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ENERGY MANAGEMENT

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MAINE STATE GOVERNMENT



a report to Governor Joseph E. Brennan



THE GOVERNOR'S MANAGEMENT TASK FORCE

MAY 1980



Joseph E. Brennan Governor GOVERNOR'S MANAGEMENT TASK FORCE State Office Bldg., Room 319 Station No. 78 Augusta, Maine 04333

State of Maine

Telephone 289-3446

Rodney L. Scribner Chairman

Joseph E. Brennan, Governor State House Augusta, Maine 04333

Dear Governor Brennan:

The Governor's Management Task Force is pleased to transmit its initial report, <u>Energy Management in Maine State Government</u> containing recommendations for improvements and savings in State vehicle management and energy management in State-owned buildings.

Monthly meetings have been held since the Task Force was established in October, 1979 and the recommendations were developed after discussions with departmental administrators and selected on-site visits at State-owned buildings. Savings and costs have been identified on the basis of actual FY 1979 costs and the ten-year projections were made on a straight-line basis. Due to uncertainties regarding future energy costs and the future impact of collective bargaining upon wages, increases in these costs have not been reflected and therefore, the identified savings should be viewed as being conservative.

We, as a Task Force, feel that the recommendations meet the purposes outlined in the Executive Order and look forward to assisting, as necessary, with implementation of this report as we continue to review and report on other areas of Maine State Government.

Sincerely,

Henry Scilver

Rodney/L/ Scribner, Chairman Governor's Management Task Force



OFFICE OF THE GOVERNOR

GOVERNOR'S MANAGEMENT TASK FORCE

WHEREAS, it is important that government services be provided in the most efficient, economical and expeditious manner possible, and

WHEREAS, government should continually seek to use every possible means to closely examine the way in which it operates to make use of new techniques of management and operation, and

WHEREAS, the experience of business and industry in the private sector can provide numerous examples of improved methods of management and operation that may be of benefit to government, and

WHEREAS, government and the private sector should cooperate in the improvement of the efficiency of government operations and should improve their understanding of the unique problems of providing some types of services,

NOW, THEREFORE, I, Joseph E. Brennan, Governor of the State of Maine, do hereby establish the Governor's Management Task Force.

The Task Force shall consist of persons with business experience appointed by the Governor to serve at his pleasure. It shall work closely with the Governor and the Commissioner of Finance and Administration to:

- Recommend ways to improve the efficiency and reduce the costs of services; 1.
- 2. Recommend improvements in managerial and operational techniques;
- Recommend changes in organization which would improve services or make 3. their delivery more efficient;
- Seek to improve understanding between the public and private sectors and 4. improve public confidence in government.

It is anticipated that the Task Force will continue its work over an extended period of time and from time to time will augment its membership with other members of the business community who have special expertise in areas being reviewed.

Governor

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GOVERNOR'S MANAGEMENT TASK FORCE MEMBERSHIP

Chairman Rodney L. Scribner, Commissioner Department of Finance & Administration

<u>Vice-Chairman</u> Linwood F. Ross, Deputy Sec. of State Motor Vehicle Division

Ernest A. Caliendo, Jr., President Northern Products, Inc. Bangor, Maine

Alton E. Cianchette, President Cianbro Corporation Pittsfield, Maine

Stephen R. Crockett, Sr. Vice President Bank of Maine Augusta, Maine

Charles Harriman, Vice President Advest Inc. Portland, Maine Shepard Lee, President Advance Auto & Lee Cadillac-Oldsmobile Auburn, Maine

Albert LePage, President LePage's Bakery Auburn, Maine

Robert H. Reny, President R. H. Reny, Inc. Damariscotta, Maine

David G. Stanley, Sr. Vice President Union Mutual Life Portland, Maine

Thacher E. Turner, President Norway Laundry, Inc. Norway, Maine

Carolyn M. Manson, Executive Director Richard R. Ericson, Bureau of the Budget

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INTRODUCTION

Authorization

In October, 1979, Governor Joseph E. Brennan issued Executive Order #8, FY 79/80 establishing the Governor's Management Task Force and charged the Task Force with examining the operations of Maine State Government and preparing recommendations for improving the efficicency of government and reducing the costs of services. As stated in the Executive Order, the purposes of the Task Force are fourfold:

- Recommend ways to improve the efficiency and reduce the cost of services;
- Recommend improvements in managerial and operational techniques;
- Recommend changes in organization which would improve services or make their delivery more efficient;
- Seek to improve understanding between the public and private sectors and improve public confidence in government.

The Task Force will continue its work over an extended period of time and periodically report its findings to the Governor.

Membership

The Governor's Management Task Force is a unique partnership of public and private sector representatives allowing for the combining of expertise from the Maine business community with that of top management officials from

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within Maine State Government. The Task Force consists of volunteer businessmen from throughout the State of Maine and the Commissioner of the Department of Finance and Administration serving as Chairman and the Deputy Secretary of State - Motor Vehicles serving as Vice-chairman. This cooperative effort by both government and business leaders not only brings together the management experiences and skills from both sectors but allows for insights into the operations of State government that have proven invaluable in the deliberations of the Task Force.

Approach

In order to meet the purposes outlined in the Executive Order, the Task Force adopted the approach that functions of government would be the primary subject of their evaluations. Management practices, procedures, systems and operational techniques were determined to be the focus of this study. Subject areas and processes common to many departments and basic to the operations of State government would be examined by the Task Force. This functional approach of reviewing practices and procedures that affect groups of departments will result not only in greater savings and efficiencies but will have a greater impact on improving management techniques and assisting administrators in the daily operations of running State government. Categories of review were selected on the basis of their impact on the administration of the State's business or as otherwise requested by the Governor. Preliminary areas for study were reviewed and determinations made where, in the judgement of the Task Force, the need for improvement was greatest.

Methodology

In order to meet the broad mandate outlined by the Governor's Executive Order, once the categories of review were determined, the Governor's Management

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Task Force developed procedures to use as operating guidelines during each of the evaluations. These guidelines were designed to aid the Task Force during its deliberations in meeting the objectives of the Executive Order. The procedures adopted include notifying all State government agencies of the subject and scope of the review; compiling data and background materials; interviewing administrators as well as recipients of services; and selective on-site evaluations by Task Force members and staff. After these intial steps were taken, recommendations were then developed. This process may be repeated for each category to be reviewed.

Initial Review

Energy Management in Maine State Government was determined to be the function for the Governor's Management Task Force's initial review. With the cost of energy increasing on a daily basis and with concerns for conservation foremost in everyone's mind, energy was determined to be an area where the Task Force should concentrate its efforts immediately.

How well does State government manage the energy problems facing such a big user of scarce resources? The Task Force divided the review into two major categories: 1. Vehicle Management and 2. Energy Management in Stateowned Buildings. The Task Force focused on what has been and is being done and what remains to be accomplished. The results of this evaluation are contained in this report. Maine State government has done much to conserve and better utilize its energy resources but as the recommendations point out, more can be accomplished.

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ENERGY MANAGEMENT IN MAINE STATE GOVERNMENT

VEHICLE MANAGEMENT IN MAINE STATE GOVERNMENT

As a part of the evaluations of energy utilization in Maine State Government, the Governor's Management Task Force looked at how the State manages its vehicle fleet; the system or systems used to track mileage and other vehicle costs; the State's fuel facilities and use of commercial credit cards; and the standards in effect for purchase and sale of Stateowned vehicles. Generally, the Task Force found that although there is a serious effort made by agencies to manage vehicles and their costs, there are as many systems as there are user agencies; there is no central inventory of State-owned vehicles available; standards for vehicle assignment and maintenance differ from agency to agency; and operation of the State's fuel facilities needs to be reorganized.

During the fiscal year ending June, 1979, State employees traveled in excess of fifty-two million miles in conducting the State's business. Of this, approximately eighteen million miles were traveled in privately owned vehicles at a reimbursement cost of some \$2.4 million and approximately thirty-four million miles in State-owned vehicles with operating costs of some \$3.4 million. According to a survey conducted by the Maine Insurance Advisory Board in August, 1979, the total number of vehicles of all types owned by the State of Maine, as reported by departments, is 5,004. These include passenger vehicles, trucks, trailers and construction equipment, buses, snowmobiles and tractors. Of these, 1,311 are classified as passenger vehicles with the departments having the largest passenger vehicle fleets being Public Safety (406 including 6 leased vehicles), Transportation (205), and the University of Maine (158). Other agencies with large passenger

vehicle fleets include Inland Fisheries and Wildlife (94), Mental Health and Corrections (83), Conservation (76), Marine Resources (46), Agriculture (30), and Human Services (22).* A total of some twenty-nine agencies are presently operating State-owned vehicles.

There is no central, standardized system for managing the State's vehicle fleet. The methods used for tracking costs and miles traveled differ from agency to agency. Some are better than others with varying degrees of information being available. The Task Force recommends that an automated vehicle management information system be developed as a single, central source for inventory and cost data for all State-owned vehicles. A ten percent fuel savings was obtained by a large metropolitan center solely on the basis of installing a similar system. Responsibility for coordinating and monitoring the system will be assigned to an Energy Management Coordinator in the Bureau of Accounts and Control, Department of Finance and Administration. Implementation of this recommendation will require several steps including: a uniform numbering system for all State-owned vehicles; a single source fuel system; automated fuel facilities; re-issuance of all credit cards used for State business; and appointment of an Energy Management Coordinator in the Bureau of Accounts and Control.

The Task Force also recommends that the University of Maine be required to use the automated vehicle management information system established by the State. The University operates a large vehicle fleet and its participation in this system would provide management with the same benefits and information as those expected to accrue to State agencies.

*Note: These figures are those reported by the departments to the Maine Insurance Advisory Board in August, 1979 and may have varied since then.

Energy Management Coordinator

The Task Force recommends that a position of Energy Management Coordinator be established in the Bureau of Accounts and Control. This position would be responsible for preparation and analysis of regular reports on vehicle usage and costs in order to assist the Bureau of the Budget and the operating agencies in better managing the State's vehicle fleet. Necessary data will be generated from the recommended Vehicle Management Information System.

In addition, the Energy Management Coordinator will be responsible for energy consumption data relating to State-owned buildings. This additional responsibility is discussed later in this report.

Uniform Numbering System

Title 29, § 256, M.R.S.A., states that "All State-owned vehicles shall be registered by the Secretary of State...". The Task Force recommends immediate implementation of this provision in conjunction with development of a uniform numbering system and assignment of a permanent number to each vehicle as the identifier for the management information system. The elements of the numbering system will identify the type of vehicle, department, user, and location and will accummulate all costs incurred against that vehicle thus providing accurate and up-to-date information on a timely basis.

The management information system presently used by the Department of Transportation should be expanded to provide the data collection capability needed to account for operating costs of all State-owned vehicles. To insure a smooth transition to this new system, a temporary advisory group representing the major user agencies should be established to assist and advise DOT with any necessary adjustments and the definition of specific agency needs. Conversion to this system by all agencies will also provide a central source for a state-wide vehicle inventory count on a continuing basis and provide

accurate data for identification of both under utilized and over utilized vehicles ("break-even" point analysis).

Automated Fuel Facilities

In addition, the Task Force recommends establishing a centralized and automated State-operated fueling system for all agencies that operate Stateowned vehicles. There are presently fuel facilities at 250 locations throughout the State operated by over 10 different departments and the University of Maine. The differing requirements of State agencies have resulted in an inefficient system replete with duplications. A single automated fuel system available twenty-four hours a day, seven days a week would not only remove the need for many of the State's smaller and less efficient facilities but would also significantly reduce the need to purchase fuel at commercial service stations. Many times commercial purchases are made because of fueling needs after normal working hours when the State's facilities have not been available. An automated fuel system when completed is expected to result in elimination of approximately 1/3 of the State's existing fuel facilities. Elimination would be based on factors agreed upon by the involved agencies but should take into consideration duplication of location and general condition of the facility. For example, in the City of Augusta, there are fourteen fueling stations operated by 8 different agencies. Implementation of an automated system will reduce this number to three stations and at the same time provide twentyfour hour service presently not available. A pilot project in three locations throughout the State should be implemented immediately with a completed statewide system being phased in over a 3 year period. Because of the heavy concentration of State-owned vehicles in Augusta, Scarborough and Bangor these areas should be the sites for the pilot system.

An automated fuel system will provide better security because a special State-issued card will be required for activation and will include identification of the person obtaining the product. The number on the credit card will coincide with the newly assigned vehicle number and all data relating to the transaction will then be recorded by the management information system. The Task Force recommends that all State-issued credit cards be recalled and credit cards specially coded to the proposed VMIS be issued in their place. This system calls for entry of odometer readings prior to the issuance of fuel which is another step toward assuring proper use of fuels. A maximum number of gallons permissible for each transaction is another feature built into the system. The allocation of fuels as well as control of inventory is another management feature of this system. An automated system will normally be able to provide information pertaining to each day's activity by the following work day.

Once the central automated fueling system is operational, it will eliminate the need for commercial gasoline purchases within the State, except in rare circumstances. The Task Force recommends that all commercial credit cards currently being used be recalled and that the Bureau of Purchases design and implement a plan for instituting stricter controls over the future use of commercial credit cards.

Single Source Fuel System

The benefits to be gained from centralizing the State's fueling system can be maximized by authorizing a single agency to manage bulk purchases of fuel and operation of the State's depots. Presently, the Departments of Transportation, Inland Fisheries and Wildlife, Mental Health and Corrections, Public Safety (State Police), Conservation (Parks and Recreation and Forestry),

Finance and Administration (Bureau of Public Improvements), Defense and Veterans' Services (Military Bureau), the Southern Maine Vocational Technical Institute and the Baxter State Park Authority purchase fuel in bulk for their respective needs. The Task Force recommends that the Department of Transportation assume sole responsibility for operating a single source fuel system. Coordination of the unique requirements of the user agencies is essential to the success of the centralized system. Once the system is fully automated and the facilities are available on an around-the-clock basis, elimination of some 1/3 of the depots can begin. Having a single agency coordinating bulk purchases should not only result in a better price from the dealer but will provide more complete and accurate data on inventories. Timeliness and accuracy of data will increase in importance as we proceed into the next decade and are faced with more critical petroleum product supply problems.

Current Vehicle Use Policies

Policies governing the use of State-owned vehicles need to be updated and re-issued. An Executive Order was issued in May, 1975 with an amendment issued in October, 1977 establishing guidelines on the policy and use of State-owned vehicles. The Task Force found that most agencies are using this as a guide, however, some are not. An updated policy on motor vehicle use and maintenance should be issued by the Governor. This will provide the means to standardize use of vehicles throughout State government.

