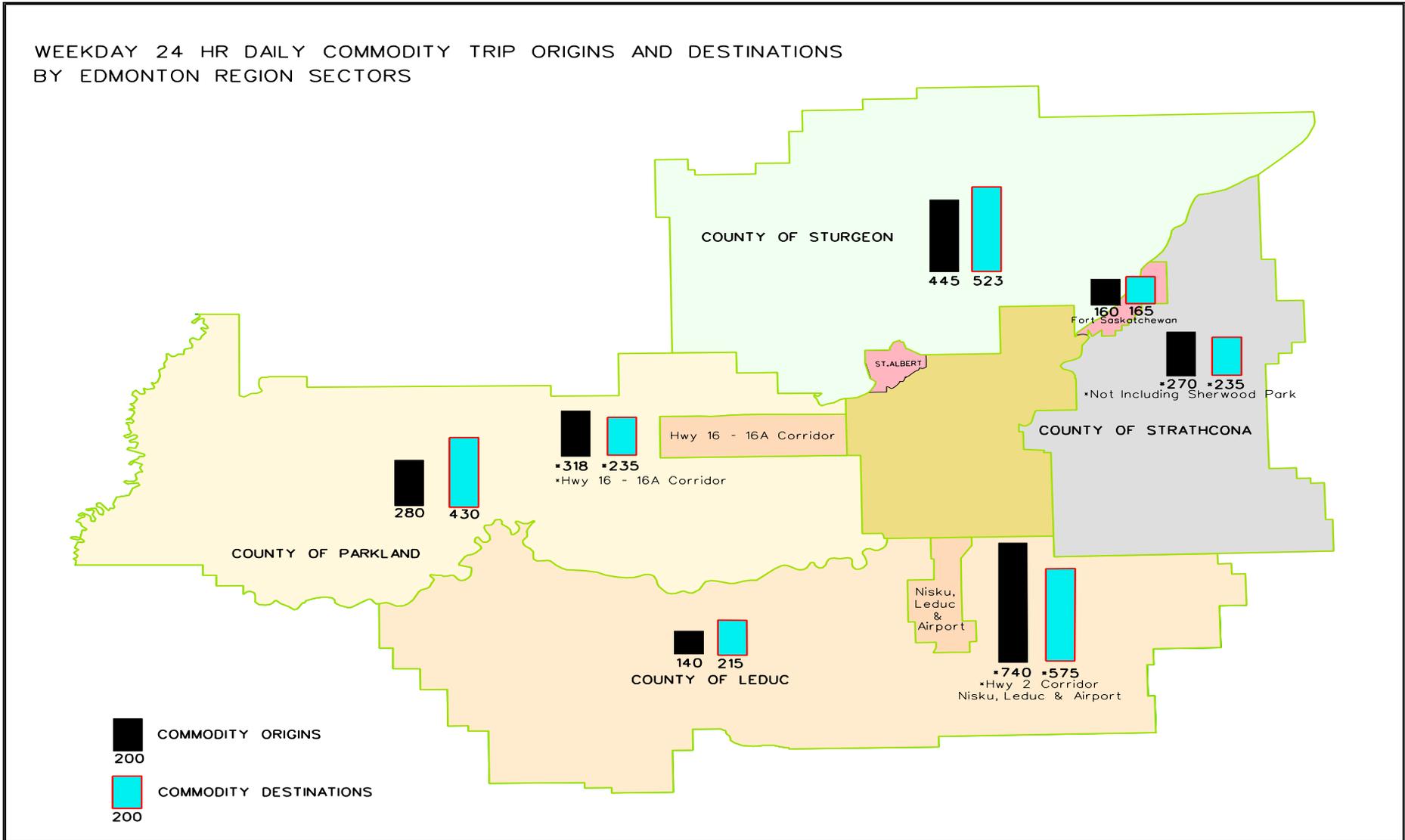
WEEKDAY 24 HR DAILY COMMODITY TRIP ORIGINS AND DESTINATIONS
BY EDMONTON REGION SECTORS

COUNTY OF STURGEON

445   523

160 165
Fort Saskatchewan

*270 *235
*Not Including Sherwood Park

COUNTY OF STRATHCONA

ST.ALBERT

Hwy 16 – 16A Corridor

*318 *235
*Hwy 16 – 16A Corridor

280   430

COUNTY OF PARKLAND

Nisku,
Leduc
&
Airport

140 215
COUNTY OF LEDUC

*740 *575
*Hwy 2 Corridor
Nisku, Leduc & Airport

■ COMMODITY ORIGINS
200

□ COMMODITY DESTINATIONS
200

APPENDICES

APPENDIX A:
Questionnaire,
Survey Procedures,
Truck Classifications
and
Miscellaneous Commodities

Exhibit A 1 – Final Questionnaire

External Commodity Flow Survey   **LAMONT** (site 4 & 16)   **Interview Sheet**

Survey Location **3**	Interviewer:	Date: Wed, Oct 10, 2001	Page: ____/_____

☐ Inbound ☐ Outbound	Time:	Truck Type:	Gross Vehicle Weight (kg):	Occupancy:

DESCRIBE THE LOAD CARRIED AT THIS POINT (MAY BE MULTIPLE)

☐ Load Type of: ☐ Service	Quantity: Incl. Units	$ Value: CDN/US

WHERE WAS THIS LOAD PICKED UP (ADDRESS, TOWN, PROVINCE / STATE.)?

If distant: where did the load originate today (town, province / state)?

WHERE WILL THIS LOAD BE DELIVERED (ADDRESS, TOWN, PROVINCE / STATE)?

If distant: where will this load stop today?

IS THIS PART OF A ROUND TRIP: ☐ Yes   ☐ No

WHAT HIGHWAY(S) WAS USED TO GET HERE?

WHAT HIGHWAY(S) WILL YOU USE NEXT?

INBOUND: IS THIS LOAD STOPPING WITHIN EDMONTON OR THE REGION FOR LONGER THAN 15 MINUTES?

OUTBOUND: DID THIS LOAD STOP IN EDMONTON OR THE REGION FOR LONGER THAN 15 MINUTES?

Stop	Location (address, establishment, town)	Reason	Arrival Time	Depart Time	Commodity	Quantity	Value
1		☐ Delivery ☐ Pick Up					
2		☐ Delivery ☐ Pick Up					
3		☐ Delivery ☐ Pick Up					
4		☐ Delivery ☐ Pick Up					

WHO OWNS THIS TRUCK (CIRLCE) :   Company Owned   Company Leased   For Hire

Freedom of Information Declaration: The Company information is collected for transportation purposes by the City of Edmonton, Transportation and Streets Department, under the authority of Section 32© of the Freedom of Information and Protection of Privacy (FOIP) Act and is protected by the FOIP Act. If you have any questions about the collection, please contact the General Supervisor, Transportation Planning Branch @ 496 – 1778.

Exhibit A 2 – General Survey Procedures

Interview Procedures (how will the survey work in the field)

Alberta Infrastructure (AI)
- ➢ Manages trucks
- ➢ Creates safe areas for interviewers

Monitoring Services (MS)

Interviewers remain in safe area until trucks are stopped

Interviewers are assigned vehicle to interview

Interviewers record information

Interviewers return to safe area

Interview Supervisor reviews surveys for discrepancies
- ♦ Interview is completely filled in.
- ♦ Truck type identified correctly
- ♦ Trip definition: if Inbound Edmonton or Region can't be Origin, if outbound destination can't be Edmonton or Region.

Surveys bundled by hour and filed for transport to office.

Additional knowledge required:
- ♦ 24 hour clock
- ♦ Alberta place names

Alberta Infrastructure
- ➢ Releases trucks.
- ➢ Determines if trucks should bypass interview area if there is congestion. MS to assign personnel to monitor number of tracks bypassing survey location.

Supplies Required:

Interviewer: watch, pencil(s), erasers, warm clothes (layered), warm footwear, chair, interview package, vehicle, lunch, thermos.

Interviewer Supervisor: spare pencils, lead, erasers, watch, elastics, stapler, boxes, first aid kit, emergency phone numbers (home phone numbers, contact people), interview sheets.

Interview Package includes:

Map – Alberta with the region and stations highlighted

Place Names for Alberta – all locations in Alberta with the cities / towns within the region highlighted.

Interview Schedule with routings / meeting places for transport to station.

Survey Procedures

Additional:

MS: arrange count of trucks bypassing interview location if congestion occurs

MS: 24-hour vehicle classification count at 4 interview locations. The interview will give the required information during the interview time period. Additional information for the remaining 24 hours will be collected within the same 5 week time period.

The focus is on the movement of the commodity rather than the movement of the truck.

Definitions:

Truck: a vehicle with dual rear wheels. To classify – determine if vehicle has a hitch and count the axles.

Single – unit truck: no hitch

Multi – unit truck: has hitch (or multiple hitches) joining the "trailer" to a pulling unit.

Trip: one way movement – the origin and destination should be different. Inbound origin should not be Edmonton or Region; outbound destination should not be Edmonton or Region.

<u>Interview Sheet</u>

In general: use check marks for all check boxes. Use X for incorrect information that has been changed.

Field name	Definition	Special Instructions
Survey Location	Numeric code for the survey location	Code should be on the survey sheet.
Interviewer	The name of the interviewer	Fill out a number of these sheets when you arrive and during slow times.
Date	The survey date in MM/DD/YY order: 9/18/01 is Sept. 18, 2001.	Fill out a number of these sheets when you arrive and during slow times.
Page #	The page and number of pages.	Some surveys may take more than one page if there are multiple stops.
☐ Inbound ☐ Outbound	Is the load/service entering the region or leaving the region. Check the appropriate box **and** circle the appropriate entry / exit on the map.	Required – record as truck is moving into interview area. Some locations you may have to ask or interpolate from the Origin /destination information.
Time	Time of day in 24 hour clock	Required – record as truck is moving into interview area.
Truck Type	Truck types are described on accompanying sheet.	Required – record as truck is moving into interview area. The number of axles is included in the classification name.
Gross Vehicle Weight (kg)	Found on the outside of the truck. Identify if kg or tons (? – what does the US use).	Required – record as truck is moving into interview area.
Occupancy	The number of people inside the truck including the driver.	Record as truck is moving into interview area. It is not necessary to ask further questions.
Questions related to the load/service: Record information for each load/service.		
☐ Load ☐ Service	Is the truck carrying a load or is it providing a service. What load is it carrying or what service is it providing?	Required. Record all loads carried by the truck
Quantity	For Load: How much is the truck carrying at this point? Use whatever measurements the driver uses but make sure to identify the measurement unit. For Service: it may be I'm doing 6 "calls"	Required
$ Value	The value of the load or service – specify CDN or US $	Required – but be flexible. Use DK for don't know rather than $0.
Origin and destination information – start with general and work to specific. Be alert to the logic for one – way trips (what we want), round trips and inbound / outbound differences. If driver says "I'm coming back/I'm returning from AM" then prompt for the specific information for the INBOUND or OUTBOUND trip.		
Where was the load picked up?	Where was this commodity loaded onto this vehicle? Within the region: address, establishment, city / town. Outside the region: city / town, province / state.	Required. Inbound vehicles should not have Edmonton or Region as a pick up point. Outbound vehicles will not have deliveries in Edmonton. Multiple pickups / deliveries – we want all. Empty load – where did truck start.
If distant: where did the load start today.	If the load was picked up at a location more than one day's drive then ask for today's information. Within the region: address, establishment,	Required

Field name	Definition	Special Instructions
	city / town.	
	Outside the region: city / town, province.	
Where will this load be delivered?	What is the final drop off point for this commodity?	Required
		Inbound vehicles should not have Edmonton or Region as a pick up point. Outbound vehicles will not have deliveries in Edmonton.
	Within the region: address, establishment, city / town.	
	Outside the region: city / town, province.	
If distant: where will this load stop today.	Where will this load/service rest at the end of your driving day?	Required
	Within the region: address, establishment, city / town.	
	Outside the region: city / town, province.	
Is this part of a round trip?	We are interested in the one – way trip – inbound or outbound in relation to our regional boundaries. Quite often the driver will be making a return trip (or several return trips) on the same day.	Check YES or NO
Is this load/service (in this case you may think of it as truck) stopping (or has it stopped for OUTBOUND trips) in Edmonton or the Region? We are looking for stops longer than 15 minutes.		
Stop	If more than 4 use the reverse of the sheet. If multiple stops be sure to get first and last stops of the day	
Location	Address, establishment, city / town	Required
Reason	Inbound: **D**elivery or **S**ervice (breaks, fuel)	Required
	Outbound: Pickup or **S**ervice	
Arrival Time	Time in 24-hourclock.	Required
Depart Time	Time in 24-hourclock.	Required
Commodity	What commodity was handled at this stop if delivery or pick up	Required
Quantity	How much of the commodity was delivered / picked up.	Required
$Value	Dollar value of commodity delivered / picked up. Specify CDN or US $.	Required.
Vehicle Ownership	Who owns the truck:	
	Owned by company producing goods being shipped.	
	Leased and operated by company producing goods being shipped.	
	FOR HIRE: Owned by a different company or driver.	

Exhibit A 3 – Truck Classifications

Edmonton Region External Truck Commodity Survey
Classification of Commodity and Service Vehicles

Single Unit

Dump truck

D s
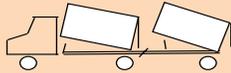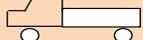
D d

Pick up truck

P s

P d

S 2 s

S 3 s

M 3 d

M 3 s

M 4 c

M 4 d

M 4 d

Multi Unit

M 5 c

M 5 d

M 5 d

M 6 d

M 6 d

M 6 d

M 6 d

M 5 s

M 5 d

M 4 s

M 4 s

M 8 d

M 8 t

M 7 d

M 7 d

M 7 d
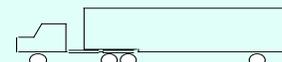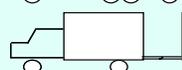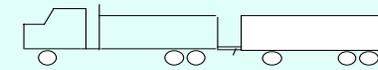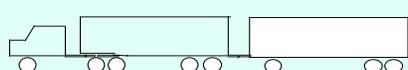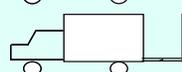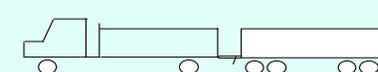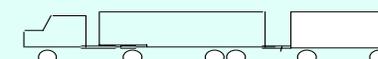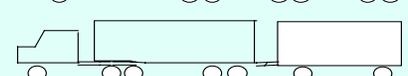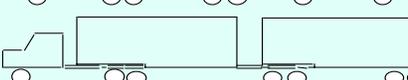
Classified by number of axles including trailer

Alberta TRANSPORTATION

THE CITY OF Edmonton

Economic Development Edmonton

9

Draft: April 23, 2003

A.5

Exhibit A 4 – Miscellaneous Commodity Descriptions

40   Miscellaneous manufactured products

Beverage Equipment Materials	Parts	Transport
Buildings, Steel	Pipe Rack	TSR Panels
Cabin Drawn	Pipe Spool	Wagon, Horse
Campers Bldg.	Plastic Blinds & Glass	
Christmas Decorations	Plastic Oil Tank	
Columns	Poly truss	
Drawhooks	Portable Bridge	
Emation	Pressure Tubing	
Engel Mix	RBOPS, Tools, Shack	
Enviro Paks	Safety Equipment	
Fireplaces	screenings	
Floatation Tires	Section, 40 ft	
Foam	Shack	
Gas Parts	Shack, Compression	
Gazebos	Shack, Energy	
Golf Equipment	Shack, Generator	
Goose Decoys	Shack, Modular	
Hardware	Shack, Rental	
Hockey sticks	Shack, Well Site	
Hog Trough	Shed, compressor	
Home Hardware Supplies	Shed, Oil	
Home Maintenance	Shed, Trap	
House, Water Storage	Sheds, Gen	
Household	Show Cases	
Household Goods	Sound & Lighting cases	
Household goods, personal	Steel Oil & Straw	
Household Items	Styrofoam cups	
Hunting gear	Subsector	
Mats, Oil Drilling	Tank	
Matting, Drilling	Tarps and antifreeze	
Medical Supplies	Tire Shop Supplies	
Mill parts	Tire Supplies/ Tube patch	
Mobile Home	Tire' Depends	
Modular Building	Toys	
Modular Home, half of	Trailer, house	
Office Building	Trailer, Mobile	
Office supplies, mail	Trailer, office	
Oil Drums	Trailer, Wood Quad	

Exhibit A4 – Miscellaneous Commodity Descriptions (Continued)

42   Miscellaneous transported products

Air Handle Units	LTL, mixed	Trench Box
Auto parts	Lumber	Unknown Load
Bins, empty Freight	Mining Supplies	Wal–Mart
Bottle Containers; empty Merchandise	Miscellaneous Merchandise	Wal–Mart
Bottles, empty General Freight	Miscellaneous	Wal–Mart,
Buckets	Miscellaneous Packages	Water
Camp Startup Equipment	Model, 24 – Ft wide	Water & Dirt
Canadian Tire Goods	Oil field Collars	Water Bottles
Cans & Bottles empty	Oil Field Supplies	Water Bottles,
Cement Blocks	Packing Materials	Water, Distilled
Cement Forms	Personal Belongings	Water, Fresh
Civil Construction Prod.	Picture Framing supplies	Water, KCL
Container	Platform	Water, Produced
Container, empty Drilling	Plumbing supplies	Water, Units of
Different Type of Freight	Portable Toilets	
Drilling products	Radioactive Sources	
Empty Crates	Rags and barrels	
Empty Milk Jugs	Recycle Products	
Equipment	Roping Shuttle	
Farm Freight	Safety Cones	
Farm Supplies	Sea Containers	
Farm Supplies and Product	Sears Freight	
Flammable Goods	Sears Products	
Flat Bed	Sears General Merchandise	
Flooring	Seed Containers	
Freight	Seismic Drilling	
General Freight	Shoot Construction	
General Freight, mixed	Silo for grain	
General Freight/Dry Goods	Skids	
General Freight	Snow mobile Display	
General Goods	Stockyard Materials	
General Merchandise	Storage Tank	
Grain Bin	Superstore Products	
Gun Wash	Tank, water	
Hazardous Goods	Tanks	
Industrial Plant Site	Tanks, oil storage	
LTL	Test Tank	
LTL (General Freight)	Trailer	

Exhibit A4 – Miscellaneous Commodity Descriptions (Continued)

72   Other personal & misc. services

Agriculture Field Service

AMA

Bailer Service

Bus (security)

Clean – up Unit

Empty Pressure Vessel

Engines

Farm Service

Farmer's Service Truck

Flare Stacks

Inspection Service

Maintenance Service

Mechanical Heating

Misc. Service

Parts and Tools

Plant Maintenance

Service

Service, Pickup w/Trailer

Supervision

Trailer, safety

Truck, Picker

Water & Plant Service

Wood Chipper Service

Wood Chippers

APPENDIX B:
Pictorial Depiction of Commodity Trip Origins and Destinations by Regions

Exhibit B 1 – Commodity Trips to/from Edmonton and Edmonton Region (Weekday 24-hourDaily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM EDMONTON AND REGION

ALASKA

YUKON

NORTHWEST TERRITORIES

NUNAVUT

BRITISH COLUMBIA

ALBERTA

SASKATCHEWAN

MANITOBA

QUEBEC

ONTARIO

MARITIMES

300

331

53

138
UNITED STATES OF AMERICA

NW ALBERTA

NE ALBERTA
970

1453

EDMONTON REGION

1836

SW ALBERTA
616

SE ALBERTA

755

CALGARY

73   315   220   40

1023

1531

1851

693

523

EDMONTON AND REGION

130
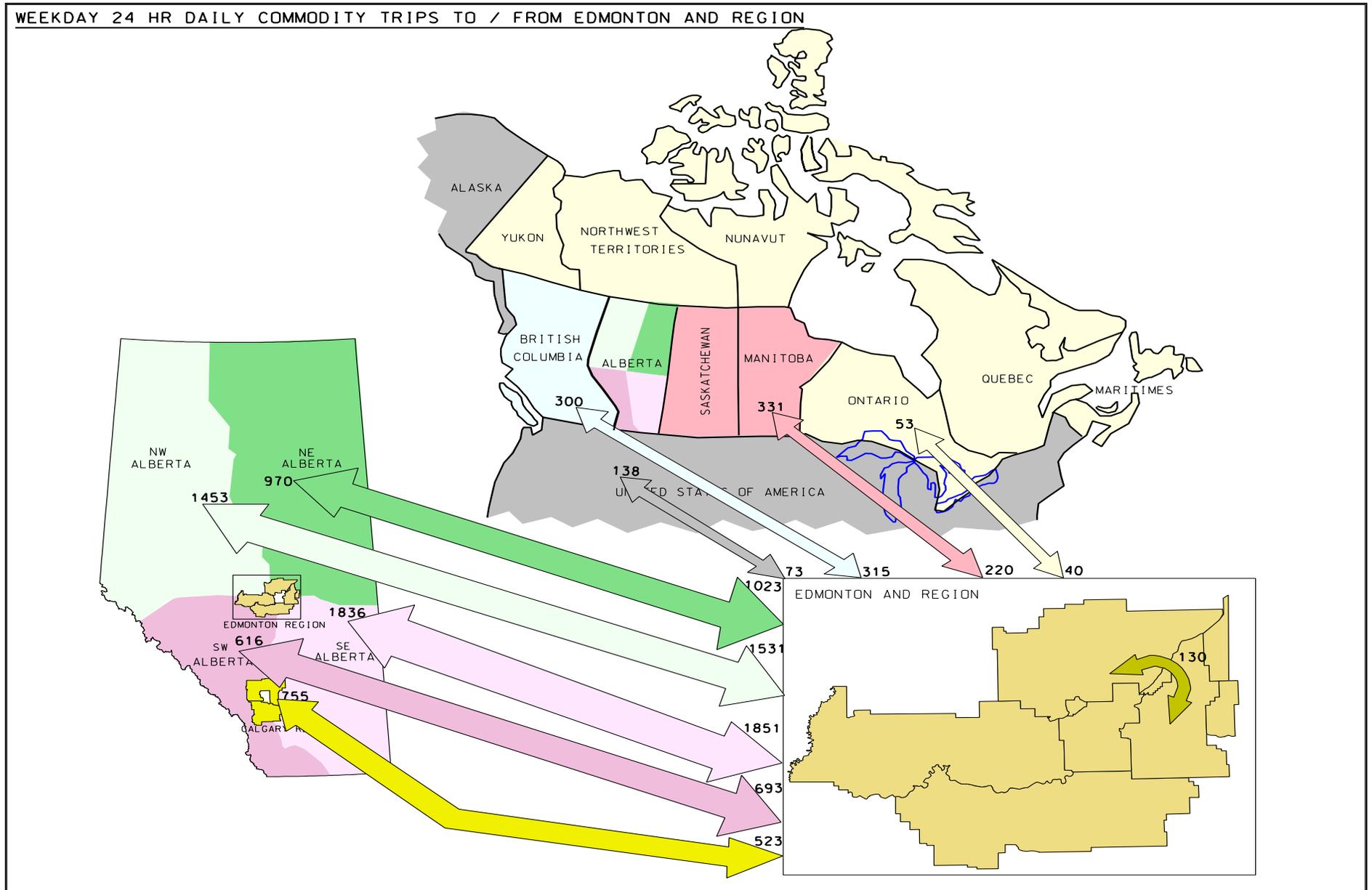
Exhibit B 2 – Commodity Trips to/from City of Edmonton (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM THE CITY OF EDMONTON

ALASKA

YUKON

NORTHWEST
TERRITORIES

NUNAVUT

BRITISH
COLUMBIA

ALBERTA

SASKATCHEWAN

MANITOBA

QUEBEC

MARITIMES

ONTARIO

775

NE
ALBERTA

NW
ALBERTA

205

198

505

UNITED STATES OF AMERICA

100

38

15

EDMONTON REGION

SW
ALBERTA

SE
ALBERTA

545

CALGARY REGION

918

228

220   140

58   30

763

610

20

358

908

245

CITY OF
EDMONTON

Exhibit B 3 – Commodity Trips to/from Edmonton Region (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY TRIPS TO / FROM EDMONTON REGION

ALASKA

YUKON

NORTHWEST TERRITORIES

NUNAVUT

BRITISH COLUMBIA

ALBERTA

SASKATCHEWAN

MANITOBA

QUEBEC

MARITIMES

ONTARIO

95

133

15

38

UNITED STATES OF AMERICA

15   95   80   10

NW ALBERTA

NE ALBERTA   465

678

413

EDMONTON REGION

918

SW ALBERTA   388

SE ALBERTA

768

210

943

CALGARY R.

448

165

EDMONTON REGION

95

15   20
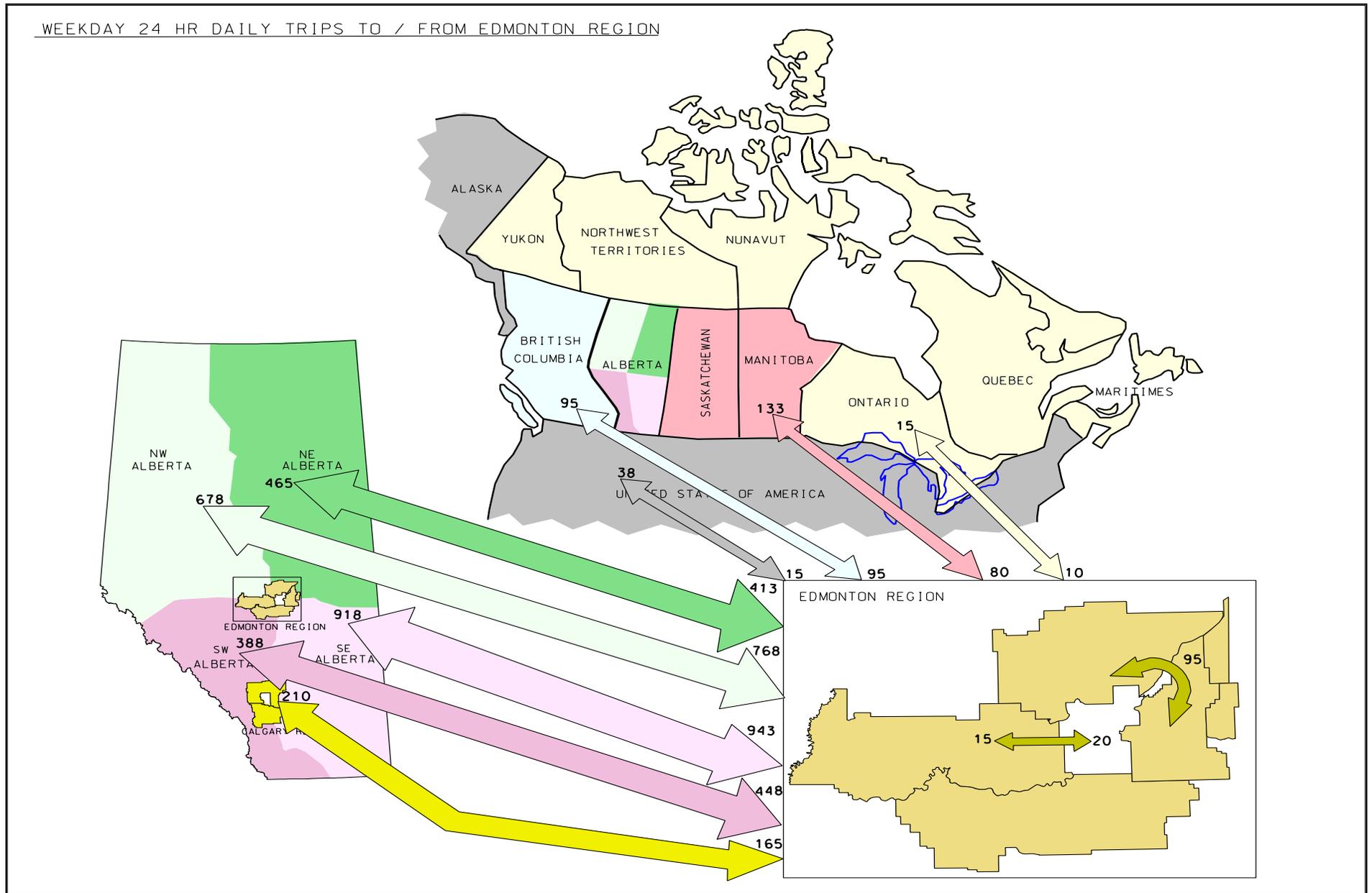
Exhibit B 4 – Commodity Trips to/from Northeastern Alberta (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM NORTHEASTERN ALBERTA

ALASKA

YUKON

NORTHWEST TERRITORIES

NUNAVUT

20

BRITISH COLUMBIA

15
13
0

3

ALBERTA

3

SASKATCHEWAN

3

MANITOBA

0

ONTARIO

QUEBEC

MARITIMES

3

UNITED STATES OF AMERICA

NW ALBERTA

NE ALBERTA

50

38

38

90

65

80

45

EDMONTON REGION

SW ALBERTA

ALBERTA

90

38

CALGARY REGION
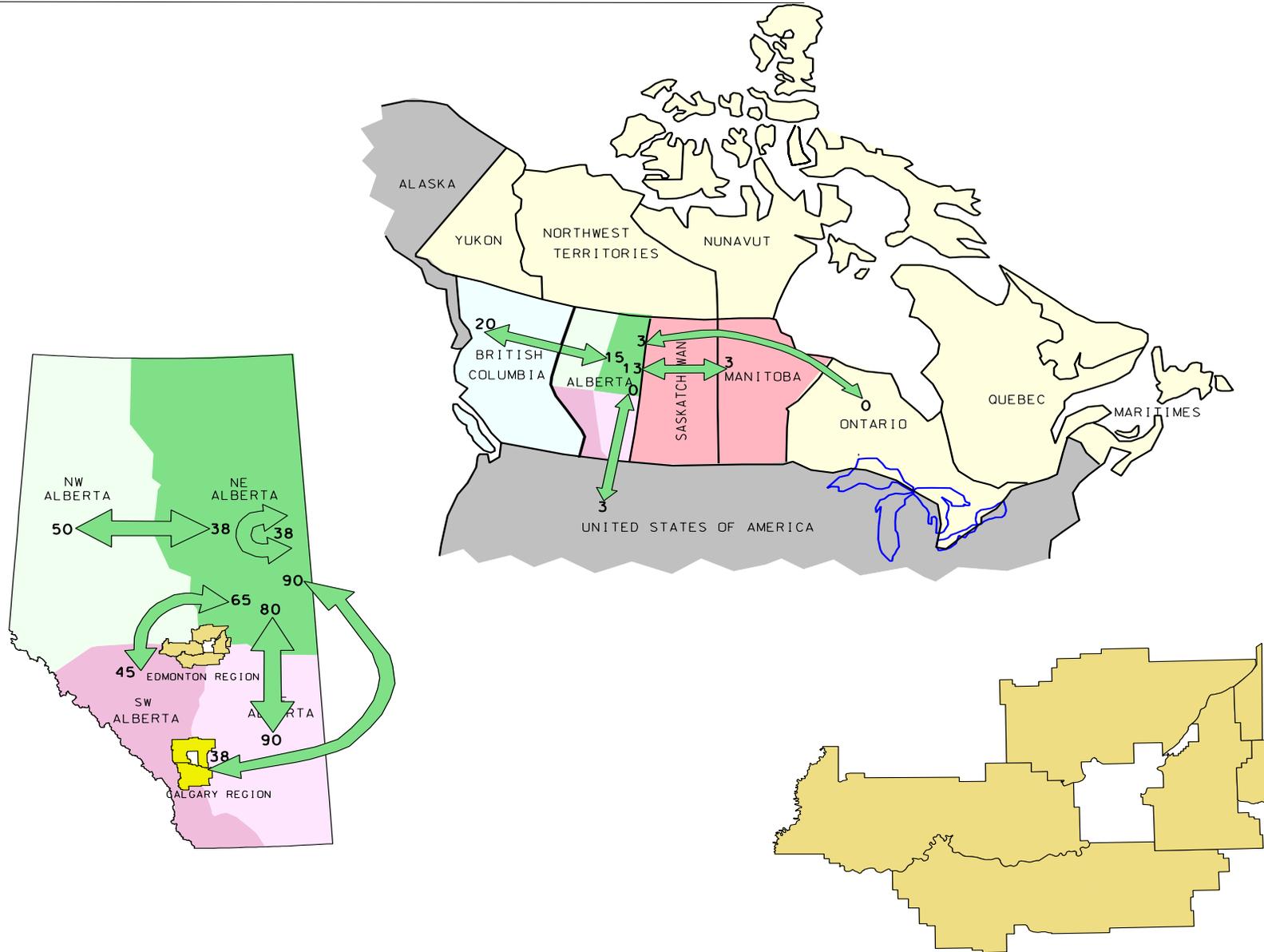
Exhibit B 5 – Commodity Trips to/from Northwestern Alberta (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM NORTHWESTERN ALBERTA
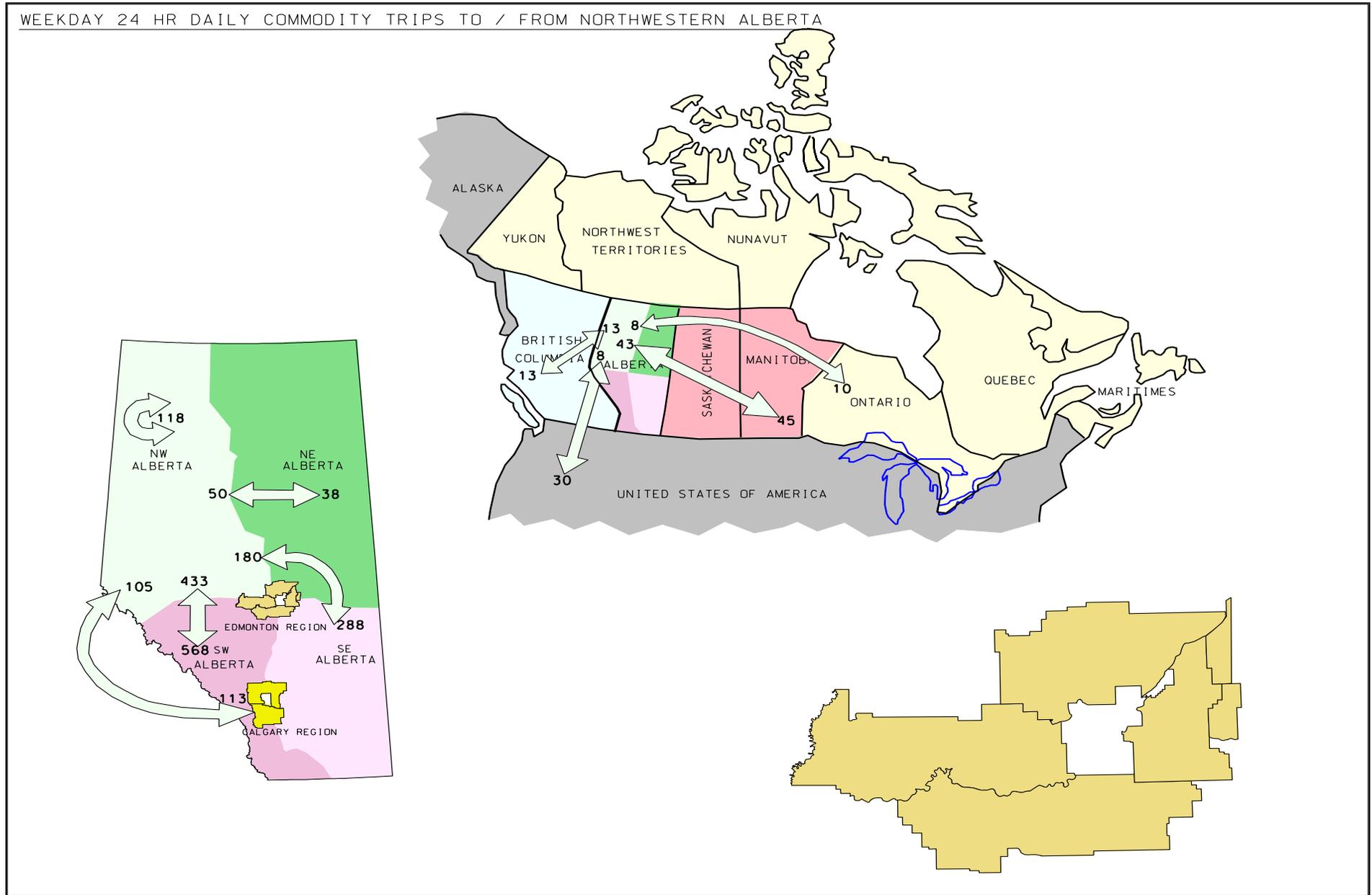
Exhibit B 6 – Commodity Trips to/from Southeastern Alberta (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM SOUTHEASTERN ALBERTA
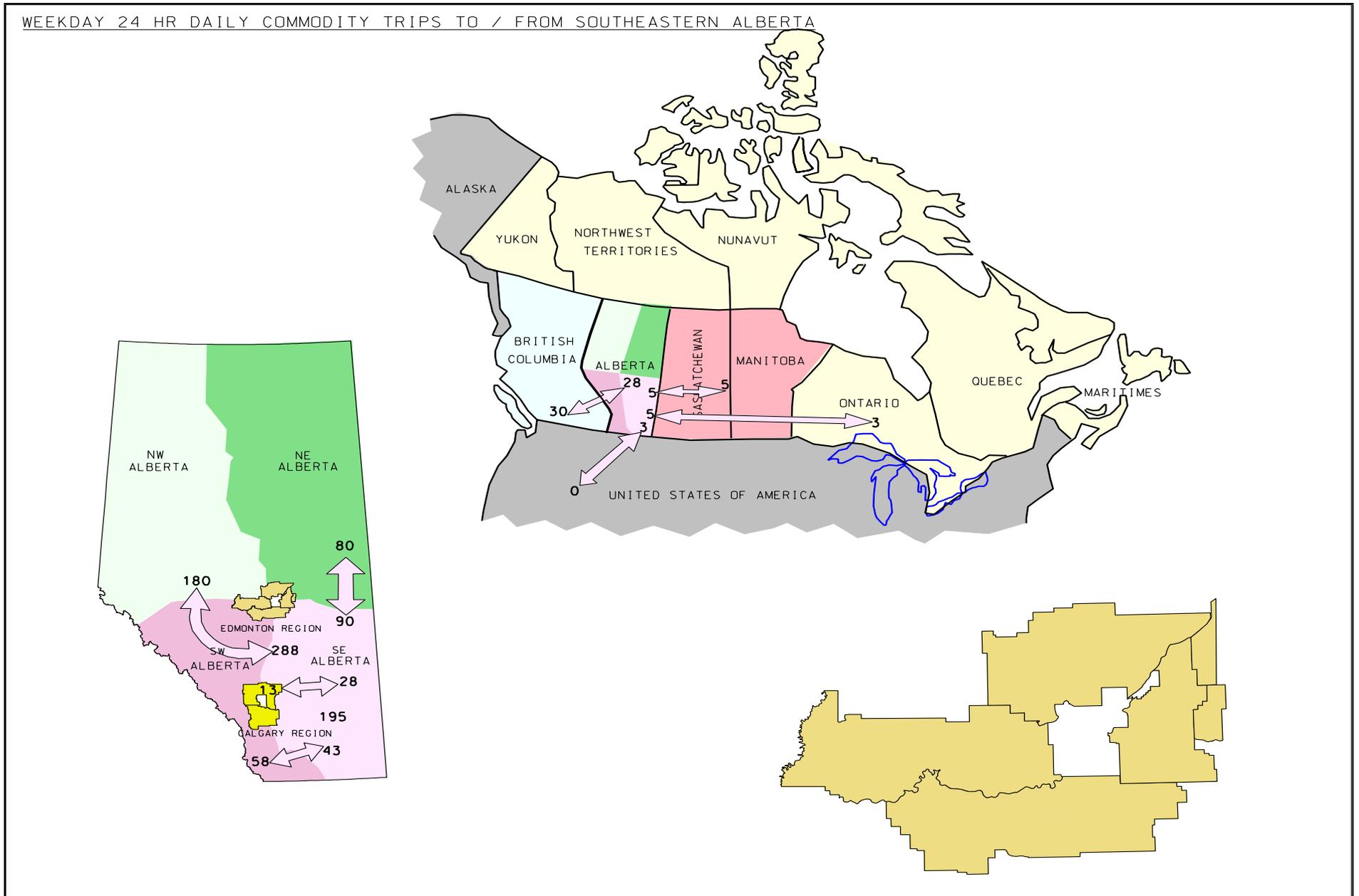
Exhibit B 7 – Commodity Trips to/from Southwestern Alberta (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM SOUTHWESTERN ALBERTA
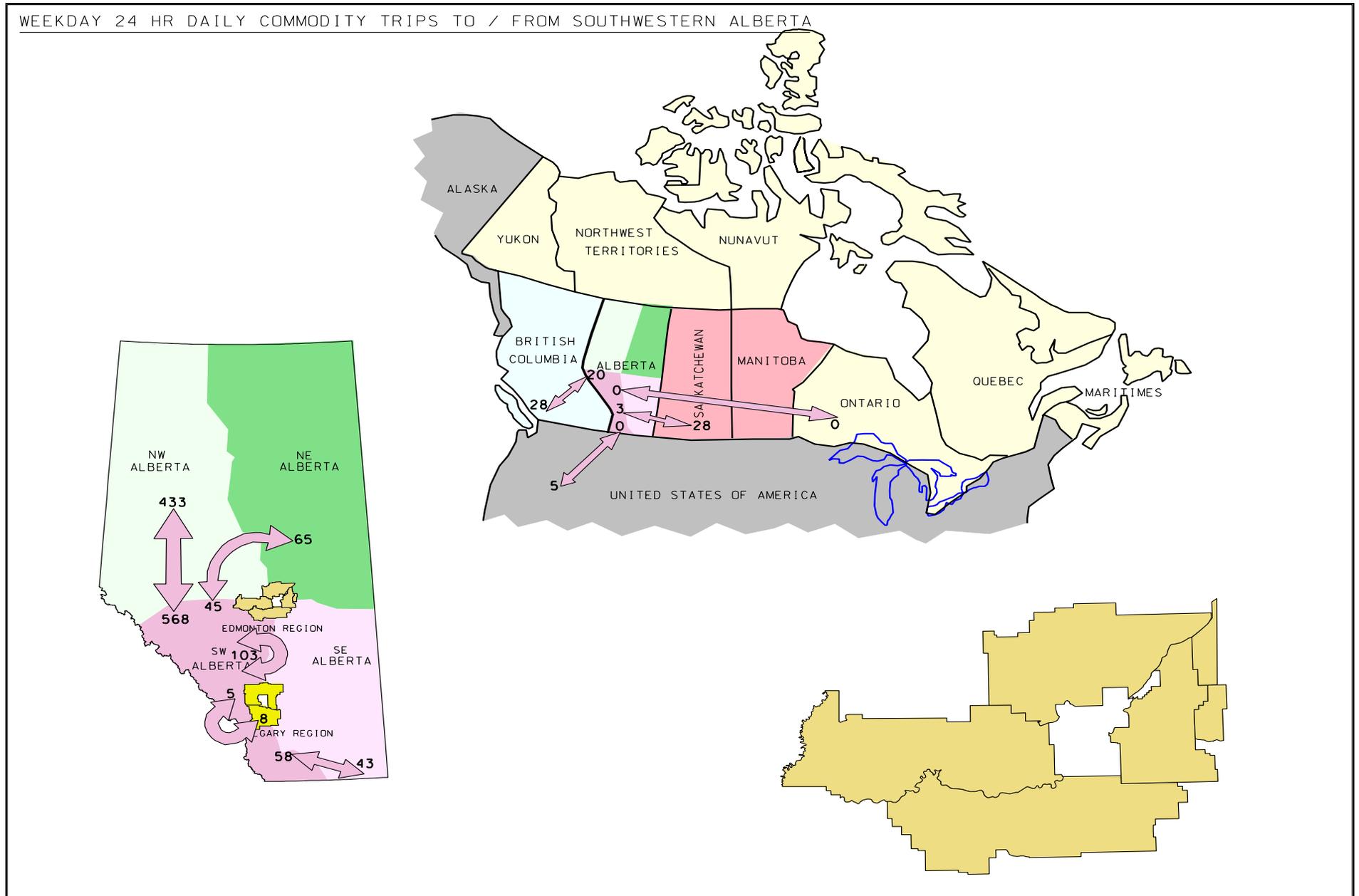
Exhibit B 8 – Commodity Trips to/from British Columbia (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM BRITISH COLUMBIA
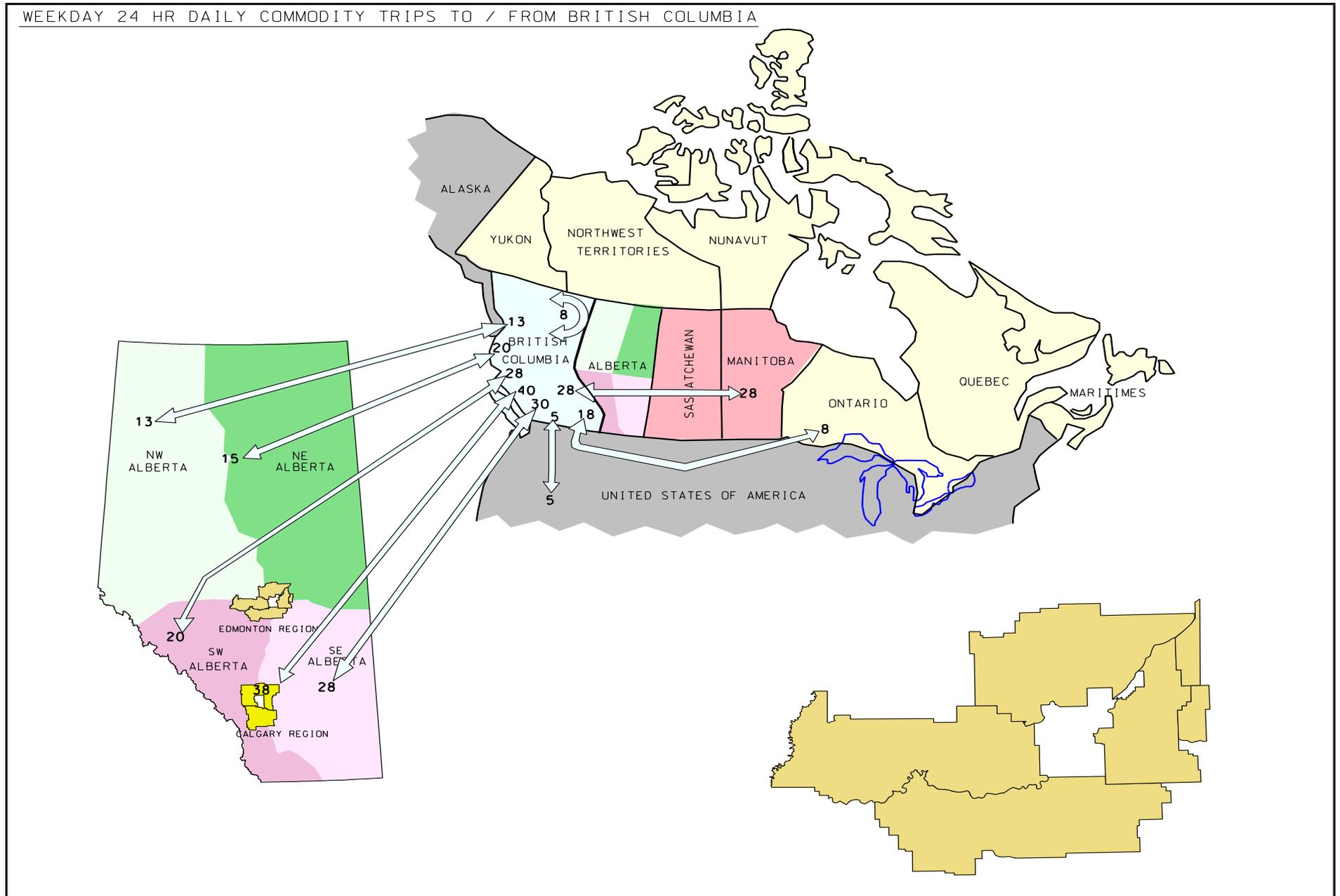
Exhibit B 9 – Commodity Trips to/from Saskatchewan/Manitoba (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM SASKATCHEWAN/MANITOBA
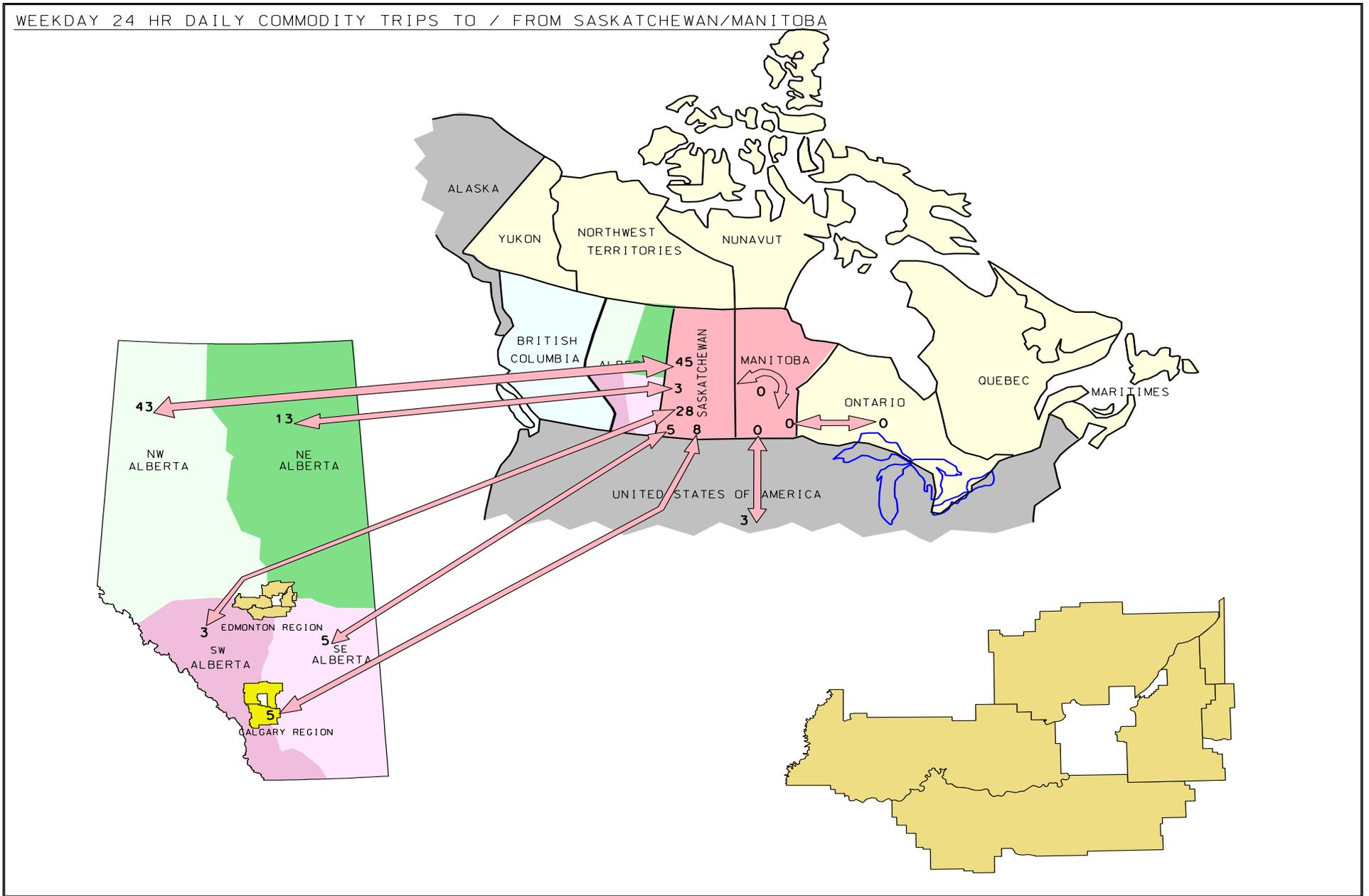
Exhibit B 10 – Commodity Trips to/from Rest of Canada (Weekday 24-hourDaily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM THE REST OF CANADA
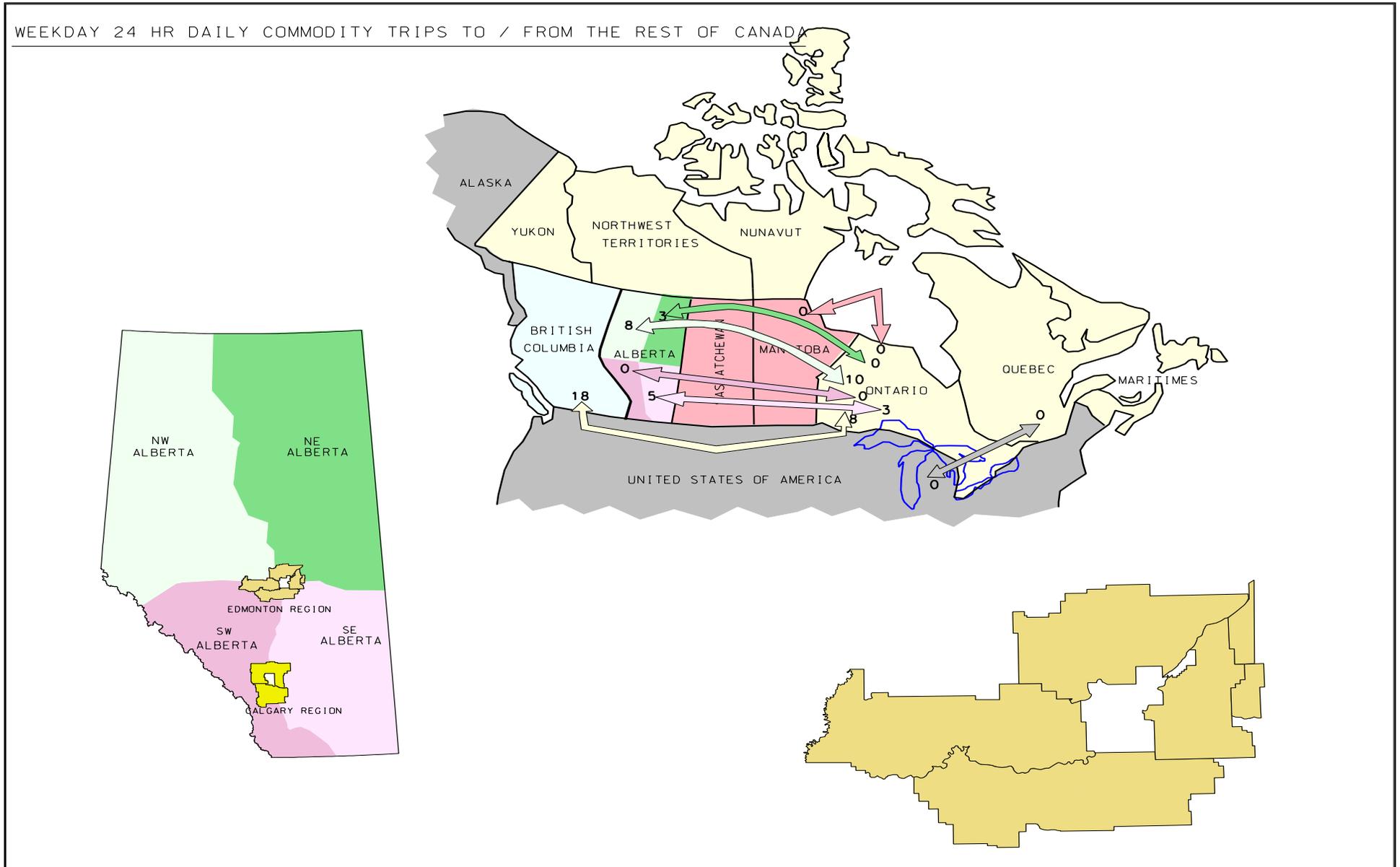
Exhibit B 11 – Commodity Trips to/from United States (Weekday 24 Hour Daily)

