



# **Action Committee on the Rural Economy**

## **Transportation Subcommittee**

### **Final Report**

**November 2002**

## **EXECUTIVE SUMMARY**

Transportation plays a critical role in economic activity and economic development. In fact, a strong argument can be made that the development of an economy cannot proceed without an adequate transportation system. The efficiency and effectiveness of a jurisdiction's transportation system will have a large impact on the competitiveness of the business sector within that jurisdiction.

The large output of commodities and goods, combined with a small population and long distances to markets, means that transportation is likely the most critical factor for economic development in Saskatchewan in general and in particular in rural Saskatchewan. A low cost, efficient transportation system has always been critical for economic development in rural Saskatchewan.

The importance of transportation to the economic well-being of rural Saskatchewan was reinforced during the work carried out by ACRE. In November 2001, ACRE felt that the transportation issue needed further study. A transportation subcommittee was then established to further examine the role of transportation and its impact on economic development in rural Saskatchewan.

The transportation system in rural Saskatchewan is made up of three modes, road, rail and air. The first two play a key role in the rural economy and account for a majority of the freight from/to the province.

### **Roads**

Roads are the most important transportation mode in the province and play a pivotal role in moving goods, services and people. There is an extensive road system in Saskatchewan comprised of 26,100 km of provincial highways, 158,900 km of rural municipal roads and 13,700 km of urban streets and federal roads.

Under the Canadian Constitution, roads are a provincial responsibility. Therefore, either the province or municipalities fund almost the entire provincial and municipal road system. There is only minimal funding for road infrastructure by the federal government. Although there is little direct federal involvement or funding for the provincial road network, federal policy, especially federal rail policy, has a tremendous impact on the provincial road system. The province has little impact on rail decisions made either by the federal government or by the national railways. Decisions made to abandon rail lines or change rail freight rates ultimately result in increased pressure on the roads that are funded by provincial taxpayers.

### **Rail**

Saskatchewan is a large producer of low-value, high-volume bulk commodities (grain and potash) and relies on rail transportation, to a large extent, to move these products from Saskatchewan to world markets. The most significant change to railway operations in Saskatchewan over the last several years has been the abandonment of grain dependent branch

lines, along with consolidation of the grain collection system, and the establishment of several short lines in the province.

## **Air**

Air transportation plays an important role in transporting people inter-provincially and to a lesser extent intra-provincially. Air freight is not a big issue in Saskatchewan as only very high-value goods move by air. In rural Saskatchewan air travel is not a major transportation mode as rural residents must either travel to Regina or Saskatoon to access out-of-province locations. However, air ambulance service is becoming more important for health care in rural areas.

## **Transportation Policy**

A good transportation policy environment requires that it is stable, complimentary and consistent across the different modes of transportation. Policies must be developed and implemented that support the greatest economic and social benefits. It is vital to develop and maintain a strong understanding of the transportation sector and be acutely aware of impending changes.

Although there are policy issues in the rail (short lines) and air sectors, the most important transportation policy issue facing rural Saskatchewan is the future of the road system. Saskatchewan has a large road network, a small population base that is geographically spread out and limited budgets. These factors, combined with a dramatic shift in grain traffic from rail to road, are putting an enormous strain on the provincial and municipal road system.

Maintaining an efficient road system is absolutely critical for rural Saskatchewan, as it requires an efficient and effective road system to support and enhance the rural economy. Cost effective access to raw materials and markets is critical to the businesses that operate in rural Saskatchewan. New businesses are unlikely to locate to rural Saskatchewan unless there is a good quality road system.

The road system must also address the social needs of rural Saskatchewan such as health care, education and recreation. Investment will not occur in rural Saskatchewan without a competent and qualified labour pool to support it. In order to attract and sustain economic development, it is essential that the road system contribute to a desirable quality of life so that investment and labour are willing to go there.

## **Summary of Recommendations**

In the course of its deliberations and through research and consultations, the transportation subcommittee concluded that the huge size and the many facets of the transportation sector precluded the subcommittee from examining all transportation issues that may affect rural Saskatchewan. Therefore, the focus of the subcommittee was to concentrate its resources in areas where the likelihood of change would be the greatest. Thus, a major focus of the report is on roads, as roads fall under the jurisdiction of the province and municipalities.

Although railroads play a very important role in the rural economy, railways, with the exception of provincially regulated short lines, are under federal jurisdiction. The subcommittee felt that

because ACRE is a provincial process, its recommendations and thoughts should concentrate on those areas of provincial and municipal control. Thus, the subcommittee will limit its comments on rail and air issues to those that are affected by provincial and municipal policies.

The subcommittee has developed a series of recommendations based on information they obtained through a literature review and meetings with stakeholders involved in Saskatchewan's transportation system. The subcommittee believes that transportation is a key element in economic development and the recommendations within this report will improve the transportation system, which will facilitate more economic activity in rural Saskatchewan.

The recommendations have been categorized into six common areas or themes. They are: Funding; Planning and Co-ordination; Weights, Enforcement and Compliance; Air Issues; Rail Issues; and Other Issues.

## **A FUNDING**

### **Transportation Partnership Program**

**It is recommended that the province change its policy on how it charges for permits that allow users to run primary weights on secondary weight highways. The fees for TPP should be changed so that businesses wishing to run trucks at primary weights over secondary weight highways are charged a fee, which reflects the costs of the incremental damage caused to the secondary weight highways by using primary weights. The fee would apply for every km that a truck runs on a secondary weight highway at primary weights. The shipper would no longer be required to share the benefits with DHT associated with fewer trips. The fees should be administered fairly and equitably across all industries and all road users.**

### **Municipal Road Funding**

**The province amend legislation which would allow municipalities the ability to assess special fees on industries which create extra road costs above and beyond the normal road traffic loads. The extra fees should be administered fairly and equitably across all industries and all road users.**

### **Federal and Provincial Funding for Roads**

**The Federal Government fund the construction and maintenance of the national highway system in Canada.**

### **Allocation of Permits and Fines Collected by DHT**

**It is recommended that any permits, fines for overweight vehicles or other charges, directly related to road costs, collected by DHT should remain with DHT rather than being allocated to the General Revenue Fund for the Province.**

## **B PLANNING AND CO-ORDINATION**

### **Transportation Corridors**

- 1. The province, in consultation with stakeholders, establish an integrated transportation corridor system. The corridor system should be developed using various information available such as grain, tourist, and trucking routes and using the Rural Road Classification System. The main corridors, road linkages, and feeder roads should all be identified. It should also be recognized that construction and maintenance funding should be allocated proportionately.**
- 2. The province, in consultation with stakeholders, actively monitor and develop, if warranted, a north/south international trade corridor system.**
- 3. The province provide financial incentives to municipalities that agree to co-operate in situations where traffic originates in one rural municipality and travels across adjacent rural municipalities to reach a major highway.**
- 4. The province update and print the Rural Road Classification System map to assist in corridor development. The traffic flow maps should be produced in an updated format of the line width graph format, both on a provincial and municipal basis, to assist in the development of the traffic corridors.**

### **Bridges and Grid Road Standards and Inspection**

- 1. The province provide adequate resources to assess the load bearing capacities, width capacities and condition of all municipal and provincial bridges.**
- 2. Municipalities need to be cautious when issuing primary weight permits to ensure that all bridges along the route are able to withstand the increased weight.**
- 3. The province update design requirements and inspection of municipal constructed roads.**

### **Investment Strategies**

- 1. The province develop transportation infrastructure investment strategies that maximize rates of return to the economy. The investment strategies also must recognize the role of rural areas in generating GDP. The investment strategies must be developed for both the long-term and the short-term.**
- 2. The province determine the relationship between infrastructure investment and the provincial GDP and incorporate the findings into investment strategies.**

## **Horizontal Integration and Co-operation of Government Departments**

- 1. Policies, practices and procedures be developed that require provincial government departments to work together in a more integrated, collaborative and complimentary manner to ensure integrated development of the transportation system. When appropriate, this must be done inter-jurisdictionally to ensure the integrated development of the transportation system.**
- 2. All levels of government and industry establish a process for providing information to the road authorities on impending and future economic development projects.**

## **Area Transportation Planning Committees (ATPC)**

**Strengthen the relationship and linkages between Area Transportation Planning Committees and economic development.**

## **Multi-Modal Passenger and Freight Services**

**The province, appropriate transportation authorities and industry develop strategies, schedules and facilities that enhance passenger and freight multi-modal services in order to facilitate and promote tourism and trade.**

## **Intelligent Transportation Systems (ITS)**

**The province continue to be involved in the ITS development to reduce traffic (truck) monitoring costs and assist in the development of the worldwide industry.**

## **Use of Rights-of-Way by Crown Utilities**

**The province direct the crown utilities to work with road authorities to achieve an efficient transportation and utility distribution system, which is cost effective and workable for all parties. Prior to construction/reconstruction of linear utilities the consultation process must also include adjacent landowners.**

## **Maintenance of Highways by DHT Inside Urban Limits**

- 1. The province review its present policy of maintenance of highways in urban centres. In cases where the province does not have equal or total control on speed, signage, access and intersectional occurrences, then the maintenance of these portions should become the responsibility of the urban municipalities.**
- 2. The province review whether 1000 (or less) people in a community is the appropriate level for its policy of maintaining highways through these communities.**

## **C WEIGHTS, ENFORCEMENT AND COMPLIANCE**

### **Designation of Weights**

- 1. There be no further increases in the primary weights, regardless of what other provinces do, until the primary weight transportation system in the province is at a long-term standard capable of handling increased weights. An exception to this would be where 100 percent federal funding is made available to address national/international harmonization issues.**
- 2. DHT develop a policy to accommodate changing weight requirements and road capabilities. Authority to approve weight designation changes should rest with the Minister of DHT.**
- 3. The province develop a winter weights regime based on the number of frost days for the various regions of the province.**
- 4. The province change the existing legislation to permit rural municipalities to designate routes for weights, dangerous goods and dimensional (over-sized) loads.**

### **Compliance and Enforcement**

- 1. DHT should significantly increase the use of their authority to audit weigh bill tickets. Depending on the circumstance, an overweight charge should be laid on the basis of an audit or the audit could be used in conjunction with other enforcement measures.**
- 2. Regulations and policies need to be put in place to ensure efficient and adequate random auditing can be done. To ensure fairness and equity, all industries and those involved in moving goods by truck would be subject to random weight audits.**

### **Containers**

**A special trailer could be designed that would allow a heavier container to be transported on Saskatchewan's secondary weight roads, therefore, the province and industry should work together to develop a trucking method and axle system to accommodate the use of containers to their maximum capacity.**

## **D AIR ISSUES**

### **Air Planning and Funding**

- 1. The province commit to work collaboratively and co-operatively with appropriate stakeholders to plan, develop and implement a sustainable integrated rural air access strategy.**
- 2. The province update the digital map on the location of airports, airstrips and their classifications in Saskatchewan.**

## **E RAIL ISSUES**

### **Short Line Railways**

- 1. That the Saskatchewan Assessment Management Agency (SAMA) change its criteria for assessing the value of property owned by short line railways, especially in instances where there has been large changes in traffic from the base assessment period.**
- 2. The province continue the Short line Advisory Unit in DHT and continue to develop, in consultation with existing short lines and local stakeholders, regulations under *The Saskatchewan Railway Act*.**
- 3. That the Government of Saskatchewan continue to treat all future short lines as commercial ventures.**

## **F OTHER ISSUES**

### **Education and Training**

- 1. The province, industry and educational institutions promote the opportunities, careers and training that are available in the transportation sector.**
- 2. The trucking industry continue with and increase their presence at high schools and public forums in promoting the interest and respect of the trucking industry and the job opportunities available.**
- 3. DHT and the ATPCs educate the public regarding our highway system, its construction and what it is capable of handling for weights. This should include things like damage costs caused by overweight vehicles and by the speed of vehicles.**
- 4. DHT, the ATPCs, and the STA work together to promote truck safety and to increase the public's awareness and perception of large trucks.**

### **Abandoned Railway Rights-of-Way**

**The province, in conjunction with the municipalities, conduct a detailed interdepartmental review to determine the potential current and future uses for railway rights-of-way and develop a plan to preserve them where necessary. The province should also develop legislation to fairly deal with the removal of a rail line.**

### **Contract Accountability**

**The province conduct an independent review of existing DHT contracts used for construction, maintenance and engineering contracting to the private sector to ensure the department is receiving value for money.**



# TABLE OF CONTENTS

	Page
Executive Summary	i
I Introduction.....	1
II Transportation in Rural Saskatchewan.....	1
III Transportation Policy .....	6
IV Summary of Meetings .....	7
V Conclusions and Recommendations.....	9
A - Funding.....	10
B - Planning and Co-ordination.....	14
C - Weights, Enforcement and Compliance.....	25
D - Air Issues.....	30
E - Rail Issues .....	32
F - Other Issues.....	33
VI Glossary of Terms and Acronyms.....	38
VII Bibliography.....	39
Appendix I .....	40
Appendix II.....	41

## **I INTRODUCTION**

Transportation plays a critical role in economic activity and economic development. In fact, a strong argument can be made that the development of an economy cannot proceed without an adequate transportation system. Historical evidence would suggest that the different degrees of economic development throughout the world have depended to a large extent on the availability and quality of a country's transportation system. A good transportation system, whether it be roads, rail, water or air, is critical for the movement of raw materials and finished products for industry and for the movement of people.