Several positive steps have taken place recently. Governor Brennan has issued Executive Order #3, FY 79/80, State Policy on Motor Vehicle Purchase and Operation directing that new vehicle purchases be in the subcompact category. This directive has helped in conserving gasoline used in State travel and also prevented agencies from purchasing vehicles directly from dealers at higher costs as has happened in the past. The Task Force recommends that this

policy be continued and that it be expanded to include new vehicle purchases by the University of Maine.

A program to achieve a ten percent reduction in automobile travel has been instituted for all agencies at the direction of the Governor with the Office of Energy Resources monitoring the program. The Task Force found that while most agencies have filed a plan for reducing mileage by ten percent, the actual reduction has been far less than ten percent overall with some agencies experiencing an increase in mileage. Because of the use of smaller cars, although mileage has increased gasoline consumption has decreased. The Task Force recommends that this program be continued but be reorganized to require compliance by State agencies.

In addition, the Office of Energy Resources should design a more formal system for interdepartmental ridesharing. The system that already exists on an informal basis in several major departments allows for State employees to travel together when their destinations coincide and thus reduces gasoline consumption and subsequent costs to the State. The Task Force also recommends that the Office of Energy Resources study the feasibility of utilizing van pool vehicles to provide a shuttle service between State buildings in the Augusta area complex during normal working hours.

The Task Force recommends that the State of Maine issue a standard maintenance policy for State-owned vehicles requiring better maintenance procedures for assigned vehicles and that the use of synthetic motor oils be required in all passenger vehicles purchased by the State in order to extend vehicle life and reduce maintenance/operating costs.

In most instances, there are no provisions for the use of State-owned vehicles assigned to employees for purposes other than official business. However, since the State does not operate a secure, centrally located storage facility, many employees garage their assigned vehicles at their residences.

This practice has resulted in the additional benefit of free commuting to the employee involved at a considerable cost to the State. The Task Force recommends that employees who are authorized to regularly commute be charged for this commuting mileage. This charge would eliminate the employee's obligation to report the value of commuting as income for Federal and State tax purposes and result in the State being reimbursed, in part, for this costly practice.

Centralized Purchasing of School Buses

While perhaps the greatest influence that the Department of Educational and Cultural Services can have concerning energy conservation is through continuation of the encouragement and technical guidance it provides to the local school systems, the Management Task Force has identified possible modifications to the procedure now utilized to purchase school buses as having high potential for immediate savings. These potential savings would result from a policy mandating that all school buses funded under provisions of the School Finance Act be collectively bid in order to achieve a better per unit price due to volume purchasing.

The state presently reimburses localities for 90% of the acquisition costs of buses. Approximately 200 buses are purchased each year for a cost to the state of about \$4 million. Under present procedures, the state cannot mandate the manner in which the local districts buy these buses or individual specifications (aside from safety related considerations).

It is proposed that the Department of Educational and Cultural Services actively pursue the necessary steps to develop, have authorized, and initiate a centralized bidding procedure whereby local purchases of standardized buses would be made from one to four times per year on a consolidated basis. In conjunction with this recommendation, the Task Force suggests that when bidding

standards are developed for consolidated purchases that diesel engines be specified in order to reduce local fuel and maintenance costs which are also largely reimbursable by the state.

During fiscal year 1979 school buses being operated by local school districts in the State of Maine travelled over 28 million miles at an annual cost of \$20.6 million or \$.72 per mile. Combined savings from implementation of a consolidated bidding procedure and switch to diesel buses (with their attendant better mileage, lower maintenance costs and longer service life) are expected to be significant. While initial savings would be first realized at the local level, by virtue of provisions of the School Finance Act these savings would ultimately be reflected as reductions in state subsidy requirements.

The Task Force further recommends that the Department of Educational and Cultural Services develop a plan for actively encouraging local school districts to consolidate school bus stops. A preliminary study is currently being conducted in the Farmington area and such a plan should be based on the results of that study, taking into consideration the beneficial impact upon bussing costs that would ultimately be reflected as reduced costs to the State.

Bookmobile Program

In addition, the Task Force recommends that the Maine State Library bookmobile program should be re-evaluated due to the extremely high cost of the service it provides. In 1979, it cost the State over \$340,000 to operate eight bookmobiles carrying materials worth approximately \$30,000. These costs (consisting of personnel, capital replacements, and transportation related items) contribute to making the operation of bookmobiles throughout

the state a very inefficient method of providing this service. The Department of Educational and Cultural Services should develop an alternative means of providing this service to rural areas and present recommendations for making more efficient use of these resources as a part of its next biennial budget request.

ENERGY MANAGEMENT IN MAINE STATE GOVERNMENT BUILDINGS

The second phase of the study by the Governor's Management Task Force on energy management in Maine State Government focused on State operated buildings and the efforts being made by various agencies to conserve energy. The State of Maine operates buildings throughout the State including: the Central Office Complex in Augusta; the institutions operated by the Department of Mental Health and Corrections; State Police barracks; DOT garages; State armories; vocational technical institutes; and wardens' camps. During the fiscal year ending 1979, the State consumed approximately 8.7 million gallons of heating oil at a cost of over \$4.7 million dollars at an average price of .54 cents per gallon. With the heating oil price increases experienced during the past months, energy conservation in State operated buildings is of immediate concern to State officials.

Many initiatives have been taken by agencies to try to conserve energy and lessen the impact of these costs on their budgets. The Department of Inland Fisheries and Wildlife is installing wood furnaces/stoves and insulating their facilities as is the Department of Conservation. The Department of Marine Resources has installed storm windows and thermo pane doors and insulation on all buildings that are used year round. The Department of

Mental Health and Corrections has an Internal Energy Task Force representing each institution for the sharing of ideas on energy conservation. The Department of Defense and Veterans' Services has issued an Energy Conservation Program outlining policies and procedures for energy conservation in the Maine State Armories and other buildings under their jurisdiction. These are just some examples of the conservation activities underway by State departments.

Energy Audit Program

The Bureau of Public Improvements of the Department of Finance and Administration is responsible for administering an Energy Audit Program which was authorized by passage of a \$10,000,000 Bond Issue for energy upgrading projects in public schools and State-owned buildings. To date, approximately 122 Stateowned buildings have been audited under this program with approximately 290 yet to be audited. Of the approximately 800 eligible public school buildings in the state, audits on 750 have been completed. Audits on the remaining 50 are in progress.

Projects which were calculated to have a 10% or greater return on investment were funded for 550 of the 800 school buildings for which audit funds were provided by the \$10 million bond issue. A second energy bond issue authorized by the Legislature in March of 1980 will provide funds for energy upgrading projects in the remaining 250 school buildings, if it is ratified by the voters.

The projects approved and funded to date have been based on achieving a 10% or better rate of return based upon fuel costs in effect when the audit program was initiated two years ago. Because fuel costs have doubled since initial returns were calculated, many projects which were not originally deemed cost effective are now very desirable from the standpoint of pay-back period. The recently approved bond issue includes funding to complete projects in all 800

school buildings that are now economically feasible in light of the current cost of fuel.

Energy Policies and Standards

The Governor's Management Task Force conducted on-site visits at Bangor Mental Health Institute, Augusta Mental Health Institute, the Maine State Prison, the Maine Youth Center and the Maine Correctional Center. In addition, meetings were held with representatives of the Bureau of Public Improvements and heads of major departments that operate State-owned buildings.

While the Task Force recognizes that many energy savings measures are in progress, it is recommended that efforts to reduce energy consumption levels in State-owned buildings be given a higher and more immediate priority by State officials. Policies governing energy utilization by all State agencies need to be developed and implemented. Energy consumption standards need to be established and monitored for all State buildings. The position of Energy Management Coordinator as recommended earlier in this report, should be established not only to monitor vehicle usage but to monitor energy consumption in all major State buildings and to insure that recommended conservation measures are implemented and that resultant reductions in energy requirements are reflected in amounts included in future biennial budget recommendations.

On-site energy reviews need to be scheduled on a regular basis by the Bureau of Public Improvements with follow up and immediate action taken on identified, fast pay back projects. For example, the Task Force found great heat losses in many of the buildings visited because the manpower was not available to complete projects such as installing insulation and storm windows and upgrading steam traps and installing temperature controls. Because of the high cost of energy today, projects of this nature should be completed on more of an emergency basis.

The Task Force recommends that standby contracts be awarded to crafts people (carpenters, plumbers, electricians, etc.) located in the vicinity of the State institutions. Those contracts would be awarded on a competitive bid basis and would enable crafts people to be available, upon call, to complete projects at the various institutions on an immediate basis when institutional maintenance resources are not adequate.

The Task Force also recommends that a Division of Energy Management be established in the Bureau of Public Improvements to provide the capability for conducting on-site energy reviews and monitoring of all major State buildings on a continuing basis. The existence of such a division will help to insure that energy standards are maintained.

The Task Force recommends stricter space standards be established to consolidate use of space and reduce energy needed to maintain that space. Also, efficiency guidelines should be developed and used as criteria that must be met before the State enters into contracts to lease space. Such criteria should include all leased space of over 5,000 square feet.

Consolidation of Laundries

The Department of Mental Health and Corrections operates laundries at five institutions - Bangor Mental Health Institute, Augusta Mental Health Institute, Maine Correctional Center, Pineland Center and the Maine State Prison. The Governor's Management Task Force recommends that the laundries - except for the Maine State Prison facility - be consolidated in a single, central laundry facility located at Augusta Mental Health Institute. Due to security restrictions at the Maine State Prison, the laundry presently being operated there should continue. Augusta Mental Health Institute was chosen due to its central location which will facilitate the traffic of linen to and from the other institutions with the least amount of problems and because the

present AMHI laundry facility will require only minimum renovations to be upgraded to handle this service for the other institutions. Cost analyses demonstrate that by closing the laundries at the other institutions and establishing a central laundry facility at AMHI, approximately \$250,000 will be saved annually by the Department of Mental Health and Corrections after the initial year of operation.

Space Utilization Recommendations - Bangor Mental Health Institute

In addition to the energy conservation measures that should be undertaken at this facility, of particular concern to the Task Force is the need for improved space utilization at the Bangor Mental Health Institute campus. It is therefore recommended that the Departments of Finance and Administration (through the Bureau of Public Improvements) and Mental Health and Corrections be required to prepare a plan for the Governor maximizing the use of space at the BMHI complex including an assessment of state agency rental space in the greater Bangor area which may be accommodated within the unused space at the BMHI complex. Such a plan should be modeled after the successful program of alternate space utilization nearly completed at the Augusta Mental Health Institute campus and should include at a minimum, alternate uses for buildings "H", "D", "A-1", and "G". Space consolidation recommendations should also take into consideration the present and anticipated future space needs of other State agencies in the Bangor area. The Governor's Management Task Force strongly recommends that the energy upgrading program at BMHI, including consolidation of space, be given an immediate priority by the Bureau of Public Improvements and the Department of Mental Health and Corrections. Major State Facilities

Because the Department of Mental Health and Corrections, through the operation of the State's institutions is the biggest user of energy in Maine

State Government, the Governor's Management Task Force conducted on-site visits to see first-hand the efforts being made and problems encountered in energy conservation at the State's institutions. Many of the buildings visited are energy inefficient by their very design - four and five story buildings with high ceilings built in an age when energy conservation was not the important consideration that it is today. Many have little or no insulation and central heating systems that lack modern controls. Energy audits have been or will be conducted at all of the institutions and the recommended renovations when completed will result in far more energy efficient operations. While the onsite visits conducted by Task Force members were limited by time and geographical considerations, they should be viewed as being illustrative of conditions generally existant throughout the state's facilities. It is expected that many of the specific recommendations pertaining to those facilities that were visited would be applicable to other state buildings in general. The Task Force has included in the Appendix a description and status of the energy upgrading projects for many major State buildings including the Department of Mental Health and Corrections, the Vocational Technical Institutes, the Maine State Armories and the Augusta Capital Complex. The following is a brief description of some of the major facilities operated by the State including the institutions visited by the Task Force members.

INSTITUTIONS

Augusta Mental Health Institute

The Augusta Mental Health Institute has a present patient population of approximately 300. The gross/heated area is 777,075 sq. ft. with 1,028,003 gallons of #6 oil required to heat the complex. The energy audit is in progress. Several buildings at AMHI are now utilized by other State agencies for

office space and this alternate space utilization program which is nearly completed has proven to be a very efficient use of this space. Conversion of the Deering Building into additional office space should be completed and this program should be continued.

The Task Force has recommended that the laundry facilities at AMHI be expanded and upgraded to provide laundry services for all other institutions except the Maine State Prison.

Bangor Mental Health Institute

The Bangor Mental Health Institute has a present population of over 300 patients with a gross area of 547,186 sq. ft. and a heated area of 535,186 sq. ft. which annually requires 686,922 gallons of #6 oil. The buildings are generally in a good state of repair with the exception of the second and third floors of the "D" building which were gutted for renovations never completed. There are presently over 150,000 sq. ft. of space not occupied and over 135,000 sq. ft. is being heated while not being used. Storm windows and insulation should be installed to help reduce the heat losses. Better temperature controls need to be installed to maintain a more even and lower temperature throughout the institution. (During the Task Force tour, windows were found open throughout the complex because the buildings were being heated at such a high temperature.) The energy audit has been completed at BMHI and the identified, approved projects are scheduled for completion prior to the 1980-81 heating season. The Task Force also recommends that the Bureau of Public Improvements conduct a feasibility study for converting the BMHI complex to coal generation for heat. Maine Correctional Center

The Maine Correctional Center located in South Windham is a medium security facility for men and women. The Center has a total capacity of approximately 220 inmates - 200 males and 20 females - and at the time of the Task Force visit

216 inmates - 198 males and 18 females - were located at the Center. The buildings were found to be in a generally good state of repair. The MCC has a gross area of 153,600 sq. ft. and a heated area (steam) of 108,910 sq. ft. and 10,768 sq. ft. heated electrically. The MCC is presently using 187,694 gallons of oil annually. The energy audit has not been started and the Task Force recommends that the contract be completed immediately. The four cottages that are now being heated electrically should be converted to the central heating plant with conversion costs financed from the Energy Conservation fund now available. Until ten years ago, coal was used to heat the Maine Correctional Center and the facilities there seem to lend themselves to conversion back to coal for heat generation. The Task Force recommends that the Bureau of Public Improvements conduct a feasibility study of reconverting the MCC to a coal generated system.