WEEKDAY 24 HR DAILY COMMODITY TRIPS TO / FROM U.S.A.
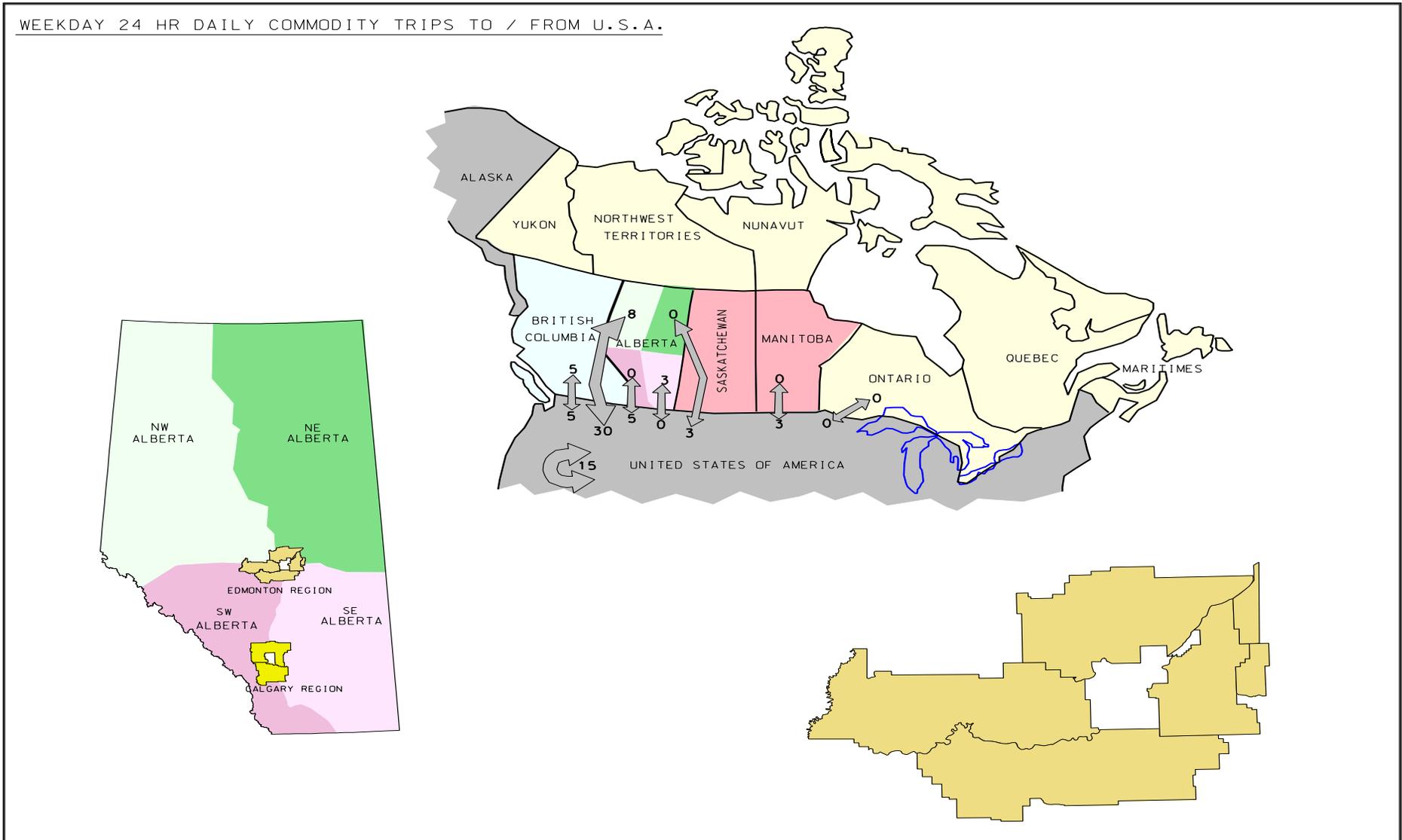
APPENDIX C:
Commodity Trip Origins and Destinations by Localities

Revised: June, 2004

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)

Origin	Destination	Total Unscaled Commodity Trips
, , USA	Fort Saskatchewan, AB, Can	1
, AB, Can	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	1
	Lac La Biche, AB, Can	1
	Sherwood Park, AB, Can	1
	Sundre, AB, Can	1
, BC, Can	Drayton Valley, AB, Can	1
	Entwistle, AB, Can	1
, CA, USA	Edmonton, AB, Can	1
	Vancouver, BC, Can	1
, MB, Can	Edmonton, AB, Can	1
, MO, USA	Edmonton, AB, Can	1
, NB, Can	Burnaby, BC, Can	1
, OK, USA	Edmonton, AB, Can	1
, ON, Can	Prince George, BC, Can	1
, SK, Can	Hondo, AB, Can	1
, WY, USA	Westlock, AB, Can	1
100 Mile House, BC, Can	St. Vincent, AB, Can	2
Abbotsford, BC, Can	Edmonton, AB, Can	3
Ackins, SK, Can	Carrot Creek, AB, Can	1
Acme, AB, Can	Sangudo, AB, Can	1
Ainsworth, AB, Can	Edmonton, AB, Can	2
Airdrie, AB, Can	Athabasca, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	3
	Spruce Grove, AB, Can	1
	Sturgeon County, AB, Can	1
Albany, OR, USA	Edmonton, AB, Can	1
Alberta Beach, AB, Can	Onoway, AB, Can	1
Alcomdale, AB, Can	Clyde, AB, Can	1
	Westlock, AB, Can	1
Alder Flats, AB, Can	Devon, AB, Can	1
	Edmonton, AB, Can	2
	Edson, AB, Can	1
	Glendon, AB, Can	1
	Grande Prairie, AB, Can	1
	High Prairie, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Alder Flats, AB, Can	Leduc County, AB, Can	1
	Warburg, AB, Can	1
Alexander, IA, USA	Fairbanks, AK, USA	1
Alexandria, MN, USA	Anchorage, AK, USA	1
Alexis Indian Reserve, AB, Can	Edmonton, AB, Can	1
	Spruce Grove, AB, Can	1
Alix, AB, Can	Eaglesham, AB, Can	1
	Fort McMurray, AB, Can	1
	Peace River, AB, Can	1
	Sturgeon County, AB, Can	1
Alpaso, TX, USA	Edmonton, AB, Can	1
Alsike, AB, Can	Gunn, AB, Can	1
Anchorage, AK, USA	, AZ, USA	1
	Strathcona County, AB, Can	1
Andrew, AB, Can	Edmonton, AB, Can	3
	Fort Saskatchewan, AB, Can	1
	Lamont County, AB, Can	1
	Legal, AB, Can	2
	Redwater, AB, Can	2
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
	Winterburn, AB, Can	1
Ardrossan, AB, Can	Edmonton, AB, Can	1
	Ryley, AB, Can	1
	Sherwood Park, AB, Can	1
Athabasca County No.12, AB,	Fort Saskatchewan, AB, Can	1
	Sherwood Park, AB, Can	2
Athabasca, AB, Can	100 Mile House, BC, Can	2
	Brooks, AB, Can	2
	Calgary, AB, Can	1
	Camrose, AB, Can	1
	Didsbury, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	23
	Harmattan, AB, Can	1
	Killam, AB, Can	2
	Olds, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Athabasca, AB, Can	Parkland County, AB, Can	2
	Red Deer, AB, Can	1
	St. Albert, AB, Can	1
	Stony Plain, AB, Can	1
	Vegreville, AB, Can	1
	Villeneuve, AB, Can	1
Atmore, AB, Can	Sturgeon County, AB, Can	1
Avola, BC, Can	Edmonton, AB, Can	1
Balzac, AB, Can	Edmonton, AB, Can	1
	Gordondale, AB, Can	1
Banff, AB, Can	, AK, USA	1
Barrhead County, AB, Can	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	2
	Parkland County, AB, Can	1
	Sundre, AB, Can	1
Barrhead, AB, Can	, MO, USA	1
	Calgary, AB, Can	1
	Edmonton, AB, Can	22
	Entwistle, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	Gwynne, AB, Can	1
	Lac Ste Anne County, AB, Can	1
	Lacombe, AB, Can	1
	Lethbridge, AB, Can	1
	MD of Brazeau No. 77, AB, Ca	1
	Nisku, AB, Can	2
	Niton Junction, AB, Can	2
	Onoway, AB, Can	3
	Parkland County, AB, Can	2
	Perryville, MO, USA	1
	Red Deer, AB, Can	2
	Redwater, AB, Can	1
	Rosedale, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	3
	Vancouver, BC, Can	1
	Walford, IA, USA	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Barrhead, AB, Can	Wetaskiwin, AB, Can	1
Barrie, ON, Can	Swan Hills, AB, Can	1
Barriere, BC, Can	Edmonton, AB, Can	1
Baton Rouge, LA, USA	Joffre, AB, Can	1
Beach Corner, AB, Can	Onoway, AB, Can	1
Beamer, AB, Can	Wakaw, SK, Can	1
Bear, BC, Can	Spruce Grove, AB, Can	1
Beaumont, AB, Can	Prince George, BC, Can	1
	Wetaskiwin County, AB, Can	1
Beauval, SK, Can	Sturgeon County, AB, Can	1
Beauvallon, AB, Can	Nisku, AB, Can	1
Beaver County, AB, Can	Strathcona County, AB, Can	1
Beaverlodge, AB, Can	Calgary, AB, Can	1
	Drumheller, AB, Can	1
	Edmonton, AB, Can	2
Beiseker, AB, Can	Dawson Creek, BC, Can	1
	Mayerthorpe, AB, Can	1
Belle Plaine, SK, Can	Grande Prairie, AB, Can	1
Belleford, SK, Can	Nisku, AB, Can	1
Bentley, AB, Can	Bondiss, AB, Can	1
	Edson, AB, Can	1
	Grande Prairie, AB, Can	1
	Hinton, AB, Can	1
Bezanson, AB, Can	Edmonton, AB, Can	1
Big Brag, BC, Can	Stony Plain, AB, Can	1
Big River, SK, Can	Mission, BC, Can	1
Big Valley, AB, Can	Sherwood Park, AB, Can	1
Bittern Lake, AB, Can	Edmonton, AB, Can	3
Blackfalds, AB, Can	Edmonton, AB, Can	1
	Fort Nelson, BC, Can	1
	Nisku, AB, Can	5
	Spruce Grove, AB, Can	1
Blackie, AB, Can	Kootenay Area, BC, Can	1
Blue Ridge, AB, Can	Blackfalds, AB, Can	1
	Calgary, AB, Can	1
	Cranbrook, BC, Can	1
	Davidson, SK, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Blue Ridge, AB, Can	Drayton Valley, AB, Can	3
	Edmonton, AB, Can	9
	Lloydminster, AB, Can	1
	Saskatoon, SK, Can	1
Blue River, BC, Can	Edmonton, AB, Can	2
	Parkland County, AB, Can	2
Blueberry Mountain, AB, Can	Strathmore, AB, Can	1
Bluesky, AB, Can	Red Deer, AB, Can	2
	Warner, AB, Can	1
Bolton, ON, Can	Calgary, AB, Can	1
Bon Accord, AB, Can	Legal, AB, Can	1
	Strome, AB, Can	1
Bonners Ferry, ID, USA	Edmonton, AB, Can	1
Bonnyville, AB, Can	Edmonton, AB, Can	16
	Fort Saskatchewan, AB, Can	1
	Hinton, AB, Can	1
	Leduc County, AB, Can	1
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	St. Albert, AB, Can	2
	Strathcona County, AB, Can	1
Boundary Lake, AB, Can	Calmar, AB, Can	1
Bowden, AB, Can	Eaglesham, AB, Can	1
	Fairview, AB, Can	1
	Sherwood Park, AB, Can	1
	Wildwood, AB, Can	1
Boyle, AB, Can	Didsbury, AB, Can	1
	Edmonton, AB, Can	4
	Lacombe, AB, Can	2
	Legal, AB, Can	1
	Parkland County, AB, Can	1
	Sherwood Park, AB, Can	2
Brandon, MB, Can	Edmonton, AB, Can	2
	Spokane, WA, USA	1
Breton, AB, Can	Edmonton, AB, Can	2
	Edson, AB, Can	1
	Fort Saskatchewan, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Brooks, AB, Can	Edmonton, AB, Can	5
	Grande Prairie, AB, Can	1
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Whitecourt, AB, Can	1
Bruderheim, AB, Can	Boyle, AB, Can	1
	Camrose, AB, Can	1
	Hairy Hill, AB, Can	1
	Lamont, AB, Can	2
	Mundare, AB, Can	1
	Niton Junction, AB, Can	1
	Red Deer, AB, Can	1
	Stettler, AB, Can	2
	Vulcan, AB, Can	1
Buck Creek, AB, Can	Carrot Creek, AB, Can	2
	Edmonton, AB, Can	1
	Edson, AB, Can	4
	Peers, AB, Can	1
	Robb, AB, Can	1
Buck Lake, AB, Can	, AB, Can	1
	Edmonton, AB, Can	1
	Sherwood Park, AB, Can	1
	Sunnybrook, AB, Can	1
	Wabamun, AB, Can	1
Buffalo Narrows, SK, Can	Fort Saskatchewan, AB, Can	1
Burnaby, BC, Can	Edmonton, AB, Can	1
	Saskatoon, SK, Can	1
Burns Lake, BC, Can	Edmonton, AB, Can	1
Busby, AB, Can	Alexander Indian Reserve, AB,	1
	Legal, AB, Can	2
	Riviere Qui Barre, AB, Can	1
Cadomin, AB, Can	Rocky Mountain House, AB, Ca	1
	Sundre, AB, Can	1
Calahoo, AB, Can	Clyde, AB, Can	1
	Rocky Mountain House, AB, Ca	2
Calgary, AB, Can	Ardrossan, AB, Can	1
	Athabasca, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Calgary, AB, Can	Busby, AB, Can	1
	Christina Lake, AB, Can	2
	Clyde, AB, Can	2
	Conklin, AB, Can	1
	Dawson City, YK, Can	1
	Dawson Creek, BC, Can	2
	Devon, AB, Can	1
	Edmonton, AB, Can	131
	Entwistle, AB, Can	1
	Fort McMurray, AB, Can	8
	Fort Saskatchewan, AB, Can	4
	Fort St. John, BC, Can	4
	Fox Creek, AB, Can	1
	Grande Prairie, AB, Can	12
	Grassland, AB, Can	1
	Hinton, AB, Can	1
	Innisfree, AB, Can	1
	Lac La Biche, AB, Can	1
	Leduc County, AB, Can	4
	Leduc, AB, Can	3
	Lloydminster, AB, Can	6
	McBride, BC, Can	1
	Meadow Lake, SK, Can	1
	Nisku, AB, Can	16
	Niton Junction, AB, Can	1
	North Battleford, SK, Can	1
	Parkland County, AB, Can	3
	Peace River, AB, Can	1
	Prince George, BC, Can	5
	Rainbow Lake, AB, Can	1
	Redwater, AB, Can	3
	Saskatoon, SK, Can	1
	Sherwood Park, AB, Can	13
	Slave Lake, AB, Can	2
	Smoky Lake, AB, Can	1
	Spruce Grove, AB, Can	3
	St. Albert, AB, Can	4

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Calgary, AB, Can	Star, AB, Can	1
	Stony Plain, AB, Can	1
	Strathcona County, AB, Can	1
	Sturgeon County, AB, Can	3
	Vegreville, AB, Can	6
	Vermilion, AB, Can	1
	Viking, AB, Can	1
	Waskatenau, AB, Can	1
	Westlock, AB, Can	2
	Whitecourt, AB, Can	7
	Yellowknife, NT, Can	1
Calling Lake, AB, Can	Sherwood Park, AB, Can	1
	Villeneuve, AB, Can	1
Calmar, AB, Can	Bruce, AB, Can	1
	Camrose County, AB, Can	1
	Coronation, AB, Can	1
	Drayton Valley, AB, Can	1
	Lodgepole, AB, Can	1
	Millet, AB, Can	1
	Red Deer, AB, Can	1
Camrose County, AB, Can	Calmar, AB, Can	1
	Edmonton, AB, Can	1
	Leduc County, AB, Can	1
	Nisku, AB, Can	1
	Strathcona County, AB, Can	1
Camrose, AB, Can	Beaumont, AB, Can	2
	Beaverlodge, AB, Can	1
	Boyle, AB, Can	1
	Calahoo, AB, Can	1
	Devon, AB, Can	1
	Drayton Valley, AB, Can	3
	Edmonton, AB, Can	42
	Fort Saskatchewan, AB, Can	3
	Hay Lakes, AB, Can	1
	Leduc County, AB, Can	4
	Leduc, AB, Can	1
	Morinville, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Camrose, AB, Can	New Sarepta, AB, Can	2
	Nisku, AB, Can	10
	Onoway, AB, Can	1
	Parkland County, AB, Can	2
	Redwater, AB, Can	2
	Sherwood Park, AB, Can	4
	Spruce Grove, AB, Can	1
	St. Albert, AB, Can	2
	Strathcona County, AB, Can	2
	Sturgeon County, AB, Can	2
	Valleyview, AB, Can	1
Carbon, AB, Can	Grande Prairie, AB, Can	1
Carbondale, AB, Can	Westlock, AB, Can	1
Cardson Creek, BC, Can	Edmonton, AB, Can	1
Carievale, SK, Can	Barrhead, AB, Can	1
Carnwood, AB, Can	Parkland County, AB, Can	2
	Warburg, AB, Can	1
Caroline, AB, Can	Sherwood Park, AB, Can	1
Carrot Creek, AB, Can	Buck Creek, AB, Can	2
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	2
	Entwistle, AB, Can	1
	Keephills, AB, Can	1
	Morinville, AB, Can	1
	Parkland County, AB, Can	1
Carrot River, SK, Can	Abbotsford, BC, Can	1
Carseland, AB, Can	Cardinal River, BC, Can	1
	Edmonton, AB, Can	1
Carstairs, AB, Can	Nisku, AB, Can	1
	Sturgeon County, AB, Can	1
	Westlock, AB, Can	1
Carvel Corner, AB, Can	Kamloops, BC, Can	1
Carvel, AB, Can	Wildwood, AB, Can	1
Caslan, AB, Can	Bon Accord, AB, Can	1
	Morningside, AB, Can	1
Castor, AB, Can	Sherwood Park, AB, Can	1
	Whitecourt, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Chaska, MN, USA	Edmonton, AB, Can	1
Chauvin, AB, Can	Edmonton, AB, Can	2
Cherhill, AB, Can	Drayton Valley, AB, Can	4
	Edmonton, AB, Can	3
	Morinville, AB, Can	2
	Onoway, AB, Can	2
	Rimbey, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
	Vegreville, AB, Can	1
Chetwynd, BC, Can	Edmonton, AB, Can	1
Chicago, IL, USA	Calgary, AB, Can	1
Chilliwack, BC, Can	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	1
	Sturgeon County, AB, Can	1
	Thorsby, AB, Can	1
Chipman, AB, Can	Edmonton, AB, Can	2
	Niton Junction, AB, Can	2
	Parkland County, AB, Can	2
	Red Deer, AB, Can	1
	Redwater, AB, Can	1
	Zama City, AB, Can	1
Cincinnati, OH, USA	Kelowna, BC, Can	1
Clandonald, AB, Can	Stettler, AB, Can	1
Claresholm, AB, Can	Boyle, AB, Can	1
	Edmonton, AB, Can	4
Clearwater, BC, Can	Devon, AB, Can	1
	Edmonton, AB, Can	1
	Wetaskiwin, AB, Can	1
Clive, AB, Can	Edmonton, AB, Can	1
	Sturgeon County, AB, Can	1
Clyde, AB, Can	Bon Accord, AB, Can	1
	Clyde, AB, Can	1
	Edmonton, AB, Can	7
	Legal, AB, Can	1
	Lloydminster, AB, Can	1
	Morinville, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Clyde, AB, Can	Regina, SK, Can	1
	Sturgeon County, AB, Can	2
	Vermilion, AB, Can	1
Coaldale, AB, Can	Two Hills, AB, Can	1
Cochrane, AB, Can	Nisku, AB, Can	1
Cold Lake, AB, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	14
	Fort Saskatchewan, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	4
Cold Valley City, AB, Can	Calgary, AB, Can	1
Columbus, OH, USA	Edmonton, AB, Can	1
Concord, ON, Can	Edmonton, AB, Can	1
Conklin, AB, Can	Parkland County, AB, Can	1
Cooking Lake, AB, Can	Pigeon Lake, AB, Can	1
	Ryley, AB, Can	1
Coronation, AB, Can	Edmonton, AB, Can	2
	MD of Brazeau No. 77, AB, Ca	1
Coutts, AB, Can	Edmonton, AB, Can	1
Cremona, AB, Can	Edmonton, AB, Can	1
Creston, BC, Can	Edmonton, AB, Can	1
Crooked Creek, AB, Can	Nisku, AB, Can	1
Crossfield, AB, Can	Carrot Creek, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	4
	Grande Prairie, AB, Can	2
	Prince George, BC, Can	1
	Spruce Grove, AB, Can	1
Crow Lake, AB, Can	Edmonton, AB, Can	1
Cynthia, AB, Can	Edmonton, AB, Can	2
	Leduc, AB, Can	1
	Nisku, AB, Can	1
	Parkland County, AB, Can	1
	Sturgeon County, AB, Can	2
	Westlock, AB, Can	1
Czar, AB, Can	Edmonton, AB, Can	1
	Sherwood Park, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Dallas, TX, USA	Strathmore, AB, Can	1
Dalmeny, SK, Can	Edmonton, AB, Can	1
Dapp, AB, Can	Lamont, AB, Can	1
Darwell, AB, Can	Edson, AB, Can	1
	Niton Junction, AB, Can	1
	Tangent, AB, Can	1
Dawson Creek, BC, Can	Edmonton, AB, Can	3
	Strathmore, AB, Can	1
Daysland, AB, Can	Edmonton, AB, Can	2
	Sturgeon County, AB, Can	3
Debeau, AB, Can	Medicine Hat, AB, Can	1
Debolt, AB, Can	Blackfalds, AB, Can	1
	Caroline, AB, Can	1
Delburne, AB, Can	Edmonton, AB, Can	1
Delmas, SK, Can	Sherwood Park, AB, Can	1
Delta, BC, Can	Edmonton, AB, Can	1
	Montreal, QC, Can	1
	Sherwood Park, AB, Can	1
	Waskatenau, AB, Can	1
Demmitt, AB, Can	Edmonton, AB, Can	1
	Sundre, AB, Can	1
Derwent, AB, Can	Sherwood Park, AB, Can	1
Devon, AB, Can	Calgary, AB, Can	1
	Chauvin, AB, Can	1
	Falun, AB, Can	1
	Lac Ste Anne County, AB, Can	1
	Mulhurst Bay, AB, Can	1
	Ponoka, AB, Can	2
	St. Paul, AB, Can	1
	Wetaskiwin County, AB, Can	1
Didsbury, AB, Can	Athabasca, AB, Can	3
	Grassland, AB, Can	3
	Pickardville, AB, Can	1
	Spirit River, AB, Can	1
	Westlock, AB, Can	1
Donalda, AB, Can	Edmonton, AB, Can	1
Donnelly, AB, Can	Camrose, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Donnelly, AB, Can	Edmonton, AB, Can	2
Drayton Valley, AB, Can	, AB, Can	1
	Athabasca, AB, Can	2
	Blue Ridge, AB, Can	1
	Boon Lake, MN, USA	1
	Burnaby, BC, Can	1
	Calgary, AB, Can	1
	Camrose, AB, Can	2
	Carrot Creek, AB, Can	1
	Carvel, AB, Can	1
	Cherhill, AB, Can	3
	Cynthia, AB, Can	1
	Delta, BC, Can	1
	Devon, AB, Can	3
	Edmonton, AB, Can	26
	Edson, AB, Can	41
	Entwistle, AB, Can	27
	Evansburg, AB, Can	2
	Fickle Lake, AB, Can	1
	Hinton, AB, Can	14
	Hughenden, AB, Can	1
	Lac La Biche, AB, Can	1
	Lac Ste Anne County, AB, Can	5
	Lake Isle, AB, Can	1
	Leduc County, AB, Can	4
	Leduc, AB, Can	1
	Mayerthorpe, AB, Can	1
	MD of Brazeau No. 77, AB, Ca	1
	Millet, AB, Can	1
	Moon Lake, AB, Can	1
	Mulhurst Bay, AB, Can	1
	Nisku, AB, Can	9
	Niton Junction, AB, Can	2
	Onoway, AB, Can	2
	Parkland County, AB, Can	24
	Peers, AB, Can	3
	Robb, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Drayton Valley, AB, Can	Sangudo, AB, Can	1
	Sargees, BC, Can	1
	Seba Beach, AB, Can	3
	Sherwood Park, AB, Can	3
	Slave Lake, AB, Can	1
	Smoky Lake, AB, Can	1
	St. Albert, AB, Can	2
	Stony Plain, AB, Can	1
	Sunnybrook, AB, Can	5
	Surrey, BC, Can	1
	Tomahawk, AB, Can	2
	Vancouver, BC, Can	4
	Wabamun, AB, Can	1
	Warburg, AB, Can	3
	Wetaskiwin County, AB, Can	1
	Wetaskiwin, AB, Can	1
	Whitecourt, AB, Can	1
	Wildwood, AB, Can	3
	Winnipeg, MB, Can	1
	Yellowhead County North, AB,	1
Drumheller, AB, Can	Edmonton, AB, Can	1
	Edson, AB, Can	1
	Sherwood Park, AB, Can	3
Duchess, AB, Can	Edmonton, AB, Can	1
Duggan, AB, Can	Strathcona County, AB, Can	3
Duncan, BC, Can	Edmonton, AB, Can	1
Eaglesham, AB, Can	Olds, AB, Can	1
East Peace No.131, AB, Can	Nisku, AB, Can	1
Eckville, AB, Can	Dewberry, AB, Can	1
	Edmonton, AB, Can	2
	Sherwood Park, AB, Can	1
	Wabamun, AB, Can	1
Eden Lake, AB, Can	Calgary, AB, Can	1
	Fox Creek, AB, Can	1
Edmonton, AB, Can	, AZ, USA	1
	, CA, USA	4
	, CO, USA	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	, IA, USA	2
	, IL, USA	1
	, MB, Can	1
	, MN, USA	1
	, MO, USA	1
	, NE, USA	1
	, ON, Can	2
	, OR, USA	1
	, SK, Can	2
	, WA, USA	1
	Abbotsford, BC, Can	1
	Airdrie, AB, Can	2
	Alberta Beach, AB, Can	4
	Alder Flats, AB, Can	1
	Alix, AB, Can	2
	Andrew, AB, Can	6
	Armstrong, BC, Can	1
	Athabasca, AB, Can	17
	Balzac, AB, Can	2
	Barrhead, AB, Can	20
	Bashaw, AB, Can	4
	Belford, BC, Can	1
	Belle Plaine, SK, Can	4
	Belmont, BC, Can	1
	Bentley, AB, Can	2
	Bezanson, AB, Can	1
	Billings, MT, USA	1
	Bittern Lake, AB, Can	6
	Blackfalds, AB, Can	1
	Blackie, AB, Can	1
	Blue Ridge, AB, Can	8
	Bluffton, AB, Can	1
	Bodo, AB, Can	1
	Bonnyville, AB, Can	13
	Booseman, SK, Can	1
	Bow Valley, AB, Can	1
	Boyle, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Bragg Creek, AB, Can	1
	Brandon, MB, Can	1
	Breton, AB, Can	3
	Brooks, AB, Can	6
	Brownsville, TX, USA	3
	Bruce, AB, Can	2
	Buck Creek, AB, Can	1
	Buck Lake, AB, Can	3
	Buffalo Lake, AB, Can	1
	Burlington, ON, Can	1
	Burnaby, BC, Can	2
	Calgary, AB, Can	192
	Calling Lake, AB, Can	3
	Cambridge, ON, Can	1
	Camp Creek, AB, Can	1
	Camrose County, AB, Can	2
	Camrose, AB, Can	50
	Canal Flats, BC, Can	1
	Canmore, AB, Can	1
	Carnesss Mine, BC, Can	1
	Caroline, AB, Can	1
	Carrot Creek, AB, Can	1
	Carseland, AB, Can	3
	Castor, AB, Can	1
	Chard, AB, Can	1
	Cherhill, AB, Can	2
	Chestermere, AB, Can	1
	Chetwynd, BC, Can	1
	Chicago, IL, USA	4
	Chinchoga, BC, Can	1
	Chipman, AB, Can	1
	Clandonald, AB, Can	1
	Claresholm, AB, Can	2
	Clive, AB, Can	1
	Clyde, AB, Can	10
	Cochrane, AB, Can	2
	Cold Lake, AB, Can	11