The efficiency and effectiveness of a jurisdiction's transportation system will have a large impact on the competitiveness of the business sector within that jurisdiction. A low cost, efficient transportation system will allow businesses the ability to ship their products to the world market place and remain competitively priced. At the same time, consumers within that jurisdiction also benefit as a good transportation system allows goods and services from other parts of the world to be imported resulting in lower prices and greater variety.

The importance of transportation to the economic well-being of rural Saskatchewan was reinforced during the work carried out by ACRE. During the course of their work, the eight subcommittees originally established by ACRE came to the conclusion that transportation issues were a common concern of all the subcommittees. In November 2001, ACRE felt that the transportation issue needed further study. A transportation subcommittee was then established to further examine the role of transportation and its impact on economic development in rural Saskatchewan.

In the course of its deliberations and through research and consultations, the transportation subcommittee concluded that the huge size and the many facets of the transportation sector precluded the subcommittee from examining all transportation issues that may affect rural Saskatchewan. Therefore, the focus of the subcommittee was to concentrate its resources in areas where the likelihood of change would be the greatest. Thus, a major focus of the report is on roads, as roads fall under the jurisdiction of the province and municipalities.

Although railroads play a very important role in the rural economy, railways, with the exception of provincially regulated short lines, are under federal jurisdiction. The subcommittee felt that because ACRE is a provincial process, its recommendations and thoughts should concentrate on those areas of provincial and municipal control. Thus, the subcommittee will limit its comments on rail and air issues to those that are affected by provincial and municipal policies.

## **II TRANSPORTATION IN RURAL SASKATCHEWAN**

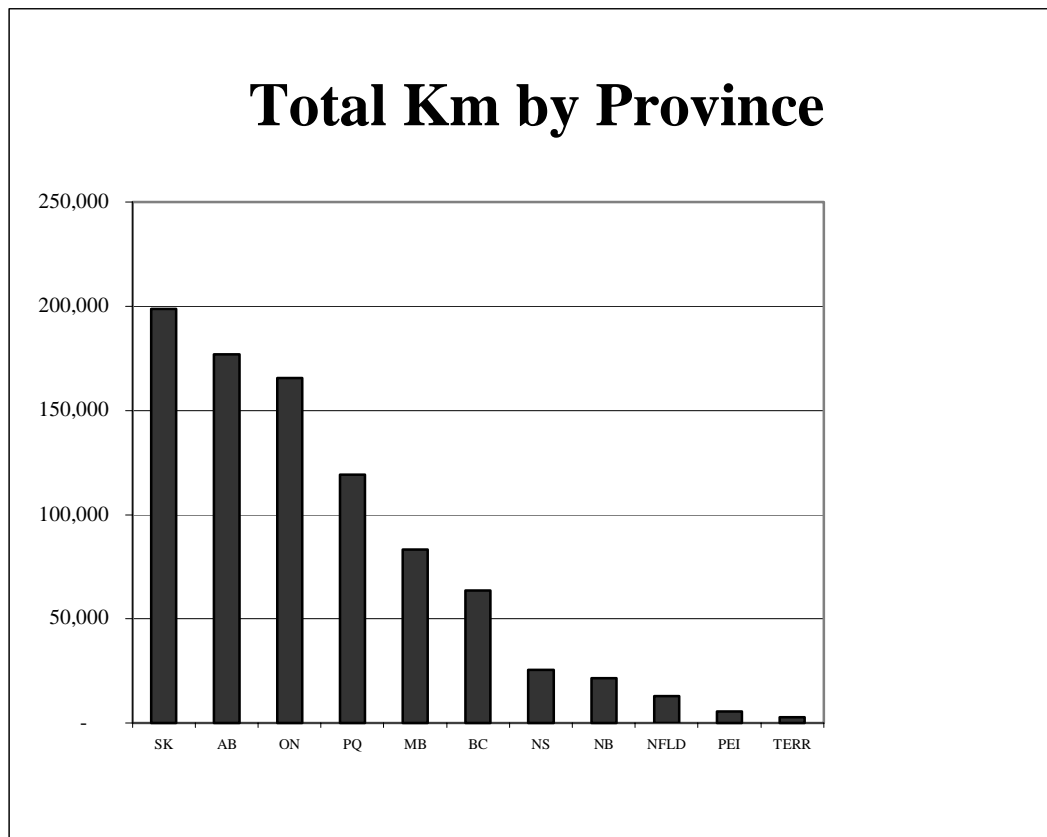
The large output of commodities and goods, combined with a small population and long distances to markets, means that transportation is likely the most critical factor for economic development in Saskatchewan in general and in particular in rural Saskatchewan. A low cost, efficient transportation system has always been critical for economic development in rural Saskatchewan. The opening up of the prairies to settlement and the development of the wheat economy came about because of the railroad and the advent of steamships that greatly lowered

ocean freight costs. These two events allowed Saskatchewan wheat to become competitive in the British wheat market.

The transportation system in rural Saskatchewan is made up of three modes, rail, road and air. The first two play a key role in the rural economy and account for a majority of the freight from/to the province. Safety and the movement of people and goods are also key factors in the development and review of a transportation system.

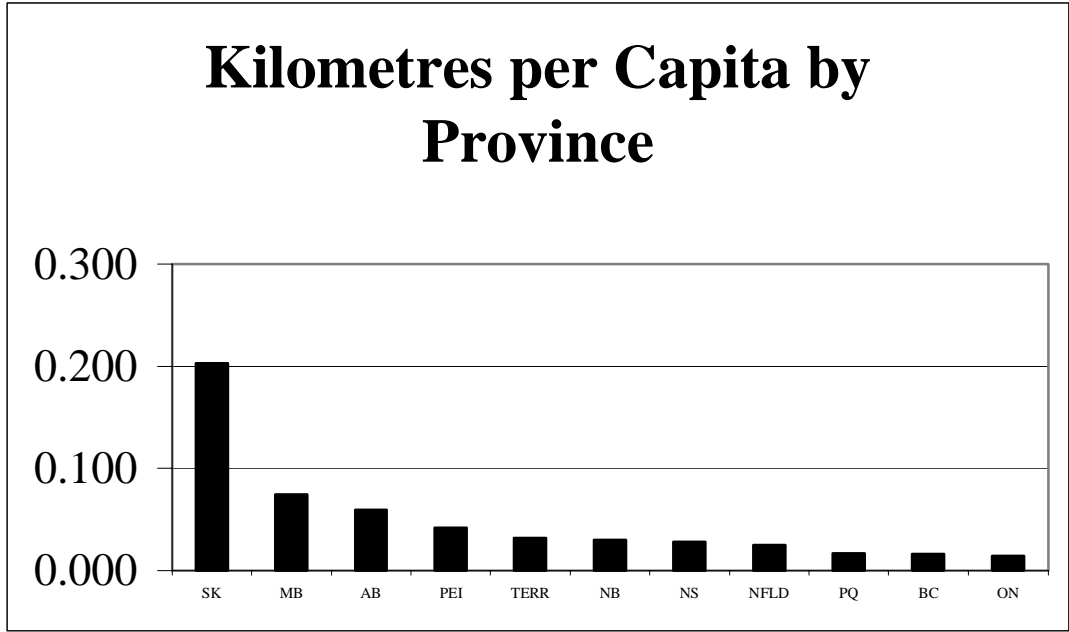
## Roads

Roads are the most important transportation mode in the province and play a pivotal role in moving goods, services and people. There is an extensive road system in Saskatchewan comprised of 26,100 km of provincial highways, 158,900 km of rural municipal roads and 13,700 km of urban streets and federal roads. As indicated in figure 1, Saskatchewan has the highest km of roads of any province in Canada.



**Figure 1: Km of Roads by Province – Source: Saskatchewan Highways and Transportation, *Investing in Transportation, A Strategy For Saskatchewan People, 1997, Page 8.***

The high number of km of roads is even more dramatic when calculated on a per capita basis using the above km and the 2001 census population data as shown in figure 2.



**Figure 2: Total Km per Capita by Province**

Structurally designed pavements, thin membrane surface (TMS) and gravel are the three main types of roads in the provincial highway system. Depending on the type of road structure, the cost of constructing a road can be very expensive. Costs can be as high as \$500,000 per km to build a highway that has a life expectancy of 20 to 25 years with proper maintenance. Appendix II shows the differences between the types of roads and estimates of costs and capacities for each type of road.

Under the Canadian Constitution, roads are a provincial responsibility. Therefore, either the province or municipalities fund almost the entire provincial and municipal road system. There is only minimal funding for road infrastructure by the federal government. The lack of federal funding for road infrastructure is in stark contrast to the role of other national governments. For example, within the Organization for Economic and Co-operative Development (OECD), “Canada is the only OECD country without a National Highway Policy and our federal government contributes the smallest percentage of funding (5%) to highways. By comparison other OECD government contributions range from 31% to 100% of total highways expenditures.”<sup>1</sup>

Although there is little direct federal involvement or funding for the provincial road network, federal policy, especially federal rail policy, has a tremendous impact on the provincial road system. The province has little impact on rail decisions made either by the federal government or by the national railways. Decisions made to abandon rail lines or change rail freight rates ultimately result in increased pressure on the roads that are funded by provincial taxpayers.

<sup>1</sup> Canadian Automobile Association, Brief to the Canadian Transportation Act Review Panel. January 2001, page 5.

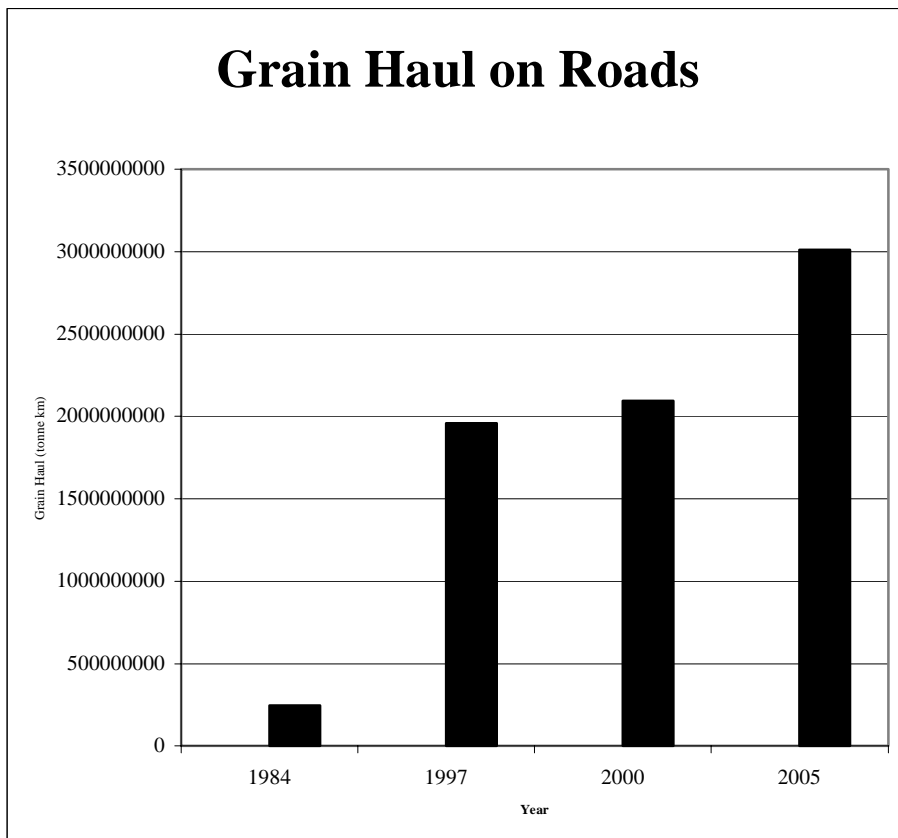
### ***The Growing Importance of Roads***

The role of roads has become more important in the transportation system over the last 40 to 50 years as traffic has shifted from rail to road. The first shift occurred in the movement of people with the advent of better roads, more passenger vehicles and the abandonment of rail passenger service by the railways. Thus, with the exception of air service and the VIA transcontinental rail service through central Saskatchewan, roads are the only option to move people within this province and in and out of Saskatchewan.

