ANALYSIS OF THE COMMERCIAL VEHICLE DRIVER SURVEY RESULTS

(REST AREA RESEARCH PROJECT—PHASE I)

Prepared for Transport Canada

by

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Analysis of commercial vehicle driver survey results

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Executive summary

This report presents the analysis of the results of a commercial truck driver survey. The survey objective was to better understand the habits and preferences of truck drivers travelling in Canada. The survey also focused on the drivers' level of satisfaction with public and private service centres and truck stops. The survey results helped to identify locations where parking is lacking and how this shortage influences the work of drivers throughout the country.

The survey was conducted online at http://www.surveymonkey.com/stationnementscamionscanada). A few completed questionnaires were also received by mail. Various trucking associations and public organizations distributed leaflets and sent emails to publicize the survey. A total of 1788 survey responses were collected between November 16, 2009 and February 22, 2010 representing approximately 0.8 percent of the Canadian commercial vehicle drivers (225 000 drivers)¹. The survey results yielded useful information about the opinions and behaviours of Canadian truck drivers.

A total of 93.7 percent of the drivers who answered the survey said that their work requires off-duty periods away from home. Drivers travelled an average of 166 000 kilometres (km) per year, but about 40 percent of them travelled more than 200 000 km annually. On average, they spent 192 nights away from home, but only 5 nights in a motel. Most of the drivers drove in two or three jurisdictions across Canada and 67 percent of all the drivers travelled in Ontario at least once.93.2 percent of the vehicles are equipped with a sleeper berth and 56.3 percent with a cab heater. About 30 percent of the drivers operated over-dimensional vehicles, while 10 percent drove long combination vehicles.

The majority of the drivers had trouble finding parking at different phases of their journey. At the destination, 48 percent experienced difficulty in finding parking, while the rate en route is 60.4 percent. Urban areas represent the most difficult place to park at 80.8 percent. While this number is lower for smaller communities, it is more than 50 percent for uninhabited areas. Southern British Columbia, most parts of Alberta, northern Ontario and large urban areas are problematic for parking. This lack of parking impacts drivers' behaviour. 49.2 percent of drivers drove beyond their planned location to find parking, causing 49 percent of them to frequently (often or always) surpass their available hours of service. In the year before the survey, 42.8 percent were told by an enforcement officer to move away from a non-designated parking space. In 37.6 percent of these cases, the drivers were out of their hours of service when told to move their vehicle. Finally, a very high rate of the drivers, 88.4 percent, stated that there are not enough rest areas, roadside pull-outs and turn-outs, or safe havens for them to safely perform inspections.

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¹ Owner-Operator's Business Association of Canada (OBAC).

Most drivers reported that telephones, washrooms and drinking water are lacking from the public rest areas and service centres in Canada. The few drivers, 14 percent, who considered there to be enough service stated that Quebec and Ontario are the main provinces providing these amenities. The services reported to be the most important in service centres include washrooms, parking, adequate lighting and drinking water. Drivers would like to have more public centres equipped with cell phone service in remote areas, food service, showers and convenience stores. Internet connections are also sought by drivers. If a time limit on parking must be imposed in these areas (as accepted by 33 percent of the drivers), it should be from 10 to 12 hours.

The services offered are very important to 54 percent of drivers when they choose a particular private truck stop. 41 percent found that the operability of their card lock outlets was unacceptable. When they fuel their truck, drivers expect to have free access to showers (96 percent), parking (99 percent) and the Internet (72 percent). They are willing to pay for showers (87 percent), but not parking (21 percent). Few drivers are willing to pay for parking even though they have larger parking lots or plug-in stations available to them. However, 28 percent are willing to pay if there is better security at the location. 70 percent of the drivers will pay a maximum of \$30 per night for the services (excluding fuel). Private truck stop services are generally used by most of the respondents. The most popular services are food, showers and store merchandise. They want more of the following services in private sites: healthier food, repair facilities, plug-in stations, snow removal and wireless Internet.

More than 75 percent of the drivers stated that they are willing to use closed weigh stations for alternative parking, however only 57 percent would use them when they are open. The most popular ad hoc parking locations are industrial properties (used by 84 percent of the drivers), followed by shopping mall parking lots (69 percent), vacant lots (64 percent), roadside pull-outs (64 percent) and weigh stations (60 percent). Drivers identified potential locations with the most cited being Walmart parking lots, which are available countrywide. In many suggestions, drivers also recommended that the Canadian authorities look south of the border for good examples of truck stop services.

At the end of the survey, the drivers provided comments about how truck parking could be improved in Canada. The comments were divided into eight categories. Drivers generally asked for more facilities and more spaces in these facilities. For the configuration of the parking facilities, 24.4 percent of the drivers stated they prefer that the facilities be configured similar to those in the United States. 16.7 percent would like to have truck-only areas. The services most wanted include showers, restrooms and laundry. Some drivers recommended that there be some type of public funding and support for rest areas and truck stops or have the trucking industry support these facilities. When drivers commented on the irritants about their driving duty, the most relevant were the hours of service (HOS) and other regulations, the presence of recreational vehicles in parking spaces and the sense of negative judgement by the general population. According to some drivers, they need more flexibility to comply with regulations (for example, by adding more rest locations and changing the rules to accommodate drivers

when they cannot park). They also expressed that it is already difficult for them to comply with this regulation since they often do not find a spot to park when they are beyond their hours limit.

A correlation analysis was applied to the answers. The analysis shows a relationship between the difficulty of finding parking and exceeding the HOS regulation. It mentions concerns about safety such as a lack of camera surveillance, fencing and lighting. The correlation analysis shows that the services that the drivers want for public areas are about the same as those that are available in private service centres and at truck stops. There is an especially strong correlation in the case of exercise areas. The analysis also shows that drivers were consistent in their answers. For example, several answers mentioned Internet access.

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Introduction

In Canada, road transportation of freight has increased by more than 300 percent since 1990. In 2008², the amount of goods carried by the trucking industry was estimated to be at about 507 million tons. This rapid evolution has not been accompanied by the same evolution of road infrastructure supply. In this context, an increasing pressure is put on infrastructures and notably on rest areas. As we know, rest areas are critical locations for the trucking industry. Truck drivers, particularly long-haul drivers, require places to park to rest and comply with the hours of service (HOS) regulations. Commercial drivers require areas where they can park safely while taking breaks, using washrooms, having meals and doing maintenance checks on their vehicles. Such services are available in various types of locations such as organized service centres and recreational rest areas; privately-owned truck stops, service stations and restaurants; and other business places. Truck drivers in Canada are required to park to rest especially to comply with the HOS regulation stated below:

"Under the Commercial Vehicle Drivers Hours of Service Regulations commercial drivers are permitted to drive up to 13 hours a day and be on-duty up to 14 hours a day within a 16 hour elapsed-time window (e.g. maximum 16 hours from the time they report to duty to the time they finish for the day). They must take a minimum of 8 consecutive hours off within a 24 hour period. Commercial drivers are also limited by cycle caps; they cannot drive more than 70 hours within a 7-day period (cycle 1) before having to take a 36-hour rest period or 120 hours within a 14 day period (cycle 2) before taking 72 hours off."

Transport Canada, the Owner-Operator's Business Association of Canada and the project steering committee conducted a survey to measure the supply and demand of truck parking in Canada. There is a need to identify the requirements of commercial vehicle drivers according to their level of activity and to compare those requirements with the availability of parking spaces and rest area services and amenities across the country. There is also a need to estimate the possible impact of parking shortages or inconveniences that may result from the lack of adequate services. This report presents the analysis of the information gathered through this survey, which was conducted between November 2009 and February 2010 among 1788 respondents.

The information in this report does not necessarily represent the views of Transport Canada or the project steering committee. The contents of this report focus on the results and showings that resulted from the answers provided by the survey respondents.

The report is organized as follows:

Survey objective and glossary

² North American Transportation Statistics Database, http://nats.sct.gob.mx/nats (accessed on April 13, 2010).

- Section 1: About your work
- Section 2: Parking considerations—General
- Section 3: Parking considerations—Compliance and productivity
- Section 4: Parking considerations—Personal security and hygiene
- Section 5: Public rest areas and service centres
- Section 6: Private truck stops
- Section 7: Alternative parking solutions
- Section 8: Truck parking improvements—Driver suggestions and comments
- Conclusion

Survey objective and glossary

This section explains the objective of the survey and lists the terms and definitions used in the survey and this report.

Survey objective

The survey, Truck Parking in Canada—Commercial Vehicle Driver Survey, was conducted by Transport Canada and its industry partners. The objective of this survey was to

- determine truck drivers' parking habits and preferences while travelling in Canada
- identify areas of the country where designated truck parking might be difficult to find
- determine how any possible shortages of parking might impact safety, productivity and personal well-being³

Glossary

This section provides the terms and definitions used in the survey and this report.

ad hoc parking area: a place that trucks park even though they are not expressly permitted. Examples include roadside pull-outs, snowplow turnarounds, brake check areas, highway on-and off-ramps, Customs compounds, shopping mall parking lots, municipal streets, vacant lots and privately owned facilities near loading docks.⁴

card lock outlet: an unattended fuel station that drivers access then bill directly to the company

designated truck parking: a place where trucks are expressly permitted to park. In addition to the areas listed for ad hoc parking area, such places could include weigh stations or, after-hours, at industrial premises where trucks load and unload.⁴

GPS trace: location data provided by a truck's global positioning system (GPS)

load board: a video terminal found at some truck stops displaying various loads that are available to haul for hire in the vicinity of the truck stop. The loads are generally posted by independent freight brokers.

multiple choice question: a type of question where the user had to select an answer (or several) from among options (such as Yes or No for a list of questions). In some cases, respondents answered a question by selecting option, Other, and entering their comments into an open-text comment box.

³ Excerpt from the survey questionnaire foreword.

⁴ As cited in the printed version of the questionnaire of the survey.

open-text question: a type of question where the respondent had to fill-out a text box with a comment, a location, a quantity or any other information that was not validated by the online tool.

rating scale question: a type of question where the respondent had to rate various assertions.

rest area: a publicly owned facility built to provide travellers with short-term parking while en route, such as those located along Quebec's Highway 20. A rest area may provide washroom facilities, limited food service, designated truck parking and access to telephones.⁴

service centre: a privately owned or public facility built alongside highways (such as those located along Ontario's 400-series highways and Quebec's Highway 40) with designated truck parking, restaurants, washrooms and other services.⁴

shore power: a plug-in station, which provides electricity and allows idle reduction (i.e. it reduces the amount of fuel consumed by a truck while it idles during a rest period)

single system electrification: off-board equipment providing heating, ventilation and air conditioning systems contained in a structure above or next to the truck parking spaces. For example, IdleAire Technologies Corporation (IdleAire) is a company that provides in-cab services to truckers.

truck stop: includes privately owned full-service centres (e.g. Husky Plus Car &Truck Stop, Irving Big Stop), card lock locations (e.g. Petro-Pass), restaurants and smaller fuel stops that allow truck parking⁴

1 About your work

This section describes the profile of the survey respondents (Questions 1 to 7).

1.1 Off duty periods

1.	Does your work as a commercial driver require that you spend off-duty periods away from
	home, or in the course of a work shift, do you find yourself in need of parking facilities to
	rest, use a washroom, or consume a meal?
	☐ Yes ☐ No

A total of 93.7 percent of the drivers said that their work requires off-duty periods away from home. Only 4.5 percent of the remaining 6.3 percent of the respondents answered the questions about rest areas and truck stops.

1.2 Distances driven per year

2. How many kilometres did you drive last year?

Most of the respondents drove between 150 000 and 250 000 kilometres (km) per year. The resultant average distance is 166 000 km. (The median value is 175 000 km). Figure 1.1 shows the distribution of the travel distances in ranges of 50 000 km.

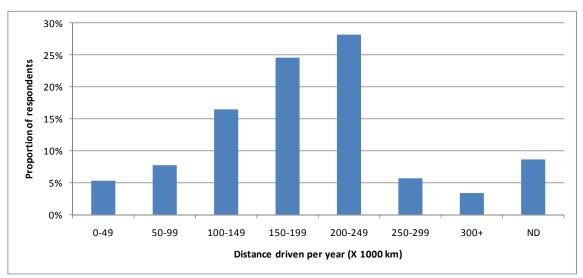


Figure 1.1: Distribution of travel distances per year (Q2).

1.3 Nights away from home per year

3. How many nights (average) do you spend away from home each year?

The number of nights away from home is divided between two distinct groups (Figure 1.2). About 14 percent of the respondents were away less than 50 nights per year, while 50 percent of them slept more than 200 nights away from home. This results in an overall average of 192 nights. (The median is 202.)

