

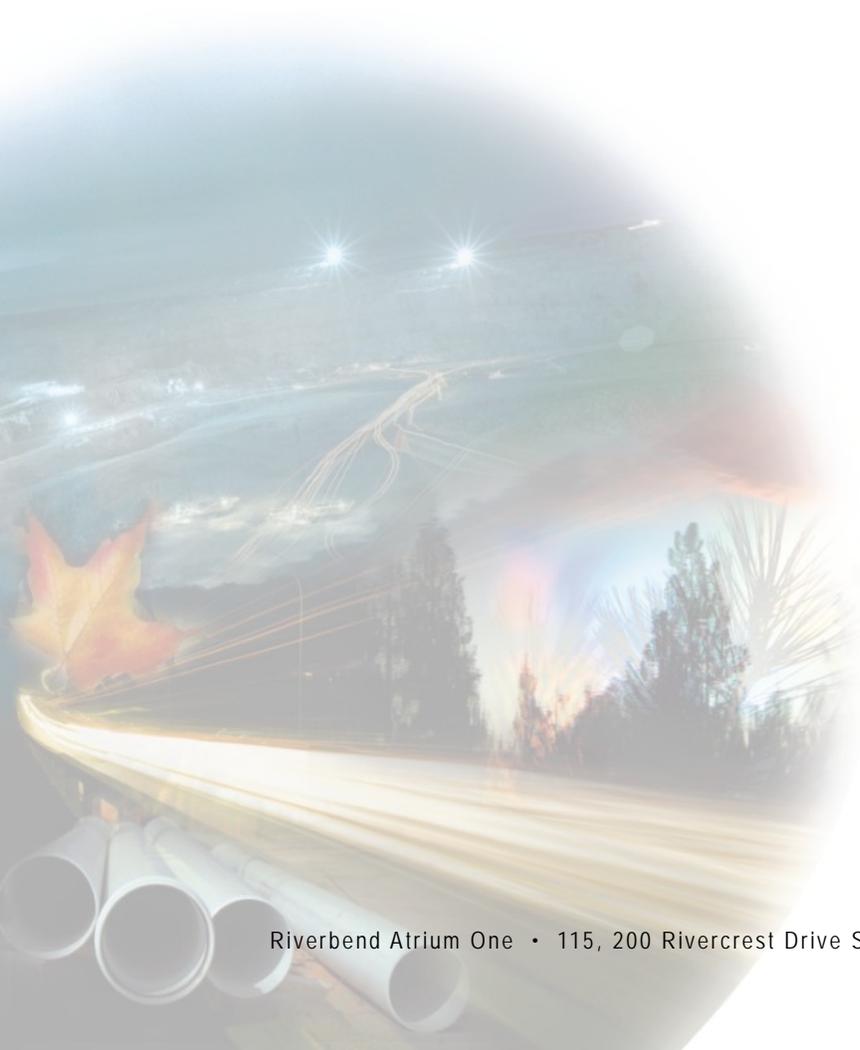


Centre for Transportation Engineering and Planning

**SURVEY OF ALBERTA'S TRUCKING INDUSTRY WITH A VIEW TO
IMPROVING ALBERTA'S HIGHWAYS AND URBAN STREETS**

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EXECUTIVE SUMMARY

This report presents the observations and suggestions of a focus group of ten representatives of Alberta trucking industry regarding improvements in the planning, design, pavement management, safety and operation of highways and urban roads in Alberta. The comments should in general be applicable to other jurisdictions. The report also provides recommendations regarding best methods to obtain trucking industry feedback.

The comments and suggestions made by the focus group of ten people are not necessarily fully representative of the entire trucking industry in Alberta. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc.), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

However, the report's findings should be useful for the highway and street infrastructure providers as a basis for, among other things, selecting appropriate design vehicles, standard and special intersection designs and identification of special routes. Such improvements in turn would make truck operations safer and more efficient, thus enhancing the financial performance of the trucking industry, and contributing to the efficiency of the economy in general.

In this study the term "truck" denotes commercial vehicles with a gross vehicle weight exceeding 4,500 kg.

SUMMARY OF SUGGESTIONS FROM THE TRUCKING INDUSTRY

The following is a summary of the focus group suggestions listed under appropriate headings. It should be noted that EBA Engineering Consultants Ltd. is simply reporting what was said in the focus group session, and does not endorse or discount the suggestions that have been made. The major road infrastructure agencies in Alberta (INFTRA and the cities of Calgary and Edmonton) and elsewhere should consider this information, assess its applicability to their jurisdictions, and implement where appropriate.

Planning

1. More frequent, better designed rest areas with more facilities should be provided on highways. More rest stops/staging areas should be provided near large urban areas, so as to facilitate the movements of over-dimensional commercial vehicles and long combination vehicles.
2. Greater coordination is required among the various levels of government (provincial, municipal and, where applicable, federal) in matters pertaining to the trucking industry's infrastructure needs.
3. More bypasses of towns should be provided on major international/interprovincial routes, such as the CANAMEX (Canada-US-Mexico) trade corridor.
4. On major routes, providing more interchanges and on and off access points would be helpful to trucks.

5. The short and long-term transportation plans by the province and large municipalities should be revised more frequently to keep them in step with the rapid economic developments.
6. An explanation and comparison of the governments' revenues from fuel taxes and the expenditures on roads would be useful.

Geometric Design

1. The design of on and off ramps and acceleration and deceleration lanes (length, crown/superelevation, location on curves, etc.) should take a greater account of the characteristics of trucks.
2. The number of curves should be minimized.
3. Tight horizontal curves before and after bridges should be avoided.
4. There is a need for more interchanges on major highways and truck routes.
5. There are examples (e.g., on the Trans Canada Highway in Medicine Hat) of traffic lights right on the grade of a big hill. In such cases trucks takes a long time and extra fuel to get back to highway speeds.
6. Railroad crossings need to be made smoother and the night-time visibility of the markings and advance warning signs at railroad crossings needs to be improved.
7. Passing lanes need to be on more than just hills and should extend past the crown of the hill (especially if there's a roadside pullout located at the crest).
8. More emergency pullouts (runaway lanes) are needed in the mountainous areas.
9. More protection of bridge pillars with energy damping materials is needed.
10. The location of signs at or near intersections sometimes blocks the sight lines.
11. In areas with large volumes of truck traffic, such as industrial zones in cities, design standards should be enhanced or adapted to serve the trucks.
12. Vehicle inspection stations/weigh scales and rest/staging areas should be located on the right side of a divided highway and not in the median.
13. More Variable Message Signs should be used.
14. Mile markers would be useful for reporting the location of breakdowns.
15. Truck-only lanes should be considered on routes with heavy truck volumes.

Pavement Design and Management

1. Pavement rutting is a serious problem for trucks.
2. Measures to prevent and/or deal with the black ice on roads in winter are required.
3. New materials such as rubber-asphalt pavements should be investigated.

4. Pavement roughness affects truck operations (e.g., speed, fuel consumption, wear and tear, etc.) and thus lowers profitability.
5. Rules regarding seasonal weight restrictions on highways should be reviewed to make at least the major routes restriction free.

Maintenance

1. Proper maintenance (potholes filled, lines painted, snow removed, and road sanded, etc.) on highways and city streets is “key” from the truckers’ perspective.
2. Maintenance needs to be timely.
3. Maintenance standards, practices, and quality appear to vary among regions.
4. Signs covered with snow are a problem; drivers can miss their exit.
5. Signage for lane closure in urban areas is sometimes inadequate.
6. Several suggestions were made regarding snow and ice control, particularly in urban areas: higher priority for truck routes, sanding on hills, less salt use, snow and ice build up under overpasses.

Safety

1. Faded road markings are a big hazard. More durable markings with better night/winter time reflectivity should be used.
2. Median safety barriers should be provided on heavily travelled divided highways (such as Highway 2 between Calgary and Edmonton) to prevent crossover collisions.
3. More safety training and education is required for both truck drivers and motorists.
4. The driver training for all drivers should include special emphasis on the characteristics of large trucks, and on “dos and don’ts” of driving safely in the presence of large trucks.
5. Stricter enforcement of speed limits for non-truck traffic is required.
6. Reduced speed limits should be posted at night on highways through animal zones.
7. The automatic daytime running lights on cars and pickups only turn the headlights on, but not the tail lights, making the back of these vehicles hard to see. All drivers should be required to switch their full lights (front and tail) on during inclement weather.
8. There should be rest areas for the public prior or after the brake check stop. Often the public will be in a brake check stop area sleeping, etc. so the truckers have to do their brake checks on the highway.
9. To improve drivers’ sight lines, the tree lines should be cut back, especially on corners and tight curves.
10. The visibility of pedestrian crosswalks should be improved in urban areas.

Traffic Operation

1. More Weigh in Motion installations would be useful, especially on major routes such as Highway 2, to bypass the scale if the truck is not too heavy.
2. Detours seem to be designed just for passenger vehicles, and are often inconvenient and unsafe for trucks. Detours on dangerous goods routes should receive special attention, and suitable alternative routes should be provided.
3. To minimize stopping and starting by trucks:
 - a. Provide better synchronization/coordination of traffic lights.
 - b. Install more advanced notices that a light is going to change, especially on routes with speed limits of 80 km/h or higher.
 - c. Turn more routes within cities to through routes with amber flashing lights at certain times of the day when traffic is very low.
4. Greater awareness and public education is required about roundabouts.

Other Aspects

1. The term “truck” usually applies to pickups, single unit trucks, semi-trailers, and long combination vehicles. The focus group participants felt that some way to differentiate between commercial trucks and pickup trucks would be useful. For example, some participants felt that collisions involving pickups are usually reported as involving “trucks”, without clarifying that a large truck may not have been involved.
2. The decision-making process of the provincial and municipal governments regarding road plans and priorities needs to be better communicated, and the trucking industry needs to be more involved in the process.
3. A formal and more frequent feedback/input system from truckers to the province, Alberta Infrastructure and Transportation, and the cities is required.

Note that, as expressed in points 2 and 3 above, the desire to be consulted is strong. However, it contrasts with the difficulty in getting the trucking companies interested in providing input for this study. There is thus a need to find a consultation method that would be productive, as well as convenient for the trucking industry.

IMPLEMENTING THE TRUCKING INDUSTRY’S SUGGESTIONS

A preliminary discussion of practical ways of implementing the trucking industry’s suggestions was held with the staff from INFTRA (six staff from the planning, design, operations, and carrier safety divisions) and the City of Calgary (two staff from the transportation planning and traffic engineering divisions) and the City of Edmonton (two staff from traffic operations and design divisions). The following summarizes the discussion.

1. The group agreed that some of the trucking industry suggestions were useful and relevant. Some were already being acted upon, and that the infrastructure providers would give appropriate consideration to other relevant ones.

2. It was pointed out that some of the suggestions were a bit too truck-oriented. Some appeared to be complaints based on an inadequate understanding of the policies, standards and practices of INFTRA and the cities, and of the needs of light vehicles.
3. It was pointed out that a single focus group of ten is probably not fully representative of the entire trucking industry. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

SUGGESTIONS FOR FUTURE CONSULTATION WITH THE TRUCKING INDUSTRY

This study has demonstrated that asking the trucking industry (companies, dispatchers or drivers) to complete questionnaires is not a productive method of getting the industry's input and feedback. The following suggested actions would be more useful for that purpose.

