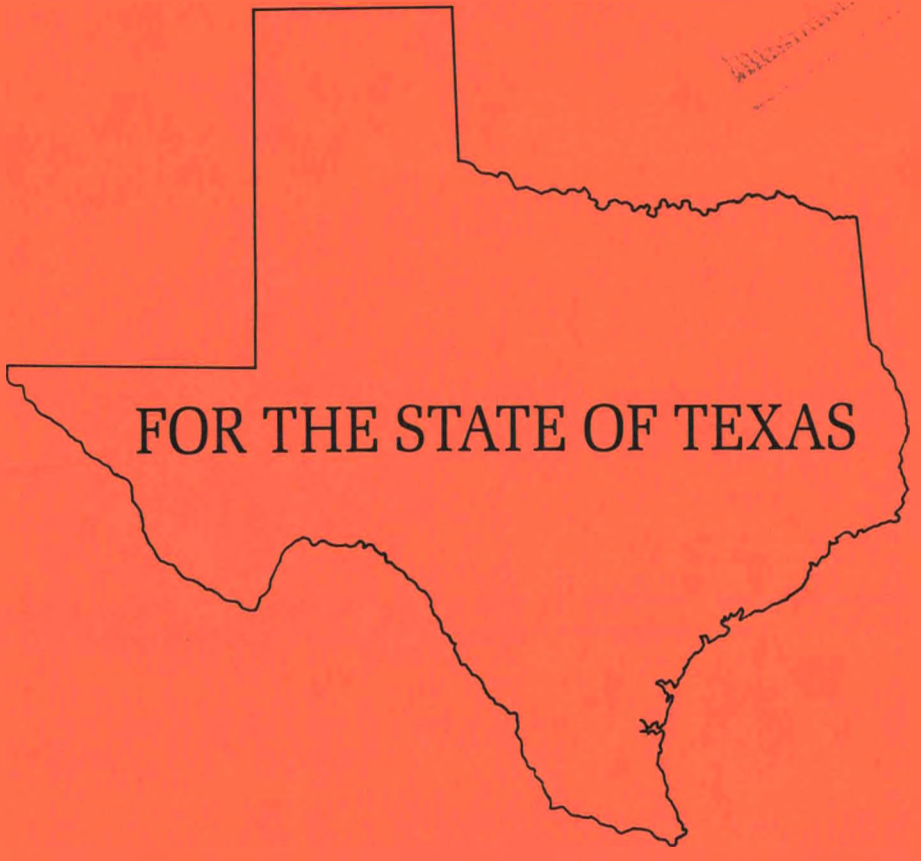
PETROLEUM SHORTAGE CONTINGENCY PLAN



FOR THE STATE OF TEXAS

TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL

JUNE 1982

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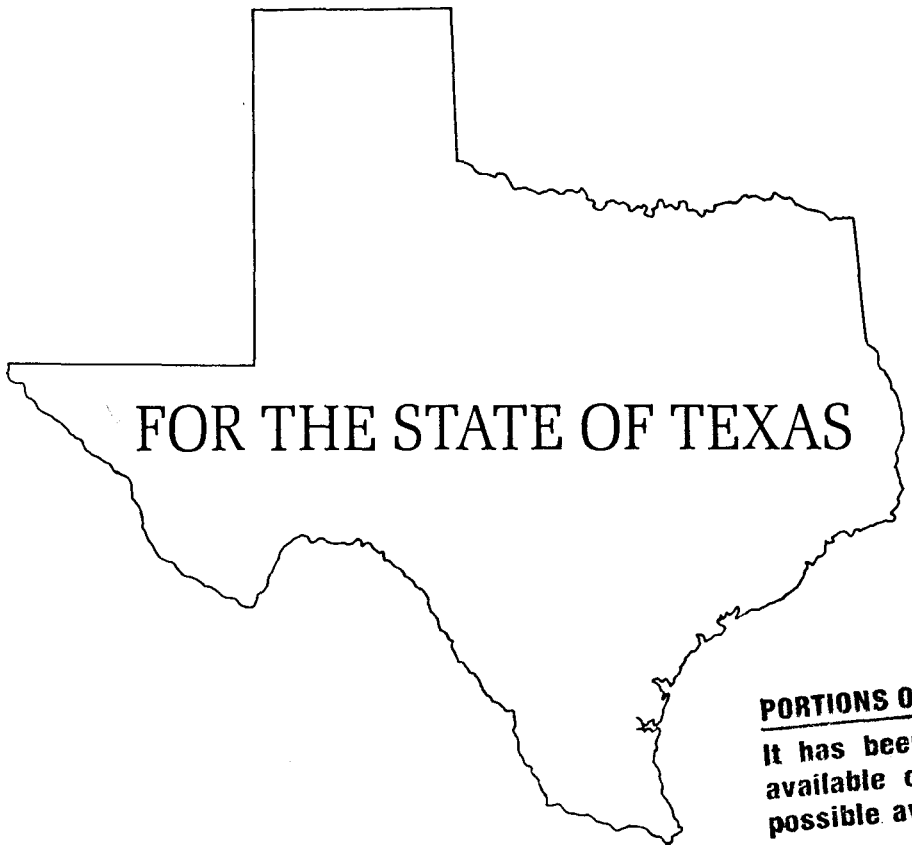
PETROLEUM SHORTAGE CONTINGENCY PLAN



FOR THE STATE OF TEXAS

TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL
200 East 18th Street, Austin, Texas 78701

June 1982

This report was prepared by the Texas Energy and Natural Resources Advisory Council (TENRAC) staff, under the guidance of the Advisory Committee, and does not necessarily represent the views of the individual members of TENRAC.

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FOREWORD

On behalf of the TENRAC Advisory Committee on Gasoline Rationing and Emergency Energy Planning, I am pleased to present the Petroleum Shortage Contingency Plan for the State of Texas. This document, which details a state energy contingency plan for future oil shortages, is the product of months of work by the TENRAC staff, under the guidance of the Advisory Committee, and with considerable input from other state agencies, local governments, and private organizations and businesses from throughout the state.

The plan consists of 19 measures that, through an extensive evaluation process, have been identified as being the most appropriate potential state responses to a future petroleum shortage. It should be noted, however, that the decision to actually implement any of these measures lies strictly with the Governor, with whatever advice the Texas Energy and Natural Resources Advisory Council may wish to offer. The responses outlined in this plan are intended to complement and supplement any existing federal, local and private contingency plans rather than replace them. Further, it is hoped that this state plan will serve to guide and assist local governments and private businesses in developing and maintaining their own response plans by providing an indication of the authority and probable action of the state in the event of another significant fuel supply disruption.

It is our hope, however, that the measures in this plan will never have to be implemented. Market mechanisms, unfettered by the obtrusive and oftentimes counterproductive federal allocation regulations in place during the 1970s, should be able to accommodate most minor fuel supply disruptions and problems. If however, Texas and its economy are ever threatened with serious disruption due to an oil shortage of the type or magnitude that the marketplace or federal actions cannot readily contend with, I feel that the Petroleum Shortage Contingency Plan for the State of Texas will place the state in a much better position to react quickly and prudently to alleviate any such petroleum supply problems. I also think it is important to note that this plan recognizes the need for a cooperative response between state government and petroleum producers, suppliers and consumers if a fuel shortage results in its implementation.

Milton L. Holloway
Executive Director
TENRAC

PREFACE AND ACKNOWLEDGEMENTS

The U.S. oil supply disruptions which affected the nation in 1973-74 and again in 1979-80 did not leave Texas untouched. A program established by federal legislation to set aside a certain percentage of state gasoline supplies for use by essential users was activated by the Governor in 1974 and extended through the 1979-80 disruption. Requests for fuel from this program reached a high point of over 8,000 applications during July 1979. Additionally, during 1979-80, retail gasoline and diesel shortages which occurred in the Dallas and Houston areas became severe enough to warrant state intervention in the form of an odd-even purchase program. At the same time, large price increases affected all state motor fuel users.

During this period, numerous federal laws and regulations were enacted to attempt to deal with these fuel shortages. These included the Emergency Petroleum Allocation Act of 1973, the Energy Policy and Conservation Act of 1975, and the Emergency Energy Conservation Act of 1979. While these programs undoubtedly increased public awareness of the energy problems and alleviated some of the shortage-related difficulties, they also constrained normal free-market operations. Many subsequent research studies have suggested that these federal responses actually increased the oil shortages. Subscribing to this viewpoint, President Reagan eliminated oil price and allocation controls in January 1981, and further efforts by Congress to provide the President with standby authority to reimpose controls during an oil shortage emergency have been unsuccessful.

As a result of the uncertainties of federal policies in dealing with future oil shortages, state and local governments have increasingly begun to look at their own possible responses to shortage problems which likely will not be addressed by federal strategies should another supply disruption occur. In Texas, several cities, regional planning agencies, and transit systems have developed energy contingency plans. The state, until the development of this plan, has acted on a crisis reaction basis to respond to energy shortage problems, often with various state agencies unaware of each other's actions.

The need for a state response plan became more evident with the inclusion of "energy emergencies" in the Texas Disaster Act by the State Legislature in 1981. The energy emergency amendments to this Act outlined the Governor's powers with regard to state or localized motor fuel shortages. The TENRAC Advisory

Committee on Gasoline Rationing and Emergency Energy Planning, chaired by Ed Vetter, recognizing the need to identify the Governor's options as well as appropriate state agency involvement in future fuel shortages, directed the TENRAC staff to develop an appropriate response plan. Members of the Advisory Committee which provided guidance during development of the plan and adopted the plan at its May 20, 1982 meeting, are listed below. The plan was reviewed and accepted by TENRAC council members on June 9, 1982.

ADVISORY COMMITTEE ON
GASOLINE RATIONING AND EMERGENCY ENERGY PLANNING

Ed Vetter
Advisory Committee Chairman

Sam Clonts, Executive Director
Texas Association of Counties

Dave Fellers, Executive Vice President
Texas Oil Marketers Association

Frank Hildebrand, Executive Director
Texas Tourist Development Agency

James Keay, Vice Chairman
Republic of Texas Corporation

Dr. Emmette Redford, Professor
LBJ School of Public Affairs

Reagan V. Brown, Commissioner
Texas Department of Agriculture

Peter A. Dallas, Senior Vice President
First National Bank of Amarillo

Mark Goode, Engineer-Director
Texas Department of Highways and
Public Transportation

Bob Honts, Chairman
Texas Advisory Commission on
Intergovernmental Relations

Bruce Palmer, General Manager
Texas Division
American Automobile Association

Sid Wieser, Executive Director
Texas Department of Community Affairs

The plan was developed under the general direction of Milton L. Holloway, TENRAC's Executive Director, and through the guidance of the Advisory Committee on Gasoline Rationing and Emergency Energy Planning. John Gooding, Director of the Fuel Allocation and Emergency Planning Division, and Larry Cooper were largely responsible for the management and production of the report. Inga Lokey typed and edited the manuscripts and coordinated the report production. In addition, individuals from various government and private organizations, too numerous to mention here, provided valuable comments and input to the plan development.

EXECUTIVE SUMMARY

The motor fuel shortages which occurred in parts of Texas during 1979-80, the continuing reliance of the nation on imports from politically unstable Middle East oil producing areas, and the uncertainties of federal "free market" energy policies to contend with severe oil shortages demonstrate the need for the state to be ready to respond to future petroleum supply problems. Recognizing that oil disruptions could harm the state economy and cause serious hardships for many consumers, the Texas Legislature in 1981 passed amendments to the State Disaster Act including "energy emergencies" within this emergency statute. Under the amended Disaster Act, the Governor has broad emergency powers to respond to temporary statewide, regional or local shortages of petroleum or liquid fuel energy supplies.

To assist the Governor in responding to future petroleum emergencies and to identify other appropriate state contingency actions, the Texas Energy and Natural Resources Advisory Council (TENRAC), with the assistance of other state agencies, local governments and private businesses, developed a state contingency plan to respond to petroleum shortages. This plan consists of a list of potential actions which the Governor and state agencies could implement to alleviate the adverse impacts of a state liquid fuel shortage.

Planning Process

The TENRAC Advisory Committee on Gasoline Rationing and Emergency Energy Planning directed the planning process. This process included an examination of trends in petroleum supply and consumption, analysis of past fuel shortages, identification and evaluation of potential response actions and development of a final list of best actions. The impacts of each of the measures, including potential fuel savings, implementation and operating costs, implementation time, responsible agencies, advantages and disadvantages, were identified. A description of these options and considerations is contained in the following pages. Input and recommendations from state agencies, local governments, regional planning agencies, transit systems, private businesses and interested organizations from throughout the state were solicited.

Existing State Authorities

The implementation of measures in this contingency plan rely to a large extent on existing state authorities and powers to deal with anticipated problems. The Governor, besides his normal state powers, has the authority to declare an energy emergency under the State Disaster Act and implement measures as necessary for "meeting the dangers to the state and people presented by disasters and disruptions to the state and people....". This includes the energy-related authority to make "emergency measures necessary to reduce demand or allocate supply".

In addition to the Governor's powers, various state agencies have regulatory powers and coordinating roles which can be used to manage fuel shortages and associated problems. The Railroad Commission, for example, regulates intercity public transportation and trucking operations while the Department of Public Safety enforces state vehicle operations and inspection laws. Many other agencies, including TENRAC, Agriculture, Highways and Public Transportation and the Tourist Development Agency can play an important role in technical assistance and information dissemination.

Recommended Measures

Of the 25 potential energy contingency measures initially identified and evaluated, 19 were judged acceptable for implementation by the state. The 19 measures which were adopted in the final plan rely on voluntary compliance to the greatest extent possible; are implementable within a short time; are low cost and highly cost-effective, provide for input and participation from public and private sectors; and encourage the free market solutions to the shortage.

The recommended measures were grouped into four sets with common objectives. These sets and their respective measures are:

1) Information Measures

These are strategies which act to improve communication and interaction between the state and local governments and the private sector as well as among the various state agencies. Specific measures include:

- o an enhanced data collection and monitoring program by state agencies to provide information needed to guide state and local contingency actions;

- o a technical assistance program by state agencies which will provide information to assist local governments in coping with fuel shortages;

- o an energy coordinator network program which will encourage establishment of energy contacts in major cities and counties around the state to improve communication with state agencies;

- o a state information "hot line" which will be used to facilitate communication between the state and local governments;

- o a state public information campaign to encourage energy conservation and describe state programs.

2) Supply Management Measures

This group of measures was adopted to manage available fuel supplies and their distribution to the public if free market strategies prove inadequate. The principal focus is to minimize the impacts of a fuel shortage on essential services. Recommended measures include:

- o an odd-even fuel purchase plan which would restrict vehicle fuel purchases based on license plate numbers or letters and the days of the month;

- o a minimum fuel purchase plan which would require motorists to purchase an established gallon amount of fuel;

- o retail gasoline station operating regulations which would require gas stations in designated emergency areas to comply with certain rules designed to facilitate retail fuel sales;

- o a state set-aside program which would take a set percentage of state fuel supplies and redistribute them to priority users.

3) Demand Reduction/Restraint

These measures are designed to reduce state petroleum consumption, either by providing incentives to conserve fuel or by directly discouraging vehicle use. Voluntary actions would be used and encouraged as much as possible. The measures include:

- o a state agency conservation program which would implement model energy conservation programs within individual state agencies;

- o a rideshare parking site program which would develop emergency parking lots along highways to facilitate ridesharing;

- o a tire inflation program which would include public information during a mild shortage and mandate tire inflation checks as part of the state vehicle inspection during a severe shortage;

- o a speed limit enforcement program which would save fuel by reducing highway vehicle speeds;

- o a voluntary cooling, heating and lighting conservation program which would encourage greater energy efficiency in residential, commercial and industrial uses;

- o a program to relax public transportation entry regulations in order to encourage more public transportation service;

- o relaxed air quality regulations to allow the use of alternative fuels in place of scarce petroleum;

- o an alternate work hours program to be implemented as part of the state agency conservation program and encouraged in local government and private business operations.

4) Income Redistribution

One of the most adverse impacts of fuel shortages is the rapid rise in fuel prices. This can be most detrimental to low-income residents. The following action was identified as the most appropriate state income redistribution involvement:

- o the administration of federal low-income energy assistance programs as funding is available to reduce the adverse effects of fuel cost increases on the most needy segment of the state.

CHAPTER 1

INTRODUCTION

1. A. Purpose and Objectives

The gasoline and diesel fuel shortages which occurred in Texas during 1979-80 demonstrated that the state is no longer immune to the petroleum product shortages which have occurred in other areas of the nation. The nation's continued dependence on large quantities of imported oil supplies from politically unstable countries, the lack of a concise federal action plan to contend with oil disruptions, and the uncertain effects of a free market oil supply-demand policy on the state economy make the development of a state response plan for motor fuel shortages a timely task.

