

TEMP-85-01



Energy
Ontario

**TEMP Year-end Report
Part 1: Conservation and
Marketing
Fiscal Year 1984/85**

Transportation
Energy
Management
Program



Ministry of
Transportation and
Communications

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TEMP Year-end Report

Part 1: Conservation and Marketing

Fiscal Year 1984/85

V. Soots
Manager
Transportation Energy Office

The Transportation Energy Management Program (TEMP) is a joint program of the Ministry of Transportation and Communications (MTC) and the Ministry of Energy (MENG) in which MTC is responsible for the program delivery of the utilization aspects of transportation energy.

The report was prepared by MTC's Transportation Energy Office to record TEMP's accomplishments during the past fiscal year.

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EXECUTIVE SUMMARY

The past fiscal year saw a reorganization of the Transportation Energy Management Program (TEMP) into two separate sections: Conservation and Marketing in one section, administered by the Transportation Energy Office, and Alternative Transportation Fuels (ATF) in the other, administered by the Automotive Technology and Systems Office.

The Conservation and Marketing section continued to promote energy conservation and use of available alternative fuels in both the private and public sectors. Activities were carried out in eight sub-programs with a total of 33 projects. Of these, ten were new initiatives and six were concluded during the year.

MUNICIPAL

The Municipal Program has continued to maintain direct contact with Ontario municipalities through the Municipal Transportation Energy Advisory Committee, and has continued to provide transportation energy management information to the municipalities by means of a quarterly newsletter and through responses to requests from municipal officials.

During the past year a demonstration of a fleet management information system was initiated in the City of Sudbury, and a study of energy-saving opportunities for smaller municipalities was undertaken.

It is estimated that during fiscal year 1984/85 municipal transportation energy management measures have resulted in the saving of 550 - 740 million litres of gasoline, and thereby retained \$180 - \$240 million in the provincial economy.

SHARE-A-RIDE

Share-A-Ride has continued to work to increase vehicle occupancy of commuter trips through the establishment of carpool and vanpool activities.

Growth in vanpool activities has shifted from employer-sponsored to owner-operated vanpools. There was a slight increase in number of employer-sponsored vanpools, to a total of 132, and a steady growth in

the number of owner-operated ones, bringing the estimated total to about 500. Share-A-Ride continued to provide carpool matching services to nine private and public sector employers.

Work continued on developing a ridesharing matching program for a micro-computer. The postal-code/geocode system was updated and expanded with the addition of about 10 500 new postal codes.

It is estimated that during FY 84/85 programs initiated by Share-A-Ride have resulted in energy savings of 15.7 million litres of gasoline, retention of \$4.8 million in the provincial economy, and removal of 5800 cars from the roads during commuting periods.

TRUCKSAVE

Trucksave has become the leader in North America in the marketing of fuel economy advice to the trucking industry. Its film "The Trucksave Edge" and its various publications are in demand throughout Canada and the United States.

During the past fiscal year the series of eight "Spec'ing" booklets was completed with the publication of the last two booklets in the series. A consultant's survey of the Trucksave program was completed and its findings were studied by the Trucksave Advisory Committee. The Committee forwarded a set of recommendations to improve the marketing of Trucksave.

Participation in the Trucksave Economy Challenge, the annual fuel efficiency driving competition for truckers, increased by 100% over last year.

It is estimated that during FY 84/85 Trucksave contributed to the saving of 80 million litres of fuel by the trucking industry, that resulted in the retention of \$28.7 million of capital in the provincial economy.

DRIVESAVE

DriveSave continued to market energy conservation to its three major target groups: light vehicle fleets, beginning drivers, and general licensed drivers. Input from the private sector was obtained through the DriveSave Fleet Advisory Committee.

Eleven DriveSave seminars for fleet managers were conducted. These were attended by over 150 fleet managers representing more than 125 vehicle fleets. DriveSave also co-sponsored a seminar on propane, natural gas and future alternative transportation fuels, which was attended by over 150 fleet managers.

Regular contact was maintained with driving schools and driver educators. A new series of fuel economy seminars for driver instructors was initiated.

A new pamphlet, "Fuel Economy for All Seasons," was created and distributed to over two million Ontario drivers. A series of four colour posters, each depicting a fuel-saving measure, was developed as a new marketing tool for DriveSave.

The DriveSave display was exhibited at the Canadian National Exhibition, Toronto International Auto Show, the Kortright Centre for Conservation, and a number of shopping malls in and around Toronto, as well as in Sudbury, London, and Ottawa.

In addition, over 80 000 new car dealership envelopes, containing DriveSave pamphlets and fuel economy calculators were distributed, and the "The DriveSave Zone" film has been shown on the community channels of over 20 Cable TV systems.

GOVERNMENT PROGRAMS

In FY 84/85, government programs were concentrated in two areas, energy management and contingency planning.

In Government Fleetsave, the energy management program for government ministries and agencies, TEMP organized and supervised a survey of conservation and substitution measures now in place throughout government fleets. Information gained in the survey was used for the development of terms of reference as the basis for determining achievements to date and the direction of future measures.

In the contingency area, TEMP supervised a survey of existing government transportation systems, produced guidelines and led ministry co-ordinators through the development of preliminary contingency plans for their own ministries.

ALTERNATIVE TRANSPORTATION FUELS: SUBSTITUTION MARKETING

The promotional emphasis of TEMP's ATF Substitution Marketing program began to shift from propane to natural gas for vehicles (NGV). With TEMP maintaining a "market support" function in propane, 10 000 new propane conversions brought the total number of propane vehicles in Ontario to about 60 000, and 580 million litres of gasoline displaced by propane resulted in the retention of \$100 million of capital in the provincial economy.

The ATF Substitution Marketing program organized (with DriveSave co-sponsorship) an ATF seminar for fleet administrators, revised and printed 5000 copies of the booklet, "Switching to Propane," and developed a new booklet, "Switching to NGV," of which 3000 copies were printed.

Manuscripts of informational booklets and pamphlets on all alternative fuels were produced. These will be printed during the next fiscal year.

TELECONFERENCING

The Teleconferencing Section continued its program to increase awareness and promote the use of teleconferencing as a substitute for business travel.

Over 4000 copies of informational material were distributed and 14 presentations on teleconferencing were given.

Assistance was provided in the establishment of a course on teleconferencing at Sheridan College in Oakville and several training sessions were held with various government departments.

An intensive one-day seminar on teleconferencing for new or potential users was held, with 75 delegates and 20 speakers participating.

Major reports on the state-of-the-art of teleconferencing and the status of Telework were initiated.

As marketing of teleconferencing is now pursued vigorously by the private sector in Ontario, the government's teleconferencing promotion through TEMP's Teleconferencing Section was discontinued at the end of FY 84/85.

DATA ANALYSIS

During the past year, all program planning functions of this section were incorporated into the regular management activities of the Transportation Energy Office, and the section became the Data Analysis section. Its activities consisted of continuing updating of TEMP's data base through the acquisition and monitoring of various statistical reports and publications, and the production, publication and distribution of the "Transportation Energy Data Report: Volume 3." In addition a project to determine the energy consumption trends of the Ontario automobile fleet, as reflected by highway vehicle speeds, was initiated.

FOREWORD

The Transportation Energy Management Program (TEMP) was created in 1978 in response to Ontario government's concern about the province's increasing dependence on imported oil, the uncertainty about future oil supplies, and Ontario's large oil bill. TEMP was aimed at reducing Ontario's oil consumption in the transportation sector by improving oil-use efficiency, reducing travel requirements, and introducing alternative fuels.

Today, eight years later, there does not seem to be a similar concern about Ontario's oil dependence, since oil supplies appear to be ample and there have been no oil shortages in North America for several years. Nevertheless, oil is still expensive and last year alone Ontario paid over \$7 billion to purchase oil from outside the province. At the same time, the world oil supply remains precariously dependent on volatile political situations far beyond our control, domestic conventional oil supplies are dwindling, and frontier supplies require expensive and hazardous recovery methods.

Clearly, energy remains a serious concern for Ontario; not only is a secure, economical supply of energy vital to our transportation system, but efficient use of energy is essential to all sectors of Ontario's industry in order that it may retain its trading share in an increasingly competitive world market. In this environment TEMP is doubly important. First, TEMP helps to reduce Ontario's oil dependence by reducing oil consumption and by facilitating the introduction of alternative transportation fuels. Second, TEMP assists Ontario industry to become more competitive through increased energy efficiency, and strengthens Ontario's economy by retaining capital within Ontario which otherwise would leave the province for the purchase of oil. It is estimated that over the past five years, TEMP measures have produced savings of about 2.5 billion litres of gasoline and diesel fuel, which has resulted in the retention of \$600 million within the provincial economy.