1. The infrastructure providers should ask the Alberta Motor Transport Association (AMTA), (and its counterparts in other provinces) to encourage its members to phone in or email (to the provincial or city transportation departments) any specific problems/issues on highways and streets. The AMTA office could keep a simple file of these suggestions, and periodically pass them on to the provincial or city transportation departments. Alternatively, a formal yearly meeting could be arranged to provide a forum to present information that the industry association(s) and/or their representatives have collected.
2. Major trucking companies could likewise encourage their truck drivers to inform their own dispatch office (by phone or a note) of problems the truckers observe.
3. The agenda for the routine meetings between the infrastructure providers and the provincial trucking associations or sector/regional associations should have a specific item pertaining to truckers' comments and suggestions regarding general or specific improvements required on highways and streets.
4. This study relied on only one focus group of ten from the industry as a whole. Perhaps more focus group discussions should be held with truck drivers/dispatchers from the sector/regional sectors of the for-hire and private trucking companies.

DISCUSSION

It should be noted that the comments and suggestions made by the focus group of ten people are not necessarily fully representative of the entire trucking industry in Alberta. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc.), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

It should be noted that EBA Engineering Consultants Ltd. is simply reporting what was said in the focus group session, and does not endorse or discount the suggestions that have been made. The major road infrastructure agencies in Alberta (INFTRA and the cities of Calgary and Edmonton) and elsewhere should consider this information, assess its applicability to their jurisdictions, and implement where appropriate.

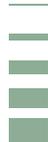


TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
2.0 PURPOSE AND OBJECTIVES OF THE STUDY	2
3.0 METHODOLOGY	3
3.1 General.....	3
3.2 Consultations Regarding Questionnaire Design	3
3.2.1 Consultation with AMTA Members.....	3
3.2.2 Consultation with Provincial Trucking Associations and Provincial and City Chief Engineers	4
3.3 Focus Group Discussions with Alberta Trucking Industry Representatives	5
4.0 HIGHLIGHTS OF THE SUGGESTIONS FROM THE TRUCKING INDUSTRY	6
4.1 Introduction to Highlighted Suggestions From the Trucking Industry	6
4.2 Highway and Urban Road Network Planning	7
4.3 Highway and Urban Road Geometric Design	8
4.4 Pavement Design and Management.....	9
4.5 Highway and Urban Road Maintenance	10
4.6 Safety	11
4.7 Traffic Operation.....	12
4.8 Other Aspects	12
5.0 IMPLEMENTING TRUCKING INDUSTRY'S SUGGESTIONS	13
6.0 SUGGESTIONS FOR FUTURE CONSULTATION WITH THE TRUCKING INDUSTRY	14
7.0 CONCLUDING COMMENTS	15
8.0 CLOSURE	16

APPENDICES

- Appendix A Regional Meeting, Alberta Motor Transport Association, June 13, 2006
- Appendix B Initial Survey Response from the Chief Engineers and Provincial Trucking Associations
- Appendix C Summary of Comments at the April 2007 Focus Group with Alberta Trucking Industry
- Appendix D Summary of Workshop with Staff from INFTRA and Cities of Calgary and Edmonton

1.0 INTRODUCTION

Trucks are the lifeline of a modern economy like Alberta's: almost everything we use in our daily lives moves by truck. (In the study the term "truck" denotes commercial vehicles with a gross vehicle weight exceeding 4,500 kg.) The importance and ubiquitousness of trucks is borne out by the following statistics:

1. Statistics published by Alberta Infrastructure and Transportation (INFTRA) show that as of March 31, 2005 there were 2.46 million motor vehicles registered in Alberta, of which 55,740 (2.3%) were truck tractor/trailer units, and 139,960 (5.7%) were single unit trucks of more than 4,500 kg tare (empty) weight. Of the 21.2 billion vehicle-kilometres of travel on Alberta's highways in 2004 (not including the travel on urban streets), tractor/trailers accounted for 2.1 billion vehicle-kilometres (9.9%), and single unit trucks accounted for 1.1 billion vehicle-kilometres (5.2%). Thus trucks account for more than 15% of the travel on Alberta's highways – far out of proportion to their numbers.
2. In terms of the type of vehicle involved in road traffic collisions on Alberta highways and streets in 2004, tractor/trailer and single unit trucks accounted for 4.7% of the vehicles in non-fatal injury collisions and 17.5% of the vehicles in fatal collisions.

The situation is similar in most industrialized countries. Trucks are major users and stakeholders of highway and street systems everywhere, including Alberta.

Understandably, therefore, the characteristics and requirements of trucks determine and influence various aspects of highway and street planning, design, and operation. Some obvious examples are bridges, pavements, lane widths, intersection geometry, maximum gradients, and climbing lanes, among others.

Given the importance of trucks, one would assume that trucking companies and operators would be consulted on an ongoing basis regarding the various planning, design, operations and safety aspects of the highway and street infrastructures. However, that does not appear to be the case. With the exception of consultation about regulatory affairs, such as truck weights and dimensions, the trucking industry is not generally consulted by the highway and municipal agencies.

The Centre for Transportation Engineering and Planning (C-TEP) therefore perceived a need for consulting the Alberta trucking industry with a view to improving the non-regulatory aspects (e.g., planning, engineering, operational and safety policies, standards and practices) for provincial highways and urban streets in Alberta.

C-TEP retained the services of EBA Engineering Consultants Ltd. (EBA) to undertake a study to fulfill this need through consultation with the Alberta trucking industry. EBA was assisted by Dr. Jeannette Montufar of the University of Manitoba Transportation Information Group. Guidance to the study design and process was provided by a Technical

Review Team (TRT) consisting of two staff from INFTRA (Mr. Peter Kilburn and Mr. Robert Hastings). Mr. Mayne Root of Alberta Motor Transport Association (AMTA) provided valuable advisory and administrative assistance in liaising with the trucking industry.

2.0 PURPOSE AND OBJECTIVES OF THE STUDY

The overarching purpose of the study was to suggest improvements in the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta in terms of their interaction with large trucks. Comments from the trucking industry would be useful for the highway and street infrastructure providers as a basis for, among other things, selecting appropriate design vehicles, standard and special intersection designs and identification of special routes. Such improvements in turn would make truck operations safer and more efficient, thus enhancing the financial performance of the trucking industry, and contributing to the efficiency of Alberta's economy in general.

The objectives of the study were:

1. To obtain trucking industry observations and feedback regarding various aspects of highway and street infrastructure that are of mutual interest to the highway/street agencies and the trucking industry, including but not limited to the following topics:
 - Planning: aspects of items like network planning, route location, rest stops/staging areas and functional planning.
 - Geometric Design: horizontal and vertical alignment and lane widths on routes with high truck volumes and/or high proportion of over-dimension trucks.
 - Pavement Design and Management: pavement roughness and rutting performance measures, seasonal variations in roughness, and the effects of roughness on vehicles and payloads.
 - Maintenance: road maintenance standards and practices, winter snow and ice control, and signing.
 - Safety: speed limits, signing, pavement markings, vehicle-animal collision countermeasures, emergency planning and management, and dangerous goods transportation.
 - Others: to be added after discussion/consultation with INFTRA, the cities of Edmonton and Calgary.
2. To assess, consolidate, and summarize the trucking industry's responses with a view to assisting and facilitating the major infrastructure agencies in Alberta (INFTRA, Calgary and Edmonton) to take this information, assess applicability to their jurisdictions, and implement where appropriate.
3. To propose, as an ancillary objective, a flexible method to facilitate ongoing consultations between the trucking industry and the infrastructure agencies in Alberta.

3.0 METHODOLOGY

3.1 GENERAL

Trucking industry in Alberta, and in the rest of Canada, is organized in two categories:

1. “For Hire Carriers” whose main business is trucking and who can be hired by anyone to transport goods.
2. “Private Carriers” which are trucking divisions of firms such as grocery/department stores, oil companies, construction companies, etc., that have their own fleet of trucks to carry their own goods; and they are not normally available for hire by others.

The database of the trucking industry maintained by the Vehicle Safety and Carrier Services Division of Alberta, INFTRA, located in Red Deer, has about 25,000 carriers listed as of the end of 2005. About 12,000 are “For Hire Carriers” and the remainder are “Private Carriers”. A complete list of the names and addresses of the “For Hire Carriers” and “Private Carriers” is available from INFTRA.

Alberta Motor Transport Association (AMTA) is the trucking industry association in Alberta, and represents mainly the “For Hire Carriers”, both large and small. The AMTA has more than 12,000 members: 85% of them are one or two-truck owners/operators; the remaining 15% are larger, multi-truck carriers, some with hundreds of trucks and carry goods to/from other provinces and the United States and Mexico. Some of the “Private Carriers” are also members of the AMTA, but not many. There is no single association of “Private Carriers”; some may belong to their parent company’s “trade association”.

The original methodology for this study had envisaged that the data would be collected through a questionnaire distributed to a representative sample of AMTA members (major “For Hire Carriers” and owners/operators) as well as “Private Carriers”. However, as explained below, poor response rate in a trial questionnaire survey at a regional meeting of the AMTA, and a letter survey for comments from the provincial motor transport associations, indicated that a questionnaire approach would likely not be successful in getting the required information from the trucking industry.

3.2 CONSULTATIONS REGARDING QUESTIONNAIRE DESIGN

With a view to improving the design of a suitable questionnaire, three separate efforts were made to consult with the trucking industry and the senior provincial and city engineers responsible for the highway and street infrastructure. Each is briefly described below.

3.2.1 Consultation with AMTA Members

EBA staff made a presentation at the regional meeting of the AMTA in Edmonton on June 13, 2006. The purpose was to get input into the design of the questionnaire that was to be sent to the trucking companies and owner-operators. The one-page handout distributed at the meeting is shown in Appendix A. After the meeting, the handout was

also sent to selective AMTA member companies by the AMTA Executive Director. The following two questions were posed to the AMTA members:

1. What questions should we ask in the survey so as to obtain the truckers' opinion about improvements needed on highways and streets?
2. AMTA will email the questionnaire to the carriers. How can we increase the response rate? And, how should we get the input from the owner-operators?

The response to the questions at the meeting or later by email was, unfortunately, extremely low. The only substantive comment received was that "the questionnaire should be designed for a grade-8 education level".

3.2.2 Consultation with Provincial Trucking Associations and Provincial and City Chief Engineers

In May 2006, EBA staff sent a questionnaire to 25 senior provincial and city engineers on the Chief Engineers' Council of the Transportation Association of Canada, and seven provincial motor transport/trucking associations to improve the design of the trucking industry survey and gain insights from the experience of other jurisdictions in Canada. The questionnaire consisted of the following three questions:

1. Do consultations currently take place between your jurisdiction (the Provincial/Territorial highway/transportation department or City works/engineering department) and the trucking industry regarding the trucking industry's needs and input into planning, design, construction, and operations of highways and streets? If yes, please indicate the purpose, a brief description of the process, and frequency of such consultations.
2. What would be a simple and flexible process of consultation between the Provincial/Territorial highway/transportation departments or City works/engineering departments and the trucking industry so that regular, meaningful input could be obtained from the trucking industry to improve planning, design and operation of highways and streets?
3. What questions would you like to be included in the trucking industry survey questionnaire? Please list them below.