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Conklin, AB, Can	1
	Cooking Lake, AB, Can	1
	Cranbrook, BC, Can	2
	Crossfield, AB, Can	5
	Crow Creek, AB, Can	1
	Cynthia, AB, Can	2
	Dawson Creek, BC, Can	3
	Daysland, AB, Can	1
	Delta, BC, Can	1
	Dewberry, AB, Can	1
	Drayton Valley, AB, Can	30
	Drumheller, AB, Can	1
	Edson, AB, Can	32
	Elk Point, AB, Can	3
	Estevan, SK, Can	1
	Exshaw, AB, Can	1
	Falun, AB, Can	2
	Fawcett, AB, Can	3
	Ferintosh, AB, Can	3
	Flatbush, AB, Can	1
	Forestburg, AB, Can	2
	Fort Assiniboine, AB, Can	1
	Fort McMurray, AB, Can	23
	Fort Nelson, BC, Can	5
	Fort St. John, BC, Can	2
	Fox Creek, AB, Can	6
	Fremont, CA, USA	1
	Gadsby, AB, Can	1
	Glendon, AB, Can	2
	Grande Cache, AB, Can	3
	Grande Prairie, AB, Can	34
	Grassland, AB, Can	3
	Great Falls, MT, USA	1
	Grimshaw, AB, Can	1
	Gunn, AB, Can	6
	Hague, SK, Can	1
	Halkirk, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Halsey, OR, USA	1
	Hamlet, NC, USA	1
	Hanna, AB, Can	4
	Hardisty, AB, Can	3
	Hay Lakes, AB, Can	1
	Hay River, NT, Can	2
	Heatherdown Pit, AB, Can	2
	High Level, AB, Can	10
	High Prairie, AB, Can	5
	High River, AB, Can	7
	Hines Creek, AB, Can	1
	Hinton, AB, Can	15
	Hoadley, AB, Can	2
	Hobbema, AB, Can	3
	Holden, AB, Can	1
	Houston, TX, USA	1
	Independence, OR, USA	1
	Innisfail, AB, Can	4
	Inuvik, NT, Can	1
	Irma, AB, Can	3
	Iron River, AB, Can	1
	Island Lake, AB, Can	1
	Jasper, AB, Can	4
	Joffre, AB, Can	4
	Kamloops, BC, Can	11
	Kansas City, KS, USA	1
	Kelowna, BC, Can	1
	Kennewick, WA, USA	1
	Killam, AB, Can	2
	Kindersley, SK, Can	1
	Kinsella, AB, Can	3
	Kinuso, AB, Can	1
	Kitscoty, AB, Can	1
	La Corey, AB, Can	2
	La Crete, AB, Can	4
	Lac La Biche, AB, Can	6
	Lac La Nonne, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Lac Ste Anne County, AB, Can	2
	Lac Ste. Anne, AB, Can	1
	Lacombe County, AB, Can	1
	Lacombe, AB, Can	14
	Lamont County, AB, Can	2
	Lamont, AB, Can	18
	Langham, SK, Can	1
	Langley, BC, Can	4
	Lavoy, AB, Can	2
	Leduc County, AB, Can	1
	Lethbridge, AB, Can	8
	Linden, AB, Can	1
	Lloydminster, AB, Can	23
	Lodgepole, AB, Can	1
	Lougheed, AB, Can	1
	Mackenzie, BC, Can	1
	Magrath, AB, Can	2
	Majeau Lake, AB, Can	1
	Mallaig, AB, Can	2
	Manning, AB, Can	1
	Mannville, AB, Can	1
	Manola, AB, Can	1
	Maple Creek, SK, Can	1
	Mayerthorpe, AB, Can	4
	MD of Brazeau No. 77, AB, Ca	2
	Meadow Lake, SK, Can	1
	Medicine Hat, AB, Can	2
	Middle Lake, SK, Can	1
	Millet, AB, Can	10
	Minburn, AB, Can	2
	Minneapolis, MN, USA	1
	Mitsue, AB, Can	2
	Monticello, GA, USA	1
	Mulhurst Bay, AB, Can	1
	Mundare, AB, Can	1
	Myrnam, AB, Can	1
	Nampa, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Nanaimo, BC, Can	2
	Neerlandia, AB, Can	1
	New Norway, AB, Can	2
	New Westminster, BC, Can	1
	Newbrook, AB, Can	1
	Nisku, AB, Can	1
	Niton Junction, AB, Can	3
	Nogales, AZ, USA	1
	North Battleford, SK, Can	2
	Oklahoma City, OK, USA	1
	Olds, AB, Can	3
	Onoway, AB, Can	11
	Oregon City, OR, USA	1
	Oshawa, ON, Can	1
	Oyen, AB, Can	1
	Paintearth County, AB, Can	2
	Parkland County, AB, Can	1
	Peace River, AB, Can	6
	Peers, AB, Can	3
	Penhold, AB, Can	1
	Pigeon Lake, AB, Can	3
	Ponoka, AB, Can	23
	Port Coquitlam, BC, Can	1
	Port Hope, ON, Can	1
	Prince George, BC, Can	8
	Provost, AB, Can	3
	Quesnel, BC, Can	1
	Rabbit Lake, SK, Can	1
	Red Deer, AB, Can	61
	Red Earth Creek, AB, Can	2
	Regina, SK, Can	10
	Rich Valley, AB, Can	2
	Richardton, ND, USA	1
	Richmond, BC, Can	1
	Richmond, SK, Can	1
	Rimbey, AB, Can	1
	Robb, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Rocky Mountain House, AB, Ca	7
	Rocky Rapids, AB, Can	1
	Rocky, OK, USA	1
	Rycroft, AB, Can	1
	Ryley, AB, Can	1
	Santa Clara, CA, USA	1
	Saskatoon, SK, Can	23
	Savona, BC, Can	1
	Scarborough, ON, Can	1
	Sedgewick, AB, Can	5
	Selkirk, MB, Can	1
	Shaunavon, SK, Can	1
	Shelby, MT, USA	1
	Slave Lake, AB, Can	24
	Smithers, BC, Can	1
	Smoky Lake, AB, Can	3
	Sparks, NV, USA	1
	St. Paul, AB, Can	6
	St. Vincent, AB, Can	2
	St. Walburg, SK, Can	1
	Star, AB, Can	1
	Stauffer, AB, Can	1
	Steinbach, MB, Can	1
	Stettler, AB, Can	5
	Strathmore, AB, Can	1
	Strome, AB, Can	1
	Sturgeon County, AB, Can	2
	Sundre, AB, Can	6
	Surrey, BC, Can	5
	Swan Hills, AB, Can	7
	Thorhild, AB, Can	4
	Three Hills, AB, Can	1
	Tofield, AB, Can	12
	Trochu, AB, Can	1
	Two Hills, AB, Can	7
	Unity, SK, Can	3
	Valemount, BC, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edmonton, AB, Can	Valleyview, AB, Can	2
	Vancouver, BC, Can	16
	Vanderhoof, BC, Can	2
	Vauxhall, AB, Can	1
	Vegreville, AB, Can	16
	Vermilion, AB, Can	6
	Veteran, AB, Can	1
	Victoria, BC, Can	1
	Viking, AB, Can	5
	Vilna, AB, Can	6
	Vimy, AB, Can	1
	Vulcan, AB, Can	1
	Wabasca-Desmarais, AB, Can	5
	Wainwright, AB, Can	9
	Wandering River, AB, Can	1
	Warburg, AB, Can	1
	Warspite, AB, Can	1
	Waskatenau, AB, Can	4
	West Pembina, AB, Can	2
	Westlock County, AB, Can	7
	Westlock, AB, Can	26
	Wetaskiwin County, AB, Can	7
	Wetaskiwin, AB, Can	55
	Wheatland, AB, Can	1
	Whitecourt, AB, Can	22
	Whitehorse, YK, Can	1
	Wildwood, AB, Can	8
	Williston Lake, BC, Can	1
	Winfield, AB, Can	1
	Winnipeg, MB, Can	19
	Yellowhead County North, AB,	1
	Yellowknife, NT, Can	4
	Zama City, AB, Can	1
Edson, AB, Can	Alder Flats, AB, Can	1
	Bentley, AB, Can	1
	Buck Creek, AB, Can	3
	Calgary, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Edson, AB, Can	Calmar, AB, Can	2
	Cochrane, AB, Can	1
	Cold Lake, AB, Can	1
	Drayton Valley, AB, Can	37
	Edmonton, AB, Can	32
	Enoch Reserve, AB, Can	1
	Entwistle, AB, Can	1
	Fort McMurray, AB, Can	1
	Lacombe, AB, Can	2
	Leduc County, AB, Can	1
	Leduc, AB, Can	3
	Leslieville, AB, Can	1
	Lloydminster, AB, Can	1
	Miami, FL, USA	1
	Morinville, AB, Can	2
	Nisku, AB, Can	9
	Onoway, AB, Can	1
	Parkland County, AB, Can	12
	Pickardville, AB, Can	1
	Ponoka, AB, Can	1
	Quebec City, QC, Can	1
	Red Deer, AB, Can	11
	Rimbey, AB, Can	1
	Rocky Mountain House, AB, Ca	11
	Sangudo, AB, Can	1
	Seba Beach, AB, Can	1
	Sherwood Park, AB, Can	6
	Spruce Grove, AB, Can	3
	Strachan, AB, Can	1
	Sundre, AB, Can	9
	Unity, SK, Can	1
Elk Island National Park, AB, C	Edmonton, AB, Can	2
	Sherwood Park, AB, Can	1
Elk Point, AB, Can	Athabasca, AB, Can	1
	Calgary, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	3

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Elk Point, AB, Can	Fort Saskatchewan, AB, Can	1
	Nisku, AB, Can	2
	Sherwood Park, AB, Can	1
	Vancouver, BC, Can	1
Elk River, AB, Can	Edmonton, AB, Can	1
Enilda, AB, Can	Turner Valley, AB, Can	1
Enoch Reserve, AB, Can	Alberta Beach, AB, Can	1
Entwistle, AB, Can	, AB, Can	1
	Barrhead, AB, Can	1
	Carrot Creek, AB, Can	3
	Drayton Valley, AB, Can	20
	Edson, AB, Can	3
	Lacombe, AB, Can	1
	Leslieville, AB, Can	1
	Perses, BC, Can	1
	Rimbey, AB, Can	1
	Rocky Rapids, AB, Can	1
	Sangudo, AB, Can	1
	Wildwood, AB, Can	3
	Yellowhead County North, AB,	1
Estevan, SK, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	1
Evansburg, AB, Can	Alsike, AB, Can	1
	Darwell, AB, Can	2
	Drayton Valley, AB, Can	10
	Edmonton, AB, Can	5
	Entwistle, AB, Can	10
	Fort Saskatchewan, AB, Can	1
	Gunn, AB, Can	8
	Ma-Me-O Beach, AB, Can	1
	Magnolia, AB, Can	5
	Namao, AB, Can	1
	Parkland County, AB, Can	5
	Tomahawk, AB, Can	1
Exshaw, AB, Can	Cold Lake, AB, Can	2
	Edmonton, AB, Can	3
	Sherwood Park, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Fairbanks, AK, USA	, NE, USA	1
	Kimball, NE, USA	1
Fairview, AB, Can	Calgary, AB, Can	1
	Olds, AB, Can	1
Falher, AB, Can	Parkland County, AB, Can	1
Falun, AB, Can	Edmonton, AB, Can	2
	Leduc County, AB, Can	1
	Parkland County, AB, Can	1
Fawcett, AB, Can	Edmonton, AB, Can	1
Ferintosh, AB, Can	Edmonton, AB, Can	3
	Edson, AB, Can	1
	Leduc County, AB, Can	2
	Strathcona County, AB, Can	40
Fickle Lake, AB, Can	Buck Creek, AB, Can	1
Flatbush, AB, Can	Fort Saskatchewan, AB, Can	1
Forestburg, AB, Can	Edmonton, AB, Can	5
	Sturgeon County, AB, Can	1
Fort Assiniboine, AB, Can	Abbotsford, BC, Can	1
	Edmonton, AB, Can	3
	Parkland County, AB, Can	3
	Red Deer, AB, Can	1
Fort Kent, AB, Can	Edmonton, AB, Can	1
Fort MacKay, AB, Can	Nisku, AB, Can	1
Fort Macleod, AB, Can	Edmonton, AB, Can	2
	Lloydminster, AB, Can	1
	Sturgeon County, AB, Can	1
Fort McMurray, AB, Can	Aldersyde, AB, Can	1
	Calgary, AB, Can	2
	Camrose, AB, Can	1
	Edmonton, AB, Can	47
	Fort Saskatchewan, AB, Can	1
	Innisfail, AB, Can	1
	Prince George, BC, Can	1
	Sherwood Park, AB, Can	1
	Strathmore, AB, Can	1
	Sturgeon County, AB, Can	7
	Vancouver, BC, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Fort Nelson, BC, Can	Edmonton, AB, Can	2
	Nisku, AB, Can	1
Fort Saskatchewan, AB, Can	Ashmont, AB, Can	1
	Athabasca, AB, Can	1
	Baldur, MB, Can	1
	Blue Ridge, AB, Can	1
	Boissevain, MB, Can	1
	Boyle, AB, Can	1
	Brandon, MB, Can	1
	Calgary, AB, Can	3
	Chipman, AB, Can	1
	Cold Lake, AB, Can	1
	Czar, AB, Can	1
	Edberg, AB, Can	1
	Elk Point, AB, Can	1
	Forestburg, AB, Can	1
	Fort McMurray, AB, Can	1
	Grande Prairie, AB, Can	2
	Joffre, AB, Can	1
	Killam, AB, Can	1
	Kitimat, BC, Can	1
	Lamont County, AB, Can	1
	Lamont, AB, Can	1
	Lavoy, AB, Can	1
	Leoville, SK, Can	2
	Lloydminster, AB, Can	1
	Maidstone, SK, Can	1
	MD of Brazeau No. 77, AB, Ca	1
	Meadow Lake, SK, Can	1
	Neerlandia, AB, Can	1
	Neilburg, SK, Can	1
	Paradise Hill, SK, Can	1
	Peace River, AB, Can	1
	Ponoka, AB, Can	1
	Provost, AB, Can	1
	Red Deer, AB, Can	2
	Regina, SK, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Fort Saskatchewan, AB, Can	Richmond, BC, Can	1
	Ryley, AB, Can	1
	Saskatoon, SK, Can	2
	Sedgewick, AB, Can	1
	Slave Lake, AB, Can	2
	Smoky Lake County, AB, Can	1
	Smoky Lake, AB, Can	2
	Star, AB, Can	1
	Strathcona County, AB, Can	5
	Vancouver, BC, Can	1
	Vermilion, AB, Can	1
	Viking, AB, Can	2
	Vulcan, AB, Can	1
	Wainwright, AB, Can	1
	Westlock, AB, Can	1
	Yellowhead County South, AB,	1
Fort St. John, BC, Can	Brandon, MB, Can	1
	Calgary, AB, Can	1
	Carseland, AB, Can	1
	Edmonton, AB, Can	4
	Leduc, AB, Can	1
	Priddis, AB, Can	1
	Red Deer, AB, Can	1
	Sherwood Park, AB, Can	1
	Spruce Grove, AB, Can	1
Fort Vermillion, AB, Can	Legal, AB, Can	2
Fox Creek, AB, Can	Drayton Valley, AB, Can	3
	Edmonton, AB, Can	5
	Fort Saskatchewan, AB, Can	1
	Lacombe, AB, Can	1
	Lloydminster, AB, Can	1
	Nisku, AB, Can	2
	Parkland County, AB, Can	1
	Red Deer, AB, Can	4
	Sherwood Park, AB, Can	3
	Stettler, AB, Can	1
Galveston, TX, USA	Edmonton, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Gaudin, AB, Can	Lamont County, AB, Can	1
Genesee, AB, Can	Drayton Valley, AB, Can	2
	Red Deer, AB, Can	1
Gibbons, AB, Can	Berwyn, AB, Can	1
	Boyle, AB, Can	2
	Hinton, AB, Can	1
	North Vancouver, BC, Can	1
	St. Paul, AB, Can	1
Glaslyn, SK, Can	Edmonton, AB, Can	1
Glendon, AB, Can	Sherwood Park, AB, Can	1
Glenevis, AB, Can	CFB Cardiff, AB, Can	1
	Edmonton, AB, Can	1
	Hardisty, AB, Can	1
	Lodgepole, AB, Can	1
	Spruce Grove, AB, Can	1
Golden Spike, AB, Can	MD of Brazeau No. 77, AB, Ca	1
Golden, BC, Can	Edmonton, AB, Can	1
Grande Cache, AB, Can	Didsbury, AB, Can	1
	Drayton Valley, AB, Can	1
	Nisku, AB, Can	2
	Onoway, AB, Can	1
	Red Deer, AB, Can	2
Grande Prairie, AB, Can	Calgary, AB, Can	10
	Camrose, AB, Can	1
	Crossfield, AB, Can	1
	Drayton Valley, AB, Can	2
	Edmonton, AB, Can	41
	Fort Saskatchewan, AB, Can	2
	Ghruebers, SK, Can	1
	High River, AB, Can	1
	Lethbridge, AB, Can	1
	Lloydminster, AB, Can	2
	Nisku, AB, Can	6
	Onoway, AB, Can	1
	Red Deer, AB, Can	3
	Redwater, AB, Can	1
	Rocky Mountain House, AB, Ca	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Grande Prairie, AB, Can	Sherwood Park, AB, Can	14
	Spruce Grove, AB, Can	3
	Sundre, AB, Can	1
	Wetaskiwin, AB, Can	3
	Weyburn, SK, Can	1
	Winnipeg, MB, Can	1
Grassland, AB, Can	Edmonton, AB, Can	4
	Sherwood Park, AB, Can	2
	Sturgeon County, AB, Can	2
Great Falls, MT, USA	Anchorage, AK, USA	1
	Edmonton, AB, Can	1
	Sherwood Park, AB, Can	1
Green Court, AB, Can	Spruce Grove, AB, Can	1
Grimshaw, AB, Can	Edmonton, AB, Can	1
	Red Deer, AB, Can	1
Gull Lake, AB, Can	Entwistle, AB, Can	1
	Nisku, AB, Can	1
Gunn, AB, Can	Battle Lake, AB, Can	1
	Buck Lake, AB, Can	1
	Edmonton, AB, Can	2
	Entwistle, AB, Can	1
	Namao, AB, Can	2
	Parkland County, AB, Can	1
	Riviere Qui Barre, AB, Can	1
	Spruce Grove, AB, Can	2
	Thorhild, AB, Can	1
	Wabamun, AB, Can	1
Hairy Hill, AB, Can	Edmonton, AB, Can	2
	High River, AB, Can	1
	Sherwood Park, AB, Can	1
Hanna, AB, Can	Edmonton, AB, Can	2
	Sherwood Park, AB, Can	1
	Whitecourt, AB, Can	1
Hardisty, AB, Can	Edmonton, AB, Can	3
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Winterburn, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Hay Lakes, AB, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	6
	Leduc, AB, Can	2
	Mundare, AB, Can	1
	New Sarepta, AB, Can	1
Hay River, NT, Can	Tofield, AB, Can	1
Hays, AB, Can	Hinton, AB, Can	1
Heisler, AB, Can	Edmonton, AB, Can	1
	New Sarepta, AB, Can	1
	Parkland County, AB, Can	1
	Westlock, AB, Can	1
High Level, AB, Can	Drayton Valley, AB, Can	4
	Edmonton, AB, Can	4
	Nisku, AB, Can	2
High Prairie, AB, Can	Bentley, AB, Can	1
	Calgary, AB, Can	1
	Camrose, AB, Can	1
	Caroline, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	6
	Leduc County, AB, Can	1
	Mayerthorpe, AB, Can	1
	Mesquite, TX, USA	1
	Nisku, AB, Can	7
	Sherwood Park, AB, Can	2
	Sturgeon County, AB, Can	1
	Winnipeg, MB, Can	1
High River, AB, Can	Clyde, AB, Can	2
	Edmonton, AB, Can	1
	High Prairie, AB, Can	1
	Keephills, AB, Can	1
	Onoway, AB, Can	1
	Sherwood Park, AB, Can	1
	Vegreville, AB, Can	2
Highridge, AB, Can	Edmonton, AB, Can	1
Highvale, AB, Can	Hobbema, AB, Can	1
	Ponoka, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled) (Continued)

Origin	Destination	Total Unscaled Commodity Trips
Hines Creek, AB, Can	Crossfield, AB, Can	1
	Sherwood Park, AB, Can	2
Hinton, AB, Can	Buck Creek, AB, Can	1
	Calgary, AB, Can	2
	Camrose, AB, Can	1
	Canmore, AB, Can	1
	Drayton Valley, AB, Can	12
	Edmonton, AB, Can	12
	Fort Saskatchewan, AB, Can	1
	Nisku, AB, Can	2
	Onoway, AB, Can	1
	Parkland County, AB, Can	2
	Red Deer, AB, Can	3
	Rocky Mountain House, AB, Ca	17
	Saskatoon, SK, Can	1
	Sherwood Park, AB, Can	5
	Strachan, AB, Can	2
	Sturgeon County, AB, Can	1
	Sundre, AB, Can	17
	Sylvan Lake, AB, Can	1
	Whitecourt, AB, Can	1
	Winnipeg, MB, Can	1
Hoadley, AB, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	1
	Peace River, AB, Can	1
Hobbema, AB, Can	Edmonton, AB, Can	3
	Highvale, AB, Can	1
	New Sarepta, AB, Can	1
	Nisku, AB, Can	1
Holden, AB, Can	Carnwood, AB, Can	1
	Sherwood Park, AB, Can	1
Hondo, AB, Can	Fort Saskatchewan, AB, Can	1
Houston, BC, Can	Sherwood Park, AB, Can	1
Houston, TX, USA	Edmonton, AB, Can	3
	Mayerthorpe, AB, Can	1
Hughenden, AB, Can	Drayton Valley, AB, Can	1
	Slave Lake, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled) (Continued)

Origin	Destination	Total Unscaled Commodity Trips
Innisfail, AB, Can	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	6
	Edson, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	La Crete, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
Innisfree, AB, Can	Edmonton, AB, Can	2
Irma, AB, Can	Leduc, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	1
Iron River, AB, Can	Edmonton, AB, Can	1
Jarvie, AB, Can	Calgary, AB, Can	1
Jasper, AB, Can	Edmonton, AB, Can	3
	Onoway, AB, Can	1
Jenks, OK, USA	Onoway, AB, Can	1
Jidaro Valley, AB, Can	Tofield, AB, Can	1
Joffre, AB, Can	Edmonton, AB, Can	2
	Leduc, AB, Can	1
John D'or Prairie, AB, Can	Sturgeon County, AB, Can	1
Josephburg, AB, Can	Edmonton, AB, Can	1
	Lamont, AB, Can	1
	Willingdon, AB, Can	1
Kamloops, BC, Can	Beaverlodge, AB, Can	1
	Edmonton, AB, Can	4
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	1
	Wetaskiwin, AB, Can	1
Keeler, SK, Can	Edmonton, AB, Can	1
Keephills, AB, Can	Lodgepole, AB, Can	1
Kenly, NC, USA	Edmonton, AB, Can	2
Killam, AB, Can	Edmonton, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	Stony Plain, AB, Can	1
	Sturgeon County, AB, Can	1
Kindersley, SK, Can	Edmonton, AB, Can	1
	Leduc, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled) (Continued)

Origin	Destination	Total Unscaled Commodity Trips
Kindersley, SK, Can	Sturgeon County, AB, Can	1
Kingman, AB, Can	Leduc, AB, Can	1
	Sherwood Park, AB, Can	1
Kinsella, AB, Can	Edmonton, AB, Can	1
Kinuso, AB, Can	Edmonton, AB, Can	1
Knelbursg, SK, Can	Bruderheim, AB, Can	1
La Corey, AB, Can	Edmonton, AB, Can	4
La Crete, AB, Can	Sherwood Park, AB, Can	1
Lac La Biche, AB, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	10
	Lac La Nonne, AB, Can	1
	Nisku, AB, Can	2
	Parkland County, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	1
Lac Ste Anne County, AB, Can	Dapp, AB, Can	1
	Drayton Valley, AB, Can	6
	Entwistle, AB, Can	1
	Grande Cache, AB, Can	1
	MD of Brazeau No. 77, AB, Ca	1
	Parkland County, AB, Can	1
	Spruce Grove, AB, Can	1
	Wabamun, AB, Can	1
	Yellowhead County South, AB,	1
Lac Ste. Anne, AB, Can	Drayton Valley, AB, Can	1
	Entwistle, AB, Can	1
Lacombe County, AB, Can	Parkland County, AB, Can	1
Lacombe, AB, Can	Barrhead, AB, Can	3
	Cold Lake, AB, Can	1
	Edmonton, AB, Can	14
	Fort McMurray, AB, Can	1
	Lamont, AB, Can	1
	Leduc County, AB, Can	2
	Legal, AB, Can	1
	Nisku, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Lacombe, AB, Can	Strathcona County, AB, Can	1
	Sturgeon County, AB, Can	1
Lake Isle, AB, Can	Drayton Valley, AB, Can	1
	Seba Beach, AB, Can	1
Lake Wabamun, AB, Can	Lindale, AB, Can	1
Lamont County, AB, Can	Dapp, AB, Can	1
	Edmonton, AB, Can	4
	Fox Creek, AB, Can	1
	Josephburg, AB, Can	1
	Lamont, AB, Can	1
	Lougheed, AB, Can	1
	Nisku, AB, Can	2
	Redwater, AB, Can	1
	Smoky Lake, AB, Can	1
	Star, AB, Can	2
	Sturgeon County, AB, Can	1
Lamont, AB, Can	Bruderheim, AB, Can	3
	Delburne, AB, Can	1
	Edmonton, AB, Can	10
	Elnora, AB, Can	3
	Fort Saskatchewan, AB, Can	3
	Lacombe, AB, Can	1
	Lamont County, AB, Can	1
	Legal, AB, Can	1
	Morinville, AB, Can	1
	Parkland County, AB, Can	1
	Radway, AB, Can	1
	Redwater, AB, Can	1
	Rocky Mountain House, AB, Ca	1
	Sturgeon County, AB, Can	4
	Thorhild, AB, Can	1
	Vimy, AB, Can	1
	Wetaskiwin, AB, Can	1
Langley, BC, Can	Binora, ON, Can	1
	Edmonton, AB, Can	4
	Lloydminster, AB, Can	1
	Red Deer, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Langley, BC, Can	Winnipeg, MB, Can	1
Lashburn, SK, Can	Edmonton, AB, Can	3
Laventon, BC, Can	Edmonton, AB, Can	1
Lavoy, AB, Can	Edmonton, AB, Can	2
	Fort Saskatchewan, AB, Can	1
Leduc County, AB, Can	Abbotsford, BC, Can	1
	Alsike, AB, Can	2
	Barrhead, AB, Can	1
	Bittern Lake, AB, Can	1
	Buck Lake, AB, Can	1
	Calgary, AB, Can	1
	Camrose County, AB, Can	2
	Camrose, AB, Can	3
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	1
	Falun, AB, Can	1
	Fort McMurray, AB, Can	1
	Grande Prairie, AB, Can	1
	Hay Lakes, AB, Can	2
	High Prairie, AB, Can	1
	Leduc, AB, Can	1
	Lodgepole, AB, Can	1
	Millet, AB, Can	1
	Mulhurst Bay, AB, Can	1
	New Sarepta, AB, Can	1
	Ponoka, AB, Can	3
	Red Deer, AB, Can	2
	Rolly View, AB, Can	1
	Swift Current, SK, Can	1
	Tomahawk, AB, Can	1
	Westlock, AB, Can	1
	Wetaskiwin County, AB, Can	3
	Wetaskiwin, AB, Can	7
Leduc, AB, Can	Athabasca, AB, Can	1
	Barrhead, AB, Can	1
	Breton, AB, Can	1
	Calgary, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Leduc, AB, Can	Camrose County, AB, Can	1
	Camrose, AB, Can	3
	Cynthia, AB, Can	1
	Dapp, AB, Can	1
	Drayton Valley, AB, Can	2
	Drumheller, AB, Can	1
	Edgerton, AB, Can	1
	Edson, AB, Can	5
	Hinton, AB, Can	1
	Hobbema, AB, Can	1
	Killam, AB, Can	1
	Kingman, AB, Can	1
	Lloydminster, AB, Can	1
	Ma-Me-O Beach, AB, Can	2
	Mariana Lake, AB, Can	1
	Miami, FL, USA	1
	Millet, AB, Can	4
	Morningside, AB, Can	5
	Okotoks, AB, Can	1
	Olds, AB, Can	1
	Pine Lake, AB, Can	1
	Ponoka, AB, Can	15
	Red Deer, AB, Can	2
	Rocky Mountain House, AB, Ca	3
	Round Hill, AB, Can	1
	Sangudo, AB, Can	1
	Spirit River, AB, Can	1
	St. Paul, AB, Can	3
	Westlock, AB, Can	1
	Wetaskiwin County, AB, Can	1
	Wetaskiwin, AB, Can	8
	Winfield, AB, Can	1
Legal, AB, Can	Edmonton, AB, Can	1
	Fisher Branch, MB, Can	1
	Grassland, AB, Can	1
	Haynes, AB, Can	1
	Innisfail, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Legal, AB, Can	Lacombe, AB, Can	1
	Morinville, AB, Can	1
	Myrnam, AB, Can	1
	Olds, AB, Can	1
	Onoway, AB, Can	1
	Pibroch, AB, Can	1
	Rochester, AB, Can	1
	Strome, AB, Can	1
	Thorhild, AB, Can	2
Leslieville, AB, Can	Edmonton, AB, Can	1
Lethbridge, AB, Can	Clyde, AB, Can	1
	Edmonton, AB, Can	2
	Fort McMurray, AB, Can	1
	Fort Nelson, BC, Can	1
	Morinville, AB, Can	1
	Nisku, AB, Can	1
	Onoway, AB, Can	1
Lindale, AB, Can	Parkland County, AB, Can	1
	Tomahawk, AB, Can	1
	Warburg, AB, Can	1
Lindbergh, AB, Can	Edmonton, AB, Can	2
	Joffre, AB, Can	1
	Kamloops, BC, Can	1
	Red Deer, AB, Can	1
	Rocky Mountain House, AB, Ca	1
Linden, AB, Can	Edmonton, AB, Can	1
	Sturgeon County, AB, Can	1
Little Smoky, AB, Can	Nisku, AB, Can	1
Lloydminster, AB, Can	Beiseker, AB, Can	1
	Blackfalds, AB, Can	1
	Bruderheim, AB, Can	1
	Calgary, AB, Can	1
	Edmonton, AB, Can	44
	Fort Assiniboine, AB, Can	1
	Fort Saskatchewan, AB, Can	2
	Grande Prairie, AB, Can	1
	High River, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Lloydminster, AB, Can	Leduc, AB, Can	2
	Lillooet, BC, Can	1
	Medicine Hat, AB, Can	1
	Nisku, AB, Can	4
	Onoway, AB, Can	2
	Peace River, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	9
	Spruce Grove, AB, Can	1
	St. Albert, AB, Can	1
	Warburg, AB, Can	1
	Westlock, AB, Can	1
	Whitecourt, AB, Can	1
	Winfield, AB, Can	1
Lodgepole, AB, Can	Edmonton, AB, Can	1
	Evansburg, AB, Can	1
	Leduc County, AB, Can	1
	Leduc, AB, Can	1
	Oyen, AB, Can	1
	Whitecourt, AB, Can	3
London, ON, Can	Sturgeon County, AB, Can	1
Lone Pine, AB, Can	Edmonton, AB, Can	1
Looma, AB, Can	Hay Lakes, AB, Can	1
Loon River, AB, Can	Edmonton, AB, Can	1
Lougheed, AB, Can	Grande Prairie, AB, Can	1
Lousana, AB, Can	Edmonton, AB, Can	1
	Spirit River, AB, Can	1
Mackenzie, BC, Can	Sherwood Park, AB, Can	1
Macklin, SK, Can	Morinville, AB, Can	1
Maidstone, SK, Can	Edmonton, AB, Can	3
Majeau Lake, AB, Can	Clyde, AB, Can	1
Manning, AB, Can	Camrose, AB, Can	1
	Edmonton, AB, Can	3
	Leduc, AB, Can	1
	Nisku, AB, Can	1
Mannville, AB, Can	Edmonton, AB, Can	1
	Stony Plain, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Manola, AB, Can	Falun, AB, Can	1
	Toronto, ON, Can	1
Maple Creek, SK, Can	Edmonton, AB, Can	1
Mariana Lake, AB, Can	Fort Saskatchewan, AB, Can	1
Marsden, SK, Can	Edmonton, AB, Can	2
Marshall, SK, Can	Wabamun, AB, Can	1
Mayerthorpe, AB, Can	Bon Accord, AB, Can	1
	Clyde, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	4
	Entwistle, AB, Can	1
	Nisku, AB, Can	1
	Ponoka, AB, Can	1
	Rocky Rapids, AB, Can	1
	Seba Beach, AB, Can	1
	Spruce Grove, AB, Can	1
McBride, BC, Can	Calgary, AB, Can	1
	Eau Claire, WI, USA	1
McLennan, AB, Can	Strathmore, AB, Can	1
MD of Brazeau No. 77, AB, Ca	Bruderheim, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	3
	Entwistle, AB, Can	1
	Parkland County, AB, Can	2
	Sherwood Park, AB, Can	1
	Spruce Grove, AB, Can	1
	Whitecourt, AB, Can	1
MD of Clearwater # 99, AB, Ca	Edmonton, AB, Can	1
Meadow Lake, SK, Can	Fort Saskatchewan, AB, Can	3
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	2
	Whitecourt, AB, Can	2
Meadowland, AB, Can	Nisku, AB, Can	1
Medicine Hat, AB, Can	Edmonton, AB, Can	4
	Fort St. John, BC, Can	1
	Grande Prairie, AB, Can	2
	Sherwood Park, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Medicine Hat, AB, Can	Whitecourt, AB, Can	1
Meeting Creek, AB, Can	Edmonton, AB, Can	1
Midway, BC, Can	Spruce Grove, AB, Can	1
Millarville, AB, Can	Edmonton, AB, Can	1
Millet, AB, Can	Barrhead, AB, Can	1
	Edmonton, AB, Can	2
	Genesee, AB, Can	1
	Leduc County, AB, Can	2
	Leduc, AB, Can	4
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
Milo, AB, Can	Fairview, AB, Can	1
	Peace No. 135 MD, AB, Can	1
Miquelon Lake, AB, Can	Leduc County, AB, Can	1
	Wetaskiwin, AB, Can	1
Mirror, AB, Can	Lloydminster, AB, Can	1
	Waskatenau, AB, Can	1
Mississauga, ON, Can	Edmonton, AB, Can	4
Mitsue, AB, Can	Edmonton, AB, Can	3
Montreal, QC, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	2
	Nisku, AB, Can	1
	Sturgeon County, AB, Can	1
	Vancouver, BC, Can	1
Moon Lake, AB, Can	Cynthia, AB, Can	1
	Drayton Valley, AB, Can	1
Moose Jaw, SK, Can	Rycroft, AB, Can	1
Moose Lake, BC, Can	Calgary, AB, Can	1
Morinville, AB, Can	Barrhead, AB, Can	1
	Busby, AB, Can	1
	Calgary, AB, Can	2
	Drayton Valley, AB, Can	1
	Edson, AB, Can	1
	Fort McMurray, AB, Can	1
	Gibbons, AB, Can	1
	High Level, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Morinville, AB, Can	Peers, AB, Can	1
	Prince Albert, SK, Can	1
	Rimbey, AB, Can	1
	Saskatoon, SK, Can	1
	Wainwright, AB, Can	1
	Westlock County, AB, Can	1
	Westlock, AB, Can	2
Morningside, AB, Can	Edmonton, AB, Can	3
Morrin, AB, Can	Edmonton, AB, Can	1
Mt. Robson, BC, Can	Edmonton, AB, Can	1
Mulhurst Bay, AB, Can	Edmonton, AB, Can	1
	Leduc County, AB, Can	1
	Nisku, AB, Can	1
	Slave Lake, AB, Can	1
	Wetaskiwin County, AB, Can	2
Muncho Lake, BC, Can	Caroline, AB, Can	1
Mundare, AB, Can	Bruderheim, AB, Can	1
	Edmonton, AB, Can	6
	Fort Saskatchewan, AB, Can	1
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
Myrnam, AB, Can	Morinville, AB, Can	1
Namao, AB, Can	Macklin, SK, Can	1
	Wainwright, AB, Can	1
	Waskatenau, AB, Can	1
Nampa, AB, Can	Cranbrook, BC, Can	1
	Edmonton, AB, Can	1
	Parkland County, AB, Can	1
Nanaimo, BC, Can	Red Deer, AB, Can	1
Nanton, AB, Can	Edmonton, AB, Can	1
Neerlandia, AB, Can	Fort Saskatchewan, AB, Can	1
	Lacombe, AB, Can	1
	Penhold, AB, Can	1
	Ranfurly, AB, Can	1
	Red Deer, AB, Can	4
	Redwater, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Neerlandia, AB, Can	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
	Sylvan Lake, AB, Can	1
Neilburg, SK, Can	Fort Saskatchewan, AB, Can	1
	Strathcona County, AB, Can	1
Nevis, AB, Can	Edmonton, AB, Can	1
New Norway, AB, Can	Edmonton, AB, Can	3
New Sarepta, AB, Can	Camrose, AB, Can	1
	Elk Island National Park, AB, C	2
	Hay Lakes, AB, Can	1
New Westminster, BC, Can	Edmonton, AB, Can	1
Newbrook, AB, Can	Edmonton, AB, Can	3
Nipisi River, BC, Can	Strathcona County, AB, Can	1
Nisku, AB, Can	Airdrie, AB, Can	1
	Athabasca, AB, Can	1
	Balzac, AB, Can	1
	Barrhead, AB, Can	1
	Bawlf, AB, Can	1
	Bittern Lake, AB, Can	1
	Blackfalds, AB, Can	2
	Blue Ridge, AB, Can	1
	Bonnyville, AB, Can	3
	Brooks, AB, Can	4
	Brunt Hall, MB, Can	1
	Calgary, AB, Can	15
	Camrose County, AB, Can	1
	Caroline, AB, Can	2
	Carson Creek, AB, Can	4
	Carson, CA, USA	1
	Carstairs, AB, Can	1
	Chauvin, AB, Can	1
	Chipman, AB, Can	1
	Clearwater County, AB, Can	1
	Cold Lake, AB, Can	4
	Donnelly, AB, Can	1
	Drayton Valley, AB, Can	11
	Druidsan, SK, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Nisku, AB, Can	Drumheller, AB, Can	2
	Eckville, AB, Can	1
	Edson, AB, Can	5
	Estevan, SK, Can	1
	Fort MacKay, AB, Can	4
	Fort McMurray, AB, Can	3
	Fort Nelson, BC, Can	3
	Fort St. John, BC, Can	1
	Fox Creek, AB, Can	6
	Grande Cache, AB, Can	2
	Grande Prairie, AB, Can	2
	Hanna, AB, Can	1
	Hay Lakes, AB, Can	3
	Hinton, AB, Can	3
	Hobbema, AB, Can	1
	Hythe, AB, Can	1
	Iron River, AB, Can	1
	Joffre, AB, Can	1
	Kaybob, AB, Can	1
	La Corey, AB, Can	3
	La Rouge, SK, Can	1
	Lac Ste Anne County, AB, Can	2
	Lacombe, AB, Can	7
	Lethbridge, AB, Can	1
	Lindale, AB, Can	1
	Lloydminster, AB, Can	3
	Mannville, AB, Can	1
	Mariana Lake, AB, Can	1
	Mayerthorpe, AB, Can	2
	MD of Greenview, AB, Can	2
	Millet, AB, Can	4
	Morningside, AB, Can	10
	Mulhurst Bay, AB, Can	2
	Mundare, AB, Can	1
	Nordegg, AB, Can	2
	North Battleford, SK, Can	1
	Parkland County, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Nisku, AB, Can	Ponoka, AB, Can	18
	Prince Albert, SK, Can	1
	Provost, AB, Can	3
	Red Deer, AB, Can	9
	Red Earth Creek, AB, Can	1
	Rimbey, AB, Can	1
	Robb, AB, Can	1
	Rocky Mountain House, AB, Ca	1
	Rycroft, AB, Can	1
	Sandy Lake Indian Reserve, AB	1
	Saskatoon, SK, Can	1
	Stettler, AB, Can	1
	Strathmore, AB, Can	4
	Sundre, AB, Can	1
	Two Hills, AB, Can	2
	Valhalla Centre, AB, Can	1
	Vancouver, BC, Can	1
	Vegreville, AB, Can	1
	Viking, AB, Can	1
	Vilna, AB, Can	1
	Wetaskiwin County, AB, Can	3
	Wetaskiwin, AB, Can	5
	Whitecourt, AB, Can	6
	Wizard Lake, AB, Can	1
	Yellowhead County South, AB,	1
	Yellowknife, NT, Can	1
Niton Junction, AB, Can	Barrhead, AB, Can	1
	Darwell, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	2
	Golden, BC, Can	1
	Morinville, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	1
	Tempest, AB, Can	1
Nojack, AB, Can	Drayton Valley, AB, Can	2
	Parkland County, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Nordegg, AB, Can	Edmonton, AB, Can	2
	Grande Prairie, AB, Can	4
North Battleford, SK, Can	Athabasca, AB, Can	1
	Canmore, AB, Can	1
	Edmonton, AB, Can	7
Oakland, CA, USA	Edmonton, AB, Can	1
Oakville, ON, Can	Strathcona County, AB, Can	1
	Surrey, BC, Can	2
Oklahoma City, OK, USA	Edmonton, AB, Can	1
Okotoks, AB, Can	Onoway, AB, Can	1
Olds, AB, Can	Athabasca, AB, Can	1
	Barrhead, AB, Can	1
	Crooked Creek, AB, Can	1
	Edmonton, AB, Can	3
	Fairview, AB, Can	1
	Fort Assiniboine, AB, Can	1
	Lac La Biche, AB, Can	1
	Mayerthorpe, AB, Can	1
	Prince George, BC, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	2
Onoway, AB, Can	Athabasca, AB, Can	1
	Bonnyville, AB, Can	1
	Boyle, AB, Can	2
	Red Deer, AB, Can	1
Osoyoos, BC, Can	Calgary, AB, Can	1
Oxbridge, ON, Can	Fort MacKay, AB, Can	1
Oyen, AB, Can	Edmonton, AB, Can	1
Parkland County, AB, Can	Anahana, SK, Can	1
	Athabasca, AB, Can	1
	Barrhead, AB, Can	4
	Breton, AB, Can	1
	Brownsville, TX, USA	2
	Calgary, AB, Can	6
	Calling Lake, AB, Can	1
	Camrose, AB, Can	2
	Carnwood, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Parkland County, AB, Can	Cherhill, AB, Can	1
	Chipman, AB, Can	1
	Cynthia, AB, Can	1
	Drayton Valley, AB, Can	10
	Eckville, AB, Can	1
	Edson, AB, Can	6
	Estevan, SK, Can	1
	Falun, AB, Can	2
	Fawcett, AB, Can	1
	Fort Assiniboine, AB, Can	2
	Fox Creek, AB, Can	1
	Grande Cache, AB, Can	1
	Grassland, AB, Can	1
	Gunn, AB, Can	1
	Hardisty, AB, Can	2
	High Level, AB, Can	2
	Hinton, AB, Can	2
	Innisfail, AB, Can	1
	Kenora, ON, Can	1
	Lac Ste Anne County, AB, Can	6
	Lacombe, AB, Can	3
	Lodgepole, AB, Can	1
	Mayerthorpe, AB, Can	1
	MD of Brazeau No. 77, AB, Ca	3
	Nisku, AB, Can	1
	Niton Junction, AB, Can	1
	Okotoks, AB, Can	1
	Onoway, AB, Can	3
	Peers, AB, Can	2
	Pigeon Lake, AB, Can	1
	Ponoka, AB, Can	1
	Red Deer, AB, Can	1
	Rocky Mountain House, AB, Ca	2
	Seba Beach, AB, Can	1
	Sherwood Park, AB, Can	1
	Slave Lake, AB, Can	2
	Strathmore, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Parkland County, AB, Can	Surrey, BC, Can	1
	Trout Lake, AB, Can	1
	Valemount, BC, Can	1
	Viking, AB, Can	1
	Waskatenau, AB, Can	1
	Westlock, AB, Can	2
	Wetaskiwin, AB, Can	2
	Whitecourt, AB, Can	1
	Wildwood, AB, Can	3
	Yellowhead County North, AB,	1
	Yellowhead County South, AB,	1
Parkland, AB, Can	Edmonton, AB, Can	1
Payton, ON, Can	Mayerthorpe, AB, Can	1
Peace River, AB, Can	Brant, AB, Can	1
	Calgary, AB, Can	1
	Edmonton, AB, Can	12
	Eshewan, SK, Can	1
	Nisku, AB, Can	1
	Red Deer, AB, Can	1
	Rocky Mountain House, AB, Ca	2
	Sherwood Park, AB, Can	1
	Sundre, AB, Can	1
Peers, AB, Can	Buck Creek, AB, Can	1
	Cochrane, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	1
	Enoch Reserve, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	High River, AB, Can	1
	Morinville, AB, Can	1
	Sherwood Park, AB, Can	1
	Villeneuve, AB, Can	1
Penhold, AB, Can	Devon, AB, Can	1
Perryvale, AB, Can	Edmonton, AB, Can	1
	Redwater, AB, Can	1
Pibroch, AB, Can	Sturgeon County, AB, Can	1
Pickardville, AB, Can	Camrose, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Pickardville, AB, Can	Edmonton, AB, Can	1
	Legal, AB, Can	1
Pigeon Lake, AB, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	1
	Seba Beach, AB, Can	1
	Westlock, AB, Can	1
Pincher Creek, AB, Can	Nisku, AB, Can	2
	Sherwood Park, AB, Can	1
Pine Lake, AB, Can	Leduc County, AB, Can	1
Pipestone, AB, Can	Calmar, AB, Can	1
Plamondon, AB, Can	Sherwood Park, AB, Can	1
Ponoka County, AB, Can	Spruce Grove, AB, Can	1
Ponoka, AB, Can	Beaumont, AB, Can	14
	Calling Lake, AB, Can	1
	Devon, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	13
	Fort Saskatchewan, AB, Can	1
	Golden Spike, AB, Can	1
	Highvale, AB, Can	1
	Kavanagh, AB, Can	1
	Lamont, AB, Can	1
	Leduc County, AB, Can	8
	Leduc, AB, Can	8
	Morinville, AB, Can	1
	Nisku, AB, Can	7
	Prince George, BC, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	2
	Smithers, BC, Can	1
	Vanderhoof, BC, Can	1
	Whitecourt, AB, Can	1
Port Coquitlam, BC, Can	Edmonton, AB, Can	1
Port St. James, BC, Can	Calgary, AB, Can	1
Portage La Prairie, MB, Can	Morinville, AB, Can	1
Pouce Coupe, BC, Can	Drayton Valley, AB, Can	1
Powers, MT, USA	Parkland County, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Pramalea, ON, Can	Edmonton, AB, Can	1
Primrose, AB, Can	Edmonton, AB, Can	1
Prince Albert, SK, Can	Darwell, AB, Can	1
Prince George, BC, Can	Calgary, AB, Can	3
	Edmonton, AB, Can	8
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Spruce Grove, AB, Can	1
	Strathcona County, AB, Can	1
	Winnipeg, MB, Can	1
Prince Rupert, BC, Can	Edmonton, AB, Can	1
	Wetaskiwin, AB, Can	1
Provost, AB, Can	Edmonton, AB, Can	9
	Fort Saskatchewan, AB, Can	1
	Morinville, AB, Can	1
	Nisku, AB, Can	3
	Sherwood Park, AB, Can	2
	Strathcona County, AB, Can	1
Purden Lake, BC, Can	Sherwood Park, AB, Can	1
Quebec City, QC, Can	Vancouver, BC, Can	1
Quesnel, BC, Can	Airdrie, AB, Can	1
	Warman, SK, Can	1
Radisson, SK, Can	Edmonton, AB, Can	1
Radway, AB, Can	Edmonton, AB, Can	1
	Lamont, AB, Can	1
	Minneapolis, MN, USA	1
	Stettler, AB, Can	1
	Sturgeon County, AB, Can	1
Rainbow Lake, AB, Can	Nisku, AB, Can	2
	Sherwood Park, AB, Can	1
Red Deer, AB, Can	Barrhead, AB, Can	3
	Beaumont, AB, Can	1
	Blue Ridge, AB, Can	2
	Calmar, AB, Can	1
	Conklin, AB, Can	1
	Dawson Creek, BC, Can	1
	Devon, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Red Deer, AB, Can	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	66
	Edson, AB, Can	5
	Entwistle, AB, Can	1
	Fort McMurray, AB, Can	2
	Fort St. John, BC, Can	1
	Fox Creek, AB, Can	3
	Genesee, AB, Can	2
	Grande Cache, AB, Can	1
	Grande Prairie, AB, Can	4
	High Prairie, AB, Can	1
	Hinton, AB, Can	1
	Lac La Biche, AB, Can	3
	Leduc County, AB, Can	2
	Leduc, AB, Can	2
	Lloydminster, AB, Can	3
	MD of Brazeau No. 77, AB, Ca	1
	Millet, AB, Can	1
	Nisku, AB, Can	12
	Parkland County, AB, Can	6
	Robb, AB, Can	3
	Sherwood Park, AB, Can	28
	Slave Lake, AB, Can	1
	Smoky Lake, AB, Can	1
	St. Albert, AB, Can	3
	St. Paul, AB, Can	1
	Stony Plain, AB, Can	1
	Strathcona County, AB, Can	3
	Sturgeon County, AB, Can	2
	Sunnybrook, AB, Can	1
	Thorsby, AB, Can	1
	Tofield, AB, Can	1
	Valleyview, AB, Can	1
	Vegreville, AB, Can	2
	Vilna, AB, Can	1
	Westlock, AB, Can	1
	Wetaskiwin, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Red Deer, AB, Can	Whitecourt, AB, Can	2
	Yorkton, SK, Can	1
Red Earth Creek, AB, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	5
	Hughenden, AB, Can	1
Red Willow, AB, Can	Strathcona County, AB, Can	1
Redcliff, AB, Can	Edmonton, AB, Can	1
Redwater, AB, Can	Andrew, AB, Can	1
	Calgary, AB, Can	2
	Camrose, AB, Can	1
	Caslan, AB, Can	1
	Chipman, AB, Can	1
	Cutknife, SK, Can	1
	Hinton, AB, Can	1
	Irma, AB, Can	1
	Kirby Lake, AB, Can	1
	Lamont County, AB, Can	1
	Lamont, AB, Can	1
	Lloydminster, AB, Can	1
	Radway, AB, Can	1
	Ryley, AB, Can	1
	Smoky Lake, AB, Can	1
	St. Michael, AB, Can	1
	Vermilion, AB, Can	1
	Warwick, AB, Can	1
	West Pembina, AB, Can	1
Regina, SK, Can	Burnaby, BC, Can	1
	Edmonton, AB, Can	3
	Fort Saskatchewan, AB, Can	1
	Merritt, BC, Can	1
	Sherwood Park, AB, Can	1
	Westlock, AB, Can	1
Reston, MB, Can	Edmonton, AB, Can	1
Rich Valley, AB, Can	Clyde, AB, Can	1
	Cooking Lake, AB, Can	2
	Cut Off Creek, AB, Can	1
	Edmonton, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Rich Valley, AB, Can	Manly Corner, AB, Can	1
	Parkland County, AB, Can	1
	Rocky Mountain House, AB, Ca	1
Richmond, BC, Can	Edmonton, AB, Can	2
	Fort McMurray, AB, Can	1
	St. Albert, AB, Can	1
	Winnipeg, MB, Can	1
Rimbey, AB, Can	Edmonton, AB, Can	4
	Edson, AB, Can	1
	Entwistle, AB, Can	1
	Fort Assiniboine, AB, Can	1
	Fort McMurray, AB, Can	1
	McLeod River, AB, Can	1
	Morinville, AB, Can	1
	Parkland County, AB, Can	2
	Peers, AB, Can	1
	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Can	1
	Valleyview, AB, Can	1
	Villeneuve, AB, Can	1
Riviere Qui Barre, AB, Can	Westlock, AB, Can	2
Robb, AB, Can	Calgary, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	2
	Fort Saskatchewan, AB, Can	1
	Red Deer, AB, Can	1
	Rocky Mountain House, AB, Ca	6
	Strachan, AB, Can	3
	Sundre, AB, Can	6
Rochester, AB, Can	CFB Cardiff, AB, Can	1
	Edmonton, AB, Can	1
	Legal, AB, Can	1
Rocky Mountain House, AB, Ca	Ashmont, AB, Can	1
	Calahoo, AB, Can	1
	Calmar, AB, Can	1
	Edmonton, AB, Can	15
	Hinton, AB, Can	6

