10.

TRANSPORTATION AND PUBLIC WORKS - SNOW AND ICE CONTROL

BACKGROUND

- 10.1 The Department's snow and ice control operations promote the safe movement of vehicular traffic on paved highways and gravel roads by the removal of snow and ice buildup, as well as improved traction through the salting and sanding of driving surfaces. These activities are the responsibility of the District Operations Division of the Department.
- 10.2 There are over 26,000 kilometres of road in the Province of Nova Scotia, approximately one half of which are paved. The Department has classified the various sections of road, set service levels and established priorities for its snow and ice control program. The major winter maintenance activities performed by the Department are snow plowing, salting and sanding. Snow plowing generally begins when there is in excess of one inch of snow on a road. The Department uses about 240,000 tonnes of salt on 13,566 kilometres of roads each winter, and 53,000 cubic metres of sand on 10,383 kilometres of road. The Department maintains 430 units of equipment for winter operations and employs 823 equipment operators on a part and full-time basis.
- **10.3** For purposes of conducting the Department's highway programs, the Province is divided into four geographic districts (Central, Western, Northern, Eastern), which are each managed by a District Director. Each district is subdivided into three or four areas, each the responsibility of an Area Manager. Operations Supervisors and equipment operators work in each area under the Area Managers.
- **10.4** Snow and ice control activities cost approximately \$29 million in 1998-99. This is a significant reduction from 1991-92 when the Department spent about \$45 million in this area. The Department changed its organizational structure in 1993-94 and implemented other changes in subsequent years to achieve operational efficiencies and realize cost savings. The Department attributes \$11.0 million of its cost reductions to these initiatives, while the remaining \$5.0 million is the result of changes in accounting methods.

RESULTS IN BRIEF

10.5 The following are the principal observations from this audit.

Snow and Ice Control

- Operational planning for snow and ice control is performed on an annual basis. However, it is decentralized to the various regional areas of the Province and there are no longer-term, Province-wide strategic plans and no well-defined, measurable performance standards.
- In recent years, the Department has changed its organizational structure and methods of operation to significantly reduce costs while maintaining a consistent level of snow and ice control service. More formal analysis is required to assess additional cost-reduction alternatives identified by management.

- Snow and ice control operations are closely monitored through review of various financial, budgetary and operational reports. We recommend timely completion of the development of measurable performance standards to expand the capability of management to monitor operations.
- The Department acquires most goods and services in accordance with government procurement policies and at competitive prices.
- Recoveries for snow and ice control services provided to municipalities are billed and collected on a timely basis. A study was conducted in 1994-95 to determine the cost of providing winter and summer road maintenance services, and the rate charged to municipalities was based on this study. However, there is no similar study supporting the higher rate that the Province charges for roads built after 1995.
- The Department provides road maintenance services to 12 kilometres of private roads and to various roads to municipal landfill sites, but does not charge for these services.

Hiring of Trucks (80-20 Rule)

The hiring of trucks for road construction and maintenance does not comply with the spirit of the Government Procurement Policy and results in higher costs to the Department. The rates paid to members of the Truckers Association of Nova Scotia are above market rates and, in our view, represent a subsidy from government to truckers. The Department estimated the premium paid for 1998 was about \$4.0 million, and for the six years between 1993 and 1998 exceeded \$20.0 million. However, we were cautioned that the Department cannot be precise in these estimates, and that cost reductions may take a number of years to materialize if the hiring of trucks was open to competition. We expressed concern about the lack of formal analysis of the benefits and costs of paying above-market rates, and the lack of proper reporting of the subsidy in the Department's financial records.

