

## 1991, NATIONAL CAPITAL REGION GOODS MOVEMENT STUDY SUMMARY REPORT

### Executive Summary:

The National Capital Goods Movement Study had four main objectives:

1. Collect information on the travel patterns, trends and costs of goods movement in the National Capital Region (NCR).
2. Evaluate the effectiveness and effects of goods movement on the existing transportation network.
3. Evaluate the implications of changes to the existing transportation network, with regard to current and future goods movement operations.
4. Review the policies concerning the movement of goods in the NCR; in particular, those concerning restrictions on goods movement.

The study was conducted under the direction of a subcommittee of TRANS, a joint technical committee on transportation systems planning. The TRANS subcommittee was made up of representatives of the following governments:

- City of Ottawa, Transportation and Parking Branch
- Ville de Hull, Service du génie
- Regional Municipality of Ottawa-Carleton (RMOC), Transportation Planning and Operations Divisions
- Communauté régionale de l'Outaouais (CRO)
- Ministry of Transportation of Ontario, Transportation Demand Research Office
- Ministère des Transports du Québec, Direction du transport routier des marchandises
- National Capital Commission, Policy and Research Division

With the study's emphasis on providing "a clear *understanding* of goods movement operations in the National Capital Region", the four stated objectives can be considered in two ways: first, as collecting and interpreting qualitative and quantitative *information* on the nature of goods movement in the NCR; second, as summarizing and assessing goods movement *issues*, their implications and their *policy context*. Therefore, the study recommendations represent a point of departure for further examination of specific goods movement issues. Detailed information on the study process, analysis and findings is contained in the Summary Report, and the accompanying Technical Report and Technical Appendices.

A significant amount of qualitative and quantitative information was collected on urban goods movement in the NCR. Three methods of collecting data were used:

1. Detailed truck origin-destination surveys, to quantify the characteristics of goods movement.
2. Telephone interviews conducted among trucking managers, to gather information on their perceptions and problems on NCR urban goods movement issues.

3. Focus Group discussion sessions, held among truckers, industry association representatives, and police forces, to identify the problems and propose solutions.

Key characteristics of goods movement in the NCR are as follows:

- 153,000 goods movement truck trips are made daily, compared with 1,350,000 private vehicle trips (11%).
- 8.7 goods movement trips made by each truck daily, on average. For trucks operating entirely within the NCR, the average is 12.0 trips per day.
- Goods movement tends to be made within each region (the RMOC or the CRO).
- 4% of goods movement trips are made between the RMOC and the CRO, across the Ottawa River. Because of the central location of the interprovincial bridges, average speeds for goods movements across the Ottawa River are 10% lower than the NCR average (36kph compared with 40 kph). Interprovincial trip distances are 20 kilometers, compared with the NCR average of 10 kilometers.
- For every goods movement trip made to or from the Ottawa-Hull Central Areas, another trip passes through. Together, these represent 20% of all NCR goods movement trips.
- CRO has lower goods movement trip generation than RMOC.
- Industrial zones are high generators of goods movements.
- Central Area office / government employment are low generators of goods movements, as are residential areas.
- Most goods movements occur during the normal working day. The peak times for goods movements are just after the morning commuter peak, and just before the afternoon commuter peak.
- High frequency truck accident intersections rank high among the top general accident intersections.
- Truck travel has been growing at rates slightly higher than general traffic. This growth is likely to taper off in the long-term, but will be at least as high as general growth rates. By applying truck trip generation rates – developed as part of this study – to TRANS population and employment forecasts, a 25% increase in truck travel was estimated to occur by about the year 2011.
- The costs of goods movement operations are \$500 million annually, of which \$40 - \$50 million is attributable to travel time lost due to congestion.
- 15% of travel time in the commuter peak periods is attributable to congestion, at an annual cost of \$14 - \$18 million.

- 11% of travel time in the off-peak daytime hours is attributable to congestion, at an annual cost of \$25 - \$33 million.

Through the telephone interviews and Focus Group discussion sessions, several issues of interest to TRANS were analyzed. There were:

- Goods movement operations in the Ottawa-Hull Central Areas.
- Loading / unloading in the Ottawa-Hull Central Areas.
- Interprovincial travel.
- NCR truck routes.
- Seasonal load restrictions.
- Dangerous goods movement.
- Oversized / overweight loads.

On the basis of the analysis, the following recommendations were made:

1. Provide for new alternative truck routes bypassing the Ottawa Central Area, to reduce through trips and congestion.
2. Increase enforcement of on-street loading zones in the Central Areas, to free-up existing on-street spaces.
3. Enhance existing curbside management strategies in the Central Areas, to improve the management of curbside space.
4. Review and revise off-street loading facility by-laws, to ensure the adequacy of these facilities.
5. Ensure that the results of this study are explicitly considered in the planning for the interprovincial bridges, and ensure that future bridges are connected directly to the NCR freeway system, to improve interprovincial goods movement.
6. Summarize, and make available to local operators, the institutional, legal and financial requirements of operating within the NCR, but in both provinces.
7. To enhance the NCR truck route system, maximize the availability of alternative truck routes; reduce circuitry; and minimize or eliminate discontinuities.
8. Prepare and periodically update a truck route map for the entire NCR, to increase operator awareness.
9. Minimize discontinuities and consult operators, in the designation of seasonal load restrictions.
10. The need to improve facilities that are subject to seasonal load restrictions should be factored into the process that determines the priorities for facility rehabilitation.
11. Maintain current practice of not designing dangerous goods truck routes, until justification is demonstrated.

Another three recommendations address the need for communications:

12. Establish a JACPAT subcommittee on goods movement, with the goal of promoting uniformity in regulations.

13. Under JACPAT, establish an NCR Goods Movement forum, to establish lines of communication among operators and industry associations; police forces; and public agencies. Trucking operators should be encouraged to organize, to speak with one voice, and should be encouraged to participate actively in the forum.

14. TRANS should liaise with other technical organizations, to monitor developments in urban goods movement.