Recognizing the need for the state to be able to respond to statewide or regional motor fuel shortages, the Texas Legislature in 1981 passed legislation, subsequently signed by the Governor, to include "energy emergencies" under the provisions of the Texas Disaster Act. This authority provides the Governor with broad powers which can be used, upon official declaration of an energy emergency, to respond to statewide, regional, or local liquid fuel shortages.

To assist the Governor in responding to a future energy emergency and to identify appropriate state contingency actions, the Advisory Committee on Gasoline Rationing and Emergency Energy Planning of the Texas Energy and Natural Resources Advisory Council (TENRAC) directed the development of a state response plan. The resulting contingency plan outlined in this report represents a list of possible state actions from which the Governor and state agencies can select appropriate measures to respond to various levels of motor fuel shortages.

This report outlines a state plan to respond to, manage, and to the extent possible, alleviate the adverse impacts of a petroleum supply disruption on the state or any region of the state. This plan is intended to serve as a contingency strategy, to be implemented temporarily and only in the event of an actual or impending fuel shortage which the Governor has determined cannot be managed without state action. More specific objectives of the plan are to:

- o Provide a unified, consistent, and flexible statewide response to future state petroleum shortages,

- o Minimize adverse social and economic impacts of fuel supply shortages on the state,

- o Examine and delineate authorities, roles and responsibilities of the state,

- o Provide the most equitable distribution of limited fuel supplies to assure continuation of essential services and priority activities,

- o Inform local governments, the private sector, and the public of intended state actions,

- o Encourage local governments and the private sector to develop action plans which facilitate and complement the state plan,

- o Meet any federal requirements for fuel shortage preparedness.

B. Planning Process

The development of this plan involved input from a wide variety of sources including state agencies, local governments, regional planning agencies, private businesses and interested citizens. The Advisory Committee on Gasoline Rationing and Emergency Energy Planning of TENRAC oversaw the plan development.

The general flow of the planning process was to:

1) Examine the past, current and future trends in petroleum supply and consumption patterns. This was useful in determining the causes of past shortages and potential degree of severity of future shortages.

2) Identify and analyze the impacts of past fuel shortages. This was important to note because future shortages will probably affect the State in ways similar to the impacts of previous shortages.

3) Identify potential actions to respond to fuel shortages. Measures implemented during previous shortages and those recommended in other state and national contingency planning efforts were used to compile a comprehensive list of possible measures.

4) Evaluate the measures. This involved both a quantitative and qualitative analysis of possible impacts from implementing individual measures. Quantitative analysis included costs, potential fuel savings, and implementation time. Qualitative analysis included such aspects as public acceptance and implementation ease.

5) Develop the final list of recommended measures. Based on the evaluation performed for each measure, those which appeared to be the most acceptable and effective were identified.

C. State Authorities and Powers

The State has statutory and regulatory powers which can be used to respond to a local, regional, or statewide motor fuel shortage. These major authorities are described below.

Governor's Authorities

The Texas Disaster Act of 1975 confers broad powers upon the Governor to deal with any "disaster". This Act was amended in 1981 to specifically include an energy emergency under the definition of "disaster". An "energy emergency" is defined as a "temporary statewide, regional, or local shortage of petroleum or liquid fuels energy supplies that makes emergency measures necessary to reduce demand or allocate supplies". (See Appendix A for a full copy of the Disaster Act). A disaster emergency may be declared by executive order or proclamation by the Governor if he finds a disaster has occurred or is imminent. After declaring an emergency, the Governor may, among other actions, use the Disaster Act to:

- suspend the provisions of any state regulatory statute or regulation of any state agency if the provisions would in any way prevent, hinder, or delay necessary action in coping with the emergency;

- implement a state set-aside program to redistribute fuel to priority and emergency users;

- utilize all available resources of the state government and of the political subdivisions of the state;

- temporarily reassign direction, personnel or functions of state departments and agencies;

- commandeer or utilize any private property;

- prescribe, temporarily suspend or modify for a period not to exceed 60 days any public health, safety, zoning or transportation regulations within or across the state;

- on determination that a local government has or will suffer a substantial loss of tax or other revenues and has demonstrated a need for financial assistance, apply to the federal government for a loan;

- on determination that financial assistance is essential to meet disaster-related expenses or serious needs of individuals or families, accept a grant from a federal government to fund financial assistance;

- make financial grants to meet disaster-related expenses or serious needs of individuals or families; and,

- designate the Texas Department of Human Resources or other state agency to carry out the functions of providing financial aid.

The disaster emergency continues until the Governor finds that the threat of danger has passed or the disaster has been dealt with, but no state disaster may continue for longer than 30 days unless renewed by the Governor. The

Governor also has the power to recall the Texas State Legislature, if it is not in session at the time, to introduce any legislation necessary to implement state emergency programs.

State Agency Powers

Several state agencies have the capability of dealing with varied aspects of an energy emergency. Authorities of some of these state agencies are described below:

Railroad Commission of Texas - can deal with intercity public transportation and trucking regulations within the state. It can, for example, relax regulations limiting intercity public transportation operations to allow for greater service. It can also temporarily alter, amend or suspend any existing freight rates, tariffs, schedules or vehicle registration to facilitate the movement of important commodities, such as fuel.

Department of Public Safety - can enforce or temporarily suspend enforcement of various vehicle operation laws on state roadways. For example, it is empowered to enforce the state 55 mph speed limit, vehicle inspection requirements and truck operations. The Department of Safety's Director of Disaster Emergency Services maintains close contact through a statewide communication network with all local civil preparedness organizations.

Department of Community Affairs - can assist local governments in providing essential public services for their citizens. It also can assist the Governor and the Legislature in coordinating federal and state programs affecting local governments and inform state officials and the public about local government needs.

Department of Agriculture - can, through its public information efforts and in cooperation with other agricultural organizations and agencies, assist in implementation of fuel management and conservation measures. It can serve as an important communication focus for input on farm fuel supply problems and state contingency programs.

Texas Education Agency - can assist in providing emergency information to public schools. It can also establish guidelines for public school districts to follow regarding the use of school buses, school operating hours and dates.

Department of Human Resources - can, through Title IV of the Social Security Act, authorize emergency assistance to low-income persons in the form of cash payments, in-kind payments, services or medical or remedial care. It also administers the Federal Energy Assistance Program and can implement programs to relieve the economic impacts of high energy costs on low-income citizens.

Texas Industrial Commission - can provide assistance to small businesses under the Small Business Act. This could include assistance to state businesses in applying for financial assistance due to economic injury from an energy shortage. It can coordinate efforts with banks, local chambers of commerce, private industry and the state.

State Department of Highways and Public Transportation - can provide information and assistance in implementing actions such as local carpool and transit programs. It can also initiate such measures as bus/carpool lanes on state highways as a means to encourage ridesharing.

Texas Energy and Natural Resources Advisory Council - can provide energy-related information and data to assist in state decision-making and planning. It can provide technical expertise in energy conservation, collect data and monitor the magnitude and impacts of a fuel shortage. The Fuel Allocation Division, if so directed by the Governor, can allocate set-aside fuel supplies to priority users.

Tourist Development Agency - can provide information on state energy programs to the state tourist industry through its newsletter and monitor energy-related problems experienced by this sector during a fuel shortage. It can redirect its extensive public information program to account for fuel supply problems.

D. Report Organization

The following chapter describes each of the recommended energy contingency measures. Table 2-1 summarizes the important points and impacts of each measure.

The appendices at the end of the report provide more background detail on the general world and U.S. oil outlook, state energy use, impacts of past oil shortages, possible impacts of future shortages and possible energy scenarios. A copy of the Texas Disaster Act is included in Appendix A.

CHAPTER 2

RECOMMENDED CONTINGENCY MEASURES

2. Recommended Contingency Measures

During the preparation of this plan, some 25 potential energy contingency measures were identified and evaluated. Of these, 19 have been included, in some form, in the final recommendations. Those measures analyzed, but not recommended, included a driverless day program, recreational vehicle restrictions, increased state fuel taxes, reduction in the state speed limits, and an increased local sales tax. These non-recommended measures were determined to be either incompatible with the purpose and objectives of this plan or inappropriate state-level responses.

The measures which have been recommended for inclusion in the state response plan for motor fuel shortages are described in this chapter. To be included in the final list of recommendations, a potential measure had to:

- Be more appropriately implemented at the State rather than local level,
- Rely to the greatest extent possible on voluntary compliance,
- Provide for maximum input and participation from a variety of public and private sectors,
- Allow for the flexibility of the State to respond to diverse needs,
- Be implementable within a short time frame,
- Clearly state responsibilities and capabilities,
- Be as simple as possible and avoid unnecessary regulation,
- Build upon existing authorities, capabilities and resources,
- Encourage the free market to contend with the shortage to the greatest extent possible,

- o Be relatively low cost and highly cost-effective,

- o Have limited adverse social, economic and environmental effects, and;

- o Respond to short-term emergencies in a manner which will help solve the long-term problem of reducing the demand for unreliable fuel.

The recommended measures are grouped into four sets according to common objectives:

1) Information measures include those actions which improve communication and interaction between the state, local governments and the general public. They are generally low-cost, easily initiated measures which can be implemented in the early stages of a fuel supply disruption.

2) Supply management measures include actions which the state can impose as a fuel shortage becomes more severe and interferes with state mobility and the operation of vital services.

3) Demand reduction and restraint measures are programs which either encourage or produce direct fuel savings or, if the shortage becomes severe enough, impose restrictions which restrain the use of petroleum products.

4) An income redistribution measure is included to provide a state response to sharply rising fuel costs which may occur during a fuel shortage.

The individual state actions which are recommended are summarized on Table 2-1 and described in more detail in this chapter.

TABLE 2-1
SUMMARY OF RECOMMENDED MEASURES

MEASURE	FUEL SAVINGS[1]	STATE COSTS[2]		IMPLEMENTATION			ADVANTAGES	DISADVANTAGES	PREIMPLEMENTATION ACTIVITIES
		IMPLEMENTATION	OPERATING	TIME	RESPONSIBILITY	AUTHORITY			
A. INFORMATION 1) ENHANCED STATE DATA COLLECTION/MONITORING	NOT APPLICABLE	MINIMAL TO LOW	MINIMAL TO LOW	1 WEEK-1 MONTH	TENRAC	EXISTING STATE	• LOW-COST • QUICK IMPLEMENTATION	• NONE IDENTIFIED	• IDENTIFY DATA NOW COLLECTED • MAINTAIN OIL COMPANY CONTACT LIST
2) TECHNICAL ASSISTANCE FOR LOCAL GOVERNMENTS	UP TO 1%	LOW TO MEDIUM	LOW TO MEDIUM	1 WEEK-1 MONTH	TENRAC	EXISTING STATE	• LOW-COST • QUICK IMPLEMENTATION	• NONE IDENTIFIED	• IDENTIFY TECHNICAL PROGRAMS AVAILABLE
3) ENERGY COORDINATOR NETWORK	NOT APPLICABLE	LOW	LOW	2 WEEKS-1 MONTH	TENRAC	EXISTING STATE	• LOW-COST • QUICK IMPLEMENTATION	• NOT ALL GOVERNMENTS MAY PARTICIPATE	• IDENTIFYING EXISTING ENERGY COORDINATORS
4) STATE ENERGY INFORMATION "HOT LINE"	NEGLIGIBLE	LOW	LOW	2 WEEKS-1 MONTH	TENRAC	EXISTING STATE	• LOW COST • QUICK IMPLEMENTATION	• NONE IDENTIFIED	• NONE IDENTIFIED
5) PUBLIC INFORMATION MEDIA CAMPAIGN	NEGLIGIBLE	LOW	LOW	1 WEEK-1 MONTH	TENRAC, OTHER STATE AGENCIES	EXISTING STATE, FEDERAL EECA	• LOW COST • QUICK IMPLEMENTATION • DRAWS ON EXISTING PROGRAMS	• DIFFICULT TO JUDGE EFFECTIVENESS	• IDENTIFY MEDIA CONTACTS • IDENTIFY STATE AGENCY NEWSLETTERS
6) STATE ENERGY INFORMATION COORDINATING COMMITTEE	NOT APPLICABLE	MINIMAL	MINIMAL	2 WEEKS	TENRAC	EXISTING STATE	• LOW COST • QUICK IMPLEMENTATION • REDUCES DUPLICATION	• NONE IDENTIFIED	• IDENTIFY STATE AGENCIES
B. SUPPLY MANAGEMENT 1) ODD-EVEN FUEL PURCHASES	1%-2%	LOW	MINIMAL	2 WEEKS	GOVERNOR	STATE DISASTER ACT, POSSIBLE FEDERAL	• PREVIOUS STATE EXPERIENCE • MOSTLY SELF-ENFORCING	• DIFFICULT TO ENFORCE	• PREPARE SAMPLE EXECUTIVE ORDER AND REGULATIONS
2) MINIMUM FUEL PURCHASES	½% TO 1 ½%	LOW	MINIMAL	2 WEEKS	GOVERNOR	STATE DISASTER ACT, FEDERAL EECA	• PREVIOUS STATE EXPERIENCE • MOSTLY SELF-ENFORCING	• DIFFICULT TO ENFORCE	• PREPARE SAMPLE EXECUTIVE ORDER AND REGULATIONS
3) RETAIL SERVICE STATION OPERATING REGULATIONS	NOT APPLICABLE	LOW	MINIMAL	2 WEEKS	GOVERNOR	STATE DISASTER ACT, POSSIBLE FEDERAL	• PREVIOUS STATE EXPERIENCE	• EXTRAS COSTS TO SERVICE STATION OWNERS	• PREPARE SAMPLE EXECUTIVE ORDER AND REGULATIONS
4) STATE SET-ASIDE	NOT APPLICABLE	LOW	LOW	1 MONTH	GOVERNOR OR FEDERAL AUTHORITY	STATE DISASTER ACT, POSSIBLE FEDERAL	• PREVIOUS STATE EXPERIENCE • STATE ACTIVATION PLAN READY	• FEDERAL LAW MAY PREEMPT • DETERMINATION OF PRIORITY USERS DIFFICULT	• EVALUATE STATE EXPERIENCE AND CURRENT READINESS OF COMPUTERIZED SYSTEM • MONITOR FEDERAL PLANS
C. DEMAND REDUCTION/RESTRAINT 1) STATE AGENCY CONSERVATION PROGRAM	NEGLIGIBLE	LOW	LOW	2 WEEKS	GOVERNOR	EXISTING STATE, DISASTER ACT	• SERVES AS MODEL • LOW COST • QUICK IMPLEMENTATION	• SMALL FUEL SAVINGS	• IDENTIFY POTENTIAL ACTIONS • PREPARE SAMPLE EXECUTIVE DIRECTIVE
2) RIDESHARE PARKING LOT PROGRAM	NEGLIGIBLE	MODERATE	LOW	1 WEEK-1 MONTH	SDHPT	EXISTING STATE, DISASTER ACT	• SERVES NONURBAN AS WELL AS URBAN AREAS	• SMALL FUEL SAVINGS	• COORDINATE WITH SDHPT
3) TIRE INFLATION PROGRAM, VOLUNTARY OR PART OF STATE INSPECTION	UP TO ½%	LOW TO MODERATE	LOW TO MODERATE	2 WEEKS	GOVERNOR OR STATE LEGISLATION	EXISTING STATE DISASTER ACT, POSSIBLE NEW LEGISLATION	• LOW COST	• SMALL FUEL SAVINGS • STATE LEGISLATION IF MANDATORY • IF MANDATORY, COULD INCREASE INSPECTION FEE	• NONE IDENTIFIED
4) SPEED LIMIT ENFORCEMENT	1% to 4 %	MODERATE TO HIGH	MODERATE TO HIGH	2 WEEKS-2 MONTHS	GOVERNOR	EXISTING STATE, DISASTER ACT	• LARGE FUEL SAVINGS POSSIBLE	• EXPENSIVE TO ENFORCE • UNPOPULAR • CAN INTERFERE WITH TRUCKING	• PREPARE SAMPLE EXECUTIVE ORDER
5) VOLUNTARY COOLING, HEATING AND LIGHTING CONSERVATION PROGRAM	UP TO 1%	MINIMAL TO LOW	MINIMAL TO LOW	2 WEEKS	GOVERNOR	EXISTING STATE, DISASTER ACT	• LOW COST • QUICK IMPLEMENTATION	• DIFFICULT TO ENFORCE • MINIMAL PETROLEUM SAVINGS	• PREPARE SAMPLE EXECUTIVE DIRECTIVE
6) RELAXED PUBLIC TRANSPORTATION RESTRICTIONS	NEGLIGIBLE	MINIMAL	MINIMAL	1 WEEK-1 MONTH	TEXAS RAILROAD COMMISSION	EXISTING STATE, DISASTER ACT, POSSIBLE FEDERAL	• LOW COST • QUICK IMPLEMENTATION	• DOES NOT GUARANTEE NEW PUBLIC TRANSPORTATION	• PREPARE SAMPLE EXECUTIVE ORDER
7) RELAXED CLEAN AIR REGULATIONS	UP TO 1%	MINIMAL	MINIMAL	1 WEEK-1 MONTH	GOVERNOR, FEDERAL APPROVAL	EXISTING STATE, DISASTER ACT	• LOW COST • QUICK IMPLEMENTATION	• INCREASES AIR POLLUTION	• PREPARE SAMPLE EXECUTIVE DIRECTIVE
8) VOLUNTARY ALTERNATE WORK HOUR PROGRAMS	1% TO 2%	MINIMAL TO LOW	MINIMAL TO LOW	2 WEEKS-2 MONTHS	GOVERNOR	POSSIBLE FEDERAL	• LOW COST	• PRIVATE BUSINESS COOPERATION NEEDED • DIFFICULT TO ENFORCE	• NONE IDENTIFIED
D. INCOME REDISTRIBUTION 1) ADMINISTRATION OF FEDERAL LOW-INCOME ENERGY ASSISTANCE PROGRAM	NEGLIGIBLE	MINIMAL	MINIMAL	2 WEEKS-1 MONTH	GOVERNOR	EXISTING STATE, DISASTER ACT, FEDERAL	• PREVIOUS STATE EXPERIENCE	• FUNDING UNCERTAIN	• MONITOR FEDERAL PLANS AND ACTIVITIES

[1]Reduction from 1980 state petroleum consumption. State and DOE estimates.