AUDIT SCOPE

- 10.6 In the fall of 1999 we completed a broad-scope audit of the snow and ice control operations of the Department of Transportation and Public Works in accordance with Section 8 of the Auditor General Act. As part of this assignment, we also audited the Department's practices respecting the hiring of trucks for road construction and maintenance activities.
- 10.7 General objectives and criteria were developed to help us assess the adequacy of systems and practices used by the Department to provide for economy and efficiency in its operations. The objectives and criteria were discussed with management at the beginning of the audit. The audit criteria are outlined in Exhibit 10.1 on page 175. The objectives of the audit were to:
 - determine whether snow and ice control planning adequately addresses ways in which winter program goals can be achieved in a more economic and efficient manner, and whether the planning process sets specific expectations regarding the economic and efficient performance of the program;
 - assess whether snow and ice control activities are conducted in a manner which ensures winter program goals are pursued efficiently and economically;

- assess whether snow and ice control activities and outputs/outcomes are adequately measured, monitored and compared to winter program goals and objectives; and
- review the background, objectives, functioning and reporting practices related to the arrangement with the Truckers Association of Nova Scotia for the provision of trucking services for Department road construction and maintenance programs (i.e., the 80/20 Rule).
- **10.8** Our audit approach consisted of interviews with management and staff of the Department and an examination of processes, controls and related documents. Testing included an examination of a sample of expenditures relating to the purchase of equipment and supplies.

PRINCIPAL FINDINGS

Planning

- **10.9** Operational planning The Department prepared business plans for the 1998-99 and 1999-2000 fiscal years. The plans describe its mission and strategic goals, as well as define core business functions and priorities for each year. One of the goals outlined in the 1998-99 business plan was to enhance the value and safety of the transportation system. The Department's snow and ice control operations are integral to the safety of Nova Scotia's highway system.
- **10.10** Operational plans address budget allocations, plowing routes and equipment operator shift schedules, and are prepared, for the most part, by the Area Managers in the districts throughout the Province. The plans are developed through consultation with the Operations Supervisors, review of financial and operational results from the prior year, and the general knowledge and experience of the Area Managers.
- **10.11** In our view, there is a lack of system-wide, longer-term strategic planning. However, the Division has begun to look at some aspects of winter operations on a longer-term and Province-wide basis. A Department-wide review of equipment usage and staffing in each area was recently conducted, the usage and need for weather forecasting information was examined, and a review of operational bases is currently in progress.
- **10.12** *Reducing program costs* We examined the Department's attention to cost-reduction in its planning activities. We found that the District Operations Division has made several changes to the snow and ice control program in the last several years to make it more efficient and economic, including:
 - changing the plowing equipment to reduce the required number of operators of each
 from two to one, as well as to regulate the application rate of salt and sand more
 effectively;
 - wherever possible, replacing two pieces of equipment with one which can perform dual functions, or which can be used for both winter and summer maintenance programs;
 - using site-specific weather information to improve decisions made on the dispatching of winter equipment operators;
 - closing certain fleet services offices and providing mobile fleet maintenance services;
 and

- staffing for normal winter operations rather than peak storm periods, and bringing in additional staff only when needed.
- 10.13 Contracting with private operators for plowing and sanding services was tried in some areas in the past. Staff indicated that, at the time, it was found to be more cost-effective to provide the services using the Division's own resources. However, we noted that two provinces, Alberta and British Columbia, have realized costs savings from contracting out highway maintenance services to private industry. Alberta reported that, in 1996-97, it completed the outsourcing of its maintenance, design and construction of highways and bridges, and discontinued its own fleet, shop and store operations. As a result, the Province of Alberta reduced its transportation staff from approximately 1,800 to 816 employees, and transportation expenses declined from \$903 million to \$668 million. We were told that best practices in other jurisdictions have been and will continue to be reviewed for applicability in Nova Scotia.
- **10.14** *Performance standards* The Department has established general winter service levels based on the type and classification of roads. There are three service levels for plowing, three levels for salting and one level for sanding. Service levels are well communicated by the Department and documented for the reference of staff in the Division's Operator's Manual. We were unable to determine how these service levels were developed, but we understand that they have been in place for several decades.
- **10.15** General service levels are guidelines only, and their achievement is not readily measurable. The required rate of salt application to achieve service levels is documented. However, a time-frame for achieving each service level (e.g., hours after initial snowfall or ice buildup) is not specified because winter service is dependent on weather conditions. While District Operations Division measures salt usage, it does not determine whether or not service levels are achieved.
- 10.16 The development of winter performance standards is needed to set performance targets and ensure a reasonable and equitable level of service is provided across the Province. For example, in 1998-99 the Central District, with 3,325 kilometres of road, had the highest cost of summer and winter maintenance at about \$6,000 per kilometre. The average cost in the other three districts was only \$4,300 per kilometre. Based on this analysis, the extra cost of maintaining roads in the Central District is approximately \$5.7 million per year. We understand from Department officials that some of the extra cost is due to high historic levels of service which have been provided in the district and the Department cannot significantly reduce maintenance costs in this district without addressing the level and quality of service. We were informed that the quality of service is generally higher around the large urban areas of Halifax Regional Municipality and Cape Breton Regional Municipality because of the higher traffic volumes, as well as to approximate the level of service provided by the municipalities and expected by municipal residents. If the Department developed measurable performance standards and targets, it might be possible to isolate more specific reasons for apparent discrepancies in the cost of maintenance and take corrective action, if needed.
- **10.17** In 1998, a committee of Area Managers and Operations Supervisors was formed to review the current levels of service and develop winter performance standards. In its 1999-2000 Business Plan, the Department identified the need to develop performance standards which would clearly indicate the acceptable maintenance operations on all classes of roads. A draft winter service policy and procedures manual containing some performance standards has been developed and is currently under review. However, work remains to be done in the development of performance standards.