The response rate, after two reminders, was 40% (10 of 25) from the Chief Engineers, and 29% (2 of 7) from the provincial motor transport associations. The actual responses to each question are shown in Appendix B.

Note that not all respondents answered all three questions. In particular, the response to the crucial Question 3 was disappointingly low: none of the motor transportation associations answered this question, and the six suggestions made by the Chief Engineers were not all usable.

The relatively meagre quantity and quality of the suggestions received, particularly regarding the questions to be asked in the questionnaire, led EBA to the conclusion that a questionnaire approach would not be effective for the purposes of this study.

3.3 FOCUS GROUP DISCUSSIONS WITH ALBERTA TRUCKING INDUSTRY REPRESENTATIVES

At the November 22, 2006 meeting with the Technical Review Team, EBA staff presented the results of the consultation efforts described above, and their conclusion that a questionnaire approach would not be effective for the purposes of this study. EBA staff suggested that a “focus group” approach would be more effective. The TRT agreed, and decided to implement the focus group approach.

The revised methodology consisted of holding two focus group discussions, one in Calgary and one in Edmonton, so that some regional characteristics could be captured. Each focus group would consist of ten carefully selected trucking industry representatives (drivers, operations managers), who would attend a day-long discussion, facilitated by EBA staff, with a view to eliciting their comments and opinions on the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta, as they relate to trucks.

The selection of the members of the focus groups was done with AMTA’s assistance. It was planned that the selection of the focus group members would be done with a view to allowing representation from various industrial/shipping sectors [e.g., private/for hire/owner-operator, commodity type (fuels, logging, etc.) in the province]. It should be noted that, in order to encourage attendance by trucking industry people, the focus group discussions were scheduled on a Saturday and an honorarium of \$150 was provided to the participants.

The focus group discussion was held in Calgary on Saturday, April 14, 2007. Ten people representing various levels in different for-hire and private trucking companies participated in the discussion. The participants represented the range of trucking industry sectors. However, it was difficult, in a relatively small group of ten, to provide for full representation from all sectors of the trucking industry (e.g., construction, gravel, logging, oilfield).

Between April 2007 and August 2007, three attempts were made to schedule the focus group discussion in Edmonton on a Saturday convenient to the trucking companies invited, but all three attempts were unsuccessful in obtaining the necessary number of participants. As an alternative method, in September the five trucking companies, that had initially agreed to send staff to the Edmonton focus group discussion, were sent the Calgary session summary (shown in Appendix C) and were asked to add their comments. However, no response was received despite reminders.

The material for the focus group discussion was designed with the assistance of Dr. Jeannette Montufar of the University of Manitoba Transportation Information Group (UMTIG) and was reviewed by the TRT and the staff from the Calgary and Edmonton

traffic engineering departments. EBA Staff (Dr. Masood Hassan) facilitated the focus group discussion.

Appendix C contains the questions utilized to facilitate the Calgary focus group discussion, as well as a summary of the comments and suggestions made by the participants. These are discussed in the Results section below.

It should be noted that the comments and suggestions made by the focus group of ten people are not necessarily fully representative of the entire trucking industry in Alberta. However, the suggestions are useful and valuable to form the basis of discussion for the purposes of this study.

4.0 HIGHLIGHTS OF THE SUGGESTIONS FROM THE TRUCKING INDUSTRY

4.1 INTRODUCTION TO HIGHLIGHTED SUGGESTIONS FROM THE TRUCKING INDUSTRY

This Section summarizes and highlights the main suggestions made at the trucking industry focus group, which are reported in Appendix C. The following general points should be kept in mind when interpreting the suggestions.

1. The following list is a summary of the trucking industry comments under the same categories/headings that were used in the focus group. The definitions of the categories and the details of the various suggestions, including selective verbatim comments, are shown in the focus group report in Appendix C. The focus group discussion was deliberately kept semi-structured so as to allow the participants to feel free to express their opinions and observations. Therefore, many comments, as expected, relate to more than one among the categories of planning, design, and safety. The various comments were allocated to the most suitable category; and comments reported under one category are not usually duplicated elsewhere.
2. The trucking industry suggestions reported in this study reflect the observations and opinions of a focus group of ten trucking industry representatives, each with tens of thousands of kilometres of truck driving experience. The suggestions are generally quite perceptive and relevant, even though some may appear to be, understandably, too truck-oriented at the expense of car drivers.
3. The suggestions are necessarily selective: with more focus groups, a greater range of suggestions on various aspects of highways and streets, and from various sectors of the trucking industry (e.g., logging, construction, oilfield, etc.), might presumably have been obtained.
4. The suggestions are not recommendations by EBA. They are presented for consideration by the infrastructure providers. The preliminary comments (on some of the focus group suggestions) by the infrastructure providers at the Infrastructure Providers' Workshop are reported in Appendix D.

5. Among the focus group suggestions, some are truck-specific, while others are of general application to all highway and street users. Many of the suggestions are already part of the planning, design and operating practices of the infrastructure providers; while others provide new insights from the truckers' viewpoint. Many comments, as expected, relate to more than one among the categories of planning, design, safety, etc. Comments reported under one category are not duplicated elsewhere.
6. The following summary emphasizes mainly the items that are of general application to the highway and street networks in Alberta and elsewhere. Appendix C and Appendix D include references to specific issues and/or locations on the Alberta highway system and on the street networks in Calgary and Edmonton.

4.2 HIGHWAY AND URBAN ROAD NETWORK PLANNING

The following are the main suggestions under the general heading of highway and street planning.

1. More frequent and better designed rest areas should be provided on highways.
 - Roadside pullouts should be off the highway. Simply widening the shoulder to provide a pullout is not safe: these do not provide sufficient parking length for large number of semi-trailers and long combination vehicles (LCV) on the highways. Better signing for roadside pullouts is required.
 - Some desirable features in rest stops are: sufficient parking space to accommodate the trucks expected to use a given route; lighting at entrance; better signing; more facilities, e.g., bathrooms, better pavement markings for parking, segregated truck parking from RV and passenger vehicles.
 - More rest stops/staging areas should be provided near large urban areas (see the next item for explanation).
2. Greater coordination is required among the various levels of government (provincial, municipal and, where applicable, federal) and with the trucking industry.
 - To illustrate the point, the focus group discussed an example related to special permits for over-dimensional (OD) trucks and LCV's. The province does not allow the OD trucks to travel on provincial highways at night because of a lack of illumination; while the cities of Calgary and Edmonton require them to travel at night so as to avoid the daytime city traffic. The two levels of government have been unable to harmonize these rules. A possible way to mitigate the situation would be to have sufficiently large truck rest/staging areas just outside the city limits, where truckers can sleep at night after leaving the city and then proceed on the provincial highways in the morning.
3. More bypasses of towns should be provided on major international/interprovincial routes, such as the CANAMEX (Canada-US-Mexico) trade corridor.
4. On major routes, providing more interchanges and on and off access points would be helpful to trucks.

5. The short and long-term transportation plans by the province and large municipalities have not kept pace with the rapid economic development in Alberta, and should be updated more frequently to reflect the emerging economy and its impact on transportation needs.
6. An explanation and comparison of the governments' revenues from fuel taxes and the expenditures on roads would be useful.

4.3 HIGHWAY AND URBAN ROAD GEOMETRIC DESIGN

The following are the main suggestions under the general heading of geometric design.

1. The design of on and off ramps and acceleration and deceleration lanes (e.g., length, crown/superelevation, location on curves), should take a greater account of the characteristics of trucks. On some curves, the superelevation seems to be insufficient or reversed causing truck handling problems.
2. The number of curves should be minimized; where necessary, the curves should be as gentle as possible.
3. Tight horizontal curves before and after bridges are a real problem. Bridge decks tend to be icy and it would be better to provide longer, straighter approaches to bridges.
4. There is a need for more interchanges, as there are too many traffic signals on the major highways in the province.
5. There are examples (e.g., on the Trans Canada Highway in Medicine Hat) of traffic signals on steep grades. In such cases trucks take a long time and extra fuel to get back to speed.
6. Railroad crossings need to be made smoother; the bump when travelling over a railway is definitely an issue for trucks. The night-time visibility of the markings and advance warning signs at railroad crossing needs to be improved.
7. Passing lanes need to be on more than just hills and should extend past the crown of the hill (especially if there's a roadside pullout located at the crest).
8. More emergency pullouts (runaway lanes) are needed in the mountainous areas.
9. With respect to safety barriers, more protection of bridge pillars with energy damping materials should be provided; barriers on some bridge approaches tend to narrow the traffic lane.
10. The location of signs at or near intersections sometimes causes sight issues, trying to see around the signs is sometimes difficult.
11. In areas with large volumes of truck traffic, such as industrial zones in cities, design standards should be enhanced or adapted to serve the trucks; examples include: wider turning lanes, longer left turning bays, paved shoulders on rural intersections.

12. Vehicle inspection stations/weigh scales located in the median of divided highways require the truckers to cross multiple lanes, which can be difficult with LCVs. In general, these facilities should be located on the right side of the highway and should have proper acceleration and deceleration lanes.
13. More permanent Variable Message Signs should be used, such as the ones between Calgary and Red Deer.
14. Mile markers would be useful for reporting the location of breakdowns, particularly when one cannot see the nearest sign. Some highways may already have mile markers, but the truckers and the general public are not aware of their presence because they may not be prominent enough.
15. On routes with heavy truck volumes, consideration should perhaps be given to truck-only lanes.

4.4 PAVEMENT DESIGN AND MANAGEMENT

The following are the main suggestions under the general heading of pavement design and management.

1. Pavement rutting is a serious problem for trucks: water and ice build up in ruts, and ruts cause stability and safety problems. Quick-fix overlays do not seem to work, as ruts come back sometimes after only one season. The subgrades may need to be rebuilt to solve the rutting problem. More durable solutions are required, e.g., better pavement designs and materials. Allowing and encouraging trucks to use all lanes on multi-lane highways, as they do in certain US states, may help with the rutting problems.
2. Measures to prevent and/or deal with the black ice on roads in winter are required. Chip seals used in many Canadian and American jurisdictions appear to work.
3. Has enough research been done on rubber-asphalt pavement, including long term and winter properties, its impact on truck operations and stability?
4. Pavement roughness affects truck operations (e.g., speed, fuel consumption, wear and tear, etc.) and thus lowers profitability.
5. Several comments were made regarding seasonal weight restrictions on highways:
 - Spring weight restrictions on primary routes in Alberta cause problems when the adjacent jurisdiction(s) do not impose weight restrictions on their portions of the inter-provincial primary routes.
 - The trucking industry would prefer that there be no weight restrictions on major Alberta routes (e.g., Alberta Highway 1, Highway 2, Highway 16, and Highway 63). If the weight restrictions must be imposed, they should at least be similar to the neighbouring jurisdictions.
 - Stronger, load-restriction-free pavements in truck lanes could be provided on the heavily traveled major routes to support heavily loaded vehicles.