[2]Range of monthly costs: Minimal: $0-$999 / Low: $1,000-$9,999 / Moderate: $10,000-$49,999 / High: $50,000 or more

ENHANCED DATA COLLECTION AND MONITORING

Description

TENRAC, which now collects state energy-related data, will collect additional information as necessary to monitor the fuel supply disruption. This information may include retail motor fuel price, supply, consumption and availability data, gasoline station operating hours and auto counts of retail station lines. The information will be collected from local governments (through requests to local energy coordinators), private businesses or agencies, such as oil companies and AAA, and other state agencies (Department of Agriculture, Tourist Development Agency, etc.) which monitor impacts of various sectors of the state economy. In addition, information on the impacts of implementing and operating state contingency measures will be monitored. The data and information will be compiled and sent to the Governor's Office, other state agencies, local governments and released to the public as required. A written analysis of the data will be supplied by TENRAC staff when necessary.

Objective

The main purpose of this program is to establish a central information collection/dissemination point to provide quantitative and qualitative information to the Governor and other state and local officials which can be used to make policy decisions regarding the state response to fuel disruptions.

Implementation

At the outset of an impending fuel shortage, TENRAC will contact other state agencies, appropriate private organizations and major local governments to request their cooperation in collecting and disseminating data. Existing TENRAC staff will record and compile the data. The Executive Director of TENRAC will be responsible for implementing the program.

Costs

Since data collection is a normal function of TENRAC, costs would be minimal to expand the existing program. Costs for additional staff time and communications would be the major expenses. Additional monthly costs of $1,000 to $5,000 may occur.

Fuel Savings

This measure would not directly produce any energy savings.

Advantages

A coordinated centralized information collection program will reduce inefficient duplication of efforts and improve information dissemination.

Disadvantages

No disadvantages of this program have been identified.

Recommendation

Because of the low cost/high benefit qualities of this measure, it is recommended for implementation at the outset of a fuel disruption.

TECHNICAL ASSISTANCE PROGRAM

Description

At the outset of a fuel supply disruption, various state agencies will inform the public of the technical information and programs they have available which can be used to develop and implement energy conservation actions. Existing staff of these state agencies will be utilized.

TENRAC and other agencies will publicize the types of expertise available through their newsletters and other communications lines. Areas of technical assistance and responsible agencies will include:

- o carpool and vanpool programs - TENRAC and State Department of Highways and Public Transportation
- o agriculture conservation actions - Department of Agriculture
- o transportation system management actions (e.g. coordinated traffic signals) - SDHPT
- o school transportation energy conservation - Texas Education Agency
- o public and residential building conservation measures - TENRAC
- o use of school buses for public transportation - Texas Education Agency
- o development of local energy contingency plans - TENRAC

Objective

This program is intended to provide technical assistance for the planning and implementation of energy contingency/conservation measures by local governments and major employers.

Implementation

At the outset of a petroleum supply disruption, TENRAC will compile a list of state agencies (including state-funded universities), staff and areas of expertise which may be useful to local governments or private business.

TENRAC will then act as the main contact point and clearinghouse for energy-related technical questions. It will refer the request for assistance to the appropriate agency and staff. Contacts may also be made directly to individual agencies.

Depending on the type of information or assistance requested, the appropriate staff person will respond over the telephone, mail available literature on the subject or, if necessary, meet with the local staff.

Costs

Costs to the state agencies would be limited to staff time, travel expenses and costs of technical material for distribution. Existing staff and technical information and materials already available will be used as much as possible. Additional costs for each participating agency could range from nothing to a few thousand dollars a month.

Fuel Savings

Although this program is not designed to directly save fuel, the technical assistance provided could result in the implementation of energy conserving measures at the local level.

Advantages

The measure could be implemented quickly and inexpensively because the technical expertise and staff already exist in the various state agencies.

Disadvantages

State agency staff time spent on energy-related problems could distract from other activities of the agencies.

Recommendation

Because of the need for this program, it is recommended for implementation during the early stages of a fuel disruption.

ENERGY COORDINATOR NETWORK

Description

Cities with a population of over 50,000 and all counties will be encouraged to designate an existing staff person or elected official as an energy contact for state and local information. This person will serve as the focal point for information within the community and as the contact for state information. In addition, to facilitate State communication and coordination with the private sector, businesses and organizations involved with energy production, distribution, or consumption will be encouraged to name a contact person.

The state will compile and maintain a list of these energy contacts. When news releases or information important for local governments needs to be transmitted, these persons will be the recipients. It is expected that they will pass on the information to the appropriate local officials or agencies. They will also be important to provide input to the state on the impact of fuel disruptions in their areas. Statewide or region-wide meetings with state officials may be held as necessary.

Objective

The purpose of this measure is to establish a communication network between the state and local governments to facilitate the quick and efficient flow of information. This will provide the state with a central contact point at the local government level.

Implementation

When a petroleum supply disruption appears imminent, TENRAC will contact the county judges and city mayors to request the designation of a local energy contact person from their jurisdiction. A letter describing the purpose of the action and a designation form to fill out and return to TENRAC will be mailed to the state's counties and major cities. Regional Councils of Governments (COG's) may be asked to assist in this effort.

TENRAC will compile and possibly computerize the list of contacts, their mailing addresses and telephone numbers for easy access. As changes in energy coordinator personnel occur, local governments would be asked to provide updated information.

Costs

Because existing staff will be utilized, both at the state and local government levels, costs will be minimal. There will be expenses for mail, phone calls and meetings, if necessary. State personnel time and communications costs of under $1,000 a month can be expected.

Fuel Savings

While this program is not intended to directly save fuel, an improved state information flow which leads to state contingency measures being implemented more quickly and smoothly may result in some fuel savings.

Advantages

This measure is low-cost and can be quickly implemented. Energy coordinators, planners or contacts now exist in several Texas cities and counties, so the concept will not be a new one for some governments.

Disadvantages

No disadvantages of this measure have been identified.

Recommendation

This program is recommended for implementation at the outset of a fuel disruption.

INFORMATION "HOT LINE"

Description

A state information telephone "hot line" will be established for use by local government officials around the state. State employees will be trained to respond to energy-related questions. A list of further contacts and referrals to answer more specific or technical questions will be available. The "hot line" will operate during normal business hours (8:00 a.m.-5:00 p.m.). The telephone number could be either toll-free or regular.

Objective

The "hot line" will serve as a direct communication link between the state, local government officials, staff and energy coordinators to answer any questions regarding state contingency programs or other energy-related problems. It will serve to reduce misinformation and rumors and clear up questions on state contingency programs. It will be a vital part of any other state contingency program implementation plan.

Implementation

At the outset of an impending fuel supply disruption, TENRAC will notify by mail the major cities and counties of the "hot line" number and the purpose of its establishment. Regional Councils of Government (COG's) will also be notified and asked to provide the information to other local governments in their regions. Existing staff of the Fuel Allocation and Emergency Planning Division of TENRAC will man the phones. If the shortage becomes more severe and calls increase beyond the ability of TENRAC staff to handle easily, temporary help will be hired to man the phones. The "hot line" will not be advertised for general public use. Major local governments and transit systems will be encouraged to establish their own "hot lines" for local resident inquiries. The "hot line" will be initiated by the Executive Director of TENRAC and operated by the Director of the Fuel Allocation and Emergency Planning Division.

Costs

Costs of implementing and operating the program will be borne by TENRAC. The state costs of the telephone line will be $900 - 1300 monthly for a toll-

free number or $10 - 15 monthly, plus long distance calls, for a regular line. Staff time to man the phones could range from a few hours a day ($500 - $600/month) during a mild shortage to 40 - 50 man-hours ($5000 -$6000/ month) during a severe shortage. In addition, other TENRAC staff time may be involved in responding to more technical questions. Total state costs of implementing and operating this measure would be in the range of $1,000 to $8,000 monthly.

Fuel Savings

While this measure is not intended to directly save fuel, state energy savings may result from the smoother implementation and operation of state programs which can be achieved by dispelling confusion with the aid of this "hot line".

Advantages

This program can be implemented quickly and at a relatively low cost. It can provide immediate information to local governments and be helpful in obtaining input on the energy situation around the state.

Disadvantages

There would be some chance that the telephone line might be misused by callers wanting information other than that relating to energy contingency measures. If the general public uses the line for information on local problems or complaints, the line may be overtaxed.

Recommendation

This measure is recommended for implementation at the outset of a fuel disruption.

PUBLIC INFORMATION MEDIA CAMPAIGN

Description

Short and concise public announcements will be developed to encourage fuel conservation and provide information on state contingency programs. TV and radio public service advertisements, newspapers, and educational programs in shopping centers, schools and other public places will be utilized as much as possible.

Objective

The purpose of this program is to provide timely energy-related information to as large an audience as possible in areas affected by a fuel supply shortage. This information is intended to encourage energy conservation and assist in the implementation and operation of state contingency measures.

Implementation

Prior to the implementation of any state contingency measures, the state agencies involved will prepare and send news releases and other appropriate information material to media sources in the impacted areas. Existing state staff and communication networks will be used as much as possible. A list of state media contacts will have to be developed prior to this.

TENRAC, with the assistance of an ad hoc committee of state agencies involved in the public information program, will coordinate the program and monitor its effectiveness. Participating state agencies could include TENRAC, Texas Agriculture Department, State Department of Highways and Public Transportation, Tourist Development Agency, Texas Railroad Commission, the Department of Human Resources and the Texas Advisory Committee on Intergovernmental Relations. It is anticipated that some local governments and transit systems would also develop public information media programs.

Costs

Because existing staff will be utilized, costs will be limited to staff time in preparing the news releases and materials and postage involved in transmitting the information. Preparation of more detailed media releases, such

as films, billboards or brochures, will require more planning and expenses. Costs could range from minimal to several thousand dollars a month per participating agency.

Fuel Savings

The amount of direct fuel savings will be a factor of the effectiveness of the media campaign in persuading the public to conserve fuel. Depending upon the programs or measures publicized, fuel savings of up to 2% may result (estimate by U.S. DOE based on a nationwide public information program).

Advantages

This program can be implemented quickly and inexpensively. The state media can be used to reach the largest possible audience in the shortest amount of time.

Disadvantages

It is difficult to predict public response and the amount of fuel savings that will result.

Recommendation

It is recommended that this program be implemented at the outset of a fuel disruption.

STATE ENERGY INFORMATION COORDINATING COMMITTEE

Description

An ad hoc committee will be formed from representatives of state agencies involved in the dissemination of energy-related public information and technical assistance. The committee will meet as necessary to coordinate state information and program implementation efforts.

Objective

This measure would provide for the coordination of state agency programs to eliminate duplication of efforts and increase the effectiveness of agency programs. It would also facilitate transfer of information and technical assistance among state agencies, local governments, and the general public.

Implementation

When state action to contend with a fuel shortage is imminent, TENRAC will invite appropriate state agencies to participate in a committee that will coordinate collection and dissemination of energy information. Among the agencies encouraged to participate will be the Department of Agriculture, State Department of Highways and Public Transportation, Tourist Development Agency, Department of Human Resources, Comptroller of Public Accounts, Texas Air Control Board, Department of Public Safety, Railroad Commission of Texas, and the Public Utility Commission. The committee will meet at least once a month during the emergency and more frequently as required.

Costs

State costs will be minimal and limited to meeting expenses and staff time.

Fuel Savings

This measure is not intended to have a direct impact on fuel savings.

Advantages

This measure would save state money by eliminating wasteful duplication of public information and other state programs. Coordination of state informa-

tion should also benefit the public by reducing confusion. It could be implemented quickly and at little cost.

Disadvantages

No disadvantages have been identified.

Recommendation

It is recommended that this program be implemented at the outset of an energy emergency before state agencies prepare energy-related public information programs.

2. A. Information Measures

This group of measures is designed to collect, monitor and disseminate data and information which can be used to plan and implement actions to contend with state or regional petroleum shortages. These measures provide a critical communication link between the state, local governments, the private sector and the general public. Where possible, existing state information and communication measures will be used and expanded when necessary. The success of other state response measures will, to a large extent, depend upon the effectiveness of these information measures. These measures are characteristically low-cost, quickly implementable, and well accepted.

The measures included in this group are:

1) Enhanced Data Collection and Monitoring

2) Technical Assistance for Local Governments

3) Energy Coordinator Network

4) State Energy Information "Hot Line"

5) Public Information Media Campaign

6) State Energy Information Coordinating Committee

Each is described in more detail in the following section.

2. B. Supply Management Measures

This group of measures consists of programs designed to respond to motor fuel distribution problems. They are not intended to reduce the demand for fuel, but rather to manage available supply or its distribution to the public during a fuel shortage. The principal focus of these measures is to minimize the impacts of a fuel shortage on essential services. Measures in this group are complementary of each other when operated together.

The measures included in this group are:

1. Odd-Even Sales Plan
2. Minimum Fuel Purchase Requirements
3. Retail Gas Station Regulations
4. State Set-Aside Program

ODD-EVEN SALES PLAN

Description

Vehicles with license plates ending in an even digit can purchase gasoline only on even numbered days of the month, odd numbered vehicles only on odd days. Various rules for assigning plates ending in letters can be used. Exceptions are granted to priority users and out-of-state vehicles. Local governments would be expected to enforce the regulations, although the Governor could direct that the DPS assist in enforcement.

Objective

The purpose of this program is to manage gas lines by discouraging "panic" buying and tank topping.

Implementation

When gas lines, which interfere with the general safety and activity of an area, appear in parts of the state, the Governor will issue an Executive Order implementing and describing the Odd-Even plan on a county-wide basis in those areas. This can be done either under federal or state authority to the Governor. Although past experience has shown that this type of program is mostly self-enforcing, local governments will be asked to see that the measure is enforced. A copy of the regulations will be supplied to all retail gas stations by the Department of Public Safety and will be publicized in the local media through public service announcements and press releases developed by TENRAC. TENRAC will administer and monitor the Odd-Even program and report the program's progress to the Governor as necessary.

Costs

Costs of administration would be relatively small and limited largely to public information and monitoring of the regulations. Local law enforcement agencies would be responsible for local enforcement of the regulations, although costs may be minimal due to general public self-enforcement.

Fuel Savings

Although designed to manage rather than reduce fuel use, this action could result in fuel savings by making it difficult to take long trips and by making gasoline purchasing more inconvenient for customers. Savings of 2.5% (U.S. DOE estimate) could be realized on a short-term basis as trips are curtailed and tank-topping reduced.

Advantages

This measure can be implemented quickly and at minimal expense. The regulations are generally easy to understand and can be applied to individual regions or the whole state. It provides a symbolic effect of calming the public. The state has experience in operating a similar measure in 1979.

Disadvantages

This measure has a limited effect on consumer behavior. The program relies on public and retail station operator cooperation to be effective. It would be difficult to mandate local enforcement if it is needed. Retail operators may have difficulty in identifying commercial or exempt vehicles.