Monitoring and Evaluation

- **10.18** *Monitoring* The costs of winter operations are monitored through regular review of reports from the Department's financial management system, and through monthly cost forecasting procedures. Such monitoring is performed at the Area Manager, District Director and senior management levels.
- **10.19** Salaries and wages comprise about 25% of the Department's snow and ice control costs. The payroll system produces reports which show working hours, standby hours and staff utilization rates. We understand that the reports are used regularly at the district and area levels to monitor staff utilization, but are not used regularly at the senior management level. In our view, comparisons between districts and areas may indicate inefficient areas of operation and suggest where additional attention is warranted.
- **10.20** The Department is implementing a new information system module which will track service costs per kilometre of road, and allow cost accumulation and comparisons by individual routes. While some of this information is currently available, it must be obtained from a number of sources and thus is very time consuming to prepare. The new module will be implemented in four of fourteen areas by December 1999 and will be fully operational by December 2000. The new system should improve the monitoring and reporting of the Division's costs of winter operations.
- **10.21** Operational activities such as salting and sanding are also monitored through the preparation and review of weekly and bi-weekly usage reports. The reports provide comparisons of salt and sand volumes to the amounts used in the previous year and those used in other areas in the Province. These reports are reviewed by management at all levels. Failure to meet usage expectations is investigated by the Area Managers and corrective action is taken, if needed.
- **10.22** As noted above in paragraph 10.14, the established general winter service levels are guidelines only, and achievement is not readily measurable. Performance standards for winter operations have not yet been developed. Effective monitoring by management would be substantively aided by the setting of specific performance targets and a regular assessment of the level of achievement. We encourage the Division to complete its development and implementation of performance standards as quickly as possible.
- **10.23** *Evaluation* Management at all levels are responsible for the efficiency of their operations and held accountable for results. Performance evaluations are performed for all management levels in the Division, down to Operations Supervisors. However, equipment operators are not included in the yearly performance evaluation process.
- **10.24** During the evaluation process, achievement of goals, such as financial targets, is assessed and performance targets for the coming year are established. In our opinion, the establishment of winter performance standards would also serve to clarify and broaden individual performance goals and enhance accountability for the economy and efficiency of winter operations.

Operations

10.25 Organization - In 1994, significant organizational changes were implemented in the Department in response to recommendations of a 1993 management audit. The number of functional regions was reduced from seven to four, along with a reduction in the layers of supervision. More than 100 positions in the various regions were eliminated, and greater emphasis was placed on delegating authority to staff in the field. The positions of District Director and Area Manager were created at that time.