Maine State Prison including the Minimum Security Facility at Warren

The Maine State Prison located at Thomaston is a maximum security facility for adult males with a maximum capacity of 412 and a continuing inmate population of 400 plus. The gross area is 220,458 sq. ft. and the heated area is 220,458 sq. ft. using 541,575 gallons of #6 oil per year. The Task Force found the existing maintenance program at the MSP to be inadequate and a concentrated effort must be made to upgrade the condition of the facilities. The Task Force recognizes that because of the security restrictions at the MSP, it is more difficult to complete the necessary renovations, however it is recommended that this be given a high priority by the Bureau of Public Improvements and the MSP maintenance staff. Doorways need to be repaired to prevent heat losses and the steam distribution system is in need of major renovations including the system connected to the Warden's residence. Although not directly related to energy management, the Task Force recommends that the food storage capacity at

the MSP be upgraded with the purchase of a new freezer. Money could be saved by volume purchases of food, if the capacity for storage were available. The Task Force also recommends that additional insulation be installed in the workshop and the residential buildings at the Minimum Security Unit at Warren.

The energy audit for the MSP is underway with the first phase completed on steam production and distribution. The recommended improvements project an annual savings of 100,000 gallons of oil at a cost to complete of \$50,000. Maine Youth Center

The Maine Youth Center located at South Portland is a minimum security institution for juveniles. The Center has a "warehouse" capacity for approximately 250 and a "treatment" capacity or ideal population of approximately 150. The present average daily population is around 200. The gross area at the Center is 170,000 sq. ft. and the heated area is 170,000 sq. ft. requiring 322,500 gallons of #6 oil per year. The major energy problem for the institution is the Administration Building built in 1851-53 and containing 40,000 sq. ft. of space. By its very design, it is the most energy inefficient building visited by the Task Force. It is recommended that a study be initiated by the Bureau of Public Improvements recommending the future use of this building. This study should be made in consultation with the Maine Historic Preservation Commission and the recommendations should take into consideration the historical significance of the building. Until such a study is completed, short-term energy saving measures should be implemented including closing the stairways to the second and third floors, lowering the ceilings on the first floor and insulating above the first floor.

The Energy Audit for this institution is underway with the first phase having been submitted. Those recommendations when completed estimate savings of 2,600 gallons of #2 oil and 105,815 cubic feet of natural gas per year.

Pineland Center

Pineland Center is a mental retardation facility with a present population of over 300. The gross area is 468,747 sq. ft. and the heated area is 466,337 sq. ft. requiring 867,615 gallons of #6 oil per year. There are 2,410 sq. ft. of unoccupied and unheated space at Pineland. The energy audit has been completed estimating annual savings in oil (#6) of 335,876 gallons. A status of energy conservation projects at Pineland is listed in the Appendix.

Stevens Campus

The Stevens Campus is located in Hallowell and was formerly known as the Stevens School for Girls and used totally as a correctional institute. Since the closing of the School for Girls, the facility has become an office annex for the State Complex in Augusta and is now utilized to capacity. The gross area is 130,000 sq. ft. and the heated area is 130,000 sq. ft., requiring 90,000 gallons of oil (#6) to heat per year. The energy audit has not been completed at the Stevens Campus however, a number of improvements have been completed by the BPI staff.

VOCATIONAL TECHNICAL INSTITUTES

There are six vocational technical institutes in Maine located at Waterville (KVVTI), Lewiston (CMVTI), South Portland (SMVTI), Bangor (EMVTI), Presque Isle (NMVTI) and Calais (WCVTI). The energy audits have been completed at CMVTI and KVVTI and are partially completed at the remaining four campuses. Of the eightyseven buildings at the six locations, thirty-one buildings have been completed. A status of energy conservation projects is listed in the appendix.

AUGUSTA CAPITAL COMPLEX

The central complex in Augusta consists of four major buildings - the State House, State Office Building, State Cultural Building and the Education Building.

The energy audit has been completed at this complex. A new energy efficient boiler was installed and oil (#6) consumption has been reduced from 349,885 gallons in FY 1975 to 226,083 gallons in FY 1979, a savings of 123,802 gallons which is considered to be peak efficiency for the complex area.

MAINE STATE ARMORIES

There are twenty-six armories in Maine located throughout the State. The energy audits are in progress at the armories with nine completed and the remaining seventeen scheduled for completion by the end of 1980 calendar year. In addition, a contract has been approved with a private consultant to do energy efficient tests at each of the armories.

UNIVERSITY OF MAINE

The University of Maine system operates seven campuses throughout the State. The Task Force met with representatives from the Chancellor's Office and discussed the steps the University has taken and is planning to implement to conserve energy. As a result of these steps the University projects a 15% savings in energy consumption to be realized in FY 1980 compared to consumption in FY 1979. Each campus has an Energy Conservation Committee and efforts are being made to involve students in the conservation efforts. Federal temperature guidelines are being implemented in all buildings; rotary one-hour switches have been installed in classrooms for automatically turning out lights; 5,000 steam traps have been examined and those found inefficient (45%) are being corrected; a series of maintenance seminars on pneumatic controls have been conducted resulting in better maintenance; and pilot projects using alternate sources of energy are underway. In addition, energy audits are being completed and projects where there is a payback of two years or less are being completed immediately. A bond issue recently passed by the Legislature, if ratified by the voters, will provide two million dollars for energy upgrading projects at the University.

SUMMARY OF ENERGY RELATED SAVINGS

RECOMMENDED BY

THE GOVERNOR'S MANAGEMENT TASK FORCE

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SUMMARY OF ENERGY RELATED SAVINGS RECOMMENDED BY THE GOVERNOR'S MANAGEMENT TASK FORCE

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		SAVINGS	<u>COST</u>	NET SAVINGS	10-YEAR PROJECTION (NET)
SUM	MARY: MOTOR VEHICLE MANAGEMENT RECOMMENDATIONS				
1.	Develop a centrally-administered automated vehicle management information system for all State agencies.	\$ 340,000		\$ 340,000	\$ 3,400,000
2.	Proceed with implementation of T. 29, § 256, M.R.S.A., requir- ing registration of all State-owned vehicles by the Secretary of State.			<u></u>	
3.	Assign, at the time of registration, a permanent number to each vehicle as the identifier for the automated vehicle management information system.		-		
4.	Appoint an Energy Management Coordinator in the Bureau of Accounts and Control of the Department of Finance and Administration.		(16,500)	(16,500)	(165,000)
5.	Expand the Department of Transportation's management infor- mation system to accomodate data collection for all State- owned vehicles.				
6.	Establish a temporary advisory group of user agencies to ad- vise and assist the Department of Transportation with con- version to the State-wide system.				
7.	Require the University of Maine to use the automated vehicle management information system.				
8.	Reorganize the State's fueling facilities with conversion to an automated, single source system.	48,000	(53,000)	(5,000)	2,000,000
9.	Implement recommendation #4 by immediately establishing three pilot areas - Augusta, Bangor and Scarborough - with a completed State-wide system being phased in over the next 3 years.				
10.	Re-issue credit cards used for State vehicles.		——		

			FIRST YEAR			
			IMPLEMENTATION			
SUM	MARY: MOTOR VEHICLE MANAGEMENT RECOMMENDATIONS - Con't	SAVINGS	COST	NET SAVINGS	10-YEAR PROJECTION (NET)	
11.	Reduce the amount of commercial gasoline purchases by man- dating all State departments to use the State's fuel facil- ities.		~			
12.	Reorganize the program of achieving at least a ten percent reduction in State related travel and require compliance by State agencies.	500,000		500,000	5,000,000	
13.	Revise and re-issue a policy for use of State-owned vehicles as a standardized guide for all departments.					
14.	Continue the policy of requiring that all new passenger vehi- cles be in the subcompact category with centralized purchasing only. Encourage the University of Maine to purchase new passenger vehicles through the Bureau of Purchases.	_~				
15.	Utilize "break-even" point analysis in determining assign- ment of vehicles.				. · ·	
16.	Issue a standard maintenance policy for State-owned vehicles and require the use of synthetic motor oils in all passenger vehicles purchased by the State.	100,000		100,000	1,000,000	
17.	Implement the interdepartmental ride-share program for State- related travel.					
18.	Prohibit the use of State vehicles during normal business hours for traveling between State facilities in the Augusta- area complex. Establish a schedule and utilize the van pool vehicles for this purpose.					
19.	Whenever possible, establish a means whereby employees will be required to reimburse the State for all personal mileage incurred while using a State vehicle.					
20.	Require that all school buses funded under provisions of the School Finance Act be purchased through a centralized bidding procedure.	180,000		180,000	1,800,000	

				NET	10-YEAR
SUM	ARY: MOTOR VEHICLE MANAGEMENT RECOMMENDATIONS - Con't	SAVINGS	<u></u>	SAVINGS	PROJECTION (NET)
21.	Require diesel engines be specified for school buses to reduce local fuel and maintenance costs.	288,000		288,000	2,880,000
22.	Require that the Department of Educational and Cultural Ser- vices develop a plan for the next school year encouraging local school districts to consolidate school bus stops.				
23.	Direct the Department of Educational and Cultural Services to reorganize the Maine State Library bookmobile program.				
SUBI	OTAL	1,456,000	(53,000)	1,403,000	16,081,000
SUM	ARY: ENERGY MANAGEMENT IN MAINE STATE GOVERNMENT BUILDINGS RECOMMENDATIONS				
24.	Establish energy conservation in State-owned buildings as an immediate priority for State officials and complete energy conservation measures with a pay back period of two years or less.	1.700.000	(60,000)*	1 - 640 - 000	16,400,000
25.	Establish within the Bureau of Public Improvements the capa- bility for immediate action on energy upgrading projects.				
26.	Complete energy audits on State buildings and implement on a more immediate time schedule.		(50,000)	(50,000)	(50,000)
27.	Review the energy audit projects that were calculated at un- der ten percent return.	600,000	(330,000)*	270,000	2,700,000
28.	Continue the program of installing insulation in all State buildings wherever possible to reduce heat losses.				
29.	Intensify efforts to upgrade windows and evaluate storm win- dows or bricking in on an individual basis.		·		
30.	Establish a Division of Energy Management Conservation in the Bureau of Public Improvements to provide the capability for conducting on-site energy reviews and monitoring.	370,000	(65,000)	305,000	3,050,000

SUM	MARY: ENERGY MANAGEMENT IN MAINE STATE GOVERNMENT BUILDINGS RECOMMENDATIO	<u>SAVINGS</u> <u>NS</u> - Con't	FIRST YEAR IMPLEMENTATION	NET SAVINGS	10-YEAR PROJECTION (NET)
31.	Establish energy consumption standards for all major State buildings and assign monitoring of these standards to the Energy Management Coordinator.		·		
32.	Establish energy efficiency standards that must be met before the State contracts to lease space of over 5,000 square feet.	·			
33.	Institute stricter space standards for all State buildings in order to consolidate use of space and energy required to maintain that space.			•	
34.	Consolidate the laundries operated by the institutions within the Department of Mental Health and Corrections into a single, central laundry facility.	434,000	(364,000)	70,000	2,320,000
35.	Prepare a plan for the Governor maximizing the use of space at the Bangor Mental Health Institute Complex.				
36.	Complete the feasibility study being conducted by the Bureau of Public Improvements to convert the Maine Correctional Center and the Bangor Mental Health Institute to coal gener- ation for heat.				
37.	Require the Bureau of Public Improvements to initiate a study of the future use of the Administrative Building at the Maine Youth Center, South Portland.				
SUBI	TOTAL	3,104,000	(869,000)	2,235,000	24,420,000
TOTA	AL	\$4,560,000	\$ (922,000)	\$3,638,000	\$40,501,000
Note	2: * Represents Bond Issue Proceeds Prorated over a 10-year period.				
Fisc of a stra cost Ford hend	<u>cal Note</u> : Savings and costs have been identified on the basis actual FY 1979 costs. Ten-year projections were made on a aight-line basis. Due to uncertainties regarding future energy ts and the impact of collective bargaining upon wages, the Task be has not attempted to reflect increases for these items - the identified savings should be viewed as being conservative.				

RECOMMENDATIONS, ECONOMIC IMPACT AND REQUIRED IMPLEMENTATION

MOTOR VEHICLE MANAGEMENT RECOMMENDATIONS

1. Develop a centrally-administered automated vehicle management information system for all State agencies that operate State-owned vehicles. The system will have the capability for tracking all vehicle costs and reporting the necessary data on a timely basis. This system should be coordinated by the Bureau of Accounts and Control of the Department of Finance and Administration with the Department of Transportation being responsible for data collection for all State-owned vehicles.

Economic Impact

Currently, there is no central, standardized system for controlling vehicle inventory or managing State-owned vehicle costs. There presently exists a variety of individual systems being used by State agencies that operate vehicle fleets. Because of the successes demonstrated in other States and major cities as a result of implementation of a central, uniform vehicle management system, the Task Force recommends that such a system be developed for managing the State of Maine's vehicle fleet. It is estimated that by tracking and controlling all vehicle use and maintenance on a timely basis, abuses or unnecessary travel being incurred will be curtailed and therefore the current level of vehicle mileage and other related costs can be reduced by 10%. Based on operating costs during FY 1979 of \$3.4 million, the Task Force projects an <u>annual savings of</u> \$340,000.

Required Implementation

Recommendations #2 through 6 address the significant steps required to implement the recommended system.

2. Proceed with implementation of T. 29, § 256, M.R.S.A., requiring registration of all State-owned vehicles by the Secretary of State.

Economic Impact

Title 29, M.R.S.A. § 256, requires the registration of all Stateowned vehicles by the Secretary of State. The Task Force recommends that as an initial step in the process of implementing the Vehicle Management Information System, the number assigned to State-owned vehicles at the time of registration be keyed to the data requirements and coincide with programming needs of the proposed system. This will insure that each vehicle in the State fleet will have a unique, single identifier from the time it is acquired until its disposal. This permanently assigned number is explained further in Recommendation #3 that follows. No costs or savings are identified with this recommendation.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

3. Assign, at the time of registration, a permanent number to each vehicle as the identifier for the automated vehicle management information system.

Economic Impact

The key element of the proposed Vehicle Management Information System (VMIS) is a means of relating costs to individual vehicles and/or drivers. A uniform numbering system and assignment of a permanent number to each vehicle will provide this capability. The numbering system will identify the type of vehicle, department, user and location and will accumulate all costs incurred against that vehicle providing accurate and up-to-date information on a timely basis. This is one component of the VMIS for which annual savings are identified in Recommendation #1.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

4. Appoint an Energy Management Coordinator in the Bureau of Accounts and Control of the Department of Finance and Administration with the assigned responsibilities for analyzing and disseminating all data gathered by the Vehicle Management Information System. The Energy Management Coordinator will monitor the data collected to insure that State vehicle policies are being implemented and to assist the agencies in controlling vehicle costs.