- Uniform truck weight and dimension regulations with the United States would alleviate the problem of having to transfer loads when trucking to the U.S.
- Question – Do the seasonal road bans make Alberta roads better than the ones in other jurisdictions?
- Signing of road bans needs to be well in advance before an overweight truck reaches the road ban location.
- Need better network planning and coordination on routes and bridges used by truckers.

4.5 HIGHWAY AND URBAN ROAD MAINTENANCE

The following are the main suggestions under the general heading of highway and urban road maintenance.

1. Proper maintenance (e.g., potholes filled, lines painted, snow removed and road sanded) on highways and city streets is “key” from the truckers’ perspective. Poor maintenance affects safety, truck operations, wear and tear on tires and suspensions, etc.
2. Maintenance needs to be timely: crews should be out there before the problems arise.
3. Maintenance standards, practices, and quality appear to vary among regions.
4. Signs covered with snow are a problem; drivers can miss their exit. Possible solutions include: snow-repellent signs, better maintenance/cleaning of signs, and secondary (backup) signs.
5. Signage for lane closure in urban areas is sometimes inadequate.
6. Several suggestions were made regarding snow and ice control, particularly in urban areas.
 - Truck routes should be a high priority for quick snow removal and sanding. On some urban routes, trucks cannot get going after stopping because of a lack of traction. After a snow storm, trucks tend to go out of their way to avoid the usual truck routes with hills, as they know from experience that the city would have simply ploughed the truck routes without adequately sanding them to improve traction.
 - Some cities seem to have a better sanding/surfacing program. Material used in other cities doesn’t seem to last as long or gets blown off the surface.
 - Reduction in salt use is recommended.
 - Snow and ice build up under overpasses can affect the overall clearance available for trucks.

4.6 SAFETY

The following are the main suggestions under the general heading of safety.

1. More durable road markings with better night/winter time reflectivity are a must. Lane widths in cities are already narrow, and lane markings seem to wear out quickly in cities, even on bridges, thus creating unsafe conditions.
2. Median safety barriers should be provided on heavily travelled divided highways (such as Highway 2 between Calgary and Edmonton) to prevent crossover collisions.
3. More safety training and education is required for both truck drivers and motorists. The automobile associations and trucking associations must work together.
4. In order to drive safely in the presence of large trucks, the driver training for new drivers should include special emphasis on “dos and don’ts” of driving safely in the presence of large trucks, and on the characteristics of large trucks, such as: the need for wide turns; truck driver’s blind zones; trucks do not usually swerve to avoid hitting animals on highways.
5. Stricter enforcement of speed limits is required. By company policy, trucks are required to keep within the posted speed limits. However, speeding by cars and motorcycles is a common occurrence. There is confusion about the speed limit rules in construction zones, and also large variability of speeds by the travelling public.
6. Reduced speed limits should be posted at night on highways through heavily populated animal zones.
7. Trucks are required to drive with all lights on in inclement weather (company policy). The automatic daytime running lights on cars and pickups only turn the headlights on, but not the tail lights, making the back of these vehicles hard to see. The provinces should, by regulation, require all drivers to switch their full lights (front and tail) on during inclement weather and at dawn and dusk. Alternatively, the federal government should change the vehicle standards requiring that day time running lights should automatically switch all lights on.
8. Trucking industry has to check their vehicles and lights all the time, the general public does not seem to have this onus.
9. Brake checks for truckers – there should be rest areas for the public prior to or after the brake check stop. Often the public will be in brake check stop area sleeping, etc., so the truckers have to do their brake checks on the highway.
10. To improve drivers’ visibility, the tree lines should be cut back, especially on corners and tight curves.
11. The visibility of pedestrian crosswalks should be improved in urban areas, especially on heavily travelled truck routes.

12. More Variable Message Signs on highways and urban roads, and the provision of reasonably prominent mileage markers on highways, would enhance traffic safety.

4.7 TRAFFIC OPERATION

The following are the main suggestions under the general heading of traffic operation.

1. More Weigh in Motion installations would be useful, especially on major routes such as Highway 2.
2. Detours seem to be designed just for passenger vehicles, and are often inconvenient and unsafe for trucks. Detours can be quite difficult for LCVs, which need a more gradual change of alignment. Detours on dangerous goods routes should receive special attention, and suitable alternative routes should be planned.
3. Stopping and starting is the biggest time and fuel waster for trucks. Several suggestions were made to improve the flow of truck traffic and operation of traffic signals in urban areas in general and industrial areas in particular.
 - Provide better synchronization/coordination between the advanced warning light (that a traffic signal is going to change) and the traffic signal.
 - Install more of these advanced warning lights ahead of the traffic signals, especially on routes with speed limits of 80 km/h or higher.
 - Improve the management and coordination of traffic signals on a given route. There needs to be some consistency in how the traffic on the cross streets trip the traffic signals.
 - More routes within cities should turn to through routes at certain times of the day when traffic is very low. Through routes should have amber flashing lights for all intersections and flashing red for the minor side streets.
4. Greater awareness and public education is required about roundabouts.
5. Waiting at railway crossings in cities can be excessive at times. Some mechanism for enforcing the federal or railway companies' own regulations about waiting times at railway crossings is required.

4.8 OTHER ASPECTS

The following are the main suggestions regarding aspects of highways and urban streets that have not been reported under other headings above.

1. The term “truck” is commonly used for vehicles ranging from half-ton pickups, single unit trucks, semi-trailers and long combination vehicles. The focus group participants felt that some way to differentiate between commercial trucks and pickup trucks would be useful. For example, some participants felt that collisions involving pickups are usually reported involving “trucks”, without clarifying that a large truck may not have been involved.
2. The trucking industry and the general public have very little understanding of the decision-making process of the provincial and municipal governments regarding road plans and priorities. The process needs to be better communicated, and the trucking industry needs to be more involved in the process.
3. This study is a good start. However, a more formal feedback/input system to INFTRA and the cities is required.

Note that, as expressed in points 2 and 3 above, the desire to be consulted is strong. However, it contrasts with the difficulty in getting the trucking companies interested in providing input for this study. There is thus, a need to find a consultation method that would be productive as well as convenient for the trucking industry.

5.0 IMPLEMENTING TRUCKING INDUSTRY'S SUGGESTIONS

On November 21, 2007, a half-day Infrastructure Providers' Workshop was held with the staff from INFTRA (six staff from the planning, design, operations, and carrier safety divisions) and the City of Calgary (two staff from the transportation planning and traffic engineering divisions) and the City of Edmonton (two staff from traffic operations and design divisions). The purpose of the workshop was to:

1. Present the summary of the comments received from the trucking industry, and discuss practical ways of implementing them.
2. Elicit additional ideas from the staff from INFTRA and the City of Edmonton and the City of Calgary, regarding the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta as they relate to trucks.
3. Discuss ways to facilitate ongoing consultations between the trucking industry and the infrastructure agencies in Alberta regarding the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta as they relate to trucks.

Highlights of the workshop discussion are presented in Appendix D. Note that the workshop was able to note and discuss in a preliminary manner only selective issues raised at the focus group. The following summarizes the discussion.

1. The group agreed that some of the trucking industry suggestions were useful and relevant. Some were already being acted upon, and that the infrastructure providers would give appropriate consideration to other relevant ones.

2. It was pointed out that some of the suggestions were a bit too truck-oriented. Some appeared to be complaints based on an inadequate understanding of the policies, standards and practices of INFTRA and the cities, and of the needs of light vehicles.
3. It was pointed out that a single focus group of ten is probably not fully representative of the entire trucking industry. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc.), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

6.0 SUGGESTIONS FOR FUTURE CONSULTATION WITH THE TRUCKING INDUSTRY

The comments by the provincial and city chief engineers, as shown in Appendix B, indicate that they do consult with the trucking industry (mainly through the provincial trucking/motor transport associations) on a reasonably regular basis. However, these consultations are in most cases, related to regulatory affairs (truck weights and dimensions, hours of service, etc.) or high level policies and long range plans. As a result, the provincial and city infrastructure providers do not get direct feedback from the trucking industry with respect to the specific problems and issues related to planning, design, pavement management, maintenance, safety, and operation of highways and urban roads.

The trucking associations, such as the AMTA, are mostly composed of the executive levels from trucking companies; and are often not the best sources for the kind of information highway and urban road planners, designers and managers require. It would be useful to get feedback from truck drivers or people on the frontline like dispatchers to get another perspective on things. It was suggested at the infrastructure providers' workshop that perhaps the best approach for dealing with AMTA is to get feedback from subgroups of trucking associations in sectors and regions, such as Alberta Sand and Gravel Association, Alberta Construction Trucking Association, etc.

Calgary and Edmonton each have a 311 phone line for the public to report road and traffic related problems and suggestions to a central location. But such callers do not identify themselves as truckers; and it is therefore difficult to ascertain whether a problem is truck related.

As discussed above, asking the trucking industry (companies, dispatchers or drivers) to complete questionnaires is not a productive method of getting the industry's input and feedback. The following suggested actions would be more useful for that purpose.

1. The infrastructure providers should ask the Alberta Motor Transport Association (AMTA) (and its counterparts in other provinces) to encourage its members to phone in or email (to the provincial or city transportation departments) any specific problems/issues on highways and streets. The AMTA office could keep a simple file of these suggestions and periodically pass them on to the provincial or city transportation departments. Alternatively, a formal yearly meeting could be arranged to provide a

forum to present information that the industry association(s) and/or their representatives have collected.

2. Major trucking companies could likewise encourage their truck drivers to inform their own dispatch office (by phone or a note) of problems the truckers observe.
3. The agenda for the routine meetings between the infrastructure providers and the provincial trucking associations or sector/regional associations should have a specific item pertaining to truckers' comments and suggestions regarding general or specific improvements required on highways and streets.
4. This study relied on only one focus group of ten from the industry as a whole. Perhaps more focus group discussions should be held with truck drivers/dispatchers from the sector/regional sectors of the for-hire and private trucking companies.

7.0 CONCLUDING COMMENTS

The usual consultations with the trucking industry pertain mainly to regulatory or policy matters. This report has presented the results of a focus group survey which, perhaps for the first time in Alberta, elicited suggestions by the trucking industry representatives with extensive personal truck-driving experience about improvements required on the highway and urban road networks that would better serve large trucks.

The comments and suggestions made by the focus group of ten people are not necessarily fully representative of the entire trucking industry in Alberta. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc.), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

It should be noted that that EBA is simply reporting what was said in the focus group session, and does not endorse or discount the suggestions that have been made. The suggestions are for consideration of the infrastructure providers as appropriate.

This study has demonstrated that a questionnaire approach does not work when surveying trucking company drivers and other staff. For future feedback from the trucking industry, methods that would work better include:

- focus groups;
- direct input by truck drivers by phone to a central file in the trucking company or in the provincial or city transportation departments; and
- specific agenda items in the regular meetings with the provincial trucking associations.

8.0 CLOSURE

EBA is pleased to have been given the opportunity to work on this interesting study.