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Rocky Mountain House, AB, Ca	Irma, AB, Can	1
	Mayerthorpe, AB, Can	1
	Nisku, AB, Can	2
	Parkland County, AB, Can	1
	Sherwood Park, AB, Can	3
	Spruce Grove, AB, Can	2
	St. Albert, AB, Can	1
	St. Paul, AB, Can	1
	Tomahawk, AB, Can	1
	Wabamun, AB, Can	1
	Warburg, AB, Can	1
	Whitecourt, AB, Can	1
	Williams Lake, BC, Can	2
Rocky Rapids, AB, Can	Entwistle, AB, Can	1
	Nisku, AB, Can	1
	Wildwood, AB, Can	1
Rolly View, AB, Can	Leduc County, AB, Can	1
	Mulhurst Bay, AB, Can	1
	Ponoka, AB, Can	1
Round Hill, AB, Can	Edmonton, AB, Can	2
	Leduc, AB, Can	1
Royal City, WA, USA	Edmonton, AB, Can	1
Rycroft, AB, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	1
	Sherwood Park, AB, Can	1
	Warner, AB, Can	1
Ryley, AB, Can	Edmonton, AB, Can	2
	Fort Saskatchewan, AB, Can	1
	Leduc County, AB, Can	1
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	17
	Strathcona County, AB, Can	2
Saddle Lake, AB, Can	Edmonton, AB, Can	1
Saddle River, AB, Can	Edmonton, AB, Can	1
Salmon Arm, BC, Can	Smoky Lake, AB, Can	1
Sangudo, AB, Can	Drayton Valley, AB, Can	2
	Edmonton, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sangudo, AB, Can	Edson, AB, Can	2
	Entwistle, AB, Can	1
	Hinton, AB, Can	1
	Peers, AB, Can	2
	St. Albert, AB, Can	1
	Strathmore, AB, Can	1
	Sturgeon County, AB, Can	1
	Sundre, AB, Can	1
Saskatoon, SK, Can	100 Mile House, BC, Can	1
	Blue Ridge, AB, Can	1
	Coquitlam, BC, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	14
	Edson, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	Grande Prairie, AB, Can	1
	Hinton, AB, Can	1
	Manning, AB, Can	1
	Sherwood Park, AB, Can	2
	Slave Lake, AB, Can	1
	Sturgeon County, AB, Can	1
	Vancouver, BC, Can	1
Seattle, WA, USA	Edmonton, AB, Can	1
Seba Beach, AB, Can	Lake Isle, AB, Can	1
	Vilna, AB, Can	1
	Violet Grove, AB, Can	1
Sedgewick, AB, Can	Edmonton, AB, Can	2
Seven Persons, AB, Can	Nisku, AB, Can	1
Sexsmith, AB, Can	Nisku, AB, Can	1
	Sturgeon County, AB, Can	1
Shandro, AB, Can	Cherhill, AB, Can	5
Shelby, MT, USA	Edmonton, AB, Can	1
Sherbrook, SK, Can	Kelowna, BC, Can	1
Sherwood Park, AB, Can	, CA, USA	1
	, LA, USA	1
	, OK, USA	1
	, ON, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sherwood Park, AB, Can	, OR, USA	1
	Alder Flats, AB, Can	2
	Athabasca, AB, Can	1
	Balzac, AB, Can	1
	Barrhead, AB, Can	2
	Bashaw, AB, Can	1
	Bezanson, AB, Can	1
	Blue Ridge, AB, Can	1
	Bonnyville, AB, Can	2
	Bowden, AB, Can	1
	Boyle, AB, Can	2
	Buck Lake, AB, Can	1
	Burnaby, BC, Can	1
	Calgary, AB, Can	19
	Camrose, AB, Can	6
	Carseland, AB, Can	1
	Chicago, IL, USA	1
	Chipman, AB, Can	1
	Cold Lake, AB, Can	3
	Cold Valley City, AB, Can	2
	Czar, AB, Can	1
	Dapp, AB, Can	1
	Dawson Creek, BC, Can	5
	Drayton Valley, AB, Can	5
	Edson, AB, Can	6
	Elk Island National Park, AB, C	1
	Endley, SK, Can	1
	Falher, AB, Can	1
	Forestburg, AB, Can	3
	Fort MacKay, AB, Can	2
	Fort McMurray, AB, Can	7
	Fort Nelson, BC, Can	1
	Fort St. John, BC, Can	1
	Foster Creek, AB, Can	1
	Fox Creek, AB, Can	2
	Gemen, BC, Can	1
	Grande Cache, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sherwood Park, AB, Can	Grande Prairie, AB, Can	6
	Hardisty, AB, Can	3
	High River, AB, Can	1
	Highridge, AB, Can	1
	Hines Creek, AB, Can	1
	Hinton, AB, Can	2
	Houston, TX, USA	1
	Jasper, AB, Can	1
	Joffre, AB, Can	1
	Kamloops, BC, Can	2
	Kelowna, BC, Can	1
	Kerrobert, SK, Can	1
	Kingman, AB, Can	1
	La Crete, AB, Can	5
	La Ronge, SK, Can	1
	Lac La Biche, AB, Can	3
	Lacombe, AB, Can	2
	Lakeland County, AB, Can	1
	Lamont County, AB, Can	2
	Lamont, AB, Can	3
	Lethbridge, AB, Can	1
	Lloydminster, AB, Can	7
	Lodgepole, AB, Can	1
	Marshall, SK, Can	1
	Millet, AB, Can	1
	Mundare, AB, Can	2
	Nevis, AB, Can	1
	Niton Junction, AB, Can	1
	Oakville, ON, Can	1
	Ohaton, AB, Can	1
	Olds, AB, Can	1
	Peace River, AB, Can	2
	Ponoka, AB, Can	1
	Provost, AB, Can	2
	Red Deer, AB, Can	12
	Rimbey, AB, Can	2
	Rocky Mountain House, AB, Ca	3

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sherwood Park, AB, Can	Ryley, AB, Can	17
	Saskatoon, SK, Can	4
	Slave Lake, AB, Can	5
	Sparwood, BC, Can	2
	St. Paul, AB, Can	1
	Steinbach, MB, Can	1
	Stettler, AB, Can	3
	Strathcona County, AB, Can	2
	Strongsville, OH, USA	1
	Sunderland, AB, Can	1
	Surrey, BC, Can	1
	Tacomas, SK, Can	1
	Tofield, AB, Can	2
	Unity, SK, Can	2
	Valleyview, AB, Can	1
	Vancouver, BC, Can	1
	Viking, AB, Can	1
	Wainwright, AB, Can	1
	Wallula, WA, USA	1
	Waskatenau, AB, Can	1
	Westlock, AB, Can	10
	Wetaskiwin, AB, Can	6
	Whitecourt, AB, Can	5
	Winfield, AB, Can	1
	Winnipeg, MB, Can	1
	Yellowhead County South, AB,	1
	Yellowknife, NT, Can	1
Silver Valley, AB, Can	Sherwood Park, AB, Can	1
Slave Lake, AB, Can	, LA, USA	1
	Calgary, AB, Can	1
	Edmonton, AB, Can	35
	Morinville, AB, Can	1
	Ponoka, AB, Can	1
	Red Deer, AB, Can	1
	San Antonio, TX, USA	1
	Sherwood Park, AB, Can	4
	Spruce Grove, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Slave Lake, AB, Can	Spruce View, AB, Can	1
	Strathcona County, AB, Can	2
	Sturgeon County, AB, Can	1
	Tomahawk, AB, Can	2
	Toronto, ON, Can	1
	Wabamun, AB, Can	1
	Windsor, ON, Can	1
Slocan, BC, Can	Parkland County, AB, Can	1
Smith, AB, Can	Edmonton, AB, Can	1
	Sherwood Park, AB, Can	1
Smithers, BC, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	1
	Sundre, AB, Can	1
Smoky Lake County, AB, Can	Drayton Valley, AB, Can	1
Smoky Lake, AB, Can	Edmonton, AB, Can	3
	Fort Saskatchewan, AB, Can	1
	Lacombe, AB, Can	1
	Stony Plain, AB, Can	1
	Sturgeon County, AB, Can	3
South Burnaby, BC, Can	Edmonton, AB, Can	1
Spanish Fork, UT, USA	Edmonton, AB, Can	1
Sparwood, BC, Can	Edmonton, AB, Can	1
Spirit River, AB, Can	Ponoka, AB, Can	1
Spruce Grove, AB, Can	, NT, Can	1
	Airdrie, AB, Can	1
	Alexis Indian Reserve, AB, Can	1
	Barrhead, AB, Can	2
	Blackie, AB, Can	1
	Calgary, AB, Can	4
	Carbon, AB, Can	1
	Carrot Creek, AB, Can	2
	Drayton Valley, AB, Can	1
	Edson, AB, Can	4
	Fort McMurray, AB, Can	2
	Fort St. John, BC, Can	1
	Glenevis, AB, Can	2
	Grande Cache, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Spruce Grove, AB, Can	Grande Prairie, AB, Can	2
	Gunn, AB, Can	1
	Heatherdown Pit, AB, Can	1
	High River, AB, Can	1
	Hines Creek, AB, Can	1
	Lac Ste Anne County, AB, Can	2
	Mayerthorpe, AB, Can	1
	Meikle River, AB, Can	1
	Millet, AB, Can	1
	Onoway, AB, Can	1
	Phoenix, AZ, USA	1
	Ponoka, AB, Can	1
	Spedden, AB, Can	2
	Stettler, AB, Can	2
	Vegreville, AB, Can	1
	Westlock, AB, Can	1
	Wetaskiwin, AB, Can	1
	Wildwood, AB, Can	1
Spruce View, AB, Can	Slave Lake, AB, Can	1
Squamish, BC, Can	Red Rock, OH, USA	1
St. Albert, AB, Can	Athabasca, AB, Can	3
	Barrhead, AB, Can	3
	Bawlf, AB, Can	1
	Bonnyville, AB, Can	1
	Breton, AB, Can	1
	Calgary, AB, Can	4
	Chetwynd, BC, Can	1
	Clyde, AB, Can	1
	Delta, BC, Can	1
	Entwistle, AB, Can	1
	Fort McMurray, AB, Can	1
	Kamloops, BC, Can	1
	Lloydminster, AB, Can	2
	Ponoka, AB, Can	1
	Red Deer, AB, Can	3
	Two Hills, AB, Can	1
	Vancouver, BC, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
St. Albert, AB, Can	Vimy, AB, Can	1
	Westlock, AB, Can	2
	Wetaskiwin, AB, Can	2
	Wolf Lake, AB, Can	1
St. Francis, AB, Can	Alsike, AB, Can	1
	Breton, AB, Can	1
St. Jean, MB, Can	Edmonton, AB, Can	1
St. Michael, AB, Can	Redwater, AB, Can	1
St. Paul, AB, Can	Bruderheim, AB, Can	1
	Calgary, AB, Can	3
	Calmar, AB, Can	1
	Edmonton, AB, Can	4
	Fox Creek, AB, Can	1
	Gibbons, AB, Can	2
	Parkland County, AB, Can	1
	Red Deer, AB, Can	2
	Sherwood Park, AB, Can	2
	St. Albert, AB, Can	1
	Strathcona County, AB, Can	1
Stales, NE, USA	Sherwood Park, AB, Can	1
Stanstead, QC, Can	Calgary, AB, Can	1
Star, AB, Can	Edmonton, AB, Can	1
	Parkland County, AB, Can	1
	Strathmore, AB, Can	1
	Sturgeon County, AB, Can	3
Stavely, AB, Can	Nisku, AB, Can	1
Sterling, SK, Can	Athabasca, AB, Can	1
Stettler, AB, Can	Edmonton, AB, Can	8
	Lamont County, AB, Can	1
	Leduc County, AB, Can	1
	Nisku, AB, Can	3
	Redwater, AB, Can	1
	Sherwood Park, AB, Can	2
	Sturgeon County, AB, Can	2
	Tofield, AB, Can	1
Stony Plain, AB, Can	Alberta Beach, AB, Can	2
	Athabasca, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Stony Plain, AB, Can	Coleman, AB, Can	1
	Drayton Valley, AB, Can	1
	Edson, AB, Can	1
	High Prairie, AB, Can	1
	Lac Ste Anne County, AB, Can	4
	Lethbridge, AB, Can	1
	Onoway, AB, Can	2
	Peers, AB, Can	1
	Prince George, BC, Can	1
	Rocky Mountain House, AB, Ca	1
	Slave Lake, AB, Can	2
	Wainwright, AB, Can	1
	Wildwood, AB, Can	1
Strachan, AB, Can	Hinton, AB, Can	1
Strathcona County, AB, Can	Airdrie, AB, Can	1
	Ardrossan, AB, Can	1
	Athabasca County No.12, AB,	1
	Bashaw, AB, Can	1
	Battle River, SK, Can	1
	Beaver County, AB, Can	2
	Beiseker, AB, Can	1
	Cactus Lake, SK, Can	1
	Calgary, AB, Can	1
	Camrose County, AB, Can	5
	Camrose, AB, Can	3
	Caslan, AB, Can	1
	Chilliwack, BC, Can	1
	Duggan, AB, Can	4
	Edmonton, AB, Can	4
	Edson, AB, Can	1
	Ferintosh, AB, Can	25
	Fort Saskatchewan, AB, Can	5
	Grande Cache, AB, Can	1
	High Level, AB, Can	1
	Joffre, AB, Can	1
	Lac Ste Anne County, AB, Can	1
	Lamont County, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Strathcona County, AB, Can	Lamont, AB, Can	2
	Leduc County, AB, Can	1
	Lloydminster, AB, Can	3
	Minburn, AB, Can	1
	Mundare, AB, Can	1
	Nevis, AB, Can	1
	Ponoka, AB, Can	1
	Red Deer, AB, Can	2
	Red Earth Creek, AB, Can	1
	Sherwood Park, AB, Can	2
	St. Albert, AB, Can	1
	Star, AB, Can	1
	Strathcona County, AB, Can	2
	Tofield, AB, Can	1
	Valleyview, AB, Can	1
	Vegreville, AB, Can	1
	Westlock, AB, Can	1
	Wetaskiwin County, AB, Can	1
	Whitecourt, AB, Can	1
Strathmore, AB, Can	Athabasca, AB, Can	1
	Boyle, AB, Can	1
	Edmonton, AB, Can	1
	Lamont, AB, Can	1
	Mayerthorpe, AB, Can	1
	Nisku, AB, Can	1
	Parkland County, AB, Can	1
	Sturgeon County, AB, Can	1
	Westlock County, AB, Can	1
	Westlock, AB, Can	3
Strome, AB, Can	Legal, AB, Can	1
	Sherwood Park, AB, Can	2
	Vancourt, BC, Can	1
Sturgeon County, AB, Can	, SK, Can	1
	Airdrie, AB, Can	1
	Alix, AB, Can	1
	Atmore, AB, Can	1
	Barrhead, AB, Can	2

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled) (Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sturgeon County, AB, Can	Boyle, AB, Can	2
	Calgary, AB, Can	2
	Camrose, AB, Can	4
	Clyde, AB, Can	3
	Conklin, AB, Can	1
	Daysland, AB, Can	2
	Drayton Valley, AB, Can	1
	Dundurn, SK, Can	4
	Edson, AB, Can	1
	Elk Point, AB, Can	1
	Estevan, SK, Can	1
	Falher, AB, Can	3
	Fort McMurray, AB, Can	2
	Fort Steel, BC, Can	1
	Grande Prairie, AB, Can	1
	Grassland, AB, Can	2
	High Prairie, AB, Can	1
	La Crete, AB, Can	3
	Lacombe, AB, Can	1
	Lamont County, AB, Can	2
	Lamont, AB, Can	6
	Lavoy, AB, Can	1
	Legal, AB, Can	1
	Lethbridge, AB, Can	1
	Linden, AB, Can	2
	Lloydminster, AB, Can	1
	Meadow Lake, SK, Can	1
	Morinville, AB, Can	2
	Mundare, AB, Can	1
	Naicam, SK, Can	1
	Nakamum Lake, AB, Can	1
	Onoway, AB, Can	1
	Paradise Hill, SK, Can	1
	Phoenix, AZ, USA	2
	Radway, AB, Can	1
	Red Deer, AB, Can	3
	Rochester, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Sturgeon County, AB, Can	Saskatoon, SK, Can	2
	Smoky Lake, AB, Can	4
	Stettler, AB, Can	5
	Strathmore, AB, Can	1
	Strome, AB, Can	1
	Sturgeon County, AB, Can	1
	Tar Island, AB, Can	1
	Thorhild, AB, Can	1
	Vegreville, AB, Can	1
	Vimy, AB, Can	2
	Wainwright, AB, Can	3
	Warspite, AB, Can	1
	Westlock County, AB, Can	2
	Westlock, AB, Can	5
	Wetaskiwin, AB, Can	1
	Wolf Creek, AB, Can	1
	Wolf Lake, AB, Can	1
	Wood Buffalo, AB, Can	1
Sudbury, ON, Can	Edmonton, AB, Can	1
Sunan Lake, AB, Can	Sherwood Park, AB, Can	1
Sundance Beach, AB, Can	Calgary, AB, Can	1
Sundre, AB, Can	Athabasca County No.12, AB,	1
	Athabasca, AB, Can	2
	Edmonton, AB, Can	4
	Edson, AB, Can	1
	Grande Prairie, AB, Can	2
	High Prairie, AB, Can	1
	Hinton, AB, Can	21
	Peers, AB, Can	1
	Sturgeon County, AB, Can	2
	Two Hills, AB, Can	1
Sunnybrook, AB, Can	Drayton Valley, AB, Can	7
Surrey, BC, Can	Edmonton, AB, Can	4
	Fort Saskatchewan, AB, Can	1
	Lloydminster, AB, Can	1
	Whitecourt, AB, Can	1
Swalwell, AB, Can	Sangudo, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Swan Hills, AB, Can	Bentley, AB, Can	1
	Edmonton, AB, Can	10
	Millet, AB, Can	1
	Nisku, AB, Can	2
	Red Deer, AB, Can	4
Swift Current, SK, Can	Nisku, AB, Can	1
Sylvan Lake, AB, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	3
Taber, AB, Can	Edmonton, AB, Can	2
	Grande Prairie, AB, Can	1
	Millet, AB, Can	2
	Nisku, AB, Can	1
	Sturgeon County, AB, Can	1
Taylor, BC, Can	Fort Saskatchewan, AB, Can	1
	Sherwood Park, AB, Can	2
Tete Jaune Cache, BC, Can	Edmonton, AB, Can	2
Thorhild, AB, Can	Legal, AB, Can	2
	Spruce Grove, AB, Can	1
	Sturgeon County, AB, Can	1
Thorsby, AB, Can	Drayton Valley, AB, Can	1
	Pigeon Lake, AB, Can	1
	Westlock, AB, Can	1
	Wetaskiwin County, AB, Can	1
	Wetaskiwin, AB, Can	1
Three Hills, AB, Can	Sherwood Park, AB, Can	1
	Spruce Grove, AB, Can	1
Tofield, AB, Can	Ardrossan, AB, Can	1
	Cynthia, AB, Can	1
	Edmonton, AB, Can	12
	Fort McMurray, AB, Can	1
	Fort Saskatchewan, AB, Can	2
	High Level, AB, Can	1
	Jidaro Valley, AB, Can	1
	Sherwood Park, AB, Can	3
	Strathcona County, AB, Can	4
	Whitehorse, YK, Can	1
Tomahawk, AB, Can	Alder Flats, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Tomahawk, AB, Can	Drayton Valley, AB, Can	2
	Leduc County, AB, Can	1
	Wetaskiwin, AB, Can	1
Toronto, ON, Can	Airdrie, AB, Can	1
	Edmonton, AB, Can	2
	Grande Prairie, AB, Can	1
	Prince George, BC, Can	1
Trident, MB, Can	Sherwood Park, AB, Can	1
Trochu, AB, Can	Calmar, AB, Can	1
	Edmonton, AB, Can	1
	Lac La Biche, AB, Can	1
	Leduc, AB, Can	1
	Sherwood Park, AB, Can	2
Trout Lake, AB, Can	Edmonton, AB, Can	3
	Parkland County, AB, Can	1
Tumbler Ridge, BC, Can	Sparwood, BC, Can	2
Two Hill County No. 21, AB, C	Cherhill, AB, Can	1
Two Hills, AB, Can	Edmonton, AB, Can	5
	Morinville, AB, Can	1
	Red Deer, AB, Can	1
	St. Albert, AB, Can	1
	Strathmore, AB, Can	1
Usona, AB, Can	Edmonton, AB, Can	1
	Nisku, AB, Can	1
Valemount, BC, Can	Edmonton, AB, Can	4
	Sherwood Park, AB, Can	2
	Wetaskiwin, AB, Can	1
Valleyview, AB, Can	Camrose, AB, Can	1
	Donalda, AB, Can	1
	Edmonton, AB, Can	7
	Leduc County, AB, Can	1
	Parkland County, AB, Can	1
	Provost, AB, Can	2
	Rimbey, AB, Can	1
	Saskatoon, SK, Can	1
	Sherwood Park, AB, Can	2
	Sturgeon County, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Vancouver, BC, Can	Brantford, ON, Can	1
	Calgary, AB, Can	2
	Cold Lake, AB, Can	1
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	23
	Fort McMurray, AB, Can	1
	Fort St. John, BC, Can	1
	Leduc, AB, Can	1
	Nisku, AB, Can	3
	North Battleford, SK, Can	1
	Saskatoon, SK, Can	3
	St. Albert, AB, Can	1
	Wetaskiwin, AB, Can	2
Vanderhoof, BC, Can	Edmonton, AB, Can	1
Vanscoy, SK, Can	Hondo, AB, Can	1
	Morinville, AB, Can	1
	Parkland County, AB, Can	2
Vauxhall, AB, Can	Sturgeon County, AB, Can	1
Vegreville, AB, Can	Bruderheim, AB, Can	1
	Drayton Valley, AB, Can	2
	Edmonton, AB, Can	19
	Fort Saskatchewan, AB, Can	3
	Gibbons, AB, Can	1
	Lodgepole, AB, Can	1
	MD of Brazeau No. 77, AB, Ca	1
	Red Deer, AB, Can	1
	Sherwood Park, AB, Can	3
	Slave Lake, AB, Can	1
	Stony Plain, AB, Can	1
	Sturgeon County, AB, Can	1
	Whitecourt, AB, Can	1
Vermilion, AB, Can	Beamer, AB, Can	1
	Dapp, AB, Can	1
	Edmonton, AB, Can	10
	Judy Creek, AB, Can	1
	Nisku, AB, Can	1
	Red Deer, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled) (Continued)

Origin	Destination	Total Unscaled Commodity Trips
Vermilion, AB, Can	Redwater, AB, Can	1
	Rimbey, AB, Can	1
	Sherwood Park, AB, Can	2
	St. Albert, AB, Can	1
	Stettler, AB, Can	1
	Stony Plain, AB, Can	1
	Sturgeon County, AB, Can	1
Vernon, BC, Can	Edmonton, AB, Can	1
Victoria, BC, Can	Athabasca, AB, Can	1
	Whitecourt, AB, Can	1
Viking, AB, Can	Edmonton, AB, Can	8
	Fort Saskatchewan, AB, Can	1
	Langley, BC, Can	1
	Leduc County, AB, Can	1
	Nisku, AB, Can	2
Villeneuve, AB, Can	Andrew, AB, Can	1
Vilna, AB, Can	Edmonton, AB, Can	6
	Vancouver, BC, Can	1
Vimy, AB, Can	Busby, AB, Can	1
	Edmonton, AB, Can	1
	Majeau Lake, AB, Can	1
	Nanton, AB, Can	1
	Sturgeon County, AB, Can	1
	Two Hills, AB, Can	1
Violet Grove, AB, Can	Keephills, AB, Can	1
	Seba Beach, AB, Can	1
Vulcan, AB, Can	Edmonton, AB, Can	1
Wabamun Lake IR 133A, AB,	Cochrane, AB, Can	1
Wabamun, AB, Can	Drayton Valley, AB, Can	1
	Exshaw, AB, Can	4
	Grimshaw, AB, Can	1
	Wildwood, AB, Can	1
	Yellowhead County South, AB,	1
Wabasca-Desmarais, AB, Can	Edmonton, AB, Can	1
	Lacombe, AB, Can	1
	Nisku, AB, Can	2
	St. Albert, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Waco, TX, USA	Fort Saskatchewan, AB, Can	1
Wainwright, AB, Can	Calahoo, AB, Can	1
	Devon, AB, Can	1
	Edmonton, AB, Can	17
	Parkland County, AB, Can	1
	Red Deer, AB, Can	1
	Sherwood Park, AB, Can	4
	St. Albert, AB, Can	1
	Stony Plain, AB, Can	1
Wandering River, AB, Can	Millet, AB, Can	1
	Pincher Creek, AB, Can	1
Wanham, AB, Can	Donalda, AB, Can	1
	Lacombe, AB, Can	1
	Sherwood Park, AB, Can	1
Warburg, AB, Can	Alsike, AB, Can	1
	Drayton Valley, AB, Can	4
	Lindale, AB, Can	2
	Lodgepole, AB, Can	1
Warspite, AB, Can	Fort Saskatchewan, AB, Can	1
Warwick, AB, Can	Redwater, AB, Can	1
Waskatenau, AB, Can	Blue River, BC, Can	1
	Edmonton, AB, Can	2
	Fort Saskatchewan, AB, Can	1
	Legal, AB, Can	1
	Linden, AB, Can	1
	Mirror, AB, Can	1
	Olds, AB, Can	1
	Sherwood Park, AB, Can	1
West Pembina, AB, Can	Sturgeon County, AB, Can	3
Westlock County, AB, Can	Busby, AB, Can	1
	Edmonton, AB, Can	1
	Legal, AB, Can	3
	Sturgeon County, AB, Can	1
	Wetaskiwin, AB, Can	1
Westlock, AB, Can	Arrowwood, AB, Can	1
	Calgary, AB, Can	2
	Cynthia, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Westlock, AB, Can	Devon, AB, Can	1
	Edmonton, AB, Can	20
	Edson, AB, Can	1
	Elk Point, AB, Can	1
	Lacombe, AB, Can	1
	Legal, AB, Can	4
	Lethbridge, AB, Can	1
	Linden, AB, Can	1
	Lodgepole, AB, Can	2
	Morinville, AB, Can	3
	Nisku, AB, Can	1
	Onoway, AB, Can	1
	Parkland County, AB, Can	2
	Pigeon Lake, AB, Can	1
	Red Deer, AB, Can	1
	Riviere Qui Barre, AB, Can	2
	Sherwood Park, AB, Can	6
	Spruce Grove, AB, Can	1
	St. Albert, AB, Can	2
	Strathmore, AB, Can	2
	Sturgeon County, AB, Can	8
	Wetaskiwin, AB, Can	1
	Winnipeg, MB, Can	1
Wetaskiwin County, AB, Can	Calmar, AB, Can	1
	Edmonton, AB, Can	2
	Leduc County, AB, Can	4
	Leduc, AB, Can	3
	Nisku, AB, Can	2
	Onoway, AB, Can	1
	Thorsby, AB, Can	1
Wetaskiwin, AB, Can	Barrhead, AB, Can	1
	Boyle, AB, Can	1
	Breton, AB, Can	1
	Calmar, AB, Can	3
	Devon, AB, Can	2
	Drayton Valley, AB, Can	1
	Edmonton, AB, Can	43

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Wetaskiwin, AB, Can	Edson, AB, Can	1
	Fort McMurray, AB, Can	2
	Lamont, AB, Can	1
	Leduc County, AB, Can	8
	Leduc, AB, Can	7
	Nisku, AB, Can	3
	Parkland County, AB, Can	1
	Peers, AB, Can	1
	Redwater, AB, Can	1
	St. Albert, AB, Can	1
	Strathcona County, AB, Can	1
	Sturgeon County, AB, Can	1
	Thorsby, AB, Can	2
	Two Hills, AB, Can	1
Wheatland, AB, Can	Parkland County, AB, Can	1
White Rock, BC, Can	Edmonton, AB, Can	1
	St. Albert, AB, Can	1
Whitecourt, AB, Can	, MB, Can	1
	, MT, USA	1
	, OH, USA	1
	Airdrie, AB, Can	1
	Alamogordo, NM, USA	1
	Alsike, AB, Can	1
	Beaver Dam, WI, USA	1
	Calgary, AB, Can	4
	Claresholm, AB, Can	2
	Drayton Valley, AB, Can	2
	Edmonton, AB, Can	24
	Elk River, AB, Can	4
	Entwistle, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	Glenella, MB, Can	1
	Idaho Falls, ID, USA	1
	Lac Ste Anne County, AB, Can	1
	Lacombe, AB, Can	1
	Lloydminster, AB, Can	2
	Lodgepole, AB, Can	6

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Whitecourt, AB, Can	Meadow Lake, SK, Can	1
	Nisku, AB, Can	6
	Nordegg, AB, Can	1
	Parkland County, AB, Can	2
	Red Deer, AB, Can	7
	Rocky Mountain House, AB, Ca	2
	Sedgewick, AB, Can	1
	Sherwood Park, AB, Can	7
	Slave Lake, AB, Can	1
	Stony Plain, AB, Can	1
	Sturgeon County, AB, Can	1
	Unity, SK, Can	2
	Viking, AB, Can	2
	Wainwright, AB, Can	1
	Winnipeg, MB, Can	1
Whitehorse, YK, Can	Edmonton, AB, Can	1
Wildwood, AB, Can	Camrose, AB, Can	1
	Clearwater County, AB, Can	1
	Drayton Valley, AB, Can	2
	Edmonton, AB, Can	7
	Fawcett Lake, AB, Can	1
	Parkland County, AB, Can	3
	Rocky Mountain House, AB, Ca	1
	Spruce Grove, AB, Can	2
	Stony Plain, AB, Can	1
Williams Lake, BC, Can	Rocky Mountain House, AB, Ca	2
Willingdon, AB, Can	Edmonton, AB, Can	1
	Parkland County, AB, Can	1
Winfield, AB, Can	Clyde, AB, Can	1
	Edmonton, AB, Can	2
	Edson, AB, Can	4
	Nisku, AB, Can	1
	Niton Junction, AB, Can	1
Winfield, BC, Can	Saskatoon, SK, Can	1
Winnipeg, MB, Can	Athabasca, AB, Can	1
	Brooks, AB, Can	1
	Calgary, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Winnipeg, MB, Can	Edmonton, AB, Can	11
	Fort Saskatchewan, AB, Can	1
	Grande Prairie, AB, Can	1
	Grimshaw, AB, Can	1
	Hinton, AB, Can	1
	Prince George, BC, Can	1
	Red Deer, AB, Can	1
	Red Pass, BC, Can	1
	St. Albert, AB, Can	1
	Vancouver, BC, Can	1
Winterburn, AB, Can	Carrot Creek, AB, Can	1
Wisconsin Rapids, WI, USA	Edmonton, AB, Can	1
Wizard Lake, AB, Can	Gunn, AB, Can	1
Wolf Creek, AB, Can	Rimbey, AB, Can	1
Wolf Lake, AB, Can	Drayton Valley, AB, Can	1
	Rimbey, AB, Can	1
Wood Buffalo, AB, Can	Edmonton, AB, Can	1
Wooden, CA, USA	Edmonton, AB, Can	1
Wynyard, SK, Can	Edmonton, AB, Can	1
Yellowhead County North, AB,	Drayton Valley, AB, Can	4
	Edmonton, AB, Can	3
	Lac Ste Anne County, AB, Can	1
	Nisku, AB, Can	1
	Parkland County, AB, Can	4
	Ponoka, AB, Can	1
	Sherwood Park, AB, Can	2
	Strathcona County, AB, Can	1
	Wabamun, AB, Can	1
	Wetaskiwin, AB, Can	1
Yellowhead County South, AB,	Drayton Valley, AB, Can	4
	Edmonton, AB, Can	1
	Fort Saskatchewan, AB, Can	1
	Morinville, AB, Can	1
	Stony Plain, AB, Can	1
	Sundre, AB, Can	4
Yellowknife, NT, Can	Kinsella, AB, Can	1
Yorkton, SK, Can	Tiger Lily, AB, Can	1

Exhibit C 1 - Origins and Destinations of Commodity Trips (Unscaled)
(Continued)

Origin	Destination	Total Unscaled Commodity Trips
Zama City, AB, Can	Calgary, AB, Can	2
	Camrose, AB, Can	1
	Spruce Grove, AB, Can	2
Grand Total		**6,485**