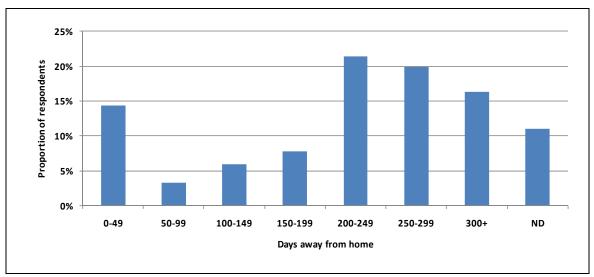


Figure 1.2: Number of nights away from home per year (Q3).

1.4 Jurisdictions

4. Estimate how much (10%, 35%, etc.) of your driving time is spent in these jurisdictions each year:

British Columbia	
Alberta	
Saskatchewan	
Manitoba	
Ontario	
Quebec	
New Brunswick	
Nova Scotia	
Prince Edward Island	
Newfoundland and	
Labrador	
Yukon	
Northwest Territories	
Nunavut	
United States	

Question 4 addresses jurisdictions based on

- the proportion of respondents who travelled in each jurisdiction
- the average distance travelled in each jurisdiction per year
- the average number of nights away from home in each jurisdiction

1.4.1 Jurisdictions travelled in

Figure 1.3 shows the proportion of respondents who travelled at least one night in each of the jurisdictions⁵. It is noteworthy that about 54 percent of the drivers went to the United States and 67 percent to Ontario. The western provinces are also well represented.

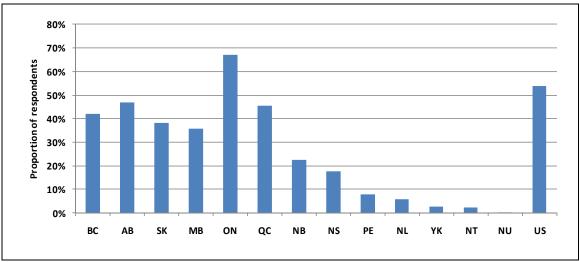


Figure 1.3: Proportion of respondents who travelled in each jurisdiction.

1.4.2 Jurisdictions and distances

Figure 1.4 shows the average distance driven in each jurisdiction. The distances were calculated by combining the proportion of driving time in each jurisdiction based on the yearly distance declared by each respondent. Here, Ontario and the Unites States (U.S.) remain important jurisdictions, but the average distance is higher in the U.S.

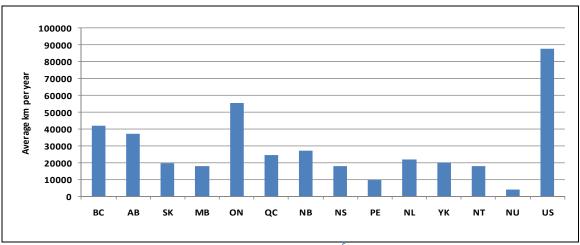


Figure 1.4: Average distances driven per year, per jurisdiction⁶.

⁵ BC=British Columbia, AB=Alberta, SK=Saskatchewan, MB=Manitoba, ON=Ontario, QC=Quebec, NB=New Brunswick, NS=Nova Scotia, PE=Prince Edward Island, NL=Newfoundland and Labrador, YK=Yukon, NT=Northwest Territories, NU=Nunavut, US=United States.

⁶ The average was obtained by dividing the total number of kilometres driven in a jurisdiction by the number of drivers who reported a proportion of their driving time in a jurisdiction.

For total travel distance, the U.S. was excluded from the analysis to better represent the share of each province in Canada. Figure 1.5 shows that 33.9 percent (about one third) of the total distance was travelled in Ontario and about 16 percent in both British Columbia and Alberta.

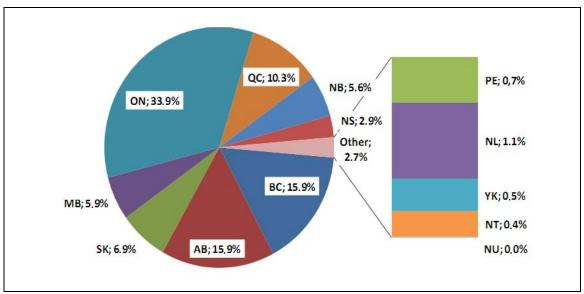


Figure 1.5: Proportion of distance travelled, per jurisdiction (excluding the U.S) (Q4).

1.4.3 Jurisdictions and nights away from home

The distribution of the average number of nights away from home is shown in Figure 1.6. While the U.S. is still predominant, the average number of nights is also high in British Columbia, Alberta and Ontario.

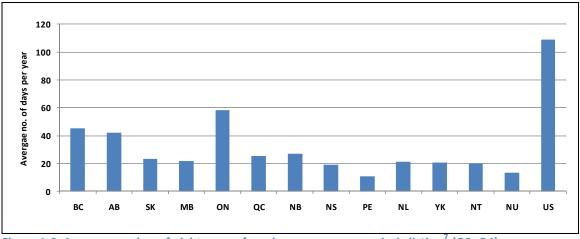


Figure 1.6: Average number of nights away from home per year, per jurisdiction (Q3, Q4).

The proportion of the total number of nights away from home, excluding the U.S., is shown in Figure 1.7

9

⁷ The average was obtained by dividing the total number of days compiled in a jurisdiction by the number of drivers who reported a proportion of their driving time in the jurisdiction.

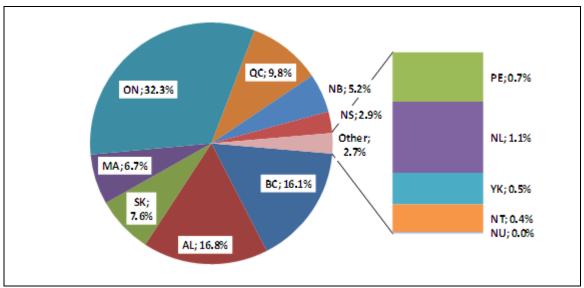


Figure 1.7: Proportion of the number of nights away from home per jurisdiction (excluding the U.S.).

1.5 Dominant jurisdictions

In this section, we identify the dominant jurisdiction(s) associated with each respondent. The goal here is to identify the patterns of behaviour by respondents with similar characteristics.

Figure 1.8 shows the sum of the jurisdictions declared by the respondents as having travelled in. Most of them declared two or three jurisdictions, but groups of jurisdictions were found in the results, especially for the Maritime and western provinces. Based on these results, an arbitrary grouping was made to ease the analyses.

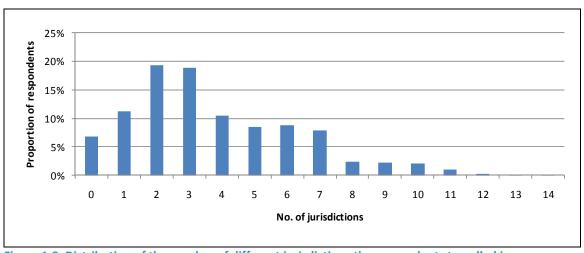


Figure 1.8: Distribution of the number of different jurisdictions the respondents travelled in.

The respondents were grouped as follows:

- The United States were excluded from the analysis. Only the proportion of the distance travelled in Canada was used for this analysis. No redistribution of the Canadian distances was made.
- The following groups were created to limit the number of jurisdictions for analysis purposes:
 - Prairies (Alberta, Saskatchewan and Manitoba)
 - Maritimes (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador)
 - o Territories (Yukon, Northwest Territories and Nunavut)
- The maximum proportion of driving time was retained as the respondent's dominant jurisdiction.
- When two jurisdictions were equal (i.e. where respondents reported the same proportion of parking shortages), two additional groups were created: Western provinces, and Ontario and Quebec. These additional groups helped to identify the dominant regions.

Figure 1.9 shows the results of this grouping. A vast majority of the respondents declared Ontario as their major place of work. The western provinces are also well represented in the survey results.

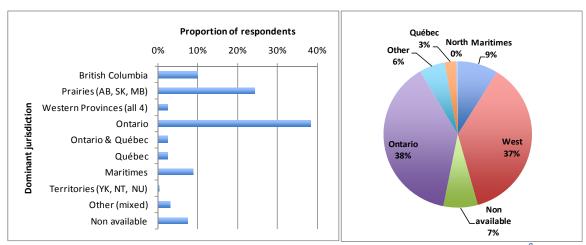


Figure 1.9: Distribution of the number of respondents according to their dominant jurisdiction.8

Figure 1.10 shows the significance of identifying such groupings of the respondents. The travel distance distribution is slightly different between the drivers. As expected, those with single province groups travelled less during a year, compared to the group associated with multiple provinces. In the Territories, the travel distance is lower for most drivers, but there is also a large proportion of very high distances (i.e. more than 300 000 km) in the group.

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⁸ In the Other (OT) group, we found that some drivers declared the same proportion of driving time for more than two grouped jurisdictions (e.g. 30 percent Ontario, 30 percent Quebec, 30 percent Maritimes and 10 percent elsewhere).

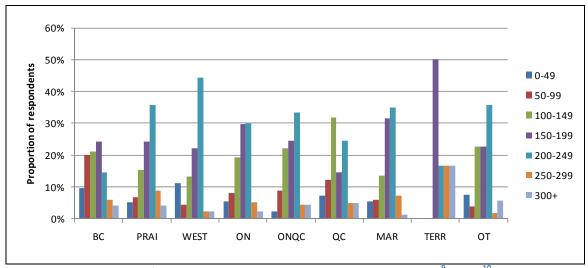


Figure 1.10: Distribution of travel distances per year, per dominant jurisdiction group to make the property of the second secon

The distribution of the number of days away from home is shown in Figure 1.11.

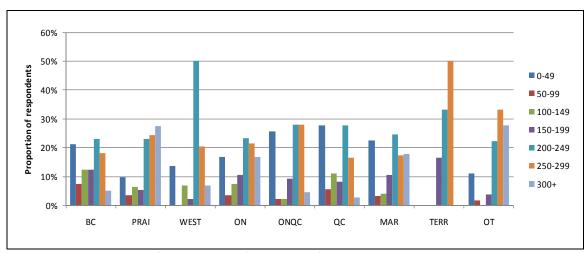


Figure 1.11: Distribution of the number of days away from home per year, per dominant jurisdiction group.

¹⁰ BC=British Columbia, PRAI=Prairies, WEST=All 4 western provinces, ON=Ontario, ONQC=Ontario and Quebec, QC=Quebec, MAR=Maritimes, TERR=Territories, OT=Other

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⁹ For distributions per jurisdiction, figures for Territories (TERR) may not be significant due to the low number of respondents.

If we look at the number of nights in motels (Figure 1.12), we see that the distributions are similar for most of the jurisdictions, except for the Territories.

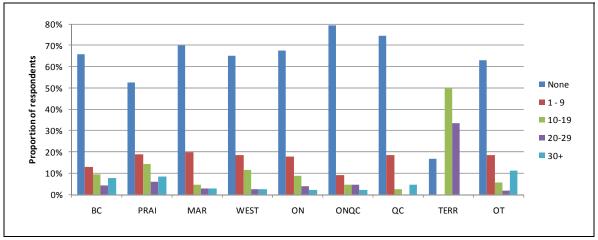


Figure 1.12: Distribution of the number of nights in a motel per year, per dominant jurisdiction group.

1.6 Vehicle characteristics

5.	Does your tractor have a sleeper berth?
	☐ Yes ☐ No

Figure 1.13 shows that a large majority of the drivers have a vehicle equipped with a sleeper berth.

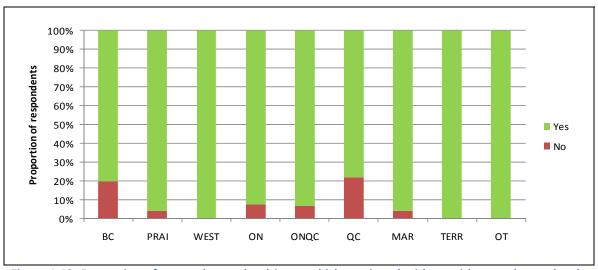


Figure 1.13: Proportion of respondents who drive a vehicle equipped with or without a sleeper berth, per dominant jurisdiction group (Q5).

The proportion of respondents who drive a vehicle that is equipped with or without a sleeper berth varies with the number of nights spent in a motel. Drivers without a sleeper berth are more likely to use motels for more than 30 nights per year, as shown in Figure 1.14. The proportion is stable for drivers who spend less than 30 nights in a motel per year.

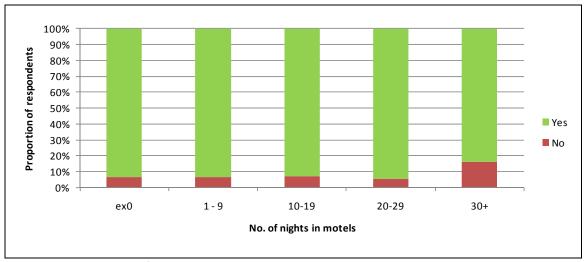


Figure 1.14: Proportion of respondents who drive a vehicle equipped with a sleeper berth with respect to the number of nights spent annually in a motel (Q3, Q7).