There is no direct data on the increased effectiveness of Ontario's industry due to TEMP measures, but there are several individual examples within various transportation applications that illustrate the contribution of energy efficiency to increased productivity. Particularly noteworthy is the emergence of a new propane conversion and dispensing

industry, with the creation of over 7 000 jobs, as a result of TEMP's initiatives for the introduction of propane as an alternative transportation fuel.

Administratively, TEMP is a joint program of the Ministry of Transportation and Communications and the Ministry of Energy. MTC is responsible for the program delivery, while the Ministry of Energy provides the policy direction and funding for direct operating expenses. Program planning and monitoring are carried out jointly by both Ministries. The program is co-ordinated with the private sector through a number of Advisory Committees that have been created within TEMP and which meet periodically.

TEMP's direct energy goals, as formulated by the Ministry of Energy in 1980, are:

- a 33% reduction in the fuel consumer per passenger-kilometre in passenger transportation by 1995 over 1980;
- a 20% reduction in the fuel consumed per tonne-kilometre in freight transportation by 1995 over 1980;
- a 10% improvement in energy efficiency in the Ontario government fleet operations by 1983 over 1980; and
- a 2% substitution of petroleum products by alternative fuels by 1985 and 10% by 1995.

The past fiscal year saw a reorganization of the Transportation Energy Management Program into two separate sections: Conservation and Marketing in one section, administered by the Transportation Energy Office, and Alternative Transportation Fuels (ATF) in the other, administered by the Automotive Technology and Systems Office.

The Conservation and Marketing Section continued to promote energy conservation and use of available alternative fuels in both the private and public sectors. Activities were carried out in eight sub-programs with a total of 33 projects. Of these, ten were new initiatives and six were concluded during the year.

The following chapters report on the results of these activities for the fiscal year 1984/85.

1/ THE MUNICIPAL PROGRAM

1.1/ Overview

The Municipal Program is conducted by the provincial government in co-operation with the Ontario municipalities. It entails the analysis of transportation energy usage, identification of conservation and energy management needs, development of appropriate measures to meet these needs, and the implementation of energy management programs based on the developed measures.

The implementation of energy management programs and measures is achieved through the supply of information to the municipalities, initiation of selected demonstrations, provision of advice and assistance to the municipalities, and through promotion.

During the past year a demonstration of a fleet management information system was initiated in the City of Sudbury, and a study of energy-saving opportunities for smaller municipalities was undertaken.

Ongoing direct contact with the municipalities is maintained through a Municipal Transportation Energy Advisory Committee (MTEAC). Information is disseminated to the municipalities by means of a quarterly newsletter, and through responses to direct requests from municipal officials.

Although exact figures showing the total energy savings stemming from the Municipal Program are difficult to produce, approximate numbers can be generated using various estimating techniques. For the fiscal year (FY) 1984-85, estimated total energy savings are 560 to 740 million litres of gasoline, while the dollar savings are \$280 million to \$370 million at 50¢/L. The amount retained in the provincial economy is \$182 million to \$241 million. The Municipal Program's budget represents less than 0.05% of dollar energy savings achieved. Therefore, for every dollar invested by the Municipal Program, \$1,880 to \$2,418 are retained in the provincial economy.

During FY 1984-85, the Municipal Program received a total of 220 inquiries, which included 60 letters, 135 telephone calls and 25 personal

inquiries. The requests for documents and information totalled 228, which included nine requests for the "Planning Smarter/Driving Smoother" film.

A total of approximately 14 000 documents were printed, which included 4000 summary booklets and 10 000 "Planning Smarter/Driving Smoother" quiz pamphlets.

1.2/ Project Reports

1.2.1/ Municipal Transportation Energy Advisory Committee (MTEAC) (33177)

Project Objective

To provide advice and guidance on how the province can best assist and encourage municipalities in developing and implementing energy conservation practices in the transportation sector.

Activities included:

- quarterly meetings with the full MTEAC committee;
- monthly meetings with the executive committee;
- developing a comprehensive list of projects for the next two years;
- continuing to advise Ontario municipalities on the initiation, development and implementation of energy programs; and
- continuing to assist TEMP staff in program guidance and project direction.

Results and Achievements

The committee formed an executive committee to act as a working sub-committee, replaced six past members with new members, conducted four full MTEAC meetings, and two executive committee meetings.

Issues discussed by the two committees included:

- Sudbury Fleet Management Information System;
- MTATES implementation;
- Ottawa-Carleton implementation;
- TEAM distribution and future updating;

- driver training implementation; and
- new projects and program direction.

Starting Date: February 1980

Completion Date Ongoing

1.2.2/ Municipal Fleet Management Information System (33412)

Project Objective

To develop a computerized fleet management information system that can be utilized by Ontario municipalities having a fleet of 50 vehicles or more.

Activities

Following a comprehensive review of the City of Sudbury's operations and procedures in their four fleets (Public Works, Public Transit, Parks and Recreation and Fire) as well as the needs of other Ontario municipalities, it was decided to develop a stand-alone microcomputer-based Municipal Fleet Management Information System (MFMIS). This system would meet the needs of a wide range of Ontario municipalities.

Results and Achievements

The system is now developed and has been designed to run on MS-DOS and UNIX operating systems, utilizing an IBM PC/AT.

The features of the MFMIS include:

- monitoring of vehicles and workshop products;
- generation of preventive maintenance schedules;
- monitoring of vehicle fuel consumption;
- vehicle cost tracking;
- a life history of individual vehicles;
- vehicle utilization monitoring;
- a repair audit trail, providing the ability to monitor repairs by component; and
- provision for transferring data from automated fuelling facilities.

The Sudbury MFMIS has now been implemented in the Public Works fleet in Sudbury. User training is complete and on-line operation will begin May 1, 1985. Subsequent implementation in the other three fleets will

begin shortly. Sudbury expects an annual saving of \$300,000. If only 20% of Ontario's 840 municipalities implement the MFMIS, the potential saving could be around \$50 million annually.

Starting Date: November 1983

Completion Date: July 1985

1.2.3/ MTEAC Newsletter (33339)

Project Objective

To keep municipalities abreast of contemporary energy conservation developments in the transportation sector by distributing a quarterly newsletter to 5000 subscribers.

Activities included:

- researching various energy and transportation-related articles for possible inclusion in the newsletter;
- writing and editing articles for the newsletter; and
- printing and distributing four issues to approximately 5000 readers per issue.

Results and Achievements

- continued to provide information to Ontario municipalities on energy and transportation through the newsletter;
- distributed over 20 000 newsletters;
- maintained a consistent two-way communications link with readers;
- newsletter generated requests for more in-depth information;
- printed feature articles which included:
 - "Fuel Consumption at Intersections"
 - "Propane Fuelling Facilities Siting Guidelines"
 - "Energy Conservation Through Land Use Planning"
 - "Alternative Work Schedules"
 - "Used Lube Oil Recycling"
 - "Street Lighting Efficiency"
 - "Propane Survey"

Starting Date: January 1981

Completion Date: Ongoing

1.2.4/ Transportation Energy Conservation -- Guidelines for Small and Rural Municipalities (33451)

Project Objective

To produce a guide for municipal officials of small and/or rural municipalities showing that the opportunity for energy conservation in municipal services does exist, and to highlight those opportunities in a fashion understandable by both the local elected representatives and the professional staff.

Activities:

- researching and developing the required information, using four or five case municipalities;
- developing an introductory pamphlet highlighting the findings of the research stage; and
- producing the final document which will show what opportunities exist for energy conservation in the transportation end of municipal services.

Results and Achievements

This project was initiated by providing a detailed study design. The first phase was completed by selecting the appropriate municipalities and collecting the necessary information on local fuel consumption since 1960.

The second phase, which involves the analysis and interpretation of the collected data and the development of opportunities to reduce fuel demand was started.

The remainder of this project will be completed in FY 85/86.

Starting Date: February 1985

Completion Date: July 1985

2/ SHARE-A-RIDE

2.1/ Overview

Share-A-Ride continued to work successfully to increase vehicle occupancy of commuter trips through the establishment of carpool and vanpool activities in order to make better use of the existing road network and to save energy.

Share-A-Ride's activities were focussed in two areas:

- promotion and assistance; and
- research and development.

The scope of activities included employer programs, owner-operator vanpools, carpool parking lots, public awareness, organizing a conference on ridesharing and developing area-wide ridesharing computerized matching capabilities.