Recommendation

This program is recommended for implementation on a region-by-region basis when gas line problems begin to develop.

MINIMUM FUEL PURCHASE

Description

Consumers at retail fuel stations would have to purchase at least a specific minimum number of gallons. Guidelines for possible exemptions, such as for motorcycles and small gas cans, would be developed. The exact minimum purchase volume will be decided on at the time of any shortage. Maximum purchase guidelines were considered, but it was decided that oil companies would likely impose their own maximum restrictions on their retailers if necessary.

Objective

By requiring a minimum fuel purchase, tank topping will be discouraged and fewer trips will be made to retail stations, helping to shorten lines. Maximum fuel purchase restrictions would allow gasoline retailers to spread a limited fuel allotment among more customers.

Implementation

The Governor will issue an Executive Order describing the provisions of the regulations and the counties of the state included. A description of the regulations will be distributed to retail operators by mail or delivery through DPS. TENRAC will prepare the information to be distributed. A news release will be prepared and distributed by TENRAC. The measure will be administered and monitored by TENRAC.

Costs

Costs of this measure would be largely limited to publicity and information dissemination of the program guidelines. Because enforcement of this program would probably be the responsibility of local law enforcement agencies, expenses of enforcement would be paid by these agencies, although it is expected that this measure would be largely self-enforcing.

Fuel Savings

This measure is not intended to save energy, but rather to more equitably allocate existing supplies. By reducing tank topping and panic buying, fuel supplies will not be depleted as rapidly and unnecessary auto travel will be discouraged.

Advantages

This measure can be implemented quickly and at minimal expense. It is immediately effective at discouraging tank topping. The state imposed a minimum sales measure in 1979.

Disadvantages

This measure has little effect on either the uncertainty of gas availability or gasoline consumption demand. The measure relies on gas station operators or local governments for enforcement.

Recommendation

The minimum purchase measure is recommended to be implemented at the same time as the odd-even plan. The maximum purchase requirement is not recommended as a State regulation because it is felt that private oil companies will determine their own maximums if shortages are severe enough.

RETAIL GAS STATION REGULATIONS

Description

Gasoline stations would be required to initiate certain operations measures such as displaying flags (green, red, yellow) to indicate if the station is open or closed. In addition, if the shortage is severe enough, incentives will be developed to encourage retail station operations on days, such as weekends, or times when few stations would normally be open. Anti-favoritism rules may also be included.

Objective

The purpose of this measure is to standardize gasoline station operating regulations to reduce public confusion in purchasing gasoline.

Implementation

The Governor will issue an Executive Order stating the provisions of the rules and the area of the state they will be imposed. A copy of the rules will be sent to gasoline station operators by mail or delivery through DPS. TENRAC will administer and monitor the program.

The gas station operators will be given a specified amount of time to meet the regulations. The local governments will be asked to enforce the provisions.

TENRAC will administer and monitor the program.

Costs

State costs will be limited to public information concerning the provisions of the measure and administrative costs of the program and delivery costs of the regulations. Retail station operators will be expected to purchase the flag sets and local governments would pay for any needed enforcement.

Fuel Savings

These regulations are designed to manage the supplies rather than save fuel. Some fuel may be saved, however, by motorists if they do not have to drive long distances looking for open stations or waiting in long lines.

Advantages

This program can be implemented quickly and at minimal expense. The state has experience in operating a similar program in 1979. The measure will help reduce uncertainty and waste of gasoline caused by consumers searching for open gas stations.

Disadvantages

The program relies on gas station operators and local governments for enforcement.

Recommendation

This measure is recommended for implementation at the same time as the odd-even program.

STATE SET-ASIDE PROGRAM

Description

A certain percent (up to 5%) of monthly state fuel supplies distributed by the prime suppliers would be set aside to be redistributed by the State to bulk consumers who are considered priority users and who are experiencing difficulty obtaining sufficient fuel supplies. Gasoline and possibly diesel fuel, propane or other motor fuels may be included in this program.

Those needing more fuel supplies than their suppliers can provide would apply to the State fuel allocation office of TENRAC on a monthly basis for additional supplies from the set-aside program. After a review of the application, additional supplies may or may not be authorized for delivery. In addition, surplus supplies of the state set-aside may be directed for general distribution to retail stations in hardship counties. Set-aside supplies could also be used as an incentive to encourage retail stations to remain open on weekends or during non-peak hours.

This program would be similar to that operated during 1979-80 and 1974. The cooperation of the private sector, especially the oil companies, will contribute to the smooth operation of this program.

Objective

This program is designed to provide additional supplies of gasoline or other motor fuels to bulk users experiencing an emergency or severe hardship caused by a shortage. The emergency need of priority users, such as agriculture operations, emergency medical, fire and police services, public transportation, school buses, and energy suppliers among others, will be met as much as possible.

Implementation

When the Governor determines that a state set-aside program is needed, an Executive Order will be issued establishing the program. Authority could be from either a Federal delegation or from the State Disaster Act. Upon this declaration, TENRAC will notify all oil companies supplying Texas of the

program. A representative of each company will be designated as a communication point for TENRAC. Bulk users, including retail stations, will be notified through a public information program of their possible participation in the program.

The fuel allocation office of TENRAC will administer the program. This office has developed a computerized set-aside allocation system and has application forms ready on a standby basis to implement this program. (See Appendix I).

The amount of state set-aside volume shall be based on the total anticipated supply to be made available to the state's distribution system for consumption during the upcoming month. The Prime Supplier's Monthly Report, EIA-25, will service as the source of this information. If unavailable, the information could be collected on a comparable state report at the request of the Governor.

Depending upon the severity of the shortage, additional staff may have to be hired at TENRAC to handle the fuel allocation requests. This staff will respond to public questions regarding the program, code data and operate the computerized program and review fuel assignments as necessary.

Costs

Startup costs would include public information and activating the computerized operations. Additional staff may be required. Operational costs would be for communications, operating the computer program and additional personnel. Experience with the 1979-80 set-aside program, during which up to 18 full-time employees were involved, indicated total costs exceeding $10,000 per month could be expected.

Fuel Savings

There would be no direct fuel savings associated with this program.

Advantages

This measure could be implemented relatively quickly (2 weeks to a month). It will serve to quickly move gasoline to end users in need of emergency or

hardship fuel supplies within a short time. It can be very effective of redistributing fuel to areas of the state with the greatest need. This program has been applied in the state previously and is reasonably understood by the oil companies. A computerized program to speed processing of fuel requests is already in place by the state.

Disadvantages

Federal regulations may preempt or disallow implementation of this program. There is some potential for abuse by applicants seeking emergency allocations that are not needed. A large number of personnel may have to be hired and trained within a short time. The determination of who should be considered a priority user or in what order the users should be prioritized is a difficult decision. If the set-aside program is implemented prematurely, it might exacerbate the shortfall.

Recommendation

It is recommended that this measure be implemented at the point when a fuel shortage is severe enough to disrupt essential state operations such as agriculture, public transportation and emergency services.

2. C. Demand Reduction/Restraint

This group of measures includes those which are designed to reduce fuel consumption, either by directly restricting use of motor vehicles or by providing incentives to conserve fuel. Many of these measures can be applied in two steps: a voluntary compliance phase during which consumers are encouraged to participate, and a mandatory compliance phase to be imposed by the Governor if the fuel shortage becomes more severe and if voluntary compliance is not effective. The measures which are very restrictive and expensive to implement or operate would be considered only in the event of a serious and long-lasting fuel shortage created an extreme emergency.

The Demand Reduction/Restraint Measures examined here are:

1) State Agency Conservation Program
2) Rideshare Parking Lot Program
3) Tire Inflation Program
4) Speed Limit Enforcement
5) Cooling, Heating and Lighting Conservation Program
6) Relaxed Public Transportation Restrictions
7) Relaxed Clean Air Act Regulations
8) Alternate Work Hour Programs

STATE AGENCY CONSERVATION PROGRAM

Description

The various state agencies would be encouraged by the Governor to participate in energy conservation activities which could be viewed by local governments and the private sector as model programs. State agency programs could include:

1) Reduced use of state vehicles/reduced state travel
2) Rideshare incentive parking plans
3) Participation in special transit (e.g. subsidized pass) programs
4) Building temperature and lighting restrictions
5) Alternate work hour programs

Objective

The state, by implementing its own emergency energy conservation program for its various agencies, would set an example which local governments and private business would be encouraged to follow.

Implementation

When a state fuel shortage appears imminent, the Governor shall issue an Executive Directive asking each state agency to participate in a state-sponsored energy conservation program. TENRAC will administer and coordinate the program by providing the agencies with the necessary information to implement the conservation programs. TENRAC will advise the Governor of potential agency actions, their potential energy savings and other impacts. The success of the program will be monitored by TENRAC.

Costs

Costs will be limited to minimal administrative expenses of publicizing and managing the programs. Some of the programs, such as limiting state vehicle use, could result in cost savings to the state.

Fuel Savings

Because state agency fuel consumption, when compared to the state as a whole, is very small, total energy savings will be minimal. Additional savings

would be realized if local governments or private businesses implement similar programs.

Advantages

These programs can be implemented quickly and at minimum expense. In some cases, cost savings will occur, resulting in an indirect savings to state taxpayers due to reduced government expenditure.

Disadvantages

The participation of each agency may be limited according to the individual location and operating characteristics. Disruption of some state activities may occur.

Recommendation

It is recommended that this program be implemented at the early stages of a fuel shortage in order to set an example for local governments and private business.

RIDESHARE PARKING LOT PROGRAM

Description

Parking lots would be established or expanded where they already exist to accommodate motorists who wish to meet and participate in carpooling, vanpooling or transit programs. The individual districts of the State Department of Highways and Public Transportation (SDHPT) will identify potential meeting sites, such as along major highway intersections, and establish free parking lots for commuters. The lots can be paved or covered with gravel and may be identified with a sign. Several of the SDHPT districts have already established such lots in urban, suburban and rural areas of the State. In addition, local governments would be encouraged to develop similar lots within their jurisdiction and private lot owners, such as shopping centers or churches, would be encouraged to allow commuters to use their lots for ridesharing meeting purposes. Local ordinances prohibiting or discouraging this use should be relaxed.

Objective

This measure would provide a relatively inexpensive and quickly implemented action to encourage and assist motorists in participating in formal or informal rideshare arrangements. It could be an effective strategy in nonurban as well as urban areas of the State.

Implementation

During an impending motor fuel shortage, the SDHPT District Engineers would be encouraged to identify potential rideshare meeting sites in their districts. A priority list of sites for lot construction should be developed. As money for the program becomes available,the lots would be developed. The local media should be contacted to publicize the parking lot program. Under a severe disruption and declared emergency, the Governor could direct the SDHPT to establish lots in the areas of the State experiencing the worst problems. Construction time would range from one to three days for gravel lots to one week for paved lots. The work is usually performed by SDHPT personnel.

Costs

Construction costs for the lots established under existing programs in SDHPT districts range from $250 per parking space for gravel lots to $750 per space for paved lots. Costs are generally paid with District maintenance funds, although larger paved lots in urban areas are sometimes constructed with a combination of local, state and federal funds. Assuming a state-wide program which would establish 60 gravel lots (approximately doubling the existing number) accommodating 20 vehicles each, state expenses would total approximately $300,000. An emergency statewide lot construction program would probably require a special appropriation of state funds. Cost savings will be realized by those commuters utilizing the lots.

Fuel Savings

Because of the relatively small magnitude of the program when compared to total state petroleum consumption, fuel savings for the new lots would be minimal. If local governments and the private sector develop similar lots throughout the state, fuel savings could be considerably higher, however.

Advantages

This program can be implemented in a relatively short time, with minimum funding and can benefit commuters in nearly all areas of the state. It is especially beneficial to those living out of transit service areas. Past experience has shown that it is an effective method of encouraging rideshare and reducing fuel use and commuting costs.

Disadvantages

Current SDHPT funding levels for the lots would not be sufficient for a major construction effort. Emergency state funding would have to be found to support the program. SDHPT work crews, who now perform most of the construction, may be diverted from other planned or ongoing highway projects to construct the lots. Most lots would have little security and increased surveillance by police may be necessary.

Recommendation

It is recommended that this program be implemented in the early stages of a fuel disruption. The extent of the program will be subject to available funding.

TIRE INFLATION PROGRAM

Description

This program will promote public awareness on the impact of underinflated tires on reduced vehicle fuel efficiency. The public will be encouraged, through public information, and possibly through mandatory state inspection requirements, to maintain correct tire inflation on their vehicles.

Objective

An estimated 20 to 30% of the vehicle fleet currently travels on tires with inflation pressures of 4-5 psi below manufacturer specification. Vehicles with underinflated tires in this range will improve fuel efficiency by 2-5% if corrected. Therefore, a program which reduces the number of vehicles operating with underinflated tires will produce fuel savings.

Implementation

This program will consist of two phases: a voluntary public participation program and a mandatory tire inflation requirement under the state motor vehicle inspection program. During the first phase, the public will be urged to check tire inflation regularly as part of normal auto maintenance to reduce fuel use. This information will be included in the state's public information media campaign along with other energy-saving tips. TENRAC will coordinate the public information program with DPS.

If the fuel shortage becomes more severe, a mandatory tire inflation check could be added to the annual state vehicle inspection. This would probably require a statutory change to modify the state vehicle inspection regulations. State vehicle inspection centers would be sent instructions on adding the tire inflation requirement to inspections. DPS would administer the program as it does the current vehicle inspection regulations. The program could operate either on a permanent basis or be temporary until the fuel shortage eases.

Costs

As part of the overall public information media program, costs would be minimal and limited to expenses of developing media releases for public

service announcements. If implemented as a mandatory part of the state inspection system, costs involved in the time necessary to make the checks will be borne by the private state inspection stations or passed on to consumers if an increase in the state inspection fee is allowed.

Fuel Savings

The reduction in fuel use will depend to a large extent on the amount of public acceptance and participation in the program. Even so, when compared to total state petroleum use, fuel savings would be minimal.

Advantages

This program can be implemented quickly and at minimal cost.

Disadvantages

Fuel savings will be minimal. The program will be difficult to enforce. Additional costs of vehicle inspections may be passed on to consumers. A statutory change may be needed.

Recommendation

It is recommended that during a mild fuel disruption, this program be part of the public information campaign for voluntary compliance. During a moderate to severe shortage, this program can become a mandatory part of the state vehicle inspection requirements.

SPEED LIMIT ENFORCEMENT

Description

Greater compliance with the 55-mph highway speed limit would conserve significant amounts of fuel. Initially, the public will be encouraged, through a public information program, to voluntarily adhere to the 55-mph limit. If necessary, DPS could temporarily reallocate resources to provide for increased enforcement of the speed limit.

Objective

The main purpose of this program is to reduce highway fuel consumption. Because vehicle fuel efficiency improves at lower highway speeds, motor fuel can be saved by reducing the speeds of vehicles using the highways.

Implementation

At the outset of a fuel shortage, motorists will be encouraged to reduce speed to conserve fuel through the state public information program. If this does not succeed in reducing speeds significantly, the Governor can consult with DPS and SDHPT to ascertain the potential for greater compliance of the state speed limit through increased DPS enforcement. If such an action is determined to be cost-effective, the Governor will direct DPS to operate the necessary program to increase compliance. It was determined that, if a reduction in the speed limit is warranted during a severe shortage, this would more appropriately be pursued at the Federal level.

Costs

The first phase of this program, the public information phase, would cost little. This would be limited to expenses for preparing public information news releases to be part of public service announcements. The second phase, increased enforcement and the third phase, reduced maximum speed limit, could be expensive if DPS personnel need to work overtime or if additional DPS personnel must be hired. Due to the anticipated short-term nature of a fuel shortage emergency, it is unlikely that it would be cost-effective to train new employees for the program. Instead, priorities could be shifted to provide increased manpower for program enforcement. Even with this

approach, costs could be high, reaching $100,000 or more a month to implement and operate.

Fuel Savings

Depending on the prior state compliance level and the success of the public information and enforcement programs, fuel savings could be considerable. Motor fuel use could be reduced by 1% to 4% (U.S. DOE estimate), resulting in a total state petroleum savings of 0.6% to 2.6%. The higher level of savings will result from reduced speed limits with greater enforcement.

Advantages

Lower travel speeds have favorable effects on highway safety. They also achieve gasoline demand reduction without an appreciable loss in mobility.

Disadvantages

The primary disadvantage will be its unpopularity among motorists and, possibly, enforcement personnel. In addition, reduced travel speeds entail a real cost increase due to longer trip travel times. This especially impacts goods movement activities.

Recommendation

It is recommended that during the early stages of a fuel disruption this program be part of the public information program for voluntary compliance. If the fuel disruption becomes worse and voluntary compliance is not successful, it is recommended that DPS increase enforcement as much as possible within existing budget limits.