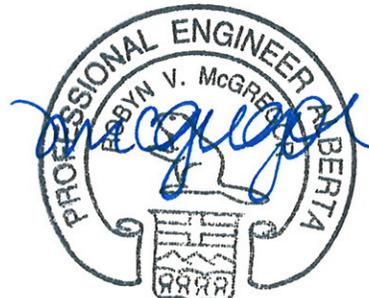
Respectfully submitted,
EBA Engineering Consultants Ltd.

Reviewed by



May 6, 2008

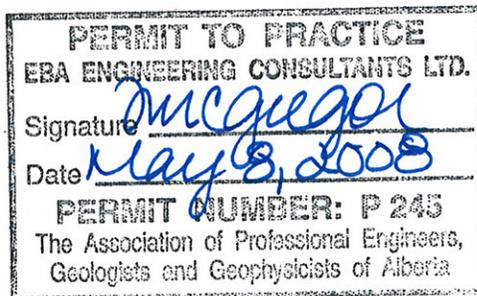
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May 8, 2008

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APPENDIX A

APPENDIX A REGIONAL MEETING, ALBERTA MOTOR TRANSPORT ASSOCIATION,
JUNE 13, 2006

**REGIONAL MEETING OF THE ALBERTA MOTOR TRANSPORT ASSOCIATION
JUNE 13, 2006**

THE STUDY

Survey of Alberta's Trucking Industry with a View to Improving the Planning, Design, and Operation of Alberta's Highways and Urban Streets. (A Project for the Centre for Transportation Engineering and Planning by EBA Engineering Consultants.)

OBJECTIVES OF THE STUDY

1. To obtain trucking industry observations and feedback regarding various aspects of highway and street infrastructure that are of mutual interest to the highway/street agencies and the trucking industry, including but not limited to the following topics:
 - Planning: aspects of items like network planning, route location, rest stops/staging areas and functional planning.
 - Geometric Design: horizontal and vertical alignment and lane widths on routes with high truck volumes and/or high proportion of over-width and over-height trucks.
 - Pavement Design and Management: pavement roughness and rutting performance measures; seasonal variations in roughness; the effects of roughness on vehicles and payloads.
 - Maintenance: road maintenance standards and practices; winter snow and ice control; signing.
 - Operations: Traffic signals and other controls; signing; stopping and parking.
 - Safety: speed limits; signing; pavement markings, vehicle-animal collision countermeasures; emergency planning and management; dangerous goods transportation.
 - Others: to be added after discussion/consultation with other highway and street jurisdictions and trucking associations.
2. To assess, consolidate and summarize the trucking industry's responses with a view to assisting and facilitating the highway and street infrastructure agencies to take this information, assess applicability to their jurisdictions, and implement where appropriate.
3. To propose a flexible method to facilitate ongoing consultations between the trucking industry and the highway and street infrastructure agencies.

INPUT REQUESTED FROM THE AMTA MEMBERS AT THIS MEETING

1. **What questions should we ask** in the survey so as to obtain the truckers' opinion about improvements needed on highways and streets?
2. **AMTA will email the questionnaire to the carriers. How can we increase the response rate? And, how should we get the input from the owner-operators?**

We would appreciate your comments now or by June 19 to:

Masood Hassan, EBA Engineering Consultants, 780.451.2130 x325 or mhassan@eba.ca



APPENDIX B

APPENDIX B INITIAL SURVEY RESPONSE FROM THE CHIEF ENGINEERS AND PROVINCIAL TRUCKING ASSOCIATIONS

C-TEP PROJECT "ALBERTA TRUCKING INDUSTRY SURVEY"

RESPONSES RECEIVED FROM PROVINCIAL/CITY CHIEF ENGINEERS AND PROVINCIAL MOTOR TRANSPORT ASSOCIATIONS

INTRODUCTION

To improve the design of the trucking industry survey, and gain insights from the experience of other jurisdictions in Canada, in May 2006 a questionnaire was sent to 25 Provincial and city engineers on the Chief Engineers Council of the Transportation Association of Canada, and 7 provincial motor transport associations. The response rate, after two reminders, was 44% (11 of 25) from the Chief Engineers, and 29% (2 of 7) from the provincial motor transport associations. The responses to each question are shown below. Note that not all respondents answered all three questions. In particular, the response to the crucial Question 3 was disappointing.

The purpose of the questionnaire was to discern general trends; it was not to compare the various jurisdictions. Note that the respondents' answers are reproduced as stated. Some jurisdictions identified themselves in their answers while others didn't. EBA staff did not deliberately attempt to identify the respondents in particular answers if the respondents did not self-identify themselves. Hence some answers start with a "we" or "the department".

RESPONSES

QUESTION 1

Do consultations currently take place between your jurisdiction (the Provincial/Territorial highway/transportation department or City works/engineering department) and the trucking industry regarding the trucking industry's needs and input into planning, design, construction and operations of highways and streets? If yes, please indicate the purpose, a brief description of the process and frequency of such consultations.

Responses to Q.1 from Chief Engineers

1. We have several stakeholders that are consulted when developing new policy initiatives including Trucking Associations.

For designs that would be subject to a heavy truck generator or possibly impact a trucking operation, we would normally consult with the specific generator/operation to ensure our designs best accommodated the project requirements given the traffic type. This would include constraints during construction and possible design changes. It is unlikely there would be any change in operations that would be necessary. Trucking Associations are not normally contacted in the maintenance, construction or design of a project.

2. New Brunswick conducts a regular series of consultations with the trucking industry, originally to deal with red-tape reduction, but now more wide ranging so as to provide an opportunity for industry to comment on any issues of concern. These meetings are scheduled to occur twice

per year, in the spring and again in the fall. This process has been in place for the past 3 to 4 years.

3. Department staff from the Trucking Policy and Programs work unit meets, on a quarterly basis, with Saskatchewan Trucking Associations (STA) to discuss various transportation related issues, concerns and opportunities. Topics may include safety, design, operational, intersections, transportation efficiencies, rest stops etc. STA is also represented on the Trucking Partnership Fund Advisory Committee and uses the committee meetings as a forum to influence transportation infrastructure improvement projects funded through the Trucking Partnership Fund. .

The issues and concerns are relayed to the appropriate department work units (planning, design, construction, and operations) for input and consideration.

STA also may influence projects on the department's Annual Safety Improvement Program, by voicing concerns through our Trucking Policy and Programs or the TPF Advisory Committee.

Department always consults the trucking industry when Legislation/Regulations are reviewed.

4. *Quebec includes in its planning process what we call "Regional transportation plan". Those plan are updated regularly (every 5 years or so) and a formal consultation process is included in the making of those plan. Trucking industry is an important part of the stakeholders targeted by the consultation process as well as others road users. Because of regional characteristics the plans are prepared by each of our 14 regional office of Ministry of transportation and are submitted for approval to ministry's authority at the provincial level. We also have a permanent forum called "**Table de sécurité gouvernement industrie sur les véhicules lourds**". This forum meets at least twice a year and representatives of heavy vehicles users, trucking and bus associations and many other directly involved stakeholders in road safety issues for heavy vehicles are attending this forum. This is the place where issues concerning road safety and road design with respect of road safety are discussed. Sub group conduct works asked by the forum. You may find information on this concentration table (only in French) at: <http://www.mtq.gouv.qc.ca/fr/camionnage/lourds/table/index.asp>*
5. There has traditionally been very little consultation between the department and the trucking industry regarding individual highway design projects. However, the trucking industry has from time to time made request for specific rest stops, scale facility approach modifications etc. which has been considered and at time implemented.
6. Manitoba consults extensively on ongoing basis with the trucking and other stakeholders on transportation needs for the purpose of planning, design and operations of the highways. These industries have and will continue to be significantly involved in providing input into transportation infrastructure investments and the development of major transportation initiatives/policies, examples of which are:

2020 Manitoba's Transport Vision: In 2002, Manitoba embarked on a unique and innovative long-term planning process involving extensive public consultation. The purpose of this two year process was to develop a provincial transportation vision and investment plan in consultation with stakeholders and the public which is realistic and has public support.

The trucking industry was very much involved in the 2020 process and was actively involved as a committee member of the Manitoba Transportation Advisory Committee.

Large area, functional planning and design studies: The Department consults with the Manitoba Trucking Association on all large area transportation planning studies, major functional plans and design studies. In many cases, the Trucking Association along with other major stakeholders participates as a member of the advisory committee in providing input to highway studies and designs.

Truck Productivity Improvement Fund (TPI Fund): Legislatively approved in June 2004, the TPI Fund was directly designed in consultation with industry stakeholders (including trucking industry) to address their increased demands for oversize/overweight loads. Once the formal program policy and operational guidelines are finalized, this initiative will provide a mechanism for the private sector to partner with the Province on mutually beneficial and sustainable infrastructure investments. This voluntary program provides private sector proponents with the opportunity to make strategic decisions to choose increased payloads when the benefits accrued exceed the incremental infrastructure costs they incur. Contributions to cover incremental highway damage will be on a cost-recovery basis and stored in the TPI Fund to support highway improvement or rehabilitation projects on affected routes. The TPI Fund is expected to grow gradually as industry assesses the benefits and costs to their own unique situations, as well as observe the results of the initial projects.

7. The City of Ottawa meets with trucking industry representatives whenever requested to do so by the industry, as well as during the development or alteration of our Traffic and Parking By-Law, which governs the movement of trucks within the City. Over the past few years, such meetings have occurred roughly at a frequency of 2 to 5 times per year. The primary reason for such meetings is to increase the allowable limits for weight and dimension to accommodate larger equipment or loads.
8. The Regional Municipality of Durham has established a Transportation Master Plan. One of several objectives contained in the Transportation Master Plan is to establish a Strategic Goods Movement Network. We have recently initiated the process of establishing this network. Consultations with the trucking industry are an integral part of this process. This consultation process is just beginning. The objectives of this consultation would be to primarily better understand the nature of goods movement patterns in our local area and identify geometric deficiencies on our network. The objectives of establishing the Strategic Goods Movement Network are to develop routes for trucks which are continuous, without truck bans or restrictions, serve typical truck weights and dimensions and are clearly marked. Routing of truck traffic around residential areas is also a priority.
9. Our Traffic Operations Branch consults/meets with the trucking industry on an issue specific basis. The last major effort that we had with industry was in the late 90's when we reviewed weights and designation in the city. Since that time our contact has been limited to situations where we are adding or deleting minor sections of the truck route system. A regular forum would be an asset in terms of establishing an ongoing relationship with the industry and the Province. Possibly quarterly meetings would be a good starting point.

Consultations also take place when we are doing transportation planning work. The Trucking Association is a stakeholder at the table in terms of identifying problems/concerns and part of solution development. A stakeholder advisory group meets as often as needed.