6. Does your tractor have any of the anti-idle devices listed below?	
Auxiliary Power Unit (APU)	
Cab heater	
Cab cooler	
Battery-powered climate control system	
On-board shore power capabilities	

Table 1.1 shows that cab heaters are quite popular in Canada, but devices such as cab coolers or battery climate control systems are not so much used in the fleet.

Table 1.1: Proportion of vehicles equipped with a specific device (Q5, Q6).

Device					
Sleeper berth	93.2%				
Cab heater	56.3%				
Auxiliary power unit	22.9%				
On-board shore power capabilities	10.2%				
Cab cooler	10.0%				
Battery-powered climate control system	7.2%				

7. How many nights do you stay in motels rather than sleep in the truck each year?

Figure 1.15 shows that 60 percent of the respondents did not stay a single night in a motel during the previous year. The number of nights spent in a motel is generally low at 5.2 on average.

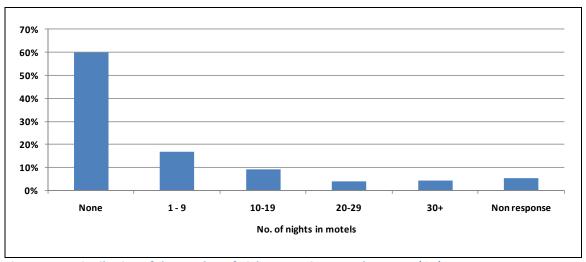


Figure 1.15: Distribution of the number of nights spent in a motel per year (Q7).

The sections that follow analyze the answers the respondents gave to the descriptive questions of the survey. The questions examined pertain to the parking areas in general, the impact of the parking activities, the parking evaluation, the expectations of the drivers for parking, the inventory of ad hoc parking, the improvement of parking and a comparison between public and private parking.

2 Parking considerations—General

This section addresses general parking considerations (Questions 8 and 9) including the frequency of difficulty when trying to find parking and the most problematic locations.

2.1 Difficulty finding parking

This subsection describes the difficulties that truck drivers experience when trying to find a parking space.

8. On a scale of 1 to 5, how often do you have trouble finding designated parking in these situations and places?					
	1-	2-	3-	4-	5-
	Always	Often	Sometimes	Rarely	Never
At your destination					
En route when you need short term parking for a nap, a meal, personal hygiene, etc.					
At the planned end of your daily driving shift					
In urban areas					
In smaller communities					
In uninhabited areas					

Figure 2.1 shows that at the destination, 48 percent (i.e. Always and Often combined) of the drivers experience difficulty while trying to find parking versus 60.4 percent while en route. About the same level applies at the end of a driving shift. Urban areas, at 80.8 percent, represent the most difficult place to park. While this number is lower for smaller communities and relatively less important for uninhabited areas, at least 50 percent of the drivers experience this situation.

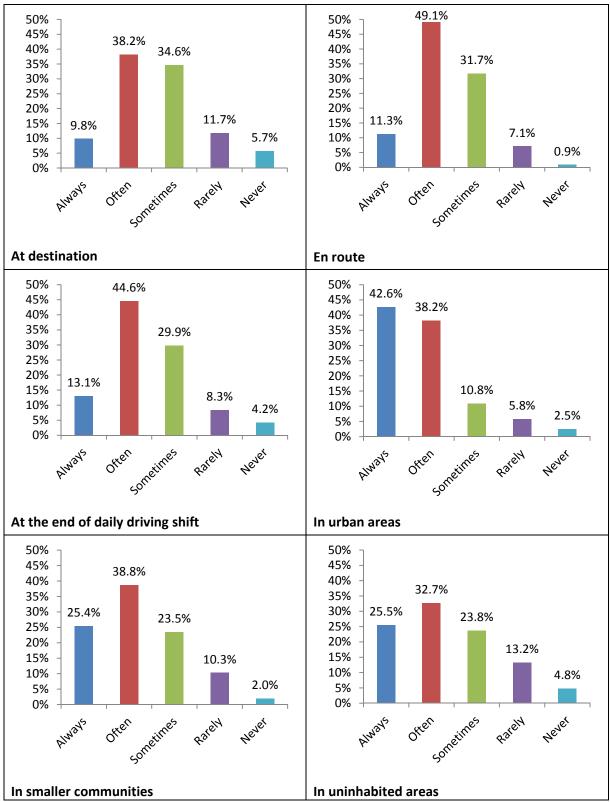


Figure 2.1: Frequency of difficulty finding parking at various phases of journey by area (Q8).

2.2 Locations where parking could be improved

This section identifies locations where parking could be improved in Canada.

9. Name up to five places in Canada where you feel parking is a problem and needs more designated truck parking. Please include route or highway numbers and specific locations. (For example, Hwy 11 near Long Lac, Ontario.)

The answers to Question 9 provided a broad range of locations where parking is most problematic. The following figures show a compilation of the respondents' answers, without ranking them.

Figure 2.2 shows that the provinces of British Columbia, Alberta and Ontario received the highest number of declared locations with problematic parking.

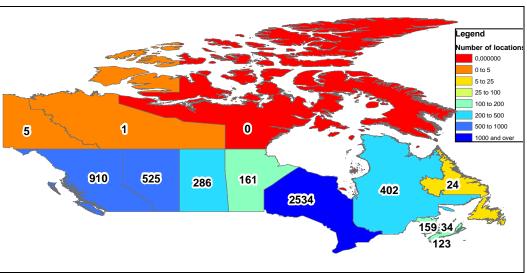


Figure 2.2: Number of responses per province where parking is problematic (Q9).

For a better interpretation, we grouped all of the problematic locations to their respective province to see if there was a relationship. For example, Figure 2.3 shows the number of location responses per thousand inhabitants. The figures for Saskatchewan, Prince Edward Island, New Brunswick and British Columbia are relatively high while figures for Quebec, and Newfoundland and Labrador are quite low.

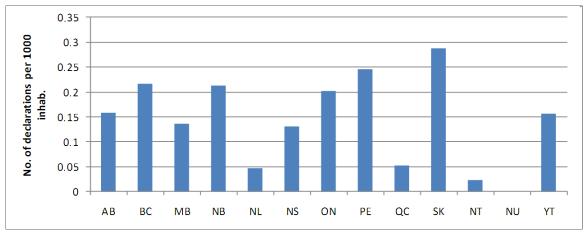


Figure 2.3: Number of location responses per 1000 inhabitants (Q9).

An overall figure by region was established because the distribution of locations can vary within each province. Figure 2.4 shows that southern British Columbia, most parts of Alberta, northern Ontario and the Montréal area appear to be problematic for parking availability.

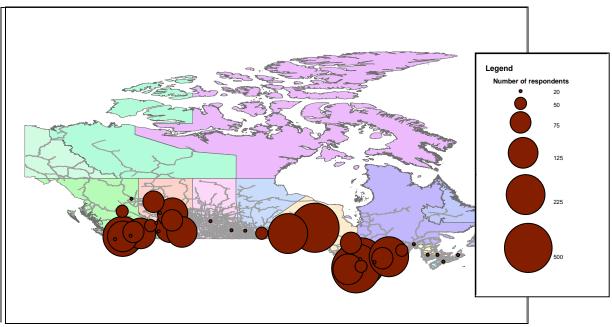


Figure 2.4: Regions with the most problematic parking (Q9).

Figure 2.5 details the most problematic parking regions in British Columbia and Alberta. The Greater Vancouver Regional District is clearly identified. Other places of importance are Edmonton, Calgary, Okanagan Valley and Southern Alberta in general.

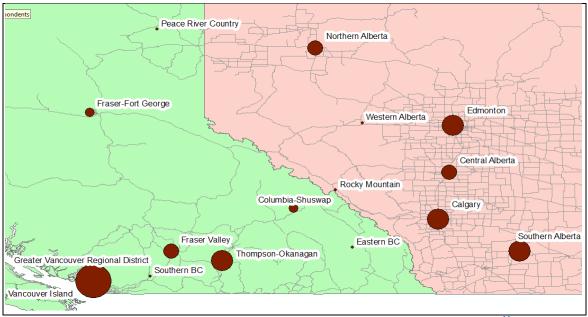


Figure 2.5: Regions with the most problematic parking—British Columbia and Alberta (Q9)¹¹.

In central Canada, northern Ontario was often declared as problematic (Figure 2.6). This region is about a 12- to 14-hour drive from Toronto. It appears that drivers also have a hard time finding adequate parking places in Toronto.

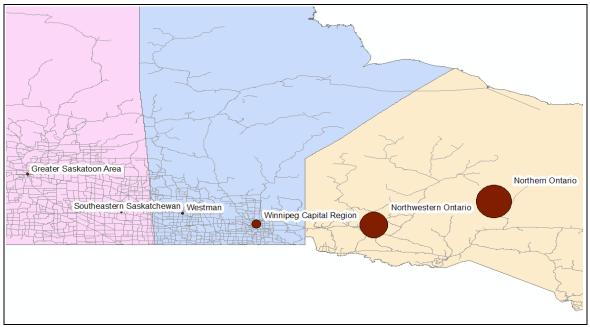


Figure 2.6: Regions with the most problematic parking—central Canada (Q9).

In eastern Canada, regions around Toronto and Montréal were said to be a problem for suitable parking (Figure 2.7).

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 $^{^{\}rm 11}$ The locations of the regions are approximate and may not perfectly fit the description.

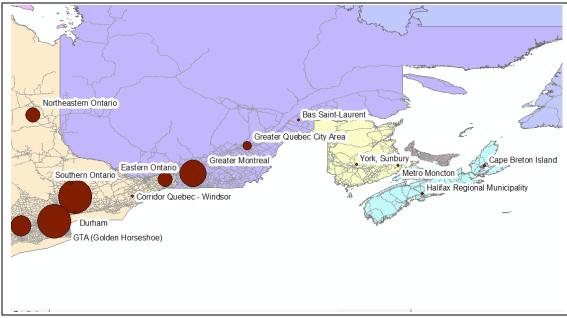


Figure 2.7: Regions with the most problematic parking—eastern Canada (Q9).

Figure 2.8 lists the top 20 regions where parking is most problematic, in proportion to all of the responses.

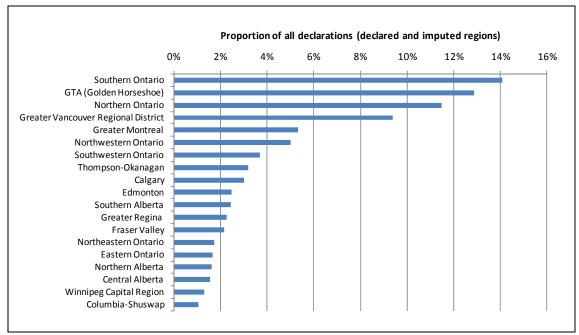


Figure 2.8: Top 20 regions with the most problematic parking (Q9).

The profiles by cities (Figure 2.9) help to identify the specific places that were reported as being problematic for finding parking.

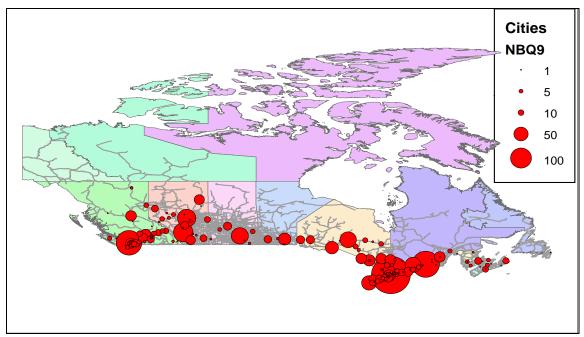


Figure 2.9: Cities with the most problematic parking (Q9).

In western Canada, the cities of Vancouver, Calgary and Edmonton still arose, but other cities such as Prince George, Kamloops, Lethbridge and Fort McMurray were also notable.

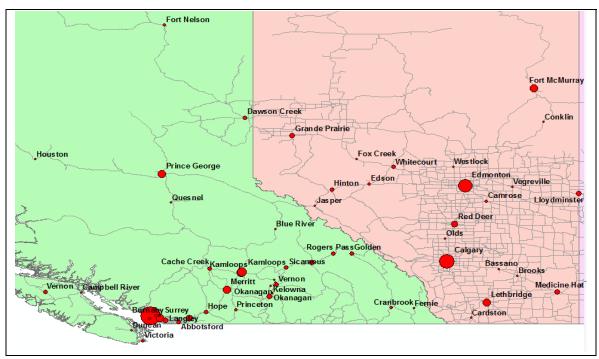


Figure 2.10: Cities with the most problematic parking-British Columbia and Alberta (Q9).