COOLING, HEATING AND LIGHTING CONSERVATION PROGRAM

Description

Limits on the energy use for space heating and cooling and indoor and outdoor lighting would be encouraged . This could be first initiated as a voluntary program and later, if the fuel shortage becomes more severe, a mandatory measure.

Objective

The purpose of the measure would be to directly reduce petroleum use by electric utility companies by reducing overall electricity use. In addition, as a general energy conservation program, it will provide a symbolic action to emphasize the importance of conserving energy to the public.

Implementation

As a fuel shortage appears imminent, the Governor will issue an Executive Directive to state agencies asking them to restrict energy use by setting building heating and cooling temperatures at levels to conserve fuel and reducing lighting. The suggested temperature settings and lighting restrictions will be established in consultation with TENRAC.

At the same time, the Governor through the media will urge the private sector, local governments and the general public to participate in similar energy conservation programs.

If the shortage becomes more severe and an emergency is declared, the Governor may issue an Executive Order mandating the temperature and lighting restrictions. TENRAC will administer the program, determine exemptions, answer questions regarding its implementation and monitor its effectiveness. Local governments will be expected to enforce the program if necessary.

Costs

Costs of implementing the program will be small and limited to informing the public of the regulations. Although past experience has indicated that the

majority of the public will voluntarily cooperate with a temperature and lighting restriction programs, some local enforcement may be necessary. These costs, though probably small, would be borne by the local government.

Fuel Savings

In Texas, only a small portion (1% to 2%) of the petroleum used in the state is burned for producing electricity and this is used largely for emergency purposes. As a result, petroleum savings potential would be minimal, although overall electricity or natural gas savings could be significant.

Advantages

This measure can be implemented quickly and with minimal expense. The public has experience following similar temperature guidelines in the past.

Disadvantages

There may be some opposition from private businesses or the public if the temperature or lighting restrictions have an adverse impact on business activity or general health. The measure would be difficult to enforce if not done voluntarily. Many buildings already restrict energy use as a money-saving measure so additional savings could be limited.

Recommendation

It is recommended that this program be included as part of the public information program for voluntary compliance and part of the state agency conservation program as a model for local governments to follow. It should be made mandatory only during a severe fuel disruption.

RELAXED PUBLIC TRANSPORTATION RESTRICTIONS

Description

State and local government regulations regarding the licensing and operations of public transportation services (bus, taxi, jitney) would be relaxed on a temporary basis to expedite new service. The state, which regulates operations between cities, will relax these regulations, while local governments, which regulate operations within their boundaries, will be encouraged to take similar actions. In both cases, licensing, routes and rates will be prescribed by the respective government agencies.

Objective

The purpose of this measure is to allow quicker and easier entry of private public transportation operators into the transportation service business. By relaxing existing restrictive regulations, private operators will be encouraged to operate public transportation services, thereby providing an energy-efficient transportation alternative for motorists. It will also relieve some of the pressure on existing transit systems to handle large ridership increases.

Implementation

At the outset of a fuel shortage, the Texas Railroad Commission could announce relaxation of its entry regulations for intercity public transportation service. This would allow the temporary licensing of new commercial transit operations between cities where the Commission feels additional service is warranted, and it would prescribe allowable rates to be charged. It could expedite the approval process by temporarily suspending any opposition hearings for new transportation providers which can add 2 to 3 months to the licensing process. This will shorten the licensing process to about 30 to 45 days. At the same time, the Governor will encourage local governments, using the state as an example, to allow similar changes to local regulations. TENRAC and the RRC will provide local governments with ideas on the types of regulatory changes that can be made. The RRC and TENRAC will monitor the effectiveness of the program. The measure should be viewed as temporary but operators may be allowed to operate permanently if their service is needed after the emergency.

Costs

Most regulatory or statutory changes could be enacted at minimal cost to state and local governments. Costs of new transit operations would be paid by the operators and their respective passengers.

Fuel Savings

Energy savings would occur due to motorists switching from use of their automobile to more fuel-efficient public transportation for trips. Due to the relatively limited number of new public transportation services which would likely begin operation, fuel savings would be small (less than 0.1%) when compared to total state petroleum use.

Advantages

The measure can be implemented quickly and at minimal expense. It will allow the free market system to operate more freely by reducing government regulations.

Disadvantages

Existing public transportation operators and unions may not like the new competition. New operators may have problems in obtaining a fuel supplier. The state and local governments cannot force a new operator to provide service to any specific area it feels is in need.

Recommendation

It is recommended that this program be implemented when it appears that the fuel disruption is impairing the mobility of state residents.

RELAXED CLEAN AIR ACT REGULATIONS

Description

State and federal clean air laws prescribe the allowable levels of air pollutants which may be emitted from fuels burned by state utilities and industries. Because of this, most large petroleum users are prohibited from burning high sulfur petroleum. During a period when low sulfur petroleum supply is tight, high sulfur oil may be in greater supply. In this case this measure would allow these users to substitute high sulfur fuels.

Objective

The main purpose of this action is to allow industrial and utility petroleum users to increase their fuel purchase options by allowing them to burn petroleum regardless of its sulfur content.

Implementation

In order to relax state air pollution laws, the Executive Director of the Texas Air Control Board (TACB) can allow high sulfur fuels to be burned if evidence is presented that low sulfur fuels are unavailable. State law could also be relaxed by Executive Order of the Governor during a declared energy emergency.

At the same time, permission to relax federal standards must be pursued. This is done by the Governor petitioning the President for his approval. Although this can be a lengthy process of up to 4 months involving public hearings, the Governor may decide to allow high sulfur fuels to be burned while a Presidential decision is being deliberated. This was done in 1979-80 by some of the nation's governors.

Costs

State administrative costs would be minimal. It is expected that only those utilities and industries which could convert easily and inexpensively to alternate fuels would do so.

Fuel Savings

By allowing high sulfur petroleum to be used in place of low sulfur petroleum, total oil use will not be reduced. However, this will free low sulfur petroleum for use as motor fuel and other priority uses. Few petroleum users will be able to convert to other fuels (i.e. coal or natural gas) within the short-term disruption assumed here.

Advantages

The measure can be implemented quickly and at minimal expense. It will free more petroleum for use as motor fuel.

Disadvantages

Total fuel savings would be minimal, especially on a short-term basis. Federal approval may be necessary before this measure can be implemented. Air pollution may increase. Fuel conversions in some industries would require a long lead time.

Recommendation

It is recommended that this measure be implemented during a moderate to severe fuel shortage.

ALTERNATE WORK HOUR PROGRAMS

Description

Private and public businesses following the lead of Texas state agencies would be encouraged to alter normal 8-5 working hours to permit a spread of peak-period travel times. Several potential methods of achieving this exist. A flexible work hours program, whereby employees are allowed to begin and end work anytime between designated hours or a staggered work hour program, whereby employees begin and end work at shifts of designated times, are two modified work hour plans. In addition, businesses may choose to reduce the number of days in a working week, such as by working for 10 hours for 4 days and having off the fifth day.

Objective

The purposes of this measure are to spread the peak traffic period which saves motor fuel by reducing congestion and to relieve rush hour use of transit facilities. A shortened work week would reduce work trip fuel use.

Implementation

The Governor will issue an Executive Directive asking all state government agencies to participate in an alternate work hours program to encourage energy conservation. This can be done in conjunction with other state agency conservation measures. In addition, the Governor, through the media, will encourage private businesses and local governments to follow the state's example. TENRAC will develop appropriate news releases, information on the model programs and provide technical assistance. This program would be voluntary, although the Governor could mandate its use under his emergency powers if necessary.

Costs

There would be no direct costs related to this program other than administration of employee work hours. If a disruption of normal business activity occurs, there may be some costs to businesses.

Fuel Savings

If this measure succeeds in reducing vehicle congestion in urban areas during the peak periods, encouraging transit ridership and eliminating some work

trips, motor fuel savings could be substantial. State fuel savings of 0.2% to 1.5% (U.S. DOE estimate) may be expected with moderate participation in this program.

Advantages

The program could be implemented quickly and at minimal expense. Many businesses are already operating on this type of program so it will be nothing new.

Disadvantages

Not all types of businesses can operate efficiently under this type of work hours program. A mandatory program would be resisted by some businesses.

Recommendation

It is recommended that this program be part of the public information program for voluntary compliance and part of the state agency conservation program.

ADMINISTRATION OF FEDERAL LOW INCOME ENERGY ASSISTANCE PROGRAM

Description

The price of fuel may rise dramatically during a fuel shortage and have an adverse impact on low-income residents. To offset these sudden increases, residents may require some form of financial assistance. This assistance could be in the form of increased welfare payments or other assistance from federal government programs administered by the state. The existing low-income energy assistance program administered by the state includes provisions for operating an "energy crisis intervention" program.

Objective

The purpose of this measure is to provide financial hardship assistance to state residents who are adversely impacted by greatly increased fuel costs.

Implementation

As gasoline prices rise to a level which the Governor determines detrimentally affects their welfare and ability to maintain necessary mobility, he can direct the Department of Human Resources to implement a program of financial assistance for these hardship groups. This program could be based on existing federal energy assistance programs which utilize federal funds or new programs. The method of relieving the high fuel cost impacts will be left to the SDHR, but could include such actions as increased welfare payments to cover mobility or heating needs. Implementation time could take 2 to 6 months if the programs are not already in existence.

Costs

Under a federally funded program, no state costs would be involved. Current federal funding for hardship energy assistance in Texas totals about $44 million in FY 1982.

Fuel Savings

This program is not intended to directly save fuel.

Advantages

The adverse economic impacts of fuel price rises will be alleviated for the most needy segment of the state population.

Disadvantages

A new federal program may take several months to implement. Middle-income residents, who would also be adversely impacted by the price increases, would receive no relief under this program.

Recommendation

It is recommended that this program be implemented subject to availability of Federal funding during a fuel shortage scenario when large fuel price increases impair the mobility of the state's low income residents.

2. D. Income Redistribution

Past experience has shown that one of the most adverse impacts of fuel shortages is the rapid rise in fuel prices. These cost increases can produce unexpected financial burdens on state consumers, especially low-income residents, private business and state and local government operations.

The extent of price increases, being subject to federal and state tax policy decisions, price controls, and the severity of the shortage, are difficult to predict. Nevertheless, if past fuel disruptions are any indication, a large increase in retail motor fuel prices may likely occur.

The following action has been identified as the most appropriate income redistribution involvement:

- Administration of Federal Low-Income Energy Assistance Program

APPENDIX A

STATE DISASTER ACT

TEXAS DISASTER ACT OF 1975

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THIS UNOFFICIAL COPY OF THE TEXAS DISASTER ACT OF 1975 HAS BEEN CHANGED TO INCLUDE THE ACTS (H.B. 36 AND H.B. 1499) OF THE 67TH LEGISLATURE WHICH BECOMES EFFECTIVE AUGUST 31, 1981. CHANGED SECTION TITLES, SECTIONS, AND PARAGRAPHS ARE DENOTED BY THE FOLLOWING SYMBOL: [

TEXAS DISASTER ACT OF 1975

Title 120A STATE AND NATIONAL DEFENSE Art. 6889-7

Short title

Section 1. This Act may be cited as the Texas Disaster Act of 1975.

Purposes

Section 2. The purposes of this Act are to

(1) reduce vulnerability of people and communities of this state to damage, injury, and loss of life and property resulting from natural or man-made catastrophies, riots, or hostile military or paramilitary action;

(2) prepare for prompt and efficient rescue, care, and treatment of persons victimized or threatened by disaster;

(3) provide a setting conducive to the rapid and orderly restoration and rehabilitation of persons and property affected by disasters;

(4) clarify and strengthen the roles of the Governor, state agencies, and local governments in prevention of, preparation for, response to, and recovery from disasters;

(5) authorize and provide for cooperation in disaster prevention, preparedness, response, and recovery;

(6) authorize and provide for coordination of activities relating to disaster prevention, preparedness, response, and recovery by agencies and officers of this state, and similar state-local, interstate, federal-state, and foreign activities in which the state and its political subdivisions may participate;

[(7) provide an emergency management system embodying all aspects of predisaster preparedness and postdisaster response;

[(8) assist in prevention of disasters caused or aggravated by inadequate planning for and regulation of public and private facilities and land use; and

[(9) provide the authority and mechanism to respond to an energy emergency.

Limitations

Section 3. Nothing in this Act may be construed to

(1) interfere with the course or conduct of a labor dispute, except that actions otherwise authorized by this Act or other laws may be taken when necessary to forestall or mitigate imminent or existing danger to public health or safety;

[(2) interfere with dissemination of news or comment on public affairs, but any communications facility or organization, including radio and television stations, wire services, and newspapers, may be required to transmit or print public service messages furnishing information or instructions in connection with a disaster or potential disaster;

[(3) affect the jurisdiction or responsibilities of police forces, fire fighting forces, units of the armed forces of the United States, or of any of their personnel when on active duty, but state, local, and interjurisdictional emergency management plans shall place reliance on the forces available for performance of functions related to disasters; or

(4) limit, modify, or abridge the authority of the Governor to proclaim martial law or exercise any other powers vested in him under the constitution or laws of this state independent of or in conjunction with any provisions of this Act.

Definitions

Section 4. In this Act

[(1) "Disaster" means the occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from any natural or man-made cause, including fire, flood, earthquake, wind, storm, wave action, oil spill or other water contamination, volcanic activity, epidemic, air contamination, blight, drought, infestation, explosion, riot, hostile military or paramilitary action, other public calamity requiring emergency action, or energy emergency.

(2) "Political subdivision" means a county or incorporated city.

(3) "Organized volunteer groups" means organizations such as the American National Red Cross, the Salvation Army, Civil Air Patrol, Radio Amateur Civil Emergency Services, and other similar organizations recognized by federal or state statute, regulation, or memorandum.

(4) "Temporary housing" means temporary housing as defined in the Federal Disaster Relief Act of 1974 (PL 93-288, 88 Stat., 143).[1]

[(5) "Interjurisdictional agency" means a disaster agency maintained by and serving more than one political subdivision.

[(6) "Energy emergency" means a temporary statewide, regional, or local shortage of petroleum or liquid fuels energy supplies that makes emergency measures necessary to reduce demand or allocate supply.

[1] 42 U.S.C.A. §§ 5121 et seq., 5174.

[The Governor and emergency management

Section 5. [(a) The Governor is responsible for meeting the dangers to the state and people presented by disasters and disruptions to the state and people caused by energy emergencies.

(b) Under this Act, the Governor may issue executive orders, proclamations, and regulations and amend or rescind them. Executive orders, proclamations, and regulations have the force and effect of law.

[(c) The Governor may establish by executive order an Emergency Management Council to advise and assist him in all matters relating to disaster preparedness, emergency services, energy emergencies, and disaster recovery. The Emergency Management Council is composed of the heads of state agencies, boards, and commissions and representatives of organized volunteer groups.

[(d) A state of disaster may be declared by executive order or proclamation of the Governor if he finds a disaster has occurred or that the occurrence or the threat of disaster is imminent. The state of disaster continues until the Governor finds that the threat or danger has passed or the disaster has been dealt with to the extent that emergency conditions no longer exist and terminates the state of disaster by executive order, but no state of disaster may continue for longer than 30 days unless renewed by the Governor. The legislature by law may terminate a state of disaster at any time. On termination by the legislature, the Governor shall issue an executive order ending the state of disaster. All executive orders or proclamations issued under this subsection shall indicate the nature of the disaster, the area threatened, and the conditions which have brought it about or which make possible termination of the state of disaster. An executive order or proclamation shall be

disseminated promptly by means calculated to bring its contents to the attention of the general public and, unless the circumstances attendant on the disaster prevent or impede, promptly filed with the Division of Emergency Management, the secretary of state, and the county clerk or city secretary in the area or areas to which it applies.

[(e) An executive order or proclamation setting forth a state of disaster activates the disaster recovery and rehabilitation aspects of the state emergency management plan applicable to the area in question and is authority for the deployment and use of any forces to which the plan applies and for use or distribution of any supplies, equipment, and materials and facilities assembled, stockpiled, or arranged to be made available pursuant to this Act or any other provision of law relating to disasters. The preparedness and response aspects of the plan shall be activated as provided in the plan.

[(f) During the continuance of any state of disaster and the pursuant recovery period, the Governor is Commander-in-Chief of state agencies, boards, and commissions having emergency responsibilities. To the greatest extent practicable, the Governor shall delegate or assign command authority by prior arrangement embodied in appropriate executive orders or plans, but nothing in this Act restricts his authority to do so by orders issued at the time of the disaster.