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, AB, Can	Sherwood Park, AB, Can	1
	Athabasca, AB, Can	Brooks, AB, Can	1
		Edmonton, AB, Can	23
		Killam, AB, Can	1
		Parkland County, AB, Ca	2
		St. Albert, AB, Can	1
		Stony Plain, AB, Can	1
		Vegreville, AB, Can	1
		Villeneuve, AB, Can	1
	Atmore, AB, Can	Sturgeon County, AB, Ca	1
	Barrhead, AB, Can	Edmonton, AB, Can	3
		Fort Saskatchewan, AB,	1
		Redwater, AB, Can	1
	Boyle, AB, Can	Edmonton, AB, Can	1
		Legal, AB, Can	1
		Parkland County, AB, Ca	1
	Calling Lake, AB, Can	Sherwood Park, AB, Can	1
		Villeneuve, AB, Can	1
	Clyde, AB, Can	Bon Accord, AB, Can	1
		Edmonton, AB, Can	6
		Legal, AB, Can	1
		Morinville, AB, Can	1
		Regina, SK, Can	1
		Sturgeon County, AB, Ca	2
	Conklin, AB, Can	Parkland County, AB, Ca	1
	Donnelly, AB, Can	Edmonton, AB, Can	1
	Fort McMurray, AB, Can	Edmonton, AB, Can	14
	Fort Vermillion, AB, Can	Legal, AB, Can	2
	Grassland, AB, Can	Edmonton, AB, Can	2
		Sturgeon County, AB, Ca	2
	High Prairie, AB, Can	Mayerthorpe, AB, Can	1
		Sherwood Park, AB, Can	2
		Sturgeon County, AB, Ca	1
		Winnipeg, MB, Can	1
	Lac La Biche, AB, Can	Edmonton, AB, Can	2

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Lac La Biche, AB, Can	Nisku, AB, Can	1
		Parkland County, AB, Ca	1
	Legal, AB, Can	Edmonton, AB, Can	1
		Morinville, AB, Can	1
		Olds, AB, Can	1
	Loon River, AB, Can	Edmonton, AB, Can	1
	Manola, AB, Can	Toronto, ON, Can	1
	Neerlandia, AB, Can	Fort Saskatchewan, AB,	1
	Newbrook, AB, Can	Edmonton, AB, Can	3
	Perryvale, AB, Can	Edmonton, AB, Can	1
		Redwater, AB, Can	1
	Pibroch, AB, Can	Sturgeon County, AB, Ca	1
	Pickardville, AB, Can	Legal, AB, Can	1
	Rainbow Lake, AB, Can	Nisku, AB, Can	1
		Sherwood Park, AB, Can	1
	Red Deer, AB, Can	Vegreville, AB, Can	1
	Rochester, AB, Can	CFB Cardiff, AB, Can	1
		Edmonton, AB, Can	1
		Legal, AB, Can	1
	Slave Lake, AB, Can	Edmonton, AB, Can	5
		Morinville, AB, Can	1
		Sherwood Park, AB, Can	1
		Spruce Grove, AB, Can	1
		Sturgeon County, AB, Ca	1
	Smith, AB, Can	Sherwood Park, AB, Can	1
	Sturgeon County, AB, Ca	Legal, AB, Can	1
	Swan Hills, AB, Can	Edmonton, AB, Can	1
	Thorhild, AB, Can	Legal, AB, Can	2
	Vimy, AB, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
	Wabasca-Desmarais, AB,	Edmonton, AB, Can	1
		Nisku, AB, Can	1
		St. Albert, AB, Can	1
	Wandering River, AB, Ca	Pincher Creek, AB, Can	1
	Waskatenau, AB, Can	Legal, AB, Can	1

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Westlock County, AB, C	Busby, AB, Can	1
		Legal, AB, Can	2
		Sturgeon County, AB, Ca	1
		Wetaskiwin, AB, Can	1
	Westlock, AB, Can	Devon, AB, Can	1
		Edmonton, AB, Can	9
		Elk Point, AB, Can	1
		Legal, AB, Can	2
		Morinville, AB, Can	1
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	3
		St. Albert, AB, Can	2
		Sturgeon County, AB, Ca	4
		Winnipeg, MB, Can	1

Total Commodity Trips for Site 1: Hwy 2 - North of Legal Inbound   **156**

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Airdrie, AB, Can	Athabasca, AB, Can	1
	Calahoo, AB, Can	Clyde, AB, Can	1
	Calgary, AB, Can	Fort McMurray, AB, Can	1
	Carbondale, AB, Can	Westlock, AB, Can	1
	Didsbury, AB, Can	Athabasca, AB, Can	1
	Edmonton, AB, Can	Athabasca, AB, Can	15
		Barrhead, AB, Can	2
		Boyle, AB, Can	1
		Calling Lake, AB, Can	3
		Chard, AB, Can	1
		Clyde, AB, Can	9
		Conklin, AB, Can	1
		Fawcett, AB, Can	1
		Flatbush, AB, Can	1
		Fort McMurray, AB, Can	6
		Grimshaw, AB, Can	1
		High Level, AB, Can	1
		High Prairie, AB, Can	1
		Island Lake, AB, Can	1
		Lac La Biche, AB, Can	2
		Nampa, AB, Can	1
		Neerlandia, AB, Can	1
		Newbrook, AB, Can	1
		Peace River, AB, Can	1
		Rich Valley, AB, Can	1
		Slave Lake, AB, Can	4
		Sturgeon County, AB, Ca	2
		Thorhild, AB, Can	2
		Vimy, AB, Can	1
		Wabasca-Desmarais, AB,	2
		Wandering River, AB, Ca	1
		Westlock County, AB, C	3
		Westlock, AB, Can	14
	Fort Saskatchewan, AB,	Neerlandia, AB, Can	1
		Slave Lake, AB, Can	2

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Gunn, AB, Can	Thorhild, AB, Can	1
	High River, AB, Can	Clyde, AB, Can	1
		High Prairie, AB, Can	1
	Leduc County, AB, Can	Fort McMurray, AB, Can	1
	Leduc, AB, Can	Athabasca, AB, Can	1
	Legal, AB, Can	Grassland, AB, Can	1
		Pibroch, AB, Can	1
		Rochester, AB, Can	1
		Thorhild, AB, Can	2
	Mayerthorpe, AB, Can	Clyde, AB, Can	1
	Moose Jaw, SK, Can	Rycroft, AB, Can	1
	Morinville, AB, Can	Fort McMurray, AB, Can	1
		High Level, AB, Can	1
		Westlock County, AB, C	1
		Westlock, AB, Can	2
	Nisku, AB, Can	Sandy Lake Indian Reser	1
	North Battleford, SK, Ca	Athabasca, AB, Can	1
	Onoway, AB, Can	Athabasca, AB, Can	1
		Boyle, AB, Can	2
	Parkland County, AB, Ca	Calling Lake, AB, Can	1
	Regina, SK, Can	Westlock, AB, Can	1
	Sherwood Park, AB, Can	Athabasca, AB, Can	1
		Fort Nelson, BC, Can	1
		La Crete, AB, Can	2
		Slave Lake, AB, Can	1
		Westlock, AB, Can	3
	St. Albert, AB, Can	Athabasca, AB, Can	3
		Barrhead, AB, Can	3
		Clyde, AB, Can	1
		Vimy, AB, Can	1
		Westlock, AB, Can	2
	Stony Plain, AB, Can	Athabasca, AB, Can	1
	Strathcona County, AB,	Westlock, AB, Can	1
	Strathmore, AB, Can	Westlock County, AB, C	1
	Sturgeon County, AB, Ca	Atmore, AB, Can	1

Exhibit C 2 - Site 1: Hwy 2 - North of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Sturgeon County, AB, Ca	Boyle, AB, Can	2
		Clyde, AB, Can	3
		Conklin, AB, Can	1
		Fort McMurray, AB, Can	1
		Grassland, AB, Can	2
		High Prairie, AB, Can	1
		La Crete, AB, Can	2
		Rochester, AB, Can	1
		Thorhild, AB, Can	1
		Vimy, AB, Can	2
		Westlock County, AB, C	1
		Westlock, AB, Can	2
	Vancouver, BC, Can	Fort McMurray, AB, Can	1
	Vermilion, AB, Can	Dapp, AB, Can	1
	Victoria, BC, Can	Athabasca, AB, Can	1

Total Commodity Trips for Site 1: Hwy 2 - North of Legal Outbound   **156**

Total Commodity Trips for Site 1: Hwy 2 - North of Legal   **312**

Exhibit C 3 - Site 2: Hwy 28 - North of Redwater
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Athabasca, AB, Can	Camrose, AB, Can	1
	Bonnyville, AB, Can	Edmonton, AB, Can	2
		Hinton, AB, Can	1
		St. Albert, AB, Can	2
	Boyle, AB, Can	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Caslan, AB, Can	Bon Accord, AB, Can	1
	Cold Lake, AB, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	4
	Crow Lake, AB, Can	Edmonton, AB, Can	1
	Fort MacKay, AB, Can	Nisku, AB, Can	1
	Fort McMurray, AB, Can	Calgary, AB, Can	1
		Camrose, AB, Can	1
		Edmonton, AB, Can	20
		Sturgeon County, AB, Ca	2
	Grassland, AB, Can	Sherwood Park, AB, Can	1
	La Corey, AB, Can	Edmonton, AB, Can	1
	Lac La Biche, AB, Can	Edmonton, AB, Can	2
	Meadow Lake, SK, Can	Sturgeon County, AB, Ca	2
		Whitecourt, AB, Can	1
	Radway, AB, Can	Minneapolis, MN, USA	1
		Stettler, AB, Can	1
	Smoky Lake, AB, Can	Edmonton, AB, Can	1
		Lacombe, AB, Can	1
	St. Paul, AB, Can	Edmonton, AB, Can	1
	Thorhild, AB, Can	Spruce Grove, AB, Can	1
	Vermilion, AB, Can	Redwater, AB, Can	1
	Vilna, AB, Can	Edmonton, AB, Can	1
		Vancouver, BC, Can	1
	Waskatenau, AB, Can	Sherwood Park, AB, Can	1

Total Commodity Trips for Site 2: Hwy 28 - North of Redwater Inbound　　　　**58**

Exhibit C 3 - Site 2: Hwy 28 - North of Redwater
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Athabasca, AB, Can	1
		Bonnyville, AB, Can	3
		Boyle, AB, Can	1
		Cold Lake, AB, Can	4
		Fort McMurray, AB, Can	7
		Glendon, AB, Can	1
		Iron River, AB, Can	1
		La Corey, AB, Can	1
		Lac La Biche, AB, Can	2
		Mallaig, AB, Can	2
		Smoky Lake, AB, Can	1
		St. Paul, AB, Can	1
		Vilna, AB, Can	2
		Warspite, AB, Can	1
		Waskatenau, AB, Can	1
	Gibbons, AB, Can	Boyle, AB, Can	2
	Namao, AB, Can	Waskatenau, AB, Can	1
	Nisku, AB, Can	Fort MacKay, AB, Can	2
		Vilna, AB, Can	1
	Oxbridge, ON, Can	Fort MacKay, AB, Can	1
	Parkland County, AB, Ca	Waskatenau, AB, Can	1
	Red Deer, AB, Can	Vilna, AB, Can	1
	Redwater, AB, Can	Caslan, AB, Can	1
	Salmon Arm, BC, Can	Smoky Lake, AB, Can	1
	Seba Beach, AB, Can	Vilna, AB, Can	1
	Sherwood Park, AB, Can	Fort MacKay, AB, Can	2
		Fort McMurray, AB, Can	2
	Spruce Grove, AB, Can	Fort McMurray, AB, Can	1
	St. Albert, AB, Can	Bonnyville, AB, Can	1
		Fort McMurray, AB, Can	1
	Sturgeon County, AB, Ca	Tar Island, AB, Can	1

Total Commodity Trips for Site 2: Hwy 28 - North of Redwater Outbound   **49**

Total Commodity Trips for Site 2: Hwy 28 - North of Redwater   **107**

Exhibit C 4 - Site 3: Hwy 45 - NE of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Andrew, AB, Can	Lamont County, AB, Can	1
		Legal, AB, Can	1
		Redwater, AB, Can	1
		Sturgeon County, AB, Ca	1
	Athabasca County No.12,	Fort Saskatchewan, AB,	1
		Sherwood Park, AB, Can	2
	Beauval, SK, Can	Sturgeon County, AB, Ca	1
	Bonnyville, AB, Can	Edmonton, AB, Can	10
		Fort Saskatchewan, AB,	1
		Leduc County, AB, Can	1
		Sherwood Park, AB, Can	1
		Strathcona County, AB,	1
	Boyle, AB, Can	Didsbury, AB, Can	1
		Sherwood Park, AB, Can	1
	Calgary, AB, Can	Edmonton, AB, Can	1
	Caslan, AB, Can	Morningside, AB, Can	1
	Chipman, AB, Can	Redwater, AB, Can	1
		Zama City, AB, Can	1
	Cold Lake, AB, Can	Edmonton, AB, Can	4
		Fort Saskatchewan, AB,	1
		Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	1
	Fort McMurray, AB, Can	Edmonton, AB, Can	6
		Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	1
	Kindersley, SK, Can	Sturgeon County, AB, Ca	1
	La Corey, AB, Can	Edmonton, AB, Can	1
	Lac La Biche, AB, Can	Edmonton, AB, Can	3
		Redwater, AB, Can	1
		Sherwood Park, AB, Can	1
	Lamont County, AB, Can	Edmonton, AB, Can	1
		Josephburg, AB, Can	1
		Nisku, AB, Can	1
		Redwater, AB, Can	1
		Sturgeon County, AB, Ca	1

Exhibit C 4 - Site 3: Hwy 45 - NE of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Lamont, AB, Can	Fort Saskatchewan, AB,	1
		Redwater, AB, Can	1
		Sturgeon County, AB, Ca	2
		Thorhild, AB, Can	1
	Lethbridge, AB, Can	Morinville, AB, Can	1
	Lloydminster, AB, Can	Fort Assiniboine, AB, Ca	1
	Meadow Lake, SK, Can	Fort Saskatchewan, AB,	2
	Myrnam, AB, Can	Morinville, AB, Can	1
	Radway, AB, Can	Sturgeon County, AB, Ca	1
	Ryley, AB, Can	Redwater, AB, Can	1
	Saddle Lake, AB, Can	Edmonton, AB, Can	1
	Saddle River, AB, Can	Edmonton, AB, Can	1
	Shandro, AB, Can	Cherhill, AB, Can	5
	Smoky Lake, AB, Can	Edmonton, AB, Can	2
		Fort Saskatchewan, AB,	1
		Stony Plain, AB, Can	1
		Sturgeon County, AB, Ca	3
	St. Michael, AB, Can	Redwater, AB, Can	1
	St. Paul, AB, Can	Bruderheim, AB, Can	1
		Edmonton, AB, Can	1
		Fox Creek, AB, Can	1
		Gibbons, AB, Can	2
		St. Albert, AB, Can	1
	Star, AB, Can	Sturgeon County, AB, Ca	3
	Sunan Lake, AB, Can	Sherwood Park, AB, Can	1
	Two Hill County No. 21,	Cherhill, AB, Can	1
	Two Hills, AB, Can	Morinville, AB, Can	1
	Vilna, AB, Can	Edmonton, AB, Can	4
	Warspite, AB, Can	Fort Saskatchewan, AB,	1
	Warwick, AB, Can	Redwater, AB, Can	1
	Waskatenau, AB, Can	Fort Saskatchewan, AB,	1
	Wood Buffalo, AB, Can	Edmonton, AB, Can	1
	Yorkton, SK, Can	Tiger Lily, AB, Can	1

Total Commodity Trips for Site 3: Hwy 45 - NE of Bruderheim Inbound　　　　**103**

Exhibit C 4 - Site 3: Hwy 45 - NE of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Alix, AB, Can	Fort McMurray, AB, Can	1
	Bruderheim, AB, Can	Boyle, AB, Can	1
		Hairy Hill, AB, Can	1
	Calgary, AB, Can	Fort McMurray, AB, Can	1
	Cherhill, AB, Can	Vegreville, AB, Can	1
	Clyde, AB, Can	Lloydminster, AB, Can	1
	Didsbury, AB, Can	Grassland, AB, Can	1
	Edmonton, AB, Can	Andrew, AB, Can	3
		Bonnyville, AB, Can	3
		Cold Lake, AB, Can	3
		Fort McMurray, AB, Can	6
		Glendon, AB, Can	1
		Lac La Biche, AB, Can	1
		Lamont County, AB, Can	1
		Smoky Lake, AB, Can	1
		St. Paul, AB, Can	2
		St. Vincent, AB, Can	2
		Vilna, AB, Can	3
	Fort Saskatchewan, AB,	Athabasca, AB, Can	1
		Boyle, AB, Can	1
		Cold Lake, AB, Can	1
		Elk Point, AB, Can	1
		Fort McMurray, AB, Can	1
		Smoky Lake County, AB,	1
	Gaudin, AB, Can	Lamont County, AB, Can	1
	Gibbons, AB, Can	St. Paul, AB, Can	1
	Josephburg, AB, Can	Willingdon, AB, Can	1
	Lamont County, AB, Can	Smoky Lake, AB, Can	1
		Star, AB, Can	2
	Legal, AB, Can	Myrnam, AB, Can	1
	Nisku, AB, Can	Bonnyville, AB, Can	3
		Fort McMurray, AB, Can	2
	Radway, AB, Can	Lamont, AB, Can	1
	Red Deer, AB, Can	Smoky Lake, AB, Can	1
	Redwater, AB, Can	Andrew, AB, Can	1

Exhibit C 4 - Site 3: Hwy 45 - NE of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Redwater, AB, Can	Chipman, AB, Can	1
		Lamont County, AB, Can	1
		Ryley, AB, Can	1
		St. Michael, AB, Can	1
		Warwick, AB, Can	1
	Sherwood Park, AB, Can	Bonnyville, AB, Can	2
		Cold Lake, AB, Can	3
		Fort McMurray, AB, Can	2
		Foster Creek, AB, Can	1
		Lac La Biche, AB, Can	2
		Lakeland County, AB, Ca	1
		Lamont County, AB, Can	1
		Waskatenau, AB, Can	1
	Spruce Grove, AB, Can	Spedden, AB, Can	2
	Strathcona County, AB,	Athabasca County No.12,	1
		Minburn, AB, Can	1
	Sturgeon County, AB, Ca	, SK, Can	1
		Elk Point, AB, Can	1
		Lamont County, AB, Can	2
		Lamont, AB, Can	4
		Meadow Lake, SK, Can	1
		Smoky Lake, AB, Can	4
		Vegreville, AB, Can	1
		Warspite, AB, Can	1
		Wood Buffalo, AB, Can	1
	Villeneuve, AB, Can	Andrew, AB, Can	1

Total Commodity Trips for Site 3: Hwy 45 - NE of Bruderheim Outbound   **93**

Total Commodity Trips for Site 3: Hwy 45 - NE of Bruderheim   **196**

Exhibit C 5 - Site 4: Hwy 15 - East of SH 637 East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Andrew, AB, Can	Redwater, AB, Can	1
	Buffalo Narrows, SK, Ca	Fort Saskatchewan, AB,	1
	Calgary, AB, Can	Fort McMurray, AB, Can	1
	Cold Lake, AB, Can	Edmonton, AB, Can	1
	Edmonton, AB, Can	Camrose, AB, Can	1
	Elk Point, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	1
	Fort McMurray, AB, Can	Edmonton, AB, Can	1
	Killam, AB, Can	Fort Saskatchewan, AB,	1
	Knelbursg, SK, Can	Bruderheim, AB, Can	1
	Lac La Biche, AB, Can	Nisku, AB, Can	1
	Lamont County, AB, Can	Dapp, AB, Can	1
		Fox Creek, AB, Can	1
	Lamont, AB, Can	Bruderheim, AB, Can	3
		Delburne, AB, Can	1
		Edmonton, AB, Can	9
		Fort Saskatchewan, AB,	2
		Lacombe, AB, Can	1
		Lamont County, AB, Can	1
		Legal, AB, Can	1
		Morinville, AB, Can	1
		Parkland County, AB, Ca	1
		Sturgeon County, AB, Ca	1
		Wetaskiwin, AB, Can	1
	Lavoy, AB, Can	Fort Saskatchewan, AB,	1
	Lloydminster, AB, Can	Bruderheim, AB, Can	1
		Fort Saskatchewan, AB,	2
		Redwater, AB, Can	1
	Macklin, SK, Can	Morinville, AB, Can	1
	Meadow Lake, SK, Can	Sherwood Park, AB, Can	1
	Mundare, AB, Can	Bruderheim, AB, Can	1
		Fort Saskatchewan, AB,	1
		Sturgeon County, AB, Ca	1
	Neilburg, SK, Can	Fort Saskatchewan, AB,	1
		Strathcona County, AB,	1

Exhibit C 5 - Site 4: Hwy 15 - East of SH 637 East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Plamondon, AB, Can	Sherwood Park, AB, Can	1
	Ryley, AB, Can	Fort Saskatchewan, AB,	1
	Saskatoon, SK, Can	Fort Saskatchewan, AB,	1
		Sturgeon County, AB, Ca	1
	Sterling, SK, Can	Athabasca, AB, Can	1
	Stettler, AB, Can	Lamont County, AB, Can	1
	Strome, AB, Can	Legal, AB, Can	1
	Tofield, AB, Can	Fort Saskatchewan, AB,	1
	Vauxhall, AB, Can	Sturgeon County, AB, Ca	1
	Vegreville, AB, Can	Bruderheim, AB, Can	1
		Edmonton, AB, Can	1
		Fort Saskatchewan, AB,	2
		Gibbons, AB, Can	1
	Vermilion, AB, Can	Beamer, AB, Can	1
	Viking, AB, Can	Fort Saskatchewan, AB,	1
	Waco, TX, USA	Fort Saskatchewan, AB,	1
	Waskatenau, AB, Can	Olds, AB, Can	1
	Winnipeg, MB, Can	Fort Saskatchewan, AB,	1

Total Commodity Trips for Site 4: Hwy 15 - East of SH 637 East of Bruderheim Inbound　　**66**

Exhibit C 5 - Site 4: Hwy 15 - East of SH 637 East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	, AB, Can	Lac La Biche, AB, Can	1
	Beamer, AB, Can	Wakaw, SK, Can	1
	Blue Ridge, AB, Can	Lloydminster, AB, Can	1
		Saskatoon, SK, Can	1
	Bon Accord, AB, Can	Strome, AB, Can	1
	Bruderheim, AB, Can	Lamont, AB, Can	2
		Mundare, AB, Can	1
	Dapp, AB, Can	Lamont, AB, Can	1
	Edmonton, AB, Can	Andrew, AB, Can	1
		Grassland, AB, Can	2
		Lamont, AB, Can	15
		Saskatoon, SK, Can	1
		St. Walburg, SK, Can	1
		Winnipeg, MB, Can	1
	Fort Saskatchewan, AB,	Baldur, MB, Can	1
		Boissevain, MB, Can	1
		Brandon, MB, Can	1
		Chipman, AB, Can	1
		Killam, AB, Can	1
		Lavoy, AB, Can	1
		Leoville, SK, Can	2
		Lloydminster, AB, Can	1
		Maidstone, SK, Can	1
		Meadow Lake, SK, Can	1
		Neilburg, SK, Can	1
		Paradise Hill, SK, Can	1
		Regina, SK, Can	1
		Ryley, AB, Can	1
		Saskatoon, SK, Can	1
		Sedgewick, AB, Can	1
		Vermilion, AB, Can	1
		Viking, AB, Can	2
	Lacombe, AB, Can	Lamont, AB, Can	1
	Lamont County, AB, Can	Lamont, AB, Can	1
	Legal, AB, Can	Strome, AB, Can	1

Exhibit C 5 - Site 4: Hwy 15 - East of SH 637 East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Morinville, AB, Can	Saskatoon, SK, Can	1
	Onoway, AB, Can	Bonnyville, AB, Can	1
	Redwater, AB, Can	Lamont, AB, Can	1
		Lloydminster, AB, Can	1
		Vermilion, AB, Can	1
	Sherwood Park, AB, Can	Lamont, AB, Can	3
		Mundare, AB, Can	1
	St. Albert, AB, Can	Lloydminster, AB, Can	1
	Strathcona County, AB,	Caslan, AB, Can	1
		Lamont, AB, Can	2
		Mundare, AB, Can	1
		Vegreville, AB, Can	1
	Sturgeon County, AB, Ca	Estevan, SK, Can	1
		Lamont, AB, Can	1
		Lavoy, AB, Can	1
		Lloydminster, AB, Can	1
		Mundare, AB, Can	1
		Paradise Hill, SK, Can	1
		Saskatoon, SK, Can	1
	Wetaskiwin, AB, Can	Lamont, AB, Can	1

Total Commodity Trips for Site 4: Hwy 15 - East of SH 637 East of Bruderheim Outbound   **76**

Total Commodity Trips for Site 4: Hwy 15 - East of SH 637 East of Bruderheim   **142**

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Alexander, IA, USA	Fairbanks, AK, USA	1
	Andrew, AB, Can	Edmonton, AB, Can	1
	Ardrossan, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Barrie, ON, Can	Swan Hills, AB, Can	1
	Beauvallon, AB, Can	Nisku, AB, Can	1
	Bolton, ON, Can	Calgary, AB, Can	1
	Bonnyville, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	1
	Brandon, MB, Can	Edmonton, AB, Can	2
		Spokane, WA, USA	1
	Chaska, MN, USA	Edmonton, AB, Can	1
	Chipman, AB, Can	Edmonton, AB, Can	2
		Niton Junction, AB, Can	1
		Parkland County, AB, Ca	2
		Red Deer, AB, Can	1
	Cold Lake, AB, Can	Edmonton, AB, Can	1
	Concord, ON, Can	Edmonton, AB, Can	1
	Dalmeny, SK, Can	Edmonton, AB, Can	1
	Delmas, SK, Can	Sherwood Park, AB, Can	1
	Duggan, AB, Can	Strathcona County, AB,	3
	Elk Island National Park,	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Elk Point, AB, Can	Athabasca, AB, Can	1
		Calgary, AB, Can	1
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Estevan, SK, Can	Nisku, AB, Can	1
	Glaslyn, SK, Can	Edmonton, AB, Can	1
	Innisfree, AB, Can	Edmonton, AB, Can	2
	Josephburg, AB, Can	Edmonton, AB, Can	1
	Keeler, SK, Can	Edmonton, AB, Can	1
	Kenly, NC, USA	Edmonton, AB, Can	2
	Kindersley, SK, Can	Leduc, AB, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	La Corey, AB, Can	Edmonton, AB, Can	2
	Lac La Biche, AB, Can	Edmonton, AB, Can	1
	Lamont County, AB, Can	Edmonton, AB, Can	3
		Nisku, AB, Can	1
	Lashburn, SK, Can	Edmonton, AB, Can	3
	Lavoy, AB, Can	Edmonton, AB, Can	2
	Lindbergh, AB, Can	Edmonton, AB, Can	2
		Kamloops, BC, Can	1
		Red Deer, AB, Can	1
	Lloydminster, AB, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	44
		Grande Prairie, AB, Can	1
		High River, AB, Can	1
		Leduc, AB, Can	2
		Lillooet, BC, Can	1
		Medicine Hat, AB, Can	1
		Nisku, AB, Can	4
		Onoway, AB, Can	1
		Peace River, AB, Can	1
		Sherwood Park, AB, Can	9
		Spruce Grove, AB, Can	1
		St. Albert, AB, Can	1
		Warburg, AB, Can	1
		Whitecourt, AB, Can	1
	London, ON, Can	Sturgeon County, AB, Ca	1
	Maidstone, SK, Can	Edmonton, AB, Can	3
	Mannville, AB, Can	Edmonton, AB, Can	1
		Stony Plain, AB, Can	1
	Marshall, SK, Can	Wabamun, AB, Can	1
	Meadow Lake, SK, Can	Whitecourt, AB, Can	1
	Mississauga, ON, Can	Edmonton, AB, Can	4
	Montreal, QC, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
	Mundare, AB, Can	Edmonton, AB, Can	6
		Nisku, AB, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Mundare, AB, Can	Sherwood Park, AB, Can	1
	North Battleford, SK, Ca	Canmore, AB, Can	1
		Edmonton, AB, Can	6
	Oakville, ON, Can	Strathcona County, AB,	1
	Payton, ON, Can	Mayerthorpe, AB, Can	1
	Portage La Prairie, MB,	Morinville, AB, Can	1
	Pramalea, ON, Can	Edmonton, AB, Can	1
	Provost, AB, Can	Edmonton, AB, Can	1
	Radisson, SK, Can	Edmonton, AB, Can	1
	Regina, SK, Can	Burnaby, BC, Can	1
		Edmonton, AB, Can	2
		Fort Saskatchewan, AB,	1
		Sherwood Park, AB, Can	1
	Reston, MB, Can	Edmonton, AB, Can	1
	Ryley, AB, Can	Sherwood Park, AB, Can	1
		Strathcona County, AB,	1
	Saskatoon, SK, Can	Blue Ridge, AB, Can	1
		Edmonton, AB, Can	14
		Edson, AB, Can	1
		Grande Prairie, AB, Can	1
		Hinton, AB, Can	1
		Manning, AB, Can	1
		Sherwood Park, AB, Can	2
		Vancouver, BC, Can	1
	Sherwood Park, AB, Can	Strathcona County, AB,	1
	St. Jean, MB, Can	Edmonton, AB, Can	1
	St. Paul, AB, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	1
		Parkland County, AB, Ca	1
	Stales, NE, USA	Sherwood Park, AB, Can	1
	Strathcona County, AB,	Ardrossan, AB, Can	1
		Edmonton, AB, Can	4
		Fort Saskatchewan, AB,	5
		Sherwood Park, AB, Can	2
		St. Albert, AB, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Strathcona County, AB,	Strathcona County, AB,	2
	Sudbury, ON, Can	Edmonton, AB, Can	1
	Tofield, AB, Can	Edmonton, AB, Can	1
		Fort Saskatchewan, AB,	1
	Toronto, ON, Can	Airdrie, AB, Can	1
		Edmonton, AB, Can	2
	Trident, MB, Can	Sherwood Park, AB, Can	1
	Two Hills, AB, Can	Edmonton, AB, Can	4
		Strathmore, AB, Can	1
	Vanscoy, SK, Can	Morinville, AB, Can	1
		Parkland County, AB, Ca	2
	Vegreville, AB, Can	Edmonton, AB, Can	18
		Fort Saskatchewan, AB,	1
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	3
		Slave Lake, AB, Can	1
		Stony Plain, AB, Can	1
		Sturgeon County, AB, Ca	1
		Whitecourt, AB, Can	1
	Vermilion, AB, Can	Edmonton, AB, Can	10
		Nisku, AB, Can	1
		Sherwood Park, AB, Can	2
		St. Albert, AB, Can	1
		Stony Plain, AB, Can	1
		Sturgeon County, AB, Ca	1
	Viking, AB, Can	Edmonton, AB, Can	1
		Langley, BC, Can	1
	Wainwright, AB, Can	Edmonton, AB, Can	3
	Wheatland, AB, Can	Parkland County, AB, Ca	1
	Willingdon, AB, Can	Parkland County, AB, Ca	1
	Winnipeg, MB, Can	Athabasca, AB, Can	1
		Brooks, AB, Can	1
		Edmonton, AB, Can	10
		Grande Prairie, AB, Can	1
		Red Deer, AB, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Winnipeg, MB, Can	Vancouver, BC, Can	1
	Wisconsin Rapids, WI, U	Edmonton, AB, Can	1
	Wynyard, SK, Can	Edmonton, AB, Can	1

Total Commodity Trips for Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale Inbound   **298**

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Barrhead, AB, Can	, MO, USA	1
		Perryville, MO, USA	1
	Burnaby, BC, Can	Saskatoon, SK, Can	1
	Calgary, AB, Can	Innisfree, AB, Can	1
		Lloydminster, AB, Can	3
		Meadow Lake, SK, Can	1
		North Battleford, SK, Ca	1
		Vegreville, AB, Can	6
		Viking, AB, Can	1
	Clyde, AB, Can	Vermilion, AB, Can	1
	Delta, BC, Can	Montreal, QC, Can	1
	Devon, AB, Can	St. Paul, AB, Can	1
	Eckville, AB, Can	Dewberry, AB, Can	1
	Edmonton, AB, Can	, IA, USA	2
		, IL, USA	1
		, MB, Can	1
		, MN, USA	1
		, MO, USA	1
		, ON, Can	2
		, SK, Can	2
		Belle Plaine, SK, Can	4
		Booseman, SK, Can	1
		Brandon, MB, Can	1
		Burlington, ON, Can	1
		Calgary, AB, Can	1
		Cambridge, ON, Can	1
		Chicago, IL, USA	4
		Chipman, AB, Can	1
		Cooking Lake, AB, Can	1
		Dewberry, AB, Can	1
		Elk Point, AB, Can	2
		Estevan, SK, Can	1
		Hague, SK, Can	1
		Hamlet, NC, USA	1
		Houston, TX, USA	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Kansas City, KS, USA	1
		Kitscoty, AB, Can	1
		Lamont County, AB, Can	1
		Langham, SK, Can	1
		Lavoy, AB, Can	2
		Lloydminster, AB, Can	22
		Mannville, AB, Can	1
		Meadow Lake, SK, Can	1
		Middle Lake, SK, Can	1
		Minburn, AB, Can	2
		Minneapolis, MN, USA	1
		Monticello, GA, USA	1
		Mundare, AB, Can	1
		North Battleford, SK, Ca	2
		Oklahoma City, OK, US	1
		Oshawa, ON, Can	1
		Port Hope, ON, Can	1
		Rabbit Lake, SK, Can	1
		Regina, SK, Can	9
		Rocky, OK, USA	1
		Saskatoon, SK, Can	22
		Scarborough, ON, Can	1
		Selkirk, MB, Can	1
		St. Paul, AB, Can	2
		Steinbach, MB, Can	1
		Tofield, AB, Can	1
		Two Hills, AB, Can	1
		Vegreville, AB, Can	15
		Vermilion, AB, Can	6
		Winnipeg, MB, Can	14
	Edson, AB, Can	Cold Lake, AB, Can	1
		Miami, FL, USA	1
		Quebec City, QC, Can	1
	Fort Saskatchewan, AB,	Strathcona County, AB,	5
	Fort St. John, BC, Can	Brandon, MB, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Fox Creek, AB, Can	Lloydminster, AB, Can	1
	Grande Prairie, AB, Can	Ghruebers, SK, Can	1
		Lloydminster, AB, Can	1
		Winnipeg, MB, Can	1
	Hay Lakes, AB, Can	Mundare, AB, Can	1
	High River, AB, Can	Vegreville, AB, Can	1
	Hinton, AB, Can	Winnipeg, MB, Can	1
	Langley, BC, Can	Binora, ON, Can	1
		Lloydminster, AB, Can	1
		Winnipeg, MB, Can	1
	Leduc, AB, Can	Lloydminster, AB, Can	1
	Legal, AB, Can	Fisher Branch, MB, Can	1
	Mirror, AB, Can	Lloydminster, AB, Can	1
	Morinville, AB, Can	Prince Albert, SK, Can	1
	Neerlandia, AB, Can	Ranfurly, AB, Can	1
	New Sarepta, AB, Can	Elk Island National Park,	2
	Nisku, AB, Can	Brunt Hall, MB, Can	1
		Chipman, AB, Can	1
		Druidsan, SK, Can	1
		Estevan, SK, Can	1
		La Rouge, SK, Can	1
		Lloydminster, AB, Can	1
		Mannville, AB, Can	1
		Mundare, AB, Can	1
		North Battleford, SK, Ca	1
		Prince Albert, SK, Can	1
		Saskatoon, SK, Can	1
		Two Hills, AB, Can	2
		Vegreville, AB, Can	1
	Niton Junction, AB, Can	Tempest, AB, Can	1
	Parkland County, AB, Ca	Anahana, SK, Can	1
		Chipman, AB, Can	1
		Estevan, SK, Can	1
		Kenora, ON, Can	1
	Peace River, AB, Can	Eshewan, SK, Can	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Prince George, BC, Can	Strathcona County, AB,	1
		Winnipeg, MB, Can	1
	Sherwood Park, AB, Can	, OK, USA	1
		, ON, Can	1
		Chicago, IL, USA	1
		Chipman, AB, Can	1
		Elk Island National Park,	1
		Endley, SK, Can	1
		La Ronge, SK, Can	1
		Lloydminster, AB, Can	7
		Marshall, SK, Can	1
		Mundare, AB, Can	1
		Oakville, ON, Can	1
		Saskatoon, SK, Can	4
		Steinbach, MB, Can	1
		Strathcona County, AB,	1
		Strongsville, OH, USA	1
		Tacomas, SK, Can	1
		Winnipeg, MB, Can	1
	Slave Lake, AB, Can	San Antonio, TX, USA	1
		Windsor, ON, Can	1
	Spruce Grove, AB, Can	Vegreville, AB, Can	1
	St. Albert, AB, Can	Lloydminster, AB, Can	1
	Strathcona County, AB,	Duggan, AB, Can	4
		Lloydminster, AB, Can	3
	Sturgeon County, AB, Ca	Dundurn, SK, Can	4
		Saskatoon, SK, Can	1
		Wainwright, AB, Can	1
	Surrey, BC, Can	Lloydminster, AB, Can	1
	Valleyview, AB, Can	Provost, AB, Can	2
		Saskatoon, SK, Can	1
	Vancouver, BC, Can	Brantford, ON, Can	1
		Saskatoon, SK, Can	3
	Wetaskiwin, AB, Can	Two Hills, AB, Can	1
	Whitecourt, AB, Can	, OH, USA	1

Exhibit C 6 - Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Whitecourt, AB, Can	Glenella, MB, Can	1
		Lloydminster, AB, Can	1
		Meadow Lake, SK, Can	1
		Winnipeg, MB, Can	1
	Winfield, BC, Can	Saskatoon, SK, Can	1
	Yellowhead County Nort	Strathcona County, AB,	1

Total Commodity Trips for Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh Scale Outbound   **275**

Total Commodity Trips for Site 5: Hwy 16 East - East of SH 830 Ardrossan Weigh   **573**

Exhibit C 7 - Site 6: Hwy 14 - West of SH 630 - West of Tofield
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Beaver County, AB, Can	Strathcona County, AB,	1
	Belleford, SK, Can	Nisku, AB, Can	1
	Brooks, AB, Can	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Chauvin, AB, Can	Edmonton, AB, Can	2
	Coronation, AB, Can	Edmonton, AB, Can	1
	Czar, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Duchess, AB, Can	Edmonton, AB, Can	1
	Forestburg, AB, Can	Edmonton, AB, Can	2
	Great Falls, MT, USA	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Hanna, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Hardisty, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Heisler, AB, Can	Edmonton, AB, Can	1
	Holden, AB, Can	Sherwood Park, AB, Can	1
	Irma, AB, Can	Leduc, AB, Can	1
		Redwater, AB, Can	1
		Sherwood Park, AB, Can	1
	Kindersley, SK, Can	Edmonton, AB, Can	1
	Kinsella, AB, Can	Edmonton, AB, Can	1
	Maple Creek, SK, Can	Edmonton, AB, Can	1
	Marsden, SK, Can	Edmonton, AB, Can	2
	Medicine Hat, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	2
	North Battleford, SK, Ca	Edmonton, AB, Can	1
	Provost, AB, Can	Edmonton, AB, Can	6
		Fort Saskatchewan, AB,	1
		Morinville, AB, Can	1
		Sherwood Park, AB, Can	1
		Strathcona County, AB,	1
	Redcliff, AB, Can	Edmonton, AB, Can	1
	Regina, SK, Can	Edmonton, AB, Can	1

Exhibit C 7 - Site 6: Hwy 14 - West of SH 630 - West of Tofield
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Round Hill, AB, Can	Edmonton, AB, Can	2
	Ryley, AB, Can	Edmonton, AB, Can	1
		Leduc County, AB, Can	1
		Sherwood Park, AB, Can	16
		Strathcona County, AB,	1
	Sedgewick, AB, Can	Edmonton, AB, Can	1
	St. Paul, AB, Can	Edmonton, AB, Can	1
	Strome, AB, Can	Sherwood Park, AB, Can	1
	Taber, AB, Can	Edmonton, AB, Can	1
	Tofield, AB, Can	Edmonton, AB, Can	11
		Fort McMurray, AB, Can	1
		High Level, AB, Can	1
		Jidaro Valley, AB, Can	1
		Sherwood Park, AB, Can	3
		Strathcona County, AB,	4
	Viking, AB, Can	Edmonton, AB, Can	7
		Leduc County, AB, Can	1
		Nisku, AB, Can	2
	Wainwright, AB, Can	Calahoo, AB, Can	1
		Devon, AB, Can	1
		Edmonton, AB, Can	14
		Parkland County, AB, Ca	1
		Sherwood Park, AB, Can	4
		St. Albert, AB, Can	1
		Stony Plain, AB, Can	1

Total Commodity Trips for Site 6: Hwy 14 - West of SH 630 - West of Tofield Inbound **124**

Exhibit C 7 - Site 6: Hwy 14 - West of SH 630 - West of Tofield
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Calmar, AB, Can	Bruce, AB, Can	1
	Cooking Lake, AB, Can	Ryley, AB, Can	1
	Devon, AB, Can	Chauvin, AB, Can	1
	Edmonton, AB, Can	Brooks, AB, Can	1
		Bruce, AB, Can	2
		Clandonald, AB, Can	1
		Gadsby, AB, Can	1
		Great Falls, MT, USA	1
		Hardisty, AB, Can	1
		Holden, AB, Can	1
		Irma, AB, Can	2
		Killam, AB, Can	2
		Kinsella, AB, Can	3
		Lloydminster, AB, Can	1
		Medicine Hat, AB, Can	1
		Provost, AB, Can	2
		Regina, SK, Can	1
		Richardton, ND, USA	1
		Richmond, SK, Can	1
		Ryley, AB, Can	1
		Sedgewick, AB, Can	3
		Tofield, AB, Can	11
		Unity, SK, Can	3
		Vegreville, AB, Can	1
		Veteran, AB, Can	1
		Viking, AB, Can	5
		Wainwright, AB, Can	9
		Winnipeg, MB, Can	1
	Fort Saskatchewan, AB,	Czar, AB, Can	1
		Forestburg, AB, Can	1
		Provost, AB, Can	1
		Saskatoon, SK, Can	1
		Wainwright, AB, Can	1
	Jidaro Valley, AB, Can	Tofield, AB, Can	1
	Lamont County, AB, Can	Lougheed, AB, Can	1