In central Canada, the areas around Longlac, Thunder Bay, Kenora and Dryden were also identified. In addition, large cities such as Regina and Winnipeg are problematic for parking.

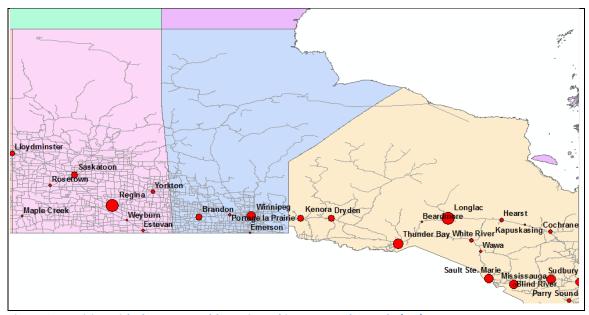


Figure 2.11: Cities with the most problematic parking—central Canada (Q9).

Figure 2.12 and Figure 2.13 show that very few locations were declared in Quebec and the Maritimes, except for the Montréal region. In Ontario, the city of Toronto is a major site where parking is problematic.

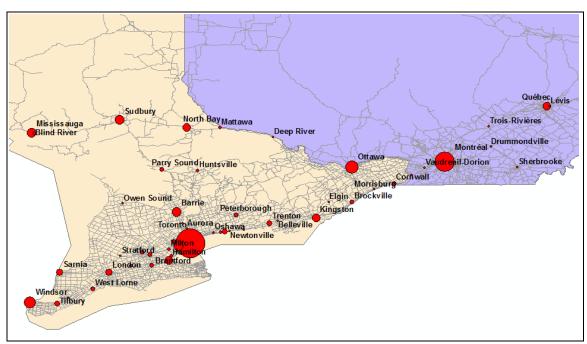


Figure 2.12: Cities with the most problematic parking—southern Ontario and Quebec (Q9).

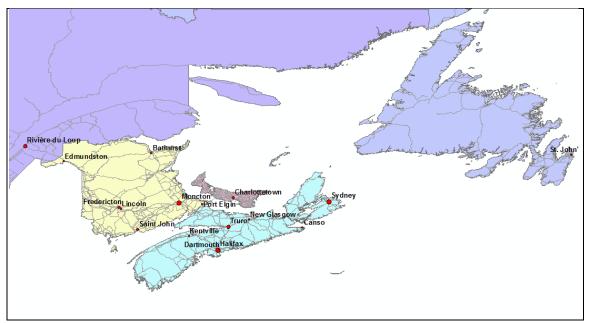


Figure 2.13: Cities with the most problematic parking—Maritimes (Q9).



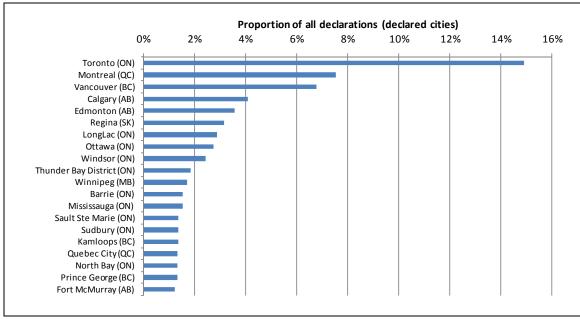


Figure 2.14: Top 20 cities with the most problematic parking (Q9).

Several respondents specified the road numbers to identify the most problematic sites for parking. While it is hard to locate the exact sites along the road, Table 2.1 reports the top 20 roads where parking is the most problematic. We see that the main highways of Ontario were often cited and that the Trans-Canada Highway requires examination.

Table 2.1: Top 20 roads with the most problematic parking (Q9).

Province	Route	Description	Number of
			responses
ON	401	The main freeway in Ontario, from the Quebec border to Windsor	712
ON	17	From Ottawa to the border of Manitoba, crossing northern Ontario	393
ON	11	From Toronto to the border of Manitoba, crossing northern Ontario	354
ВС	1	Trans-Canada Highway from Banff to Vancouver	209
ON	400	400 series represent all the freeways of Ontario	143
SK	1	Trans-Canada Highway crossing the south of Saskatchewan through Regina.	92
QC	20	Freeway from Montréal to Rivière-du-Loup, passing by Québec city	88
ВС	97	Road through Okanagan Valley and up to northern BC	85
AB	1	Trans-Canada Highway crossing the south of Alberta through Calgary	76
ВС	5	In its southern part, it is the freeway between Vancouver and Kamloops.	76
ON	69	Approximately between Parry Sound and Sudbury	71
MB	1	Trans-Canada Highway crossing south of Manitoba through Winnipeg	70
ON	402	Highway between London and Sarnia	65
AB	2	Mainly the highway between Calgary and Edmonton	60
QC	40	Freeway from Montréal to Québec city, passing through Trois-Rivières	59
AB	16	Trans-Canada Highway crossing the centre of Alberta through Edmonton	54
ВС	3	Highway crossing British Columbia to the very south	49
SK	16	Trans-Canada Highway crossing the centre of Saskatchewan through Saskatoon	49
ВС	16	Trans-Canada Highway crossing the centre of British Columbia to Prince Rupert	46
NB	2	Trans-Canada Highway the province from Edmunston to Moncton	46

3 Parking considerations—Compliance and productivity

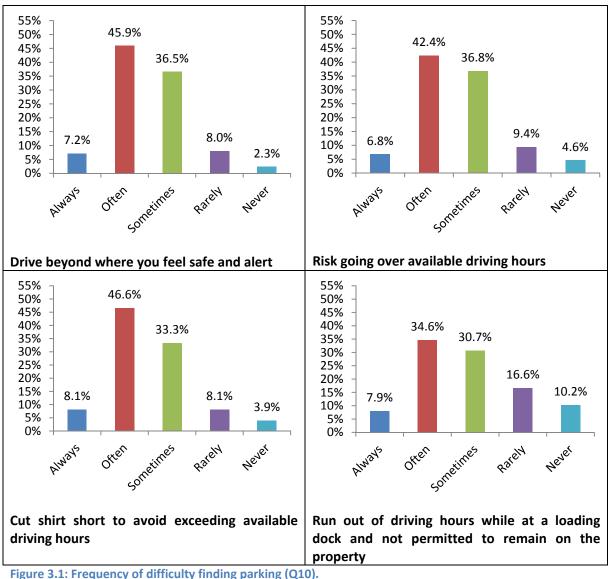
The questions examined here (Questions 10 to 16) pertain to the difficulties that truck drivers experience when trying to find parking, the intervention of enforcement officers, the actions taken when parking is not found and special vehicles.

3.1 Frequency of difficulty finding parking

10. On a scale of 1 to 5, how often do you:						
	1- Always	2- Often	3- Sometimes	4- Rarely	5- Never	
Have trouble finding designated parking when coming to the end of your driving shift?						
Have to drive beyond where you feel safe and alert because you cannot find a parking space?						
Risk going over your available driving hours because you cannot find a place to park at the end of the driving shift?						
Cut your driving shift short to park where you know space is available?						

hours while at a loading dock but are not permitted to remain on the property?	loading dock but are not permitted to remain on the					
--	---	--	--	--	--	--

The results for Question 10 (Figure 3.1) indicate that in most cases drivers had to drive beyond the location where they planned to stop. Therefore, they risked exceeding the available number of driving hours they had at 49.2 percent level (Always and Often) or they had to cut their shift shorter than planned to avoid this situation. 42.5 percent of the drivers stated that they always or often ran out of driving hours while they were at the unloading dock and they did not have permission to remain on the property.



3.2 Actions taken when parking not found

11. What do you do if you arrive at a planned rest stop and find no available parking?
Continue driving until you find another.
Park in a non-designated area nearby.
Other (please explain)

When drivers cannot find parking, most of them continue driving until they find another parking area instead of parking in a non-designated area. Very few of them plan extra time or simply do not arrive at their destination on time because of their inability to find parking. (Figure 3.2)

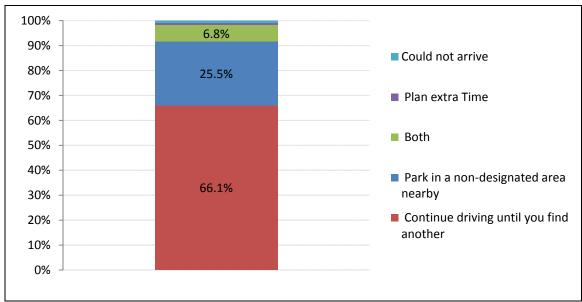


Figure 3.2: Actions taken when parking not found (Q11).

3.3 Law enforcement issues

12. In the past year have you been woken up by an enforcement officer and told to move while parked somewhere other than a designated truck parking area?
☐ Yes ☐ No
13. In the past year have you been woken up by an enforcement officer and told to move but, were out of Hours of Service driving time?

Yes No
14. When hauling loads that require periodic inspections as mandated by Cargo Securement
and /or Transportation of Dangerous Goods regulations, are there enough rest areas, pull-
offs, turn-outs, or "safe havens" where these inspections can be safely carried out?
Yes No

Questions 12 to 14 relate to law enforcement issues while drivers are parked at designated rest areas or inspection facilities. Figure 3.3 shows that a majority of truck drivers were told by an officer to move away from a non-designated parking area. In 37.6 percent of the cases, the drivers were out of their hours of service when told to move. Question 14 pertains to the availability of safe areas to perform truck inspections as required by law. A very high rate—88.4 percent of the drivers—stated that there are not enough rest areas, roadside pull-outs and turnouts, or safe havens for them to safely perform inspections.

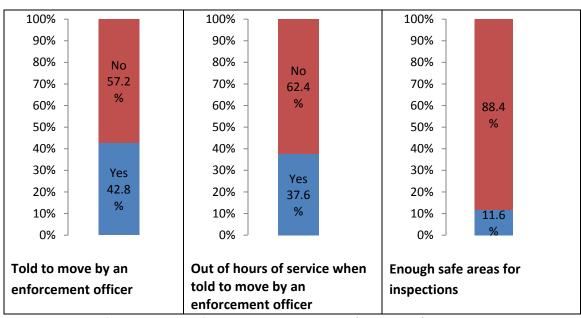


Figure 3.3: Law enforcement issues for parking and inspections (Q12, 13, 14).

3.4 Special vehicles

Special vehicles include over-dimensional vehicles, vehicles with minimal ground clearance or Atrain combinations, long combination vehicles (LCVs) and turnpike doubles.

15. Do you operate over-dimensional vehicles, vehicles with minimal ground clearance, and/or A-train combination that present special parking needs?
☐ Yes ☐ No
If yes, how often do you have trouble finding available parking? (1 = always, 2 -= often, 3 = sometimes, 4 = rarely, 5 = never)
1
16. Do you operate long combination vehicles (LCVs) or turnpike doubles that require wideradius access ways to and from the roadway as well as pull-through, over-length parking spaces?
☐ Yes ☐ No
If yes, how often do you have trouble finding available parking? (1 = always, 2 -= often, 3 = sometimes, 4 = rarely, 5 = never)
1

Drivers of special vehicles have trouble finding adequate parking at the same level of difficulty as the other drivers (Figure 3.4).

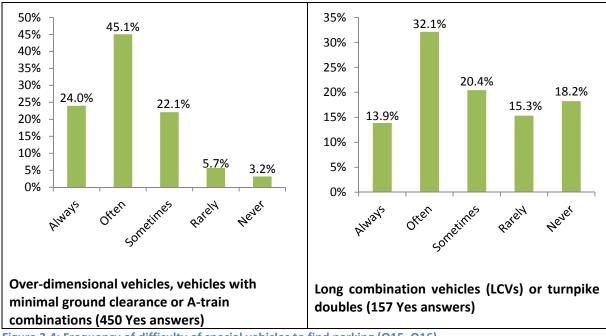


Figure 3.4: Frequency of difficulty of special vehicles to find parking (Q15, Q16).

A non-negligible portion of the drivers operate vehicles with special characteristics that make it more difficult to use truck stops and service areas. (See section 4.1.6, Special vehicles, for more information.) In Figure 3.5, we see that about 30 percent of the drivers operate over-dimensional vehicles, vehicles with minimal ground clearance or A-train combinations that present special parking needs. About 10 percent of these drivers operate long combination vehicles (LCVs) or turnpike doubles, which require wide-radius access ways to and from the roadway, and pull-through and over-length parking spaces.