(g) In addition to any other powers conferred on the Governor by law, he may:

[(1) suspend the provisions of any regulatory statute prescribing the procedures for conduct of state business or the orders, rules, or regulations of any state agency if strict compliance with the provisions of any statute, order, rule, or regulation would in any way prevent, hinder, or delay necessary action in coping with the disaster;

[(2) Utilize all available resources of the state government and of each political subdivision of the state which are reasonably necessary to cope with the disaster;

[(3) temporarily reassign resources, personnel, or functions of state executive departments and agencies or their units for the purpose of performing or facilitating emergency services;

[(4) subject to any applicable requirements for compensation under Section 12 of this Act, commandeer or utilize any private property if he finds this necessary to cope with the disaster;

(5) recommend the evacuation of all or part of the population from any stricken or threatened area in the state if he deems this action necessary for the preservation of life or other disaster mitigation, response, or recovery;

(6) prescribe routes, modes of transportation, and destinations in connection with evacuation;

(7) control ingress and egress to and from a disaster area and the movement of persons and the occupancy of premises in the area;

(8) suspend or limit the sale, dispensing, or transportation of alcoholic beverages, firearms, explosives, and combustibles;

(9) enter into purchase, lease, or other arrangements with an agency of the United States for temporary housing units to be occupied by disaster victims and to make units available to any political subdivision of the state;

(10) assist any political subdivision which is the locus of temporary housing for disaster victims to acquire sites necessary for temporary housing and to do all things required to prepare the site to receive and utilize temporary housing units by advancing or lending funds available to the Governor from any appropriation made by the legislature or from any other source;

"passing through" funds made available by any agency, public or private; or becoming a copartner with the political subdivision for the execution and performance of any temporary housing for disaster victims project;

(11) under such regulations as he shall prescribe, temporarily suspend or modify for not to exceed 60 days any public health, safety, zoning, transportation within or across the state, or other requirement of law or regulation within this state when by proclamation he deems the suspension or modification essential to provide temporary housing for disaster victims;

(12) on his determination that a local government of the state has or will suffer a substantial loss of tax and other revenues from a major disaster and has demonstrated a need for financial assistance to perform its governmental functions, apply to the federal government on behalf of the local government for a loan, receive and disburse the proceeds of any approved loan to any applicant local government, determine the amount needed by any applicant local government to restore or resume its governmental functions, certify that to the federal government provided that no application amount may exceed 25 percent of the annual operating budget of the applicant for the fiscal year in which the major disaster occurs, and recommend to the federal government, based on his review, the cancellation of all or any part of repayment when in the first three full fiscal-year periods following the major disaster the revenues of the local government are insufficient to meet its operating expenses, including additional disaster-related expenses of a municipal operation character;

[(13) through the use of state departments or agencies or the use of any of the state's instrumentalities, clear or remove from publicly or privately owned land or water, debris and wreckage that may threaten public health or safety or public or private property in any state of disaster declared by the Governor or major disaster declared by the President of the United States;

(14) accept funds from the federal government and utilize the funds to make grants to any local government for the purpose of removing debris or wreckage from publicly or privately owned land or water;

(15) on his determination that financial assistance is essential to meet disaster-related necessary expenses or serious needs of individuals or families adversely affected by a major disaster which cannot be otherwise adequately met from other means of assistance, accept a grant by the federal government to fund financial assistance, subject to terms and conditions as may be imposed on the grant, and enter into an agreement with the federal government of any officer or agency of the United States pledging the state to participate in funding not more than 25 percent of the financial assistance authorized in this subsection;

(16) make financial grants to meet disaster-related necessary expenses or serious needs of individuals or families adversely affected by a major disaster which cannot otherwise adequately be met from other means of assistance, which shall not exceed an aggregate amount in excess of that established by federal statute to an individual or family in any single major disaster declared by the President of the United States; and

(17) make rules and regulations as are necessary for carrying out the purposes of this Act, including standards of eligibility for persons applying for benefits, procedures for applying and administration, methods of investigation, filing, and approving applications, and formation of local or statewide boards to pass on applications and procedures for appeals.

[(h) The Governor may designate in the state emergency management plan the Department of Human Resources or other state agency to carry out the functions of providing financial aid to individuals or families qualified for disaster relief. The designated agency may employ temporary personnel

for these functions to be paid from funds appropriated to the agency, federal funds, or the Disaster Contingency Fund. The Merit System does not apply to the temporary positions. The Governor may allocate funds appropriated under this Act to implement the purposes of this Act.

(i) Nothing in this Act may be construed to limit the Governor's authority to apply for, administer, or expend any grant, gift, or payment in aid of disaster prevention, preparedness, response, or recovery.

(j) No debris or wreckage from public or private property may be removed until the affected local government, corporation, organization, or individual presents an unconditional authorization for removal to the Governor. No debris or wreckage may be removed from private property until the state is indemnified against any claim arising from removal. Whenever the Governor provides for clearance of debris or wreckage under the provisions of this Act, state employees or other individuals acting by authority of the Governor may enter on private land or water to perform tasks necessary to the removal or clearance operation. Except in cases of willful misconduct, gross negligence, or bad faith, a state employee or agent performing his duties while complying with orders of the Governor issued under the provisions of this Act shall not be liable for the death of or injury to persons or damage to property.

(k) Any political subdivision of this state is expressly authorized to acquire, temporarily or permanently, by purchase, lease, or otherwise, sites required for installation of temporary housing units for disaster victims and to enter into whatever arrangements (including purchase of temporary housing units and payment of transportation charges) which are necessary to prepare or equip the sites to utilize the housing units.

[State Division of Emergency Management

Section 6. [(a) A Division of Emergency Management is established in the office of the Governor. The Division shall have a Director and a State Coordinator. The Director shall be appointed by and serve at the pleasure of the Governor. The Coordinator shall be appointed by the Director. The Division shall have other coordinating and planning officers and other professional, technical, secretarial, and clerical employees necessary for the performance of its functions.

[(b) The Division shall prepare and maintain a comprehensive state emergency management plan and keep it current. The plan may include:

(1) provisions for prevention and minimization of injury and damage caused by disaster;

(2) provisions for prompt and effective response to disaster;

(3) provisions for emergency relief;

[(4) provisions for energy emergencies;

(5) identification of areas particularly vulnerable to disasters;

(6) recommendations for zoning, building, and other land-use controls, safety measures for securing mobile homes or other nonpermanent or semi-permanent structures, and other preventive and preparedness measures designed to eliminate or reduce disasters or their impact;

[(7) provisions for assistance to local officials in designing local emergency management plans;

(8) authorization and procedures for the erection or other construction of temporary works designed to protect against or mitigate danger, damage, or loss from flood, conflagration, or other disaster;

(9) preparation and distribution to the appropriate state and local officials of state catalogs of federal, state, and private assistance programs;

(10) organization of manpower and channels of assistance;

[(11) coordination of federal, state, and local emergency management activities;

[(12) coordination of the state emergency management plan with the emergency management plans of the federal government;

[(13) coordination of federal and state energy emergency plans; and

(14) other necessary matters relating to disasters.

[(c) The Division shall take an integral part in the development and revision of local and interjurisdictional emergency management plans prepared under Section 8 of this Act. To this end it shall employ or otherwise secure the services of professional and technical personnel capable of providing expert assistance to political subdivisions and disaster agencies. These personnel shall consult with subdivisions and agencies on a regularly scheduled basis and shall make field reviews of the areas, circumstances, and conditions to which particular local and interjurisdictional emergency management plans are intended to apply and may suggest revisions.

[(d) In preparing and revising the state emergency management plan, the Division shall seek the advice and assistance of local government, business, labor, industry, agriculture, civic, and volunteer organizations and community leaders. In advising local and interjurisdictional agencies, the Division shall encourage them also to seek advice from these sources.

[(e) The state emergency management plan or any part of it may be incorporated in regulations of the Division or executive orders which have the force and effect of law.

[(f) The Division shall:

[(1) determine requirements of the state and its political subdivisions for food, clothing, and other necessities in event of a disaster;

(2) procure and pre-position supplies, medicines, materials, and equipment;

[(3) promulgate standards and requirements for local and interjurisdictional emergency management plans;

[(4) periodically review local and interjurisdictional emergency management plans;

(5) provide for mobile support units;

[(6) establish and operate training programs and programs of public information or assist political subdivisions and disaster agencies to establish and operate the programs;

(7) make surveys of public and private industries, resources, and facilities in the state which are necessary to carry out the purposes of this Act;

(8) plan and make arrangements for the availability and use of any private facilities, services, and property and provide for payment for use under terms and conditions agreed on if the facilities are used and payment is necessary;

[(9) establish a register of persons with types of training and skills important in disaster prevention, preparedness, response, and recovery;

[(10) establish a register of mobile and construction equipment and temporary housing available for use in a disaster;

(11) prepare, for issuance by the Governor, executive orders and regulations necessary or appropriate in coping with disasters;

(12) cooperate with the federal government and any public or private agency or entity in achieving any purpose of this Act and in implementing programs for disaster prevention, preparation, response, and recovery; and

(13) do other things necessary, incidental, or appropriate for the implementation of this Act.

[(g) The Division may employ temporary personnel to be paid from funds appropriated to the Division, federal funds, or the Disaster Contingency Fund. The Merit System does not apply to the temporary positions.

[(h) The Division may provide assistance to private aviators, including partial reimbursement for funds expended, to meet the actual costs of aircraft operation in performing search, rescue, or disaster-related functions requested by the Governor or the Governor's designee. The reimbursements shall be limited to the actual cost of aircraft operation not reimbursable from other sources.

Financing

Section 7. [(a) It is the intent of the legislature and declared to be the policy of the state that funds to meet disasters always be available.

[(b) The Disaster Emergency Funding Board, which is composed of the Governor, the Lieutenant Governor, the Chairman of the State Board of Insurance, the Commissioner of the Department of Human Resources, and the Director of the Division, is established.

(c) A disaster contingency fund is established which shall receive money appropriated by the legislature.

(d) It is the legislative intent that the first recourse shall be to funds regularly appropriated to state and local agencies. If the Governor finds that the demands placed on these funds in coping with a particular disaster are unreasonably great, he may with the concurrence of the Disaster Emergency Funding Board make funds available from the Disaster Contingency Fund.

[(e) Whenever the federal government or any other public or private agency or individual offers to the state or through the state to any political subdivision of the state, services, equipment, supplies, materials, or funds as gifts, grants, or loans for purposes of emergency services or disaster recovery, the Governor, if required by the donor, and the political subdivision through the presiding officer of its governing body may accept the offer in behalf of the state or its political subdivision. Where any gift, grant, or loan is accepted by the state, the Governor or on his designation the Emergency Management Council or the State Coordinator may dispense the gift, grant, or loan directly to accomplish the purpose for which it was made or allocate and transfer to any political subdivision of this state, services, equipment, supplies, materials, or funds in the amount he or his designated agent may determine. The funds received by the state shall be placed in a special fund or funds and shall be disbursed by warrants issued by the Comptroller of Public Accounts on order of the Governor or his designated agent, who may be named by him either in a written agreement accepting the funds or in a written authorization filed with the Secretary of State. Where the funds are to be used for the purchase of equipment, supplies, or commodities of any kind, it is not necessary that bids be obtained or that the purchases be approved by any other agency. On receipt of an order for disbursement, the Comptroller shall issue a warrant without delay. Political subdivisions are authorized to accept and utilize all services, equipment, supplies, materials, and funds to the full extent authorized by the agreement under which they are received by the state or by the political subdivision.

Local and interjurisdictional disaster agencies and services

Section 8. [(a) Each political subdivision within this state is within the jurisdiction of and served by the Division and by a local or interjurisdictional agency responsible for disaster preparedness and coordination of response.

[(b) Each county shall maintain an emergency management program or participate in a local or interjurisdictional emergency management program which, except as otherwise provided under this Act, has jurisdiction over and serves the entire county or interjurisdictional area.

[(c) The Governor shall determine which municipal corporations need emergency management programs of their own and shall recommend that they be established and maintained. He shall make his determinations on the basis of the municipality's disaster vulnerability and capability of response related to population size and concentration. The emergency management program of a county must be coordinated with the emergency management programs of municipalities situated within its borders but shall not apply in a municipality having its own emergency management program.

[(d) The Governor may recommend that a political subdivision establish and maintain a program and form an interjurisdictional agency jointly with one or more other political subdivisions if he finds that the establishment and maintenance of a joint program or participation in it is made necessary by circumstances or conditions that make it unusually difficult to provide disaster prevention, preparedness, response, or recovery services under other provisions of this Act.

[(e) Each city which does not have a program and has not made arrangements to secure or participate in the services of an existing program shall designate a liaison officer to facilitate the cooperation and protection of that subdivision in the work of disaster prevention, preparedness, response, and recovery. Each county shall provide an office and a liaison officer to coordinate with state and federal emergency management personnel concerning disaster preparedness, response, or recovery services under other provisions of this Act.

[(f) The presiding officer of the governing body of each political subdivision shall notify the Division of the manner in which the political subdivision is providing or securing an emergency management program, identify the person who heads the agency responsible for the program, and furnish additional pertinent information that the Division requires.

[(g) Each local and interjurisdictional agency shall prepare and keep current a local or interjurisdictional emergency management plan for its area providing for disaster preparedness, response, recovery, and rehabilitation. The plan shall provide for:

[(1) wage, price, and rent controls and other economic stabilization methods in the event of disaster; and

[(2) curfews, blockades, and limitations on utility usage in an area affected by a disaster, rules governing ingress and egress to the affected area, and other security measures.

[(h) The local or interjurisdictional disaster agency shall prepare in written form and distribute to all appropriate officials a clear and complete statement of the disaster responsibilities of all local agencies and officials and of the disaster channels of assistance.

[(i) A political subdivision may make appropriations for emergency management services as provided by law for making appropriations for ordinary expenses of the political subdivisions and may enter into agreements for the purpose

of organizing emergency management service divisions, provide for a mutual method of financing the organization of units on a basis satisfactory to the political subdivisions, and render aid to other subdivisions under mutual aid agreements provided that the functioning of said units shall be coordinated by the Emergency Management Council. For the payment of the cost of any equipment, construction, acquisition, or any improvements for carrying out the provisions of this Act, counties and incorporated cities and towns may issue time warrants. These time warrants shall be issued in accordance with the provisions of the Bond and Warrant Law of 1931 as amended (Article 2368a, Vernon's Texas Civil Statutes). Time warrants shall not be issued for financing permanent construction or improvements for emergency management purposes except on the right of a referendum vote as provided in Section 4 of that law.

[Qualifications for rendering aid

Section 9. [If any person holds a license, certificate, or other permit issued by any state or political subdivision of any state evidencing the meeting of qualifications for professional, mechanical, or other skills, the person may render aid involving the skill in this state to meet an emergency or disaster, and this state shall give due consideration to the license, certificate, or other permit.

[Declaration of local disasters

Section 10. [(a) A local state of disaster may be declared by the presiding officer of the governing body of a political subdivision. It may not be continued or renewed for a period in excess of seven days except by or with the consent of the governing body of the political subdivision. Any order or proclamation declaring, continuing, or terminating a local state of disaster shall be given prompt and general publicity and shall be filed promptly with the city secretary or county clerk as applicable.

[(b) The effect of a declaration of a local state of disaster is to activate the recovery and rehabilitation aspects of any and all applicable local or interjurisdictional emergency management plans and to authorize the furnishing of aid and assistance under the declaration. The preparedness and response aspects of the plans shall be activated as provided in the plans.

Disaster prevention

Section 11. [(a) In addition to disaster prevention measures as included in the state, local, and interjurisdictional emergency management plans, the Governor shall consider on a continuing basis steps that could be taken to mitigate the harmful consequences of disasters. At his direction and pursuant to any other authority and competence they have, state agencies including but not limited to those charged with responsibilities in connection with floodplain management, stream encroachment and flow regulation, weather modification, fire prevention and control, air quality, public works, land use and land use planning, and construction standards shall make studies of disaster-prevention-related matters. The Governor from time to time shall make

recommendations to the legislature, local governments, and other appropriate public and private entities as may facilitate measures for prevention or reduction of the harmful consequences of disasters.

[(b) The Department of Water Resources and other state agencies in conjunction with the Division shall keep land uses and construction of structures and other facilities under continuing study and identify areas which are particularly susceptible to severe land shifting, subsidence, flood, or other catastrophic occurrence. The studies undertaken under this subsection shall concentrate on means of reducing or avoiding the dangers caused by this occurrence or its consequences.