Economic Impact

In order to realize the full potential of the Vehicle Management Information System once it is operational, the Task Force recommends that the position of Energy Management Coordinator in the Bureau of Accounts and Control be established. This individual will be responsible for preparing and disseminating statistical report data from the system to user agencies and the Bureau of the Budget. In addition, the Energy Management Coordinator will be responsible for preparation and analysis of regular reports on vehicle usage and costs in order to

insure that State-wide vehicle mileage and use policies are in compliance. This position will have additional energy related reporting responsibilities as discussed under Recommendation #31. It is estimated that establishment of this position will result in an <u>annual</u> cost of \$16,500.

Required Implementation

Implementation of this recommendation will require legislative authorization.

5. Expand the Department of Transportation's management information system to accomodate data collection for all State-owned vehicles and operating agency needs.

Economic Impact

The Department of Transportation presently maintains a Vehicle Information System which with moderate expansion would be eminently suitable for the purpose of maintaining vehicle information on a State-wide basis. Conversion to the system by all affected agencies should be completed no later than July 1, 1982. This is a further component of the comprehensive Vehicle Management Information System for which annual savings are identified in Recommendation #1. While moderate costs are expected to result from this expansion of the DOT system, it is expected that they will be able to be absorbed by the participating departments and should not diminish the net annual savings reflected in Recommendation #1.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

6. Establish a temporary advisory group of user agencies to advise and assist the Department of Transportation with conversion to the State-wide system.

Economic Impact

In order to insure a smooth transition to this new system, a temporary, advisory group representing major motor vehicle using agencies

should be established. This will insure that specific agency needs are addressed while the system is being developed. There are no costs or savings identified with this component of implementing the Vehicle Management System.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

7. <u>Require the University of Maine to use the automated vehicle management</u> information system.

Economic Impact

The Task Force recommends that the University of Maine be mandated to utilize the automated Vehicle Management Information System identified and explained in Recommendations #1 thru #6. The University currently operates 158 passenger vehicles which would place it among the largest fleet operators if it were a State agency. Availability of information expected to be generated by this system should provide the means of effecting proportionate savings to the University system.

Required Implementation

Implementation of this recommendation may require legislative authorization.

8. Reorganize the State's fueling facilities with conversion to an automated, single source system which will permit elimination of approximately onethird of the existing 250 State operated fuel depots.

Economic Impact

Presently there are fuel facilities at 250 locations throughout the State operated by over ten different departments. These have been established over the years and as a result there is much duplication and inefficiency. It is estimated that reorganization of the State

fueling facilities will permit elimination of approximately one third of the existing 250 State operated fuel depots while at the same time will improve the system. Coupled with this centralized system, introduction of automated equipment will provide 24 hour service at key locations and necessary fuel cost data for the proposed Vehicle Management Information System. Implementation of this recommendation involves the steps in Recommendations #9, 10 and 11 that follow. Based on a three year implementation schedule for approximately 100 depots, it is estimated that this system when fully implemented will yield an <u>annual sav-</u> ings of over \$400,000.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

9. Implement recommendation #8 by immediately establishing three pilot areas -Augusta, Bangor and Scarborough - with a completed State-wide system being phased in over the next 3 years.

Economic Impact

Implementation of an automated fueling system as proposed in Recommendation #8 should begin immediately at three pilot locations with the completed system being phased in over the next three years. The Task Force recommends that Augusta be identified as the initial site followed by automated facilities at Bangor and Scarborough. Presently in Augusta there are fourteen fueling stations operated by eight different agencies. This system will result in elimination of eleven locations. The remaining three locations will provide 24 hour service which is currrently not available. Estimated savings from completion of pilot projects are included in Recommendation #8.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

10. <u>Re-issue credit cards used for State vehicles. New State cards will be</u> <u>coded to the permanent vehicle numbering system and keyed to the management</u> information system.

Economic Impact

In order to assure that all necessary data is accurately programed to the Vehicle Management Information System, the Task Force recommends that all State-issued credit cards be recalled and credit cards specially coded to the proposed VMIS system be issued in their place.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

11. Reduce the amount of commercial gasoline purchases by mandating all State departments to use the State's fuel facilities and instituting stricter controls over the use of commercial credit cards.

Economic Impact

Once the central automated fueling system is fully operational, it will eliminate the need for commercial gasoline purchases, except when using State vehicles for out-of-state travel or in rare circumstances during travel within the State. In order to insure that the use of and therefore savings resulting from the reorganized fueling system are maximized, it is recommended that all commercial credit cards currently being used be recalled and that the Bureau of Purchases design and implement a means of instituting stricter controls over the future use of commercial credit cards. These cards should be issued only for out-of-state travel and when exceptions for in state travel use have been justified to the State Purchasing Agent. Savings from the recommendation are identified under Recommendation #8.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

12. Reorganize the program of achieving at least a ten percent reduction in State related travel and require compliance by State agencies.

Economic Impact

The Task Force believes this program to reduce mileage has potential for future savings, however it needs to be restructured to require compliance by State agencies. The Office of Energy Resources should develop and maintain a system for monitoring agency compliance. (The recommended Vehicle Management Information System when implemented will assist with monitoring). The Task Force feels that this recommendation can be implemented with existing staff at the Office of Energy Resources. Based upon FY 1979 mileage figures of 52 million miles travelled in conducting the State business, achievement of a 10% reduction would save over \$500,000 annually.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

13. <u>Revise and re-issue the policy for use of State-owned vehicles as a stan-</u> dardized guide for all departments.

Economic Impact

While no savings are claimed to result from this recommendation, development and implementation of a uniform motor vehicle policy for all agencies is a critical component in the State's efforts to reduce travel related costs.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

14. Continue the policy of requiring that all new passenger vehicles be in the subcompact category with centralized purchasing only. Encourage the University of Maine to purchase new passenger vehicles through the Bureau of Purchases.

Economic Impact

Since this policy is currently in effect, no additional savings are claimed. However, success to date from this policy indicates its merit particularly in terms of reduced fuel costs and a lower per unit price due to volume purchasing. Similar benefits (savings of at least \$200 per vehicle) could be expected to accrue to the University of Maine.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

15. Utilize "break-even" point analysis in determining whether to assign State-owned passenger vehicles rather than reimbursing employees for use of privately owned vehicles.

Economic Impact

Upon availability of detailed motor vehicle usage data from the proposed Vehicle Management Information System, "break-even" point analyses should be undertaken on all assigned motor vehicles and for high mileage travellers using personal vehicles on a regular basis. This will determine when it is in the best interest of the State to assign a State-owned vehicle vs. reimbursing an employee when a personal vehicle is used. While no savings are claimed for this recommendation, it will insure efficient utilization of assigned State-owned vehicles.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

16. Issue a standard maintenance policy for State-owned vehicles requiring better maintenance procedures for assigned vehicles and require the use of synthetic motor oils in all passenger vehicles purchased by the State in order to extend vehicle life and reduce maintenance/operating costs.

Economic Impact

Currently, there is no standard maintenance policy regarding Stateowned vehicles. Implementation of the Motor Vehicle Management Information System will provide a means of insuring that maintenance is accomplished on a regular basis which should reduce repair costs and prolong vehicle life. Available test data shows that the use of synthetic motor oil should also contribute to these efforts. It is estimated that a 10% increase in vehicle life will yield an <u>annual savings of approximately</u> \$100,000.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

17. Implement the interdepartmental ride-share program for State-related travel.

Economic Impact

The informal interdepartmental ridesharing program should be formalized by the Office of Energy Resources as a means of further reducing State related travel costs. While no direct savings are claimed for this recommendation, implementation of such a system will contribute to achieving the goal of a 10% reduction in travel as stated in Recommendation #12.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

18. Prohibit the use of State vehicles during normal business hours for traveling between State facilities in the Augusta-area complex. Establish a schedule and utilize the van pool vehicles for this purpose.

Economic Impact

The Office of Energy Resources should study the feasibility of utilizing the van pool vehicles to provide shuttle service between State buildings in the Augusta area complex during normal working hours. While no direct savings are claimed for this recommendation, implementation will contribute to achieving the goal of a 10% reduction in travel as stated in Recommendations #12 and #17.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

19. Wherever possible, establish a means whereby employees will be required to reimburse the State for all personal mileage incurred while using a State vehicle.

Economic Impact

In most instances, there are no provisions for the use of State-owned vehicles assigned to employees for purposes other than official business. However, since the State does not operate a secure, centrally located storage facility, many employees garage their assigned vehicles at their residences. This practice results in the additional benefit of free commuting to the employee involved at considerable cost to the State. It is recommended that employees who are authorized to regularly commute be charged for this commuting mileage. This charge would eliminate the employee's obligation to report the value of commuting as income for Federal and State tax purposes and result in the State being reimbursed, in part, for this costly practice. Until the implementation of the Vehicle Management Information System is complete and able to track all mileage, it is not feasible to identify the savings.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

20. Require that all school buses funded under provisions of the School Finance Act be purchased through a centralized bidding procedure in order to achieve a better per unit price due to volume purchasing.

Economic Impact

Under present procedures, while the State reimburses localities for 90% of the acquisition costs of buses, it cannot mandate the manner in which the local districts buy these buses or individual specifications (aside from safety specifications). Approximately 200 buses are purchased each year for a cost to the State of \$4 million. Authorization for a centralized, State-wide bidding procedure for all new school buses should result in at least a 5% reduction in price or an estimated annual savings of \$180,000 to the State.

Required Implementation

Implementation of this recommendation will require legislative authorization.

21. Require diesel engines be specified for school buses to reduce local fuel and maintenance costs which are also largely reimbursable by the State.

Economic Impact

At current costs, the diesel engine option for a 66 passenger school bus adds approximately \$4,000 to the purchase price. However, mandating diesel engines for all new school buses should result in significant reductions in operating and maintenance costs. In FY 1979, 28 million miles of school bus travel were reimbursed by the State under provisions of the School Finance Act. A reduction of 5% of the 72¢ per mile average operating cost would result in annual savings of \$1,120,000. Net savings (after consideration of the added cost of diesel engine options of \$800,000 per year) would be approximately \$320,000 annually. Of this 90% or approximately \$288,000 per year would be saved in State subsidies.

Required Implementation

Implementation of this recommendation will require legislative authorization.

22. Require the Department of Educational and Cultural Services to develop a plan for the next school year encouraging local school districts to consolidate school bus stops.

Economic Impact

Subject to the findings of the preliminary study now being conducted with regard to fuel savings resulting from consolidation of school bus stops, the Department of Educational and Cultural Services should develop a plan for the next school year encouraging local school districts to consolidate school bus stops as one means of reducing motor fuel consumption.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

23. Direct the Department of Educational and Cultural Services to reorganize the Maine State Library bookmobile program by recommending an alternative and more cost-efficient means of providing this service. This recommendation shall be incorporated in the Department's next biennial budget requests.

Economic Impact

The Maine State Library Bookmobile program provides library services to rural areas throughout the State. Costs of these services - which include the operation of eight bookmobiles - were in excess of \$340,000 during FY 1979 for transporting approximately \$30,000 worth of materials. While the Task Force recognizes the value that this service provides to rural communities, it does however, recommend that an alternate, more cost-efficient means of delivering this service should be developed. The Task Force further recommends that the reduced-cost alternative developed be incorporated as part of the Department's 1982-83 biennial budget request.

Required Implementation

Implementation of this recommendation will require legislative authorization.

ENERGY MANAGEMENT IN MAINE STATE GOVERNMENT BUILDINGS RECOMMENDATIONS

24. Establish energy conservation in State-owned buildings as an immediate priority for State officials and complete energy conservation measures with a pay back period of two years or less.

Economic Impact

Completion of the projects with a two-year pay back period or less will involve 412 State-owned facilities. Based upon the results of the completed energy audits of 122 State-owned facilities, it is estimated that completion of all remaining projects will result in an <u>annual</u> <u>savings of \$1,700,000</u>, based on today's fuel costs. It is estimated that completion of these projects will involve a <u>one-time cost of</u> approximately \$600,000.

Required Implementation

Implementation of this recommendation can be accomplished administratively. Necessary funding is available as part of the energy bond issue passed in 1977.

25. Establish within the Bureau of Public Improvements the capability for immediate action on energy upgrading projects.

Economic Impact

It is suggested that contracts be awarded to crafts people (carpenters, plumbers, electricians, etc.) located in the vicinity of the State institutions. These contracts would be awarded on a competitive bid basis and would enable crafts people to be available, upon call, to complete projects at the various institutions on an immediate basis when institutional maintenance resources are not available. It is expected that this capability will be used to respond to unforeseen or emergency energy conservation needs. These emergency one-time costs are eligible for funding from the energy bond issue and it is anticipated that the projects completed in this manner will have an immediate pay back that will, at a minimum, meet the contract cost.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

26. Complete energy audits on State buildings and implement on a more immediate time schedule.

Economic Impact

In order to complete State energy audits before July 1, 1981, the current funding limit must be continued through fiscal year ending 1981. These funds in addition to balances expected to be available at the end of FY 80 along with anticipated Federal funds, will permit the BPI to maintain a full complement of energy auditors until the program is completed. This represents a <u>one-time cost of</u> approximately \$50,000.

Required Implementation

Implementation of this recommendation will require legislative authorization.

27. <u>Review the energy audit projects that were calculated at under ten</u> percent return.

Economic Impact

Upgrading completed audits to reflect today's fuel costs would result in an increase in the number of projects with a rate of return of greater than 10%. These additional projects would cost approximately \$3,300,000 and would reflect an <u>annual savings of</u> <u>approximately \$600,000</u> or a pay back period of $5\frac{1}{2}$ years.

Required Implementation

Implementation of this recommendation will require legislative authorization. It is suggested that this be funded by a bond issue as have energy upgrading projects in the past.

28. Continue the program of installing insulation in all State buildings wherever possible to reduce heat losses.

Economic Impact

To date cap insulation has been installed in 169(+) State-owned facilities representing the majority of situations where cap insulation was practical and supported by acceptable cost benefit ratio - generally identifiable without a comprehensive audit. This process should be continued as needs are identified under the energy audit program. Funds to support and savings expected to result from this effort are reflected in the economic impact statement of Recommendation #27.

Required Implementation

Implementation of this recommendation will require legislative authorization. It is suggested that this be funded by a bond issue as have energy upgrading projects in the past.

29. Intensify efforts to upgrade windows and evaluate storm windows or "bricking-in" on an individual basis.

Economic Impact

It is recommended that the energy audits continue to evaluate storm windows or bricking-in on an individual basis - comparing the buildings occupancy use, aesthetics of approach, feasibility and pay back comparisons of all other energy savings projects. Funds to support and savings expected to result from this effort are reflected in the economic impact statement of Recommendation #27.