The second shift, which is still ongoing, is the movement of goods, (both high-value and low-value). Today the majority of high-value goods are moving on the provincial road system.

The major change that has occurred over the last ten years has been the shift in low-value commodity traffic (essentially grain) from rail to road. As indicated below, there has been a dramatic increase since 1984 in the tonnage of grain that moves over the road system.

Another change in the last 10 years is the increase in specialty crop production. Saskatchewan is a major world exporter of green and yellow peas, large and small green lentils, red and crimson lentils, chickpeas and has started doing initial processing of these specialty crops. The majority of these crops are being moved by truck from farm to processor and then to market.



**Figure 3: Grain Haul on Roads - Source: Government of Saskatchewan, SARM, SUMA, *Parallel Process on Roads, Saskatchewan Road Impact Analysis, 1999, Page 17.***

The dramatic increase in the grain haul accelerated with changes to federal transportation legislation in 1995 and 1996. In 1995, the federal government eliminated the Crow Benefit and in 1996, the federal government introduced *The Canada Transportation Act* (CTA). One of the purposes for removing the Crow Benefit was to encourage value-added production in the prairies such as the feeding of livestock. The increase in livestock production since the mid 1990's has meant that there has been a significant increase in road traffic with more movement of feed grains and livestock.

Under the CTA, the branch line abandonment process was streamlined, which allowed the railways greater latitude to abandon branch lines. The abandonment of grain dependent branch lines and the consolidation of the grain handling and collection system has meant that farmers have had to haul their grain longer distances to grain handling facilities. This has added additional stress to the road system.

## **Rail**

Saskatchewan is a large producer of low-value high-volume bulk commodities (grain and potash) and relies on rail transportation to a large extent to move these products from Saskatchewan to world markets. Approximately 32M tonnes of Saskatchewan product moves by rail annually.

Currently, Canadian Pacific (CP), Canadian National (CN), both federally regulated, and nine provincially regulated rail companies operate 9900 km of rail line in the province. CP and CN operate approximately 3600 km of mainline and approximately 5000 km of branch lines. The nine provincially regulated rail companies operate approximately 1300 km of rail lines in the province.<sup>2</sup> CP and CN are considered Class 1 carriers while the other railways are considered short lines.

The most significant change to railway operations in Saskatchewan over the last several years has been the abandonment of grain dependent branch lines, along with consolidation of the grain collection system, and the establishment of several short lines in the province. For example, since 1974, both CP and CN have abandoned approximately 5300 km of rail line, with short line operators picking up 1300 km of these lines.<sup>3</sup>

## **Air**

Air transportation plays an important role in transporting people inter-provincially and to a lesser extent intra-provincially. Air freight is not a big issue in Saskatchewan as only very high-value goods move by air. In rural Saskatchewan air travel is not a major transportation mode as rural residents must either travel to Regina or Saskatoon to access out-of-province locations. However, air ambulance service is becoming more important for health care in rural areas.

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<sup>2</sup> Saskatchewan Highways and Transportation, Short Line Advisory Unit.

<sup>3</sup> Ibid.

There are a total of 148 airports in the province. Of these, two are owned by Transport Canada, 18 (16 are in the north) by the provincial government, 10 by cities, 55 by towns, 10 by villages, nine by rural municipalities, one by the military and 43 are privately owned.<sup>4</sup>

### **III TRANSPORTATION POLICY**

A good transportation policy environment requires that it is stable, complimentary and consistent across the different modes of transportation. Policies must be developed and implemented that support the greatest economic and social benefits. It is vital to develop and maintain a strong understanding of the transportation sector and be acutely aware of impending changes. In a knowledge-based economy it is essential to have the best information available in order to remain competitive. Effective policy requires identifying, researching and analyzing potential innovations, opportunities, threats and trends. Good policy is always important and in times of fiscal restraint, policy is critical in order to determine the best practices and strategies over time.

Although there are policy issues in the rail (short lines) and air sectors, the most important transportation policy issue facing rural Saskatchewan is the future of the road system. Saskatchewan has a large road network, a small population base that is geographically spread out and limited budgets. These factors combined with a dramatic shift in grain traffic from rail to road are putting an enormous strain on the provincial and municipal road system.

Maintaining an efficient road system is absolutely critical for rural Saskatchewan, as it requires an efficient and effective road system to support and enhance the rural economy. Cost effective access to raw materials and markets is critical to the businesses that operate in rural Saskatchewan. New businesses are unlikely to locate to rural Saskatchewan unless there is a good quality road system.

The road system must also address the social needs of rural Saskatchewan such as health care, education and recreation. Investment will not occur in rural Saskatchewan without a competent and qualified labour pool to support it. In order to attract and sustain economic development, it is essential that the road system contribute to a desirable quality of life so that investment and labour are willing to go there.

There is a significant difference in the traffic flows, the various industries and the highway or road expectations/needs as one travels throughout this province. Some areas of the province have an extensive number of heavily traveled roads while other areas have only one major route or good highway servicing the area. It is unfair to provide service based only on the number of vehicles travelling on a particular road. The remoteness of communities, the social impact and the provision of health and educational services all need to be part of the consideration package, along with the economic interests and the number of vehicles travelling the road. Although we expect all the roads to be in top-notch condition, it is not realistic to expect this. If the province were to magically rebuild all of its highways, the budget would need to dramatically increase just to maintain the system. All residents of the province should have a road network that at least meets the rudimentary needs of the area.

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<sup>4</sup> Saskatchewan Highways and Transportation, Northern Access, Air and Safety Unit.

The issue of maintaining an effective road network, with limited funds, means that the limited dollars must be spent in the most effective manner possible. Governments must make strategic investments that provide the greatest return for dollars spent.

Maintaining and developing short lines in the province may also be an effective strategy to relieving stress on the road system. Any grain traffic that can remain on rail will reduce the stress on the road infrastructure.

## **IV SUMMARY OF MEETINGS**

During the course of the subcommittee's work, it met with a number of individuals and groups to discuss transportation issues and concerns.

**November 8, 2001** – ACRE Transportation Subcommittee (subcommittee) was established to examine and make recommendations to ACRE on provincial issues of transportation.

**December 6, 2001** – The subcommittee held its first meeting in Regina. Terms of reference were developed. ACRE approved and proposed transportation recommendations and background information were reviewed. Common themes were identified including corridors, regulations, planning/co-ordination, funding, education and other considerations. A budget was developed.

**January 5, 2002** – Meeting held in Regina. The subcommittee completed a review of ACRE transportation recommendations.

- Greg Gilks from Department of Highways and Transportation (DHT) gave a presentation on the Trucking Advisory Forum, vehicle weights and dimensions and enforcement.
- A meeting was held with Rod Harder from DHT regarding municipal road haul agreements, fees and permits.
- Curtis Didkowski provided fuel tax information.

**January 23, 2002** – Meeting held in Rosetown. The subcommittee met with the Area Transportation Planning Committee Chairpersons Committee (ATPCCC).

- Dave Jackson from DHT gave a presentation on Transportation Trade Corridors.
- Stella Madsen, Bob Berry and Doug Hansen from DHT gave a presentation on Sustainable Infrastructure.

**January 24, 2002** – Some members of the subcommittee attended the ATPCCC meeting in Rosetown to see a presentation by DHT Deputy Minister Harvey Brooks on DHT's strategic management plan.

**February 6, 2002** – Meeting held in Humboldt.

- James Nolan from the University of Saskatchewan gave a presentation on Transportation and Economic Development – Road Costing.
- David Spearin from Logistics Marketing Services Inc. gave a presentation on Economic Clusters, Profiling Communities.



- The subcommittee attended the ACRE Public Meeting in the evening.

**February 7, 2002** – Meeting held in Humboldt. The subcommittee met industry representatives from around the Humboldt area. Attending were Florian Possberg (Big Sky Farms), Joe Voz (L & J Trucking), Fred Prudat (Pioneer Grain Company Ltd.), Jerry McGrath (RM of Leroy) and Dave Doepker (Doepker Industries).

**February 28, 2002** – Meeting held in Regina. The outline for the final report was discussed. A meeting was held with Allen Kuhlman, chairperson of the South West Transportation Planning Council to get an opposing perspective on the need for primary weights.

- Ed Zsombor from DHT gave a presentation on Short line Rail and Rail Issues.

**March 5, 2002** – During the SARM Convention in Regina, some members of the subcommittee met with Ian Spear from Canada Transportation Agency and John Serhienko from Saskatchewan Canola Development Commission.

**March 13, 2002** – Some members of the subcommittee met with the Prairie Grain Roads Program Management Committee.

**March 15, 2002** – Meeting held in Regina.

- Harold Hugg from DHT gave a presentation on rural airports.
- A meeting was held with Glen Annand from the Saskatchewan Pulse Growers Board.
- A meeting was held with Steve Burchie from the Regina Airport Authority.

**March 16, 2002** – Meeting held in Regina.

- The subcommittee viewed a South Dakota video “How Heavy Is Too Heavy” on damage costs associated with increased weights.
- A meeting was held with Greg Gilks from DHT to get more information on weights.
- Rights-of-way responses were reviewed.
- A meeting was held with Gary Wicentowitch from Great Western Railway.

**April 8, 2002** – Meeting held in Regina.

- A meeting was held with Keith Schneider, Sharon Armstrong, Dale McBain, Terry Haggert and David McCall representing the Saskatchewan Urban Municipalities Association.
- A meeting was held with Ted Stobbs from Transport Compliance Branch of DHT.
- Bob Billington from DHT gave a presentation on Intelligent Transportation Systems.
- A meeting was held with DHT Deputy Minister Harvey Brooks and Assistant Deputy Minister Barry Martin.

**April 22, 2002** – Meeting held in Regina.

- A meeting was held with George Stamatinos and Greg Gilks from DHT regarding the Transportation Partnership Program.
- A meeting was held with Joe Laurin from the Saskatchewan Trucking Association, and Al Clarke and Mark Simmons from the Canadian Industrial Transportation Association.

- A meeting was held with Neal Hardy, Bob Schultz and Ken Engel from the Saskatchewan Association of Rural Municipalities.
- A meeting was held with Assistant Deputy Minister Carl Neggers from DHT.

**April 26, 2002** – The subcommittee met in Regina to begin discussing and developing recommendations.

**June 5 and 6, 2002** – The subcommittee met in Regina to continue developing recommendations for the report.

**July 2 and 19, 2002** – The subcommittee met to continue work on the final draft report.

**October 16, 2002** – The subcommittee met to continue work on the final draft report.

**November 6, 2002** – The subcommittee met to complete the final report.

## **V CONCLUSIONS AND RECOMMENDATIONS**

The subcommittee has developed a series of recommendations based on information they obtained through a literature review and meetings with stakeholders involved in Saskatchewan's transportation system. The subcommittee believes that transportation is a key element in economic development and the recommendations contained within this report will improve the transportation system, which will facilitate more economic activity in rural Saskatchewan.

The recommendations have been categorized into six common areas or themes. They are: Funding; Planning and Co-ordination; Weights, Enforcement and Compliance; Air Issues; Rail Issues; and Other Issues. The categorization of the recommendations into common themes does not suggest that certain recommendations have priority over others. The purpose of the exercise was to group the recommendations into similar categories.

For any of these recommendations where consultation should occur, it is intended that some, any or all of the following be involved: all levels of government, industry and business, SARM, SUMA, REDAs, ATPCs, ATPCCC, CFDCs, STA, trucking associations, the public and other stakeholders as necessary.

## A FUNDING

### Transportation Partnership Program

#### Background

The TPP was developed in 1994 to allow truck access to primary weights on secondary weight roads. This was in response to a need to move toward a national standard for weights and, to some extent, from pressure from industry to haul primary weights. Revenues generated from the program are used exclusively for roads and do not go into general revenues of the government. There are three components to the TPP, some of which have existed for some time and some, which were developed when the TPP was formed. The three components are the Timber Program, the Energy Efficient Motor Vehicle Program and the Bulk Commodity Program. For industry and truckers the Bulk Commodity Program is the main cause of concern with the TPP. DHT estimates that the trucking program provides an \$80 - \$90M benefit to the economy.<sup>5</sup> The province collects approximately \$2.5M per year under TPP. Of this amount \$600 thousand is collected in southern Saskatchewan under the Bulk Commodity Program.<sup>6</sup>

The Bulk Commodity Program is mainly in use in the southern part of the province. The program allows participants to enter into partnership agreements with DHT to haul primary weight loads on secondary weight roads in exchange for a fee. DHT will not enter into these partnership agreements if rail service is available or unless rates for a truck haul are less than for the rail service. ‘

There are two components to the fee that is being charged. One component is to cover the incremental cost of damage to the roads caused by the overweight loads. The fee charged for the incremental damage is charged for the distance of the trip that occurs on a secondary weight road.