Growth in vanpooling has shifted from employer-sponsored to owner-operated vanpools. Although it remains difficult to get employers to implement vanpool programs, there was a slight increase in the number of employer-sponsored vanpools, bringing the total to 132. The number of owner-operated vanpools continued to increase steadily, due in part to increased confidence of individuals in the viability of the concept and Share-A-Ride's promotional campaign. Share-A-Ride continued to provide carpool matching services to nine private and public sector employers. Generally, employers are most interested in ridesharing programs when the programs are a solution to a relocation or parking problem.

A considerable amount of effort was directed into development activities. Work continued on developing a ride-sharing matching capability on a microcomputer. The postal-code/geocode system was updated and expanded in the Metro Toronto area, with approximately 10 500 postal codes added to the file.

Major achievements for Share-A-Ride in 1984/85 include:

- completion of the ridesharing matching system;

- energy savings of 15.7 million litres of gasoline from programs initiated by Share-A-Ride (\$4.8 million has been retained in the provincial economy because of these savings); and
- 5800 cars have been removed from the roadways during commuting periods as a result of programs initiated by Share-A-Ride.

2.2/ Project Reports

2.2.1/ Marketing Employer-Sponsored Ridesharing (33118)

Project Objective

To reduce the number of low-occupancy private vehicles for commuting through the substitution of carpools and vanpools.

Activities

The activities in this project include:

- Promotion, assistance and ongoing support of employer-based carpooling and vanpooling programs, entailing:
 - distributing detailed promotional material;
 - making introductory presentations;
 - providing assistance in conducting feasibility studies;
 - supplying carpool matching services;
 - providing ongoing support to vanpool program administration; and
 - maintaining an updated inventory of employer vanpool programs.
- Public awareness, which entails:
 - disseminating informational material to media, libraries, MPPs, municipalities and individuals; and
 - providing publicity for ridesharing by participating with displays at shows and by advertising in newspapers.
- Promotion of carpool parking lots, which entails:
 - providing information on carpool lots and their locations through brochures, press releases and by maintaining an inventory of these parking lots.
- Working with the Canadian Association of Van Pool Operators, which entails:
 - participation on the Board of Directors, and

- organizing the International Commuter Transportation Conference in April, taking a leadership role in Canadian program development, and providing information about ridesharing.
- Municipalities, which entails:
 - co-operate with municipalities in developments related to ride-sharing centres.
- Publications update, which entails:
 - updating carpool and vanpool brochures
- Postal-code/geocode conversion, which entails:
 - conversion of postal codes to the grid co-ordinate system.

Results and Achievements

In the promotion of vanpooling and carpooling:

- 40 employers received detailed promotional material;
- 10 employers received introductory presentations; and
- 5 employers received assistance in conducting feasibility studies.

There was a net gain of three employer-sponsored vanpools, bringing the total to 132 operating at 12 companies.

DIRECT SAVINGS: Gasoline - 2.6 million litres annually
Roadspace - 1000 cars removed.

It is unknown how many privately-operated vanpools were formed last year. It is estimated that there are about 400 to 600 of this type of vanpool in Ontario and Share-A-Ride has assisted in the formation of many of these vanpools.

DIRECT SAVINGS: Gasoline - 8 million litres annually
Roadspace - 3000 cars removed.

Share-A-Ride continued to provide computerized carpool matching assistance. Two new employers were offered carpool matching assistance.

(The number of employers offering an ongoing service is five.) A total of 3700 employees have access to carpool matching. The total number of employees registered is 1100.

DIRECT SAVINGS: Gasoline - 0.4 million litres annually
Roadspace - 185 cars removed.

Share-A-Ride printed and distributed a brochure indicating carpool parking lot locations in eastern and central Ontario, issued a press release, and updated the carpool parking lot inventory.

Currently, there are a total of 39 signed lots in Ontario. These lots provide a total of 2268 spaces. Monitoring of these lots indicates an overall occupancy of 61%.

DIRECT SAVINGS: Gasoline - 4.2 million litres annually
Roadspace - 1400 cars removed.

A consultant was hired for the conversion of some 10 500 postal codes to grid co-ordinates in Metro Toronto and area. This brings the total number of converted postal codes in Ontario to 140 000.

Starting Date: April 1977

Completion Date: Ongoing

2.2.2/ Government Employee Carpooling (33298)

Project Objective:

To provide an ongoing carpool matching service to employees working at large government locations in order to influence them away from low occupancy private vehicle commuting.

Activities

Share-A-Ride provided ongoing matching service and annual updates to the government locations involved. The services were promoted to two new locations.

bResults and Achievements

A total of four locations are offering ongoing carpool matching assistance. A total of 4525 employees have access to the matching services. A total of 655 employees are registered in the systems.

DIRECT SAVINGS: Gasoline - 0.5 million litres annually
Roadspace - 225 cars removed.

Starting Date: April 1982

Completion Date: Ongoing

2.2.3/ Share-A-Ride Newsletter (33338)

Project Objective

To promote and provide information about the concept, benefits and implementation of ridesharing to large employers, municipalities and the media through a quarterly newsletter.

Activities

Activities associated with the newsletter includes research, writing, printing and distribution. Also, a mailing list of ridesharing contacts is kept up-to-date. The newsletter highlights Share-A-Ride and TEMP activities, specific employer-sponsored programs, and issues and concerns in ridesharing. In addition, it promotes the activities of the Canadian Association of Van Pool Operators. The mailing list includes addresses of company executives, company contacts, municipalities, media, MPPs, ridesharing co-ordinators and individuals.

Results and Achievements

Four newsletters were prepared, with 2800 of each distributed. The newsletter disseminated information about ridesharing and generated contacts. It has been instrumental in making Share-A-Ride the focus of ridesharing activities within the province.

Starting Date: April 1983

Completion Date: March 1985

2.2.4/ Development of an Area-wide Matching Program on a Microcomputer (33387)

Project Objective

To develop a ridesharing matching software package for use on a micro-computer.

Activities

The project involved (with the assistance of a consultant) designing, programming, testing and documenting a computerized ridesharing matching system. The system has the capability to provide carpool matching and information on vanpools, transit and carpool parking lots. It incorporates home and work locations into the matching process and utilizes postal codes to determine spatial locations.

Results and Achievements

Version 1 of the system has been completed and is operational on the microcomputer. Conversion of ridesharing matching data from the mainframe to the microsystem was initiated. The system is capable of incorporating people interested in ridesharing into one data base, regardless of where they work or live. Compared to the mainframe, the microcomputer offers a dedicated system, transferability and lower operating costs. While the system is operational and documented, enhancements (relating to speed of operation in the context of processing and printing) will have to be addressed.

Starting Date: January 1984

Completion Date: March 1985

3/ TRUCKSAVE

3.1/ Overview

Trucksave is now the leader in North America in the marketing of fuel economy advice to the trucking industry.

The increase in requests for publications, attendance at trade shows, seminars and association meetings, plus the demand throughout Canada and the United States for the Trucksave film, "The Trucksave Edge," proves that the content of Trucksave material is respected.

One of the objectives of the Trucksave program is to produce informational material that will advise prospective equipment purchasers on how to plan their purchase and operation so that they can reduce their fuel costs. Trucksave has been successful in achieving this objective, because now manufacturers, who have recognized that purchasers are more selective, are designing new fuel-efficient vehicles and engines, and the completed set of "Spec'ing" booklets has been in great demand.

The Fuel Economy Challenge doubled again in size this year and a new route was added. The exposure of this event peaked at the trade show, "Truckcan '84", where the awards ceremony was held and a very successful Trucksave booth was manned for three days.

A consultant's survey of the Trucksave program was completed. The Trucksave Advisory Committee studied the report in detail and then produced a proposed working report on ways of improving the marketing of Trucksave. These will be put into effect during 1985/86.

It is estimated that during 1984, about 80 million litres of fuel were saved by the trucking industry, resulting in the retention of \$28.7 million of capital in the provincial economy. Trucksave made a considerable contribution toward these savings.

3.2/ Project Reports

3.2.1/ Trucksave Fleet Advisory Committee (33106)

Project Objective

To maintain direct liaison with the trucking industry, and to provide information on fuel-saving measures and techniques to the trucking industry.

To review and critique existing Trucksave projects and activities, and to generate new fuel-saving measures and techniques for truckers.

Activities included:

- monthly meetings of the committee;
- a critique of ongoing Trucksave activities and review of new material;
- generation of proposals for new measures and activities for truck fuel economy; and
- dissemination of Trucksave material at trade shows and truck stops.

Results and Achievements

Ten committee meetings were held. Two members resigned and three new industry representatives accepted invitations to serve on the committee.

Trucksave staff manned a booth at four trade shows (Hutchinson, Truckcan '84, School Bus, Owner Operators) and arranged for Trucksave publications to be available at a number of association meetings and seminars.