Required Implementation

Implementation of this recommendation will require legislative authorization. It is suggested that this be funded by a bond issue as have energy upgrading projects in the past.

30. Establish a Division of Energy Management Conservation in the Bureau of Public Improvements to provide the capability for conducting on-site energy reviews and monitoring of all major State buildings on a continuing basis.

Economic Impact

Establishment of a division of Energy Management Conservation in the Bureau of Public Improvements will require the addition of 4 energy auditor/monitoring positions at an approximate cost of \$65,000 annually. It is estimated that this monitoring program will result in <u>annual savings</u> of \$370,000. This savings is calculated upon the premise that without this monitoring program, the full savings potential from energy upgrading projects will not be realized on a continuing basis.

Required Implementation

Implementation of this recommendation will require legislative authorization.

31. Establish energy consumption standards for all major State buildings and assign monitoring of these standards to the Energy Management Coordinator (as previously recommended) in the Bureau of Accounts and Control.

Economic Impact

Energy consumption standards are being established and utilized as a result of the energy audit program. Establishment of the position of Energy Managment Coordinator in the Bureau of Accounts and Control will provide the necessary monitoring and reporting capability State-wide to insure compliance with these established energy consumption standards. Reports will be utilized by the Bureau of Public Improvements, Bureau of Purchases, and the Bureau of the Budget in addition to the other agencies. Since the primary responsibilities of the recommended Energy Management Coordinator are related to Motor Vehicle Management activities, the economic impact is identified in Recommendation #4.

Required Implementation

Implementation of this recommendation will require legislative authorization.

32. Establish energy efficiency standards that must be met before the State contracts to lease space of over 5,000 square feet.

Economic Impact

Energy efficiency standards are a consideration in the State leased space program. Current legislation mandates that energy cost benefit analysis be prepared and accepted prior to the award of a contract for any leased space in excess of 10,000 square feet. The same legislation requires the same controls for new State-owned construction in excess of 5,000 square feet. The Bureau of Public Improvements should, through administrative procedures, require that all leased space, in excess of 5,000 square feet, meet the same energy conservation standards as Stateowned space. While no savings are claimed for this recommendation, the Task Force feels that there is a cost avoidance associated with this policy. As future leases are renegotiated, implementation of this recommendation will assist in reducing the impact of higher energy costs.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

33. Institute stricter space standards for all State buildings in order to consolidate use of space and energy required to maintain that space.

Economic Impact

The Bureau of Public Improvements currently maintains space standards for the assignment of space within both State-owned and leased facilities. These standards are periodically adjusted to meet program conditions and restraints, building configurations, and expansion considerations, together with other practical application of such standards.

The Task Force recommends that increased emphasis should be given by the Bureau of Public Improvements to its efforts to achieve more definitive long-range space assignments.

While no savings are claimed for this recommendation, the Task Force feels that there is a cost avoidance associated with this policy. Better utilization of available space will not only reduce the need for increased leased space in the future but will also assist in reducing the impact of higher energy costs.

Required Implementation

Implementation of this recommendation can be accomplished administratively. 34. Consolidate the laundries operated by the institutions within the Department of Mental Health and Corrections into a single, central laundry to be located at the Augusta Mental Health Institute to provide laundry service for all other institutions except the Maine State Prison. Because of security restrictions at the Maine State Prison, the laundry now operated there should continue.

Economic Impact

The proposed laundry consolidation at AMHI will provide a centrally located and operated facility with the capacity for meeting the laundry needs of the other institutions, except the Maine State Prison. Presently the laundry facilities at the institutions are being under utilized and as a result are energy inefficient. There will be certain first year costs associated with the reorganization of the existing laundry services. These will include some additional automated equipment, a relocation of some existing equipment, minor modifications to the AMHI facility and equipment related to transporting the laundry. These first-year costs will be more than offset by savings realized from reduced staffing requirements, centralized purchase of supplies and reduced energy needs. Detailed itemization of these costs and savings are included in the Appendix.

The Task Force estimates that the <u>first year</u> will result in a net <u>savings of approximately \$70,000</u> and <u>savings thereafter of aproximately \$250,000</u> annually.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

35. Require the Department of Finance and Administration, through the Bureau of Public Improvements and the Department of Mental Health and Corrections to prepare a plan for the Governor maximizing the use of space at the Bangor Mental Health Institute Complex including an assessment of State agency rental space in the greater Bangor area which may be accommodated within the unused space at the BMHI complex. Such a plan should be modeled after the successful program of alternate space utilization nearly completed at Augusta Mental Health Institute Campus and should include at a minimum, alternate uses for buildings "H", "D", "A-1", and "G". Space consolidation recommondations should also take into consideration the present and anticipated future space needs of other State agencies in the Bangor area.

Economic Impact

While no immediate savings are claimed for this recommendation, this plan should encompass procedures for eliminating energy waste now related to the large amounts of unoccupied space at the facility and should indicate a savings that could be realized by reducing the need for leasing office space in commercial facilities in the Bangor area.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

36. Complete the feasibility study being conducted by the Bureau of Public Improvements regarding conversion of the Maine Correctional Center and the Bangor Mental Health Institute to coal generation for heat.

Economic Impact

Federal funds have been provided to complete these studies. These two facilities have been identified because both previously burned coal and reconversion is expected to be cost-efficient.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

37. Require the Bureau of Public Improvements to initiate a study of the future use of the Administrative Building at the Maine Youth Center, South Portland. The recommendations should take into consideration the historical significance of the building.

Economic Impact

Only the first floor of this very large building is currently occupied and the structure is very energy inefficient. Alternative uses and/or energy upgrading measures should be developed before the onset of the 1980-81 heating season.

Required Implementation

Implementation of this recommendation can be accomplished administratively.

APPENDIX

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MAINE STATE GOVERNMENT VEHICLE FLEET

# DEPARTMENT	of Vehic types - passe	les of including enger	Pas Static	ssenger - on Wagons, Ambula	I n cluding Jeeps, and nces
ݾݜݾݬݒݹݾݾݥݬݥݶݳݘݿݪݥݰݥݜݾݑݷݜݾݻݯݒݯݒݯݷݥݷݑݶݸݮݵݷݷݾݾݞݵݖݾݥݵݛݞݷݾݿݾݑݪݕݥݶݥݥݵݷݞݾݾݖݞݷݿݷݿݸݑݜݜݖݵݿݷݖݸݛݷݛݘݛݞݾݜݾ ݘݹݒݾݥݑݥݻݛݐݾݥݬݥݻݳݘݣݒݥݑݴݥݵݲݾݬݥݕݻݾݻݻݷݒݯݷݚݥݷݵݵݹݷݵݷݵݷݥݵݷݕݞݷݵݖݥݻݾݥݻݾݞݵݪݷݳݑݸݵݤݜݾݜݖݿݑݷݸݒݛݘݷݷݾݪݿݛݞݥ					میں بین ہے ہیں کہ ایک ایک میں ہے۔ ایک بین میں بین ایک میں ایک م
Agriculture	67			30	
Attorney General	17	(includes 2 leased)		17	(includes : leased)
Baxter State Park	34			5	
Business Regulation	1			1	
- Me. Athletic Comm.	1			1	
- Electricians Examing Bd.	3			3	
- Manufactured Housing Bd.	1			1	
- Oilburner Men's Licensing Bd. Total Business Regulation: 7	1			1	
Conservation				1. A.	
- Administration	3			3	
- Forestry	687			49	
- Me. Geological Survey	9			2	
- LURC	1			1	
- Parks & Recreation	183			21	
- Bureau of Public Lands Total Conservation: 904	21			-	
Administrative Office of the Courts	1			1	
Defense & Veterans Services					
- Administration	18			4	
- Military Bureau (U.S. owned used 365 days a year considered State vehicles)	130			29	
- Civil Emergency Preparedness	8			2	
- Veterans' Services	9			-	
Total Defense & Veterans' Services	: 165				
Education & Cultural Services					
- Baxter School for the Deaf	10			2	
- S.C.U.T.	20			-	
- Donated Commodities Program	1			-	
- Library	10			2	
- Museum	4			1	
- CMVTI	14			3	
- EMVTI	15			1	

(As Reported by Departments to the Maine Insurance Advisory Board - August 1979)

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DEPARTMENT	all types - including	Station Wagons, Jeeps, and
	passenger	Ambulances
Education & Cultural Services (co	ontinued)	,
- NMVTI	31	1
- SMVT1	26	6
- WCVTI	15	3
Total Education & Cultural Serv	vices: 146	·
Environmental Protection	54	17
Executive	1	1
Community Services	5	-
Criminal Justice Planning &		
Assistance Agency	3	3
ASSIStance Agency	5	5
State Planning Office	1	1
State Development Office	1	1
Finance and Administration		
- Alcoholic Beverages	77	7
= Property Management Division	24	Л
Runney of Durchased	54 A	4
- Bureau or Purchases	4	-
- State Surplus Property Program Total Finance and Administratic	21 20n: 60	1
Human Services	26	22
Inland Figheriag & Wildlife	671	0.4
Intanu Fisheries & Wildlife	871	. 94
- Atlantic Salmon Comm. Total I.F.&W: 682	11	3
Lottery Commission	16	15
Manpower Affairs		
- Employment Security Comm.	3	1
- CETA Planning & Coordination Total Manpower Affairs: 18	15	-
Marine Resources	88	46
Montal Haalth & Corrections		
- Administration	7	7
- MUT	1 24	1
	34	6
- AROOSTOOK KESIGENTIAI CENTER	2	2
- BMHL	2/	7
- Elizabeth Levenson Center	7	6
- Me. Correctional Center	54	25
- Military & Naval Children's H	lome 2	1
- Pineland Center	61	11
- Me. State Prison	44	11

,	# of Vehic	les of	Passenger - Including		
DEPARTMENT	all types - : Passe	including enger	Station Wagons, Ambula	Jeeps, and nces	
Mental Health & Corrections (con	ntinued)		7.7		
- Me. Youth Center Total MH κ C · 275	43				
Public Safety	·				
- State Police	363		338		
- Capital Security	2		2		
- Criminal Justice Academy	10		4		
- Drug Investigation Unit	6	(leased)	6	(leased)	
- State Fire Marshall	22		22		
- Liquor Enforcement	18		18		
-Special Investigation	20		16		
Total Public Safety: 441					
Public Utilities Commission	8		8		
Maine Sardine Council	1		1		
Secretary of State					
- Motor Vehicle Division	51		40		
- Archives	2		1		
Total Secretary of State: 53					
Transportation	1,456		205		
University of Maine	471		158		
Workers Compensation Comm.	3		3		
TOTAL:	5,004		1,311		

CATEGORIES OF VEHICLES AS REPORTED TO THE MAINE INSURANCE ADVISORY BOARD

Passenger including station wagons, jeeps and ambulances Snowmobiles & all terraine vehicles including trail bikes, motor scooters Ride on power mowers (residential type) Tractors (farm type) The following types of vehicles are rated by Gross Vehicle Weight. Load Weight or by minimum and maximum weights. G.V.W.: The combined weight of the unit plus its load carrying capacity as declared by the manufacturer. Load Weight: The manufacturer's declared load capacity. Other Types: Indicated by over or under a designated pound limit. Pickups and panels 2,000 lbs or less Pickups and panels 2,000 lbs or more Trucks including Fire and Rescue - G.V.W. 0 - 10,000 lbs Light Medium 10,001 - 20,000 lbs 20,001 - 45,000 lbs Heavy Extra Heavy over 45,000 lbs Truck type tractors 45,000 lbs or less Truck type tractors 45,000 lbs or more Trailers - semi, load weight over 2,000 lbs (Semi-trailer, a trailer equipped with a fifth wheel coupling device for use with a truck tractor.) Trailers - commercial, load weight over 2,000 lbs. (Wheels front and rear and attached by a hauling device, or coupling, where no part of trailer or load is transferred to the hauling vehicle.) Trailers under 2,000 lbs load weight designed to be hauled by a passenger type vehicle.

Buses-# Passenger Seats 1-8 (#___), 9-20 (#___), 21-60 (#___), Over 60 (#___). Construction equipment G.V.W. (scrapers, graders, etc.)

Construction equipment - crawler type



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	YEAR										
	<u> 1 </u>	2	3	4	5	6	7	8	9	10	10-YEAR TOTAL
Augusta Locations *	\$ (5)	\$ 30	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 505
Bangor/Scarboro Combined **		(5)	30	60	60	60	60	60	60	60	445
50 Additional Locations ***		(350)	(100)	150	150	150	150	150	150	150	600
50 Additional Locations ***			(350)	(100)	150	150	150	150	150	150	450

Total	\$ (5)	\$(325)	\$(360)	\$ 17O	\$ 420	\$ 420	\$ 420	\$ 420	\$ 420	\$ 420	\$2,000

PROJECTED COSTS/SAVINGS FROM CONVERSION TO AUTOMATED SINGLE SOURCE FUEL SYSTEM (In Thousands of Dollars)

NOTES:

* Cost/Savings Projected By D.O.T. as follows:

	COSTS	SAVINGS	NET		
lst year	\$ (52,300)	\$ 47,900	\$ (4,400)	rounded to	\$5,000
2nd year	(59,100)	89,100	+ 30,000		
3rd year & beyond	(65,900)	130,300	+ 64,400	rounded to	\$60,000

** Total Combined Costs/Savings for Those Two Locations Assumed Equal to Augusta.

*** Cost/Savings for Each of 100 Additional Sites:

	COSTS	SAVINGS	<u>NET</u>	
lst year 2nd year	\$ (20,500) (24,500)	\$ 13,300 22,400	\$ (7,200) or (2,100) or	\$ (7,000) (2,000)
Brd year & beyond	(28,500)	31,700	+ 3,200 or	+ 3,000
STATE OF MAINE

	Inter-Departmental Memorandum	DateMay 23, 1979
To All Commissioners,	Bureau Chiefs & Agency HeadDept	
From Joseph E. Brennan,	Governor JEB Dept	
Subjec:Automobile Travel	Cutback	

Maine and the nation are facing a potentially serious shortage of gasoline this summer. The first step to be taken in addressing this problem is strict enforcement of our speed limits and the acceleration of our energy conservation efforts. I believe that State Government should lead by example in this energy conservation effort. To that end we will begin two programs aimed at conserving gasoline in State Government.

State Travel Conservation Plans

I am requiring the head of each State agency to submit a plan for reducing automobile travel in their agencies. The goal of this plan will be a 10% reduction in miles traveled by each agency. I am instructing the Director of the Office of Energy Resources to review these plans and to work with each agency to monitor their progress toward that goal.