- **10.26** Each District Director is responsible for one of four Provincial districts. Each district is geographically divided into three or four areas, each of which is under the direction of an Area Manager. District Directors and Area Managers are located in the geographic area for which they are responsible, and day-to-day operating decisions are made at this level. Division management expressed the opinion that the reorganization resulted in more informed and timely decision making and improved customer service.
- 10.27 Human resources Winter equipment operators are unionized employees who work for the Department on either a full-time or a seasonal basis. These workers, while employed in snow and ice control operations, are required to work on a standby basis and thus be available on short notice; seven days per week for the entire 16-week winter season. Operators are paid for a minimum of 45 hours each week of the winter season and the majority of these employees are paid a standby rate of 100% of their regular pay for these hours. Depending on the severity of the winter season and the type of equipment operated, employees may actually work more or less than the 45 hours a week. Hours in excess of 45 per week are paid at the same rate as those under 45. In 1998-99, winter equipment operators were on standby (i.e, not working) approximately 39% of the time, at a cost of \$3.1 million. An Operations Supervisor may schedule an equipment operator to help with general maintenance work if there is no snow or ice to clear and there is work to do around the base.
- **10.28** As part of the Department reorganization in 1994, staffing of winter operations was reduced from the numbers needed during severe storm periods to the number of staff needed for normal winter conditions. This resulted in cost reductions.
- 10.29 As operators are paid even when they are not called out for snow and ice control operations, each area now hires the minimum number of operators required to meet specified service levels, and maintains a substitute list with at least five names on it to fill in for sick or absent operators and to meet the requirements of severe winter conditions. Each of these workers, including the substitutes, must be trained and licensed on Department equipment, so maintaining a full complement of substitute operators is a time consuming task. Based on our review, Area Managers strive to minimize their salary costs while having an adequate number of trained equipment operators available at all times during the winter season.
- **10.30** Equipment The Department owns most of the equipment necessary for snow and ice control operations. Equipment is usually replaced every six to twelve years, depending on the availability of funds. Each geographic area is charged for the equipment it uses for winter operations so the Department can track the cost of winter operations on a district and area basis. An hourly equipment charge-out rate is estimated at the beginning of each winter season, and later adjusted to represent the actual annual cost of repairs, maintenance and depreciation for equipment. These rates are also informally compared to private-sector equipment rental rates to determine if it remains cost-effective for the Department to own its equipment. We understand that in the Halifax area the Department hires two private sanding trucks and two private graders, but there was no formal analysis to compare the costs of rental to the costs of owning this equipment. We recommend that more formal attention be given to analysis of the costs and benefits of owning versus leasing snow and ice control equipment.
- **10.31** Information resources During the winter season, Area Managers must always be aware of the amount of salt used and in inventory. Weekly reports showing such information are prepared in each area to aid in the scheduling of purchases. Head Office prepares a bi-weekly Province-wide salt usage report which allows the Area Managers to compare their salt usage to other districts and areas.
- **10.32** Accurate, site-specific weather information is also critical to the snow and ice control operations. Current and forecasted conditions help to determine the nature and timing of services

required to keep roads clear or passable. Equipment operators are on standby and are only called in as necessary. Certain procedures, such as salting, are ineffective in certain weather conditions. Thus area staff need accurate information to determine the appropriate service to provide and the resources needed to do so.