Arranged for Northwestern, Northern and Southwestern regions to be responsible for the restocking of the designated truck stop display boards.

The film, "The Trucksave Edge," was premiered. This event was opened by the Minister of Transportation and Communications and the Minister of Energy, and attended by about 150 people from the trucking industry.

Starting Date: August 1979

Completion Date: Ongoing

3.2.2/ Fuel Efficient "Spec'ing" Manuals (33202)

Project Objective

To complete and distribute manuals #5 and #6, as part of the eight manual series that identifies cost-effective and fuel-efficient options that should be specified when ordering a new truck.

Activities include:

- production of manuals, including research, design, review and printing; and
- distribution of manuals.

Results and Achievements

Manuals #5 and #6 were completed, and 2500 copies of each were distributed.

These completed manuals are now available in a special folder that holds all eight manuals. Due to the demand, the manual will be revised and reprinted in 1985/86. Approximately 96 000 manuals have been distributed since the first issue in 1982.

Starting Date: January 1981

Completion Date: January 1985

3.2.3/ Fuel Economy Challenge '84 (33299)

Project Objective

To promote and demonstrate the importance of fuel cost-saving measures in Ontario's trucking industry, by holding a high profile Fuel Economy Challenge, to be run jointly by the private sector and government.

Activities included:

- organizing and conducting a fuel efficiency competition for truckers, i.e., organizing publicity, route preparation, registration of competitors, monitoring the competition and recording the results;
- developing a computer program to record the data and calculate the results; and
- collecting prize money and conducting an awards ceremony.

Results and Achievements

The Fuel Economy Challenge was held with 243 entries who competed in 26 vehicle classifications over three routes, two southern east-west routes, and one northern north-south route. The northern route was added to the competition this year.

The 243 entries constituted a 100% increase over 1983.

Then trucking industry donated \$15,000 for prizes. At the awards ceremony held at "Truckcan '84," 66 prizes were awarded to the winners.

The results in all truck categories were published in a report. The event received excellent media coverage in supply and trade magazines, and many requests to repeat the Challenge in 1985 were received.

The main result of the Challenge is an increased awareness of Trucksave and fuel economy in the trucking industry.

Starting Date: April 1984

Completion Date: December 1984

3.2.4/ Trucksave Market Assessment (33371)

Project Objective

To assess the effectiveness of the existing Trucksave program, and to identify measures necessary to correct any shortcomings identified in the assessment.

Activities included:

- survey of the trucking industry to obtain data on their awareness of Trucksave and the effectiveness of Trucksave activities;
- analysis of the results and the effectiveness of the assessment to identify corrective measures, if needed; and
- production of a report on the results of the assessment.

Results and Achievements

A consultant, retained in the past fiscal year to conduct the assessment, completed the survey of the trucking industry, carried out the analysis of the survey results and arrived at an assessment of Trucksave.

A draft report was produced by the consultant, reviewed and commented upon by the Fleet Advisory Committee.

A final report was submitted. It identified the following needs:

- marketing the Trucksave program to top management;
- greater liaison with the trucking industry;
- increased promotion of current material; and
- a need for a project involved with driver training.

The report also concluded that Trucksave material is well respected.

Starting Date: February 1984

Completion Date: August 1984

3.2.5/ Implementation of Market Assessment Findings (33396)

Project Objective

To develop a plan for the implementation of the findings of the Trucksave Marketing Assessment

This project was not initiated.

3.2.6/ Revision, Reprinting and Dissemination of Trucksave Publications (33398)

Project Objective

To continue supplying the trucking industry's demand for Trucksave publications.

Activities:

- review of all existing Trucksave publications to determine the need for revisions and updates;
- revision of publications and other material;
- reprinting of publications and other material; and

- distributing Trucksave material as requested.

Results and Achievements

Started inventory records of all publications that were requested and sent out.

Wrote and published two major articles on truck maintenance in the U.S. magazine, "Fleet Equipment", and many minor articles publicizing Trucksave activities and publications in trade magazines.

Reprinted the following Trucksave material:

Maintenance booklet	2 000
"Idling" brochure	3 000
"The Trucksave Edge" brochure	5 000
Placemats	250 000
Trucksave bags	5 000
"Trucksave Edge" films and videos	

Starting Date: April 1984

Completion Date: March 1985

3.2.7/ Guide to Energy Savings Through Computerized Record-Keeping (33397)

Project Objective

To make the trucking industry aware of the state-of-the-art programs and hardware available for the keeping of vehicle records, and to inform the industry of the energy and cost savings possible through good record-keeping.

Activities:

- A survey of the industry to determine what the average (line-haul and local cartage) fleet manager requires to know about his vehicle costs, maintenance and fuel consumption.
- A survey and collection of data available on computerized record-keeping equipment and programs.

- Production of a booklet advising the trucking industry on what can and should be recorded, and suggesting what available equipment and programs could be used for this purpose.

Results and Achievements

A consultant was hired to carry out the project.

A preliminary report outlining the approach to be taken was prepared by the consultant and presented to the Fleet Advisory Committee.

Starting Date January 1985

Completion Date: June 1985

3.2.8/ Urban Fleets: Fuel-Saving Techniques and Marketing Those Techniques (33401/33485)

Project Objective

To prepare material which provides information on those fuel-saving techniques developed by Trucksave which can apply to urban fleets, and to prepare a plan for the marketing of the selected techniques to the urban fleet market.

Activities

- Investigation of urban fleets' operating methods to determine how these differ from line-haul operations, particularly with respect to fuel consumption.
- Development of guidelines for the reduction of fuel consumption in urban fleet operations.
- Publication of material to explain the fuel economy techniques and their implementation.
- Development of a marketing strategy to reach the large and small urban fleet operators with the Trucksave fuel-saving techniques.

Results and Achievements

Due to their interdependence, the two projects #33401 and #33485 were merged into one unit. A consultant was hired to carry out both under one contract.

The consultant designed a study approach and began the fleet survey with a questionnaire to dump truck operators.

The consultant presented the study approach and the preliminary results of the fleet survey to the DriveSave and Trucksave Fleet Advisory Committees.

Starting Date: January 1985

Completion Date: July 1985

3.2.9 Optimized Routing (33399)

Project Objective

To inform the Ontario trucking industry of potential fuel savings that may be achieved through the use of computerized routing systems.

Activities:

- A survey of currently available computerized routing systems equipment and programs;
- Production of a booklet advising the trucking industry of available routing systems equipment and programs, with guidelines on how to use these programs and in what applications they are suitable.
- Publicizing the energy savings that Ontario trucking companies have achieved through computerized routing systems.

Results and Achievements

A consultant was hired and the project was initiated.

Starting Date: March 1985

Completion Date: September 1985

4/ DRIVESAVE

4.1/ Overview

DriveSave had another very active and productive year in FY 84/85, continuing with activities successful in the past, as well as some new items. New initiatives included the production and distribution of four DriveSave posters, a new series of fuel economy seminars, and participation at several exhibitions for the first time. These initiatives were part of the total range of marketing efforts directed towards DriveSave's three major target groups: light vehicle fleets, beginner drivers and general licensed drivers.

Light Vehicle Fleets

The DriveSave Fleet Advisory Committee (FAC) continued with a shift to an alternate-month meeting schedule. The committee membership includes representation from:

- a number of large- and medium-sized private sector fleets;
- two large utility fleets;
- the Ontario Safety League; and
- the Propane Gas Association of Canada.

The FAC, in addition to providing an industry-government forum for information exchange and specific input and response to the DriveSave program, was involved in:

- sponsorship of a seminar, attended by over 150 fleet managers, which dealt with both propane and natural gas for vehicles, as well as other future transportation fuels, and which included equipment displays by major propane and natural gas companies; and
- presentations by several committee member detailing the successful fuel economy programs in their respective firms.

The successful DriveSave fleet manager seminars were continued in FY 84/85 with over 170 attendees, representing more than 125 vehicle fleets, at 11 seminars. Some of the companies and organizations represented included: Canpar, Hallmark Cards, Metro Toronto Works and Parks Departments, Transport Canada, Canada Post, Laidlaw Transport, Canada Building Materials and Noranda.

Beginner Drivers

Activities undertaken to help ensure that Ontario's new drivers learn to drive fuel-efficiently included a continuation of regular contact with private driving schools and high school driver educators through school boards. Additional copies of "The DriveSave Zone" film were supplied to high schools as required.

Of the 63 school boards which offer driver education, 55 use DriveSave materials in their classes. This number is expected to increase when the new driver education curriculum is introduced in September 1985. It contains extensive fuel economy material. Approximately 250 of the new DriveSave posters have also been supplied to school boards and private driving schools.