Exhibit C 7 - Site 6: Hwy 14 - West of SH 630 - West of Tofield
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Leduc, AB, Can	Edgerton, AB, Can	1
	Morinville, AB, Can	Wainwright, AB, Can	1
	Namao, AB, Can	Macklin, SK, Can	1
		Wainwright, AB, Can	1
	Nisku, AB, Can	Chauvin, AB, Can	1
		Cold Lake, AB, Can	1
		Lloydminster, AB, Can	2
		Viking, AB, Can	1
	Parkland County, AB, Ca	Viking, AB, Can	1
	Red Deer, AB, Can	Tofield, AB, Can	1
	Red Earth Creek, AB, Ca	Hughenden, AB, Can	1
	Redwater, AB, Can	Cutknife, SK, Can	1
		Irma, AB, Can	1
	Rocky Mountain House,	Irma, AB, Can	1
	Sherwood Park, AB, Can	Czar, AB, Can	1
		Hardisty, AB, Can	3
		Kerrobert, SK, Can	1
		Provost, AB, Can	2
		Ryley, AB, Can	17
		Tofield, AB, Can	2
		Unity, SK, Can	2
		Viking, AB, Can	1
		Wainwright, AB, Can	1
	Stony Plain, AB, Can	Wainwright, AB, Can	1
	Strathcona County, AB,	Beaver County, AB, Can	2
		Cactus Lake, SK, Can	1
		Camrose, AB, Can	1
		Tofield, AB, Can	1
	Sturgeon County, AB, Ca	Wainwright, AB, Can	2
	Yellowknife, NT, Can	Kinsella, AB, Can	1

Total Commodity Trips for Site 6: Hwy 14 - West of SH 630 - West of Tofield Outbound **121**

Total Commodity Trips for Site 6: Hwy 14 - West of SH 630 - West of Tofield **245**

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Alix, AB, Can	Sturgeon County, AB, Ca	1
	Big Valley, AB, Can	Sherwood Park, AB, Can	1
	Bittern Lake, AB, Can	Edmonton, AB, Can	3
	Calgary, AB, Can	Fort McMurray, AB, Can	2
	Camrose, AB, Can	Beaumont, AB, Can	2
		Boyle, AB, Can	1
		Calahoo, AB, Can	1
		Devon, AB, Can	1
		Edmonton, AB, Can	40
		Fort Saskatchewan, AB,	3
		Leduc County, AB, Can	3
		Leduc, AB, Can	1
		New Sarepta, AB, Can	2
		Nisku, AB, Can	10
		Parkland County, AB, Ca	1
		Redwater, AB, Can	2
		Sherwood Park, AB, Can	4
		St. Albert, AB, Can	2
		Strathcona County, AB,	2
		Sturgeon County, AB, Ca	2
	Castor, AB, Can	Sherwood Park, AB, Can	1
		Whitecourt, AB, Can	1
	Clive, AB, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
	Coronation, AB, Can	Edmonton, AB, Can	1
	Daysland, AB, Can	Edmonton, AB, Can	2
		Sturgeon County, AB, Ca	3
	Donalda, AB, Can	Edmonton, AB, Can	1
	Drumheller, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	2
	Estevan, SK, Can	Edmonton, AB, Can	1
	Ferintosh, AB, Can	Edmonton, AB, Can	3
		Leduc County, AB, Can	2
		Strathcona County, AB,	40
	Forestburg, AB, Can	Edmonton, AB, Can	3

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Forestburg, AB, Can	Sturgeon County, AB, Ca	1
	Hanna, AB, Can	Edmonton, AB, Can	1
	Hardisty, AB, Can	Edmonton, AB, Can	2
		Nisku, AB, Can	1
		Winterburn, AB, Can	1
	Hay Lakes, AB, Can	Edmonton, AB, Can	6
		Leduc, AB, Can	1
		New Sarepta, AB, Can	1
	Hays, AB, Can	Hinton, AB, Can	1
	Heisler, AB, Can	New Sarepta, AB, Can	1
		Parkland County, AB, Ca	1
		Westlock, AB, Can	1
	High River, AB, Can	Sherwood Park, AB, Can	1
	Hughenden, AB, Can	Slave Lake, AB, Can	1
	Killam, AB, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
	Kingman, AB, Can	Leduc, AB, Can	1
	Linden, AB, Can	Sturgeon County, AB, Ca	1
	Meeting Creek, AB, Can	Edmonton, AB, Can	1
	Mirror, AB, Can	Waskatenau, AB, Can	1
	Nevis, AB, Can	Edmonton, AB, Can	1
	New Norway, AB, Can	Edmonton, AB, Can	3
	Oyen, AB, Can	Edmonton, AB, Can	1
	Ponoka, AB, Can	Redwater, AB, Can	1
	Provost, AB, Can	Edmonton, AB, Can	2
		Nisku, AB, Can	3
		Sherwood Park, AB, Can	1
	Red Deer, AB, Can	Sherwood Park, AB, Can	1
		Strathcona County, AB,	1
	Red Willow, AB, Can	Strathcona County, AB,	1
	Round Hill, AB, Can	Leduc, AB, Can	1
	Sedgewick, AB, Can	Edmonton, AB, Can	1
	Stettler, AB, Can	Edmonton, AB, Can	8
		Nisku, AB, Can	3
		Redwater, AB, Can	1

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Stettler, AB, Can	Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	2
	Strathmore, AB, Can	Lamont, AB, Can	1
		Sturgeon County, AB, Ca	1
	Strome, AB, Can	Sherwood Park, AB, Can	1
		Vancourt, BC, Can	1
	Swift Current, SK, Can	Nisku, AB, Can	1
	Taber, AB, Can	Nisku, AB, Can	1
		Sturgeon County, AB, Ca	1
	Three Hills, AB, Can	Sherwood Park, AB, Can	1
	Trochu, AB, Can	Leduc, AB, Can	1
		Sherwood Park, AB, Can	1
	Wetaskiwin, AB, Can	Redwater, AB, Can	1
		Strathcona County, AB,	1
		Sturgeon County, AB, Ca	1

Total Commodity Trips for Site 7: Hwy 21 - South of Sh 623 - South of New Serepta Inbound   **218**

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Athabasca, AB, Can	Brooks, AB, Can	1
		Killam, AB, Can	1
	Boyle, AB, Can	Lacombe, AB, Can	2
	Bruderheim, AB, Can	Camrose, AB, Can	1
		Stettler, AB, Can	2
	Calmar, AB, Can	Coronation, AB, Can	1
	Cooking Lake, AB, Can	Pigeon Lake, AB, Can	1
	Edmonton, AB, Can	Alix, AB, Can	1
		Bashaw, AB, Can	4
		Bittern Lake, AB, Can	5
		Bodo, AB, Can	1
		Brooks, AB, Can	4
		Calgary, AB, Can	1
		Camrose County, AB, Ca	1
		Camrose, AB, Can	48
		Carseland, AB, Can	1
		Castor, AB, Can	1
		Clive, AB, Can	1
		Daysland, AB, Can	1
		Drumheller, AB, Can	1
		Ferintosh, AB, Can	3
		Forestburg, AB, Can	2
		Halkirk, AB, Can	1
		Hanna, AB, Can	4
		Hardisty, AB, Can	2
		Hay Lakes, AB, Can	1
		Kindersley, SK, Can	1
		Lougheed, AB, Can	1
		New Norway, AB, Can	2
		Paintearth County, AB, C	2
		Provost, AB, Can	1
		Red Deer, AB, Can	2
		Santa Clara, CA, USA	1
		Sedgewick, AB, Can	1
		Stettler, AB, Can	3

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Strathmore, AB, Can	1
		Strome, AB, Can	1
		Three Hills, AB, Can	1
		Trochu, AB, Can	1
		Wetaskiwin, AB, Can	1
	Fort McMurray, AB, Can	Strathmore, AB, Can	1
	Fort Saskatchewan, AB,	Calgary, AB, Can	2
		Edberg, AB, Can	1
		Ponoka, AB, Can	1
		Red Deer, AB, Can	1
	Fox Creek, AB, Can	Stettler, AB, Can	1
	Hairy Hill, AB, Can	High River, AB, Can	1
	Lamont, AB, Can	Elnora, AB, Can	3
	Leduc County, AB, Can	Camrose, AB, Can	2
		Swift Current, SK, Can	1
		Wetaskiwin County, AB,	1
	Leduc, AB, Can	Camrose County, AB, Ca	1
		Camrose, AB, Can	2
		Kingman, AB, Can	1
	Legal, AB, Can	Haynes, AB, Can	1
	Looma, AB, Can	Hay Lakes, AB, Can	1
	Manning, AB, Can	Camrose, AB, Can	1
	New Sarepta, AB, Can	Camrose, AB, Can	1
		Hay Lakes, AB, Can	1
	Nisku, AB, Can	Bawlf, AB, Can	1
		Brooks, AB, Can	4
		Drumheller, AB, Can	2
		Hanna, AB, Can	1
		Hay Lakes, AB, Can	3
		Joffre, AB, Can	1
		Provost, AB, Can	3
		Stettler, AB, Can	1
	Parkland County, AB, Ca	Camrose, AB, Can	2
		Hardisty, AB, Can	2
	Quesnel, BC, Can	Warman, SK, Can	1

Exhibit C 8 - Site 7: Hwy 21 - South of Sh 623 - South of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Redwater, AB, Can	Camrose, AB, Can	1
	Sherwood Park, AB, Can	Bashaw, AB, Can	1
		Camrose, AB, Can	6
		Forestburg, AB, Can	3
		Nevis, AB, Can	1
		Ohaton, AB, Can	1
		Red Deer, AB, Can	1
		Sparwood, BC, Can	2
		Stettler, AB, Can	3
	Spruce Grove, AB, Can	Stettler, AB, Can	1
	St. Albert, AB, Can	Bawlf, AB, Can	1
	Star, AB, Can	Strathmore, AB, Can	1
	Strathcona County, AB,	Bashaw, AB, Can	1
		Battle River, SK, Can	1
		Camrose County, AB, Ca	5
		Camrose, AB, Can	2
		Ferintosh, AB, Can	25
		Nevis, AB, Can	1
	Sturgeon County, AB, Ca	Alix, AB, Can	1
		Calgary, AB, Can	1
		Camrose, AB, Can	4
		Daysland, AB, Can	2
		Lacombe, AB, Can	1
		Linden, AB, Can	2
		Stettler, AB, Can	5
		Strome, AB, Can	1
	Waskatenau, AB, Can	Linden, AB, Can	1
		Mirror, AB, Can	1
	Whitecourt, AB, Can	Unity, SK, Can	1

Total Commodity Trips for Site 7: Hwy 21 - South of Sh 623 - South of New Serepta Outbound   **233**

Total Commodity Trips for Site 7: Hwy 21 - South of Sh 623 - South of New Serepta   **451**

Exhibit C 9 - Site 8: Hwy 2A - South of SH 616 - South of Kavanagh
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Blackfalds, AB, Can	Nisku, AB, Can	1
	Calgary, AB, Can	Edmonton, AB, Can	1
		Redwater, AB, Can	1
	Claresholm, AB, Can	Edmonton, AB, Can	1
	Hobbema, AB, Can	Edmonton, AB, Can	2
	Hughenden, AB, Can	Drayton Valley, AB, Can	1
	Innisfail, AB, Can	Edmonton, AB, Can	1
	Killam, AB, Can	Stony Plain, AB, Can	1
	Leduc County, AB, Can	Leduc, AB, Can	1
	Millet, AB, Can	Barrhead, AB, Can	1
		Edmonton, AB, Can	1
		Leduc County, AB, Can	1
		Leduc, AB, Can	4
		Nisku, AB, Can	1
		Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	1
	Ponoka, AB, Can	Devon, AB, Can	1
		Edmonton, AB, Can	2
	Stettler, AB, Can	Tofield, AB, Can	1
	Wetaskiwin County, AB,	Nisku, AB, Can	1
	Wetaskiwin, AB, Can	Calmar, AB, Can	2
		Devon, AB, Can	2
		Edmonton, AB, Can	43
		Leduc County, AB, Can	5
		Leduc, AB, Can	7
		Nisku, AB, Can	3
		Parkland County, AB, Ca	1
		St. Albert, AB, Can	1
	White Rock, BC, Can	St. Albert, AB, Can	1

Total Commodity Trips for Site 8: Hwy 2A - South of SH 616 - South of Kavanagh Inbound   **90**

Exhibit C 9 - Site 8: Hwy 2A - South of SH 616 - South of Kavanagh
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Barrhead, AB, Can	Wetaskiwin, AB, Can	1
	Devon, AB, Can	Ponoka, AB, Can	2
	Donnelly, AB, Can	Camrose, AB, Can	1
	Drayton Valley, AB, Can	Hughenden, AB, Can	1
	Edmonton, AB, Can	Airdrie, AB, Can	1
		Bittern Lake, AB, Can	1
		Blackie, AB, Can	1
		Calgary, AB, Can	2
		Hobbema, AB, Can	2
		Lacombe County, AB, Ca	1
		Millet, AB, Can	9
		Mulhurst Bay, AB, Can	1
		Ponoka, AB, Can	5
		Red Deer, AB, Can	1
		Sedgewick, AB, Can	1
		Wetaskiwin County, AB,	3
		Wetaskiwin, AB, Can	53
	Grande Prairie, AB, Can	Wetaskiwin, AB, Can	1
	Langley, BC, Can	Red Deer, AB, Can	1
	Leduc County, AB, Can	Millet, AB, Can	1
		Wetaskiwin, AB, Can	3
	Leduc, AB, Can	Camrose, AB, Can	1
		Hobbema, AB, Can	1
		Killam, AB, Can	1
		Ma-Me-O Beach, AB, Ca	2
		Millet, AB, Can	4
		Pine Lake, AB, Can	1
		Ponoka, AB, Can	3
		Wetaskiwin, AB, Can	8
	Legal, AB, Can	Innisfail, AB, Can	1
	Nisku, AB, Can	Bittern Lake, AB, Can	1
		Blackfalds, AB, Can	1
		Millet, AB, Can	3
		Red Deer, AB, Can	4
		Wetaskiwin County, AB,	1

Exhibit C 9 - Site 8: Hwy 2A - South of SH 616 - South of Kavanagh
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Nisku, AB, Can	Wetaskiwin, AB, Can	5
	Parkland County, AB, Ca	Wetaskiwin, AB, Can	1
	Sherwood Park, AB, Can	Millet, AB, Can	1
		Wetaskiwin, AB, Can	6
	Slave Lake, AB, Can	Ponoka, AB, Can	1
	Spirit River, AB, Can	Ponoka, AB, Can	1
	Spruce Grove, AB, Can	Ponoka, AB, Can	1
		Wetaskiwin, AB, Can	1
	St. Albert, AB, Can	Wetaskiwin, AB, Can	2
	Sturgeon County, AB, Ca	Wetaskiwin, AB, Can	1
	Vancouver, BC, Can	Wetaskiwin, AB, Can	1
	Westlock, AB, Can	Wetaskiwin, AB, Can	1

Total Commodity Trips for Site 8: Hwy 2A - South of SH 616 - South of Kavanagh Outbound   **146**

Total Commodity Trips for Site 8: Hwy 2A - South of SH 616 - South of Kavanagh   **236**

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, , USA	Fort Saskatchewan, AB,	1
	, CA, USA	Edmonton, AB, Can	1
	, MB, Can	Edmonton, AB, Can	1
	, MO, USA	Edmonton, AB, Can	1
	, OK, USA	Edmonton, AB, Can	1
	Airdrie, AB, Can	Edmonton, AB, Can	3
		Spruce Grove, AB, Can	1
		Sturgeon County, AB, Ca	1
	Alix, AB, Can	Eaglesham, AB, Can	1
		Peace River, AB, Can	1
	Alpaso, TX, USA	Edmonton, AB, Can	1
	Balzac, AB, Can	Edmonton, AB, Can	1
		Gordondale, AB, Can	1
	Beiseker, AB, Can	Mayerthorpe, AB, Can	1
	Bentley, AB, Can	Bondiss, AB, Can	1
		Grande Prairie, AB, Can	1
	Blackfalds, AB, Can	Edmonton, AB, Can	1
		Fort Nelson, BC, Can	1
		Nisku, AB, Can	4
		Spruce Grove, AB, Can	1
	Bonners Ferry, ID, USA	Edmonton, AB, Can	1
	Bowden, AB, Can	Sherwood Park, AB, Can	1
	Brooks, AB, Can	Edmonton, AB, Can	3
		Nisku, AB, Can	1
		Whitecourt, AB, Can	1
	Calgary, AB, Can	Ardrossan, AB, Can	1
		Athabasca, AB, Can	1
		Christina Lake, AB, Can	1
		Clyde, AB, Can	2
		Dawson City, YK, Can	1
		Devon, AB, Can	1
		Edmonton, AB, Can	128
		Entwistle, AB, Can	1
		Fort McMurray, AB, Can	3
		Fort Saskatchewan, AB,	4

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Calgary, AB, Can	Fort St. John, BC, Can	1
		Grande Prairie, AB, Can	10
		Grassland, AB, Can	1
		Lac La Biche, AB, Can	1
		Leduc County, AB, Can	4
		Leduc, AB, Can	3
		Lloydminster, AB, Can	3
		Nisku, AB, Can	16
		Parkland County, AB, Ca	3
		Redwater, AB, Can	2
		Saskatoon, SK, Can	1
		Sherwood Park, AB, Can	13
		Slave Lake, AB, Can	1
		Smoky Lake, AB, Can	1
		Spruce Grove, AB, Can	3
		St. Albert, AB, Can	4
		Stony Plain, AB, Can	1
		Strathcona County, AB,	1
		Sturgeon County, AB, Ca	3
		Vermilion, AB, Can	1
		Westlock, AB, Can	2
		Whitecourt, AB, Can	2
	Carbon, AB, Can	Grande Prairie, AB, Can	1
	Caroline, AB, Can	Sherwood Park, AB, Can	1
	Carseland, AB, Can	Edmonton, AB, Can	1
	Carstairs, AB, Can	Nisku, AB, Can	1
		Sturgeon County, AB, Ca	1
		Westlock, AB, Can	1
	Chilliwack, BC, Can	Sturgeon County, AB, Ca	1
	Claresholm, AB, Can	Boyle, AB, Can	1
		Edmonton, AB, Can	3
	Cochrane, AB, Can	Nisku, AB, Can	1
	Columbus, OH, USA	Edmonton, AB, Can	1
	Coutts, AB, Can	Edmonton, AB, Can	1
	Cremona, AB, Can	Edmonton, AB, Can	1

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Creston, BC, Can	Edmonton, AB, Can	1
	Crossfield, AB, Can	Carrot Creek, AB, Can	1
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	4
		Grande Prairie, AB, Can	1
		Spruce Grove, AB, Can	1
	Delburne, AB, Can	Edmonton, AB, Can	1
	Didsbury, AB, Can	Athabasca, AB, Can	2
		Grassland, AB, Can	2
	Drumheller, AB, Can	Sherwood Park, AB, Can	1
	Eckville, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Exshaw, AB, Can	Cold Lake, AB, Can	1
		Edmonton, AB, Can	3
		Sherwood Park, AB, Can	2
	Fort Macleod, AB, Can	Edmonton, AB, Can	2
		Lloydminster, AB, Can	1
		Sturgeon County, AB, Ca	1
	Galveston, TX, USA	Edmonton, AB, Can	1
	Golden, BC, Can	Edmonton, AB, Can	1
	Great Falls, MT, USA	Anchorage, AK, USA	1
	Gull Lake, AB, Can	Nisku, AB, Can	1
	High River, AB, Can	Clyde, AB, Can	1
		Edmonton, AB, Can	1
		Keephills, AB, Can	1
		Onoway, AB, Can	1
		Vegreville, AB, Can	1
	Hoadley, AB, Can	Nisku, AB, Can	1
	Hobbema, AB, Can	Edmonton, AB, Can	1
		Highvale, AB, Can	1
		New Sarepta, AB, Can	1
		Nisku, AB, Can	1
	Houston, TX, USA	Edmonton, AB, Can	3
	Innisfail, AB, Can	Edmonton, AB, Can	5
		Fort Saskatchewan, AB,	1

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Innisfail, AB, Can	La Crete, AB, Can	1
		Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	1
	Joffre, AB, Can	Edmonton, AB, Can	2
		Leduc, AB, Can	1
	Lacombe County, AB, Ca	Parkland County, AB, Ca	1
	Lacombe, AB, Can	Barrhead, AB, Can	1
		Edmonton, AB, Can	14
		Fort McMurray, AB, Can	1
		Leduc County, AB, Can	1
		Legal, AB, Can	1
		Nisku, AB, Can	1
		Redwater, AB, Can	1
		Sherwood Park, AB, Can	1
		Strathcona County, AB,	1
		Sturgeon County, AB, Ca	1
	Langley, BC, Can	Edmonton, AB, Can	1
	Leslieville, AB, Can	Edmonton, AB, Can	1
	Lethbridge, AB, Can	Clyde, AB, Can	1
		Edmonton, AB, Can	2
		Nisku, AB, Can	1
		Onoway, AB, Can	1
	Linden, AB, Can	Edmonton, AB, Can	1
	Lousana, AB, Can	Edmonton, AB, Can	1
	Meadowland, AB, Can	Nisku, AB, Can	1
	Medicine Hat, AB, Can	Edmonton, AB, Can	3
		Whitecourt, AB, Can	1
	Midway, BC, Can	Spruce Grove, AB, Can	1
	Millarville, AB, Can	Edmonton, AB, Can	1
	Milo, AB, Can	Peace No. 135 MD, AB,	1
	Montreal, QC, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	1
	Morningside, AB, Can	Edmonton, AB, Can	3
	Morrin, AB, Can	Edmonton, AB, Can	1
	Nanton, AB, Can	Edmonton, AB, Can	1

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Oakland, CA, USA	Edmonton, AB, Can	1
	Oklahoma City, OK, US	Edmonton, AB, Can	1
	Okotoks, AB, Can	Onoway, AB, Can	1
	Olds, AB, Can	Athabasca, AB, Can	1
		Barrhead, AB, Can	1
		Edmonton, AB, Can	3
		Fairview, AB, Can	1
		Sherwood Park, AB, Can	1
		Sturgeon County, AB, Ca	2
	Parkland, AB, Can	Edmonton, AB, Can	1
	Penhold, AB, Can	Devon, AB, Can	1
	Pigeon Lake, AB, Can	Nisku, AB, Can	1
	Pincher Creek, AB, Can	Nisku, AB, Can	2
		Sherwood Park, AB, Can	1
	Ponoka, AB, Can	Beaumont, AB, Can	14
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	11
		Fort Saskatchewan, AB,	1
		Golden Spike, AB, Can	1
		Highvale, AB, Can	1
		Kavanagh, AB, Can	1
		Leduc County, AB, Can	4
		Leduc, AB, Can	8
		Morinville, AB, Can	1
		Nisku, AB, Can	7
		Prince George, BC, Can	1
		Sherwood Park, AB, Can	2
		Smithers, BC, Can	1
	Powers, MT, USA	Parkland County, AB, Ca	1
	Red Deer, AB, Can	Barrhead, AB, Can	3
		Beaumont, AB, Can	1
		Blue Ridge, AB, Can	1
		Calmar, AB, Can	1
		Conklin, AB, Can	1
		Devon, AB, Can	2

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Red Deer, AB, Can	Drayton Valley, AB, Can	1
		Edmonton, AB, Can	66
		Edson, AB, Can	2
		Fort McMurray, AB, Can	1
		Genesee, AB, Can	2
		Grande Prairie, AB, Can	2
		Leduc County, AB, Can	2
		Leduc, AB, Can	2
		Lloydminster, AB, Can	3
		Millet, AB, Can	1
		Nisku, AB, Can	12
		Parkland County, AB, Ca	5
		Sherwood Park, AB, Can	27
		St. Albert, AB, Can	3
		St. Paul, AB, Can	1
		Stony Plain, AB, Can	1
		Strathcona County, AB,	2
		Sturgeon County, AB, Ca	2
		Sunnybrook, AB, Can	1
		Thorsby, AB, Can	1
		Valleyview, AB, Can	1
		Vegreville, AB, Can	1
		Westlock, AB, Can	1
		Wetaskiwin, AB, Can	1
		Yorkton, SK, Can	1
	Rimbey, AB, Can	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Rocky Mountain House,	Edmonton, AB, Can	8
		Nisku, AB, Can	1
		Parkland County, AB, Ca	1
		Sherwood Park, AB, Can	2
	Royal City, WA, USA	Edmonton, AB, Can	1
	Seven Persons, AB, Can	Nisku, AB, Can	1
	Shelby, MT, USA	Edmonton, AB, Can	1
	Slocan, BC, Can	Parkland County, AB, Ca	1

Exhibit C 10 - Site 9: Hwy 2 South - Bear Hills Rest Stop
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Spanish Fork, UT, USA	Edmonton, AB, Can	1
	Sparwood, BC, Can	Edmonton, AB, Can	1
	Stavely, AB, Can	Nisku, AB, Can	1
	Stettler, AB, Can	Leduc County, AB, Can	1
		Sherwood Park, AB, Can	1
	Strathmore, AB, Can	Athabasca, AB, Can	1
		Edmonton, AB, Can	1
		Mayerthorpe, AB, Can	1
		Nisku, AB, Can	1
		Parkland County, AB, Ca	1
	Sundre, AB, Can	Athabasca County No.12,	1
		Athabasca, AB, Can	2
		Edmonton, AB, Can	4
		High Prairie, AB, Can	1
		Sturgeon County, AB, Ca	2
		Two Hills, AB, Can	1
	Sylvan Lake, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	2
	Taber, AB, Can	Edmonton, AB, Can	1
		Millet, AB, Can	2
	Three Hills, AB, Can	Spruce Grove, AB, Can	1
	Trochu, AB, Can	Calmar, AB, Can	1
		Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
	Usona, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	1
	Vancouver, BC, Can	Edmonton, AB, Can	1
	Vulcan, AB, Can	Edmonton, AB, Can	1
	Winnipeg, MB, Can	Edmonton, AB, Can	1
		St. Albert, AB, Can	1
	Wooden, CA, USA	Edmonton, AB, Can	1

Total Commodity Trips for Site 9: Hwy 2 South - Bear Hills Rest Stop Inbound   **652**

Total Commodity Trips for Site 9: Hwy 2 South - Bear Hills Rest Stop   **652**

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	, CA, USA	Vancouver, BC, Can	1
	Athabasca, AB, Can	Calgary, AB, Can	1
		Didsbury, AB, Can	1
		Olds, AB, Can	1
	Baton Rouge, LA, USA	Joffre, AB, Can	1
	Beaumont, AB, Can	Wetaskiwin County, AB,	1
	Blue Ridge, AB, Can	Cranbrook, BC, Can	1
	Bruderheim, AB, Can	Red Deer, AB, Can	1
		Vulcan, AB, Can	1
	Chicago, IL, USA	Calgary, AB, Can	1
	Cincinnati, OH, USA	Kelowna, BC, Can	1
	Clandonald, AB, Can	Stettler, AB, Can	1
	Dallas, TX, USA	Strathmore, AB, Can	1
	Devon, AB, Can	Calgary, AB, Can	1
	Drayton Valley, AB, Can	Calgary, AB, Can	1
	Eden Lake, AB, Can	Calgary, AB, Can	1
	Edmonton, AB, Can	, AZ, USA	1
		, CA, USA	4
		, CO, USA	1
		, NE, USA	1
		, OR, USA	1
		Airdrie, AB, Can	1
		Alix, AB, Can	1
		Armstrong, BC, Can	1
		Balzac, AB, Can	2
		Belford, BC, Can	1
		Billings, MT, USA	1
		Blackfalds, AB, Can	1
		Bragg Creek, AB, Can	1
		Brooks, AB, Can	1
		Brownsville, TX, USA	3
		Calgary, AB, Can	187
		Canal Flats, BC, Can	1
		Canmore, AB, Can	1
		Caroline, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Carseland, AB, Can	2
		Chestermere, AB, Can	1
		Claresholm, AB, Can	2
		Cochrane, AB, Can	2
		Cranbrook, BC, Can	2
		Crossfield, AB, Can	5
		Exshaw, AB, Can	1
		Falun, AB, Can	1
		Fremont, CA, USA	1
		Halsey, OR, USA	1
		High River, AB, Can	7
		Hobbema, AB, Can	1
		Independence, OR, USA	1
		Innisfail, AB, Can	4
		Joffre, AB, Can	4
		Kelowna, BC, Can	1
		Kennewick, WA, USA	1
		Lacombe, AB, Can	14
		Lethbridge, AB, Can	8
		Linden, AB, Can	1
		Magrath, AB, Can	2
		Maple Creek, SK, Can	1
		Medicine Hat, AB, Can	1
		Millet, AB, Can	1
		Nogales, AZ, USA	1
		Olds, AB, Can	3
		Oyen, AB, Can	1
		Penhold, AB, Can	1
		Ponoka, AB, Can	18
		Red Deer, AB, Can	57
		Rocky Mountain House,	3
		Shaunavon, SK, Can	1
		Shelby, MT, USA	1
		Sparks, NV, USA	1
		Stauffer, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Stettler, AB, Can	2
		Sundre, AB, Can	6
		Vancouver, BC, Can	1
		Vauxhall, AB, Can	1
		Vulcan, AB, Can	1
		Wetaskiwin, AB, Can	1
		Wheatland, AB, Can	1
		Winnipeg, MB, Can	3
	Enilda, AB, Can	Turner Valley, AB, Can	1
	Fairview, AB, Can	Olds, AB, Can	1
	Fort Saskatchewan, AB,	Calgary, AB, Can	1
		Joffre, AB, Can	1
		Red Deer, AB, Can	1
		Vulcan, AB, Can	1
	Fort St. John, BC, Can	Calgary, AB, Can	1
	Grande Cache, AB, Can	Red Deer, AB, Can	2
	Grande Prairie, AB, Can	Calgary, AB, Can	5
		High River, AB, Can	1
	Grimshaw, AB, Can	Red Deer, AB, Can	1
	Hay Lakes, AB, Can	Calgary, AB, Can	1
	Highvale, AB, Can	Hobbema, AB, Can	1
		Ponoka, AB, Can	1
	Lac La Biche, AB, Can	Calgary, AB, Can	1
	Leduc County, AB, Can	Calgary, AB, Can	1
		Red Deer, AB, Can	1
	Leduc, AB, Can	Calgary, AB, Can	2
		Drumheller, AB, Can	1
		Miami, FL, USA	1
		Morningside, AB, Can	5
		Okotoks, AB, Can	1
		Olds, AB, Can	1
		Ponoka, AB, Can	12
		Red Deer, AB, Can	2
		Rocky Mountain House,	3
		Winfield, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Legal, AB, Can	Lacombe, AB, Can	1
	Lindbergh, AB, Can	Joffre, AB, Can	1
	Lloydminster, AB, Can	Beiseker, AB, Can	1
		Blackfalds, AB, Can	1
	Montreal, QC, Can	Calgary, AB, Can	1
	Morinville, AB, Can	Calgary, AB, Can	2
	Nanaimo, BC, Can	Red Deer, AB, Can	1
	Neerlandia, AB, Can	Red Deer, AB, Can	1
	Nisku, AB, Can	Airdrie, AB, Can	1
		Balzac, AB, Can	1
		Blackfalds, AB, Can	1
		Calgary, AB, Can	15
		Caroline, AB, Can	2
		Carson, CA, USA	1
		Carstairs, AB, Can	1
		Eckville, AB, Can	1
		Hobbema, AB, Can	1
		Lacombe, AB, Can	7
		Lethbridge, AB, Can	1
		Millet, AB, Can	1
		Morningside, AB, Can	10
		Ponoka, AB, Can	18
		Red Deer, AB, Can	4
		Rimbey, AB, Can	1
		Rocky Mountain House,	1
		Strathmore, AB, Can	4
		Sundre, AB, Can	1
		Vancouver, BC, Can	1
	Parkland County, AB, Ca	Brownsville, TX, USA	2
		Calgary, AB, Can	5
		Eckville, AB, Can	1
		Grassland, AB, Can	1
		Lacombe, AB, Can	1
		Okotoks, AB, Can	1
		Ponoka, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Parkland County, AB, Ca	Red Deer, AB, Can	1
		Wetaskiwin, AB, Can	1
	Peace River, AB, Can	Brant, AB, Can	1
	Redwater, AB, Can	Calgary, AB, Can	2
	Rolly View, AB, Can	Ponoka, AB, Can	1
	Sherwood Park, AB, Can	, CA, USA	1
		, LA, USA	1
		, OR, USA	1
		Balzac, AB, Can	1
		Bowden, AB, Can	1
		Calgary, AB, Can	19
		Carseland, AB, Can	1
		Gemen, BC, Can	1
		High River, AB, Can	1
		Joffre, AB, Can	1
		Kelowna, BC, Can	1
		Lacombe, AB, Can	2
		Lethbridge, AB, Can	1
		Olds, AB, Can	1
		Ponoka, AB, Can	1
		Red Deer, AB, Can	11
		Rimbey, AB, Can	2
		Rocky Mountain House,	2
		Sunderland, AB, Can	1
		Wallula, WA, USA	1
	Slave Lake, AB, Can	Red Deer, AB, Can	1
	Spruce Grove, AB, Can	Airdrie, AB, Can	1
		Blackie, AB, Can	1
		Calgary, AB, Can	4
		Carbon, AB, Can	1
		High River, AB, Can	1
		Millet, AB, Can	1
		Stettler, AB, Can	1
	St. Albert, AB, Can	Calgary, AB, Can	4
		Ponoka, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	St. Albert, AB, Can	Red Deer, AB, Can	3
	St. Paul, AB, Can	Calgary, AB, Can	2
		Red Deer, AB, Can	1
	Stanstead, QC, Can	Calgary, AB, Can	1
	Stony Plain, AB, Can	Coleman, AB, Can	1
		Lethbridge, AB, Can	1
	Strathcona County, AB,	Airdrie, AB, Can	1
		Beiseker, AB, Can	1
		Calgary, AB, Can	1
		Chilliwack, BC, Can	1
		Joffre, AB, Can	1
		Ponoka, AB, Can	1
		Red Deer, AB, Can	2
	Sturgeon County, AB, Ca	Airdrie, AB, Can	1
		Calgary, AB, Can	1
		Fort Steel, BC, Can	1
		Lethbridge, AB, Can	1
		Phoenix, AZ, USA	2
		Red Deer, AB, Can	2
	Sundance Beach, AB, Ca	Calgary, AB, Can	1
	Swan Hills, AB, Can	Bentley, AB, Can	1
		Red Deer, AB, Can	1
	Two Hills, AB, Can	Red Deer, AB, Can	1
	Vancouver, BC, Can	Calgary, AB, Can	1
	Vermilion, AB, Can	Red Deer, AB, Can	1
		Stettler, AB, Can	1
	Wabamun, AB, Can	Exshaw, AB, Can	4
	Wabasca-Desmarais, AB,	Lacombe, AB, Can	1
	Wainwright, AB, Can	Red Deer, AB, Can	1
	Westlock, AB, Can	Calgary, AB, Can	1
		Lethbridge, AB, Can	1
	Whitecourt, AB, Can	, MT, USA	1
		Calgary, AB, Can	2
		Idaho Falls, ID, USA	1
		Lacombe, AB, Can	1

Exhibit C 11 - Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Whitecourt, AB, Can	Red Deer, AB, Can	1
	Winnipeg, MB, Can	Calgary, AB, Can	1

Total Commodity Trips for Site 9: Hwy 2 South - Leduc Weigh Scale - South of Leduc Outbound **661**

Total Commodity Trips for Site 9: Hwy 2 South - Leduc Weigh Scale - South of Led **661**

Exhibit C 12 - Site 10: Hwy 39 - Alsike
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, AB, Can	Edmonton, AB, Can	1
	Alder Flats, AB, Can	Devon, AB, Can	1
		Edmonton, AB, Can	2
		Glendon, AB, Can	1
		Leduc County, AB, Can	1
		Warburg, AB, Can	1
	Breton, AB, Can	Edmonton, AB, Can	2
		Fort Saskatchewan, AB,	1
	Buck Creek, AB, Can	Edmonton, AB, Can	1
	Buck Lake, AB, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
		Sunnybrook, AB, Can	1
	Calgary, AB, Can	Edmonton, AB, Can	1
	Carnwood, AB, Can	Parkland County, AB, Ca	1
		Warburg, AB, Can	1
	Chilliwack, BC, Can	Thorsby, AB, Can	1
	Cynthia, AB, Can	Edmonton, AB, Can	1
		Leduc, AB, Can	1
		Nisku, AB, Can	1
	Drayton Valley, AB, Can	Camrose, AB, Can	2
		Devon, AB, Can	3
		Edmonton, AB, Can	15
		Lac La Biche, AB, Can	1
		Leduc County, AB, Can	4
		Leduc, AB, Can	1
		Nisku, AB, Can	9
		Parkland County, AB, Ca	2
		Sherwood Park, AB, Can	1
		Sunnybrook, AB, Can	5
		Warburg, AB, Can	3
		Wetaskiwin, AB, Can	1
		Winnipeg, MB, Can	1
	Eckville, AB, Can	Edmonton, AB, Can	1
	Edmonton, AB, Can	Warburg, AB, Can	1
	Elk River, AB, Can	Edmonton, AB, Can	1

Exhibit C 12 - Site 10: Hwy 39 - Alsike
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Evansburg, AB, Can	Alsike, AB, Can	1
	Hoadley, AB, Can	Edmonton, AB, Can	1
	Lindale, AB, Can	Warburg, AB, Can	1
	Lodgepole, AB, Can	Edmonton, AB, Can	1
		Leduc County, AB, Can	1
		Leduc, AB, Can	1
		Oyen, AB, Can	1
	MD of Brazeau No. 77,	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1
		Spruce Grove, AB, Can	1
	MD of Clearwater # 99,	Edmonton, AB, Can	1
	Muncho Lake, BC, Can	Caroline, AB, Can	1
	Nordegg, AB, Can	Edmonton, AB, Can	2
	Prince George, BC, Can	Calgary, AB, Can	1
	Rimbey, AB, Can	Edmonton, AB, Can	2
		Morinville, AB, Can	1
	Rocky Mountain House,	Calmar, AB, Can	1
		Edmonton, AB, Can	6
		Nisku, AB, Can	1
		Sherwood Park, AB, Can	1
		Spruce Grove, AB, Can	2
		St. Albert, AB, Can	1
		Warburg, AB, Can	1
	Rocky Rapids, AB, Can	Nisku, AB, Can	1
	Sylvan Lake, AB, Can	Nisku, AB, Can	1
	Tomahawk, AB, Can	Leduc County, AB, Can	1
		Wetaskiwin, AB, Can	1
	West Pembina, AB, Can	Sturgeon County, AB, Ca	1
	Wetaskiwin County, AB,	Onoway, AB, Can	1
	Winfield, AB, Can	Edmonton, AB, Can	2
		Nisku, AB, Can	1

Total Commodity Trips for Site 10: Hwy 39 - Alsike Inbound   **112**

Exhibit C 12 - Site 10: Hwy 39 - Alsike
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Barrhead County, AB, Ca	Sundre, AB, Can	1
	Barrhead, AB, Can	Calgary, AB, Can	1
		MD of Brazeau No. 77,	1
		Red Deer, AB, Can	1
	Calmar, AB, Can	Drayton Valley, AB, Can	1
		Lodgepole, AB, Can	1
	Camrose, AB, Can	Drayton Valley, AB, Can	2
	Cherhill, AB, Can	Rimbey, AB, Can	1
	Coronation, AB, Can	MD of Brazeau No. 77,	1
	Eaglesham, AB, Can	Olds, AB, Can	1
	Edmonton, AB, Can	Alder Flats, AB, Can	1
		Bentley, AB, Can	1
		Breton, AB, Can	3
		Buck Creek, AB, Can	1
		Buck Lake, AB, Can	3
		Drayton Valley, AB, Can	8
		Grande Prairie, AB, Can	1
		Hoadley, AB, Can	1
		MD of Brazeau No. 77,	1
		Rocky Mountain House,	2
		Winfield, AB, Can	1
	Fort Saskatchewan, AB,	MD of Brazeau No. 77,	1
	Genesee, AB, Can	Drayton Valley, AB, Can	2
		Red Deer, AB, Can	1
	Golden Spike, AB, Can	MD of Brazeau No. 77,	1
	Holden, AB, Can	Carnwood, AB, Can	1
	Innisfail, AB, Can	Drayton Valley, AB, Can	1
	Lamont, AB, Can	Rocky Mountain House,	1
	Leduc County, AB, Can	Abbotsford, BC, Can	1
		Alsike, AB, Can	2
		Buck Lake, AB, Can	1
		Drayton Valley, AB, Can	1
		Lodgepole, AB, Can	1
		Tomahawk, AB, Can	1
	Leduc, AB, Can	Breton, AB, Can	1

Exhibit C 12 - Site 10: Hwy 39 - Alsike
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Leduc, AB, Can	Cynthia, AB, Can	1
		Drayton Valley, AB, Can	1
	Lindbergh, AB, Can	Rocky Mountain House,	1
	Lloydminster, AB, Can	Winfield, AB, Can	1
	Morinville, AB, Can	Rimbey, AB, Can	1
	Nisku, AB, Can	Clearwater County, AB,	1
		Drayton Valley, AB, Can	10
		Lindale, AB, Can	1
		Nordegg, AB, Can	2
	Parkland County, AB, Ca	Breton, AB, Can	1
		Rocky Mountain House,	1
	Rimbey, AB, Can	Parkland County, AB, Ca	1
	Sherwood Park, AB, Can	Alder Flats, AB, Can	1
		Buck Lake, AB, Can	1
		Drayton Valley, AB, Can	4
		Lodgepole, AB, Can	1
		Rocky Mountain House,	1
	St. Albert, AB, Can	Breton, AB, Can	1
		Entwistle, AB, Can	1
	St. Francis, AB, Can	Alsike, AB, Can	1
		Breton, AB, Can	1
	Stony Plain, AB, Can	Rocky Mountain House,	1
	Sunnybrook, AB, Can	Drayton Valley, AB, Can	7
	Thorsby, AB, Can	Drayton Valley, AB, Can	1
		Pigeon Lake, AB, Can	1
	Vegreville, AB, Can	Drayton Valley, AB, Can	2
		Lodgepole, AB, Can	1
		MD of Brazeau No. 77,	1
	Vermilion, AB, Can	Rimbey, AB, Can	1
	Warburg, AB, Can	Alsike, AB, Can	1
		Drayton Valley, AB, Can	4
		Lindale, AB, Can	2
		Lodgepole, AB, Can	1
	Westlock, AB, Can	Lodgepole, AB, Can	2
	Wetaskiwin, AB, Can	Breton, AB, Can	1