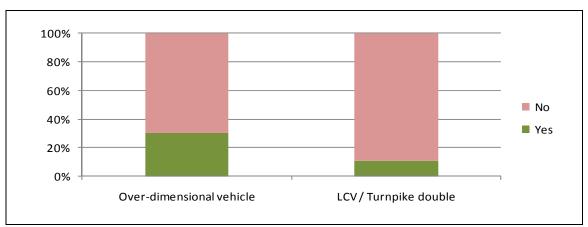


Figure 3.5: Proportion of respondents who have driven a special vehicle (Q15, Q16).

4 Parking considerations—Personal security and hygiene

This section examines Question 17, which pertains to the situations that affect driver comfort and their sense of security.

4.1 Situations affecting comfort and security

	1-	2-	3 -	4 -	5-
	Extremely uncomfortable	Very uncomfortable	Comfortable	Very comfortable	Extremely comfortable
Personal safety when parked at unsecured designated parking areas, at roadside, or in ad-hoc parking areas.					
Risk of non- response in an emergency due to lack of telephones or cellular phone service.					
Limited access to or lack of washrooms and drinking water at some designated parking areas such as rest areas and truck inspection stations (scales).					

A large majority of drivers feel very or extremely uncomfortable about unsecured parking areas, the lack of cellular phone service and limited access to washrooms and drinking water services (Figure 4.1).

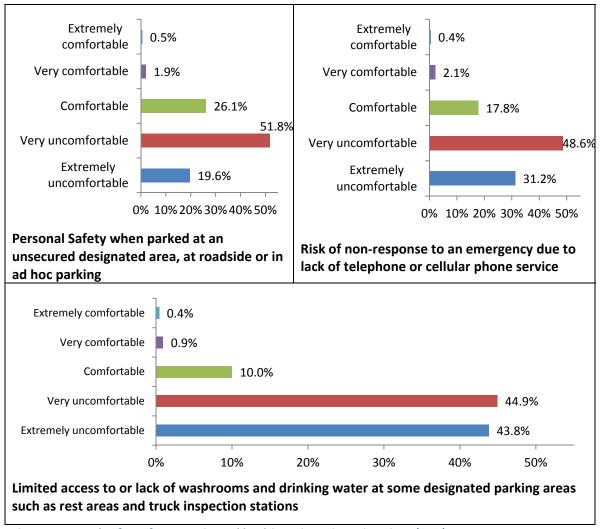


Figure 4.1: Levels of comfort experienced by drivers in various situations (Q17).

5 Public rest areas and service centres

This section presents the drivers' levels of satisfaction with public rest areas and service centres throughout Canada based on jurisdiction, amenities and parking time limits (Questions 18 to 22).

5.1 Jurisdictions

18. Name the Canadian provinces/terr of:	ritories that provide enough truck parking in the form
Rest areas	
Service centres	
Designated roadside parking areas	

Question 18 had a low answering rate at 52.7 percent. While about 50 percent of the respondents did not mention any jurisdiction, about 20 percent of them identified Quebec as having sufficient parking, followed by Alberta and Ontario (Figure 5.1).

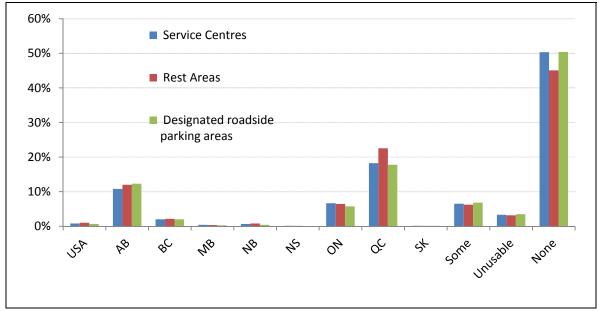


Figure 5.1: Jurisdictions that provide sufficient parking (Q18).

5.2 Amenities

19. Do you find that most public rest areas in Canada have telephones, washrooms and drinking water for truck drivers who must park to comply with Hours of Service regulations?
Yes No

Most drivers found that telephones, washrooms and drinking water are lacking in the public rest areas and service centres in Canada. The few drivers who answered yes found that Quebec and Ontario are the main provinces providing these amenities (Figure 5.2).

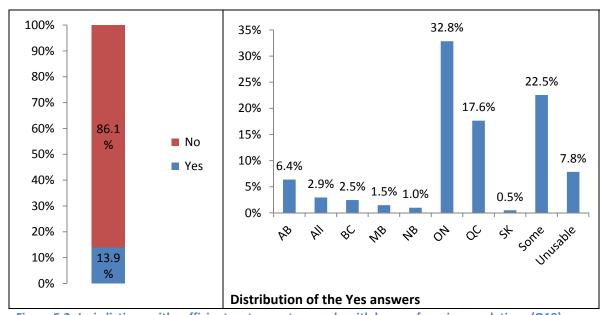
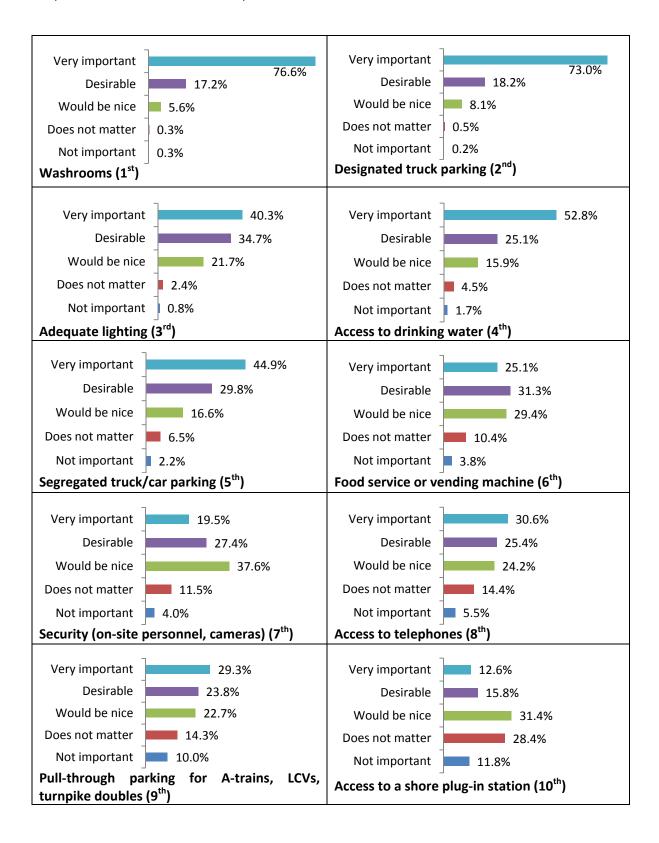


Figure 5.2: Jurisdictions with sufficient rest areas to comply with hours of service regulations (Q19).

	1-	2-	3 -	4-	5-
	Not important	Does not matter	Would be nice	Desirable	Very important
Designated truck parking					
Segregated truck/car parking					
Idle-free areas					
Pull-through parking for A-trains, LCVs, turnpike doubles					
Security (on-site staff, cameras)					
Adequate lighting					
Washrooms					
Access to drinking water					
Access to telephones					
Access to shore power plug-in stations					
Food service or vending machines					

Figure 5.3 shows that designated truck parking and washrooms are the most desired amenities that drivers would like to see in public rest areas and service centres. On the other hand shore power plug-in stations and idle-free areas are not as important for them. The figure shows the ranking of the proposed amenities according to the total of Very Important, Desirable and Would be Nice answers.



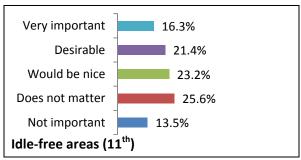


Figure 5.3: Importance of various amenities and services in public rest areas and service centres (Q20).

	1-	2-	3 -	4-	5-
	Not important	Does not matter	Would be nice	Desirable	Very important
Walking, exercise areas					
Showers					
Real-time travellers' information					
Wireless Internet access					
Food service or vending machines					
Convenience store					
Shore power plug-in stations					
Single system electrification (e.g. IdleAire)					
Cell phone service in remote areas					

The availability of cell phone service in remote areas is by far the most desired service at 61.1%. Next, food service (33.9%), showers (31.3%) and convenience stores (36.0%) are noted as desirable. Wireless Internet service is considered very important by 21.4 percent of the respondents. Figure 5.4 shows the ranking of the various options.

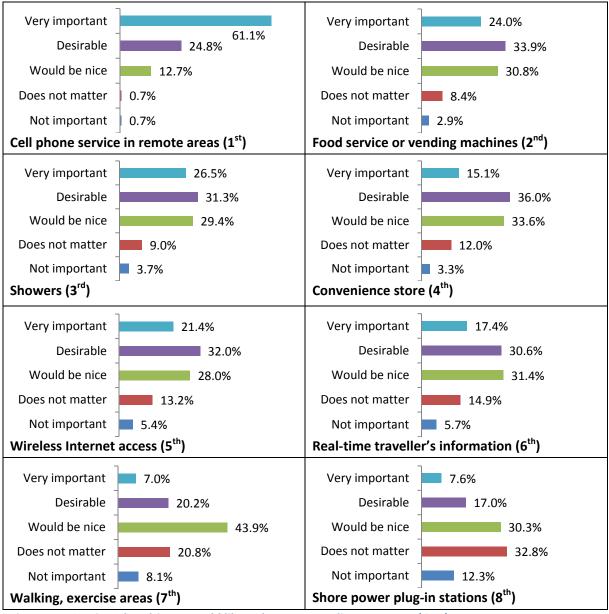


Figure 5.4: Services that drivers would like to have at Canadian rest areas (Q21).

5.3 Parking time limits

22. Should rest areas/service centres limit parking time?
Yes No
If yes, what should the time limit be?

Figure 5.5 shows the distribution of parking time limits suggested by one third of the drivers who proposed that these limits be mandatory in public rest areas and service centres. The majority of these drivers would like a parking time limit of 10 to 12 hours.

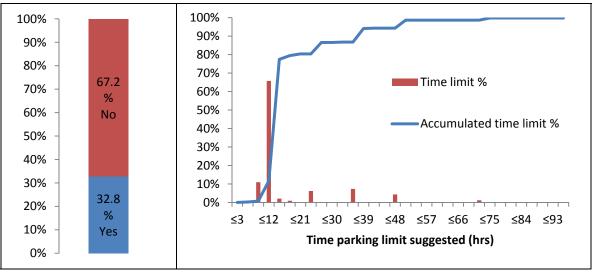


Figure 5.5: Suggested parking time limits for public rest areas and service centres (Q22).

6 Private truck stops

This section presents the results for the questions about the services that are available at private truck stops and the drivers' preferences for these amenities (Questions 23 to 31).

6.1 Service offerings

23. Most full-service truck stops offer more than basic services. And while some card lock locations do offer telephones, washroom and drinking water, many do not. When you choose a place to park and/or fuel, how important are the service offerings? (Please use a 1–5 scale: 1 = not important at all, 2 = does not matter, 3 = would be nice, 4 = desirable, 5 = very important)
1 2 3 4 5

Private truck stops are carefully chosen by drivers during their journeys. As shown in Figure 6.1, 33.8 percent of the respondents indicated that the services offered to them are somewhat desirable while 54.0 percent indicated that they are very important.

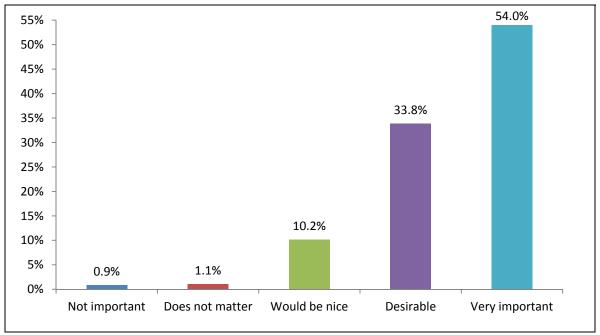
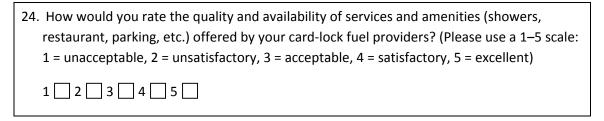


Figure 6.1: Importance of service offerings by private truck stops (Q23).

6.2 Card lock outlets and full service truck stops



The service of a card lock fuel provider is acceptable by 34 percent of the drivers; while about 41 percent of them find it unacceptable or unsatisfactory (Figure 6.2).

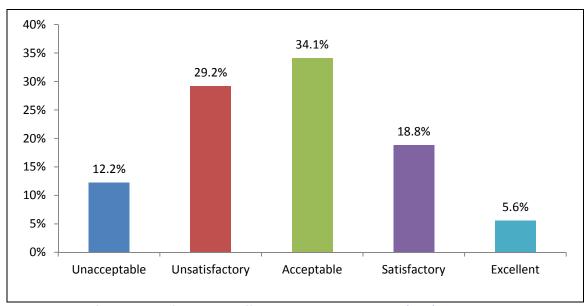


Figure 6.2: Satisfaction levels for services offered by card lock providers (Q24).