A new series of fuel economy seminars for driver instructors was initiated in Toronto in FY 84/85. The first seminar was very successful with 50 driver instructors from both private driving schools and high schools in attendance, whose respective schools train 28 000 beginner drivers annually.

General Licensed Drivers

A new form of pamphlet was created, which contained fuel economy information for all seasons. It combined the fall/winter and spring/summer editions. The new pamphlet, "Fuel Economy for All Seasons," was distributed to over two million Ontario drivers through the driver's license renewal mailings conducted by the MTC.

Another totally new marketing tool developed in FY 84/85 was a series of four colour posters which depict important fuel-saving measures. The four topics -- "Plan Trips - Save Fuel Dollars," "Inflation Saves - Give Your Tires some Air," "Tune Up" and "Idling Gets You Nowhere Fast" -- are briefly described on the posters. The posters were distributed to and displayed in all public libraries in Ontario, LCBO outlets, and MTC licensing offices.

Other activities included distribution of over 80 000 new car dealership envelopes containing seasonal pamphlets and DriveSave calculators, and

two booth/displays -- one at the Canadian National Exhibition and one at the Toronto International Auto Show.

In addition, the DriveSave display was at the Kortright Centre for Conservation, a number of shopping malls in and around Metro Toronto, as well as in Sudbury, London and Ottawa.

"The DriveSave Zone" film has been loaned to over 20 Cable TV systems in Ontario and shown several times on their respective community channels.

4.2/ Project Reports

4.2.1/ DriveSave: Fleet Industry Program (33189)

Project Objective

To maintain the DriveSave Fleet Advisory Committee and continue to serve as a liaison with industry.

Activities included:

- maintenance and development of the Fleet Advisory Committee as an active industry-government group that defines, guides and responds to initiatives for fleets;
- provision of input, comment and support for the Alternative Fuels Seminar conducted by TEMP for fleet managers; and
- the Fleet Advisory Committee meetings shifted to an alternate-month meeting schedule.

Results and Achievements

During FY 84/85, six FAC meetings were held. At these meetings, presentations were made by committee members to the FAC regarding their respective company fuel economy programs. The committee directed considerable input and feedback to the planning and conduct of the alternative fuels seminar, the ongoing propane inspection program, the consultant study on records management and the "Tip of the Month" sheets for fleet managers.

Starting Date: December 1980

Completion Date: Ongoing

4.2.2/ DriveSave: Fleet Managers Seminar (33441)

Project Objective

To train fleet managers and drivers to operate and maintain their vehicles in order to achieve maximum fuel economy.

Activities included:

- conducting a continuing series of half-day seminars on fuel economy for fleet managers with automobiles, and light and heavy trucks (with reference to alternative transportation fuels);
- providing extensive marketing of seminars at each location and surrounding area to ensure maximum attendance, and conducting regular follow-up and information support for fleet managers after attending seminars; and
- developing statistical reports on companies' and organizations' fleets, i.e., types and numbers, alternative fuel usage, and existing fuel economy and maintenance performance.

Results and Achievements

In FY 84/85, 11 seminars for fleet managers were conducted. These were attended by over 170 fleet managers, representing more than 125 vehicle fleets. The estimated savings were calculated based on average fleet vehicle performance gained from the fleet managers attending DriveSave's Fleet Manager Seminars over the last several years. The average distance travelled annually by fleet vehicles in Ontario was 24 000 km (16 000 mi), with an average vehicle fuel economy of 13 L/100 km (22 mi/gal). In FY 84/85, the fleets represented at the DriveSave seminars had 19 262 vehicles. Based on the estimate that one-half of these vehicles would achieve a 10% improvement in fuel economy, the fuel saved would be 31 519 638 L (700 436.4 gal). The fuel cost-savings, using a cost of 50¢/L, would be \$1,575,982 for one year.

Starting Date: December 1980

Completion Date: Ongoing

4.2.3/ DriveSave: Driver Education (33195)

Project Objective

To provide information on and promote the use of driving and maintenance techniques used by beginner drivers to achieve fuel efficiency.

Activities

- DriveSave staff increased the range of driver instructors contacted in both high schools and private driving schools, including the first of new fuel economy seminars held in Toronto.
- DriveSave posters were supplied to driver educators attending the seminars.
- Levels of use and need for additional DriveSave materials were regularly monitored with all high schools and private driving schools.

Results and Achievements

DriveSave materials are being used by 55 of the 63 high schools which provide driver education, and usage will continue to increase as a result of the recently initiated DriveSave instructor seminars.

The first driver educator seminar held in Toronto was very successful. It was attended by 50 driver instructors whose schools train 28 000 beginner drivers annually.

It is estimated that the 30% of private driving school students, who are over 25 years of age and have cars, will drive 10% more fuel-efficiently and hence save 4.5 million litres of fuel and \$2.25 million annually.

Starting Date: April 1981

Completion Date: Ongoing

4.2.4/ FuelSaver Newsletter (33206)

Project Objective

To develop and produce a quarterly newsletter which will inform driver educators, fleet managers and media about fuel economy, alternative fuels, and the DriveSave and Trucksaver programs.

Activities included:

- researching and writing articles as well as designing and doing layout for this newsletter, which deals with TEMP sub-programs like Alternative Fuels Marketing, Trucksave and DriveSave; and
- continually monitoring mailing lists for accuracy and making appropriate changes.

Results and Achievements

In FY 84/85, the "FuelSaver" was published three times, with the spring and summer issues being combined. The articles and layout work were completed for the next spring/summer issue. The mailing list, which contains approximately 12 000 fleet managers, driver instructors and related interests, was continually updated throughout the year.

The newsletter continued to provide reinforcement for the fuel economy measures promoted by both DriveSave and Trucksave and more information about alternative fuels.

Starting Date: April 1983

Completion Date: Ongoing

4.2.5/ DriveSave: General Licensed Driver Program (33207)

Project Objective

To provide fuel economy information to Ontario's drivers through a variety of communication forms.

Activities included:

- Production and distribution of the all-season pamphlet on fuel economy, "Fuel Economy for All Seasons," that was mailed with driver's license renewal forms to approximately two million people.
- Development, printing and distribution of four colour posters depicting four fuel-economy measures: tune-ups, tire pressures, planning trips and anticipating traffic.
- Approximately 80 000 new car dealer envelopes containing a DriveSave calculator and fall/winter seasonal pamphlet were distributed by dealers throughout Ontario.

Two booths, using the DriveSave display, were set up at the Canadian National Exhibition (CNE) and the Toronto International Auto Show.

- "The DriveSave Zone" film was loaned to over 20 cable TV systems in Ontario, and shown several times on their respective community channels.
- DriveSave presentations were made by staff to a number of community groups including:
 - the DAC German Auto Club
 - Seneca College Automotive Department
 - City of Brampton staff and students
 - York University's training program for drivers, and
 - the Kortright Centre for Conservation.

Results and Achievements

The DriveSave fuel economy message has been exposed to the general public in increasingly diverse ways and geographic locations, ensuring a wider range of drivers is made aware of fuel efficiency.

The new posters, displayed in four different types of public buildings throughout the province, provide concise, focussed information on each of four important fuel economy measures.

The successful attendance at the CNE and the Toronto Auto Show with the DriveSave display allowed direct discussion with the public about their concerns and interests. Response was generally positive to DriveSave material and information.

Starting Date: April 1982

Completion Date: Ongoing

4.2.6/ DriveSave Display (33407)

Project Objective

To promote fuel economy to the general licensed driver.

Activities

- Moving and setting up a display promoting fuel economy and DriveSave at shopping malls and in public buildings in Metro Toronto and other Ontario centres.
- Distributing DriveSave material at the display site.
- Using the display to provide the basis for a DriveSave and TEMP booth at the Canadian National Exhibition.

Results and Achievements

The DriveSave display was exhibited in shopping malls in and around Metro Toronto. In addition the display was shown in Sudbury, London and Ottawa, and at the Kortright Centre for Conservation.

The display was used to provide the basis for two successful booth/-exhibits at the Canadian National Exhibition (CNE) and the Toronto International Auto Show.

The display has given wide exposure to the DriveSave fuel economy message in many locations and to a large number of people.

Start Date: April 1983

Completion Date: Ongoing

4.2.7/ "FuelSaver" Newsletter Evaluation (33406)

Project Objective

To determine the effectiveness, readership and areas of improvement of the newsletter.

Activities:

- Development of evaluation methodology.
- Carrying out a survey of newsletter recipients.
- Preparation of reports outlining areas for improvement.