Exhibit C 12 - Site 10: Hwy 39 - Alsike
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Wetaskiwin, AB, Can	Drayton Valley, AB, Can	1

Total Commodity Trips for Site 10: Hwy 39 - Alsike Outbound   **111**

Total Commodity Trips for Site 10: Hwy 39 - Alsike   **223**

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, BC, Can	Entwistle, AB, Can	1
	Alder Flats, AB, Can	Grande Prairie, AB, Can	1
		High Prairie, AB, Can	1
	Bentley, AB, Can	Hinton, AB, Can	1
	Bowden, AB, Can	Eaglesham, AB, Can	1
		Fairview, AB, Can	1
	Buck Creek, AB, Can	Edson, AB, Can	2
		Peers, AB, Can	1
		Robb, AB, Can	1
	Calgary, AB, Can	Dawson Creek, BC, Can	1
		Fort St. John, BC, Can	1
		Fox Creek, AB, Can	1
		Grande Prairie, AB, Can	1
		Prince George, BC, Can	2
		Whitecourt, AB, Can	1
	Carseland, AB, Can	Cardinal River, BC, Can	1
	Cynthia, AB, Can	Edmonton, AB, Can	1
		Parkland County, AB, Ca	1
		Sturgeon County, AB, Ca	2
	Didsbury, AB, Can	Spirit River, AB, Can	1
	Drayton Valley, AB, Can	, AB, Can	1
		Blue Ridge, AB, Can	1
		Boon Lake, MN, USA	1
		Burnaby, BC, Can	1
		Cherhill, AB, Can	3
		Edmonton, AB, Can	10
		Edson, AB, Can	15
		Entwistle, AB, Can	27
		Evansburg, AB, Can	2
		Fickle Lake, AB, Can	1
		Hinton, AB, Can	5
		Lake Isle, AB, Can	1
		Mayerthorpe, AB, Can	1
		MD of Brazeau No. 77,	1
		Moon Lake, AB, Can	1

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Drayton Valley, AB, Can	Parkland County, AB, Ca	18
		Peers, AB, Can	2
		Robb, AB, Can	1
		Sangudo, AB, Can	1
		Sargees, BC, Can	1
		Seba Beach, AB, Can	1
		Sherwood Park, AB, Can	2
		St. Albert, AB, Can	2
		Stony Plain, AB, Can	1
		Tomahawk, AB, Can	1
		Vancouver, BC, Can	1
		Whitecourt, AB, Can	1
		Wildwood, AB, Can	1
		Yellowhead County Nort	1
	Drumheller, AB, Can	Edson, AB, Can	1
	Edmonton, AB, Can	Drayton Valley, AB, Can	1
		Edson, AB, Can	1
		Parkland County, AB, Ca	1
	Houston, TX, USA	Mayerthorpe, AB, Can	1
	Innisfail, AB, Can	Edson, AB, Can	1
	Lindale, AB, Can	Tomahawk, AB, Can	1
	Lodgepole, AB, Can	Evansburg, AB, Can	1
		Whitecourt, AB, Can	3
	MD of Brazeau No. 77,	Bruderheim, AB, Can	1
		Edmonton, AB, Can	1
		Entwistle, AB, Can	1
		Parkland County, AB, Ca	1
		Whitecourt, AB, Can	1
	Nisku, AB, Can	Parkland County, AB, Ca	1
	Nordegg, AB, Can	Grande Prairie, AB, Can	4
	Olds, AB, Can	Mayerthorpe, AB, Can	1
	Ponoka, AB, Can	Whitecourt, AB, Can	1
	Red Deer, AB, Can	Edson, AB, Can	1
		Entwistle, AB, Can	1
		Grande Prairie, AB, Can	1

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Red Deer, AB, Can	MD of Brazeau No. 77,	1
		Parkland County, AB, Ca	1
	Rimbey, AB, Can	Valleyview, AB, Can	1
	Rocky Mountain House,	Edmonton, AB, Can	1
		Hinton, AB, Can	2
		Mayerthorpe, AB, Can	1
		Whitecourt, AB, Can	1
		Williams Lake, BC, Can	1
	Rocky Rapids, AB, Can	Entwistle, AB, Can	1
	Sundre, AB, Can	Edson, AB, Can	1
		Grande Prairie, AB, Can	2
		Hinton, AB, Can	11
	Violet Grove, AB, Can	Keephills, AB, Can	1
	West Pembina, AB, Can	Sturgeon County, AB, Ca	2

Total Commodity Trips for Site 11: Hwy 22 - North of SH 621 - Rocky Rapids Inbound   **181**

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Barrhead County, AB, Ca	Drayton Valley, AB, Can	1
	Blackie, AB, Can	Kootenay Area, BC, Can	1
	Blue Ridge, AB, Can	Drayton Valley, AB, Can	1
	Carrot Creek, AB, Can	Buck Creek, AB, Can	1
	Cherhill, AB, Can	Drayton Valley, AB, Can	4
	Dawson Creek, BC, Can	Strathmore, AB, Can	1
	Debolt, AB, Can	Caroline, AB, Can	1
	Drayton Valley, AB, Can	Cynthia, AB, Can	1
	Edmonton, AB, Can	Bentley, AB, Can	1
		Cynthia, AB, Can	2
		Drayton Valley, AB, Can	19
		Lodgepole, AB, Can	1
		Nisku, AB, Can	1
		Vancouver, BC, Can	1
		West Pembina, AB, Can	2
	Edson, AB, Can	Alder Flats, AB, Can	1
		Buck Creek, AB, Can	1
		Cochrane, AB, Can	1
		Drayton Valley, AB, Can	20
		Leslieville, AB, Can	1
		Nisku, AB, Can	1
		Red Deer, AB, Can	1
		Rimbey, AB, Can	1
		Rocky Mountain House,	4
		Strachan, AB, Can	1
		Sundre, AB, Can	4
	Entwistle, AB, Can	Drayton Valley, AB, Can	20
		Lacombe, AB, Can	1
		Leslieville, AB, Can	1
		Rimbey, AB, Can	1
		Rocky Rapids, AB, Can	1
	Evansburg, AB, Can	Drayton Valley, AB, Can	7
	Fox Creek, AB, Can	Drayton Valley, AB, Can	3
	Grande Cache, AB, Can	Drayton Valley, AB, Can	1
	Grande Prairie, AB, Can	Red Deer, AB, Can	1

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Grande Prairie, AB, Can	Rocky Mountain House,	1
	High Level, AB, Can	Drayton Valley, AB, Can	4
	Hinton, AB, Can	Canmore, AB, Can	1
		Drayton Valley, AB, Can	4
		Rocky Mountain House,	1
		Strachan, AB, Can	2
		Sundre, AB, Can	8
		Sylvan Lake, AB, Can	1
	Leduc, AB, Can	Drayton Valley, AB, Can	1
	Mayerthorpe, AB, Can	Rocky Rapids, AB, Can	1
	McBride, BC, Can	Calgary, AB, Can	1
	MD of Brazeau No. 77,	Drayton Valley, AB, Can	1
	Moon Lake, AB, Can	Cynthia, AB, Can	1
		Drayton Valley, AB, Can	1
	Moose Lake, BC, Can	Calgary, AB, Can	1
	Morinville, AB, Can	Drayton Valley, AB, Can	1
	Nisku, AB, Can	Drayton Valley, AB, Can	1
	Niton Junction, AB, Can	Drayton Valley, AB, Can	1
	Parkland County, AB, Ca	Cynthia, AB, Can	1
		Drayton Valley, AB, Can	7
		Lodgepole, AB, Can	1
		MD of Brazeau No. 77,	2
		Nisku, AB, Can	1
	Peace River, AB, Can	Rocky Mountain House,	1
		Sundre, AB, Can	1
	Peers, AB, Can	Buck Creek, AB, Can	1
		Cochrane, AB, Can	1
		Drayton Valley, AB, Can	1
	Prince George, BC, Can	Calgary, AB, Can	1
	Redwater, AB, Can	West Pembina, AB, Can	1
	Robb, AB, Can	Red Deer, AB, Can	1
		Rocky Mountain House,	3
		Strachan, AB, Can	3
		Sundre, AB, Can	4
	Sangudo, AB, Can	Drayton Valley, AB, Can	1

Exhibit C 13 - Site 11: Hwy 22 - North of SH 621 - Rocky Rapids
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Sangudo, AB, Can	Sundre, AB, Can	1
	Saskatoon, SK, Can	Drayton Valley, AB, Can	1
	Sherwood Park, AB, Can	Drayton Valley, AB, Can	1
	Smoky Lake County, AB,	Drayton Valley, AB, Can	1
	Spruce Grove, AB, Can	Drayton Valley, AB, Can	1
	Stony Plain, AB, Can	Drayton Valley, AB, Can	1
	Sturgeon County, AB, Ca	Drayton Valley, AB, Can	1
	Tomahawk, AB, Can	Drayton Valley, AB, Can	2
	Vancouver, BC, Can	Drayton Valley, AB, Can	1
	Whitecourt, AB, Can	Alsike, AB, Can	1
		Calgary, AB, Can	1
		Drayton Valley, AB, Can	1
		Elk River, AB, Can	4
		Lodgepole, AB, Can	6
		Nordegg, AB, Can	1
		Red Deer, AB, Can	1
		Rocky Mountain House,	1
	Wildwood, AB, Can	Clearwater County, AB,	1
		Drayton Valley, AB, Can	1
	Williams Lake, BC, Can	Rocky Mountain House,	1
	Wolf Lake, AB, Can	Drayton Valley, AB, Can	1
	Yellowhead County Nort	Drayton Valley, AB, Can	2
	Yellowhead County Sout	Sundre, AB, Can	2

Total Commodity Trips for Site 11: Hwy 22 - North of SH 621 - Rocky Rapids Outbound   **207**

Total Commodity Trips for Site 11: Hwy 22 - North of SH 621 - Rocky Rapids   **388**

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, AB, Can	Sundre, AB, Can	1
	, BC, Can	Drayton Valley, AB, Can	1
	100 Mile House, BC, Can	St. Vincent, AB, Can	2
	Abbotsford, BC, Can	Edmonton, AB, Can	3
	Albany, OR, USA	Edmonton, AB, Can	1
	Avola, BC, Can	Edmonton, AB, Can	1
	Barriere, BC, Can	Edmonton, AB, Can	1
	Bear, BC, Can	Spruce Grove, AB, Can	1
	Beaverlodge, AB, Can	Calgary, AB, Can	1
	Big Brag, BC, Can	Stony Plain, AB, Can	1
	Blue Ridge, AB, Can	Blackfalds, AB, Can	1
		Drayton Valley, AB, Can	2
	Blue River, BC, Can	Edmonton, AB, Can	2
		Parkland County, AB, Ca	2
	Burnaby, BC, Can	Edmonton, AB, Can	1
	Burns Lake, BC, Can	Edmonton, AB, Can	1
	Cadomin, AB, Can	Rocky Mountain House,	1
		Sundre, AB, Can	1
	Cardson Creek, BC, Can	Edmonton, AB, Can	1
	Carrot Creek, AB, Can	Buck Creek, AB, Can	1
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	2
		Entwistle, AB, Can	1
		Morinville, AB, Can	1
		Parkland County, AB, Ca	1
	Chilliwack, BC, Can	Drayton Valley, AB, Can	1
		Edmonton, AB, Can	1
	Clearwater, BC, Can	Devon, AB, Can	1
		Edmonton, AB, Can	1
		Wetaskiwin, AB, Can	1
	Cold Valley City, AB, Ca	Calgary, AB, Can	1
	Debeau, AB, Can	Medicine Hat, AB, Can	1
	Debolt, AB, Can	Blackfalds, AB, Can	1
	Delta, BC, Can	Edmonton, AB, Can	1
		Sherwood Park, AB, Can	1

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Demmitt, AB, Can	Sundre, AB, Can	1
	Duncan, BC, Can	Edmonton, AB, Can	1
	Edson, AB, Can	Bentley, AB, Can	1
		Buck Creek, AB, Can	2
		Calgary, AB, Can	2
		Calmar, AB, Can	2
		Drayton Valley, AB, Can	17
		Edmonton, AB, Can	32
		Enoch Reserve, AB, Can	1
		Entwistle, AB, Can	1
		Fort McMurray, AB, Can	1
		Lacombe, AB, Can	2
		Leduc County, AB, Can	1
		Leduc, AB, Can	3
		Lloydminster, AB, Can	1
		Morinville, AB, Can	2
		Nisku, AB, Can	8
		Onoway, AB, Can	1
		Parkland County, AB, Ca	9
		Red Deer, AB, Can	9
		Rocky Mountain House,	7
		Sangudo, AB, Can	1
		Seba Beach, AB, Can	1
		Sherwood Park, AB, Can	6
		Spruce Grove, AB, Can	3
		Sundre, AB, Can	5
		Unity, SK, Can	1
	Evansburg, AB, Can	Darwell, AB, Can	2
		Drayton Valley, AB, Can	3
		Edmonton, AB, Can	5
		Entwistle, AB, Can	10
		Fort Saskatchewan, AB,	1
		Gunn, AB, Can	8
		Ma-Me-O Beach, AB, Ca	1
		Magnolia, AB, Can	5

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Evansburg, AB, Can	Namao, AB, Can	1
		Parkland County, AB, Ca	4
		Tomahawk, AB, Can	1
	Fickle Lake, AB, Can	Buck Creek, AB, Can	1
	Fort Nelson, BC, Can	Nisku, AB, Can	1
	Fort St. John, BC, Can	Carseland, AB, Can	1
		Priddis, AB, Can	1
		Red Deer, AB, Can	1
	Fox Creek, AB, Can	Nisku, AB, Can	2
		Red Deer, AB, Can	2
	Grande Cache, AB, Can	Didsbury, AB, Can	1
		Nisku, AB, Can	2
		Onoway, AB, Can	1
	Grande Prairie, AB, Can	Drayton Valley, AB, Can	2
		Lethbridge, AB, Can	1
		Red Deer, AB, Can	1
		Redwater, AB, Can	1
		Rocky Mountain House,	1
		Sundre, AB, Can	1
	High Prairie, AB, Can	Bentley, AB, Can	1
		Caroline, AB, Can	1
		Drayton Valley, AB, Can	1
	Hines Creek, AB, Can	Crossfield, AB, Can	1
	Hinton, AB, Can	Buck Creek, AB, Can	1
		Calgary, AB, Can	2
		Camrose, AB, Can	1
		Drayton Valley, AB, Can	8
		Edmonton, AB, Can	12
		Fort Saskatchewan, AB,	1
		Nisku, AB, Can	2
		Onoway, AB, Can	1
		Parkland County, AB, Ca	2
		Red Deer, AB, Can	1
		Rocky Mountain House,	16
		Saskatoon, SK, Can	1

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Hinton, AB, Can	Sherwood Park, AB, Can	5
		Sturgeon County, AB, Ca	1
		Sundre, AB, Can	9
		Whitecourt, AB, Can	1
	Houston, BC, Can	Sherwood Park, AB, Can	1
	Jasper, AB, Can	Edmonton, AB, Can	3
	Kamloops, BC, Can	Beaverlodge, AB, Can	1
		Edmonton, AB, Can	4
		Redwater, AB, Can	1
		Sherwood Park, AB, Can	1
		Wetaskiwin, AB, Can	1
	Langley, BC, Can	Edmonton, AB, Can	3
	Laventon, BC, Can	Edmonton, AB, Can	1
	Mayerthorpe, AB, Can	Drayton Valley, AB, Can	1
		Edmonton, AB, Can	1
		Entwistle, AB, Can	1
		Seba Beach, AB, Can	1
	McBride, BC, Can	Eau Claire, WI, USA	1
	Mt. Robson, BC, Can	Edmonton, AB, Can	1
	New Westminster, BC, C	Edmonton, AB, Can	1
	Niton Junction, AB, Can	Barrhead, AB, Can	1
		Darwell, AB, Can	1
		Edmonton, AB, Can	2
		Golden, BC, Can	1
		Redwater, AB, Can	1
		Sherwood Park, AB, Can	1
	Nojack, AB, Can	Drayton Valley, AB, Can	2
		Parkland County, AB, Ca	1
	Osoyoos, BC, Can	Calgary, AB, Can	1
	Parkland County, AB, Ca	Gunn, AB, Can	1
	Peace River, AB, Can	Rocky Mountain House,	1
	Peers, AB, Can	Edmonton, AB, Can	1
		Enoch Reserve, AB, Can	1
		Fort Saskatchewan, AB,	1
		Morinville, AB, Can	1

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Peers, AB, Can	Sherwood Park, AB, Can	1
		Villeneuve, AB, Can	1
	Port Coquitlam, BC, Can	Edmonton, AB, Can	1
	Port St. James, BC, Can	Calgary, AB, Can	1
	Pouce Coupe, BC, Can	Drayton Valley, AB, Can	1
	Prince George, BC, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	8
		Nisku, AB, Can	1
		Sherwood Park, AB, Can	1
		Spruce Grove, AB, Can	1
	Prince Rupert, BC, Can	Edmonton, AB, Can	1
		Wetaskiwin, AB, Can	1
	Purden Lake, BC, Can	Sherwood Park, AB, Can	1
	Quesnel, BC, Can	Airdrie, AB, Can	1
	Richmond, BC, Can	Edmonton, AB, Can	2
		Fort McMurray, AB, Can	1
		St. Albert, AB, Can	1
		Winnipeg, MB, Can	1
	Robb, AB, Can	Calgary, AB, Can	1
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	2
		Fort Saskatchewan, AB,	1
		Rocky Mountain House,	3
		Sundre, AB, Can	2
	Sangudo, AB, Can	Drayton Valley, AB, Can	1
	Seattle, WA, USA	Edmonton, AB, Can	1
	Smithers, BC, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	1
		Sundre, AB, Can	1
	South Burnaby, BC, Can	Edmonton, AB, Can	1
	Squamish, BC, Can	Red Rock, OH, USA	1
	Surrey, BC, Can	Edmonton, AB, Can	4
		Fort Saskatchewan, AB,	1
	Swan Hills, AB, Can	Edmonton, AB, Can	1
		Red Deer, AB, Can	3

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Tete Jaune Cache, BC, C	Edmonton, AB, Can	2
	Valemount, BC, Can	Edmonton, AB, Can	4
		Sherwood Park, AB, Can	2
		Wetaskiwin, AB, Can	1
	Valleyview, AB, Can	Parkland County, AB, Ca	1
		Rimbey, AB, Can	1
	Vancouver, BC, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	22
		Leduc, AB, Can	1
		Nisku, AB, Can	3
		North Battleford, SK, Ca	1
		St. Albert, AB, Can	1
		Wetaskiwin, AB, Can	1
	Vanderhoof, BC, Can	Edmonton, AB, Can	1
	Vernon, BC, Can	Edmonton, AB, Can	1
	White Rock, BC, Can	Edmonton, AB, Can	1
	Whitecourt, AB, Can	Airdrie, AB, Can	1
		Calgary, AB, Can	1
		Claresholm, AB, Can	1
		Drayton Valley, AB, Can	1
		Edmonton, AB, Can	1
		Entwistle, AB, Can	1
		Lloydminster, AB, Can	1
		Nisku, AB, Can	1
		Red Deer, AB, Can	3
		Rocky Mountain House,	1
	Wildwood, AB, Can	Drayton Valley, AB, Can	1
		Edmonton, AB, Can	7
		Fawcett Lake, AB, Can	1
		Parkland County, AB, Ca	3
		Rocky Mountain House,	1
		Spruce Grove, AB, Can	2
		Stony Plain, AB, Can	1
	Williams Lake, BC, Can	Rocky Mountain House,	1
	Wolf Creek, AB, Can	Rimbey, AB, Can	1

Exhibit C 14 - Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Wolf Lake, AB, Can	Rimbey, AB, Can	1
	Yellowhead County Nort	Drayton Valley, AB, Can	2
		Edmonton, AB, Can	3
		Nisku, AB, Can	1
		Parkland County, AB, Ca	4
		Ponoka, AB, Can	1
		Sherwood Park, AB, Can	2
		Wabamun, AB, Can	1
		Wetaskiwin, AB, Can	1
	Yellowhead County Sout	Drayton Valley, AB, Can	4
		Edmonton, AB, Can	1
		Fort Saskatchewan, AB,	1
		Morinville, AB, Can	1
		Stony Plain, AB, Can	1
		Sundre, AB, Can	2
	Zama City, AB, Can	Calgary, AB, Can	2

Total Commodity Trips for Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle Inbound   **486**

Total Commodity Trips for Site 12: Hwy 16 West - West of Hwy 22 - Entwhistle   **486**

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Barrhead, AB, Can	Edmonton, AB, Can	1

Total Commodity Trips for Site 12: Hwy 16 West - West of Hwy 22 - Wildwood Inbound   **1**

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	, NB, Can	Burnaby, BC, Can	1
	, ON, Can	Prince George, BC, Can	1
	Ackins, SK, Can	Carrot Creek, AB, Can	1
	Alder Flats, AB, Can	Edson, AB, Can	1
	Athabasca, AB, Can	100 Mile House, BC, Can	1
	Barrhead, AB, Can	Niton Junction, AB, Can	1
		Vancouver, BC, Can	1
	Beaumont, AB, Can	Prince George, BC, Can	1
	Bentley, AB, Can	Edson, AB, Can	1
	Big River, SK, Can	Mission, BC, Can	1
	Bowden, AB, Can	Wildwood, AB, Can	1
	Breton, AB, Can	Edson, AB, Can	1
	Bruderheim, AB, Can	Niton Junction, AB, Can	1
	Buck Creek, AB, Can	Carrot Creek, AB, Can	2
		Edson, AB, Can	2
	Buck Lake, AB, Can	, AB, Can	1
	Calgary, AB, Can	Hinton, AB, Can	1
		McBride, BC, Can	1
		Niton Junction, AB, Can	1
		Prince George, BC, Can	2
	Carrot River, SK, Can	Abbotsford, BC, Can	1
	Carvel Corner, AB, Can	Kamloops, BC, Can	1
	Carvel, AB, Can	Wildwood, AB, Can	1
	Chipman, AB, Can	Niton Junction, AB, Can	1
	Crossfield, AB, Can	Prince George, BC, Can	1
	Darwell, AB, Can	Edson, AB, Can	1
		Niton Junction, AB, Can	1
	Drayton Valley, AB, Can	Carrot Creek, AB, Can	1
		Delta, BC, Can	1
		Edson, AB, Can	26
		Hinton, AB, Can	9
		Niton Junction, AB, Can	2
		Peers, AB, Can	1
		Robb, AB, Can	1
		Surrey, BC, Can	1

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Drayton Valley, AB, Can	Vancouver, BC, Can	3
		Wildwood, AB, Can	2
	Edmonton, AB, Can	, WA, USA	1
		Abbotsford, BC, Can	1
		Belmont, BC, Can	1
		Burnaby, BC, Can	2
		Carnesss Mine, BC, Can	1
		Carrot Creek, AB, Can	1
		Delta, BC, Can	1
		Edson, AB, Can	31
		Grande Cache, AB, Can	3
		Hinton, AB, Can	15
		Jasper, AB, Can	4
		Kamloops, BC, Can	11
		Langley, BC, Can	4
		Mackenzie, BC, Can	1
		Nanaimo, BC, Can	2
		New Westminster, BC, C	1
		Niton Junction, AB, Can	3
		Oregon City, OR, USA	1
		Peers, AB, Can	3
		Port Coquitlam, BC, Can	1
		Prince George, BC, Can	8
		Quesnel, BC, Can	1
		Richmond, BC, Can	1
		Robb, AB, Can	1
		Savona, BC, Can	1
		Smithers, BC, Can	1
		Surrey, BC, Can	5
		Valemount, BC, Can	1
		Vancouver, BC, Can	14
		Vanderhoof, BC, Can	2
		Victoria, BC, Can	1
		Wildwood, AB, Can	7
		Williston Lake, BC, Can	1

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Yellowhead County Nort	1
	Elk Point, AB, Can	Vancouver, BC, Can	1
	Entwistle, AB, Can	Carrot Creek, AB, Can	3
		Edson, AB, Can	3
		Perses, BC, Can	1
		Wildwood, AB, Can	3
		Yellowhead County Nort	1
	Ferintosh, AB, Can	Edson, AB, Can	1
	Fort Assiniboine, AB, Ca	Abbotsford, BC, Can	1
	Fort McMurray, AB, Can	Prince George, BC, Can	1
	Fort Saskatchewan, AB,	Kitimat, BC, Can	1
		Richmond, BC, Can	1
		Vancouver, BC, Can	1
		Yellowhead County Sout	1
	Gibbons, AB, Can	Hinton, AB, Can	1
		North Vancouver, BC, Ca	1
	Leduc, AB, Can	Edson, AB, Can	5
		Hinton, AB, Can	1
	Montreal, QC, Can	Vancouver, BC, Can	1
	Morinville, AB, Can	Edson, AB, Can	1
		Peers, AB, Can	1
	Nisku, AB, Can	Edson, AB, Can	5
		Grande Cache, AB, Can	2
		Hinton, AB, Can	3
		MD of Greenview, AB, C	1
		Robb, AB, Can	1
		Yellowhead County Sout	1
	Oakville, ON, Can	Surrey, BC, Can	2
	Olds, AB, Can	Prince George, BC, Can	1
	Parkland County, AB, Ca	Edson, AB, Can	4
		Grande Cache, AB, Can	1
		Hinton, AB, Can	2
		Niton Junction, AB, Can	1
		Peers, AB, Can	2
		Surrey, BC, Can	1

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Parkland County, AB, Ca	Valemount, BC, Can	1
		Wildwood, AB, Can	3
		Yellowhead County Nort	1
		Yellowhead County Sout	1
	Ponoka, AB, Can	Vanderhoof, BC, Can	1
	Quebec City, QC, Can	Vancouver, BC, Can	1
	Red Deer, AB, Can	Edson, AB, Can	2
		Fox Creek, AB, Can	1
		Grande Cache, AB, Can	1
		Hinton, AB, Can	1
		Robb, AB, Can	3
	Redwater, AB, Can	Hinton, AB, Can	1
	Regina, SK, Can	Merritt, BC, Can	1
	Rimbey, AB, Can	Edson, AB, Can	1
		McLeod River, AB, Can	1
		Peers, AB, Can	1
	Rocky Mountain House,	Hinton, AB, Can	4
		Williams Lake, BC, Can	1
	Rocky Rapids, AB, Can	Wildwood, AB, Can	1
	Sangudo, AB, Can	Edson, AB, Can	2
	Saskatoon, SK, Can	100 Mile House, BC, Can	1
		Coquitlam, BC, Can	1
	Sherbrook, SK, Can	Kelowna, BC, Can	1
	Sherwood Park, AB, Can	Burnaby, BC, Can	1
		Cold Valley City, AB, Ca	2
		Edson, AB, Can	6
		Grande Cache, AB, Can	1
		Hinton, AB, Can	2
		Houston, TX, USA	1
		Jasper, AB, Can	1
		Kamloops, BC, Can	2
		Niton Junction, AB, Can	1
		Surrey, BC, Can	1
		Vancouver, BC, Can	1
		Yellowhead County Sout	1

Exhibit C 15 - Site 12: Hwy 16 West - West of Hwy 22 - Wildwood
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Spruce Grove, AB, Can	Carrot Creek, AB, Can	2
		Edson, AB, Can	4
		Grande Cache, AB, Can	1
		Wildwood, AB, Can	1
	St. Albert, AB, Can	Delta, BC, Can	1
		Kamloops, BC, Can	1
		Vancouver, BC, Can	1
		Wolf Lake, AB, Can	1
	Stony Plain, AB, Can	Edson, AB, Can	1
		Peers, AB, Can	1
		Prince George, BC, Can	1
		Wildwood, AB, Can	1
	Strachan, AB, Can	Hinton, AB, Can	1
	Strathcona County, AB,	Edson, AB, Can	1
		Grande Cache, AB, Can	1
	Sturgeon County, AB, Ca	Edson, AB, Can	1
		Wolf Creek, AB, Can	1
		Wolf Lake, AB, Can	1
	Sundre, AB, Can	Hinton, AB, Can	10
		Peers, AB, Can	1
	Tofield, AB, Can	Cynthia, AB, Can	1
	Toronto, ON, Can	Prince George, BC, Can	1
	Wabamun, AB, Can	Wildwood, AB, Can	1
		Yellowhead County Sout	1
	Wetaskiwin, AB, Can	Edson, AB, Can	1
		Peers, AB, Can	1
	Winfield, AB, Can	Edson, AB, Can	1
		Niton Junction, AB, Can	1
	Winnipeg, MB, Can	Hinton, AB, Can	1
		Prince George, BC, Can	1
		Red Pass, BC, Can	1
	Winterburn, AB, Can	Carrot Creek, AB, Can	1

Total Commodity Trips for Site 12: Hwy 16 West - West of Hwy 22 - Wildwood Outbound   **364**

Total Commodity Trips for Site 12: Hwy 16 West - West of Hwy 22 - Wildwood   **365**

Exhibit C 16 - Site 13: Hwy 43 - East of Hwy 33 - Gunn
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Ainsworth, AB, Can	Edmonton, AB, Can	2
	Alberta Beach, AB, Can	Onoway, AB, Can	1
	Alexis Indian Reserve, A	Edmonton, AB, Can	1
		Spruce Grove, AB, Can	1
	Anchorage, AK, USA	, AZ, USA	1
		Strathcona County, AB,	1
	Barrhead, AB, Can	Edmonton, AB, Can	14
		Gwynne, AB, Can	1
		Lac Ste Anne County, A	1
		Lacombe, AB, Can	1
		Lethbridge, AB, Can	1
		Nisku, AB, Can	2
		Onoway, AB, Can	2
		Parkland County, AB, Ca	1
		Rosedale, AB, Can	1
		Sherwood Park, AB, Can	1
		Walford, IA, USA	1
	Beaverlodge, AB, Can	Drumheller, AB, Can	1
		Edmonton, AB, Can	2
	Bezanson, AB, Can	Edmonton, AB, Can	1
	Blue Ridge, AB, Can	Calgary, AB, Can	1
		Davidson, SK, Can	1
		Edmonton, AB, Can	9
	Bluesky, AB, Can	Red Deer, AB, Can	2
		Warner, AB, Can	1
	Boundary Lake, AB, Can	Calmar, AB, Can	1
	Cherhill, AB, Can	Edmonton, AB, Can	3
		Morinville, AB, Can	1
		Onoway, AB, Can	1
		Sturgeon County, AB, Ca	1
	Chetwynd, BC, Can	Edmonton, AB, Can	1
	Crooked Creek, AB, Can	Nisku, AB, Can	1
	Dawson Creek, BC, Can	Edmonton, AB, Can	3
	Demmitt, AB, Can	Edmonton, AB, Can	1
	Fairbanks, AK, USA	, NE, USA	1

Exhibit C 16 - Site 13: Hwy 43 - East of Hwy 33 - Gunn
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Fairbanks, AK, USA	Kimball, NE, USA	1
	Fairview, AB, Can	Calgary, AB, Can	1
	Fort Assiniboine, AB, Ca	Edmonton, AB, Can	2
		Parkland County, AB, Ca	1
		Red Deer, AB, Can	1
	Fort Nelson, BC, Can	Edmonton, AB, Can	2
	Fort St. John, BC, Can	Edmonton, AB, Can	4
		Leduc, AB, Can	1
		Sherwood Park, AB, Can	1
		Spruce Grove, AB, Can	1
	Fox Creek, AB, Can	Edmonton, AB, Can	5
		Lacombe, AB, Can	1
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	3
	Glenevis, AB, Can	CFB Cardiff, AB, Can	1
		Edmonton, AB, Can	1
		Lodgepole, AB, Can	1
		Spruce Grove, AB, Can	1
	Grande Prairie, AB, Can	Calgary, AB, Can	4
		Camrose, AB, Can	1
		Crossfield, AB, Can	1
		Edmonton, AB, Can	41
		Fort Saskatchewan, AB,	2
		Lloydminster, AB, Can	1
		Nisku, AB, Can	6
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	14
		Spruce Grove, AB, Can	3
		Wetaskiwin, AB, Can	1
		Weyburn, SK, Can	1
	Green Court, AB, Can	Spruce Grove, AB, Can	1
	Gunn, AB, Can	Battle Lake, AB, Can	1
		Buck Lake, AB, Can	1
		Edmonton, AB, Can	2
		Entwistle, AB, Can	1

Exhibit C 16 - Site 13: Hwy 43 - East of Hwy 33 - Gunn
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Gunn, AB, Can	Parkland County, AB, Ca	1
		Spruce Grove, AB, Can	2
		Wabamun, AB, Can	1
	High Level, AB, Can	Edmonton, AB, Can	2
	High Prairie, AB, Can	Camrose, AB, Can	1
		Edmonton, AB, Can	2
		Nisku, AB, Can	1
	Hines Creek, AB, Can	Sherwood Park, AB, Can	2
	La Crete, AB, Can	Sherwood Park, AB, Can	1
	Lac Ste. Anne, AB, Can	Drayton Valley, AB, Can	1
	Little Smoky, AB, Can	Nisku, AB, Can	1
	Lone Pine, AB, Can	Edmonton, AB, Can	1
	Mackenzie, BC, Can	Sherwood Park, AB, Can	1
	Manning, AB, Can	Edmonton, AB, Can	3
		Leduc, AB, Can	1
		Nisku, AB, Can	1
	Mayerthorpe, AB, Can	Edmonton, AB, Can	3
		Nisku, AB, Can	1
		Spruce Grove, AB, Can	1
	Nampa, AB, Can	Cranbrook, BC, Can	1
		Edmonton, AB, Can	1
	Neerlandia, AB, Can	Lacombe, AB, Can	1
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	1
	Peace River, AB, Can	Edmonton, AB, Can	11
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	1
	Rainbow Lake, AB, Can	Nisku, AB, Can	1
	Rich Valley, AB, Can	Edmonton, AB, Can	1
		Manly Corner, AB, Can	1
		Parkland County, AB, Ca	1
	Rycroft, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	1
		Warner, AB, Can	1
	Sangudo, AB, Can	Edmonton, AB, Can	1

Exhibit C 16 - Site 13: Hwy 43 - East of Hwy 33 - Gunn
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Sangudo, AB, Can	Strathmore, AB, Can	1
	Sexsmith, AB, Can	Nisku, AB, Can	1
		Sturgeon County, AB, Ca	1
	Silver Valley, AB, Can	Sherwood Park, AB, Can	1
	Slave Lake, AB, Can	Edmonton, AB, Can	1
	Swan Hills, AB, Can	Edmonton, AB, Can	8
		Millet, AB, Can	1
		Nisku, AB, Can	2
	Taylor, BC, Can	Fort Saskatchewan, AB,	1
		Sherwood Park, AB, Can	2
	Tumbler Ridge, BC, Can	Sparwood, BC, Can	2
	Valleyview, AB, Can	Camrose, AB, Can	1
		Donalda, AB, Can	1
		Edmonton, AB, Can	7
		Leduc County, AB, Can	1
		Sherwood Park, AB, Can	2
		Sturgeon County, AB, Ca	1
	Wanham, AB, Can	Donalda, AB, Can	1
		Lacombe, AB, Can	1
		Sherwood Park, AB, Can	1
	Whitecourt, AB, Can	, MB, Can	1
		Alamogordo, NM, USA	1
		Beaver Dam, WI, USA	1
		Claresholm, AB, Can	1
		Edmonton, AB, Can	23
		Fort Saskatchewan, AB,	1
		Lac Ste Anne County, A	1
		Nisku, AB, Can	5
		Parkland County, AB, Ca	2
		Red Deer, AB, Can	1
		Sedgewick, AB, Can	1
		Sherwood Park, AB, Can	7
		Slave Lake, AB, Can	1
		Stony Plain, AB, Can	1
		Sturgeon County, AB, Ca	1

Exhibit C 16 - Site 13: Hwy 43 - East of Hwy 33 - Gunn
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Whitecourt, AB, Can	Unity, SK, Can	1
		Viking, AB, Can	2
		Wainwright, AB, Can	1
	Whitehorse, YK, Can	Edmonton, AB, Can	1
	Zama City, AB, Can	Camrose, AB, Can	1
		Spruce Grove, AB, Can	2

Total Commodity Trips for Site 13: Hwy 43 - East of Hwy 33 - Gunn Inbound **322**

Total Commodity Trips for Site 13: Hwy 43 - East of Hwy 33 - Gunn **322**

Exhibit C 17 - Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Alexandria, MN, USA	Anchorage, AK, USA	1
	Alsike, AB, Can	Gunn, AB, Can	1
	Banff, AB, Can	, AK, USA	1
	Beach Corner, AB, Can	Onoway, AB, Can	1
	Beiseker, AB, Can	Dawson Creek, BC, Can	1
	Belle Plaine, SK, Can	Grande Prairie, AB, Can	1
	Brooks, AB, Can	Grande Prairie, AB, Can	1
	Calgary, AB, Can	Dawson Creek, BC, Can	1
		Fort St. John, BC, Can	2
		Grande Prairie, AB, Can	1
		Peace River, AB, Can	1
		Rainbow Lake, AB, Can	1
		Whitecourt, AB, Can	4
		Yellowknife, NT, Can	1
	Camrose, AB, Can	Beaverlodge, AB, Can	1
		Onoway, AB, Can	1
		Valleyview, AB, Can	1
	Carievale, SK, Can	Barrhead, AB, Can	1
	Crossfield, AB, Can	Grande Prairie, AB, Can	1
	Devon, AB, Can	Lac Ste Anne County, A	1
	Drayton Valley, AB, Can	Onoway, AB, Can	1
	Eden Lake, AB, Can	Fox Creek, AB, Can	1
	Edmonton, AB, Can	Alberta Beach, AB, Can	4
		Barrhead, AB, Can	15
		Bezanson, AB, Can	1
		Blue Ridge, AB, Can	8
		Camp Creek, AB, Can	1
		Cherhill, AB, Can	2
		Chetwynd, BC, Can	1
		Chinchoga, BC, Can	1
		Dawson Creek, BC, Can	3
		Fort Assiniboine, AB, Ca	1
		Fort Nelson, BC, Can	5
		Fort St. John, BC, Can	2
		Fox Creek, AB, Can	6

Exhibit C 17 - Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Edmonton, AB, Can	Grande Prairie, AB, Can	33
		Gunn, AB, Can	6
		Heatherdown Pit, AB, Ca	2
		High Level, AB, Can	6
		High Prairie, AB, Can	2
		Inuvik, NT, Can	1
		La Crete, AB, Can	4
		Lac Ste Anne County, A	2
		Lac Ste. Anne, AB, Can	1
		Majeau Lake, AB, Can	1
		Manning, AB, Can	1
		Manola, AB, Can	1
		Mayerthorpe, AB, Can	4
		Nampa, AB, Can	1
		Onoway, AB, Can	11
		Peace River, AB, Can	2
		Rich Valley, AB, Can	1
		Rycroft, AB, Can	1
		Slave Lake, AB, Can	1
		Swan Hills, AB, Can	6
		Valleyview, AB, Can	2
		Whitecourt, AB, Can	22
		Whitehorse, YK, Can	1
		Yellowknife, NT, Can	3
		Zama City, AB, Can	1
	Enoch Reserve, AB, Can	Alberta Beach, AB, Can	1
	Entwistle, AB, Can	Barrhead, AB, Can	1
	Fort Saskatchewan, AB,	Blue Ridge, AB, Can	1
		Grande Prairie, AB, Can	2
	Hanna, AB, Can	Whitecourt, AB, Can	1
	Jasper, AB, Can	Onoway, AB, Can	1
	Jenks, OK, USA	Onoway, AB, Can	1
	Lacombe, AB, Can	Barrhead, AB, Can	2
	Leduc County, AB, Can	Barrhead, AB, Can	1
		Grande Prairie, AB, Can	1

Exhibit C 17 - Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Leduc, AB, Can	Barrhead, AB, Can	1
		Sangudo, AB, Can	1
		Spirit River, AB, Can	1
	Lethbridge, AB, Can	Fort Nelson, BC, Can	1
	Lloydminster, AB, Can	Onoway, AB, Can	1
	Lougheed, AB, Can	Grande Prairie, AB, Can	1
	Medicine Hat, AB, Can	Fort St. John, BC, Can	1
		Grande Prairie, AB, Can	2
	Milo, AB, Can	Fairview, AB, Can	1
	Nisku, AB, Can	Blue Ridge, AB, Can	1
		Carson Creek, AB, Can	4
		Donnelly, AB, Can	1
		Fort Nelson, BC, Can	3
		Fort St. John, BC, Can	1
		Fox Creek, AB, Can	6
		Grande Prairie, AB, Can	2
		Hythe, AB, Can	1
		Kaybob, AB, Can	1
		Lac Ste Anne County, A	2
		Mayerthorpe, AB, Can	2
		MD of Greenview, AB, C	1
		Parkland County, AB, Ca	1
		Rycroft, AB, Can	1
		Valhalla Centre, AB, Can	1
		Whitecourt, AB, Can	6
	Olds, AB, Can	Crooked Creek, AB, Can	1
		Fort Assiniboine, AB, Ca	1
	Parkland County, AB, Ca	Barrhead, AB, Can	4
		Cherhill, AB, Can	1
		Fort Assiniboine, AB, Ca	2
		Fox Creek, AB, Can	1
		High Level, AB, Can	1
		Lac Ste Anne County, A	6
		Mayerthorpe, AB, Can	1
		Onoway, AB, Can	3

Exhibit C 17 - Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Parkland County, AB, Ca	Sherwood Park, AB, Can	1
		Whitecourt, AB, Can	1
	Prince Albert, SK, Can	Darwell, AB, Can	1
	Red Deer, AB, Can	Blue Ridge, AB, Can	1
		Dawson Creek, BC, Can	1
		Fort St. John, BC, Can	1
		Fox Creek, AB, Can	1
		Grande Prairie, AB, Can	1
		Whitecourt, AB, Can	1
	Rimbey, AB, Can	Fort Assiniboine, AB, Ca	1
		Fort McMurray, AB, Can	1
	Rocky Mountain House,	St. Paul, AB, Can	1
	Sherwood Park, AB, Can	Barrhead, AB, Can	2
		Bezanson, AB, Can	1
		Blue Ridge, AB, Can	1
		Dawson Creek, BC, Can	5
		Falher, AB, Can	1
		Fort St. John, BC, Can	1
		Fox Creek, AB, Can	2
		Grande Prairie, AB, Can	6
		Hines Creek, AB, Can	1
		Valleyview, AB, Can	1
		Whitecourt, AB, Can	5
		Yellowknife, NT, Can	1
	Spruce Grove, AB, Can	, NT, Can	1
		Alexis Indian Reserve, A	1
		Barrhead, AB, Can	2
		Fort St. John, BC, Can	1
		Glenevis, AB, Can	2
		Grande Prairie, AB, Can	2
		Gunn, AB, Can	1
		Heatherdown Pit, AB, Ca	1
		Hines Creek, AB, Can	1
		Mayerthorpe, AB, Can	1
		Meikle River, AB, Can	1