I fully realize that some travel by State employees is essential to the efficient delivery of State services. However, by making a careful study of travel records and program requirements, I believe that each agency head can eliminate unnecessary travel without affecting program performance.

Each agency should have their plan completed and delivered to the Office of Energy Resources by June 15, 1979. If you have any questions about the required information or about this program in general, you should contact the Office of Energy Resources. The Office of Energy Resources will outline the details of each plan and identify the specific information requested in each plan.

Carpool/Vanpool Efforts

Second, the Department of Transportation and the Office of Energy Resources will be cooperating in a program to encourage carpooling and vanpooling among State employees.

The Department of Transportation has already obtained questionnaire responses from about 1,000 State employees interested in vanpooling. The responses to these questionnaires will be used to match riders in a State carpooling effort.

As an incentive to carpooling, increased priority parking will be made available for carpoolers. I would also ask Commissioners and Agency Heads to allow employees to adjust their working schedules to participate in car pools. The Office of Energy Resources and the Department of Transportation will be contacting you on the carpool and vanpool effort in the near future.

I urge each of you to make a concerted effort to achieve the target 10% reduction in auto travel and to encourage carpooling and vanpooling among your agencies employees. Through these programs we can demonstrate to the people of Maine that we are serious about energy conservation and also that we are serious about saving taxpayer dollars.

STATE OF MAINE

Inter-Departmental Memorandum Date December 19, 1979

To	<u>Commissioners</u> , Bureau Chiefs and Agency	Dept
From	Heads <u>Governor Joseph E. Brennan J. 5</u>	DeptExecutive
Subject .	Automobile Travel Cutback: Extended Effort	

As you know, this administration is committed to energy conservation. It remains particularly important that those of us in State government make special efforts to reduce energy consumption for two reasons. First, State government is responsible for the consumption of a great deal of nonrenewable energy. Second, it is our responsibility to provide leadership to the people of this State; the most effective leadership we can exercise in energy is leadership by example.

For these reasons, I am directing each of you to extend your Automobile Travel Cutback Plans (10% mileage reduction) for an indefinite period. Each of you will be expected to continue to file monthly reports as to your progress with the Office of Energy Resources.

This extension will allow us to gain a more complete picture of the travel needs and patterns of the State government as well as the overall viability of a 10% cutback in automobile travel. I believe we have made considerable progress in this effort and should not let the program falter because gasoline is available at the present time.

I commend you for your efforts this far and thank you for your further cooperation.

Questions and comments should be directed to OER.

JB/cf



STATE POLICY ON MOTOR VEHICLE PURCHASE AND OPERATION

WHEREAS, there exists critical energy and petroleum shortages in the United States and in the State of Maine, and

WHEREAS, it is encumbent on all public officials and agencies to take all appropriate measures to maximize utilization of available resources to reduce the impact of the crisis and conserve petroleum products, and

WHEREAS, appropriate procedures and specifications for the purchase and operation of State vehicles will result in efficiencies and economics,

NOW, THEREFORE, I, JOSEPH E. BRENNAN, Governor of the State of Maine, do hereby order and direct the Department of Finance and Administration to issue procedures and specifications for all departments and agencies regarding the purchase and operation of state owned or leased vehicles.

- All vehicles shall be in the subcompact category able to meet the highest federal fleet requirements except that special purpose vehicles and trucks will be of the minimum specifications of the class required for the performance of their assigned tasks and of a manufacture of proven economical performance.
- 2. All vehicle acquisitions shall conform strictly to statutory and legislative policy.
- 3. All vehicles shall be purchased according to specifications and calendar dates established by the Bureau of Purchases.

It is further ordered that any exceptions or variations be requested by the Department or agency head, evaluated by the Bureau of the Budget and approved by the Commissioner of Finance and Administration.

The following procedures and specifications for purchasing state-owned passenger vehicles were made to conform with Title 5, Section 7 to meet federal fleet mileage standards and in accordance with the Public Laws of 1979, Chapter 164, Section 12, which states in part that vehicles shall have been in service for at least five years or to have been driven at least 75,000 miles.

PROCEDURES TO FOLLOW IN ORDERING STATE PASSENGER VEHICLES

- 1. All passenger vehicles will be purchased in accordance with the established calandar dates set forth by the State Purchasing Agent. Exceptions to this must have the approval of the Commissioner of Finance and Administration.
- 2. Calendar dates for purchasing state vehicles:

March 1 October 1 December 1

- 3. All requisitions for vehicles must use the attached specifications for subcompact cars unless justification is presented for the compact or wagon. Any deviation from the specifications must be approved by the Commissioner of the department requesting special consideration and the Bureau of the Budget. Prior approval of the Commissioner and the Bureau of the Budget should be obtained before forwarding the requisitions to the Bureau of Purchases.
- 4. Any motor vehicle purchased which will increase the total department count must have prior approval of the Commissioner of Finance and Administration.
- 5. Vehicles except subcompact or compact that were donated to a State agency (vocational school) for repair projects and are road-worthy, but do not come within the Bureau of Purchases' guidelines shall be sold and not utilized by those agencies.
- 6. Confiscated passenger vehicles will not be used by state agencies if this increases their total vehicle count and such vehicles do not meet Bureau of Purchases guidelines.
- 7. Any State agency purchasing passenger vehicles from another agency must also meet Bureau of Purchases guidelines.
- 8. All vehicle requisitions must also show the following on vehicles being replaced.
 - 1. Serial number.
 - 2. Year and model.
 - 3. Total mileage.
- 9. State departments or agencies will not be permitted to purchase from a stateoperated auction. Any requests for auction items are to be negotiated between agencies and the Bureau of Purchases prior to items being placed on auction list.
- 10. Procedures #1 through #6 do not apply to law enforcement pursuit type vehicles and #1 through #10 do not apply to vehicles used by undercover agents in the Division of Special Investigations.

Subcompact

Chev. Chevette Hatchback; Ford Pinto Runabout; Dodge Omni Hatchback or approved; 4-cylinder engine, with standard equipment normal on a regular production line vehicle of this type and options as follows: manual or automatic transmission; rack & pinion steering; brakes; front disc; rear drum; tires standard for vehicle; vinyl seats. Heavy duty electrical and suspension systems if available.

Compact or Intermediate

4-Door Sedans, 6-cylinder engines (approx. 225 HP) Wheel Base (Approx. 106") with standard equipment normal on a regular production line vehicle of this type and options as follows: Automatic Transmission; Power Steering; Power Brakes; Radial Tires to include spare tire; Vinyl Seats; Front Bench Seat; Standard Wheel Covers. Heavy duty electrical and suspension systems if available.

Station Wagons

4-Door Station Wagon; 6-Passenger; 8-cylinder engines (approx. 302 HP); Wheel Base (approx. 114") with standard equipment normal on a regular production line vehicle of this type and options as follows: Automatic Transmission; Power Steering; Power Brakes; Radial Tires to include spare tire; Vinyl Seats; Front Bench Seat; Standarc Wheel Covers; Heavy Duty Suspension; Heavy Duty Electrical System; Power Tailgate Window.

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JOSEPH E. BRENNAN Governor

STATE OF MAINE

Inter-Departmental Memorandum Date. December 19, 1979

To	Commissioners, Agency Heads, Bureau Heads -	Debt
From _	Joseph E. Brennan, Governor 421	Dept. Executive
Subject	Rideshare Incentives	

At this point, the State has launched an ambitious Rideshare program. We have six vanpools on the road and more to come. We have administered a carpool matching program in which nearly 40% of Augusta State employees participated. We are currently working with major employers from Berwick to Caribou in an effort to launch similar programs throughout Maine. The benefits to this program are many; chief, of course, is the substantial gasoline conservation which results. I am very serious about doing whatever I can to assist this conservation program.

Apparently, there are some points of confusion among State agencies related to the rideshare program. One point in particular concerns flexible work hours for those State employees who wish to join car or vanpools.

My policy is simply this: I urge all those in management or supervisory positions to do their very best to accommodate those in their employ who request schedule changes in order to participate in rideshare efforts. Many departments and agencies are facilitating these kinds of arrangements without sacrificing work performance. Early-morning or end-of-the-day calls for those who are rendered unavailable because of carpool commitments should be handled by advising the public that the person in question participates in the State rideshare program and will return the call at the caller's convenience. Carpoolers should not expect to be assigned less work or shorter all around hours, but merely a more flexible timeframe in which to perform work.

Of course, certain emergency-oriented agencies (health services, etc.) simply must be available at all times to serve the public. This is why I ask each of you to exercise your best considered judgement.

Each of us must examine our habits and rules in the light of the urgency and absolute necessity of the energy situation. Please join me in this endeavor with vigor and commitment.

Questions and comments should be directed to the OER.

JEB:cf

STATUS OF AUDITS-STATE OWNED BUILDINGS

	NO. OF BLDGS.	COMPLETED	BALANCE
Agriculture	3	0	3
Conservation Forestry Park Commission	6 0	0 0	6 0
Defense Military Bureau Civil Defense Veterans Services	49 0 2	9 0 0	40 * 0 2
Educational & Cultural Service CMVTI EMVTI KVVTI NMVTI SMVTI WCVTI Baxter School	5 7 1 25 32 17 13	5 6 1 7 11 1 13	0 1 0 18 21 * 16 0
Indian Schools Old Town Peter Dana Pleasant Point UTS	1 1 3 9	0 0 0 5	1 1 3 4
Fish & Game	20	6	14 *
Finance & Administration Bureau of Public Improvemen	ts 24	10	14
Indian Affairs	3	0	3
Maine Maritime Academy	10	0	10
Marine Resources	3	0	3

	NO. OF BLDGS.	COMPLETED	BALANCE
Mental Health & Corrections			
AMHI	29	0	29 *
BMHI	15	15	0
Pineland Center	31	31	0
Aroostook Residential Ctr.	1		Ō
Levinson Center	ī	1	Ő
MCC	10	0	10
MVC	25	Ă	21 *
MSP	11	Ō	11 *
Military & Naval Children's	**	5	
Home	1	0	1
Stowong Eraining Contor	12	0	12
Stevens fraining center	14	8	. 12
Public Cofety			
Public Salety	7	1	6
Criminal Justice Academy	6	1	5
Criminal Justice Academy	0	T	J
Transportation			
lansportation	3	0	3
Watorwaya	1	0	1
Waterways	25	0	22
птунжау	410	<u>2</u>	205
	412	12/	205

* Audits in progress

** Cap Insulation Completed - 116 Buildings

*** Boiler Replacement

2 Central Plants

7 Buildings

Audit staff will be full-time State-owned buildings by June 1980.

Provided by the Bureau of Public Improvements.

ENERGY CONSERVATION PROJECTS

IN

STATE-OWNED BUILDINGS

Augusta Mental Health Institute Bangor Mental Health Institute Maine State Prison Elizabeth Levinson Center Governor Baxter School for the Deaf Stevens Center Pineland Center Capitol Complex Maine Vocational Schools Other

ENERGY CONSERVATION PROJECTS - STATE-OWNED BUILDINGS

AUGUSTA MENTAL HEALTH INSTITUTE

DESCRIPTION

- Shut down boilers after hot water demand is over in the afternoon. (summer months)
- 2. Upgrading and replacement of controls on heating and ventilating units.
- 3. Collecting information and specifications on soot blowers for Cleaver Brooks boilers to provide a means of improving efficiency.
- 4. Insulation of walls and ceiling of machinery storage building which is presently not insulated. Since oil consumption is high, this boiler will also be tested for efficiency.
- 5. Change lights in laundry to energy efficient type. Present load is 15,000 watts and new will require only 1,800 watts.

BANGOR MENTAL HEALTH INSTITUTE

- Mothball "G" Building Conversion of the sprinkler system from wet to dry and completely draining the plumbing and heating.
- 2. <u>Oil-Fired Hot-Water Tank, Hedin Hall</u> This building is remote from the main plant and has its own heating system using #2 fuel rather than #6. Before this work was done, domestic hot water was heated by the big boiler. This meant we had to run the boiler winter and summer. We can now turn the boiler off in the summer and activate the oil-fired, hot-water tank.
- 3. <u>Override Controls New Pavilion</u> Before these Done controls were installed, the heat was controlled by several thermostats on each ward. These were subject to constant adjustments. Under the present system, the charge nurse has control over the heat on the entire ward.
- 4. <u>"D" Building Controls</u> Controls amount of venti- Done lating air, enabling a reduction of the percentage of outside, cold air.

STATUS

Being Done

Done

Being Done

Awaiting material

Being Done

Done

BANGOR MENTAL HEALTH INSTITUTE - Con't

DESCRIPTION

- 5. <u>Storm Windows, F-1 and F-2</u> "F" Building is the only area having storm windows to any extent. These were installed as part of the renovation project now nearing completion.
- 6. <u>Re-roof "E" and part of "F"</u> While this project was not intended primarily for energy conservation, it is expected to save energy. Essentially, the project consisted of replacing slate shingles with asphalt. In the course of the project, 20 dormers were removed. The windows in these dormers were probably 20 years old and inefficient. The roof is now water and air tight.
- 7. Boiler Room, "A" Building During the non-heating season (about four months), reduce the steam pressure from 110 psi to 50 psi from 6:00 P.M. to 6:00 A.M.
- 8. <u>Building "A"</u> Rebuild Fisher control valves on main steam lines to automatic modulating service with outside sensors.
- 9. <u>Building "A"</u> Furnish & install new space thermostats & controls, to include night set back.
- Laundry Building "A-1" Provide & install automatic 7-day program clock with necessary controls.
- 11. <u>Building "B"</u> Furnish & install self-contained, locking thermostatic radiator valves. Furnish & install electric thermostatic with motorized valve in Chapel.
- 12. <u>Building "B-1"</u> Furnish & install pneumatic system of automatic temperature control to provide individual room control. Overhaul present re-used equipment.
- 13. <u>Building "C"</u> Furnish and install self-contained, locking thermostatic radiator valves for all radiators on all floors of the building including the basement level.

Furnish and install a 5" electric automatic control valve for the main steam coil in the plenum supplying the Sturtevent air handling unit. Furnish and install an electric automatic Control valve for the steam coil in the discharge air.

STATUS

Done

Done

Done

DESCRIPTION

13. Con't

Furnish and install a pneumatic thermostat in the coldest part of the building. This thermostat will be piped back to the main control panel to provide occupied/unoccupied control. Furnish and install an electric space thermostat in the area being served by each reheat coil. Furnish and install protective guards for each space thermostat. Readjust and balance all dampers. These two coils will be sequenced from a controller located in the return air. As the return air temperature drops to the setting of the controller, the steam coil valve on the discharge air coil opens. On a continued drop in return air temperature, and through the action of an auxiliary potentiomemter, the steam coil valve on coil in the plenum opens. Furnish and install an electric automatic control valve for each of the four (4) reheat coils.