Results and Achievements

This project was postponed to the following fiscal year.

4.2.8/ DriveSave Seasonal Pamphlet Evaluation (33408)

Project Objective

To determine the effectiveness, readership and areas for improvement of the seasonal pamphlet.

Activities:

- Development of evaluation methodology.
- Carrying out a survey of a sample of recipients of the seasonal pamphlet.
- Preparation of report of the evaluation findings with recommendations for approaches for improvements.

Results and Achievements:

This project was postponed to the following fiscal year.

5/ GOVERNMENT PROGRAMS

5.1/ Overview

Government programs for FY 84/85 were concentrated in two projects: Government Fleetsave and Internal Government Energy Contingency Planning for Transportation.

In Government Fleetsave, TEMP organized and supervised a survey of conservation and substitution measures now in place throughout government fleets. Information gained in the survey was used for the development of terms of reference as the basis for determining achievements to date and the direction of future measures.

In the contingency area, TEMP supervised a survey of existing government transportation systems, produced guidelines and led ministry co-ordinators through the development of preliminary contingency plans for their own ministries.

5.2/ Project Reports

5.2.1/ Internal Government Energy Contingency Planning: Transportation (33343)

Project Objective

To develop a transportation energy contingency plan for each ministry that will ensure essential government services can be maintained during an energy shortfall and to set an example for the public and private sector.

Activities included:

- developing terms of reference for the gathering of information on the existing operation of government fleets;
- directing and guiding co-ordinators from each ministry in their information-gathering activities;
- reviewing and carrying out a critique of information gathered by co-ordinators;

directing the development of individual ministries' preliminary contingency plans;

- reviewing and carrying out a critique of individual ministry preliminary contingency plans; and
- participating in advisory and steering committees.

Results and Achievements

- Essentially all ministries now have a Preliminary Transportation Contingency Plan for review and approval by their own senior management.
- Problems preventing completion of Final Contingency Plans have been identified and submitted to the Steering Committee.
- Draft terms of reference for an overall provincial transportation contingency plan have been prepared and submitted to the Steering Committee.

Starting Date: April 1984

Completion Date: Ongoing

5.2.2/ Government Fleetsave (33147)

Project Objective

To develop and implement a program for the energy management of Ontario government fleets.

Activities include:

- forming a committee of representatives from each ministry;
- directing the ministry representatives in a survey of existing energy conservation measures; and
- developing terms of reference based on survey results to measure achievements to date and to identify measures to be implemented in the eight largest government fleets.

Results and Achievements

- A good information base on the energy conservation activities now being undertaken by government fleets has been obtained.

- Terms of reference have been developed and a consultant has been engaged to measure effectiveness of existing fleet conservation activities and devise new techniques.
- The consultant has started his assignment.

Starting Date: April 1984

Completion Date: Ongoing

6/ ALTERNATIVE TRANSPORTATION FUELS: SUBSTITUTION MARKETING

6.1/ Overview

FY 84/85 was a transitional year for this sub-program, with promotional emphasis being gradually changed from propane to natural gas as an alternative to gasoline fuel. Although propane promotion was a major feature of this year's Alternative Fuels seminar for fleet administrators and remained an important aspect of TEMP's recent technical publications, the sub-program moved away from many of the propane market stimulation activities of the previous four years towards an essentially "market support" function.

The change in direction undertaken by the sub-program is due to the emergence of a small natural gas market infrastructure and the propane industry becoming sufficiently mature to take over many of the functions previously performed by TEMP.

Notwithstanding a tightening of regulatory requirements for propane vehicles, some 10 000 conversions this year has brought the total number of propane-powered vehicles in the province to an estimated 60 000. The confidence in propane as a motor fuel shown by fleets is largely due to TEMP's credibility as a provider of information as part of their "market support" activities.

6.2/ Project Reports

6.2.1/ Drive Propane (33124)

Project Objective

To promote the use of propane as a motor fuel.

Activities included:

- developing specifications for the OPP conversion project;
- preparing posters for the TEMP display;
- carrying out a survey of propane vehicles in municipalities with populations over 25 000;

- took part in activities which led to the development of the provincial Propane Vehicle Inspection program;
- held a seminar and trade show which was attended by over 200 fleet administrators;
- provided major input to the "FuelSaver" newsletter; and
- provided economic and technical information to private, government and commercial fleets.

Results and Achievements

- There were 10 000 conversions this year, bringing the total conversions to date to an estimated 60 000.
- This year, 450 new outlets opened, bringing the total outlets to date to 1450.
- 580 000 000 L of gasoline were displaced this year, bringing the total displaced to date to 1.08 billion litres;
- Net capital retained in the province this year as a function of the program was \$98.96 million, bringing the total retained to date to \$182.96 million;
- Jobs directly created to date are as follows:

Conversion Shops	145
Manufacturing	225
Distribution	300
Retail	730
Transportation	50
Support Services	<u>525</u>
Total	1975

- To date, 7 800 jobs have been created directly and indirectly.
- \$100 million was invested by the private sector.
- \$38.2 million was added to the provincial revenue in the form of provincial taxes.
- Supply of propane tanks prevented the closing of an Ontario firm, thereby saving 120 jobs which would have otherwise been eliminated.

Starting Date: April 1980

Completion Date: Ongoing

6.2.2/ NGV and Propane User Booklets (33409)

Project Objective

To provide information to potential users of alternative fuel on the economic, technical and operational aspects of propane and natural gas.

Activities

- updating text of propane booklet and pamphlet;
- developing text for natural gas booklet and pamphlet; and
- printing of propane and natural gas booklets and pamphlets.

Results and Achievements

The contents of the existing propane booklet and brochure were updated and new natural gas booklets and brochures were developed.

The propane and natural gas booklets and pamphlets were printed and stockpiled ready for next year's marketing activities in quantities as follows:

Switching to Propane	5000 copies
Switching to Natural Gas	3000 copies
Natural Gas: The Automotive Fuel	5000 copies
Propane: The Automotive Fuel	5000 copies

Starting Date: July 1984

Completion Date: March 15, 1985

6.2.3/ Alternative Fuels Program Publication (33293)

Project Objective

To inform government and the public of the uses, properties, and potential of alternate transportation fuels, and of the MTC initiatives in alternative fuels development.

Activities

Production, publication and distribution of booklets and pamphlets describing the properties and uses of various alternative transportation fuels.

Results and Achievements

Six booklets and corresponding pamphlets were developed, one set on each of:

- Alcohol Fuels,
- Natural Gas,
- Propane,
- Hydrogen,
- Electricity, and
- an overview set describing and comparing each fuel in a less detailed manner.

Monthly meetings were held with the consultant to review work in progress on each of the six booklets and pamphlets. Technical data and presentation guidelines were supplied by MTC personnel. The layout work and editing were completed, and the materials were delivered to the ministry as camera-ready art work, ready for printing.

When the printing is completed in FY 85/86, these materials will form a valuable source of information on alternative fuels which can be sent out in response to inquiries, and used to expand public awareness of the work done by the Ontario Government in this area and its necessity.

Starting Date: April 1984

Completion Date: March 31, 1985

6.2.4/ Government NGV Demonstration (33410)

Project Objective

To demonstrate natural gas as a viable alternative fuel in terms of operational capability and economic benefits in the private sector.

Activities:

- Construction and installation of a compressed natural gas refuelling facility for government vehicles.
- Conversion of 15 vehicle to natural gas (dual fuel) for government fleet use.
- Maintaining extensive monitoring activity, recording performance and operational expenses and experience.

Results and Achievements

This project was postponed to the next fiscal year.

7/ TELECONFERENCING

7.1/ Overview

The Teleconferencing Section within TEMP continued its program to increase awareness and promote the use of teleconferencing as a substitute for business travel.

Over 4000 copies of brochures, booklets and other informational material were distributed and 14 presentations on teleconferencing were given at seminars, conferences, and to Ontario companies.

Assistance was provided in the establishment of a course on teleconferencing at Sheridan College in Oakville and several training sessions were held with various government departments.

An intensive one-day seminar on teleconferencing for new or potential users was held, with 75 delegates and 20 speakers participating.

Major reports on the state-of-the-art of teleconferencing and the status of Telework were initiated.

Over the past few years, the level of interest and awareness in teleconferencing has increased markedly within the private sector. Marketing of teleconferencing is now pursued vigorously by Ontario's communications industry with an accompanying production and marketing of teleconferencing equipment. There is, therefore, no longer any need to pursue an independent government teleconferencing promotion, and the TEMP Teleconferencing Section was discontinued at the end of this fiscal year.