The second component is a sharing of the savings associated with fewer trips being required to haul commodities because of hauling primary weights rather than secondary weights. Savings are split on a 50/50 basis between the carriers and DHT. The savings associated with fewer trips are charged from the origin of the shipment to the destination of the shipment or from the origin to the borders of Saskatchewan for trips leaving the province. For trips entering the province the same formula for the fee applies from the border to the destination. The fee associated with hauling the primary weights is calculated on the full distance of the trip rather than just the portion that occurs on secondary weight roads.

Trips where the origin or destination is 15 km or less from a primary weight road do not have to participate in the program. Primary weight loads on secondary weight roads are allowed within the 15 km limit without having to pay a fee. Depending on location, some users are paying for damages that are incurred while others are not.

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<sup>5</sup> Saskatchewan Highways and Transportation, Partnership Programs and Services Branch.

<sup>6</sup> \$1.5M is also collected in northern Saskatchewan under the Bulk Commodity Program, but concerns expressed by the industry are mainly about the Bulk Commodity Program in southern Saskatchewan.

## **Recommendation**

It is recommended that the province change its policy on how it charges for permits that allow users to run primary weights on secondary weight highways. The fees for TPP should be changed so that businesses wishing to run trucks at primary weights over secondary weight highways are charged a fee, which reflects the costs of the incremental damage caused to the secondary weight highways by using primary weights. The fee would apply for every km that a truck runs on a secondary weight highway at primary weights. The shipper would no longer be required to share the benefits with DHT associated with fewer trips. The fees should be administered fairly and equitably across all industries and all road users.

## **Municipal Road Funding**

### **Background**

Some industries located in rural Saskatchewan, e.g., the oil industry, generate significant revenues to the province. These industries also generate significant heavy truck traffic on the municipal transportation infrastructure. The cost to construct and maintain the transportation infrastructure is primarily borne by the municipalities where the industries are located. According to SARM, municipal road costs for municipalities that have oil in them can be as much as two and a half times the road costs of municipalities that do not have oil. In some cases, municipalities have their transportation infrastructure used by industry located in neighbouring municipalities.

Under present legislation, municipalities do not have the ability to assess special fees on industries which create extra road costs above and beyond normal road traffic loads. With no special tax revenue from the industry to offset the costs of supplying the transportation system, the municipality must fund the transportation system out of its own property tax base.

Road haul agreements are not effective for industries that use a number of different roads in the municipalities. Road haul agreement fees are set in legislation and are for specific roads with specific businesses.

Some businesses and industries compensate the municipalities for the use of their roads. These businesses and industries should be recognized as being good, progressive, corporate citizens. In other cases municipalities do not receive any compensation from either the private sector or from the province.

The province currently provides about \$24M per year to municipalities to help them with road infrastructure costs. However, this amount is less than the province collects in revenues from, for example, the oil industry. The municipalities believe that the province should return more of this revenue to the municipalities that are affected by these types of industries.

## Recommendation

The province amend legislation which would allow municipalities the ability to assess special fees on industries which create extra road costs above and beyond the normal road traffic loads. The extra fees should be administered fairly and equitably across all industries and all road users.

## Federal and Provincial Funding for Roads

### Background

One of the issues identified by the Rural Manufacturing and Construction “was the fact that not all of the tax collected as a “road tax” was being used to upgrade and construct roads”.<sup>7</sup> The manufacturing and construction industries rely heavily on roads to transport raw products to plants and then ship these products to the market place. The availability of additional money directed at roads increases opportunities for the development of new businesses or established businesses to expand. Without good road infrastructure it is felt that this will not happen.

During the course of its research, the subcommittee examined this issue in more depth and came to the conclusion that not all fuel taxes collected in the province were being used to fund the road system. Both the provincial and federal governments collect fuel taxes, through the provincial fuel tax and the federal excise tax. With respect to provincial taxes and road expenditures, the following table highlights the amount of provincial fuel taxes collected and expenditures on roads from the 1997/98 to 2002/03 fiscal years. The figures suggest that while the province, in the past, collected more in fuel tax than was spent on roads, this situation has been rectified, with the province now spending more on roads than what is being collected in fuel taxes for on-road vehicles.

**Table 1: Provincial Transportation Related Expenditures & Revenues – 1997-98 to 2002-03**

Fiscal Year	1997-98 (\$M)	1998-99 (\$M)	1999-00 (\$M)	2000-01 (\$M)	2001-02** (\$M)	2002-03** (\$M)
Total Fuel Tax Revenues	377	355	369	345***	355	355
Fuel Tax Revenues collected for On-Road Vehicles*	330	316	331	308***	316.5	313.1
DHT Expenditure	213	232	237	275.5	311.7	300.3
Municipal Rural Revenue Share	18	21	22	22.4	21.9	23.8
Centenary Fund				2.6	3.7	3.3
Total Road Expenditures	231	253	259	300	337.3	327.4
% Road Fuel Tax Spent on Roads	70%	80%	78%	97%	107%	105%

Source: DHT, Policy and Planning Branch

\* Excludes non-highway revenues, vehicle registration fees and farm and First Nations fuel rebates.

\*\* The table does not include the DHT budget reduction of \$7.4 M announced in the spring of 2002.

\*\*\* Actual Fuel Tax Revenues for 2000-01 are lower than estimates for 2001-02 due to an accrual accounting adjustment.

<sup>7</sup> ACRE, Final Report of Action Committee on the Rural Economy. March 2002, page 35.

In contrast, the federal government spends less than 10 percent of the fuel taxes it collects on roads in Saskatchewan. Calculating the amount of federal excise tax collected on fuel used in Saskatchewan is more difficult because of a lack of detailed information. However, Statistics Canada estimated that in 1998 (the latest available data), the federal government collected \$202.7M in excise tax from road use related fuel used in Saskatchewan. Current expenditures by the federal government on roads in Saskatchewan, for the 2002/03 fiscal year is \$14.69M for the Prairie Grains Road Program and \$4.625M for the Strategic Highway Infrastructure Program for a total expenditure of \$19.3M. Assuming that in 2002/03 the amount of excise tax collected is the same as in 1998, then the percentage of tax that goes towards road expenditures in Saskatchewan is 9.5 percent.

For a number of years the province has lobbied the federal government to help fund a national highways system. Saskatchewan is working with other provinces to develop a national highway system. The provinces have funded the majority of the construction and maintenance costs of this system.

### **Recommendation**

The Federal Government fund the construction and maintenance of the national highway system in Canada.

### **Allocation of Permits and Fines Collected by DHT**

#### **Background**

With the exception of funds collected under the TPP, any fees, permits, fines or other charges collected by DHT presently go to the General Revenue Fund. The subcommittee believes that the collection of fees through TPP and the allocation of those fees to the TPP allow the DHT to better match the extra road costs associated with TPP with the fees that are collected under the program. As well, the firms that use TPP are assured that the fees they pay are used to improve the highway system rather used for other government purposes.

The subcommittee feels that expanding the concept of allocating any permits, fines for overweight vehicles or other charges, directly related to road costs, go to DHT rather than to the general revenue fund, which would provide the same benefits as seen in the TPP. DHT could use the revenue to increase compliance efforts in order to reduce road damage from overweight vehicles and improve truck safety.

#### **Recommendation**

It is recommended that any permits, fines for overweight vehicles or other charges, directly related to road costs, collected by DHT should remain with DHT rather than being allocated to the General Revenue Fund for the Province.

## **B PLANNING AND CO-ORDINATION**

### **Transportation Corridors**

#### **Background**

Many stakeholders that the subcommittee met with identified a need for an integrated corridor system from the municipal level to the interprovincial/international level. The corridor system they identified dealt mainly with roads and routes.

The corridor system needs to be developed from the municipal level to the interprovincial/international level. At the municipal level, municipalities need to be able to designate haul routes for weights, dangerous goods and over-dimensional traffic. Legislation needs to be changed that will give the municipalities the necessary authority. The municipal transportation system needs to be integrated with and continue to support the provincial transportation system.

It is common practice for traffic to divert, either voluntarily or when directed to do so, onto the municipal system. The province needs to recognize that there is a need for a quality municipal road network. It serves as a feeder system and as a back-up system when the provincial system fails or is restricted.

At the provincial level the corridor system needs to be developed so it is capable of meeting current and future economic and social demand. Sustainability needs to be a consideration in development of the corridor system, as well as the rest of the transportation system.

Available funding for transportation should not be dedicated exclusively to the corridor system. Funding still needs to be available for non-corridor roads at both the provincial and municipal level.

In the committee's discussions with numerous stakeholders there are some major concerns about truck traffic moving from one municipality (where an economic development project occurs) through an adjacent municipality to reach a major highway. The adjacent municipality incurs additional costs while receiving no additional benefits, such as property tax revenue, from a project. Thus, the adjacent municipality may decide to restrict this truck traffic through weight restrictions, etc. because it feels that it is not being adequately compensated for the additional road costs. Restrictions by the adjacent municipality may, therefore, jeopardize the development of the project in the neighbouring municipality.

The inequities of costs and benefits between municipalities, which arise from economic development projects, may result in tensions and non-co-operation between various municipalities. The lack of co-operation at the municipal level may discourage firms and individuals from proceeding with projects, which will hurt the entire region.

The subcommittee heard two different alternatives to help resolve this issue. Under the first alternative, economic development projects would take precedent over municipal jurisdictions. In other words, municipalities would not have the power to implement restrictions, such as those

described above, which would hurt economic development projects. The second alternative is for the province to assume control and responsibility for maintenance over municipal roads which link economic development to the existing highway system.

The subcommittee felt that both alternatives were not feasible and came up with a solution that lies between these two extremes.

The province does traffic counts on highways and municipal roads. The municipal system has been on a five-year rotation in receiving the traffic counts. Recently only the main rural roads receive a traffic count monitor compared to previously when all municipal roads were monitored. When these counts were complete, a map was produced using a line width graph to plot the traffic counts in a municipality. There was a very thin line for 5 vehicles per day and the line width increased up to a quarter of an inch for 100 vehicles per day. When the traffic exceeded 200 vehicles per day the line width graph became ineffective. These maps provided an effective method to understand traffic patterns and the routes being used within municipalities. When these maps are plotted together they provide the regional pattern of traffic flow, including the main feeder roads and the community road linkages. The province has stopped producing the graph maps.

### **Recommendation**

The province, in consultation with stakeholders, establish an integrated transportation corridor system. The corridor system should be developed using various information available such as grain, tourist, and trucking routes and using the Rural Road Classification System. The main corridors, road linkages, and feeder roads should all be identified. It should also be recognized that construction and maintenance funding should be allocated proportionately.

### **Recommendation**

The province, in consultation with stakeholders, actively monitor and develop, if warranted, a north/south international trade corridor system.

### **Recommendation**

The province provide financial incentives to municipalities that agree to co-operate in situations where traffic originates in one rural municipality and travels across adjacent rural municipalities to reach a major highway.

### **Recommendation**

The province update and print the Rural Road Classification System map to assist in corridor development. The traffic flow maps should be produced in an updated format of the line width graph format, both on a provincial and municipal basis, to assist in the development of the traffic corridors.



## **Bridges and Grid Road Standards and Inspection**

### **Background**

There are approximately 850 provincial bridges and about 2200 municipal bridges in the province.<sup>8</sup> Over the last several years the size of trucks and the weights they haul have increased significantly. The bridge infrastructure in the province needs to be assessed to determine whether or not the bridges are capable of handling the heavier traffic.

Rail line abandonment and grain elevator consolidation is resulting in increasing levels of truck traffic crossing bridges that may or may not be capable of withstanding the loads. Primary weight permits issued by municipalities are not necessarily for defined routes and could result in overweight traffic crossing bridges.

DHT carries out inspections on provincial bridges on an ongoing basis. The municipal bridges are only inspected at the request of a municipality. DHT conducts bridge inspections as a service to municipalities and averages approximately 100 requests per year. They are currently behind on municipal bridge inspection requests by roughly 25 per cent.<sup>9</sup>

The municipal bridge inspections that DHT conducts are typically focused on condition and in some cases on geometrics. They do not necessarily assess load-bearing capacities. Once an inspection is conducted recommendations are made, where necessary, back to the municipality. DHT does not typically follow up on whether the municipality undertook any actions regarding the recommendations, since the municipal bridges are the responsibility of the municipalities.