25. Do the full-service truck stops or card-lock outlets that you visit provide free long-stay parking?	e overnight or
☐ Yes ☐ No	
Explain	

As shown in Figure 6.3, a large majority of full-service truck stops and card lock outlets provide long-stay parking to their users at no charge.

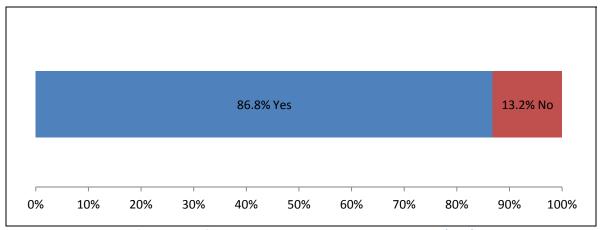


Figure 6.3: Provision of parking by full service truck stop and card lock outlets (Q25).

6.3 Expected free services

26. What free services would you expec	t when you buy fuel?	
	Yes	No
Shower		
Parking		
Use of recreation facilities		
Internet access		
OTHER (please explain)		

Drivers expect to have access to some free services when they refuel their vehicles at private truck stops. Showers and parking are the most expected amenities, with a positive answer rate of more than 96 percent. Recreation facilities and Internet access is less expected, but a majority of the drivers expect to have these services available to them with the fuel that they buy for their vehicles (Figure 6.4).

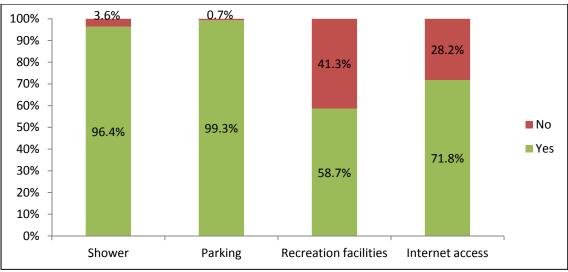


Figure 6.4: Services expected for free when buying fuel (Q26).

6.4 Paid services

27. What truck stop services would you pay to use if you did not buy fuel?					
	Yes	No			
Shower					
Parking					
Recreation facilities					
Shore power plug-in stations					
Internet access					
OTHER (please explain)					

The survey answers reveal different opinions for paid services. While 87.4 percent of the drivers agree to pay for showers, only 21.8 percent are willing to pay for parking. Other services, as shown in Figure 6.5, include recreation facilities, shore power plug-in stations and Internet access.

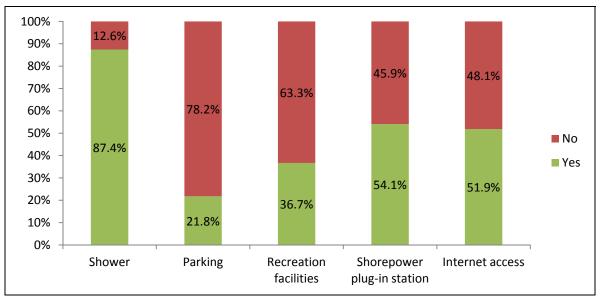


Figure 6.5: Services and driver's willingness to pay when not buying fuel (Q27).

	1-	2-	3 -	4-	5-
	Very unwilling	Reluctant	If I had to	Willing	Very willing
Larger parking lots					
Space where no other option exists					
Better security					
Shore power plug-in stations					
Other (please explain)					

Drivers indicated that they would still be very unwilling to pay for larger parking lots and shore power plug-in stations if they were available for a reasonable fee (Figure 6.6). If they had to, drivers would pay for better security. But they seemed to be unwilling to pay for parking even when no other option exists.

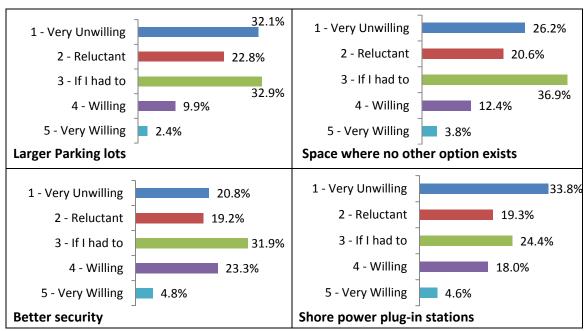
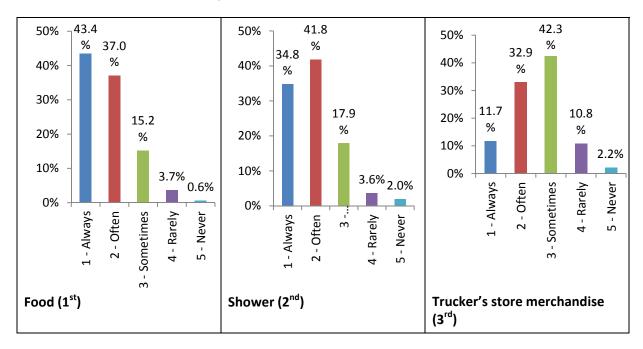


Figure 6.6: Services and drivers' willingness to pay parking fee if service made available (Q28).

	1-	2-	3-	4-	5-
	Always	Often	Sometimes	Rarely	Never
Shower					
Food					
Truck wash					
Truck repair					
Internet access					
Laundry					
Trucker's store merchandise					

TV/movie/ entertainment			
Business services such as fax/ printer/copier			
Other (please expl	ain)		

Figure 6.7 shows how frequently drivers use some of the amenities that are available at private truck stops in Canada. Food, showers and store merchandise are the most popular purchases. The other services are less used, but they still are used by a majority of the drivers. The ranking is based on the total of the Always, Often and Sometimes answers.



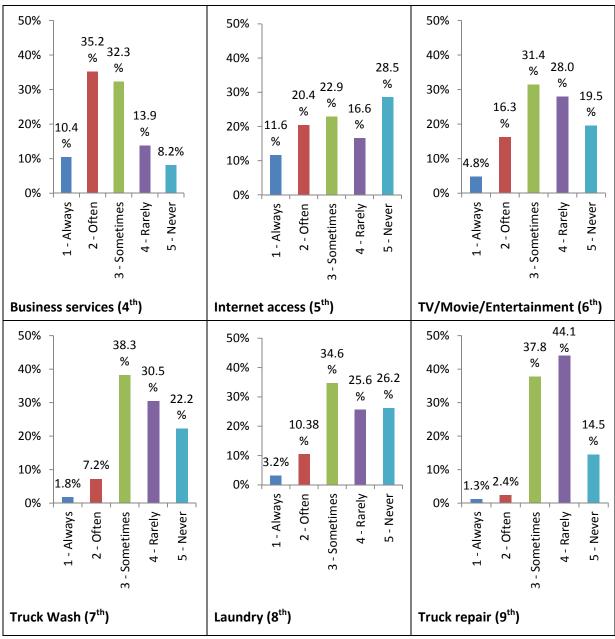


Figure 6.7: Products and services purchased during an overnight stay (Q29).

30. How much would you spend during a typical overnight stay at a Canadian truck stop, not including your fuel purchase?

About 70 percent of the drivers are willing to spend a maximum of \$30 per night to obtain services at a private truck stop (Figure 6.8). 30 percent of drivers would not spend more than \$20.

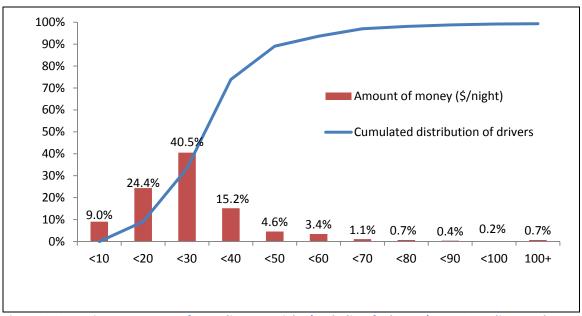
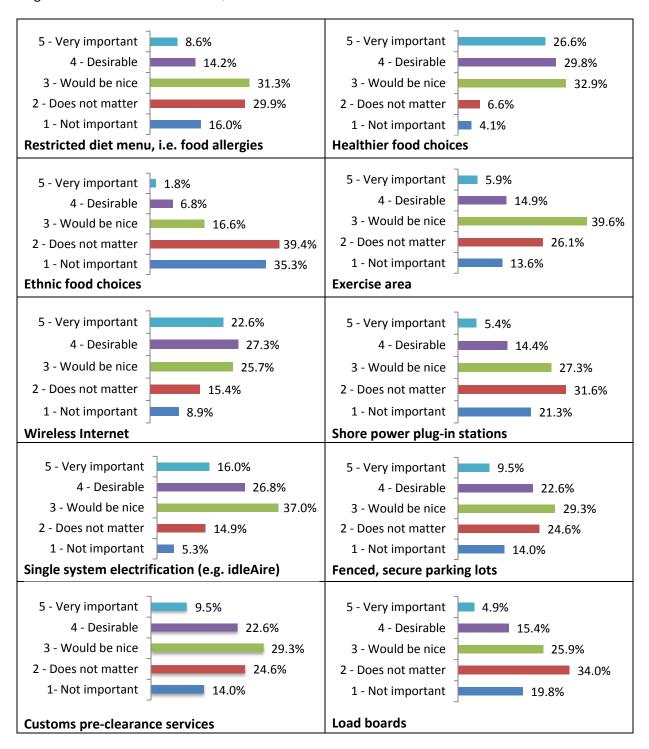


Figure 6.8: Maximum amount of spending per night (excluding fuel costs) at a Canadian truck stop (Q30).

6.5 Desired services

	1-	2-	3 –	4-	5-
	Not important	Does not matter	Would be nice	Desirable	Very important
Restricted diet menu, i.e. for food allergies					
Healthier food choices					
Ethnic food choices					
Exercise area					
Wireless Internet					
Shore power plug-in stations					
Single system electrification (e.g. IdleAire)					
Fenced, secure parking lots					
Customs pre-clearance services					
Load boards					
Permit ordering					
Repair facilities					
Trailer roof snow and ice removal					
Health clinic					

Figure 6.9 shows the results for Question 31.



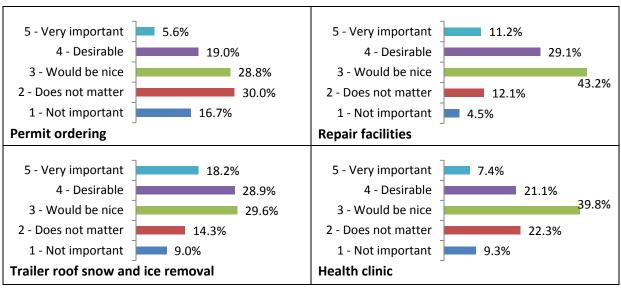


Figure 6.9: Importance of products and services at Canadian truck stops (Q31).

Table 6.1 sorts the various services and amenities from the most to the least desirable. It shows healthier food choices as the most popular item. Apart from ethnic food choices, all services and amenities seem to be desirable by the majority of the drivers.

Table 6.1: Services likely available at Canadian truck stops.

Rank	Service or amenity	Percentage positive 12
1	Healthier food choices	89.3%
2	Repair facilities	83.4%
3	Single system electrification (e.g. IdleAire)	79.9%
4	Trailer roof snow and ice removal	76.7%
5	Wireless Internet	75.6%
6	Health clinic	68.3%
7	Fenced, secure parking lots	61.4%
8	Exercise area	60.4%
9	Restricted diet menu, e.g. food allergies	54.1%
10	Permit ordering	53.3%
11	Shore power plug-in stations	47.0%
12	Customs pre-clearance services	46.2%
13	Load boards	46.2%
14	Ethnic food choices	25.2%

-

 $^{^{\}rm 12}$ Total of « Would be nice », « Desirable » and « Very important » answers.

7 Alternative parking solutions

This section is about the use of facilities that are not intended for truck parking. Weigh stations and other types of facilities are explored followed by the suggestions that the drivers provided in the survey (Questions 32 to 38).

7.1 Weigh stations and government properties

32. If truck inspection stations and weigh scale facilities could be used for truck parking, we you park behind a "closed" weigh station:	v ould
For your 8 to 10-hour off-duty interval ? Yes No	
If no, why not?	
33. If truck inspection stations and weigh scale facilities could be used for truck parking, we you park behind a "closed" weigh station?	vould
For your short nap or rest ? Yes No	
If no, why not?	
34. If truck inspection stations and weigh scale facilities could be used for truck parking, we you park behind an "open" weigh station?	vould
For your 8 to 10-hour off-duty interval ? Yes No	
If no, why not?	
35. If truck inspection stations and weigh scale facilities could be used for truck parking, we you park behind an "open" weigh station?	vould
For your short nap or rest ? Yes No	
If no, why not?	