7.2/ Project Reports

7.2.1/ Teleconferencing Publicity (33304)

Project Objective

To increase awareness and use of teleconferencing in Ontario.

Activities included:

- producing and distributing informational material such as:
 - booklets,
 - pamphlets,
 - manuals,
 - videotapes and
 - posters
- giving presentations and demonstrations on the benefits and uses of teleconferencing; and
- supplying information and providing assistance to users on various aspects of teleconferencing implementation.

Results and Achievements

Approximately 4400 copies of manuals, brochures, articles and posters were distributed. Both the Systems Guide and Program Guide were revised and reprinted, and four other manuals and reports were reprinted.

Fourteen presentations on teleconferencing were given at conferences, seminars or to companies. TEMP Teleconferencing staff participated in a filmed interview and conference for TVO.

A 15-minute videotape on teleconferencing was scripted and produced. This tape has been viewed by 88 companies and organizations, and it has been used in training sessions within the Ontario government and by several telephone companies across Canada. A total of 130 videotapes have been distributed.

Assistance was provided in the establishment and implementation of a course on teleconferencing at Sheridan College in Oakville and several training sessions were held with the Ministries of Health and Revenue. Assistance was also provided to the Canadian Association for Distance Education for several national teleconferences.

Starting Date: October 1980

Completion Date: March 1985

7.2.2 Teleconferencing Conference '84 (33415)

Project Objective:

To conduct a conference on teleconferencing for new or potential users.

Activities included:

- developing a conference program on teleconferencing technology and applications;
- publicizing and promoting the conference;
- arranging facilities, technical requirements, administration and registration of participants; and
- conducting the conference.

Results and Achievements:

A one-day intensive seminar for new or potential users was organized and held at a downtown Toronto hotel. The planning and administration included the arranging of speeches and presentations, procurement of conference rooms, arranging publicity and general administration.

Approximately 75 delegates and 20 speakers from business, educational, health and government organizations attended the conference. Several of the presentations included demonstrations of teleconferencing systems and equipment.

About 400 copies of various TEMP teleconferencing material were distributed.

Starting date: September 1985

Completion Date: April 1986

7.2.3/ Teleconferencing State-of-the-Art Report (33390)

Project Objective:

To provide comprehensive up-to-date information on all aspects of teleconferencing uses, applications and technology.

Activities included:

- reviewing and researching literature on teleconferencing and
- interviewing teleconference users and equipment suppliers.

- Preparation of a report on findings regarding:
 - teleconferencing technology;
 - applications;
 - human factors;
 - market development;
 - role of government as catalyst; and
 - future prospects.
- Printing and distribution of the report.

Results and Achievements

An intensive literature review was completed and interviews were conducted with users and equipment suppliers.

A one-day intensive session on human factors of teleconferencing was organized.

This session brought together major researchers from government, suppliers and education.

The findings from the above activities were compiled into a report with chapters on teleconferencing technology implementation, human factors, applications in government, business, health care, education and the future of the industry.

The manuscript of the report was completed. Its printing and distribution will take place in the next fiscal year.

Starting Date: April 1984

Completion Date: June 1985

7.2.4/ Telework (33402)

Project Objective

To assess the feasibility, and to develop a plan to encourage the use of communications technology to reduce travel to the work place.

Activities included:

- identification of application of communications technology for reducing commuter travel;
- determination of relevant technical, ergonomic and social factors involved in telework implementation; and
- evaluation of existing projects on Telework.

Results and Achievements

An executive summary identifying Telework options, based on literature review, interviews, and the March 1984 Planning Session was prepared and distributed.

A literature search and review was undertaken and the compilation of an annotated bibliography was begun.

Purchase of a major American study on Telework was investigated but declined, owing to the management decision to terminate TEMP's involvement in teleconferencing promotion. Instead, it was decided to produce a report summarizing the status and potential of Telework in Ontario. The preparation of this report was begun. The report will be completed in the next fiscal year.

Starting Date: April 1984

Completion Date: June 1985

8/ DATA ANALYSIS

8.1/ Overview

In conducting the TEMP program, there has always been a need for transportation energy data. To avoid duplication of search and to ensure that the office has the most recent statistical information available, the Data Analysis and Program Planning section was formed. This section has developed a transportation data base and has issued yearly summaries of useful data in the form of a Transportation Energy Data Report.

During the past year all program planning functions of this section were incorporated into the regular management activities of the Office, and the section became the Data Analysis section. Its activities consisted of continuing updating of TEMP's data base through the acquisition and monitoring of various statistical reports and publications, and the production, publication and distribution of the "Transportation Energy Data Report: Volume 3." In addition a project to determine the energy consumption trends of the Ontario automobile fleet, as reflected by highway vehicle speeds, was initiated in this section.

8.2/ Project Reports

8.2.1/ Transportation Energy Data Report: Volume 3 (33277)

Project Objective:

To monitor the current transportation energy situation and to provide a data base for the use of transportation energy management activities.

Activities included:

- monitoring of various transportation and energy data through the scanning of selected statistical reports;
- updating the TEMP data base; and
- producing and publishing a yearly Transportation Energy Data Report.

Results and Achievement

The TEMP data base has been continually updated through the acquisition of periodic data reports such as:

- Transportation Intelligence Report (Canadian Transport Commission)
- Passenger Car Fuel Consumption Survey (Stats Canada)
- New Vehicle Registrations (Poll Statistics)

The manuscript of the "Transportation Energy Data Report: Volume 3," was finalized; the report was printed and distributed.

Starting Date: April 1983

Completion Date: October 1986.

8.2.2/ Vehicle Speeds and Fuel Consumption Survey (33129)

Project Objective

To determine the energy consumption trend of Ontario's automobiles on the provincial highways as reflected by the vehicles' highway speeds.

Activities

- Analysis of highway speeds and traffic volumes on various Ontario highways from data gathered by MTC speed and traffic surveys;
- Calculation of automobile fleet fuel consumption by using empirical and theoretical relationships linking automobile speeds and fuel consumption;
- Production and publication of a report documenting the analysis and presenting the findings regarding vehicle speeds and fuel consumption trends over the past eight years.

Results and Achievements

The analysis of vehicle speeds and fuel consumption was completed, and a preliminary draft report tabulating the results was produced.

The preparation of the manuscript for the final report was initiated.

Starting Date: June 1984

Completion Date: June 1985

9/ TEMP ALLOCATIONS AND EXPENDITURES - Fiscal Year 1984/85

9.1/ Introduction

The following pages summarize the funding allocations and expenditures for the Transportation Energy Management Program for FY 1984/85. The majority of the funding is that portion allocated by the Ministry of Energy for direct operating expenditures, including consultant and university services, purchase of goods and equipment, and the direction of seminars. The tables on the following pages show the initial Ministry of Energy allocation as well as the final, adjusted by the program requirements throughout the fiscal year.

The Ministry of Transportation and Communications' expenditure includes staff resources, data processing, travel and administrative costs.

The tables do not include MTC expenditures by offices other than the Transportation Energy Office, even in cases where these offices incurred costs working on, or in support of, TEMP projects.

Tables 1 to 2 provide a general overview, while Tables 3 to 10 detail allocations and expenditures by project. The data presented in these tables have not been audited, but are considered to be accurate.

Table 1/ TEMP Fiscal Year 83/84 Budget

Project Title	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
Conservation	1155.0	1045.0	996.3	264.6
A.T.F.	800.7	800.7	757.6	24.5
O.C. Transpo	480.0	480.0	471.0	2.5
Overheads	0	0	0	247.4
TOTAL	2435.7	2325.7	2224.9	539.0

Table 2/ Conservation

Program	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
Municipal	165.0	148.5	154.8	36.5
Share-A-Ride	109.5	83.5	103.3	50.5
Trucksave	271.0	260.0	249.0	46.3
DriveSave	315.0	288.0	280.9	66.1
Government Programs	28.0	28.0	12.1	19.0
ATF Marketing	117.0	98.0	101.0	45.6
Teleconferencing	135.0	125.0	84.4	0
Data Analysis	14.0	14.0	10.8	.6
TOTAL	1155.0	1045.0	996.3	264.6

Table 3/ Municipal

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33177	Municipal Transp. Energy Advisory Comm. (MTEAC)	35.0	53.5	47.5	28.6
33339	MTEAC Newsletter	12.0	12.0	9.2	6.5
33412	Municipal Fleet Management Demo. Ph II and III	105.0	80.0	78.1	1.2
33451	Energy Management for Small Rural Municipalities	0	20.0	20.0	.2
TOTAL PROJECTS		152.0	165.5	154.8	36.5
TOTAL MODULE*		130.0*	148.5*		

*Projects should have been phased so as not to exceed the total module budget.