In regard to standards for grid and primary grid roads, these standards were developed in the 1970's. Since that time, there has been an ever-increasing amount and weight of traffic on municipal roads. There is a concern that new municipal road construction is not at a standard that will meet today's traffic demands. This concern is compounded by the lack of provincial funding for municipal road construction as municipalities previously had to meet certain construction standards to access provincial funding.

Historically, the province provided staff to inspect municipal road construction, however, there has been a decline in the number of staff responsible for this task. In the next few years many of the inspectors are going to retire. This will put a further strain on the province's ability to maintain an adequate inspection of municipal road construction.

### **Recommendation**

The province provide adequate resources to assess the load bearing capacities, width capacities and condition of all municipal and provincial bridges.

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<sup>8</sup> Saskatchewan Highways and Transportation, Bridges Unit.

<sup>9</sup> Ibid.

## **Recommendation**

Municipalities need to be cautious when issuing primary weight permits to ensure that all bridges along the route are able to withstand the increased weight.

## **Recommendation**

The province update design requirements and inspection of municipal constructed roads.

## **Investment Strategies**

### **Background**

In 1997 the provincial government committed to spending \$2.5 billion over a 10 year period to upgrade the transportation system.<sup>10</sup> In March 2001, a commitment was made to spend more than \$900M over three years on the transportation system.<sup>11</sup> Investments need to be done as strategically as possible so as to maximize the rate of return to the province and the economy. It is important that there be an integrated strategic approach to investments for things like twinning, corridor development and improving/maintaining the primary and regional transportation systems. It is imperative that the right investment decisions be made, given the high costs and longevity of the investments.

Investments must be made within an overall strategic plan for the economy and society. Governments must determine what their long and short-term goals and objectives are. Once the goals and objectives are known strategies need to be developed to achieve them. Long-term and short-term investment decisions can then be made within the context of the overall strategic direction. It is important to make investment decisions with an overall strategic plan to maximize return on investment.

Presently the transportation environment does not focus on economic benefits to society. DHT tends to report on things like how many projects were completed, how much aggregate was used, how much money was spent on preservation and operation, etc. which are all output related. The outcomes of the investments, relative to the economy are not addressed, i.e., the return on the investment to the economy and to society.

In order to maximize rates of return to the province and the economy one must be able to identify and understand the relationship between infrastructure investment and gross domestic product. When businesses and individuals make investments they expect to earn some acceptable rate of return for the risk that they bear. The same must hold true when governments make investments. The investments must maximize rates of return to the economy and to society. The relationship between short and long-term investment and the province's gross domestic product must be understood in order to maximize returns.

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<sup>10</sup> Presentation from Harvey Brooks, Deputy Minister of DHT at the ATPCCC meeting in Rosetown on January 24, 2002.

<sup>11</sup> Ibid.

DHT currently has a strategic plan with a goal of “a sustainable transportation infrastructure”<sup>12</sup> and a goal of “a transportation system that strengthens economic development and serves social needs.”<sup>13</sup> Within these goals are objectives for a preserved primary highway network and a transformed regional transportation network to meet the future economic needs of the province and of rural Saskatchewan. Another objective of a well maintained transportation system is to ensure a high quality of life in rural Saskatchewan. In a knowledge based economy it is also essential to have the best available information in order to remain competitive.

In order to meet these goals two things need to happen. The first is, the infrastructure investment relationship to the gross domestic product needs to be understood. The second is, to develop long-term and short-term investment strategies for the primary and regional networks. The investment strategies need to focus on the impact to the economy as a whole and not just to cost/benefit analysis that favours DHT. People need to understand the relationship between the economic benefit and sustainability.

Similarly, municipal governments and other jurisdictions must make their infrastructure investments within the above context. Investment strategies that are developed must be integrated with and compliment other municipal, provincial, federal and international governments’ strategies. The various levels of government must also understand that infrastructure investments are very long term and thus proper planning is important.

### **Recommendation**

The province develop transportation infrastructure investment strategies that maximize rates of return to the economy. The investment strategies also must recognize the role of rural areas in generating GDP. The investment strategies must be developed for both the long-term and the short-term.

### **Recommendation**

The province determine the relationship between infrastructure investment and the provincial GDP and incorporate the findings into investment strategies.

## **Horizontal Integration and Co-operation of Government Departments**

### **Background**

A variety of stakeholder groups expressed concerns around a lack of integration and co-operation between provincial government departments. There is a perception that government departments are not necessarily working together on common goals. There is also a perception that the various departments’ policies, programs and activities can, at times, be in conflict with each other.

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

Government departments tend to be vertically structured, hierarchical and internalized in their views. The vertical structures in turn lead to departments tending to work in isolation of each other without a clear understanding of goals, objectives, strategies, policies, programs and activities of other government departments. The potential for synergy is greatly reduced. There is a lack of horizontal integration of departments working toward common goals and outcomes. Horizontal integration should result in a complimentary policy environment. Policies that are developed in isolation from each other tend to create conflicts at times.

Virtually all economic development projects depend on an adequate road infrastructure for successful development. The type of project will determine, to a large extent, the nature or kind of road infrastructure that is needed. For example, an intensive livestock operation will require a heavy haul road, as the inputs (feed) and outputs (live animals) result in heavy payloads. On the other hand, a tourism project may only require a road that provides a dust free surface, as cars and light trucks are the main users of the road system.

DHT has expressed concerns about many of these proposed projects. The department is not consulted about the project until it is essentially ready to proceed. At this stage, the project has received all of the approvals including environmental, zoning, etc. and the developer now wishes to proceed once the highway is upgraded. If DHT's response to the request does not meet the needs of the developer, DHT becomes the perceived barrier and is blamed for the initiative not proceeding.

It would be extremely useful if DHT were notified of new proposed developments at the start, rather than at the end of the process. This would provide them with more information for planning purposes. It would allow them the opportunity to discuss with the developers and other interested stakeholders options regarding system limitations, planned capital improvements or route management options. This would provide for a more holistic approach to planning these types of diversification initiatives. Approaching these developments in a partnership fashion will benefit all participants.

The forestry industry expansion initiative provides an example of how departments can work together toward common goals. A number of different government departments and stakeholder groups are all working together with a goal of doubling the capacity of the forestry industry. Transportation requirements associated with the expansion become a key subset of an overall integrated strategy.

Another example of better horizontal integration has to do with over dimensional loads for hauling bales. The issue is one of balancing the economics of hauling over dimensional loads and concerns about safety. DHT is responsible for the transportation factors but require input from other departments and stakeholders regarding the economic benefits of hauling over dimensional loads.

## **Recommendation**

Policies, practices and procedures be developed that require provincial government departments to work together in a more integrated, collaborative and complimentary manner to ensure

integrated development of the transportation system. When appropriate, this must be done inter-jurisdictionally to ensure the integrated development of the transportation system.

### **Recommendation**

All levels of government and industry establish a process for providing information to the road authorities on impending and future economic development projects.

### **Area Transportation Planning Committees (ATPC)**

#### **Background**

There are currently eleven ATPC that cover the entire province, with the exception of an area north of Prince Albert in the La Ronge area. The mandate of the ATPC is to do transportation planning for their area and to make recommendations to provincial and municipal governments regarding transportation. They are not another level of government and are not decision-making bodies. Final decisions regarding recommendations made by ATPC rests with provincial and municipal governments.

All of the ATPC south of the Northern Administration District boundary have completed comprehensive transportation plans for their planning area with the exception of one ATPC. The one that has not yet completed a transportation plan is currently in the process of developing their plan and expect to have it completed in the near future. The plans that have been developed tend to focus on road infrastructure.

As indicated in the introduction, transportation infrastructure is a key element in economic development. It is critical that the transportation infrastructure, in a particular region, meets the needs of industry and future investments in infrastructure mesh with potential economic development projects. As part of their planning process, ATPC's, on an on-going basis, need to meet with local industry and economic development authorities, in their particular region, to co-ordinate infrastructure investment and economic development opportunities.

#### **Recommendation**

Strengthen the relationship and linkages between Area Transportation Planning Committees and economic development.

### **Multi-Modal Passenger and Freight Services**

#### **Background**

Passenger and freight service to and from rural Saskatchewan has been steadily declining over the last number of years. The decline is occurring as a result of the decline in the rural economy and the rural population base.

STA members are general merchandise carriers that have been serving rural Saskatchewan for over 30 years. Their members are finding it hard to justify serving some rural communities on a

regular basis because the volumes are getting too small. In some cases they have started charging surcharges for freight delivery services. The routes and days of service are declining. In some cases rural customers have started picking up their own freight from the larger urban centres.

STC provides passenger and freight service around the province. It services 275 communities within the province. Regina/Saskatoon and Saskatoon/Prince Albert are the only two routes that currently make a profit. From 1980-1997 STC lost approximately \$50M. In 2001, 287,000 passengers used STC compared to 787,000 in 1980. STC believes that “an on-going threat to the company's passenger operations lies in the province's changing demographics. Continued urbanization, reliance on private automobiles, and development of the highway system will only further erode the company's client base”<sup>14</sup>. In 2001 STC handled over 800,000 freight shipments.

The Regina Airport provides passenger and freight services (the subcommittee did not meet with representatives from the Saskatoon Airport but one could expect similar findings). They currently average approximately 750,000 mainly business and tourism passengers per year over the last four or five years. Freight is only a small part of their business comprised of higher valued smaller sized merchandise. About a year ago there was some discussion regarding upgrading the Regina STC bus depot and integrating it with the Regina Airport to better connect to rural Saskatchewan. Intra-provincial flights to places like Swift Current and Yorkton have been tried in the past but don't seem to be viable.

There are a number of modes of passenger and freight service in Saskatchewan. There needs to be a multi-modal strategy to better integrate the various modes. For example, departure and arrival schedules are not well aligned across the modes. Better integration of scheduling might provide better service to and from rural Saskatchewan.

## **Recommendation**

The province, appropriate transportation authorities and industry develop strategies, schedules and facilities that enhance passenger and freight multi-modal services in order to facilitate and promote tourism and trade.

## **Intelligent Transportation Systems (ITS)**

### **Background**

ITS is comprised of a wide range of different technologies applied to transportation systems to improve safety, efficiencies and reliability for users of the transportation system. There is a wide range of technologies available, such as global positioning systems, work zone safety systems, automatic roadside weather information systems, red light camera systems, electronic changeable message signs, weigh-in in motion systems and animal warning systems.

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<sup>14</sup> Saskatchewan Transportation Company, Annual Report 2001, page 13.

With such a broad spectrum of technologies available for ITS, Transport Canada has developed a Canadian ITS Architecture plan with four objectives.

1. To promote transportation safety and security.
2. To support trade and tourism through “smarter” transportation systems.
3. To improve the quality of life by promoting a sustainable transportation system.
4. To sustain a strategic investment in transportation.

In January 2001 a working group was formed in Saskatchewan led by DHT to develop an ITS deployment strategy for Saskatchewan. The working group was comprised of about twenty participants from the provincial, public, private and academic sectors of the province including:

- Major urban municipalities
- Rural municipalities
- Universities
- Road Builders Association
- Trucking associations
- Canadian Automobile Association
- Provincial government
- Crown corporations; and
- Consultants and service providers.

The working group developed an ITS deployment strategy that was completed in December 2001. The strategy is consistent with the Canadian ITS Architecture. The strategy is currently awaiting review by DHT to determine what the next steps will be.

Saskatchewan is a sparsely populated province with a vast road network that is costly to maintain and repair. Alternative approaches need to be explored to find the most efficient ways to use the transportation system. Saskatchewan needs to have an ITS strategy to address its transportation needs.

One of the main detriments to the use of ITS is the cost of the technologies. They can be very expensive with long payback periods. As such, partnerships and other alternative funding opportunities will need to be pursued.

## **Recommendation**

The province continue to be involved in the ITS development to reduce traffic (truck) monitoring costs and assist in the development of the worldwide industry.

## **Use of Rights-of-Way by Crown Utilities**

### **Background**

Some utilities use the Rights-of-Way (ROW) without paying fees or compensation to the road authorities, since ROW are in the name of the Crown. Utilities like to use the road ROW for installation and ease of maintaining their services. Some utilities have the legislated authority to

use ROW without consultation and agreement with road authorities. They do not need to deal with landowners or pay compensation for damages.

When there is a need to rebuild a road, usually, additional ROW is required. It is getting more difficult and expensive to acquire additional road ROW because some landowners do not want the utilities locating their above ground structures in the road ROW. There is continual relocation of utility lines in road ROW.

When roads are being reconstructed it is common practice for the road construction costs to include the cost of relocating utility services, either those crossing underground, pole relocations or pole resets. Recently it cost DHT \$250,000 to relocate 15 km of power line in the construction of twinning #1 west. Whenever road construction requires relocation of underground telephone lines, it becomes part of the road costs.