14. <u>"E" Building</u> - Furnish and install self-contained, locking thermostatic radiator valves for all radiators on all floors of the building including the basement level.

Furnish and install a 5" electric automatic control valve for the main steam coil in the plenum supplying the Sturtevent air handling unit. Furnish and install an electric automatic control valve for the steam coil in the discharge air. These two coils will be sequenced from a controller located in the return air. As the return air temperature drops to the setting of the controller, the steam coil valve on the discharge air coil opens. On a continued drop in return air temperature, and through the action of auxiliary potentiometer, the steam coil valve on coil in the plenum opens. Furnish and install an electric automatic control valve for each of the four (4) reheat coils. Furnish and install an electric space thermostat to provide occupied-unoccupied controls.

15. "F" Building - Furnish and install a line size electric automatic control valve for the main steam line supplying this building and an electric space thermostat to control this zone valve during unoccupied cycles. A new 7-day automatic program clock and relays will be installed to provide occupied/unoccupied changeover. Also provide an outside air sensor to fully shut the zone valve when the outside air reaches a predetermined temperature (approximately 65° F). The clock relays and miscellaneous control devices will be installed in a locking panel located per owner.

STATUS

DESCRIPTION

- 15. Con't Furnish and install self-contained, locking thermostatic valves on all uncontrolled radiators in the building.
- 16. <u>"H" Building</u> Furnish and install self-contained, locking thermostatic valves for each piece of radiation on basement floor of this building.

Wards H-1, H-2, H-3 and H-4 at the present reading are currently scheduled to be closed and will not be heated except for the basement floor (formerly HDR and HOT). Existing unit-ventilators will be replaced by the owner (basement floor only). The temperature controls for these new unit-ventilators shall be installed.

Furnish and install a pneumatic space thermostat in the coldest part of the building. This thermostat will be piped back to the main control panel to provide occupied/unoccupied control.

Existing gravity exhaust system shall be blocked off.

17. "K" Building - Furnish and install a line size pneumatic automatic control valve for the main steam line supplying this building and a pneumatic space thermostat to control this zone valve during unoccupied cycles. A new 7-day automatic program clock and pneumatic-electric relays will be installed to provide occupied/unoccupied changeover. Also provide an outside air sensor to fully shut the zone valve when the outside air temperature reaches a predetermined temperature (approximately 65° F). The 7-day clock, relays and miscellaneous control devices will be installed in a locking panel.

All existing unit ventilator controls will be replaced with new pneumatic controls, including space thermostats (located in wall-mounted aspirator boxes), control valves, damper motors and low limit discharge controllers. Add steam stats to deenergize the fan motors when there is no steam available. Add freeze controllers to deenergize the fan motors if the discharge air drops below its setting. All existing galvanized tubing will be replaced with new copper or plastic tubing.

STATUS

DESCRIPTION

17. Con't

Furnish and install pneumatic radiator valves for all radiators in K-School (Sub-basement) with a pneumatic space thermostat. Furnish and install pneumatic radiator valves for the radiation in KOT basement level to be controlled from the unit ventilator thermostat. Furnish and install pneumatic radiator valves for the radiation in the Print Shop to be controlled from the unit ventilator thermostat.

Furnish and install self-contained, locking thermostatic valves for all other radiators on all floors of this building.

- 18. Pooler Pavilion (Old) Furnish and install a line size pneumatic automatic control valve, outside air sensor and necessary relays to fully shut the main zone valve supplying this building when the outside air temperature reaches the setting of the sensor (approximately 65° F).
- 19. <u>Maintenance Building</u> Furnish and install a line size electric automatic steam zone valve, electric space thermostat and 7-day program clock to automatically select the occupied/unoccupied cycles of control.

Reduce outside air intake on HV unit during occupied mode. Eliminate outside air intake on HV unit during unoccupied mode.

Install automatic control dampers in gravity relief vents so that during the occupied mode the dampers are closed. Provide panel-mounted override switch to override program timer so that the exhaust dampers can be manually opened or closed as required.

Provide three-position override switch labelled OCCUPIED/AUTO/INOCCUPIED to manually override the program timer for the HV unit only.

Install an outside air sensor to automatically close the main steam valve whenever the outside air temperature exceeds 65° F.

STATUS

BANGOR MENTAL HEALTH INSTITUTE - Con't

DESCRIPTION

20. Prerelease Building - To furnish and install two (2) new 5" pneumatic valves and operators to replace the existing space thermostats with new dual temperature day/night thermostats. Furnish and install a new, properly sized supply air compressor and refrigerated drier. Also add a new 7-day program clock, dual pressure reducing station and electric-pneumatic relays to provide automatic day/night changeover.

Furnish and install an outside air sensor to fully close the two (2) zone valves when the outside air reaches a predetermined setting (approximately 65° F).

Furnish and install self-contained, locking thermostatic valves for all other radiators on all floors of this building.

GENERAL

In all the above areas where any of present equipment is re-used this will be upgraded or overhauled if necessary for energy conservation.

02 controls & instruments will be installed on steam generating units in Boiler plant.

MAINE STATE PRISON

1.	Replace faulty steam traps or repair elements.	Complete 90%
2.	Upgrade controls & overhaul two heating and ventilating units.	Contracted
3.	Properly sequence the boilers.	Done
4.	Insulate domestic hot water lines & some steam lines.	In Process
5.	Upgrade condensate pumping unit.	In Process

6. Install set back controls on hot water for shops and maintenance.

STATUS

The following are on a bidding process document. These all to be completed before the 1980-81 heating season.

ELIZABETH LEVINSON CENTER

DESCRIPTION STATUS 1. Reduce outside air ventilation and exhaust rate Done during the day to 750 CFM and 300 CFM during the night. 2. Kilowatt hour saving. Partial 3. Reduce daytime temperature to 72° F. Reduce night Not Done time temperature to 65° F. 4. Remove 70% of the window area and block existing To Be Done skylights. . . 5. Tighten and weatherstrip all doors. Replace To Be Done kitchen supply door with insulated door.

GOVERNOR BAXTER SCHOOL FOR THE DEAF

- 1. Install automatic program clock and night set back I thermostat.
 - In the bidding process

- 2. Weatherstrip & insulate.
- 3. Install controls for exhaust ventilation.
- 4. Increase efficiency of farmhouse boiler.
- 5. Selective blocking of windows.

STEVENS CENTER

- Replaced inefficient steam boiler with new boiler, Done including some condensate piping changes and new deareator.
- Installed one (1) oil-fired, hot-water heater and Done two (2) electric hot-water heaters to allow for shutting down boiler plant during summer.
- 3. Replaced approximately 400 linear feet of underground steam lines and 400 linear feet of condensate lines. These lines were leaking and insula tion was poor and deteriorated. Complete new insulation on these lines.
- Furnished 26,000 sq. ft. of 6" fiberglass insula- Done tion.
- 5. Insulate roof of Stevens Gym.

In Process

PINELAND CENTER

DESCRIPTION

- 1. Steam and condensate upgrading from laundry to infirmary, including new insulation and underground drainage.
- Steam and condensate upgrading at motel housing units. Includes replacement of leaking pipes underground.
- Additional Bailey controls on #2 boiler for CO₂, to improve efficiency.
- Additional Bailey controls on #1 boiler for CO₂, to improve efficiency.
- 5. New boiler feed water pumps allowing electric pump to be used normally and steam turbine used as stand-by.
- 6. New boiler oil feed system using electric driven pumps for more efficient combusion.
- 7. Insulating steam and condensate lines in tunnels and manholes.
- 8. New controls on heating & ventilating in Muskie Building.
- 9. Replace boiler in old Administrative Building. Present boiler obsolete and inefficient.
- 10. Re-vamp condensate system in Boiler House to include additional condensate receiver. This will save energy by using all condensate and recover maximum BTU's.
- 11. The following building insulation was installed in buildings at Pineland Center.
 - (a) 1,300 cubic feet of loose insulation
 - (b) 12,000 square feet of 9" fiberglass batt
- 12. Recover BTU's from boiler blow down water and steam.
- Furnish & install temperature controls Hedin Hall.
- 14. Furnish & install temperature controls Berman School.

STATUS

Done

Done

Being Done 90%

Being Done 20%

Done

Done

Done

Done

Future - Now Engineering

Done

Done

To Be Done

Done

PINELAND CENTER - Con't

DESCRIPTION

	DESCRIPTION	STATUS
15.	Furnish & install temperature controls - Muskie Building.	Done
16.	Furnish & install temperature controls - Soucy Gym.	Done
17.	Furnish & install temperature controls - Benda Hospital.	In Process
18.	New suspended ceiling in Laundry Building.	Done
19.	New combination windows at Freeport Annex.	Done
20.	New combination windows at Dirigo House.	Done
21.	New combination windows at Muskie Building.	Done
22.	Replace overhead doors on Fire Station.	In Process
23.	Furnish & install temperature controls - Adminis- trative Building.	In Process
24.	Furnish & install temperature controls - Doris Anderson Hall.	In Process
25.	Furnish & install temperature controls - Cumber- land Hall.	In process
26.	Furnish & install temperature controls - Bliss Hall.	To Be Engineered
27.	Furnish & install temperature controls - Kupelian Hall.	To Be Engineered
28.	Furnish & install temperature controls - Laundry.	To Be Engineered
29.	Furnish & install temperature controls - Motels.	To Be Engineered
30.	Replace incandescent lights with energy savers - Staples Hall.	Being Done
31.	Replace incandescent lights with energy savers - Bishop Hall.	Done

CAPITOL COMPLEX

1.	Installed new p	neumatic te	emperature	controls	and	Done
	added some self	-contained	thermostat	controls	•	

	DESCRIPTION	STATUS
2.	Re-activate controls and sensors in Cultural Building.	Contracted
3.	Installed automatic damper on outside air to paint shop and wood shop of Cultural Building.	Done
4.	Install one 100 H.P. boiler and install one 300 H.P. boiler. Remove 3 old boilers in State Office Building.	Done
5.	Additional insulation in Blaine House.	Done
6.	Upgrade controls on Blaine House Boiler.	Done
7.	Install solar collectors for domestic hot water at Executive Staff House.	Done
8.	Closed outside air louvers on all H & V units.	Done

MAINE VOCATIONAL SCHOOLS

CENTRAL MAINE VOCATIONAL TECHNICAL INSTITUTE

1.	Install a	a wind-up	timer,	reduce	temperature.	This	is	а	rec	ent
						audit	: &	wi	11	be

followed up.

2. Reduce temperature of domestic hot water to 105° F.

- 3. Weatherstrip doors.
- 4. Install suspended ceiling.
- 5. Install low wattage fluorescent tubes.
- 6. Roof insulation in 1979.
- 7. Install hot water reset and outdoor sensor, reduce temperatures.
- 8. Insulate underground heating pipes.
- 9. Reduce day and night temperatures; replace filters; maintain steam traps.
- 10. Reduce lighting hours.
- 11. Install timeclock to regulate day and night temperatures.
- 12. Reduce ventilation cycle on air handling units.
- 13. Reduce percentage of outside air on unit vents.

SOUTHERN MAINE VOCATIONAL TECHNICAL INSTITUTE

DESCRIPTION

- 1. Install new boiler in Administration Building.
- 2. Drop domestic hot water to 105° F.
- 3. Hot water temperature, setback system.
- 4. Time clocks.
- 5. Cut exhaust and balance.
- 6. Weatherstrip doors and windows.
- 7. Insulate roof of Practical Nursing.
- 8. Clean up Boiler Room, boilers and controls.
- 9. Test boilers for efficiency and make required changes.

Additional audit work is in process.

NORTHERN MAINE VOCATIONAL TECHNICAL INSTITUTE

Masonry Shop

1.	Reduce occupied temperature to 68° F. Reduce unoc- cupied temperature to 55° F. Reduce hours per week that daytime conditions are maintained to 40. Add automatic clock and thermostats to change from day- time conditions to unoccupied conditions.	Done
2.	Block 75% of the window area. Retrofit doors as anticipated in Mr. Mailman's letter of 8/30/78.	Done
3.	Add 10" of cellulose fiber to ceiling per Mr. Mailman's letter of 8/30/78.	Done
4.	Insulate walls with 4" of Rupco foam as per Mr. Mailman's letter of 8/30/78.	Done
Agri	cultural Shop	
1	Reduce occupied temperature to 68° F. Reduce un- occupied temperature to 55° F. Add automatic clock and thermostat to change from occupied to unoccupied temperature.	Done
2.	Block windows in all areas except the classroom. Reduce window area in classroom as much as possi-	

STATUS

Done

Done

Recent audit & to be done.

Done

In Process

3. Insulate walls. Weatherstrip and retrofit doors.

ble. Insulate area to a U value of .07.

Done

NORTHERN MAINE VOCATIONAL TECHNICAL INSTITUTE - Con't

DESCRIPTION STATUS General Replace three inefficient boilers. 1. Done 2. Install 8 Electrostatic Precipitators in Welding Shop. Done 3. Insulate buildings No. 170, 226, 255, 275, & 302. Done 4. Weatherstrip buildings No. 170, 302, & 275. Done Welding Shop 1. Reduce temperature to 68° F during occupied period. Reduce temperature to 55° F during unoccupied period. Add automatic time clock and thermostat for change. Done 2. Insulate walls to a U value of .06. Done 3. Insulate ceiling to a U value of .06 or better. Done 4. Insulate ceiling. Done OSHA Lab This building is equipped with an automatic 1. clock for night setback. However, it would appear from the amount of oil that is used in this building that refinement of the controls is required to hold a daytime temperature of 68° F and an unoccupied temperature of 55° F. Done 2. Retrofit manual vents, weatherstrip and insulate. Reduce ventilation and insulate. Reduce ventilation and exhaust. Reduce to zero during unoccupied hours. Done 3. Add insulation to the ceiling per Mr. Mailman's letter of 8/30/78. Done Residence Building (Electrical Heat) Eliminate porch and shut off heat during the 1. winter months and use as vestibule. Done 2. Porch eliminated. Reduce temperature in electrical heated addition to 68° F during the day, 55° F during the night, add automatic thermostat. Done 3. Insulate ceiling over electric heat addition. Done

NORTHERN MAINE VOCATIONAL TECHNICAL INSTITUTE - Con't

STATUS

Done

Done

Done

DESCRIPTION

Residence Building (Steam Heat)

1.	Reduce daytime temperature to 68 ⁰ F. Reduce
	nighttime temperature to 55° F. Install dual
	timer thermostats.

- 2. Insulate walls as per Mr. Mailman's letter dated 8/30/78. Retrofit doors.
- 3. Change windows to thermopane windows.