Table 4/ Share-A-Ride

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33387	Development of Area-wide Matching Micro Software	40.0	40.0	43.7	11.6
33118	Marketing Employer-Sponsored Ridesharing	72.0	55.5	49.7	32.7
33338	Share-A-Ride Newsletter	11.0	11.0	10.0	5.8
33298	Government Employee Carpooling	3.0	3.0	0	.4
TOTAL PROJECTS		126.0	109.5	103.4	50.5
TOTAL MODULE*		100.0*	83.5*		

*Projects should have been phased so as not to exceed the total module budget.

Table 5/ Trucksave

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33371	Trucksave Marketing Assessment	34.0	34.0	33.0	2.8
33202	Fuel Efficient "Spec'ing" Manuals	8.0	8.0	24.8	.8
33106	Trucksave Advisory Committee	18.0	18.0	32.4	18.4
33299	Trucksave Fuel Economy Challenge	49.0	49.0	85.3	15.4
33398	Reprints and Revisions	47.0	47.0	14.4	5.5
33396	Implementation of Market Assessment Findings	15.0	15.0	0	0
33397	Computerized Record Keeping	0	20.0	15.9	.7
33399	Optimized Routing	0	30.0	2.9	.6
33485 33401	Urban Trucks	0	50.0	40.3	2.1
TOTAL PROJECTS		171	271.0	249.0	46.3
TOTAL MODULE*		160*	260.0*		

*Projects should have been phased so as not to exceed the total module budget.

Table 6/ DriveSave

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33407	TEMP Display	18.0	18.0	33.4	3.2
33207	General Licensed Drive Program	96.0	96.0	123.0	9.1
33441	Fleet Managers Seminars	25.0	25.0	21.5	9.9
33189	Fleet Industry Program	67.0	67.0	32.0	20.7
33195	Driver Education	49.0	49.0	46.0	13.7
33206	FuelSaver Newsletter	30.0	28.0	25.1	9.2
33406	FuelSaver Newsletter Evaluation	12.0	12.0	0	.3
33408	Seasonal Pamphlet Evaluation	20.0	20.0	0	0
TOTAL PROJECTS		317.0	315.0	281.0	66.1
TOTAL MODULE*		290.0*	288.0*		

*Projects should have been phased so as not to exceed the total module budget.

Table 7/ Government Programs

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33343	Internal Government Contingency Planning	0	0	0	14.3
33147	Government Fleetsave	28.0	28.0	12.1	4.7
TOTAL		28.0	28.0	12.1	19.0

Table 8/ ATF: Substitute Marketing

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33124	Drive Propane	37.0	37.0	26.5	36.2
33409	NGV and Propane User Booklet	35.0	65.0	63.4.	.6
33293	ATF Program Publicity	0	15.0	11.1	8.8
33410	Government NGV Demo	100.0	0	0	0
TOTAL PROJECTS		172.0	117.0	101.0	45.6
TOTAL MODULE*		153.0*	98.0*		

*Projects should have been phased so as not to exceed the total module budget.

Table 9/ Teleconferencing

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33304	Teleconferencing Publicity	50.0	50.0	53.5	0
33415	Teleconferencing Conference '84	20.0	20.0	9.3	0
33390	Teleconferencing State-of-the-Art Report	25.0	25.0	18.7	0
33402	Telework	40.0	40.0	2.9	0
TOTAL PROJECTS		135.0	135.0	84.4	0
TOTAL MODULE*		125.0*	125.0*		

*Projects should have been phased so as not to exceed the total module budget.

Table 10/ Data Analysis

Project Number	Project Name	M'ENY Alloc. Init.	M'ENY Alloc. Final	M'ENY Final Expend.	TEMP Office Final Expend.
33277	Transport Energy Data Report #3	2.0	2.0	.5	.4
33129	Vehicle Speeds and Fuel Consumption Survey	12.0	12.0	10.3	.2
TOTAL		14.0	14.0	10.8	.6

APPENDIX A/ ADVISORY COMMITTEES

A1/ DriveSave Fleet Advisory Committee

Name	Title	Company
Don Beange (Chairman)	DriveSave Manager	MTC
Carl Wiese (Executive Secretary)	DriveSave Program Officer	MTC
Frank Attard	Fleet Administrator	Xerox Canada
Ken Austin	Manager, Administrative Services	G.D. Searle
Peter Bright	Marketing Representative	M.C.L. Business Services
Ian Crawford	Advisor, Transportation Programs	Ministry of Energy
Howard Ferguson	Fleet Manager	Canada Packers
Chris Hill	Manager, Corporate Fleet	Honeywell
David Ker	Manager, TruckSave	MTC
Ed Moore	Manager, Traffic Safety	Ontario Safety
Mark Nantias	Manager, Committees	Motor Vehicle Manufacturers' Association
Tom Peregovits	Co-ordinator, Budgets & Controls	Gulf Canada
Don Ryrie	Assistant Director, Administration & Methods	Bell Canada
Harvey Siegel	Senior Engineer Engineering Services	Ontario Hydro
Vello Soots	Manager, Transportation Energy Office	MTC
Jerry Stayer	Manager, Automotive Maintenance	United Parcel Service
Ted Westaway	Fleet Administrator	Work Wear Corp.
Colin Young	Chairman, Carb. Sub-Committee	Propane Gas Association of Canada

A2/ TruckSave Advisory Committee

Name	Title	Company
D.E. Ker (Chairman)	Trucksave Manager	Trucksave, MTC
D.H. Andrew	Vice-Pres., Maintenance	Alltrans Canada
G.G. Carr	Retired	Tippet-Richardson
E. Chambers	Operating Manager	I.C.A.
A.E. Coney	Director of Maintenance	C.P. Trucks Ltd.
R. Covello	Head, New Equipment	MTC
S. Donovan	Transport Training	George Brown College
W.H. Gough	Vice-Pres., Maintenance and Purchasing	Kingsway Transport Ltd.
G. Dennis	Fleet Manager	Sears Ltd.
V.H. Wintjes	Maintenance Manager	Canadian Tire Corp. Ltd.
A.J. Lake	General Superintendent	City Engineer's Dept., London
F.T. Leslie	Executive Vice-President	Canada Cartage System Ltd.
H. Ruhl	President	H. Ruhl Machinery Co. Ltd.
P. Stafford	Fleet Specialist	Petro Canada
D. Wronski	Editorial Staff	Ontario Trucking Association
J. Patriarche	Manager, Transportation Programs	Ministry of Energy

In conjunction with:

Canadian Fleet Maintenance Seminar

Private Motor Truck Council

Ontario Private Truck Association

Automotive Transportation Service Superintendents Association

A3/ Trucksave Economy Challenge Sub-Committee

Name	Title	Company
D.E. Ker (Chairman)	Trucksave Manager	Trucksave, MTC
S. Bigus	Transport Superintend.	Labatt's Breweries
J. Blair	Safety Supervisor	Imperial Oil
Wm. H. Capes	Equipment Research	International Carriers Ltd.(ICL)
R.J. Haystead	Safety Supervisor	Kingsway Transport
C. Hoonard	Safety Supervisor	Glengarry Transport
D. Murphy	Safety Supervisor	Kingsway Transport (Training)
T.R. Speed	Engineering Manager	Coca-Cola
H.J. Weishar	Fleet Manager	Molson's Brewery

A4/ Municipal Transportation Energy Advisory Committee

Name	Title	Company
L. Shallal (Chairman)	Chief Systems Planning Engineer	Regional Municipality of Ottawa-Carleton
V. Soots (Vice-Chairman)	Manager, Transportation Energy Office	MTC
F.M. Cherutti (Executive Secretary)	Head, Municipal Program, TEMP	MTC
J. Childs	Manager, Municipal Roads Office	MTC
A.R. Gordon	Director, Transport Division	Municipality of Metropolitan Toronto
D. Juneja	Transportation Officer, Transit Office	MTC
W. Lambert	Policy Analyst	Toronto Transit Commission
J. Mansbridge	Commissioner of Community Services	City of Sudbury
J.R. McCorkell	Director of Operations	Regional Municipality of Durham
D.J. McDonald	County Engineer	Stormont, Dundas & Glengarry
B. Mocsan	Project Manger, Municipal Program	MTC
J. Patriarche	Co-ordinator, Transportation Programs	Ministry of Energy
D.C. Redmond	City Engineer	City of Sault Ste. Marie
G.A. Thompson	Director of Roads & Traffic	Regional Municipality of Waterloo
D.H.C. Thwaites	Director of Transportation Planning	Regional Municipality of Peel
J. Toffelmire	Director, Traffic Engineering	City of Windsor