10. Our main departmental contact with the trucking industry is through the Yukon Transportation Association. This is a local group similar to other provincial trucking organizations although it is not affiliated with the national body. The group considers some aviation issues but is dominated by trucking interests. Our director of Transport Services, the branch of the department that carries out enforcement and regulation, attends all YTA meetings, usually four per year. The meetings are informal in nature but a great deal of operations information is exchanged. I've attended a few of these meetings myself over the years and know that the discussion is wide ranging and covers all aspects of surface transportation from enforcement to operations to maintenance to design. In a small jurisdiction like ours, the process works quite well.
11. The City of Calgary is constantly meeting with various trucking organization on an issue by issue basis. This includes discussion with AMTA, ACTA (Alberta Construction Trucking Assoc.) and others. In addition the City meets bi-monthly with ACTA, AMTA and Calgary Police Service. Meetings are also held monthly with Alberta Infrastructure and Calgary Police Service regarding truck enforcement issues.

During the development of the City's Truck Route Policy, Dangerous Goods Route Policy and High Load Policy we had representatives on our stakeholder group from AMTA and carriers of high load goods.

In addition the City's Engage Policy states that general public consultation on all planning and design transportation projects should occur. This usually involves public open houses where members of the public can attend.

Responses to Q. 1 from Provincial Motor Transport Associations

1. No, not on a regular basis, although there may be some consultation due to special circumstances.
2. The short answer is NO.

QUESTION 2

What would be a simple and flexible process of consultation between the Provincial/Territorial highway/transportation departments or City works/engineering departments and the trucking industry so that regular, meaningful input could be obtained from the trucking industry to improve planning, design and operation of highways and streets?

Responses to Q.2 from Chief Engineers

1. We maintain contact on policy issues. If they have issues - they raise them with our Modal Policy Office - if we have issues, we call them. There is no need for standing meetings or process to be developed provided you maintain a healthy stakeholder relationship.

2. In addition to the above, the industry is welcome to identify specific issues with respect to infrastructure (or regulation) in their direct contact with the Department. There are also consultation initiatives associated with particular issues – i.e., load securement, over-dimension loads, etc. that provide an informal opportunity for the industry to air their wide-ranging concerns in a more public forum.
3. From our perspective the quarterly meetings provide excellent forum (open agenda) for discussion on transportation issues (safety, operations and speed, rest stops, intersections etc). To enhance the consultation process it may be appropriate that at each quarterly meeting discussion specific to the four areas (planning, design, construction and operations) are in the forefront of other agenda items.
4. We think that the consultation process described in answer to question one is relevant and adequate.
5. Industry representatives, including from trucking Industry, have ad hoc meetings with the Minister of Transportation and Government Services and staff to discuss a variety of issues and concerns. There are no formal regular meeting processes. The consultation takes place on an issue by issue or project by project basis as required.

There may thus be merit in the considering establishing an external transportation advisory body. Such a group could meet on an annual/bi-annual basis to discuss a variety of transportation planning, design and operational issues within a multi-disciplinary and diverse stakeholder environment that can capture all perspectives and bring them into a well-rounded consensus building consultative planning process.

6. I am very interested in the answer to this question, but have no insight at this time.
7. Bi-annual roundtable forums with various representatives of provincial, regional and local municipal representatives along with representatives from the various trucking sectors would be a great way to create and maintain key contacts with the industry as well as to continuously be kept up to date with changes in the industry and also gather feedback regarding road networks.
8. Economic Development Edmonton has a Transportation and Logistics Cluster group that has been the key forum recently for consultation between the City, trucking industry and logistics/shipping businesses. The trucking industry, by itself, just meets the market demand, and you really need the businesses at the table to get the perspectives of costs and impacts – particularly beneficial in the planning and design phase.
9. The process we use is simple and flexible, but probably not workable in a larger jurisdiction. A possible solution would be to include “liaison officer” responsibilities in a senior level position within the transportation department to ensure that regular communication takes place.
10. The City of Calgary generally meets with industry on an issue by issue basis as needed. However, we recommend that an annual or semi annual meeting with representatives from City of Calgary, City of Edmonton, Alberta Infrastructure (members from their planning, operation, geometric design and regulation branches) and the trucking industry be held to discuss long-term planning issues such as hours of work regulation, truck rest area, etc.

Responses to Q. 2 from Provincial Motor Transport Associations

1. Meetings through the trucking associations on a bi-annual basis or when the planning and budgeting process is being undertaken.
2. An association does not need to be contacted on every construction job however meetings between industry (small group of carriers) should be held at least twice annually to ensure that both the provincial highway system and the city have a clear understanding of frequency and the type of commodities that will be moving on various routes and why.

QUESTION 3

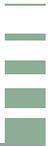
What questions would you like to be included in the trucking industry survey questionnaire? Please list them below.

Responses to Q.3 from Chief Engineers

1. Questions related to implementation of system wide ITS, issues with speed, urban congestion/delay, rest stops, national consistency, etc would be useful.
2. Suggested *questions*:
 - What gaps/differences in the trucking standards/policies adopted by each highway jurisdiction(s) (US and Canadian) need to be addressed to provide a more harmonious, integrated and seamless approach to freight shipment and planning logistics? How can this be achieved?
 - Three major concerns that the trucking industry has in each of the provinces.
 - The availability of accurate truck traffic and freight data is crucial to the development of network policy framework, planning, programming, geometric and pavement design standards and road maintenance standards and practices. Would the trucking industry be willing to partner with each jurisdiction, in both financial and information support capacities to facilitate the development of such truck traffic data bases?
3. I would like to know from the trucking industry how they envision the various governments raising the required monies to pay for improved planning, design and operation of roads and streets to better accommodate trucks.
4. Is the trucking industry willing to take routes that may be a greater distance to travel, but take less time to reach the destination?
5. a) Dimensions and loading of new truck units for incorporation into design standards.
b) It would also be worthwhile determining where the industry sees itself in the future and if they have suggestions relating to connections to ITS.
c) The survey should also determine what different weight designations are in the various municipalities and in the province with the intent of helping to standardize weights as well as spring road bans.
6. I won't make any suggestions here as the survey will be confined to Alberta. I'm sure Alberta Transportation will have a very long list for you to choose from.

Responses to Q.3 from Provincial Motor Transport Associations

None



APPENDIX

APPENDIX C SUMMARY OF COMMENTS AT THE APRIL 2007 FOCUS GROUP WITH ALBERTA TRUCKING INDUSTRY

C-TEP PROJECT
TRUCKING INDUSTRY FOCUS GROUP
Calgary Session (April 14, 2007)

SUMMARY NOTES

1.0 DISCUSSION OF PROVINCIAL HIGHWAYS AND URBAN ROADS

1.1 COMMENTS ABOUT HIGHWAY AND URBAN ROADS “PLANNING”

To start with, we would like to hear from you about highway and urban road planning in Alberta.

“Planning” is a term that includes things such as future plans for highways, construction priorities, highway twinning, road widening, rest or staging areas (including staging areas for OD loads at the interface between city streets and provincial highways – regulations preclude movements at specific times of day on both road networks), truck routes, dangerous goods routes, bypasses around towns, High/Wide/Heavy Load Corridors, etc.

- Question – Regarding routes, when do Engineers get involved in the process?
Answer – right at the conceptual or planning stage.
- Why isn't the fuel tax money coming back into infrastructure as it should be?
- Feeder systems for coming off of the big roads is a problem, no access for getting in and out.
- Group feels that the City of Edmonton has much better planning for trucks than the City of Calgary (Calgary seen as reactive instead of proactive).
- LCV's are an issue in Alberta – such as trying to get the permit for the needed routes.
 - Permits – don't trust that the bureaucrats know what needs to be done to service the transportation industry.
 - Permits – would like to see a similar focus group for Permitting. Group feels that their input is not taken into consideration.
- Would be nice to get the 3 levels of government talking with each other and with the trucking industry.
- Comments on rest and staging areas:
 - Parking inadequate.
 - Should be off highway; with new log book regulations we have to park for 10 hours after 14 hours of driving. We can't spend 10 hours sitting on the side of a highway (is not restful).

- Sometimes are forced to park on private property if there's no where to park at a rest stop.
- All rest areas should have an exit ramp where you're off the main highway, not just a widening of the shoulder which is unsafe.
- Where are the lights at some of these entranceways?
- An example of a good rest area is the one close by Brooks.
- Inadequate signing – sometimes you won't see a pull-out until you've already gone by.
- Inadequate facilities – lack of bathrooms, etc.
- Inadequate pavement markings for parking.
 - Problems with LCV trying to find a suitable rest stop. Especially if another truck or RV parks at a weird angle. Can get an LCV into an area that tight.
 - Should segregate truck parking from RV and passenger vehicles.
 - Have to be able to facilitate all the units that are out there.
- Example of great rest areas are in Washington State. Great signage such as rest area coming up, next one is this far from this one, etc. They also have flush toilets and nice grounds around them. Functional, safe, usable and even look nice. Marked parking lanes and are generally well organized.
 - Group agreed that the United States has a much better rest area system for truckers.
- More bypasses needed around towns like Nanton and Claresholm. Especially on the CANAMEX corridor.
- A more frequent review of the plans is needed to deal with the incredible changes felt in Alberta with options to adjust to what is happening.

1.2 ISSUES IN AND AROUND CALGARY

- Deerfoot
 - Anderson and Southland. The completely separate lane is a great idea for SB to WB movements.
 - 17th and Memorial – traffic congestion and issue and the access ramp is very short.
 - Not enough acceleration lanes to get to speed to properly merge with a loaded truck
- Would like to see Glenmore Trail have no lights.
- Would like to see 901/22X developed to a four lane expressway.
- What's the point of a north bypass around Calgary (big hill, extra fuel to climb) when we can go straight through on the TCH?

- Is there a mechanism for suggesting changes in and around the Foothills Industrial park? Concern that there is no access to the proposed ring road and there will be multiple trucking companies in that area.
 - Why has the City of Calgary waited so long to work on 84 Street when trucking companies were encouraged to locate to the area?
 - Heavy traffic volumes on 84 Street.
- Foothills industrial area has lots of tight corners, small intersections. Is it inadequately designed for truck traffic turning movements?
- Hwy 2, Calgary to Edmonton:
 - Needs to be three lanes per side. Currently it is packed full of traffic at all times.
 - Perhaps a phased approach for the three lanes. Maybe put in passing lanes for now with the future intent of having a full third lane.
 - Why are we spending all this money widening the median on Hwy 2?
 - We need bigger shoulders to safely pull over if there's a breakdown. Parked on the shoulder and still in the travel lane
 - On QE2 heading south to Calgary (Crossfield/Carstairs area) has bad condition pavement, coming up the hill is a real problem due to the road conditions. Everywhere else is being paved, but not this area. Continuously missed.
 - Can we put in a wind barrier on Hwy 2 (trees) to prevent wind gusts from affecting drift of the trucks or wherever there is wind problems
- Calgary doesn't have their dangerous goods routes posted. We don't know which way to go. Need better signage for everybody
 - New people don't know the routes. 17 Ave is an example, it's LCV, but not TDG.
 - How does this work with detours that detour someone to a TDG route? Says that a detour on a TDG route is automatically TDG now, although the cops sometimes don't know that and try to give out tickets.
 - Edmonton is superior in terms of marking their routes – LCV, TDG, etc. Probably one of the best we've seen.
- Sheppard Road – not marked as a TDG route, but on the city map is marked as a trucks and TDG route. Corners are tight here and building are right on the edge of the property line. No tolerance here for TDG either (corners, etc).
- Loading terminals on Barlow – getting out of there is a problem. Can knock off plumbing and some stop signs have been knocked down.
- 104 Ave and 42 Street – this corner is narrow and can't see around the building. Is a problem when two trucks meet in this intersection and a tight turn is needed. Rocks have been put on the corners of this intersection which now takes out the plumbing of the truck. The next intersection has yield ramps except for the one truckers use to turn right.