[(c) If the Division believes on the basis of the studies or other competent evidence that an area is susceptible to a disaster of catastrophic proportions without adequate warning, that existing building standards and land use controls in that area are inadequate and could add substantially to the magnitude of the disaster, and that changes in zoning regulations, other land use regulations, or building requirements are essential in order to further the purposes of this section, it shall specify the essential changes to the Governor. If the Governor on review of the recommendations finds after public hearing that the changes are essential, he shall make appropriate recommendations to the agencies or local governments with jurisdiction over the area and subject matter. If no action or insufficient action pursuant to his recommendations is taken within the time specified by the Governor, he shall so inform the legislature and request legislative action appropriate to mitigate the impact of disaster.

(d) The Governor, at the same time that he makes his recommendations pursuant to Subsection (c) of this section, may suspend the standard or control which he finds to be inadequate to protect the public safety and by regulation place a new standard or control in effect. The new standard or control shall remain in effect until rejected by concurrent resolution of both houses of the legislature or amended by the Governor. During the time it is in effect, the standard or control contained in the Governor's regulation shall be administered and given effect by all relevant regulatory agencies of the state and local governments to which it applies. The Governor's action is subject to judicial review but is not subject to temporary stay pending litigation.

Compensation

Section 12. [(a) Each person in this state shall conduct himself and keep and manage his affairs and property in ways that will reasonably assist and will not unreasonably detract from the ability of the state and the public successfully to manage emergencies. This obligation includes appropriate personal service and use or restriction on the use of property in time of disaster. This Act neither increases or decreases these obligations but recognizes their existence under the constitution and statutes of this state and the common law. Compensation for services or for the taking or use of property shall be only to the extent that obligations recognized in this Act are exceeded in a particular case and then only to the extent that the claimant may not be deemed to have volunteered his services or property without compensation.

(b) No personal services may be compensated by the state or any subdivision or agency of the state except pursuant to statute or ordinance.

[(c) Compensation for property shall be made only if the property was commandeered or otherwise used in coping with a disaster and its use or destruction was ordered by the Governor or a member of the disaster forces of this state.

[(d) Any person claiming compensation for the use, damage, loss, or destruction of property under this Act shall file a claim for compensation with the Division in the form and manner the Division provides.

[(e) Unless the amount of compensation on account of property damaged, lost, or destroyed is agreed between the claimant and the Division, the amount of compensation shall be calculated in the same manner as compensation due for taking of property pursuant to the condemnation laws of this state.

(f) Nothing in this section applies to or authorizes compensation for the destruction or damaging of standing timber or other property in order to provide a firebreak or to the release of water or the breach of impoundments in order to reduce pressure or other danger from actual or threatened flood, or contravention of Article I, Section 17, of the Texas Constitution, or statutes pertaining to that section.

Communications

Section 13. [The Division shall ascertain in cooperation with other state agencies what means exist for rapid and efficient communication in times of disaster. The Division shall consider the desirability of supplementing these communication resources or of integrating them into a comprehensive state or state-federal telecommunication or other communication system or network. In studying the character and feasibility of any system or its several parts, the Division shall evaluate the possibility of their multipurpose use for general state and local governmental purposes. The Division shall make recommendations to the Governor as appropriate.

Mutual Aid

Section 14. [(a) Political subdivisions not participating in interjurisdictional arrangements pursuant to this Act nevertheless shall be encouraged and assisted by the Division to conclude suitable arrangements for furnishing mutual aid in coping with disasters. The arrangements shall include provision of aid by persons and units in public employ.

[(b) In reviewing local emergency management plans, the Division shall consider whether they obtain adequate provisions for the rendering and receipt of mutual aid.

[(c) In reviewing local and interjurisdictional emergency management plans, the Division may require mutual aid agreements between political subdivisions if it determines that the political subdivisions have available equipment, supplies, and forces necessary to provide mutual aid on a regional basis and that the political subdivisions have not already made adequate provision for mutual aid.

Weather modification

Section 15. [The Division shall keep continuously apprised of weather conditions which present danger of precipitation or other climatic activity severe

enough to constitute a disaster. If the Division determines that precipitation that may result from weather modification operations, either by itself or in conjunction with other precipitation or climatic conditions or activity, would create or contribute to the severity of a disaster, it shall request in the name of the Governor that the officer or agency empowered to issue permits for weather modification operations suspend the issuance of the permits. On the Governor's request, no permits may be issued until the Division informs the officer or agency that the danger has passed.

Insurance coverage

Section 16. Property damage insurance covering state facilities may be purchased by agencies of the state when necessary to qualify for federal disaster assistance funds. If sufficient funds are not available for the required insurance, then the agency may petition the Disaster Emergency Funding Board to purchase the insurance in the agency's behalf. The board may expend money from the Disaster Contingency Fund to purchase the required insurance.

[Penalty for violation of emergency management plan

Section 17. [A state, local, or interjurisdictional emergency management plan may provide that failure to comply with the plan or with a rule, order, or ordinance adopted pursuant to the plan is an offense. The plan may not prescribe as punishment for the offense a fine that exceeds $1,000 or confinement in jail for a term that exceeds 180 days.

Severability

Section 18. If any provision of this Act or the application thereof is held invalid, such invalidity shall not affect other provisions or applications of the Act, and to this end the provisions of this Act are held to be severable. All plans, regulations, and executive orders and proclamations not in conflict herewith are continued in full force and effect.

Repealer

Section 19. [The Texas Disaster Act of 1973 (Article 6889-6, Vernon's Texas Civil Statutes) is repealed. Acts 1975, 64th Leg., p. 731, ch. 289, eff. May 22, 1975. Sec. 17 amended by Acts 1977, 65th Leg., p. 1164, ch. 443 § 1, eff. June 15, 1977. *Section 2 through 17 amended by Acts (H.B. 36 and 1499) 1981, 67th Legislature, effective August 31, 1981, and have been included in this unofficial draft.

[*These acts also recinded the powers authorized local government under Sections 6 through 9 of Article 5890e. These actions by local government must now be taken under the provisions of the Texas Disaster Act of 1975 as amended.

Title of Act:

An Act relating to a program for the prevention of, preparation for, response to, and relief or recovery from disasters as defined in this Act, establishing a Division of Disaster Emergency Services; creating a Disaster Contingency Fund and a Disaster Emergency Funding Board; authorizing the maintenance of local, county, or interjurisdictional disaster agencies and certain municipal agencies; prescribing the functions, powers, and duties of the Governor, the legislature, the agencies created or authorized by this Act, and existing state agencies, boards, and commissions, governing bodies of political subdivisions of the state, and local and interjurisdictional agencies, providing for coordination of all plans and facilities, including interstate cooperation and cooperation with the federal government; making certain rules as to compensation of persons for services rendered or property used, damaged, lost, or destroyed during a disaster; repealing the Texas Disaster Act of 1973, as amended (Article 6889-6, Vernon's Texas Civil Statutes); and declaring an emergency. Acts 1975, 64th Leg. p. 731, § 289.

APPENDIX B

ENERGY OVERVIEW

APPENDIX B

Energy Overview.

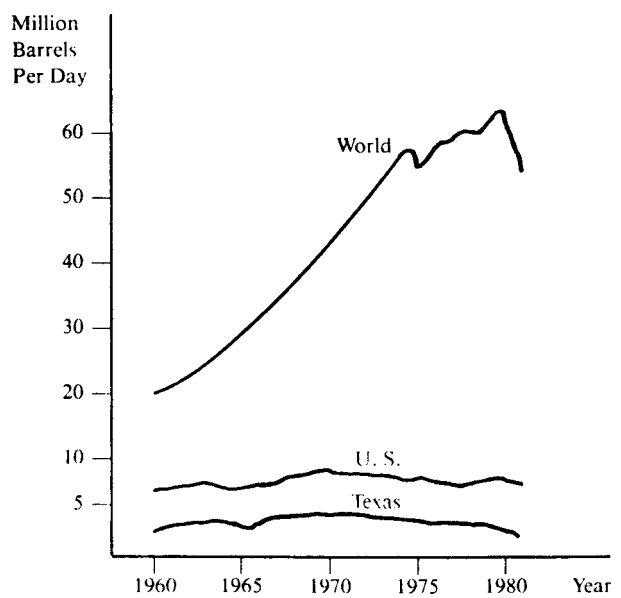
Since the 1973-74 oil embargo and the corresponding large increase in oil prices, more attention has been paid to this nation's reliance on foreign petroleum sources and the conservation of this vital resource. Because the United States consumes more petroleum than it produces, its economy is significantly tied to the world petroleum market. The background of this reliance is elaborated in the following overview of the world petroleum market.

Production

Total world oil production reached an all-time high in 1979 of 62.7 million barrels per day (MB/D). Since then, it has declined steadily, so that by the end of 1981 it was just 53 MB/D[1]. This recent decline is largely a result of depressed world oil demand caused by conservation, higher prices and an economic slowdown in most Western industrialized nations.

U. S. oil production peaked in 1970 at about 9 MB/D, then continued to decline until Alaskan wells began large-scale production in the late 1970's. Since then, production has remained fairly constant. Oil production within the State of Texas peaked in 1972 at 3.5 MB/D and has followed a gradual downward trend to 2.5 MB/D in 1981. Figure B-1 illustrates these trends.

Figure B-1
Oil Production Trends

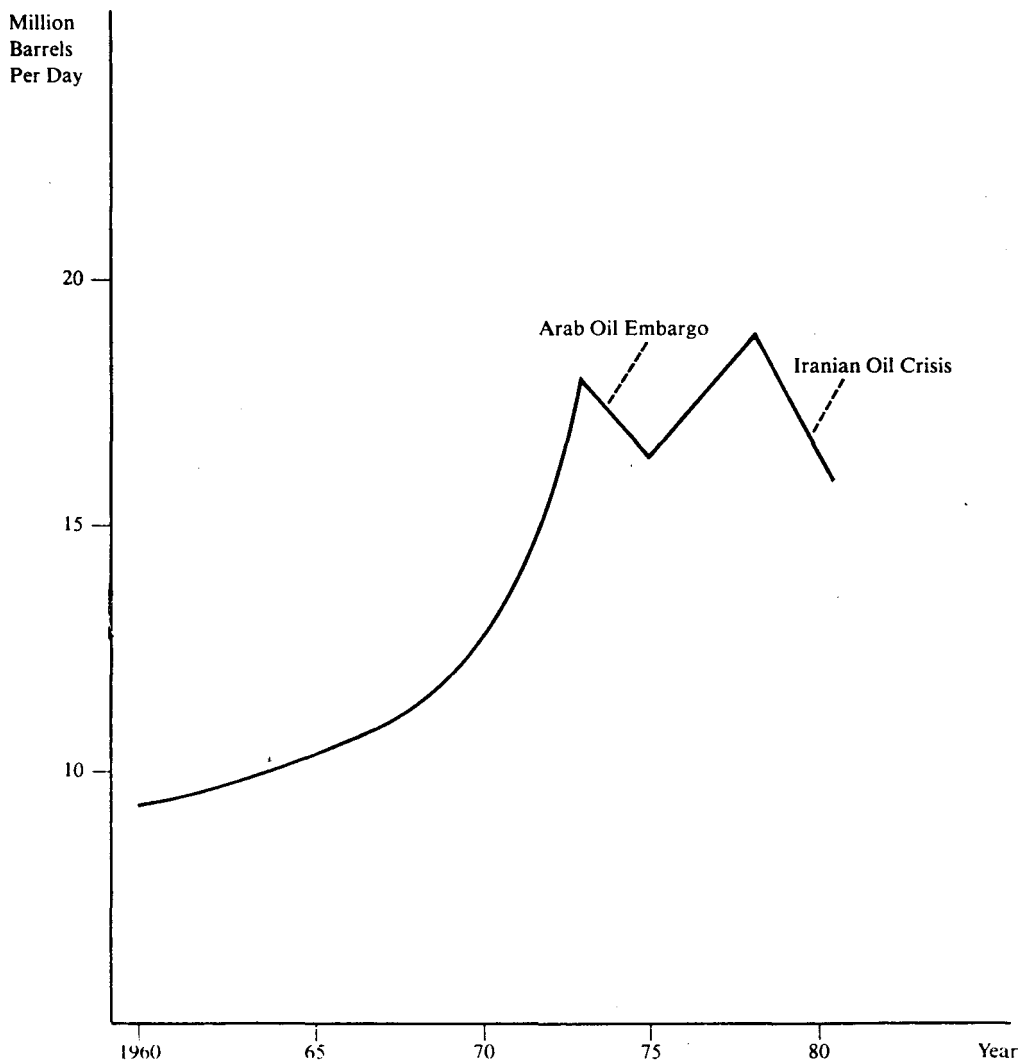


Source: U. S. Department of Energy *Monthly Energy Review*, June, 1982.

Consumption

World oil consumption has been increasing at a steady rate since the end of World War II. By 1980, petroleum demand in non-Communist countries totalled approximately 55 MB/D. During recent months, however, petroleum consumption in many industrialized countries, including the U. S., has declined due to conservation efforts, use of alternate fuels and, perhaps most significantly, a general slowdown of the world economy. In the U. S. alone, petroleum use during 1981 was over 15 percent lower than in 1978 (see Figure B-2). An upsurge in the U.S. and world economy, however, could reverse this trend and would likely induce a considerable increase in world oil demand.

Figure B-2
U.S. Petroleum Use
(MB/Day)

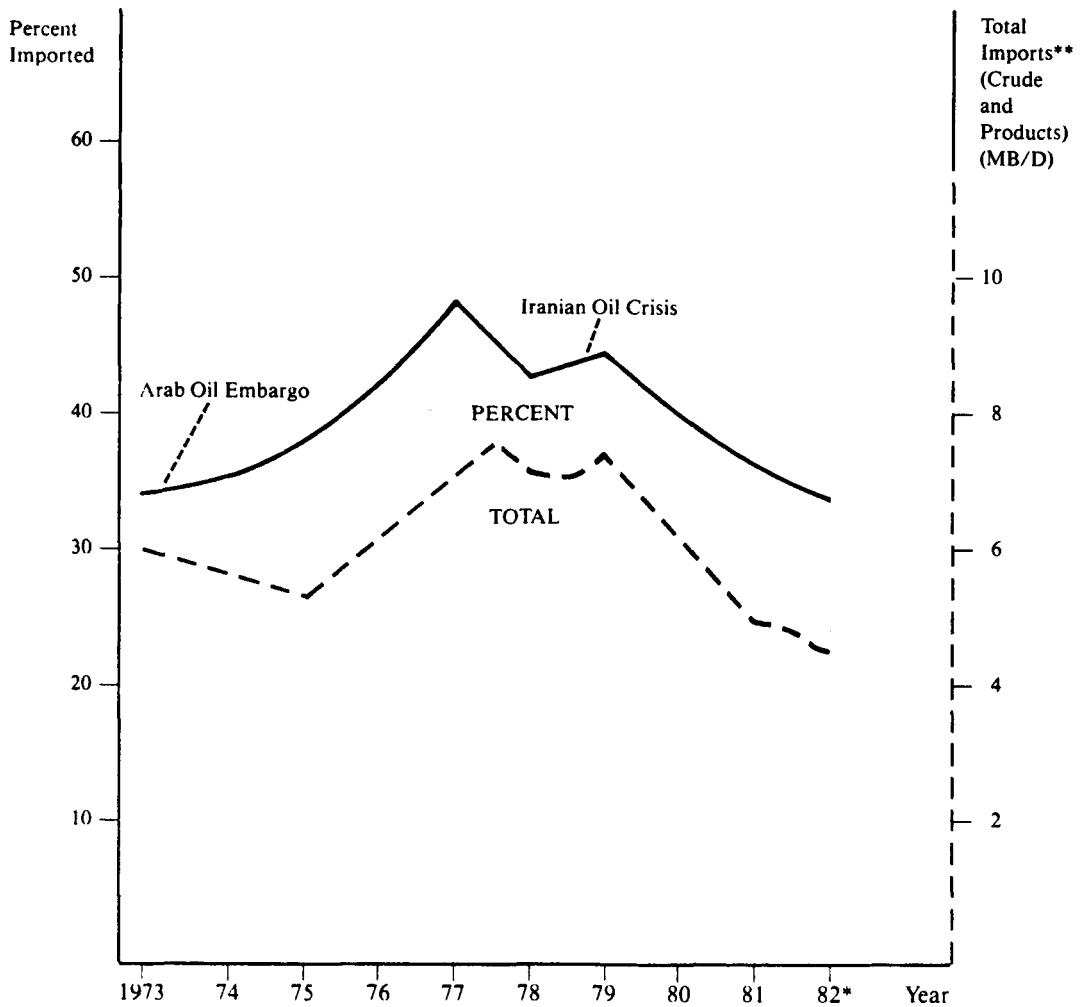


Source: U.S. Department of Energy, *Monthly Energy Review*, June 1982.