Exhibit C 17 - Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Spruce Grove, AB, Can	Onoway, AB, Can	1
	St. Albert, AB, Can	Chetwynd, BC, Can	1
	Stony Plain, AB, Can	Alberta Beach, AB, Can	2
		High Prairie, AB, Can	1
		Lac Ste Anne County, A	2
		Onoway, AB, Can	2
	Strathcona County, AB,	Lac Ste Anne County, A	1
		Valleyview, AB, Can	1
		Whitecourt, AB, Can	1
	Sturgeon County, AB, Ca	Grande Prairie, AB, Can	1
	Surrey, BC, Can	Whitecourt, AB, Can	1
	Taber, AB, Can	Grande Prairie, AB, Can	1
	Toronto, ON, Can	Grande Prairie, AB, Can	1
	Vancouver, BC, Can	Fort St. John, BC, Can	1
	Vermilion, AB, Can	Judy Creek, AB, Can	1
	Victoria, BC, Can	Whitecourt, AB, Can	1
	Wabamun, AB, Can	Grimshaw, AB, Can	1
	Westlock, AB, Can	Onoway, AB, Can	1
	Wetaskiwin, AB, Can	Barrhead, AB, Can	1
	Winnipeg, MB, Can	Grimshaw, AB, Can	1
	Wizard Lake, AB, Can	Gunn, AB, Can	1

Total Commodity Trips for Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner Outbound   **346**

Total Commodity Trips for Site 13: Hwy 43 - North of Hwy 16 - Carvel Corner   **346**

Exhibit C 18 - Site 14: Hwy 37 - East of Hwy 43
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Barrhead, AB, Can	Sturgeon County, AB, Ca	1
	Cherhill, AB, Can	Morinville, AB, Can	1
		Onoway, AB, Can	1
		Sherwood Park, AB, Can	1
	Fox Creek, AB, Can	Fort Saskatchewan, AB,	1
	Glenevis, AB, Can	Hardisty, AB, Can	1
	Grande Prairie, AB, Can	Onoway, AB, Can	1
	Gunn, AB, Can	Namao, AB, Can	2
		Riviere Qui Barre, AB, C	1
	High Level, AB, Can	Edmonton, AB, Can	1
	Mayerthorpe, AB, Can	Bon Accord, AB, Can	1
	Rich Valley, AB, Can	Cooking Lake, AB, Can	2
	Sangudo, AB, Can	St. Albert, AB, Can	1
		Sturgeon County, AB, Ca	1

Total Commodity Trips for Site 14: Hwy 37 - East of Hwy 43 Inbound	**16**
Total Commodity Trips for Site 14: Hwy 37 - East of Hwy 43	**16**

Exhibit C 19 - Site 15: SH 829 - North of Redwater
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Fort McMurray, AB, Can	Edmonton, AB, Can	2
		Sturgeon County, AB, Ca	4
Total Commodity Trips for Site 15: SH 829 - North of Redwater Inbound			**6**
Outbound	Edmonton, AB, Can	Cold Lake, AB, Can	1
		Slave Lake, AB, Can	2
		Thorhild, AB, Can	1
	Lamont, AB, Can	Radway, AB, Can	1
	Redwater, AB, Can	Kirby Lake, AB, Can	1
		Radway, AB, Can	1
	Sturgeon County, AB, Ca	Fort McMurray, AB, Can	1
		Radway, AB, Can	1
Total Commodity Trips for Site 15: SH 829 - North of Redwater Outbound			**9**
Total Commodity Trips for Site 15: SH 829 - North of Redwater			**15**

Exhibit C 20 - Site 16: SH 637 - East of Hwy 15 - East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Andrew, AB, Can	Edmonton, AB, Can	2
		Fort Saskatchewan, AB,	1
		Legal, AB, Can	1
		Sherwood Park, AB, Can	1
		Winterburn, AB, Can	1
	Bonnyville, AB, Can	Edmonton, AB, Can	3
	Boyle, AB, Can	Edmonton, AB, Can	1
	Cold Lake, AB, Can	Edmonton, AB, Can	4
		Sturgeon County, AB, Ca	3
	Derwent, AB, Can	Sherwood Park, AB, Can	1
	Elk Point, AB, Can	Fort Saskatchewan, AB,	1
		Nisku, AB, Can	1
	Fort Kent, AB, Can	Edmonton, AB, Can	1
	Fort McMurray, AB, Can	Aldersyde, AB, Can	1
		Edmonton, AB, Can	4
		Fort Saskatchewan, AB,	1
		Innisfail, AB, Can	1
	Glendon, AB, Can	Sherwood Park, AB, Can	1
	Grassland, AB, Can	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Hairy Hill, AB, Can	Edmonton, AB, Can	2
		Sherwood Park, AB, Can	1
	Iron River, AB, Can	Edmonton, AB, Can	1
	Lac La Biche, AB, Can	Edmonton, AB, Can	2
	Lamont, AB, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
		Vimy, AB, Can	1
	Mariana Lake, AB, Can	Fort Saskatchewan, AB,	1
	Meadow Lake, SK, Can	Fort Saskatchewan, AB,	1
	Primrose, AB, Can	Edmonton, AB, Can	1
	Smith, AB, Can	Edmonton, AB, Can	1
	St. Paul, AB, Can	Calmar, AB, Can	1
		Red Deer, AB, Can	1
		Sherwood Park, AB, Can	2
	Star, AB, Can	Edmonton, AB, Can	1

Exhibit C 20 - Site 16: SH 637 - East of Hwy 15 - East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Star, AB, Can	Parkland County, AB, Ca	1
	Thorhild, AB, Can	Sturgeon County, AB, Ca	1
	Two Hills, AB, Can	Edmonton, AB, Can	1
		St. Albert, AB, Can	1
	Vilna, AB, Can	Edmonton, AB, Can	1
	Wandering River, AB, Ca	Millet, AB, Can	1
	Waskatenau, AB, Can	Blue River, BC, Can	1
		Edmonton, AB, Can	2
	Willingdon, AB, Can	Edmonton, AB, Can	1

Total Commodity Trips for Site 16: SH 637 - East of Hwy 15 - East of Bruderheim Inbound   60

Exhibit C 20 - Site 16: SH 637 - East of Hwy 15 - East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Calgary, AB, Can	Christina Lake, AB, Can	1
		Conklin, AB, Can	1
		Star, AB, Can	1
		Waskatenau, AB, Can	1
	Coaldale, AB, Can	Two Hills, AB, Can	1
	Delta, BC, Can	Waskatenau, AB, Can	1
	Edmonton, AB, Can	Andrew, AB, Can	2
		Bonnyville, AB, Can	7
		Bow Valley, AB, Can	1
		Buffalo Lake, AB, Can	1
		Cold Lake, AB, Can	3
		Crow Creek, AB, Can	1
		Elk Point, AB, Can	1
		Fort McMurray, AB, Can	4
		Grassland, AB, Can	1
		La Corey, AB, Can	1
		Lac La Biche, AB, Can	1
		Lamont, AB, Can	3
		Myrnam, AB, Can	1
		Smoky Lake, AB, Can	1
		St. Paul, AB, Can	1
		Star, AB, Can	1
		Thorhild, AB, Can	1
		Two Hills, AB, Can	6
		Vilna, AB, Can	1
		Waskatenau, AB, Can	3
	Exshaw, AB, Can	Cold Lake, AB, Can	1
	Fort Saskatchewan, AB,	Ashmont, AB, Can	1
		Lamont County, AB, Can	1
		Lamont, AB, Can	1
		Smoky Lake, AB, Can	2
		Star, AB, Can	1
	Josephburg, AB, Can	Lamont, AB, Can	1
	Lacombe, AB, Can	Cold Lake, AB, Can	1
	Leduc, AB, Can	Mariana Lake, AB, Can	1

Exhibit C 20 - Site 16: SH 637 - East of Hwy 15 - East of Bruderheim
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Leduc, AB, Can	St. Paul, AB, Can	3
	Lethbridge, AB, Can	Fort McMurray, AB, Can	1
	Nisku, AB, Can	Cold Lake, AB, Can	3
		Fort MacKay, AB, Can	2
		Fort McMurray, AB, Can	1
		Iron River, AB, Can	1
		La Corey, AB, Can	3
		Mariana Lake, AB, Can	1
	Olds, AB, Can	Lac La Biche, AB, Can	1
	Ponoka, AB, Can	Lamont, AB, Can	1
	Red Deer, AB, Can	Fort McMurray, AB, Can	1
		Lac La Biche, AB, Can	3
	Redwater, AB, Can	Smoky Lake, AB, Can	1
	Sherwood Park, AB, Can	Boyle, AB, Can	2
		Fort McMurray, AB, Can	3
		Lac La Biche, AB, Can	1
		Lamont County, AB, Can	1
		St. Paul, AB, Can	1
	St. Albert, AB, Can	Two Hills, AB, Can	1
	Strathcona County, AB,	Lamont County, AB, Can	1
		Star, AB, Can	1
	Strathmore, AB, Can	Boyle, AB, Can	1
	Sturgeon County, AB, Ca	Lamont, AB, Can	1
		Naicam, SK, Can	1
	Trochu, AB, Can	Lac La Biche, AB, Can	1
	Vancouver, BC, Can	Cold Lake, AB, Can	1
	Vimy, AB, Can	Two Hills, AB, Can	1
	Wetaskiwin, AB, Can	Boyle, AB, Can	1
		Fort McMurray, AB, Can	2

Total Commodity Trips for Site 16: SH 637 - East of Hwy 15 - East of Bruderheim Outbound 99

Total Commodity Trips for Site 16: SH 637 - East of Hwy 15 - East of Bruderheim 159

Exhibit C 21 - Site 17: SH 630 - North of Hwy 14 - West of Tofield
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Ryley, AB, Can	Edmonton, AB, Can	1
	St. Paul, AB, Can	Strathcona County, AB,	1
	Tofield, AB, Can	Ardrossan, AB, Can	1
		Whitehorse, YK, Can	1
Total Commodity Trips for Site 17: SH 630 - North of Hwy 14 - West of Tofield Inbound			**4**
Outbound	Ardrossan, AB, Can	Ryley, AB, Can	1
	Edmonton, AB, Can	Irma, AB, Can	1
Total Commodity Trips for Site 17: SH 630 - North of Hwy 14 - West of Tofield Outbound			**2**
Total Commodity Trips for Site 17: SH 630 - North of Hwy 14 - West of Tofield			**6**

Exhibit C 22 - Site 18: SH 623 - East of Hwy 21 - East of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Camrose County, AB, Ca	Calmar, AB, Can	1
		Leduc County, AB, Can	1
		Nisku, AB, Can	1
		Strathcona County, AB,	1
	Camrose, AB, Can	Drayton Valley, AB, Can	1
		Edmonton, AB, Can	2
		Leduc County, AB, Can	1
		Morinville, AB, Can	1
		Parkland County, AB, Ca	1
		Spruce Grove, AB, Can	1
	Hay Lakes, AB, Can	Leduc, AB, Can	1
	Kingman, AB, Can	Sherwood Park, AB, Can	1
	Leduc County, AB, Can	Edmonton, AB, Can	1
		High Prairie, AB, Can	1
		Red Deer, AB, Can	1
		Rolly View, AB, Can	1
		Wetaskiwin, AB, Can	1
	Miquelon Lake, AB, Can	Leduc County, AB, Can	1
		Wetaskiwin, AB, Can	1
	Strathcona County, AB,	Leduc County, AB, Can	1
	Wetaskiwin County, AB,	Leduc County, AB, Can	1

Total Commodity Trips for Site 18: SH 623 - East of Hwy 21 - East of New Serepta Inbound   **22**

Exhibit C 22 - Site 18: SH 623 - East of Hwy 21 - East of New Serepta
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Calmar, AB, Can	Camrose County, AB, Ca	1
	Camrose, AB, Can	Hay Lakes, AB, Can	1
	Edmonton, AB, Can	Camrose County, AB, Ca	1
		Camrose, AB, Can	1
	High Prairie, AB, Can	Leduc County, AB, Can	1
	Leduc County, AB, Can	Camrose County, AB, Ca	2
		Camrose, AB, Can	1
		Hay Lakes, AB, Can	2
	Leduc, AB, Can	Round Hill, AB, Can	1
	Rolly View, AB, Can	Leduc County, AB, Can	1
	Sherwood Park, AB, Can	Kingman, AB, Can	1
	Wetaskiwin, AB, Can	Leduc County, AB, Can	1
	Wildwood, AB, Can	Camrose, AB, Can	1

Total Commodity Trips for Site 18: SH 623 - East of Hwy 21 - East of New Serepta Outbound   **15**

Total Commodity Trips for Site 18: SH 623 - East of Hwy 21 - East of New Serepta   **37**

Exhibit C 23 - Site 19: SH 616 - East of SH 822 - East of Kavanagh
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Millet, AB, Can	Leduc County, AB, Can	1
Total Commodity Trips for Site 19: SH 616 - East of SH 822 - East of Kavanagh Inbound			**1**
Outbound	Edmonton, AB, Can	Leduc County, AB, Can	1
	Leduc County, AB, Can	New Sarepta, AB, Can	1
	Nisku, AB, Can	Camrose County, AB, Ca	1
Total Commodity Trips for Site 19: SH 616 - East of SH 822 - East of Kavanagh Outbound			**3**
Total Commodity Trips for Site 19: SH 616 - East of SH 822 - East of Kavanagh			**4**

Exhibit C 24 - Site 21: SH 814 - South of SH 616 - South of Kavanagh
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Wetaskiwin County, AB,	Leduc County, AB, Can	1
Total Commodity Trips for Site 21: SH 814 - South of SH 616 - South of Kavanagh Inbound			**1**
Outbound	Edmonton, AB, Can	Wetaskiwin County, AB,	1
Total Commodity Trips for Site 21: SH 814 - South of SH 616 - South of Kavanagh Outbound			**1**
Total Commodity Trips for Site 21: SH 814 - South of SH 616 - South of Kavanagh			**2**

Exhibit C 25 - Site 22: SH 795 - South of Calmar - North of Pipestone
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Airdrie, AB, Can	Drayton Valley, AB, Can	1
	Camrose County, AB, Ca	Edmonton, AB, Can	1
	Falun, AB, Can	Edmonton, AB, Can	2
		Leduc County, AB, Can	1
		Parkland County, AB, Ca	1
	Lacombe, AB, Can	Leduc County, AB, Can	1
	Millet, AB, Can	Edmonton, AB, Can	1
		Genesee, AB, Can	1
	Mulhurst Bay, AB, Can	Edmonton, AB, Can	1
		Leduc County, AB, Can	1
		Nisku, AB, Can	1
		Slave Lake, AB, Can	1
		Wetaskiwin County, AB,	2
	Pigeon Lake, AB, Can	Edmonton, AB, Can	1
	Pine Lake, AB, Can	Leduc County, AB, Can	1
	Pipestone, AB, Can	Calmar, AB, Can	1
	Ponoka County, AB, Can	Spruce Grove, AB, Can	1
	Ponoka, AB, Can	Leduc County, AB, Can	4
	Rimbey, AB, Can	Parkland County, AB, Ca	1
		Sturgeon County, AB, Ca	1
		Villeneuve, AB, Can	1
	Wetaskiwin County, AB,	Calmar, AB, Can	1
		Edmonton, AB, Can	2
		Leduc County, AB, Can	2
		Leduc, AB, Can	3
		Nisku, AB, Can	1
		Thorsby, AB, Can	1
	Wetaskiwin, AB, Can	Calmar, AB, Can	1
		Leduc County, AB, Can	2
		Thorsby, AB, Can	2

Total Commodity Trips for Site 22: SH 795 - South of Calmar - North of Pipestone Inbound   **41**

Exhibit C 25 - Site 22: SH 795 - South of Calmar - North of Pipestone
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Athabasca, AB, Can	Harmattan, AB, Can	1
	Calmar, AB, Can	Millet, AB, Can	1
		Red Deer, AB, Can	1
	Devon, AB, Can	Falun, AB, Can	1
		Mulhurst Bay, AB, Can	1
		Wetaskiwin County, AB,	1
	Drayton Valley, AB, Can	Millet, AB, Can	1
		Mulhurst Bay, AB, Can	1
		Wetaskiwin County, AB,	1
	Edmonton, AB, Can	Bluffton, AB, Can	1
		Calgary, AB, Can	1
		Falun, AB, Can	1
		Hoadley, AB, Can	1
		Pigeon Lake, AB, Can	3
		Red Deer, AB, Can	1
		Rimbey, AB, Can	1
		Wetaskiwin County, AB,	3
	Leduc County, AB, Can	Bittern Lake, AB, Can	1
		Falun, AB, Can	1
		Mulhurst Bay, AB, Can	1
		Ponoka, AB, Can	3
		Wetaskiwin County, AB,	2
		Wetaskiwin, AB, Can	3
	Leduc, AB, Can	Wetaskiwin County, AB,	1
	Nisku, AB, Can	Mulhurst Bay, AB, Can	2
		Red Deer, AB, Can	1
		Wetaskiwin County, AB,	2
		Wizard Lake, AB, Can	1
	Onoway, AB, Can	Red Deer, AB, Can	1
	Parkland County, AB, Ca	Calgary, AB, Can	1
		Falun, AB, Can	2
		Innisfail, AB, Can	1
		Lacombe, AB, Can	2
		Strathmore, AB, Can	2
	Rolly View, AB, Can	Mulhurst Bay, AB, Can	1

Exhibit C 25 - Site 22: SH 795 - South of Calmar - North of Pipestone
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Sherwood Park, AB, Can	Alder Flats, AB, Can	1
		Winfield, AB, Can	1
	Spruce Grove, AB, Can	Phoenix, AZ, USA	1
	Strathcona County, AB,	Wetaskiwin County, AB,	1
	Sturgeon County, AB, Ca	Red Deer, AB, Can	1
		Strathmore, AB, Can	1
	Thorsby, AB, Can	Wetaskiwin County, AB,	1
		Wetaskiwin, AB, Can	1

Total Commodity Trips for Site 22: SH 795 - South of Calmar - North of Pipestone Outbound   **57**

Total Commodity Trips for Site 22: SH 795 - South of Calmar - North of Pipestone   **98**

Exhibit C 26 - Site 26: SH 759 - South of Tomahawk
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Acme, AB, Can	Sangudo, AB, Can	1
	Buck Lake, AB, Can	Wabamun, AB, Can	1
	Calgary, AB, Can	Prince George, BC, Can	1
	Carnwood, AB, Can	Parkland County, AB, Ca	1
	Drayton Valley, AB, Can	Carvel, AB, Can	1
		Edmonton, AB, Can	1
		Onoway, AB, Can	1
		Parkland County, AB, Ca	3
		Seba Beach, AB, Can	2
		Smoky Lake, AB, Can	1
		Tomahawk, AB, Can	1
		Wabamun, AB, Can	1
	Eckville, AB, Can	Wabamun, AB, Can	1
	Gull Lake, AB, Can	Entwistle, AB, Can	1
	Lindale, AB, Can	Parkland County, AB, Ca	1
	Lousana, AB, Can	Spirit River, AB, Can	1
	MD of Brazeau No. 77,	Edmonton, AB, Can	1
		Parkland County, AB, Ca	1
	Pigeon Lake, AB, Can	Seba Beach, AB, Can	1
	Red Deer, AB, Can	Fox Creek, AB, Can	1
		Whitecourt, AB, Can	1
	Rimbey, AB, Can	Entwistle, AB, Can	1
	Rocky Mountain House,	Ashmont, AB, Can	1
		Calahoo, AB, Can	1
		Tomahawk, AB, Can	1
		Wabamun, AB, Can	1
	Swalwell, AB, Can	Sangudo, AB, Can	1
	Violet Grove, AB, Can	Seba Beach, AB, Can	1
	Winfield, AB, Can	Edson, AB, Can	3

Total Commodity Trips for Site 26: SH 759 - South of Tomahawk Inbound   **34**

Exhibit C 26 - Site 26: SH 759 - South of Tomahawk
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Calahoo, AB, Can	Rocky Mountain House,	2
	Carrot Creek, AB, Can	Keephills, AB, Can	1
	Edmonton, AB, Can	Drayton Valley, AB, Can	2
		MD of Brazeau No. 77,	1
		Rocky Mountain House,	2
		Rocky Rapids, AB, Can	1
	Edson, AB, Can	Ponoka, AB, Can	1
		Red Deer, AB, Can	1
	Grande Prairie, AB, Can	Calgary, AB, Can	1
	Hinton, AB, Can	Red Deer, AB, Can	2
	Keephills, AB, Can	Lodgepole, AB, Can	1
	Lake Wabamun, AB, Can	Lindale, AB, Can	1
	Parkland County, AB, Ca	Carnwood, AB, Can	1
		Drayton Valley, AB, Can	1
		MD of Brazeau No. 77,	1
		Pigeon Lake, AB, Can	1
		Rocky Mountain House,	1
	Peers, AB, Can	High River, AB, Can	1
	Rich Valley, AB, Can	Cut Off Creek, AB, Can	1
		Rocky Mountain House,	1
	Seba Beach, AB, Can	Violet Grove, AB, Can	1
	Tomahawk, AB, Can	Alder Flats, AB, Can	1
	Wabamun Lake IR 133A,	Cochrane, AB, Can	1
	Wabamun, AB, Can	Drayton Valley, AB, Can	1
	Westlock, AB, Can	Parkland County, AB, Ca	1
	Whitecourt, AB, Can	Red Deer, AB, Can	1
Total Commodity Trips for Site 26: SH 759 - South of Tomahawk Outbound			**30**
Total Commodity Trips for Site 26: SH 759 - South of Tomahawk			**64**

**Exhibit C 27 - Site 27: SH 757 - North of SH 633 - North of Magnolia
Inbound and Outbound Commodity Trips (Unscaled)**

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	, AB, Can	Drayton Valley, AB, Can	1
	Barrhead, AB, Can	Entwistle, AB, Can	1
		Niton Junction, AB, Can	1
	Falher, AB, Can	Parkland County, AB, Ca	1
	Fox Creek, AB, Can	Parkland County, AB, Ca	1
		Red Deer, AB, Can	1
	Lac Ste Anne County, A	Drayton Valley, AB, Can	5
		Spruce Grove, AB, Can	1
	Lac Ste. Anne, AB, Can	Entwistle, AB, Can	1
	Mayerthorpe, AB, Can	Ponoka, AB, Can	1
	Nampa, AB, Can	Parkland County, AB, Ca	1
	Parkland County, AB, Ca	Drayton Valley, AB, Can	2
		Edson, AB, Can	2
		Seba Beach, AB, Can	1
	Peace River, AB, Can	Nisku, AB, Can	1
	Sangudo, AB, Can	Entwistle, AB, Can	1
		Hinton, AB, Can	1
		Peers, AB, Can	2
Total Commodity Trips for Site 27: SH 757 - North of SH 633 - North of Magnolia Inbound			**25**
Outbound	Drayton Valley, AB, Can	Lac Ste Anne County, A	3
		Parkland County, AB, Ca	1
	Edson, AB, Can	Parkland County, AB, Ca	3
	Entwistle, AB, Can	, AB, Can	1
		Sangudo, AB, Can	1
	Evansburg, AB, Can	Parkland County, AB, Ca	1
	Hoadley, AB, Can	Peace River, AB, Can	1
	Parkland County, AB, Ca	Athabasca, AB, Can	1
	Spruce Grove, AB, Can	Lac Ste Anne County, A	2
	Yellowhead County Nort	Lac Ste Anne County, A	1
Total Commodity Trips for Site 27: SH 757 - North of SH 633 - North of Magnolia Outbound			**15**
Total Commodity Trips for Site 27: SH 757 - North of SH 633 - North of Magnolia			**40**

Exhibit C 28 - Site 28: SH 633 - East of SH757 - North of Magnolia
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Darwell, AB, Can	Tangent, AB, Can	1
	Edmonton, AB, Can	Wildwood, AB, Can	1
	Lac Ste Anne County, A	Dapp, AB, Can	1
		Drayton Valley, AB, Can	1
		Entwistle, AB, Can	1
		Grande Cache, AB, Can	1
		MD of Brazeau No. 77,	1
		Parkland County, AB, Ca	1
		Wabamun, AB, Can	1
		Yellowhead County Sout	1
	Lake Isle, AB, Can	Drayton Valley, AB, Can	1
		Seba Beach, AB, Can	1
Total Commodity Trips for Site 28: SH 633 - East of SH757 - North of Magnolia Inbound			**12**
Outbound	Drayton Valley, AB, Can	Lac Ste Anne County, A	2
	Niton Junction, AB, Can	Morinville, AB, Can	1
	Seba Beach, AB, Can	Lake Isle, AB, Can	1
	Stony Plain, AB, Can	Lac Ste Anne County, A	2
Total Commodity Trips for Site 28: SH 633 - East of SH757 - North of Magnolia Outbound			**6**
Total Commodity Trips for Site 28: SH 633 - East of SH757 - North of Magnolia			**18**

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Athabasca, AB, Can	100 Mile House, BC, Can	1
		Drayton Valley, AB, Can	1
		Red Deer, AB, Can	1
	Barrhead County, AB, Ca	Edmonton, AB, Can	1
		Parkland County, AB, Ca	1
	Barrhead, AB, Can	Edmonton, AB, Can	3
		Onoway, AB, Can	1
		Parkland County, AB, Ca	1
		Red Deer, AB, Can	1
		Sturgeon County, AB, Ca	1
	Blueberry Mountain, AB,	Strathmore, AB, Can	1
	Busby, AB, Can	Alexander Indian Reserve	1
		Riviere Qui Barre, AB, C	1
	Clyde, AB, Can	Edmonton, AB, Can	1
	Donnelly, AB, Can	Edmonton, AB, Can	1
	East Peace No.131, AB,	Nisku, AB, Can	1
	Fawcett, AB, Can	Edmonton, AB, Can	1
	Flatbush, AB, Can	Fort Saskatchewan, AB,	1
	Fort Assiniboine, AB, Ca	Edmonton, AB, Can	1
		Parkland County, AB, Ca	2
	Fort McMurray, AB, Can	Calgary, AB, Can	1
		Vancouver, BC, Can	1
	Grande Prairie, AB, Can	Wetaskiwin, AB, Can	1
	Grimshaw, AB, Can	Edmonton, AB, Can	1
	Hay River, NT, Can	Tofield, AB, Can	1
	High Level, AB, Can	Edmonton, AB, Can	1
		Nisku, AB, Can	2
	High Prairie, AB, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	3
		Mesquite, TX, USA	1
		Nisku, AB, Can	6
	Hondo, AB, Can	Fort Saskatchewan, AB,	1
	Jarvie, AB, Can	Calgary, AB, Can	1
	John D'or Prairie, AB, Ca	Sturgeon County, AB, Ca	1
	Kinuso, AB, Can	Edmonton, AB, Can	1

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Manola, AB, Can	Falun, AB, Can	1
	McLennan, AB, Can	Strathmore, AB, Can	1
	Mitsue, AB, Can	Edmonton, AB, Can	3
	Neerlandia, AB, Can	Penhold, AB, Can	1
		Red Deer, AB, Can	2
		Sturgeon County, AB, Ca	1
		Sylvan Lake, AB, Can	1
	Nipisi River, BC, Can	Strathcona County, AB,	1
	Peace River, AB, Can	Calgary, AB, Can	1
		Edmonton, AB, Can	1
	Pickardville, AB, Can	Edmonton, AB, Can	1
	Radway, AB, Can	Edmonton, AB, Can	1
	Red Earth Creek, AB, Ca	Calgary, AB, Can	1
		Edmonton, AB, Can	5
	Rycroft, AB, Can	Sherwood Park, AB, Can	1
	Slave Lake, AB, Can	, LA, USA	1
		Calgary, AB, Can	1
		Edmonton, AB, Can	29
		Sherwood Park, AB, Can	3
		Spruce Grove, AB, Can	1
		Spruce View, AB, Can	1
		Strathcona County, AB,	2
		Tomahawk, AB, Can	2
		Toronto, ON, Can	1
	Trout Lake, AB, Can	Edmonton, AB, Can	3
		Parkland County, AB, Ca	1
	Wabasca-Desmarais, AB,	Nisku, AB, Can	1
	Westlock County, AB, C	Edmonton, AB, Can	1
		Legal, AB, Can	1
	Westlock, AB, Can	Arrowwood, AB, Can	1
		Calgary, AB, Can	1
		Cynthia, AB, Can	1
		Edmonton, AB, Can	11
		Edson, AB, Can	1
		Lacombe, AB, Can	1

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Westlock, AB, Can	Linden, AB, Can	1
		Morinville, AB, Can	2
		Nisku, AB, Can	1
		Parkland County, AB, Ca	1
		Pigeon Lake, AB, Can	1
		Riviere Qui Barre, AB, C	2
		Sherwood Park, AB, Can	3
		Spruce Grove, AB, Can	1
		Strathmore, AB, Can	2
		Sturgeon County, AB, Ca	4

Total Commodity Trips for Site 32: Hwy 44 - South of SH 651 - West of Legal Inbound　　　　**150**

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	, SK, Can	Hondo, AB, Can	1
	, WY, USA	Westlock, AB, Can	1
	Alcomdale, AB, Can	Clyde, AB, Can	1
		Westlock, AB, Can	1
	Bon Accord, AB, Can	Legal, AB, Can	1
	Calgary, AB, Can	Busby, AB, Can	1
		Slave Lake, AB, Can	1
	Clyde, AB, Can	Clyde, AB, Can	1
	Cynthia, AB, Can	Westlock, AB, Can	1
	Didsbury, AB, Can	Pickardville, AB, Can	1
		Westlock, AB, Can	1
	Drayton Valley, AB, Can	Athabasca, AB, Can	2
		Slave Lake, AB, Can	1
	Edmonton, AB, Can	Athabasca, AB, Can	1
		Barrhead, AB, Can	2
		Clyde, AB, Can	1
		Fawcett, AB, Can	2
		Hay River, NT, Can	2
		High Level, AB, Can	3
		High Prairie, AB, Can	1
		Hines Creek, AB, Can	1
		Kinuso, AB, Can	1
		Mitsue, AB, Can	2
		Peace River, AB, Can	3
		Red Earth Creek, AB, Ca	2
		Slave Lake, AB, Can	17
		Swan Hills, AB, Can	1
		Wabasca-Desmarais, AB,	2
		Westlock County, AB, C	3
		Westlock, AB, Can	12
		Yellowknife, NT, Can	1
	Edson, AB, Can	Pickardville, AB, Can	1
	Fort Saskatchewan, AB,	Peace River, AB, Can	1
		Westlock, AB, Can	1
	Leduc County, AB, Can	Westlock, AB, Can	1

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Leduc, AB, Can	Dapp, AB, Can	1
		Westlock, AB, Can	1
	Lloydminster, AB, Can	Westlock, AB, Can	1
	Morinville, AB, Can	Gibbons, AB, Can	1
	Nisku, AB, Can	Athabasca, AB, Can	1
		Barrhead, AB, Can	1
		Red Earth Creek, AB, Ca	1
		Yellowknife, NT, Can	1
	Parkland County, AB, Ca	Fawcett, AB, Can	1
		High Level, AB, Can	1
		Slave Lake, AB, Can	2
		Trout Lake, AB, Can	1
		Westlock, AB, Can	2
	Pigeon Lake, AB, Can	Westlock, AB, Can	1
	Ponoka, AB, Can	Calling Lake, AB, Can	1
	Red Deer, AB, Can	High Prairie, AB, Can	1
		Slave Lake, AB, Can	1
	Riviere Qui Barre, AB, C	Westlock, AB, Can	2
	Saskatoon, SK, Can	Slave Lake, AB, Can	1
	Sherwood Park, AB, Can	Dapp, AB, Can	1
		Highridge, AB, Can	1
		La Crete, AB, Can	3
		Peace River, AB, Can	2
		Slave Lake, AB, Can	2
		Westlock, AB, Can	7
	Spruce Grove, AB, Can	Fort McMurray, AB, Can	1
		Westlock, AB, Can	1
	Spruce View, AB, Can	Slave Lake, AB, Can	1
	Stony Plain, AB, Can	Slave Lake, AB, Can	2
	Strathcona County, AB,	High Level, AB, Can	1
		Red Earth Creek, AB, Ca	1
	Strathmore, AB, Can	Westlock, AB, Can	3
	Sturgeon County, AB, Ca	Barrhead, AB, Can	2
		La Crete, AB, Can	1
		Westlock County, AB, C	1

Exhibit C 29 - Site 32: Hwy 44 - South of SH 651 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Outbound	Sturgeon County, AB, Ca	Westlock, AB, Can	3
	Thorsby, AB, Can	Westlock, AB, Can	1
	Vanscoy, SK, Can	Hondo, AB, Can	1
	Winfield, AB, Can	Clyde, AB, Can	1

Total Commodity Trips for Site 32: Hwy 44 - South of SH 651 - West of Legal Outbound   **133**

Total Commodity Trips for Site 32: Hwy 44 - South of SH 651 - West of Legal   **283**

Exhibit C 30 - Site 33: SH 651 - East of Hwy 44 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Inbound	Barrhead County, AB, Ca	Edmonton, AB, Can	1
	Barrhead, AB, Can	Edmonton, AB, Can	1
		Sturgeon County, AB, Ca	1
	Busby, AB, Can	Legal, AB, Can	2
	High Prairie, AB, Can	Edmonton, AB, Can	1
	Highridge, AB, Can	Edmonton, AB, Can	1
	Majeau Lake, AB, Can	Clyde, AB, Can	1
	Neerlandia, AB, Can	Redwater, AB, Can	1
	Pickardville, AB, Can	Camrose, AB, Can	2
	Rich Valley, AB, Can	Clyde, AB, Can	1
	Slave Lake, AB, Can	Wabamun, AB, Can	1
	Westlock, AB, Can	Legal, AB, Can	2
Total Commodity Trips for Site 33: SH 651 - East of Hwy 44 - West of Legal Inbound			**15**
Outbound	Edmonton, AB, Can	Barrhead, AB, Can	1
		High Prairie, AB, Can	1
		Lac La Nonne, AB, Can	1
		Wabasca-Desmarais, AB,	1
		Westlock County, AB, C	1
	Gibbons, AB, Can	Berwyn, AB, Can	1
	Lac La Biche, AB, Can	Lac La Nonne, AB, Can	1
	Legal, AB, Can	Onoway, AB, Can	1
	Morinville, AB, Can	Barrhead, AB, Can	1
		Busby, AB, Can	1
	Sherwood Park, AB, Can	Slave Lake, AB, Can	2
	Sturgeon County, AB, Ca	Falher, AB, Can	3
		Morinville, AB, Can	2
		Nakamum Lake, AB, Can	1
		Onoway, AB, Can	1
		Sturgeon County, AB, Ca	1
	Vimy, AB, Can	Busby, AB, Can	1
		Majeau Lake, AB, Can	1
		Nanton, AB, Can	1
Total Commodity Trips for Site 33: SH 651 - East of Hwy 44 - West of Legal Outbound			**23**
Total Commodity Trips for Site 33: SH 651 - East of Hwy 44 - West of Legal			**38**

Exhibit C 30 - Site 33: SH 651 - East of Hwy 44 - West of Legal
Inbound and Outbound Commodity Trips (Unscaled)

Direction	Origin	Destination	Total Unscaled Commodity Trips
Total CommodityTrips			**6,485**

Exhibit C 30 - Site 33: SH 651 - East of Hwy 44 - West of Legal

C 30.2

APPENDIX D:
FACTORS INFLUENCING FREIGHT MOVEMENT AND IMPACTS OF FREIGHT MOVEMENT

Appendix D: Factors Influencing Freight Movement and Impacts of Freight Movements

There are a number of factors that influence freight movement patterns. Over the years, a combination of urban growth, changes in community values, advances in technology, environmental awareness and the increasing tendency to view goods transport as part of a total management process have had significant effect on the nature of freight movements particularly in the urban areas. Examples include (Ogden 1988, Transport 2021 1993, Roads and Traffic Authority 1991):

♦ Logistics management which places transport as a link in a chain of business activities. This has led to, in come cases, sub-optimization of transport so that optimization of other links can be achieved,

♦ Increases in congestion, increases in land prices, access problems, outdated facilities, and location changes away from congested areas, resulted in increased trip lengths,

♦ Improvements in communication technology (e.g. mobile phones, vehicle tagging), vehicle technology and changes in regulation, have allowed larger vehicles and higher loads, and

♦ Increased awareness and intolerance of adverse safety and environmental effects has placed pressure on governments to more stringently regulate these impacts.

D1.   The Economy

As indicated earlier, freight movement contributes to the economic performance of regions at a local, regional and national level. One of the most significant ways, in which the freight system can contribute to the economy, is through helping firms become more competitive by providing more efficient and reliable services.

In 2002, $7.79 billion worth of non–pipeline freight was exported to the U.S. by trucks. This represented 56% of the total non–pipeline products to the U.S. of $13.91 billion. Of the total truck freight 39.7% or $3.09 billion of products exported to the U.S. first travels east or west before heading south. Exports to the U.S., carried by trucks travelling directly south from Alberta amounted to 59.1% or $4.6 billion in value. The remaining 1.2% or $96 million worth of freight travels to the US by truck through the Yukon.

D2.   Traffic Management and Design for Trucks

• *Congestion*

As the economy grows and businesses succeed, there is a degree of inevitability associated with increased congestion. When business is most successful, activity is greatest and therefore congestion is greatest. As congestion escalates, transport costs

increase and pressure is exerted on business to move to a cheaper location, and find new opportunities (Municipality of Metropolitan Toronto 1987).

By empowering businesses with knowledge of how the road network will develop, firms will be able to plan investment strategies more efficiently and effectively thus assisting them to avoid congested conditions. Traffic management strategies such as signal priority, turning bans, and priority lanes for large vehicles as well as strategic investment in infrastructure all aid the efficiency of the network.

- *Road Network Deficiencies*

Delays and costs can be increased by deficiencies in the road network. Poor intersection geometrics and obstacles along routes often cause the most common network deficiencies encountered by trucks. Some of the deficiencies include (but not limited to):

♦ Sharp bends,
♦ Substandard clearances on overhead bridges,
♦ Poor visibility at level railway crossings,
♦ Poor maintenance of road pavement,
♦ Excessive or incorrect superelevation, and
♦ Absence of pavement or lane markings.

Other deficiencies encountered in an urban area include:

♦ Overhanging trees, and
♦ Poles, signs, shop awnings, hydrants, etc. located close to the curb.

D3.   Reducing Environmental Impacts

- *Noise Reductions*

Noise is of particular annoyance to the public, more so in an urban environment than the rural, especially on routes, which have a large proportion of trucks. These effects are greater in stop start traffic due to braking and acceleration. Excessive noise levels have resulted in many local governments introducing vehicular restrictions, prohibiting truck operations during certain hours.

Methods by which noise reduction can be achieved are:

♦ Source reduction (e.g. improvements in vehicle levels and road surfaces, to reduce tire – road interface noise),
♦ Traffic management (e.g. signal phasing, route choice), and
♦ Noise mitigation (improved building insulation and road noise barriers)

- *Emissions*

The contribution of trucks to total emissions varies with the type of truck (light versus heavy), its engine type, the conditions under which it operates (free flow versus stop – start), the load carried, the mechanical condition of the engine, brakes, tires, etc. and the total distance travelled (Ogden 1992a). Attention to the source, traffic management, and land use planning assists in the reduction of emissions.

In terms of total energy consumption, the road transport sector accounts for a fair percentage of energy consumption. However, it is interesting to note that a study in the U.S. found that the average fuel use per kilometre was the same in 1988 as in 1973 for both medium and heavy trucks (Shipper et al 1992). Improvements in technical efficiencies were offset by increases in operating speeds and increases in traffic congestion.

D4. Impacts on Urban Structure

The structure of an urban area has a profound impact on all aspects of urban freight movement. Land use and planning policies impact on the location of terminals, shippers, receivers and even operators which in turn affects costs in some ways. The decision to locate on the urban fringe, in suburbia, or close to customers, influences factors such as trip length, route choice, vehicle type, hours of operating and operating costs (Ogedn 1992a, Bowyer and Ogden 1988). As well, transportation networks which provide inadequate connectivity, and insufficient radial and ring routes result in congestion, unproductive vehicles and nuisance to residents.

- *Business Location*

Different types of Business have different transport requirements. Through understanding the factors affecting business location, and by managing the location of land uses through planning policy, the type, location, impacts, and intensity of freight and trucking activities can be influenced.

- *Network Planning*

Road networks, especially in the urban areas, were designed primarily for the movement of people and not for the movement of goods. In the absence of freight and commercial vehicle data, urban planners and transport planners have traditionally used passenger vehicles and peak commuter traffic to plan the network and forecast traffic growths. In Alberta, statistics gathered by Alberta Transportation reveal freight traffic historically is composed of 15% to 20% of the total vehicular traffic on the road, and has been incorporated as a factor of passenger car traffic. This has the effect of the freight movement industry adapting to a network designed primarily for the commuters. In some cases this has led to damage to roads and bridges, resulting in the need to restrict the network. The effects of these restrictions, for example truck bans on certain roads results

in cost to the freight sector through increased travel times, distances, and possible constraints to hours of operation.

D5.   Intelligent Transport Systems

In the future, intelligent transport systems will greatly enhance the efficiency and safety of the transport network, through the wide spread use of features such as (Ogden 1993):

- ♦ Dynamic route guidance,
- ♦ Variable message signs,
- ♦ Real time monitoring and control of traffic system performance,
- ♦ Traffic incident detection,
- ♦ Signal priority to selected vehicles,
- ♦ Traffic offences, and
- ♦ Better information to policy makers and researchers about road user behaviour, travel patterns and demands.

These tools will assist the transfer of information between all users and managers of the transport system including traffic managers and users, freight vehicle drivers and operators, and operators and customers. It is anticipated that this multi – faceted communication will allow greater efficiencies to be achieved on the network through congestion avoidance, better route planning, the ability to keep track of vehicle location, and improved data collection for research.