EASTERN MAINE VOCATIONAL TECHNICAL INSTITUTE

Johnston Gym

1.	Replace present boiler with new boiler and con- trols.	Done
2.	Install 7-day time clock with unoccupied set- back.	Done
3.	Balance air system.	Done
4.	Install high pressure sodium lights replacing inefficient lights.	Contract Being Done
5.	Install a vestibule on 3 north doors.	In Process
Co-E	d Dormitory	
1.	Board & insulate 32 fixed windows and 17 oper- able.	Done
2.	Close the Co-Ed Dormitory for summer.	Done
3.	Install 57 thermopane sliding weatherstripped windows.	Done
4.	Install 65 thermopane sliding weatherstripped windows.	Not Done
5.	Install 24 hour time clock to eliminate night exhaust.	Not Done
6.	Install check valve to eliminate hot water to drinking fountains.	Done
7.	Remove and insulate bookstore windows.	Not Done
8.	Board and insulate 24 fixed windows.	Not Done
9.	Adjust outside air at unit vent in social area.	Not Done

EASTERN MAINE VOCATIONAL TECHNICAL INSTITUTE - Con't

DESCRIPTION

Men's Dormitory & Cafeteria

- 1. Provide new hardware and weatherstrip the Mail Room outside doors.
- 2. Board up and insulate 2 of 4 picture windows in the first floor lounge (R=16 at 7.00/a square foot).
- 3. Install a 7-day time clock and mechanical windup override timer so as to maintain 55° F and 0% outside ventilation in the dining hall during the night cycle.
- Install a 24-hour time clock on roof exhaust Fan #6 (640 CFM).
- Install a 24-hour time clock on roof exhaust Fans #4 & 7 (1,080 CFM & 520 CFM).
- 6. Weatherstrip 2 West and 2 North doors.
- 7. Install a 3-way mixing valve system to provide 105° F water to specified area.

KENNEBEC VALLEY VOCATIONAL TECHNICAL INSTITUTE

1.	Blocking window areas, skylights and weather- stripping.	Done
2.	Insulate ceilings.	Done
3.	Insulate studded walls.	Done
4.	Maintain day temperatures at 65 ⁰ F with night setback.	Done
5.	Reduce night exhaust to 0.	Done
6.	Overhaul traps and condensate system.	Done
7.	Install new boiler and controls, replace ineffi- cient boiler.	Done
8.	Install efficient new burner and controls on spare boiler.	Done

STATUS

Not Done

Not Done

Not Done

Not Done

Not Done

Not Done

Not Done

WASHINGTON COUNTY VOCATIONAL TECHNICAL INSTITUTE - MARINE VOCATIONAL

DESCRIPTION

STATUS

- 1. Add time clocks to automatically change from an occupied temperature of 65° F to an unoccupied temperature of 55° F. Reduce hours that occupied temperature is maintained to 36.
- Eliminate north garage door stud and insulate areas. Replace garage door in building No. 1 and No. 3 with insulated doors. Tighten and weatherstrip all doors.
- 3. Insulate roof of building No. 1 and No. 2 to a U value of .06. Eliminate skylights and insulate these areas to a U value of .06 in build-ings No. 2 and No. 3.
- 4. Reduce outside air to 5,000 CFM. Reduce exhaust rate to 20,000 CFM.
- 5. Reduce summer fan horsepower by not running fans during unoccupied periods.

OTHER

- 1. Marine Resources, Boothbay Harbor Replace old inefficient boiler and controls, boiler fitted with stand-by gas fuel.
- Insulated various State Police Buildings (Capped).
- Central Maintenance Garage, D.O.T., Augusta -Closed 75% of window areas and insulated ceilings.
- 4. Bureau of Waterways, D.O.T., Rockland Insulated ceilings and walls.

Not Done

Not Done

Not Done

Not Done

Not Done

Done

Done

Done

SAMPLE FORM

BUREAU OF PUBLIC IMPROVEMENTS ANNUAL ENERGY REPORT

1) DEPARTMEN 2) BUILDING 3) PERSON CO	NT: : OMPLETING FORM:				COMPLETE OR	_ TELE	PHONE #: A BELOW		DOES NOT BY LOCAL	NEED TO BE C	OMPLETED
4) 1977–1978 5) 1978–1979	* COLUMNS * 8 fiscal yr. 9 fiscal yr.	l FUEL TYPE	2 GAL.	3 <u>COST</u>	4 SQ. FT. <u>HEATED</u>	5 <u>KWH</u>	6 <u>COST</u>	7 AREA <u>SERVED</u>	* 8 * GAL./ * <u>SQ. FT.</u> * * * * * * * * *	9 KWH/ <u>SQ. FT.</u>	10 MBTU/ <u>SQ. FT.</u>

*

INSTRUCTIONS:

- Line 2 Please complete one form for each building with a separate fuel oil drop.
- Lines 3 & 4 Insert the name and phone number of person to be contacted should a question arise.
- Lines 4 8 Complete and submit the data in Columns 1 through 7 each year. Column 1 indicates type of fuel (#2, #6, etc.), Column 2 is number of gallons, Column 3 is the cost in dollars, Column 4 is square footage heated by oil for this period, Column 5 is total Kilowatt hours used for all purposes, (if central meter, list total <u>once</u>), Column 6 is cost of KWH in dollars, and Column 7 is square footage for area served.

PLEASE RETURN TO: Bureau of Public Improvements, Room 119, State House Station #77, State Office Building, Augusta, Maine 04333

		SU	MMARY OF ENE	RGY IMPROVEMENT	S - MENTAL HEA	LTH & CORREC	TIONS				
			AREA						· · ·		
		Gross	Heated	Unoccupied	0il Present	Gallons Sq. Ft.	0il Projected	Savings Gallons	Imp.	Cost Compl.	
**	AMHI	777,075	777,075	-	1,028,003	1.32	925,203	102,800 E	154,200	-	
*	BMHI	547,186	535,186	150,573	686,922	1.28	339,356	357,566	453,000	30,788	
*	Pineland Center	468,747	466,337	2,410	867,615	1.86	631,739	335,876	424,659	137,888	
	Maine Correctional Center	153,600	153,600		187,694	1.22	168,925	18,769 E	-	-	
**	Maine Youth Center	170,000	-	-	322,500	1.89	289,250	32,250 E	. –	- '	
**	Maine State Prison	220,458	-	-	541,575	2.45	441,575	100,000 E	50,000	-	
	Stevens School	130,000	-	-	90,000	.69	81,000	9,000 E	25,000	-	
					3,724,309		2,877,048	956,261			

* Audit Complete

** Audit Partially Complete

E Estimated Gallon Savings Pending Complete Audit

Typical Improvements

- A. Upgrade boilers
- B. Repair and Replacement of Temperature Controls
- C. Insulation
- D. Reduction of Supply Air
- E. New Boilers or Oil Burners
- F. New Zones and Night Setback

Provided by the Bureau of Public Improvements.

CENTRALIZED LAUNDRY FACILITY PROPOSAL

The following is an over-view of the Governor's Management Task Force's recommendation of how a central laundry facility can be implemented at the Augusta Mental Health Institute with a minimal amount of expenditures while meeting the goal of supplying all of the institutions with the same level of service that they are now receiving.

CENTRAL LAUNDRY

The present laundry facility at AMHI is equipped to hand approximately two million pounds of laundry a year with present equipment. It is estimated by the Governor's Management Task Force that a central laundry would have to produce three million five hundred pounds of flatware a year in order to meet the needs of all the institutions involved. In order to do this at the AMHI location, some renovations would be required. Also, certain additional equipment would need to be purchased in order to achieve maximum output from the staff necessary to maintain the operation.

In order to meet Title XVIII, Title XIX and the Joint Commission's standards, a soiled linen loading dock would have to be constructed and a live monorail to facilitate sling loading and increased production would be required. (See Exhibit A.)

Anticipating increased use of the washers and dryers, it is proposed that one large washer and two small ones be transferred from the Bangor Mental Health Institute to be utilized as backup so that any breakdown of the present equipment would not result in a shut-down of the operation (See Exhibit A.)

In the dryer operation, it would be necessary to transfer three dryers from the Bangor Mental Health Institute in order to insure the necessary

capacity for increased drying needs as well as to compensate for possible breakdowns that might occur from time to time. In order to reduce manual labor involved in sorting and preparation, acquisition of two towel folders would provide the necessary capacity to handle the increased load and reduce required labor. (See Exhibit B.)

One of the old ironers would be replaced with an eight roll ironer from BMHI. This ironer is in good working condition and would be augmented with the following equipment in order to maintain an average capability of 90 feet per minute:

1. Sheet spreader-feeder

2. High speed cross folder.

This equipment would enable the central laundry to process the total volume necessary to meet the needs of the institutions. The existing folder and present ironer would be utilized in the processing of pillowcases and other small items, allowing an uninterrupted flow of sheets to be processed on the ironer transferred from Bangor Mental Health Institute. (See Exhibits A and B.)

Also to be transferred to the central facility would be the steam tunnel that is presently at Pineland, which would be utilized to do such things as doctor's jackets and lab coats (although these services are not supplied at AMHI and possibly could be eliminated at the other institutions.)

Minimum renovations would have to be made to the present Central Supply in order to provide for a staging area for the clean linen prior to its loading into transport vehicles.

Transportation of laundry would be accomplished through the acquisition of two twenty foot vans, unless suitable vehicles are available through State Surplus, with an anticipated (at least at the onset) daily pickup/delivery to each institution, scheduled on a Monday through Friday delivery. (See Exhibit B.)

AMHI'S INCREASED OPEARATING COST

The Task Force anticipates a total staffing requirement of 22 for the central laundry facility. (See Exhibits C and D.)

The increase in certain operating costs at the central facility for water, sewerage, electricity, repairs, etc. will be offset by reduced requirements at the other locations. (See Exhibit C.)

SATELLITE INSTITUTIONS

In order for the institutions to help unload the delivery trucks, as well as maintain clean linen inventories and pick up dirty inventories, which must be sorted at the institution level if the central operation is to be successful, consideration must be given to providing employees necessary to do this work. (See Exhibit D.)

PROPOSAL

CENTRAL LAUNDRY

START-UP COST

CAPITAL CONSTRUCTION

Unloading Dock for Soiled Linen Sprinkler System for Soiled	\$ 20,000.			
Linen Room	2,000.			
Total Capital Construction		\$ 22,000.		
MINOR IMPROVEMENTS				
Staging Area Sheet Feeder Trough Plumbing and Electrical Charges Moving Hot Water Exchanger	\$ 700. 300. 800. 1,000.			
Total Minor Improvements		\$ 2,800.		
Riggers for Moving Equipment from Bangor Mental Health and				
Pineland		ş 9,000.		

Total Start-up Cost

\$ 33,800.

PROPOSAL

CENTRAL LAUNDRY

EQUIPMENT

QUANTITY	DESCRIPTION	UNIT COST	TOTAL COST
1	Live Monorail	\$ 22,000.	\$ 22,000.
1	Sheet-Spreader-Feeder	25,000.	25,000.
2	Towel Folders	12,000.	24,000.
1	High Speed Cross Folder	25,000.	25,000.
2	Trucks with Specialized Body	25,000.*	50,000.
2	48" Exhaust Fans	2,279.	4,520.
	Total Estimated Cost of Equipment		\$150,520.
FOR BANGOR	MENTAL HEALTH INSTITUTE		
10	Commercial Washers and Dryers	\$ 800.	\$ 8,000.

\$158,520.

*It may be possible to pick up two good surplus trucks and reduce the estimated cost for transportation.

PROPOSAL

CENTRAL LAUNDRY

SUPPLEMENTAL BUDGET

PERSONAL SERVICES (9)

\$114,660.

-0-

ALL OTHER

Supplies, Mesh Bags, etc.	\$ 13,168.	
Gas, Repairs	14,368.	
Water, Sewerage, Electricity	12,259.	
Total All Other		\$ 39,795.

CAPITAL

\$154,455.

EXHIBIT D

CENTRALIZED LAUNDRY - PERSONAL SERVICES

CURRENT

AMHI

10 Laundry Worker I's
1 Laundry Worker II
1 Laundry Washman
1 Laundry Supervisor II

BMHI

8 Laundry Worker I's3 Laundry Worker II's1 Laundry Washman1 Laundry Supervisor I1 Laundry Supervisor II

PINELAND

7 Laundry Worker I's1 Laundry Worker II3 Laundry Washmen1 Laundry Supervisor II

CORRECTIONAL CENTER

1 Laundry Supervisor I

Total - 40 Positions

PROPOSED

CENTRAL LAUNDRY

22 Positions

BMHI

1 Position

PINELAND

2 Positions

Total - 25 Positions

EXHIBIT E

COST ANALYSIS - CENTRAL LAUNDRY FACILITY SERVING BMHI, PINELAND CTR., MAINE YOUTH CENTER AND MAINE CORRECTIONAL CENTER.

	FIRST YEAR COSTS	FIRST YEAR SAVINGS	ANNUAL SAVINGS @ 1980 COSTS
CAPITAL			
Unloading Dock	\$ 20,000		
Sprinkler-Dirty Linen Room	2,000		
Minor Improvements	2,800		
RIGGERS CHARGES	9,000		
EQUIPMENT - (Central Facility)			
Live Monorail	22,000		
Sheet-Spreader-Folder	25,000		
2 Towel Folders	24,000		
High Speed Cross Feeder	25,000		
2 Trucks	50,000		
2 48" Exhaust Fans	4,520		
EQUIPMENT - BMHI	0.000		
10 Washer & Dryers (for wards)	8,000		
ADDED STAFF - Augusta Location (NET)		н.	
Personal Services (9)	114,660		
All Other	39,795		
ВМНТ			
Personal Services (1)	6,000		
DINELAND COD			
PINELAND CIR.	12 000		
Personal Services (2)	\$364 775		
	304,775		
PERSONAL SERVICES SAVINGS			
BMHI (14)		\$142,230	
PINELAND (12)		114,962	
CORRECTIONAL CTR. (1)		11,253	
FRINGE BENEFITS		50,446	
UTILITIES SAVINGS		100,000	
SUPPLIES SAVINGS		15 000	
		\$433,891	
	· .		
ID PUSITIUNS @ \$10,000 each			\$150,000
UTILITY SAVINGS			100,000
			\$250,000