In many cases utility above ground structures are close to the traveled surface of a road. With the speed of many vehicles today this is a safety issue, if vehicles slide off a road surface and into a utility structure.

Many landowners farm road ditches in a ROW to reduce weed growth and utilize the available agricultural land. When there are above ground utility services located on the road ROW, this practice is not possible and weeds become a serious problem. Many landowners blame the road authorities for the problems and wish to have input into the location of new utility structures.

It is recognized that the same people pay all utility services and road services. They pay either through taxation or service fees or both. It is also recognized that there is a cost saving for utilities to use highway or municipal ROW to provide service to customers.

From a policy and operational perspective, it is important that both the utilities and road authorities work together to develop a transportation and utility distribution system that is cost effective and workable for all parties.

## **Recommendation**

The province direct the Crown utilities to work with road authorities to achieve an efficient transportation and utility distribution system that is cost effective and workable for all parties. Prior to construction/reconstruction of linear utilities the consultation process must also include adjacent landowners.

## **Maintenance of Highways by DHT Inside Urban Limits**

### **Background**

Presently there are approximately 300 km of highways in urban centres where DHT is responsible for maintaining the highways but has no control over the intersection locations, the amount of access to the highway, the speed of traffic or the amount of signage involved. Due to the urban nature of these roads, the maintenance costs are significantly higher than costs for ordinary highways.



In some cases urban municipalities want total control over the highway but do not want to maintain or pay a portion of the costs of maintenance. The province is presently trying to negotiate the handover of these urban highways to the urban municipalities but they have shown little interest in taking over the maintenance of these roads.

For communities of 1000 or less, DHT is responsible for maintaining a highway through a community. The cost of maintaining surfaces is very expensive for small communities, but input on traffic control is an important item as well. The subcommittee believes that the current criteria of 1000 people is too low.

### **Recommendation**

The province review its present policy of maintenance of highways in urban centres. In cases where the province does not have equal or total control on speed, signage, access and intersectional occurrences, then the maintenance of these portions should become the responsibility of the urban municipalities.

The province review whether 1000 (or less) people in a community is the appropriate level for its policy of maintaining highways through these communities.

## C WEIGHTS, ENFORCEMENT AND COMPLIANCE

### Designation of Weights

#### **Background**

The provincial highway system currently has primary weight, 10-month primary weight, secondary weight, winter primary weight, and spring ban weight categories. The municipal road system is restricted to secondary weights. Primary weights can be hauled on secondary weight provincial roads by paying a fee through partnership agreements under DHT's Transportation Partnership Program. Permits can be obtained for a fee from municipalities to haul primary weights on the municipal system. The whole issue of what the appropriate weights are that can be hauled on Saskatchewan's roads is a complex one with differing opinions.

Some stakeholders that are not located along primary weight roads argue that they need to be able to haul primary weights in order to be competitive in the marketplace. They also argue that not being able to haul primary weights is restricting their ability to expand their businesses. In some cases this is true. In other cases, businesses argue for primary weights but are able to survive and expand without them.

Others argue that primary weights are causing excessive damage to the transportation infrastructure. This is evidenced by the impact that grain elevator consolidation and rail line abandonment have had on our road infrastructure. The sizes of the trucks and the distances they haul have increased significantly in recent years. Most of the transportation system was never designed to handle the kinds of heavy traffic now being experienced and the impacts are evident.

From a regionalized perspective, economic development can be enhanced when a primary weight road is available. When possible, new businesses wanting to haul primary weights will tend to establish in a region where primary weight roads are available. Regions without primary weight roads argue that new economic development initiatives are more difficult to attract.

It may be useful to differentiate between businesses. There are some businesses, such as grain and oil companies, for example, that will locate in the province regardless of weight restrictions. Other businesses may only be attracted to or retained in the province if the transportation climate accommodates their needs.

There is a trade off between economic development and sustainability that needs to be recognized by all stakeholders. Some stakeholders have legitimate arguments in favour of primary weights. Others argue that the weights should be reduced. The whole weights issue needs to be examined and resolved.

With respect to winter weights, they are implemented on a province wide basis on December 1 and end on March 1 of each year. The ten percent increase in weights for this period of time has nothing to do with the annual weather conditions, but is based on the average conditions and the average expected amount of frost in the ground found throughout the province. In recent years, some of the province goes from a winter weight schedule at the end of February to a spring road ban the first of March. In other years the ground is sufficiently frozen in the fall to permit winter

weights earlier than December 1, while at other times road damage can still occur because there is not sufficient frost in the ground by this date. In addition, in some areas of the province, in the middle of winter, the frost starts to come out of the ground and road damage occurs because winter weights are being permitted.

There is technology presently available to determine if there is sufficient frost in the ground to permit increased weight limits. By using this technology there could either be more flexibility with the winter weight program or there could be a reduction in damages by knowing the frozen stability of the ground. This system may vary in some regions throughout the province depending on regional weather conditions. It could work in a manner similar to the spring road ban program.

Presently urban municipalities have the authority to designate routes for weights, dangerous goods and dimensional (over-sized) loads. Rural municipalities do not have that authority.

### **Recommendation**

There be no further increase in the primary weights, regardless of what other provinces do, until the primary weight transportation system in the province is at a long-term standard capable of handling increased weights. An exception to this would be where 100 percent federal funding is made available to address national/international harmonization issues.

### **Recommendation**

DHT develop a policy to accommodate changing weight requirements and road capabilities. Authority to approve weight designation changes should rest with the Minister of DHT.

### **Recommendation**

The province develop a winter weights regime based on the number of frost days for the various regions of the province.

### **Recommendation**

The province change the existing legislation to permit rural municipalities to designate routes for weights, dangerous goods and dimensional (over-sized) loads.

## **Compliance and Enforcement**

### **Background**

Overweight vehicles can cause significant damage to roads. According to the South Dakota School of Mines, one overweight vehicle can cause more damage in one day than a legal weight vehicle over several years. They also suggest road damage increases at an increasing rate as the level of overweight increases. For instance, a vehicle that is 10 per cent overweight results in

damages of 50 percent higher than normal damage. A vehicle that is overweight by 40 percent results in a 300 percent increase in damage.<sup>15</sup>

From a Saskatchewan perspective, it is difficult to determine the actual cost of damages to the road infrastructure from overweight vehicles because there is little information on how many overweight vehicles travel Saskatchewan highways. Despite the data, DHT estimates that overweight trucks cause more than \$10M in damage to Saskatchewan roads annually. Reducing overweight vehicles on Saskatchewan roads should allow these savings to be used elsewhere in the road system.

The lack of information on road damage in Saskatchewan caused by overweight vehicles arises from the inability to effectively enforce weight regulations in the province. Presently there are 47 officers responsible for enforcement of vehicle weights in Saskatchewan. These officers use traditional stationary highway scales, mobile scales and other technologies to enforce the weight limits.

With Saskatchewan's large geographical area, the large number of roads and the relatively small size of the enforcement team, the chance of being caught with an overweight vehicle is very small. Individuals who routinely overload their trucks know this and will continue to overload their trucks until enforcement increases. Saskatchewan has the highest fines for overweight vehicles in the country. This, however, does not seem to provide the necessary deterrent, because fines only apply when overweight vehicles are caught violating the laws.

The present system of using stationary scales and patrols by enforcement officers is not working effectively because DHT cannot determine what percentage of overweight vehicles are actually apprehended. The Department of Highways should increase use of their authority to audit weigh bill tickets at all facilities where there are weigh scales. Since almost all trucks serving industries use weigh scales at either an origination or destination point, the auditing of weigh bill tickets should be able to determine, with 100 percent accuracy, the weight of each vehicle that is travelling on Saskatchewan roads.<sup>16</sup>

Auditing weigh bill tickets allows road authorities to become much more efficient in identifying potential abusers of the weight limits, as they would have access to weights of all trucks travelling on Saskatchewan roads.<sup>17</sup> Truckers who do not abuse weight limits also benefit because there will be less need for these trucks to stop at stationary scales.<sup>18</sup>

An overweight ticket could be issued on the basis of the audited weigh bill, if the authorities are certain the truck was overweight. For example, if a vehicle is 5,000 pounds over the primary weight limit, it is clear that the truck is overweight regardless of which route or road was used.

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<sup>15</sup> South Dakota School of Mines and Technology, *How Heavy Is Too Heavy For The Roads of South Dakota*, video.

<sup>16</sup> The traditional enforcement measures would have to be used for those trucks that are not weighed at either the origination or destination point.

<sup>17</sup> The traditional enforcement measures would have to be used for those trucks that are not weighed at either the origination or destination point.

<sup>18</sup> It is anticipated that for trucks that originate or end their journey in Saskatchewan, there will be less need to stop at stationary weigh scales as authorities will have access to weigh bill tickets. Stationary weigh scales and other enforcement measures will still be necessary for out-of- province trucks that use Saskatchewan highways as a transit route.

The auditing of weigh bill tickets could be used in conjunction with other enforcement measures when authorities are not sure that a truck was overweight. For example, on the basis of the weigh bill ticket, authorities conclude that a truck may be overweight for a secondary or thin membrane highway, but not for a primary highway, however, the authorities are not 100 per cent sure which route or roads were used by the truck. However, based on this information, the authorities could then use other enforcement measures such as portable weigh scales to target potential abusers.

Once everyone is aware that weigh bill tickets are being randomly audited, the vast majority of truckers will automatically comply because the risk of being caught is high. Truckers know that every time they drive on a weigh scale, there is the potential that the weigh bill ticket will be audited, and therefore could be facing a heavy fine. Thus, there is the strong possibility that the actual auditing of weigh bill tickets could decline over time, because the threat is as useful as the actual enforcement.

### **Recommendation**

DHT should significantly increase the use of their authority to audit weigh bill tickets. Depending on the circumstance, an overweight charge should be laid on the basis of an audit or the audit could be used in conjunction with other enforcement measures.

Regulations and policies need to be put in place to ensure efficient and adequate random auditing can be done. To ensure fairness and equity, all industries and those involved in moving goods by truck would be subject to random weight audits.

### **Containers**

#### **Background**

There are presently three container terminals in Saskatchewan, two in Saskatoon at the CN and CP rail yards and one in Regina at the CP rail yard. A fourth terminal at the CN yard in Regina recently closed. These terminals are relatively small with CP facilities handling 42,000 tonne equivalent units (TEU's) (one TEU equals one 20 ft container) and 32,000 TEU's in Regina and Saskatoon respectively in 1999. It is estimated that the CN facility in Saskatoon handled approximately 60,000 TEU's in 1999. There are no container facilities or terminals in rural Saskatchewan.

The special crop industry (especially pulses) is a major user of containers, as this is a major mode for moving crops to world markets. The huge increase in speciality crop production over the last 10 years has greatly increased the demand for containers in rural Saskatchewan. From a rural Saskatchewan perspective, there are two major concerns on the container issue. First, is the lack of container facilities or terminals at rail yards in rural Saskatchewan, the second is the lack of containers.

The railways have consistently indicated that they have no plans to construct container facilities in rural Saskatchewan, as the demand for containers in rural areas does not justify the

expenditure of funds to construct container facilities. The users of containers in rural Saskatchewan, therefore, will have to continue to pick up containers in either Regina or Saskatoon, load them in rural Saskatchewan and then truck them back to these two locations. A major problem with containers is that a fully loaded container is too heavy for secondary weight roads in the province. Thus shippers must move a partially filled container that results in increased costs.

The ability to source containers for Saskatchewan shippers (both urban and rural) and the lack of containers is due to the fact that the world shipping companies control the containers and only wish to have their containers move between port positions and large inland container locations like Chicago. From a shipping companies perspective, the Saskatchewan market is too small to justify dropping off containers at either Saskatoon or Regina. Thus the supply of containers to Saskatchewan is a continuing problem.

The subcommittee recognized that the ability to source more containers for Saskatchewan would be very difficult and would depend on decisions by shipping companies, which are mostly based overseas. So far the shipping companies have not indicated a willingness to increase supplies of containers to Saskatchewan.

### **Recommendation**

A special trailer could be designed that would allow a heavier container to be transported on Saskatchewan's secondary weight roads, therefore, the province and industry should work together to develop a trucking method and axle system to accommodate the use of containers to their maximum capacity.

## **D AIR ISSUES**

### **Air Planning and Funding**

#### **Background**

The subcommittee met with Harold Hugg, Manager of Northern Access, Air and Safety Unit, Policy and Planning Division of DHT to discuss air infrastructure in the province. Information provided here is derived from the meeting with Mr. Hugg.

Transport Canada provides funding assistance to airports across Canada through the Airport Capital Assistance Program (ACAP). The program currently provides approximately \$33M for capital projects. To qualify for funding under the program the airport must have scheduled passenger service. Proposed capital projects must then successfully compete with other project applications from across the country.