- 10.33 The Department publicly tendered for weather forecasting services for the 1998-99 fiscal year. The lowest qualified bid was selected, but management indicated to us that experience from the 1999 winter season demonstrated that the forecasts were not sufficiently accurate. Department staff resorted to using other publically available resources to supplement the forecasts. The Department contracted for weather services from another company for the upcoming season, and is currently conducting an analysis to determine the benefits and costs of obtaining more expensive but higher quality forecasting services.
- **10.34** *Procurement* The Department purchases equipment and supplies for use in snow and ice control operations, and hires some operators and equipment under contract. Based on our examination, the Department complies with government procurement policies by publicly tendering for these goods and services.
- 10.35 The Department spent \$9.2 million on salt in the year ended March 31, 1999. Prior to 1997, the Department tendered for salt on an annual basis. However, the Department would receive only one bid each year because there is only one salt supplier in the Province. Consequently, the Department negotiated a three-year contract extension with the lone supplier in 1998. However, each Area Manager makes arrangements to hire trucks to pick up and deliver the salt to Department bases in the area. The trucks are paid rates negotiated with the Truckers Association of Nova Scotia. The Department has determined that these rates exceed those paid by municipalities, other provinces and private industry. This issue is discussed in greater detail in the section of this chapter beginning with paragraph 10.45.
- **10.36** In the 1999 winter season, the Department moved 30,000 tonnes of salt by barge from the supplier in Pugwash to the Department depot in Mulgrave, and then trucked the salt to various bases throughout Cape Breton. The Department estimates that it achieved an annual saving of \$300,000 by moving one half year's supply of salt to the Eastern District by barge. The Department uses about 240,000 tonnes of salt each year and may be able to realize further savings by shipping salt by sea to various other Provincial locations. We recommended that an analysis of the feasibility of expanding this initiative be performed.
- **10.37** The Department has strived to find other means of reducing its procurement costs. Often equipment tenders will be grouped together to attract lower bids. The Department also participates with other Maritime Provinces in joint tenders for the bulk supply of certain goods. Department staff estimated that Nova Scotia achieved savings of 15% to 20% on joint tenders costing the Province approximately \$1 million.

Municipal Recoveries

10.38 Service exchange - In accordance with the April 1, 1995 Provincial/Municipal Service Exchange initiative, the Province receives payments from municipalities for providing summer and winter maintenance services on 978 kilometres of Provincially-owned subdivision roads, in exchange for the Province taking over various services which were once the responsibility of municipalities. Formal agreements have been signed between the Province and various municipalities which specify the road services to be provided, the cost of service and the roads which are included. Staff of the Department of Housing and Municipal Affairs are responsible for collecting amounts due from the municipalities, but the contributions are recorded as recoveries of the Department of Transportation and Public Works.

- **10.39** Based on our examination, amounts due are billed on a timely basis and overdue amounts are followed-up promptly. In addition, a few municipalities have agreed to provide winter maintenance services on certain roads owned by the Province in exchange for the Department providing similar services on roads owned by the municipalities. This has enabled the Department and these municipalities to provide a more cost-effective service by establishing more efficient routes. We understand these arrangements are formalized by way of signed agreements.
- **10.40** In 1994-95, a study was performed to determine the average base cost of providing maintenance services on local roads (\$3,500 per kilometre), but the study has not been updated to determine the current actual cost of providing these services. In 1998-99, municipalities were billed an inflation adjusted cost of \$3,663 per kilometre (\$3,583,183 in total) for summer and winter maintenance of 978 kilometres of local roads.
- **10.41** However, the Department charges municipalities \$6,000 per kilometre for servicing local roads built after 1995. We could not determine how this rate was set. It appears from our review that the rate for newer roads may be in excess of the Department's cost to perform the services, but is also considerably less than what it would cost a municipality to conduct the services for itself. We also noted that the Department maintains some roads to municipal landfill sites at no cost to municipalities.
- **10.42** No contributions are received from the Halifax Regional Municipality because ownership and responsibility for maintenance of 546 kilometres of local roads were transferred to the Municipality on June 24, 1996.
- **10.43** *Private roads* The Department also provides summer and winter maintenance services on 12 kilometres of private roads (i.e., roads not owned by the Province or a municipality). However, Department officials could not provide us with information on the ownership of these roads or about who resides on them. In 1995, and again in 1998, the Department proposed a policy which eliminated maintenance services for these roads, but the policy has not been implemented.
- **10.44** We have two concerns with the provision of these services. The Department is not mandated to provide services to private individuals and the property owners are not billed for the cost of these services. We have been unable to determine the cost of providing these services but we understand that the roads are maintained to a high enough standard to accommodate the Department's heavy machinery. If the private owners were billed the municipal rate for new roads, the Department would recover an extra \$72,000.