- Intersections – 46 Ave and Blackfoot Trail. No turn signals for part of this intersection. Can they re-evaluate?
- Main thoroughfares need longer left-turn times, especially for truck heavy routes, i.e., Blackfoot and Glenmore.
- 52 Avenue and 16 Avenue – can't see what's coming when making a left turn into the shopping mall.
- Deerfoot/Pagan ramps are very rough and difficult to navigate. This leads to increased O&M on the trucks
- Load restrictions on bridges such as Crowchild/Memorial – can we do something to allow 8 axles or greater to use it? This is a better more direct route versus 16 Ave.
- Section east of Medicine Hat to Sask. Border is rough.
- Bridge area at the bottom of Scott Lake hill is very rough.
- Overpass at Hwy 22X and McLeod trail – tight radius turn, no warnings. Same with Deerfoot and 17 Ave – that truck can tip sign is a little late.
- Hwy 2, northbound – the exit off just south of Airdrie has an inadequate turn lane – can get backed up far down the highway.

1.3 COMMENTS ABOUT HIGHWAY AND URBAN ROAD “GEOMETRIC DESIGN”

In this next round, we would like to hear from you about highway and urban road geometric design in Alberta.

“Geometric Design” is a term that includes things such as traffic lane widths, uphill or downhill gradients, tightness of curves and turns, intersections, signing, truck climbing lanes, passing lanes, hazards in the right-of-way, median barriers (are they required in some places?), sight distances to and from intersections, ramps and other decision points.

- Lack of acceleration and deceleration lanes.
 - Entrance ramps to highways merge directly onto the highway with a short acceleration lane which makes it difficult to merge at a proper speed.
 - On and off ramps – there is sometimes an excessive crown that has to be dealt with. That is, you have to watch the lateral motion of the truck. Therefore, you can't accelerate to merging speed as you have to keep the lateral under control.
- Tight horizontal curves before and after a bridge is a real problem. Calf Robe bridge is a prime example. Bridge decks are always icy and it would be better if we had a longer straight access.
- Medicine Hat has lights right on the grade of a big hill. Takes a lot of time and fuel to get back to speed.

- Need more interchanges as there are too many lights on the major highways in the province.
- Railroad crossings
 - Comments – had to wait 17+ minutes at a railway crossing. Someone else 20+ minutes.
 - Surprise and laughter from the group that the theory is trains can't block traffic for more than 5 minutes.
 - Group asked who enforces this?
 - Examples:
 - 52 Street in Calgary – railway tracks along irrigation canal. Replaced the bridge in the 90's but didn't build it over the railway tracks so traffic and trucking companies still have to wait to cross and traffic is increasing. Seems like every morning there is train movements here during peak traffic.
 - 149th in Edmonton – had to wait 1.5 hours with an extended load.
 - Better markings, especially when travelling at night. Sometimes come up unexpectedly as there is not enough advance warning. The bump when travelling over a railway is definitely an issue for trucks.
- Passing lanes need to be on more than just hills and should extend past the crown of the hill (especially if there's a pulloff located at the crest).
- Emergency pullouts (runaway lanes) – need some more in the mountainous areas and Pincher Creek area, etc.
- Barriers
 - Why don't they protect bridge pillars and what not more often here in Alberta with energy damping materials?
 - QE2, very narrow in points, why are there no barriers or guard rails here?
 - Noticed that barriers on some bridge approaches, tend to narrow the traffic lane.

1.4 COMMENTS ABOUT "PAVEMENT DESIGN AND MANAGEMENT"

In this next round, we would like to hear from you about pavement design and management in Alberta.

"Pavement Design and Management" is a term that includes things such as road surface condition, pavement roughness and rutting, ride quality and comfort, seasonal variations in roughness, the effects of roughness on vehicles and payloads, seasonal weight restrictions, etc.

- Rutting – maybe we can switch to other lanes like they do in certain states
- Maybe a better road surface to prevent black ice as we seem to see on black asphalt.

- Chip and Seal – they do this in Montana and the highways are in much better shape
- Pine Pass, northern BC, they went to chip and seal and did other modifications to remove moisture content and they feel this working better these days.
- Ruts
 - High River to Nanton needs work. Rough ride. Big ruts and the water hangs in there and ices. Is there better pavement or practices to not allow this or allow the water to exit the pavement surface?
 - Feel we need to do more than just overlays but have to redo the subgrades, etc. The quick fix fails after one season.
- Sections using rubber integrated with the asphalt (general question).
 - What does this mean, how is this working (long term and in winter time)?
 - Section on Anderson is like this. Feels like my trailer is bouncing around. Is this an uneven level between sections or something else?
- Roughness affects:
 - Truckers O&M (springs, etc).
 - Speed – have to slow down which increases travel time and affects the bottom line (profitability).
 - Some discussion amongst the group as to the magnitude of effects from roughness as compared to weather and other factors.
- Seasonal Weight Restrictions
 - Having restrictions on primary routes is difficult, especially when other jurisdictions don't limit their primary routes.
 - Can we get Hwy 2, Fort Mac, Hwy 1, and Hwy 16 to not have road bans on overweight or at least be similar to other jurisdictions? Or build up the heavily traveled lane to support heavily loaded vehicles?
 - Have to transfer loads and weights when traveling into the States. Having the same standards with others would be great and alleviate additional transferring.
 - Question – Are our roads better than these other jurisdictions in part because of these road bans?
 - Also signing of road bans – needs to be well in advance before an overweight load reaches the ban.
 - Need better planning on routes used by truckers and the maximum weights allowed on bridges.

1.5 COMMENTS ABOUT HIGHWAY AND URBAN ROAD “MAINTENANCE”

In this next round, we would like to hear from you about highway and urban road maintenance in Alberta.

“Maintenance” is a term that includes things such as road surface condition, crack filling, pothole repair, snow and ice control, signing, traffic control during maintenance operations, etc.

- Concern with snow and ice build up under overpasses affecting overall clearance.
- Signage sometimes causes site issues trying to see around them at intersections.
- Signage – clean the snow covered ones right away or you can miss your exit, etc. Possible solutions include: less-sticky signs, better maintenance and secondary signs (for backup).
- Mile markers – this would be useful for breakdowns, where the person is located etc. Also helps you to find where you are if you can’t see the signs etc.
- The maintenance between Olds and Airdrie seems substandard. Crews get out there way to late.
- Variation in the maintenance standards and quality in different regions.
- Signage in the City of Calgary for lane closure etc seen as inadequate.
- Would like to see more Variable Message Signs used. The permanent ones between Calgary and Red Deer are great.
- Snow and Ice Control
 - No snow control on IOL/Shell route (TDG route) out of Calgary. Seem to come out for maintenance well after the fact.
 - Can’t get going when stopped at the exit to Barlow if there’s ice built it.
 - Some consideration should be given to clearing the truck routes as well although the City states the first priority is the busiest streets. Trucks go out of their way to avoid standard routes with hills (after snow and ice) as they know the City hasn’t lain anything down to help with traction – just plowing.
 - Edmonton has a better sanding/surfacing program. Material used in Calgary doesn’t seem to last long or gets blown off the surface.
- Get salt off the road.
- Increase maintenance – lines painted, snow removal, sand down, etc.
- Road maintenance is key – tires and suspension get beat up on Calgary roads.

1.6 COMMENTS ABOUT HIGHWAY AND URBAN ROAD “SAFETY”

In this next round, we would like to hear from you about highway and urban road safety in Alberta.

“Safety” is built into all aspects of highways, but in this round we would like your comments on things such as roadway lighting, speed limits, signing, pavement

markings, features and measures to avoid or reduce collisions, emergency planning and management, dangerous goods transportation, etc.

- Road markings
 - Seem to get worn out very quickly.
 - What about more reflective markings in the pavement out here? We need better reflectivity for winter and night driving.
 - The bridge on Deerfoot by Bow Bottom Trail – typically the lines are faded and cause traveler confusion.
 - Are milled strips possible for travel lanes?
- Construction Zones – how exactly does the speed limit work? That is, is it just when workers are present that you have to slow down to 80 km/h? Seems to be a large variability in the speed of the travelling public through these zones.
- If you want to get serious about safety, we need to increase the amount of driver training and re-testing.
 - Education – through driver training and the AMA.
 - Incorporate Truck Safety into driver training, especially for new drivers.
 - Dos and don'ts, no zones, etc.
 - Passenger vehicle drivers have no idea what the characteristics of a large truck are.
 - Why not all work together to promote safety around trucks and the trucking industry - AMTA, AMA, levels of government, etc.
 - Define and clarify terms – truck means different things to different people.
- All lights must be on in inclement weather (company policy). Suggestion that we should have a similar policy province wide. Hard to see the back end of vehicles sometimes because daytime running lights do not include tail lights.
- Brake checks for truckers – there should be rest areas for the public prior or after the brake check stop. Often the public will be in brake check stop area sleeping, etc. so the trucker has to do their brake checks on the highway.
- The government is so busy regulating our industry and yet we have motorcycles going 240, etc. Maybe we can step up enforcement instead.
- Trucking industry has to check their vehicles and lights all the time, the general public does not seem to have this onus.
- Truckers in general have a no swerve policy for wildlife.
- At-grade intersection should have at least decent shoulders to accommodate turning movements.

- Cut back tree lines, especially on the corners, and eliminate the number of curves in general.
- Reduce speed limits at night through heavily populated animal zones – Education.
- Check superelevation for curves. Seems to be wrong in some areas and the trucker has to fight the turn.
- Truck lanes only would be beneficial.
- Can we get stricter enforcement of speed limit on the QE2?
- Educating the public – isn't the slow to 60 km/h just for the adjacent lane? Everyone slows down though which can cause some issues.
- Some concern with the visibility of pedestrian crosswalks, especially on heavily travelled truck routes.
- Service roads – such as between Carstairs and Olds – can create a lot of dust blowing across major highways such as the QE2 – Safety Issue.

1.7 COMMENTS ABOUT “TRAFFIC OPERATIONS”

In this next round, we would like to hear from you about traffic operations in Alberta.

“Traffic Operations” is a term that includes things such as traffic signals, speed limit enforcement, incident management, traffic control during maintenance and repair operations, detours, roadway lighting, etc.

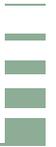
- Weigh In Motion (WIM) – would like to see more of these, especially on Hwy 2, to bypass the scale if you're not too heavy.
- General consensus that the PIC (Partners in Compliance) program is not of use. Would like to see the kind of WIM systems that they have in the states.
- Detour from construction can be quite difficult for LCVs. Need a more gradual change for the bigger vehicles.
 - Detours seem to be thought out just for passenger vehicles instead of also LCV's and TDG. Safety is a concern.
- Traffic lights
 - Better synchronization/coordination between the advanced warning light and the signal light.
 - More of these advanced notices that a light is going to change, especially on routes with speed limits of 80 km/h or higher.
 - The management and coordination of traffic signals needs to be improved on a given route. How is the traffic on the cross streets tripping the signal lights and why isn't this consistent?