The use of weigh stations for parking is viewed as a good idea by a majority of the drivers. More of them would like to park at a weigh station for a short nap or rest. However, fewer drivers care to park at a weigh station when it is open (Figure 7.1). The main reason is because they would not want to be inspected by the enforcement officers while they are parked on the facility.

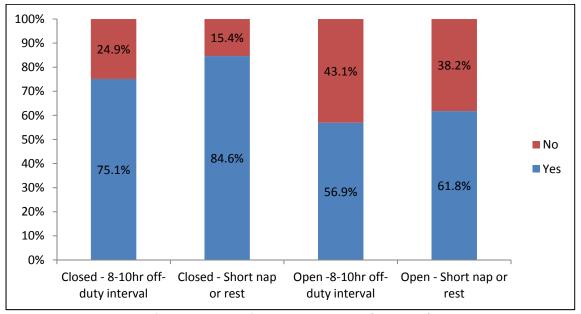


Figure 7.1: Potential uses of weight stations for long term parking (Q32 to 35).

36. Please identify the location of any government property you think could be converted to truck parking areas such as decommissioned scales or inspection station sites, public works yards, etc.

As the results in Table 7.1 show, a large number of drivers suggested using scale, weigh station and inspection areas, and government parking sites for truck parking. And many drivers mentioned that unused facilities and land could also be used.

Table 7.1: Suggestions for truck parking on government property (Q36).

Suggestion	Number of
	suggestions
Scale, weigh station and inspection areas (used	123
and unused areas)	
Unused rest areas and unused service centres	63
Government-owned land (surrounding roads)	61
Unused government facilities	18
Highway on- and off-ramp shoulders	10
Unused highways	8

Suggestion	Number of
	suggestions
Unused toll booths	8
Unused gravel or sand pits	7
Unused military sites	6
Railway track sides area	4
Camping sites	3
Information centres	3
Snowplow turnarounds (in summer)	3
Unused airports	2
Unused commuters' parking lots (at night)	2
Customs border	2
Unused parking lots	2
Picnic areas	2
Park areas	1

From the respondents' answers to Question 36, we selected the government property locations that could be converted into truck parking areas. A total of 75 locations were suggested and some of them were recurrent. Table 7.2 lists the top 10 locations according to the respondents.

Table 7.2: Top 10 government property locations that could be converted to truck parking (Q36).

Province	Road or city	Type of government property	Number of responses
			(out of 75)
ON	Hwy 401	Scale areas, old rest areas and service	9
		stations	
ВС	Coquihalla Hwy	Toll booth	7
NB	Hwy 2	Scale areas and old gravel pits	5
ON	Thunder Bay (102)	Scale areas	4
ON	Windsor (401)	Scale areas	4
AB	Edmonton (16A)	Scale areas	3
ВС	Surrey (Scott Road)	Scale areas	3
NB	Sackville (2)	Scale areas	3
ON	Hwy 402	Scale areas	2
ON	Hwy 7	Former government utilities	2

7.2 Ad hoc parking locations

37. Please indicate the typ how often you make us		_	f any) you have ເ	used in the last	t year, and
	1-	2-	3-	4-	5-
	Always	Often	Sometimes	Maybe	Never
Highway on- or off- ramp					
Shopping mall parking lot					
Vacant lot					
Private property					
Municipal street					
Industrial property near a loading dock					
Snowplow turnarounds					
Roadside pull-outs					
Brake-check/chain-up area					
Open or closed weigh station					

Ad hoc parking is widely used by the drivers. Figure 7.2 displays the various types of facilities that drivers use as ad hoc parking locations and their frequency of use. The ranking is based on the total of the Always, Often and Sometimes answers. It shows that industrial properties and shopping mall parking lots are among the most popular answers.

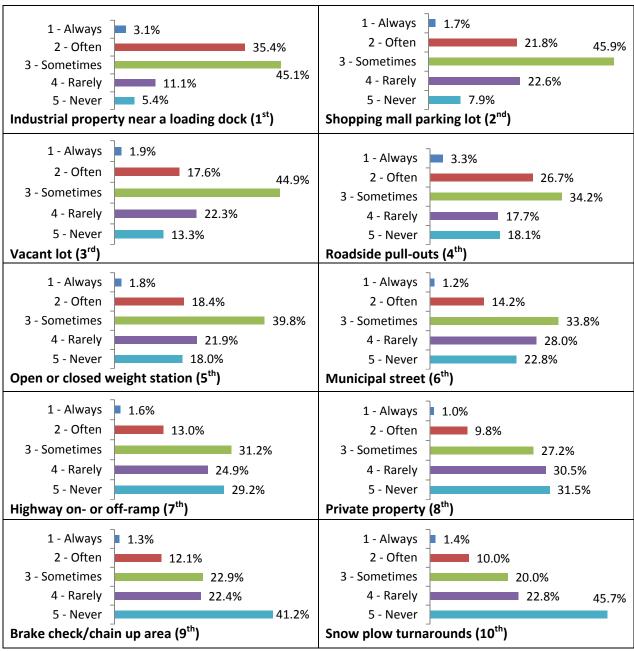


Figure 7.2: Ad hoc parking locations and frequency of use in the year preceding the survey (Q37).

38. Please identify the location of ad hoc parking sites you are familiar with by name or by providing a highway number and some nearby identifier (e.g. Walmart parking lot in Dryden, ON, or brake check are, Hwy 3, near Castlegar, B.C.).

Highway on- or off-ramp	
Shopping mall parking lot	
Vacant lot	
Private property	
Municipal street	
Industrial property near a loading dock	
Snowplow turnarounds	
Roadside pull-outs	
Brake-check/chain-up area	
Open or closed weigh station	

Table 7.3 lists the suggested private ad hoc parking locations as compiled from the survey answers. Walmart was stated as the most popular place for truck parking. Also in the list are large parking lots that are not used during night hours. Other suggestions include vacant lots on construction sites, closed commercial facilities or vacant buildings, unused parking lots and closed gas stations. The pick up or delivery points (e.g. customers' yards) are often mentioned as potential parking areas.

Drivers also identified many locations for each category including: shopping mall parking lots, highway on- or off-ramps, vacant lots, private properties, municipal streets, industrial properties near a loading dock, snowplow turnarounds, roadside pull-outs, brake check and chain up areas, and open or closed weigh stations. Another category with many locations worth mentioning is the highway on- or off-ramp.

Table 7.3: Suggestions for private ad hoc parking (Q38).

Type of ad hoc parking	Number of suggestions
Walmart parking lots	327
Shopping mall parking lots	186
Grocery store parking lots	27
Large convenience store parking lots (e.g. Canadian Tire, Zellers)	21
Power centre parking lots (e.g. Home Depot, Costco, Rona)	11
Fast food chain and restaurant parking lots	8
Cineplex and other theatre parking lots	2

Figure 7.3 reveals the cities where the drivers park on a ramp. Note that the large number and diversity of the drivers' responses made it difficult to categorize their answers.

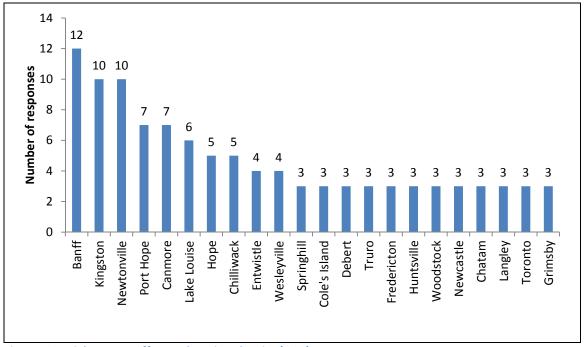


Figure 7.3: Highway on-off-ramp locations by city (Q38).

8 Truck parking improvements—Driver suggestions and comments

This section presents the ideas for improving truck parking and provides examples of good truck parking locations that currently exist as declared by the survey respondents (Question 39).

8.1 Truck parking improvement ideas

39. (OPTIONAL) Please give us your ideas on how to improve truck parking in Canada.

To obtain a better understanding of the drivers' ideas, their answers were divided into categories. A single answer sometimes corresponded to multiple categories and that was taken into account. A total of 769 respondents provided ideas on how to improve truck parking, which corresponds to a 43 percent answering rate.

The following table shows a division of the answers into seven categories ranked according to the number of answers received per category.

Table 8.1: Truck	parking im	provement ideas	divided by	y category	(Q39)
------------------	------------	-----------------	------------	------------	-------

Category Rank	Ideas on truck parking improvement by category	Number of responses	Percentage
1	Spaces/rest areas/service centres/roadside pull outs	427	39.3%
2	Configuration	208	19.1%
3	Services/amenities	188	17.3%
4	Funding/government intervention/private operations	96	8.8%
5	Irritants/problems	69	6.3%
6	Safety	67	6.2%
7	HOS (hours of service) regulations	32	2.9%
Total		1087	100%

The first three categories provide the most mentioned ideas for truck parking improvements:

- Category 1 includes the need for more places for drivers to stop or rest on the road and more space in general in these areas.
- Category 2 includes the configuration of the road, rest areas and truck stops and how they have been adapted for trucks and truck drivers.
- Category 3 includes the services and amenities desired by the drivers to accommodate their needs and lifestyle.

The tables that follow provide more details about the drivers' ideas for each of the seven categories.

Table 8.2: Truck parking improvement ideas—spaces, rest areas, service centres and roadside pull outs (Q39).

1 st Category	Spaces, rest areas, service centres and roadside pull-outs		
Subcategory rank	Truck parking improvements subcategory	Number of responses	Percentage
1	More rest areas/service centres/roadside pull- outs/facilities	168	33.9%
2	More spaces/places to park	117	23.6%
3	Rest areas on 401 (e.g. close one at a time, major problem)	107	21.6%
4	More places for trucks	78	15.7%
5	More parking in urban areas	10	2.0%
6	Scale areas	10	2.0%
7	More parking in industrial areas	5	1.0%
8	Trailer drop areas	1	0.2%
	Total	496	100%

Table 8.3: Truck parking improvement ideas—configuration (Q39).

2 nd Category	Configuration		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	Similar to U.S.	63	24.4%
2	Pull offs/roadside turn-outs/ramps/along	48	18.6%
	highways/snowplow turnarounds (summer)		
3	Truck only parking areas/marked spaces/allow	43	16.7%
	trucks in car spaces		
4	Update to LCVs/ upgrade dimensions	29	11.2%
5	Rest areas every x kms /for x trucks travelling on	24	9.3%
	the road/based on traffic on the road		
6	Parking in industrial areas (and on streets in	19	7.4%
	industrial areas)		
7	More signage/full signage/GPS	18	7.0%
8	Trucker friendly communities	5	1.9%
9	Median space between lanes on highways	3	1.2%
10	Toll road to fund parking	2	0.8%
11	Short term parking	2	0.8%
12	Unused yards	2	0.8%
	Total	258	100%

Table 8.4: Truck parking improvement ideas - services and amenities (Q39).

3 rd Category	Services and amenities		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	Restrooms/drinking water/showers/heat/	120	41.5%
	laundry		
2	Restaurant/food/store	44	15.2%
3	General/not mentioned/no details	29	10.0%
4	Lighting	24	8.3%
5	Phone/cell coverage/Internet	20	6.9%
6	24 hrs per day/7 days per week	10	3.5%
7	Coffee/coffee shop	10	3.5%
8	Shore power (e.g. IdleAire)	8	2.8%
9	Fuel/truck wash/quiet area	8	2.8%
10	Guide/info	6	2.1%
11	Green idea/garbage	6	2.1%
12	Salon	4	1.4%
	Total	289	100%

Table 8.5: Truck parking improvement ideas—funding, government intervention and private operations (Q39).

4 th Category	Funding, government intervention and private operations		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	Funding/incentives for truck stops/rest areas	42	41.2%
	(e.g. toll, lease, private subsidized operations)		
2	Government funding for truckers	28	27.5%
3	Truck stop chains/big card lock parking	9	8.8%
4	Require parking from industry	7	6.9%
5	Establish some service providing companies	7	6.9%
6	Trucking industry support	5	4.9%
7	Sponsor parking/rest areas	3	2.9%
8	General/not mentioned/no details	1	1.0%
	Total	102	100%

Table 8.6: Truck parking improvement ideas—irritants and problems (Q39).

5 th Category	Irritants and problems		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	HOS regulations vs. rest needed/taxes/	18	22.8%
	government/law requirements		
2	RVs/campers/cars	12	15.2%
3	Law enforcement	12	15.2%
4	Negative public views/opinions	11	13.9%
5	Industry parking	7	8.9%
6	Winter maintenance	6	7.6%
7	Bad habits of drivers (e.g. parking, braking,	5	6.3%
	littering)		
8	Trailer drop areas/unoccupied trucks at parking	5	6.3%
	area		
9	General/not mentioned/no details	3	3.8%
	Total	79	100%

Table 8.7: Repartition of the ideas to improve truck parking—safety (Q39).