Hiring of Trucks - 80-20 Rule

- **10.45** The majority of road construction in Nova Scotia has been performed by private contractors under contract to the Province. For a number of decades the government has followed the policy that at least 80% of all trucks hired for Department road construction contracts must be owned by independent operators working in the local area where the road is being built, and rates of pay must be equal to the amounts prescribed in the Department's Management Manual 23. The policy has been named the 80-20 Rule.
- **10.46** Prior to 1994, it was popularly believed that trucks were hired by local Department superintendents who, in many cases, were political appointees and who would hire truckers based on political affiliation. In 1994, the government transferred responsibility for dispatching trucks for road construction contracts to the various locals of the Truckers Association of Nova Scotia (TANS). There are currently 21 local TANS branches with a total membership of approximately 900.

- **10.47** The Department gave the dispatch responsibility to TANS with the understanding that:
 - hiring should be done on a rotation basis so all TANS members in an area have the opportunity to receive a relatively equal portion of work;
 - membership in TANS must be open to all truckers in the area;
 - there would be no involvement by the Department unless there was an indication that hiring is not done in a fair and equitable manner; and
 - bylaws of each TANS local had to be fair.
- **10.48** The Department has set the minimum truck rates which must be paid to truckers for road construction work. The 80-20 Rule does not formally apply to road maintenance contracts. However, in practice, if trucks are hired by the Department for maintenance work these rates of pay will be used.
- 10.49 The Department has conducted studies over the years and has determined that Nova Scotia generally pays higher trucking rates than other provinces, and that municipalities in Nova Scotia also pay less for trucking than does the Province. The Department has estimated that the 80-20 Rule increased direct road construction and maintenance costs by \$4.0 million in 1998. The Department also estimates that over \$20.0 million may have been saved over the six-year period from 1993 to 1998 if competitive trucking rates were paid. However, we were cautioned that the Department cannot be precise in these estimates, and that cost reductions may take a number of years to materialize if the 80-20 Rule was to be eliminated.
- **10.50** Prior to 1994, the 80-20 Rule rates were applied to the hauling of salt for the Department's winter operations. In 1994, the Department estimated that it was paying approximately 40% more for its trucking than if the work was tendered, and it was paying significantly more for trucking than municipalities. Consequently, the Department reduced its salt haul rates by 20%. This was estimated to save the Province \$800,000 each year. Management believes that it continues to pay a premium rate for salt trucking, compared to the rate it would pay if work was tendered.
- **10.51** The government published its *Policy on Government Procurement* on January 1, 1996. The policy was intended to create fair, open and transparent procurement by the government. The policy established a process to ensure that acquisition of goods and services is done in a manner which provides for a high degree of competition. The hiring of trucks under the 80-20 Rule for Department operations does not comply with the spirit of the Procurement Policy.
- 10.52 Some suggested benefits of maintaining the 80-20 Rule are that the above-market rates keep marginal operators going, increase economic activity in rural areas of the Province, bring some consistency to the road construction industry through use of defined rates, and "level the field" between small and large contractors. The Department can hire needed trucks faster as it is not required to tender for each service required. Costs of the 80-20 Rule include the additional funds required to construct and maintain highways, and the possible negative effect on quality of construction work as trucks and operators change regularly over the duration of a job.
- **10.53** Also, there is a significant amount of administration required by the Department to address 80-20 Rule issues. When the Department transferred dispatching responsibility to the association in 1994, it did so on the presumption that there would be no involvement by the Department unless there were indications that truck hiring was not being done in a fair and equitable manner. The Dispatch Manual compiled by TANS for its local branches notes "It is the County Executive who must police these (dispatch) systems to ensure proper conduct." However, since 1995 the

Department's involvement in administering the 80-20 rule has continued to absorb a significant amount of time, including that of Project Engineers, Construction Managers, District Directors and senior management. In 1996, the Department convened a committee with representatives from the Department and TANS to address the growing number of issues which were being raised. Three years later, the committee continues to meet monthly and consume the time of four Department employees; one of whom may spend much of the work year on matters related to the 80-20 Rule.

10.54 In our view, the 80-20 Rule provides a subsidy to TANS members. This is a matter of government policy, and we do not offer an opinion on it. There are a number of such subsidies provided by government (e.g., fuel tax rebates, economic development grants), and it is the responsibility of government to choose and design such programs to meet its objectives and strategic priorities. Our concerns are two-fold. First, there has been no quantitative analysis of the benefits and costs of the program. Without such analysis, it would be difficult to make knowledgeable decisions about the continued operation of the program and the possible use of alternative means of providing assistance (e.g., tax rebates, higher fuel subsidies).