- For trucks that travel at night, this should happen more often with amber flashing for the major routes and flashing red for the minor side streets.
 - Also for travel in the Foothills Industrial Area.
 - Need to improve the efficiencies of these intersections as we don't want to stop if unnecessary.
 - More routes within the city should turn to through routes at certain times of the day when traffic is very lower. Stopping is the biggest time and fuel waster, especially for no reason.
- Put signage up and educate the public for roundabouts.

1.8 COMMENTS ABOUT OTHER ASPECTS OF HIGHWAYS AND URBAN ROADS IN ALBERTA

In this next round, we would like to hear from you about any other aspects of highways and urban roads in Alberta, relevant to trucking, that you think we might have missed during the discussions today.

- Weigh Scales:
 - A weigh scale on a divided highway should be just to one side and not in the middle, which means the truckers have to pass multiple lanes – can be even more difficult with LCVs.
 - At Burmas, we have to cross the EB lane to get into it, and cross to get back onto the highway.
 - By Fernie, there's a center lane to help accommodate these movements. Burmas should have something similar so that they can pick up enough speed to merge safely with traffic.
 - In general, needed proper and their own, acceleration and deceleration lanes into weigh scales that are not in the median area.
- Question – When they decide on a highway, how do they decide what kind of road and bridges to build? Who makes these decisions and how does this come about? Can the trucking industry have any input?
 - Perhaps educating the general public and the trucking industry about this process and the reasons for certain choices would be a good thing.
- Need a feedback/input system to Alberta Infrastructure and Transportation and the cities. This study is a good start.



APPENDIX

APPENDIX D SUMMARY OF WORKSHOP WITH STAFF FROM INFTRA AND CITIES OF CALGARY AND EDMONTON



WORKSHOP WITH STAFF FROM ALBERTA INFRASTRUCTURE AND TRANSPORTATION AND THE CITIES OF CALGARY AND EDMONTON

November 21, 2007

1.0 INTRODUCTION

On November 21, 2007, a half-day Infrastructure Providers' Workshop was held in Edmonton with the staff from Alberta Infrastructure and Transportation (INFTRA) (six staff from the planning, design, operations, and carrier/safety divisions) and the cities of Calgary (two staff from the transportation planning and traffic engineering divisions) and Edmonton (two staff from traffic operations and design divisions). The purpose of the workshop was to:

1. Present the summary of the comments received from the trucking industry, and discuss practical ways of implementing them.
2. Elicit additional ideas from the staff from INFTRA and the cities of Edmonton and Calgary, regarding the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta as they relate to trucks.
3. Discuss ways to facilitate ongoing consultations between the trucking industry and the infrastructure agencies in Alberta regarding the planning, engineering, design, safety and operations of the highway and street infrastructure in Alberta as they relate to trucks.

EBA pointed out that the purpose of the study was to compile, summarize and submit to the infrastructure providers the comments from the trucking industry. The study terms of reference do not call for formal recommendations.

Note that the workshop was able to note and discuss in a preliminary manner only selective issues from the list of the focus group suggestions. The workshop discussion was relatively freewheeling, proceeding at times from topic to topic. Highlights of the selective points discussed are presented below under appropriate headings. Note that the comments are not attributed except where attribution would enhance clarity. After the study report is completed, the infrastructure providers would give appropriate consideration to a fuller range of the issues.

2.0 GENERAL

The group agreed that the focus group suggestions were very useful. It was pointed out that some of the suggestions were, perhaps understandably, a bit too truck-oriented. Some appeared to be complaints based on an inadequate understanding of the policies, standards and practices of INFTRA and the cities. A larger sample representing the various trucking industry sectors (e.g., logging, livestock, construction, oilfield, etc), various geographic regions and various levels of staff within the trucking industry would likely produce a more comprehensive list of suggestions.

3.0 HIGHWAY AND URBAN ROAD PLANNING

The following are the main comments made under this category.

1. It was acknowledged that the differing provincial (day time) and city (night-time) requirements for the movements of over-dimension/LCV trucks do pose a problem for the trucking industry. Other factors complicating such movements include, among others: the required simultaneous availability and involvement of third parties, such as police escorts, municipal workers (to turn lights off and on), and utility companies; shortage of staff; the working hour regulations of the entities involved; the need for overtime payments; etc.

There was general agreement that a possible way to mitigate the problem would be to placing sufficiently large safety rest areas just outside the city limits where truckers can sleep at night after leaving the city then sleep and proceed in the morning.

It was commented that more work and enforcement may be required to monitor the safety of OD loads and works needs to be done in this area.

2. On the subject of rest areas, INFTRA staff acknowledged the need for more safety rest areas and indicated that the department plans to build additional rest areas and upgrade many of the existing ones into more modern facilities that are larger and can meet and exceed the standards. Currently there are about 50 to 60 in the long range plan. Usually the practice is to build or upgrade the rest areas as new construction or rehabilitation is occurring on a project. It was commented that higher priority should be given to the provision/improvement of safety rest areas on more heavily travelled highways such as Highway 1, Highway 2, and Highway 16.
3. Several specific issues pertaining to the City of Calgary were discussed. Some generally applicable observations arising from this discussion were:
 - a. Coordination of road planning and implementation with the rural municipalities/counties surrounding the big cities is essential. The example of 84 Street truck route in Calgary and the surrounding County was cited as an example: the County's plans for its portion of the upgrading lagged behind the City's.
 - b. Funding availability is an obvious factor that influences priorities and the sequence and pace of major truck route improvements, such as interchanges.
 - c. There was general acknowledgement of the need for better signing of the dangerous goods routes in cities, and the designation of shadow/alternative routes for bigger trucks in case the regular dangerous goods route is shut down.

4.0 GEOMETRIC DESIGN

The following are the main comments made under this category.

1. Some of the existing roads in the industrial areas of cities were built to older standards. Designs for new construction and reconstruction, for example for right-turn radii at intersections, are based on longer vehicles. This results in right turns being wider for long trucks. However, this can have other consequences, such as two cars side by side trying to make the same turn which requires more line painting for guidance.
2. The need for more passing/climbing lanes on highways for trucks was acknowledged. It was pointed out, however, that the positioning of truck climbing lanes is sometimes hampered by existing intersecting roads such as a road allowance at the top of a hill.
3. INFTRA plans to use more durable line markings and superior barriers on busier routes.
4. It was commented that some of the problems mentioned at the focus group, such as inadequate superelevation resulting in trucks combating the lateral motion while accelerating or decelerating, perhaps arise because of the trucks traveling at higher than the posted speed limit for the ramps and curves.

5.0 PAVEMENT DESIGN AND MANAGEMENT

The following are the main comments made under this category.

1. The cities are conscious of the rutting on roads, and are experimenting with different types of asphalt that resist rutting e.g., on the Yellowhead Trail in Edmonton.
2. Rubberized asphalt mix has been tried in a couple of locations in the City of Edmonton. The community likes it because it's quieter. The long-term performance of rubberized asphalt is being monitored.
3. The restrictions on truck and axle loads and springtime load reductions are necessary meant to protect the investment in pavements. There have been some requests made to use "King B-train" size trucks with a payload of 90,000 kg by industry, but in INFTRA's view that is too much of a jump in weight, which would require the modification of all bridges and supporting structures.

6.0 MAINTENANCE

The following are the main comments made under this category.

1. The cities are conscious of the needs of trucks and as a policy give priority in winter maintenance (snow and ice control) to major arterials and steeper grades.
2. In terms of the load heights, it would be prudent for trucks to allow for some snow and ice build-up under overpasses as a result of unforeseen snowstorms.

3. INFTRA has a new initiative to place signs numbering the exits on the entire Yellowhead Highway from the BC border to Saskatchewan border, similar to the system already in place on Highway 1.
4. The usefulness of the variable message signs was acknowledged. It was suggested that the various Road Weather Information Systems and/or road cameras on highways and city arterials could be linked to provide real time information to trucking companies, and provide warnings via variable message signs of potential traffic problems.

7.0 SAFETY

The following are the main comments made under this category.

1. The infrastructure providers are utilizing more durable road markings made from epoxy, thermoplastic and other materials on major routes. Unfortunately, pavement markings are easily peeled off by grader or plough blades. Trying to mill in paint lines has problems too with some spots developing cracks; they swell heave and are then removed by the snow plough blade.
2. Cities, e.g., Calgary, provide some permanent detour routes for LCVs.
3. On Primary Highways flashing amber or red lights are not allowed by provincial policy.
4. In terms of the location of rest/truck staging areas and vehicle inspection stations on divided highways (median versus the side), INFTRA staff mentioned that in future most rest facilities will be built on the side.
5. There was general agreement that more public education is required with regards to the rule about passing emergency vehicles at 60 km/h.

8.0 TRAFFIC OPERATIONS

The following are the main comments made under this category.

1. There was general acknowledgement that traffic accommodation through construction is not so accommodating for trucks, and needs to be improved.
2. The truckers' wish to avoid the vehicle inspection stations through more Weigh in Motion installations is understandable. However, the vehicle inspection stations are not simply for weighing trucks, but are necessary for checking for fatigue, brakes, load security, etc.
3. In terms of the issue of trains blocking railway crossings in cities, the municipalities have no power to enforce the applicable federal regulations. Also converting the at-grade railway crossings into grade separations is not physically or economically feasible.

9.0 CONSULTATION MECHANISMS

The following are the main comments made under this category.

1. The staff in provincial and city transportation departments are quite conscious of the increasing truck traffic and the need to provide for the special needs of the trucks. On specific technical and policy items, there are ongoing discussions in these organizations among the concerned policy makers, engineers, and managers. They would welcome suggestions from the trucking industry.
2. The trucking associations, such as the Alberta Motor Transport Association (AMTA), are mostly composed of the executive levels from trucking companies; and are often not the best sources for the kind of information highway and urban road planners, designers and managers require. It would be great to get feedback from truckers or people on the frontline like dispatchers to get another perspective on things. Commonly we hear from industry heads who are just pushing an issue for business or policy reasons. What needs to be done is to talk to the right set of people about certain topics; for example: talking to dispatchers and drivers about fatigue management issues and possible locations of rest areas; and talking to trucking company presidents about policies, OD routes and things of that nature.
3. Perhaps the best approach for dealing with AMTA is to get feedback from subgroups of trucking associations in sectors and regions, such as Alberta Sand and Gravel Association, Alberta Construction Trucking Association, etc. It could be useful to elicit a “top ten” list of concerns for the various groups.
4. Calgary and Edmonton each have a 311 phone line for the public to report road and traffic related problems and suggestions to a central location. But such callers do not identify themselves as truckers if they are reporting a specific truck-related issue. Perhaps, the AMTA or the major trucking companies can establish a similar system since the truck drivers are always on the road, the best way of communicating their issues is by phone.