6 th Category	Safety		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	Parking/drop lots	26	34.7%
2	Rest areas/rest	22	29.3%
3	Lighting	11	14.7%
4	Parking place/speed in parking areas	6	8.0%
5	Guards/law enforcement/video security	3	4.0%
6	Coffee	2	2.7%
7	General/not mentioned/no details	2	2.7%
8	Emergency/cell phone coverage	1	1.3%
9	Roads	1	1.3%
10	Pedestrian walkways in parking areas	1	1.3%
	Total	75	100%

Table 8.8: Truck parking improvement ideas—hours of service regulations (Q39).

7 th Category	HOS regulations		
Subcategory	Truck parking improvements subcategory	Number of	Percentage
rank		responses	
1	More to regulations to comply with/add	19	55.9%
	locations/change rules		
2	Do not make it difficult/irritant	5	14.7%
3	Avoid traffic/plan ahead/park at clients' site	4	11.8%
4	Problem of time limit at truck stops	3	8.8%
5	Need service areas because of the regulation	2	5.9%
6	Allow use of car parking areas	1	2.9%
	Total	34	100%

Based on the drivers' answers the following general ideas were suggested most frequently:

- There needs to be more rest areas and service centres that provide sufficient space to enable drivers to stop more often. (Table 8.2)
- More space and places to park are needed in these areas so that drivers can find a spot to park and do so easily and safely. (Table 8.2)
- The closed rest areas on Highway 401 are a major issue for truck drivers. The main suggestion was to close the areas one at a time and restore them. (Table 8.2)
- Truck parking in Canada should be configured similar to those in the U.S. since the model used there seems to be efficient and popular among truck drivers. (Table 8.3)
- Some small areas such as roadside pull-offs and turn-outs, ramps, the shoulders of highways and snowplow turnarounds (during the summer) could be developed to accommodate parking for some trucks. (Table 8.3)
- Restrooms, drinking water, showers, heat and laundry facilities are some of the services that would be needed in rest areas to accommodate drivers' needs. Obviously, running water is an important commodity when it comes to truck parking areas. (Table 8.4)
- The areas where truck drivers may stop should include at least a restaurant, some available food or a store where they could buy something to eat. (Table 8.4)
- Funding or incentives for truck stops and rest areas should be provided and made available. This would help to ensure that the truck parking businesses are supported and made available in more areas in Canada so that drivers are not left aside when a parking business experiences financial difficulty. (Table 8.5)
- Truckers find themselves not supported enough by different government funding. (Table 8.5)
- Safety should be reinforced by adding parking and drop lots and rest areas or places for truck drivers to rest, as they find themselves sometimes out of places to park when they feel tired. More lighting in these places would also be appreciated. (Table 8.7)

• The hours of service (HOS) regulations are not accommodating enough given the amount of rest that drivers need and the law requirements that the trucking industry must comply with. Some drivers stated that to comply with these regulations, they need more locations to rest and a change in the rules to accommodate them when they cannot park. They also want to avoid situations that make it more difficult for them to comply with the HOS regulations. They often do not find spots to park when beyond their hours limit and are already irritated when in such situations. (Table 8.6 and 8.8)

8.2 Locations providing good truck parking

The second part of Question 39 asked drivers about the locations that they found to be examples of good truck parking. A total of 540 respondents answered the question (a 30.2 percent answering rate) and provided 551 locations as examples of good parking practices.

Table 8.9: Locations and businesses with good truck parking practices (Q39).

Good truck parking examples		
Rank	Location or business name	Number of
		responses
1	Rest area, service centre, ex-service centre	107
2	Flying J	94
3	Irving	39
4	Husky	35
5	TA (TravelCenters of America)	21
6	PetroPass	16
7	10 Acre truck stop (Belleville, ON)	14
8	730 Truck Stop (Cardinal, ON)	14
9	Petro (U.S. only)	10
10	Fifth Wheel	9
11	Road King	5
12	Shell	4
13	Ultramar	3
14	Sarnia Service Centre	2
15	Pilot	2
16	Tim Hortons	2
17	230 Truck Stop (Woodstock, ON)	2
18	Esso	2
19	Walmart	2
20	Marcel's (Bainsville, ON)	1
21	Cactus Corner (Hanna, AB)	1
22	Tower Hill (Ignace, ON)	1
23	Murray's (Woodstock, ON)	1

Good truck parking examples]
Rank	Location or business name	Number of
		responses
24	Marcel (St-Bernard-de-Lacolle, QC)	1
25	U-Save (West Virginia)	1
26	Information booth (Valleyview, AB)	1
27	Sapp Bros (U.S.)	1
	Total	391

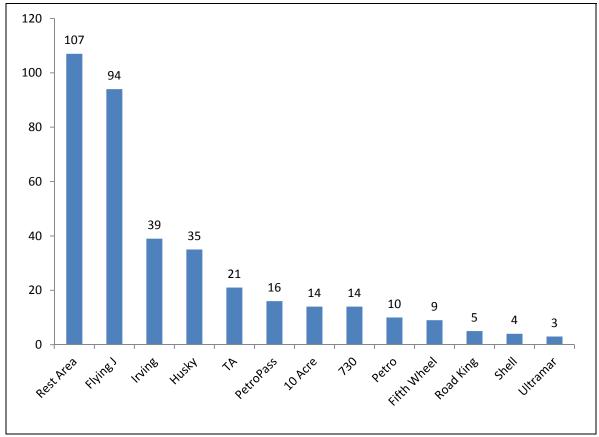


Figure 8.1: Truck stops with the best examples of good truck parking practices (Q39).

Table 8.10: Cities with good truck parking practices (Q39).

Good truck parking practices		
Rank	City	Number of
		responses
1	London, ON	23
2	Woodstock, ON	20
3	Belleville, ON	15
4	Cardinal, ON	14
5	Napanee, ON	12
6	Calgary, AB	11
7	Kamloops, BC	10
8	St-Liboire, QC	8
9	Sherwood Park, AB	7
10	Headingley, MB	6
11	Salisbury, NS	6
12	Morrisburg, ON	6
13	Dorchester, ON	5
14	Mallorytown, ON	5
15	Winnipeg, MB	5
16	Kirkella, AB	5
17	Bainsville, ON	4
18	Tilbury, ON	4
19	Regina, SK	4
20	Acheson (AB), Brooks (AB), Crossfield (AB), Lincoln (ON), Saskatoon (SK),	3
	Sault Ste. Marie (ON), Thunder Bay (ON)	
21	Cornwall (ON), Dutton (ON), Edmonton (AB), Edson (AB), Fargo (ND),	2
	Ingersoll (ON), Portage (WI), St-Nicolas (QC), Trenton (ON), Vaudreuil (QC),	
	West Lorne (ON), Wyoming (ON)	
22	Bassano, Bowmanville, Brandon, Cambridge, Chamberlain, Chilliwack,	1
	Clairmont, Comber, Corning (CA), Dafoe, Davidson, Debert, Delta, Dryden,	
	Dunc Lake, Effingham, El Paso, Elk Island, Estavan, Foldens, Fort Erie,	
	Gaston, Gleichen, Hamilton, Hanna, Ignace, Innisfree, Kapuskasing, St-	
	Bernard-de-Lacolle, Longlac, Medicine Hat, Merritt, Minnedosa,	
	Mississauga, Moncton, Mount Terry Fox, Nairn Centre, Nipigon,	
	Orangeville, Oyen, Peterborough, Port Hope, Potterville, Rivière-	
	Beaudette, Sangudo, Sarnia, St. Thomas, St-Lambert-de-Lauzon, Stony	
	Plain, Strathmore, Summersville, Surrey, Swift Current, Syracuse, Ten Mile,	
	Valleyview, Wawa, Wetaskiwin, Woller Hill, Wooler	
	Total	277

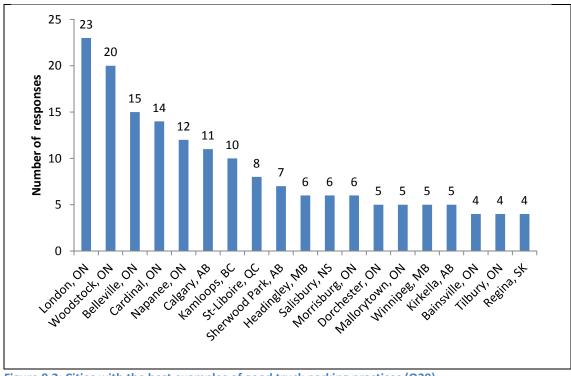


Figure 8.2: Cities with the best examples of good truck parking practices (Q39).

Table 8.11: Good truck parking practices by province or state (Q39).

Good truck parking examples		
Rank	Province/state of the location	Number of
		responses
1	Ontario (ON)	177
2	United States (U.S.)	65
3	Alberta (AB)	64
4	Quebec (QC)	32
5	New Brunswick (NB)	20
6	British Columbia (BC)	19
7	Ohio (OH)	19
8	Manitoba (MB)	18
9	Saskatchewan (SK)	13
10	Washington (WA)	8
11	Kentucky (KY)	7
12	Indiana (IN)	7
13	Florida (FL)	6
14	Oregon (OR)	6
15	Texas (TX)	5
16	New York (NY)	4

Good truck parking examples		
Rank	Province/state of the location	Number of
		responses
17	Wisconsin (WI)	3
18	Montana (MT)	3
19	Nova Scotia (NS)	3
20	California (CA)	3
21	North Dakota (ND)	2
22	Iowa (IA)	2
23	Georgia (GA)	2
24	Illinois (IL), Kansas (KS), Michigan (MI), Nevada (NV), Newfoundland	1
	and Labrador (NL), South Carolina (SC), Utah (UT), West Virginia (WV),	
	Wyoming (WY)	
	Total	497

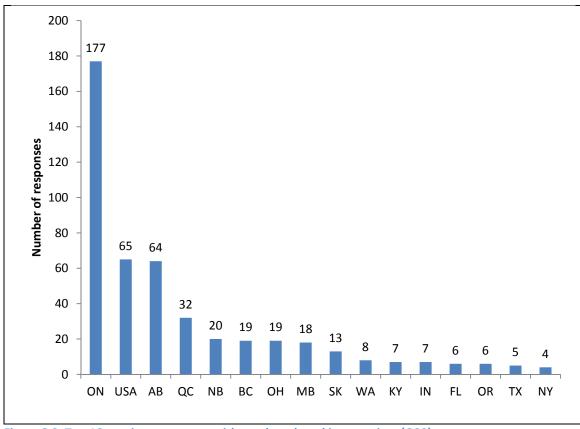


Figure 8.3: Top 16 provinces or states with good truck parking practices (Q39).

We can determine the most popular parking locations among the respondents by separating the locations that they declared based on name, city, road number and province or state. Tables 8.9 to 8.11 show that the most cited places include the following:

- rest areas—Flying J, Irving, Husky, TA, London, Woodstock, Belleville, Cardinal, Napanee, Calgary, Kamloops
- highways—401, 1, 2, 16, and 20
- locations—Ohio turnpike, Ontario, United States, Alberta, Quebec and New Brunswick

Many drivers mentioned the following places: 730 Truck Stop in Cardinal (ON, Hwy 401), 10 Acre truck stop in Belleville (ON, Hwy 401), Flying J in London and Napanee (ON, Hwy 401), Husky in London (ON, Hwy 401), Irving in Salisbury (NB, Hwy 2) and St-Liboire (QC, Hwy 20), TravelCenters of America (TA) in Woodstock (ON, Hwy 401), the service centres on the Ohio turnpike, and the rest areas in Kirkella (MB, Hwy 1) and Morrisburg (ON, Hwy 401).

Conclusion

This report presented the analysis of a commercial truck driver survey aimed at gaining a better understanding of the habits and preferences of truck drivers while travelling in Canada. The survey also emphasized the drivers' needs and opinions of public and private service centres and truck stops. It helped to identify locations where parking is lacking and how this shortage influences the work of drivers throughout the country.

The main element that arose from this survey is that truck drivers feel that the actual truck stop supply in Canada is low. Most truck drivers have trouble finding a parking space and must drive over their time limit to find one. A majority of the drivers feel uncomfortable because of the lack of services in service areas. Drivers want more services in these facilities, whether they are public or private, and some of them are willing to pay for these services. Better food, showers and washrooms were identified as essential, but drivers also need adequate cell phone coverage, Internet connections and secured parking spaces. The drivers expressed their desire to use unconventional and ad hoc parking spaces if such parking options were made available to them.