10.55 Secondly, the current cost of the subsidy was estimated at \$4.0 million per year (on average, \$4,400 to each TANS member), but the cost of the subsidy is not discernible from the financial records of the Department. It is buried in the cost of road construction, and thus is not reported as a subsidy. We believe clearer reporting is needed for such expenditures.

CONCLUDING REMARKS

10.56 The Department has made significant changes in its organization and operations in recent years. Efficiencies and cost reductions have been achieved while maintaining a consistent level of snow and ice control service. The Department has considered numerous means of further reducing costs, and we encourage the Department to more formally analyze the cost effectiveness of some of the initiatives contemplated, and to make planning for snow and ice control operations more strategic and long-term.

Exhibit 10.1

AUDIT CRITERIA

Audit criteria are reasonable and attainable standards of performance and control, against which the adequacy of systems and practices can be assessed. They relate to the audit objectives developed for this assignment and are used to design the detailed audit tests and procedures.

The following criteria were used in our audit of the snow and ice control operations of the Department of Transportation and Public Works.

- Objective One (Planning) Annual planning should explore means of making program operations more efficient and economic, and should include the establishment of goals/objectives that relate to the efficiency and economy of program operations.
- Objective Two (Operations) Procurement should be conducted in an open, fair, efficient and competitive manner, in accordance with government procurement policies. Program goals should be pursued efficiently and economically. The Department should be organized in a manner which promotes efficiency and staff should obtain the information they need to do their work efficiently. Recoveries should be based on the cost of the services rendered and agreements with customers should be formally documented. Recoveries should be collected on a timely basis.
- Objective Three (Monitoring and Evaluation) Costs, activities and outputs/outcomes should be measured where practical, and reported to appropriate staff on a regular and timely basis. Actual results should be compared to plans and significant variances from plans should be analyzed and corrective action taken. Managers should be held accountable for the economy and efficiency of the operations for which they are responsible.
- Objective Four (80-20 Rule) There should be clear understanding and agreement of the rules of the program. There should be a full understanding of the benefits and costs of the program. There should be appropriate compliance with the procurement policies of government.

TRANSPORTATION AND PUBLIC WORKS' RESPONSE

The Department of Transportation and Public Works accepts the Snow and Ice audit, saving and excepting certain portions of the audit referring to the 80/20 Rule. Transportation and Public Works would like to acknowledge the fairness and professionalism of the Auditors and acknowledge the recommendations contained in the report. The Department will be taking steps to define and measure performance, as well as review the cost saving suggestions contained in the report.

With respect to the 80/20 Rule, the Department has difficulty in accepting the use of the word "subsidy". In TPW's view, a subsidy may be quantified while the exact effect of the 80-20 premium cannot. The Department acknowledges an overall premium above market rates is paid to the trucking industry. The amount, if any, is difficult, if not impossible, to define for any given situation, and indeed, at some haul distances, may be a reduction from prevailing market rates. The Department provided an overall estimate of the extent of this premium over a six year period. It was, and is, an estimate which varied from year to year based on overall work volume and individual contract haul distances. In our opinion, it cannot be accurately determined and as such cannot be reported as noted in Section 10 - 5 of the audit.

The 80-20 Rule and method of dispatch offer certain advantages to TPW and the Government including: an open and transparent method of hiring many independent small operators for large government contracts, ensuring security of supply of trucking services, levelling the playing field between large and small contractors and ensuring the availability of truckers throughout the province for the highway maintenance and construction industry.

The Department has negotiated the rates with the trucking industry and is committed to reviewing, monitoring and updating these rates on an ongoing basis. TPW acknowledges the concerns of the Auditor General's Office in regards to the premium. TPW has just completed an internal review of the trucking rates and have determined that there are inequities in the current rates and will be sitting down shortly to review the current rates with representatives of the trucking industry.