The two airports that Transport Canada owns in Saskatchewan are in Regina and Saskatoon. The airports are then in effect rented to the Regina and Saskatoon Airport Authorities for them to operate. The only other airport that has scheduled passenger service south of the Northern Administration District (NAD) is in Prince Albert. All other airports in the south do not qualify for ACAP funding. Many of these airports are in deteriorating condition and in need of funding assistance.

British Columbia (BC) has an Air Transport Assistance Program that provides funding averaging \$2.57M per year for rehabilitation of existing airport infrastructure. The Alberta Community Airport Program provides funding of approximately \$2.5M for capital assistance. Manitoba has the Manitoba Airport Assistance Program that provides funding of \$70,200 for operating grants. Manitoba also has the Manitoba Airport Capital Assistance Program that provides \$300,000 for airport planning and capital assistance. Saskatchewan has the Saskatchewan Community Airport Assistance Program that provides \$104,000 for airport operation and maintenance assistance.

Currently, Saskatchewan Environment and Resource Management (SERM) operates a water bomber fleet to fight forest fires. Saskatchewan Health operates an air ambulance service as part of its emergency medical service. Saskatchewan Property Management Corporation (SPMC) operates Executive Air for Ministers and senior officials on government business. The Royal Canadian Mounted Police (RCMP) operates aircraft for transferring prisoners and for search and rescue missions.

Saskatchewan does not currently have a regional air strategy. Air transportation is becoming an increasingly important factor in supporting economic and social development in rural Saskatchewan. The increase in e-commerce and rural revitalization, as well as on-going business needs, further increase the demand for rural air access.

The BC Ministry of Transportation and Highways released its study, *Getting the Facts: Assessing Issues of B.C. Airport Viability* in May 2001. The study explores key issues affecting airports and examines the impacts on their financial viability. The Government of BC has not yet made any decisions regarding the report findings.

Alberta has recently completed its Alberta Aviation Strategy and Action Plan. A Task Force comprised of representatives from the airline industry, airport authorities, freight forwarders, municipal and economic development authorities, shippers and the tourism industry produced the plan. A fundamental premise of the plan is that Alberta must be competitive internationally. Six principles flowed from this premise:

- The aviation sector is a service industry; as such it should be driven primarily by customer demand.
- A maximum number of competitively priced domestic and international connections must be available to and from all regions of the country.
- Air facilities must be integrated throughout each region, including international, regional and community airports.
- Inter-modal connectivity must be optimized, so that distribution and gathering of passengers and cargo is seamless for the customers.
- Infrastructure development and logistical integration requires a collaborative investment plan supported by federal and provincial governments, as well as industry.
- A supply of skilled people must be maintained in aircraft maintenance, avionics, airport management and other careers in the aviation sector.

The Alberta approach could provide a useful guide when planning, developing and implementing a sustainable rural air access strategy for Saskatchewan. The strategy should be based on a cost shared approach among the various stakeholders.

DHT previously produced a map and an air facilities information booklet with the location of every airport and airstrip in Saskatchewan including all rural airports and airstrips. DHT has not produced this map or booklet since 1990. Pilots found this map very useful as it gave the location of every airport and airstrip in the province. As part of the rural air access strategy, the maps should be updated and produced.

### **Recommendation**

The province commit to work collaboratively and co-operatively with appropriate stakeholders to plan, develop and implement a sustainable integrated rural air access strategy.

### **Recommendation**

The province update the digital map on the location of airports, airstrips and their classifications in Saskatchewan.



## **E RAIL ISSUES**

### **Short line Railways**

#### **Background**

Under the present assessment system for railways, the assessment of railways is based on a base period and reflects traffic volumes that occurred during the base period. However, when a branch line is abandoned by a Class I railway such as CN or CP, and purchased by a short line operator, the amount of traffic can be significantly less than what it was in the base period. Thus the assessed value does not accurately reflect the current business conditions and places an unfair and heavy tax burden on short line railways.

The province presently has a group of people in DHT which assist and advise groups which are interested in setting up a short line. These people have been key to those individuals and communities that wish to set up a short line. Short lines are an effective method in reducing the impact of rail abandonment on communities and on the provincial and municipal road system.

The Government of Saskatchewan currently provides technical and financial assistance (in the form of repayable loans) to those communities and organizations interested in establishing a short line. Concern has been expressed that many of these short lines are uneconomical and would not survive without the province's help.

In developing its assistance program for short lines, the Government of Saskatchewan stated clearly that the province supports community short lines where there is committed local support and sufficient volumes to sustain viable operations. However, the province also indicated that they would not provide direct provincial funding for operations, or accept financial risk for ongoing operations. The province's decision to reject the Prairie Alliance for the Future's (PAFF) proposal for funding was based on PAFF's request for an operating subsidy.

#### **Recommendation**

That the Saskatchewan Assessment Management Agency (SAMA) change its criteria for assessing the value of property owned by short line railways, especially in instances where there has been large changes in traffic from the base assessment period.

#### **Recommendation**

The province continue the Short line Advisory Unit in DHT and continue to develop, in consultation with existing short lines and local stakeholders, regulations under *The Saskatchewan Railway Act*.

#### **Recommendation**

That the Government of Saskatchewan continue to treat all future short lines as commercial ventures.

## **F OTHER ISSUES**

### **Education and Training**

#### **Background**

Some stakeholder groups identified a need to promote career opportunities in the transportation sector. Many railroad engineers are nearing the age of retirement. The Brother of Locomotive Engineers (BLE) training school offers training for railroad engineers in Saskatoon, which is trying to address this need. In the air industry, there is a shortage of aircraft maintenance engineers. SIAST (Saskatchewan Institute of Applied Science and Technology) in Moose Jaw is now offering training for aircraft maintenance engineers. In the trucking industry many drivers are nearing retirement age and finding qualified drivers is beginning to be problematic. Most people are not aware of the career opportunities or the training opportunities that are available in the transportation sector.

There is also a need to educate the public and various stakeholder groups regarding the construction and weight capacities of the transportation infrastructure. This could be expanded to include damage costs associated with overweight vehicles and higher speeds. As well, there is a need to promote truck safety and the public's perception and awareness of large trucks for things like stopping and turning distances.

#### **Recommendation**

The province, industry and educational institutions promote the opportunities, careers and training that are available in the transportation sector.

#### **Recommendation**

The trucking industry continue with and increase their presence at high schools and public forums in promoting the interest and respect of the trucking industry and the job opportunities available.

#### **Recommendation**

DHT and the ATPCs educate the public regarding our highway system, its construction and what it is capable of handling for weights. This should include things like damage costs caused by overweight vehicles and by the speed of vehicles.

#### **Recommendation**

DHT, the ATPCs, and the STA work together to promote truck safety and to increase the public's awareness and perception of large trucks.

## **Abandoned Railway Rights-of-Way**

### **Background**

Over the last several years, the railways have abandoned a number of railway branch lines. After the rail lines are ripped up and removed, the question arises as to what to do with the railway Rights-of-Way (ROW) that continue to exist. Some argue that they should be maintained, while others argue that these areas or corridors should be sold off to adjacent landowners.

Railway ROW are important because they allow the option of access for future uses, without the need to purchase land from private landowners. There appears to be no use for the ROW today. However, no one can predict the future and these ROW may have a future benefit. For example, there is currently a trucking company proposing to use an abandoned rail bed for trucking purposes instead of running the trucks on a highway. Depending on how this project works out, this type of project may become more common in the future.

With an increase in eco-tourism, these rights-of-way may also be useful for eco-tourism trails as many rail lines traverse through quite scenic territory. If these ROW are sold it could be difficult and expensive to reacquire this land if they are needed in the future.

Others argue that the ROW should be sold to adjacent landowners. Adjacent landowners are concerned that ROW will encourage people to use these areas for activities that will result in individuals trespassing on adjacent land or causing a nuisance. For landowners whose land holdings are split up by ROW, the purchase of these areas would resolve this issue.

There are a number of issues to be addressed in deciding the future direction on this issue. Policy makers will need to consider the trade-off between the potential future use of these rail beds, the potential cost to purchase this land, if the land is sold and purchased again in the future, and the concerns expressed by adjacent landowners. The other issues include the removal or retention of crossings, rails, ties, ballast, drainage structures, grade levelling, weed control or long term maintenance of the property.

This review should include lines that were abandoned long ago, abandoned recently and those that are being proposed to be abandoned. Then, legislation should be enacted to deal with the issues on either a provincial, municipal or individual rail line basis.

### **Recommendation**

The province, in conjunction with the municipalities, conduct a detailed review to determine the potential current and future uses for railway rights-of-way and develop a plan to preserve them where necessary. The province should also develop legislation to fairly deal with the removal of a rail line.

### **Contract Accountability**

The issue of accountability in existing DHT contracts is a public concern. Contract administration, enforcement, bonding and penalties are the factors that are a part of the

accountability concerns. There are concerns that contracts are not being sufficiently fulfilled, thus possibly adding extra costs to DHT.

### **Recommendation**

The province conduct an independent review of existing DHT contracts used for construction, maintenance and engineering contracting to the private sector to ensure the department is receiving value for money.

### **Privatization of Maintenance and Operation of Highways**

The ACRE Executive Committee requested that the Transportation Subcommittee look into what experience other provinces have with privatizing the preservation, maintenance and operation of highways. The subcommittee held conference call meetings with Alberta, Manitoba and British Columbia to gather information on their experiences.

In the discussion below maintenance refers to all activities related to preserving, maintaining and operating the highway system such as road repairs, snow removal, signage, striping etc. Levels of service refers to things like how long a sign is down, snow and ice removal response time, ride comfort etc.

#### **Alberta**

The subcommittee contacted Moh Lali, Director of Maintenance, Specifications and Traffic Engineering with the Technical Standards Branch of the Alberta Ministry of Transportation. The purpose was to review Alberta's experience with privatization of road maintenance in Alberta.

Alberta privatized road maintenance for all 15,500 km of their primary highway system in 1996. They tendered their maintenance activities to 30 different contract (maintenance) areas in the province.

The tenders/contracts used a combination of lump sum and progressive payments. Lump sum payments are made to cover fixed costs. Progressive payments are made based on the amount of actual work done by the contractor. The contracts are monitored based on historical estimates and on adherence to standards.

In the first phase the contracts were awarded for a five year time frame. Some contracts were extended by two or three years as the expiration of the contracts approached. This was done so that a more staggered approach to tendering could be undertaken.

About 80-85% of employees of the Ministry of Transportation affected by privatization were hired by the contractors who were the successful bidders. Wages and benefits offered by the contractors were comparable to what the employees had as public servants. Many of the remaining affected employees either retired or found other work. Severance pay for all affected employees was typically in the area of about 43 weeks of pay.

During the 2000-01 fiscal year the province took over responsibility for all 15,000 km of the secondary highway system that was being maintained by the municipalities. Government downloading without corresponding funding to the municipalities had become an issue. Taking over the secondary system and contracting it out also brought about efficiencies because in many

cases the contractors' equipment was located near where the municipalities' equipment was located.

In the initial phase of privatization Alberta estimates that their savings were in the range of five percent. After the initial contracts expired and were re-tendered the province estimates that savings increased to the 15-20% range. The costs of administering and policing the contracts are about 10% of the value of the contracts.

### **Manitoba**

The subcommittee contacted Lance Vigfusson, Director of Construction and Maintenance with Manitoba Transportation and Government Services. The purpose was to discuss Manitoba's review of privatization of road maintenance in Alberta and British Columbia.

Manitoba's recommended position was against privatization. The analysts indicated that any potential savings would be around the five percent range. They felt that the risk of reduced levels of service was too high to justify privatization and the level of service that could be maintained.

Manitoba found that Alberta's highways were, on average, about 12 years of age. In Manitoba the average age of their system was closer to 20 years. Savings from privatization can be very dependent on the age of the system. The older the system the less likely there will be savings of any significance.

Manitoba Transportation is organized into five regions and 67 maintenance areas, responsible for 13,200 km of highways and 6,000 km of gravel roads. Most of their routine maintenance is done in-house.

They estimate that 40-50% of their maintenance expenditures already go to the private sector. In addition, construction and some specialized engineering design work is contracted out to the private sector.

Manitoba has tried tendering out work in the past and found that the bids were coming in higher than the cost of doing the work in-house. As an example, one tender for maintenance in a northern area was bid at double the cost of doing the work in-house. They did enter into three or four maintenance agreements in the past but did not renew them because the level of service was unacceptable.

### **British Columbia**

The subcommittee talked with Bruce MacKay, Assistant to Project Director for Road and Bridge Maintenance Contract Renewal, of the British Columbia Ministry of Transportation. The purpose was to discuss the privatization of road maintenance in British Columbia.

B.C. started to privatize in 1988. They have about 700 maintenance activities that are or will be contracted out to 28 contract (maintenance) areas. Contracts were initially for three years. They were then extended to five years. The upcoming round of contracts will be for ten years and will result in B.C. having nothing else left to contract out.

B.C. has about 24,000 km of highways and 16,000 km of gravel roads. The average age of their pavement is about 12 years.

The tenders/contracts are basically a lump sum approach. There is a cap in place for emergency services but the Ministry will provide additional funding for emergency services if they deem it necessary.

They are moving toward an ISO 9000 approach with a statistical audit for quality control. They currently use maintenance standards to maintain levels of service and to monitor contracts. Their current experience is that about four percent of contractors fail to fulfill their obligations under the contract.

When B.C. moved toward privatization they had a succession plan so that all affected employees got jobs with the contractors. Wage levels for these employees are now generally higher than before but benefits packages vary considerably. They have gone from about 7,500 employees to about 900.

They cannot confirm whether there has been any savings associated with privatization or not but they think they are probably around the breakeven point, i.e. the point of indifference. They feel that over the long term costs are probably similar regardless of whether the work is done in-house or contracted out.

### **Summary of Findings**

Alberta thinks that savings associated with privatization are in the 15-20% range. Manitoba studied the issue and felt the risks associated with potential reductions to levels of service outweighed their estimated five percent savings. B.C. feels that over the long term there is probably no difference in costs regardless of whether it is done in-house or contracted out.

Another consideration is the *Agreement on Internal Trade 1995* (AIT). The AIT opens up bidding on government contracts over \$100,000 to contractors from any province. A private market for road maintenance in Saskatchewan would allow contractors from anywhere in Canada to bid on any tenders over \$100,000. This could result in Alberta contractors doing highways maintenance work in Saskatchewan, particularly along the Alberta/Saskatchewan border.

The AIT removes restrictions for bidding on government contracts. As such, restricting bidding to only Saskatchewan contractors would place the province in contravention of the agreement.

When analyzing privatization of road maintenance, value, risk and regulations must be considered. Savings associated with privatization appear to be inconclusive. Other considerations include levels of service and the age of the highway system. At this time, the subcommittee cannot recommend the privatization of maintenance and operation of highways.

## **VI GLOSSARY OF TERMS AND ACRONYMS**

ATPCCC –	Area Transportation Planning Committee Chairpersons Committee
ATPCs –	Area Transportation Planning Committees
CFDCs –	Community Futures Development Corporations
DHT –	Department of Highways and Transportation
GDP –	Gross Domestic Product
REDAs –	Regional Economic Development Authorities
ROW –	Rights-of-Way
SARM –	Saskatchewan Association of Rural Municipalities
STC –	Saskatchewan Transportation Company
SUMA –	Saskatchewan Urban Municipalities Association
TEU –	Tonne Equivalent Units
TMS –	Thin Membrane Surface
TPP –	Transportation Partnership Program

## VII BIBLIOGRAPHY

1. ACRE. Final Report of the Action Committee on the Rural Economy: Submitted to Government of Saskatchewan, March 2002.
2. Canadian Automobile Association. Brief to the Canadian Transportation Act Review Panel, January 2001.
3. Canadian Transportation Agency, Rail Infrastructure Directorate, Rail and Marine Branch. Transfer and Discontinuance of Railway Line Operations and Railway Track Determinations, 2001.
4. Government of Saskatchewan, SARM, SUMA. Parallel Process on Roads, Saskatchewan Road Impact Analysis, 1999.
5. Government of Saskatchewan. The Highways and Transportation Act 1997.
6. Logistics Marketing Services. Transportation Demand Model, Prepared for Saskatchewan Agriculture and Food, Saskatchewan Highways and Transportation and Saskatchewan Economic and Co-operative Development, August 2000.
7. Saskatchewan Highways and Transportation. Investing in Transportation A Strategy For Saskatchewan People, 1997.
8. Saskatchewan Highways and Transportation. A Guide to Saskatchewan Weights and Dimensions 2000, pamphlet.
9. Saskatchewan Highways and Transportation and Tourism Saskatchewan. New Signs of the Times.
10. Saskatchewan Transportation Company. Annual Report 2001.
11. South Dakota School of Mines and Technology. How Heavy Is Too Heavy For The Roads of South Dakota video, 1999.
12. Trucking Advisory Forum. Final Report, July 4, 2001.



## **APPENDIX I**

### **ACRE Transportation Subcommittee Members:**

David Sloan – Chairperson – Area Transportation Planning Committee’s Chairpersons Committee

Joan Corneil – Great River Lakes REDA

Wendy Smith – Carlton Trail REDA

David Marit – SARM

Ron Weik – Saskatchewan Wheat Pool

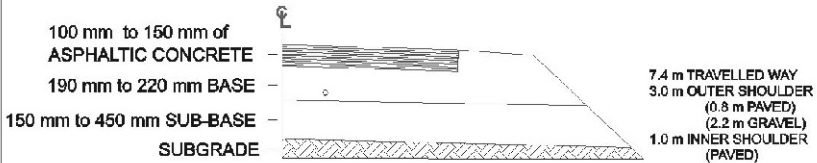
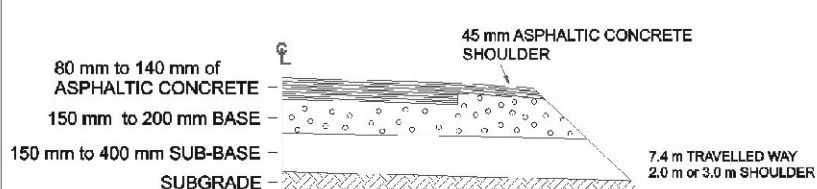
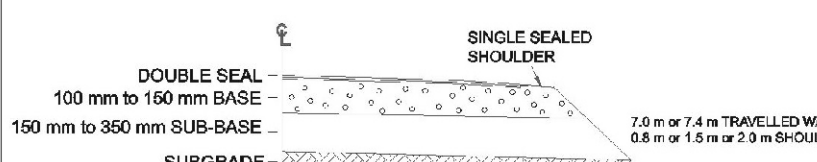
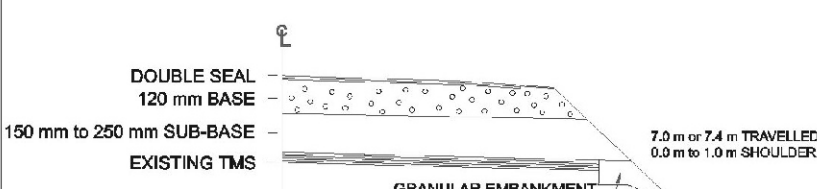
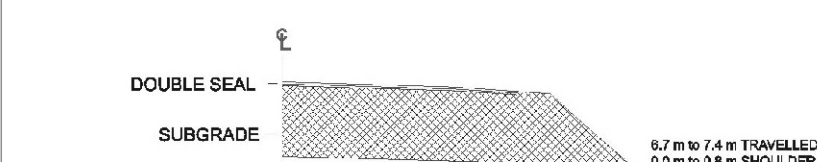
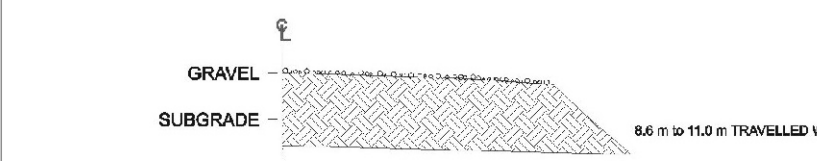
Wayne Bacon – Saskatchewan Canola Growers Association

### **Resource Personnel:**

Curtis Didkowski – Saskatchewan Highways and Transportation

Ron Eley – Saskatchewan Agriculture, Food and Rural Revitalization

## Appendix II

<b>TYPICAL RURAL HIGHWAY CROSS SECTIONS</b>	<b>TYPICAL RURAL HIGHWAY FACTS (2000 Costs)</b>
<p style="text-align: center;"><b>ASPHALT CONCRETE DIVIDED HIGHWAY</b> <i>(outer lane shown)</i></p> 	<p>Width of Travelled Way:.....7.4 m            Width of Each Shoulder:.....1.0 m inside and 3.0 m outside            Grading Cost:.....\$200,000/km per road            Surfacing Cost:.....\$350,000/km per road            Total Cost:<sup>1</sup>.....\$550,000/km per road            Surfacing Design Life:.....15 to 20 years            Annual Surface Preservation Cost:<sup>2</sup>\$500 per road            Resurfacing Cost:<sup>3</sup>.....\$70,000 to \$130,000/km            Weight Regime:.....Primary            Traffic Range:.....4 000 to 30 000 vehicles per day</p>
<p style="text-align: center;"><b>ASPHALT CONCRETE HIGHWAY</b></p> 	<p>Width of Travelled Way:.....7.4 m            Width of Each Shoulder:.....2.0 m or 3.0 m            Grading Cost:.....\$155,000/km to \$225,000/km            Surfacing Cost:.....\$170,000/km to \$310,000/km            Total Cost:<sup>1</sup>.....\$325,000/km to \$535,000/km            Surfacing Design Life:.....15 to 20 years            Annual Surface Preservation Cost:<sup>2</sup>\$1,000/km            Resurfacing Cost:<sup>3</sup>.....\$70,000 to \$130,000/km            Weight Regime:.....Primary            Traffic Range:.....&gt; 1 200 vehicles per day</p>
<p style="text-align: center;"><b>GRANULAR PAVEMENT HIGHWAY</b></p> 	<p>Width of Travelled Way:.....7.0 m or 7.4 m            Width of Each Shoulder:.....0.8 m or 1.5 m or 2.0 m            Grading Cost:.....\$80,000/km to \$155,000/km            Surfacing Cost:.....\$100,000/km to \$160,000/km            Total Cost:<sup>1</sup>.....\$180,000/km to \$315,000/km            Surfacing Design Life:.....15 years            Annual Surface Preservation Cost:<sup>2</sup>\$1,400/km            Resurfacing Cost:<sup>3</sup>.....\$110,000/km            Weight Regime:.....10 Month Primary or Secondary            Traffic Range:.....500 to 1 200 vehicles per day</p>
<p style="text-align: center;"><b>GRANULAR STRENGTHENED HIGHWAY</b></p> 	<p>Width of Travelled Way:.....7.0 m or 7.4 m            Width of Each Shoulder:.....0.0 m to 1.0 m            Grading Cost:.....N/A            Surfacing Cost:.....\$100,000/km to \$140,000/km            Total Cost:<sup>1</sup>.....\$100,000/km to \$140,000/km            Surfacing Design Life:.....15 years            Annual Surface Preservation Cost:<sup>2</sup>\$1,400/km            Resurfacing Cost:<sup>3</sup>.....\$110,000/km            Weight Regime:.....Secondary            Traffic Range:.....&lt; 700 vehicles per day</p>
<p style="text-align: center;"><b>THIN MEMBRANE SURFACE HIGHWAY</b> <i>(No Longer Constructed)</i></p> 	<p>Width of Travelled Way:.....6.7 m to 7.0 m            Width of Each Shoulder:.....0.0 m to 0.8 m            Grading Cost:.....N/A            Surfacing Cost:.....\$20,000/km            Total Cost:<sup>1</sup>.....\$90,000/km            Surfacing Design Life:.....N/A            Annual Surface Preservation Cost:<sup>2</sup>\$2,500 to \$4,000/km            Resurfacing Cost:.....N/A            Weight Regime:.....Secondary            Traffic Range:.....&lt; 500 vehicles per day</p>
<p style="text-align: center;"><b>GRAVEL HIGHWAY</b></p> 	<p>Width of Travelled Way:.....8.6 m to 11.0 m            Width of Each Shoulder:.....N/A            Grading Cost:.....\$40,000/km to \$140,000/km            Gravel Cost:.....\$10,000/km            Total Cost:<sup>1</sup>.....\$50,000/km to \$150,000/km            Surfacing Design Life:.....N/A            Annual Surface Preservation Cost:<sup>2</sup>\$1,800/km            Resurfacing Cost:<sup>3</sup>.....N/A            Weight Regime:.....Secondary            Traffic Range:.....&lt; 500 vehicles per day</p>

- Notes:**
- 1: Construction costs will vary depending on the type of soil, aggregate availability, right of way (land costs), site remoteness and environmental mitigation requirements.
  - 2: Annual surface preservation costs will vary depending annual moisture conditions, condition of existing road and traffic volume.
  - 3: Resurfacing costs will vary depending on the condition of existing surface, strength of subgrade and availability of materials.