Imports

Although past experience has shown that reliance on politically unstable nations for a significant share of its oil supply is risky, the U.S. continues to import large quantities of petroleum from these areas. In 1973, at the time of the oil embargo, 36% of U. S. oil needs were imported. Today, although imports are now about one million barrels per day less than in 1973, about a third of U. S. oil needs are still imported from foreign countries (Figure B-3).

Figure B-3
U.S. Imports As A Percentage Of
Total Consumption



*January-March **Excludes SPR

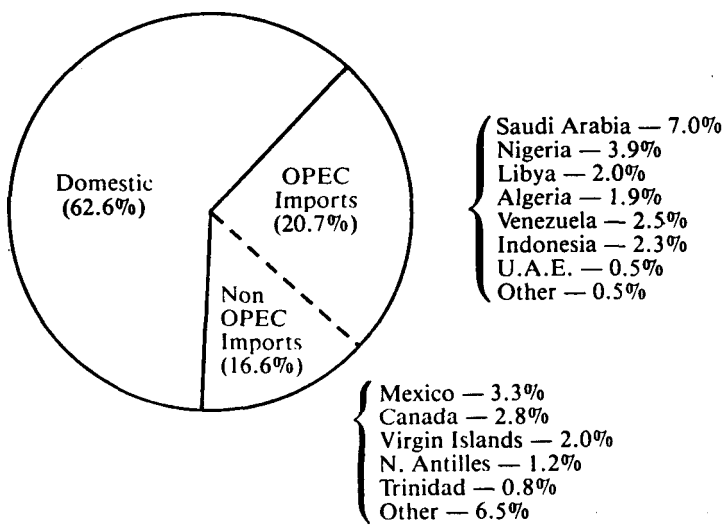
Source: U.S. Department of Energy, *Monthly Energy Review*, June 1982.

Figure B-4 shows the sources of U.S. oil used during 1980. This figure illustrates the nation's reliance on petroleum supplies from oil exporting countries. Although the major portion of the oil supply comes from U. S. domestic production, oil exporting nations provide a significant proportion of our needs. Saudi Arabia, the largest oil exporter, for example, supplied over 7% of U. S. oil needs while combined OPEC imports totaled over 20%.

Figure B-4 serves to illustrate the size of potential oil shortages under various cutoff scenarios. One involving all Arab nations would produce a 10-11% shortage, while one from all OPEC nations would be over 24%, for example. The total shortfall could be larger, however, since some of the petroleum products imported from non-OPEC countries are refined from OPEC oil.

In addition, it should be noted that although individual nations provide a small share of U. S. oil needs, they may be major suppliers for other Western nations. The interdependence of Western consuming countries on oil imports can result in market shifts during supply disruptions which could greatly magnify the impact of any one country's import reductions.

Figure B-4
U.S. Oil Use By Origin*
(1981)



*Includes crude oil and petroleum products.
Source: U.S. Department of Energy, *Monthly Energy Review*, June, 1982.

Prices

The price of world oil has risen dramatically since 1973. Before the oil embargo of 1973, the average price of a barrel of imported oil was $2.50 while a gallon of gasoline in Texas cost about $0.34. Crude prices continued a steady rise through the mid-70s and more than doubled from 1978 to 1980. By the end of 1981, the average price of a barrel of imported oil stood at over $37.00, while a gallon of regular gasoline in Texas cost about $1.26. A slight downward price trend was noted in early 1982 (Table B-1).

Table B-1
Price Trends

Year	Imported Crude Price[1]	Texas Gasoline[2]
1972	$ 2.50	.34
1973	5.05	.36
1974	11.25	.49
1975	12.30	.55
1976	13.48	.52
1977	14.53	.55
1978	14.57	.61
1979	21.67	.97
1980	33.89	1.17
1981	37.14	1.26
1982(March)	34.06	1.23

[1]U.S.D.O.E., *Monthly Energy Review*, June 1982.
[2]Average pump price, TENRAC

The Outlook

Because of the unreliability of imported oil supplies and the high price, a slow, but significant trend away from oil reliance appears to be emerging on the world market. Whether or not this trend will continue or if it will accelerate is subject to debate. An improved world economy or drastically reduced crude prices would undoubtedly reverse these trends while continued recessionary economies and rising prices may accelerate them. Nevertheless, there is little disagreement that the U.S. will continue to rely on large quantities of imported oil throughout the 1980's and any interruptions in this oil supply could have a dramatic and adverse impact on this nation and this state.

FOOTNOTES

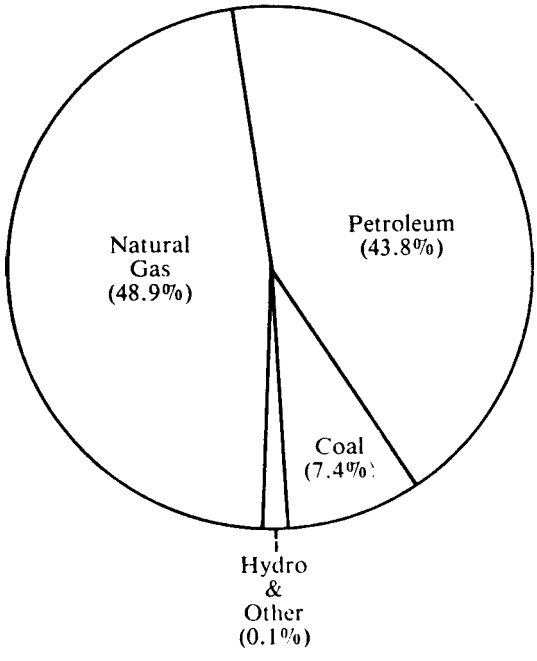
[1] U.S. Department of Energy, Monthly Energy Review, March, 1982.

State Energy Use

Texas is both the nation's largest energy producing and energy consuming state. While its leading status among energy producers has been well known since the Spindletop oil gusher in 1901, it is lesser known that its rapid population growth, urbanization and industrialization have resulted in an equally rapid growth of energy consumption.

Petroleum provides a large portion (about 44%) of the total energy consumed within the state, second only to natural gas (49%). (Figure C-1). By 1990, petroleum may be the largest energy source used in the state,[1] a situation which would be contrary to general U.S trends.

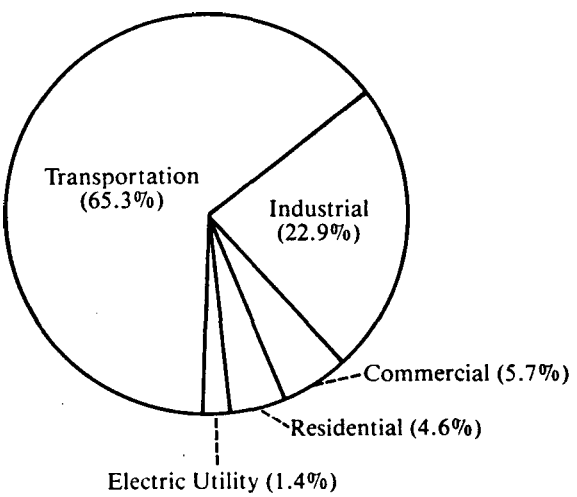
Figure C-1
Texas Energy Sources
(1979)



Source: U.S. Department of Energy, *State Energy Data Report Supplement*, October, 1981.

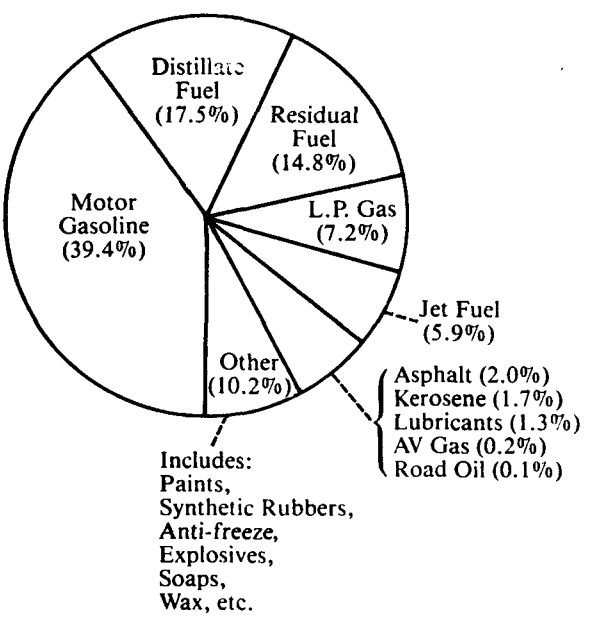
Of the over 14 billion gallons of petroleum products consumed in Texas annually, nearly two-thirds is used for transportation (Figure C-2). In fact, more petroleum is used just to operate the state's automobiles than by the industrial, commercial, residential and electric utility sectors combined. In addition, Texas transportation remains dependent on petroleum for nearly 96% of the energy it uses in the state. It is not surprising, therefore, to find that motor gasoline is the major petroleum product consumed in the state (Figure C-3). In addition to gasoline, a wide variety of other petroleum products, including distillate fuel, residual fuel, jet fuel and asphalt are consumed.

Figure C-2
Texas Petroleum Use By Sector
(1978)



Source: TENRAC, based on U.S. Department of Energy, *State Energy Data Report, Statistical Tables and Technical Documentation*, 1960-1978.

Figure C-3
Texas Petroleum Use By Product
(1978)



Source: TENRAC, *Texas Energy History, 1979 Update*, August, 1980.

Texans consumed an average of 750 million gallons of gasoline monthly in 1981. Due to conservation and more fuel efficient automobiles, state gasoline use has been declining. Table C-1 shows that from 1980 to 1981 state gasoline consumption declined by nearly 10 percent.

Table C-1
State Gasoline Use
(Th. gal./mth)

	1981 Monthly Use	Percent Change From 1980
January	835140.6	+2.8
February	709720.2	-17.1
March	712068.0	-11.7
April	792073.8	-9.6
May	917826.0	+17.6
June	681114.0	-23.6
July	749758.8	-11.6
August	718216.8	-17.0
September	702185.4	-2.4
October	690879.0	-18.0
November	656296.2	-17.1
December	834608.0	-2.2
1981 Average	749990.6	-9.5

Source: TENRAC, Prime Suppliers Monthly Reports

In summary, Texas is highly dependent on petroleum products, especially gasoline, for its energy needs. While current trends show a declining use of gasoline in the state, petroleum is expected to be a major energy source, especially for transportation, through the end of this century. The state's transportation system is thus highly vulnerable to any disruption in petroleum supplies. As the principal petroleum consumer, transportation will also be the major target of energy conservation efforts.

FOOTNOTES

[1]TENRAC, Texas Energy Outlook: 1980-2000, Austin, Texas, June, 1980, p. 109.

APPENDIX C

STATE ENERGY USE

APPENDIX D

ENERGY SHORTAGE EXPERIENCE

APPENDIX D

Energy Shortage Experience

Twice during the past 10 years the United States has experienced significant oil supply disruptions precipitated by international events. The 1973 Arab-Israeli war triggered an Arab oil embargo which produced a U.S. oil shortage of approximately 10 percent[1]. During 1979, political upheavel in Iran, formerly a major U. S. supplier of oil, resulted in the shutdown of almost 5 MB/D of world oil. Later, a U.S. boycott of Iranian oil in response to the hostage crisis further cut U.S. imports from Iran. The shutdown of Iranian oil production (10% of free world supply), compounded with international and national oil short inventory levels, produced a 5-6% U.S. oil supply shortage during this period[2]. The federal price and allocation regulatory system, still in place at the time, is attributed to magnifying this downturn into major shortages in particular sectors and regions of the country.

These two oil disruptions, though relatively mild, produced dramatic fuel price increases and spot shortages which underscored this nation's vulnerability to imported oil supplies. The impact of these shortages on the U.S. varied considerably from state to state and region to region, however. During 1973-74, severe gasoline shortages occurred in major urban areas along the East and West Coasts, while less severe problems occurred in Texas. During 1979, however, motor fuel shortages, large enough to produce long gas lines and require the Governor's intervention, occurred in some areas of Texas. In the Dallas-Fort Worth and Houston metropolitan areas an odd-even vehicle license plate fuel purchase plan was imposed to help manage the gas lines. The major impacts of these past oil shortages on the national, state and regional levels are summarized below.

Price Increases

Perhaps the most noticeable impact of the past oil shortages has been the rapid increase in motor fuel prices which accompanied the disruptions. These increases resulted from higher crude prices imposed by oil exporters as well as tighter market demand for the product. During the 1973-74 fuel shortage, the price of regular gasoline in the state rose by about 20 cents a gallon, an increase of 56%. In 1979, gasoline prices again rose dramatically from around 62 cents to $1.00 a gallon, an increase of 61%.

The rapidly rising cost of motor fuel during fuel supply interruptions has been a major factor in increasing transportation costs as well as the general cost of living. Future oil shortages will undoubtedly result in similar or larger fuel cost increases.

Motor Fuel Shortages

Petroleum supply disruptions can result in motor fuel (gasoline, diesel fuel, jet fuel, etc.) shortages due to several reasons, including: less oil being available for refining; "panic" buying which creates a sudden increase in demand; and fuel distribution problems. During 1973-74, severe shortages of gasoline in major urban areas along the East and West Coasts resulted in panic buying and long lines at gasoline stations.[3]

In Texas, while few long gas lines were noted in 1973-74, the fuel shortage did produce some difficulties. A survey of gasoline stations in the Dallas-Fort Worth area revealed that during 1973-74, 77% of the retail gasoline service stations in that area experienced longer than usual lines, 70% of the stations depleted their gasoline supplies before new shipments arrived, and 72% reduced their hours of operation[4]. The state gasoline supplies during 1973-74 were approximately 10% less than the previous year and about 15% lower than what could have been expected under normal conditions[5].

Long lines at service stations occurred during the summer of 1979 in the Dallas-Fort Worth and Houston urban areas. The problems of obtaining fuel in these areas became so severe that on July 3, 1979, the Governor imposed an odd-even and minimum fuel purchase plan to help manage the lines. In addition, a portion of the gasoline set-aside of major companies was made available in the form of a retail station weekend incentive program during the Summer of 1979. Shortly afterwards, the lines diminished. State gasoline consumption during 1979-80 was 11.4% less than the previous year or 15-16% less than what would have occurred under normal growth conditions[6].

During the 1974 and 1979-80 shortage periods, gasoline and diesel fuel supplies in the state were allocated under federal controls. Additionally, a state set-aside program allowed the state to allocate a small percentage of each supplier's fuel to alleviate emergency or hardship situations. The state set-aside program, administered by the Texas Energy and Natural Resources Advisory Council, was

authorized to reallocate up to 5% of the state's gasoline supplies and up to 4% of its diesel, 3% of the propane, 4% of the kerosene and 4% of the heating oil. Monthly applications to TENRAC for additional fuel supplies reached 8,228 requests during July, 1979.

Travel Modifications

The combination of gasoline shortages, higher fuel prices and public requests to conserve energy led to significant modifications of travel behavior around the nation during the past fuel disruptions. In general, people made fewer trips, drove slower and used transit or other forms of ridesharing when possible. Table D-1 compares responses to these changes in travel habits for the nation as a whole during the 1973-74 shortage with those in the Dallas-Fort Worth area.

Table D-1
Changes In Travel Habits Due To The
1973-1974 Oil Embargo

Travel Change	Percent National[1] (N = 2245)	Percent Texas[2] (N = 2000)
Tried to use less gasoline	78%	86%
Traveled less	55	41
Drove slower	52	38
Bought/used more efficient auto	13	10
Carpooled	8	10
Used public transportation more	3	4
Other actions (bicycled, walked)	17	14

[1]National Opinion Research Center, *The Impact of the 1973-1974 Oil Embargo on the American Household*, Chicago, Illinois, December, 1974.

[2]North Central Texas Council of Governments, *Urban Panel Project, 1976*, Arlington, Texas, September, 1976.

Travel modifications in Texas are further evidenced by reductions in highway travel. Statewide vehicle miles of travel (VMT) showed significant drops during the fuel shortage periods. This VMT reduction as well as the decrease in gasoline use during the same periods is illustrated in Table D-2.

Another notable travel modification during fuel shortages is increased use of transit, carpools, and vanpools. During 1973-74, transit systems in urban areas experiencing the most severe fuel shortages often encountered dramatic ridership growth. Nationally, transit ridership increased by up to 10% during the 1973-74 shortage and about 7% during 1979[7]. These increases are especially significant because U.S. transit ridership has experienced a steady decline since the end of World War II. Transit ridership was often more dramatic for individual transit systems and along individual lines. Ridership during 1973-74 rose up to 30% in Atlanta, 27% in Seattle, 22% in Denver and 20% in Los Angeles, to name a few.

Table D-2
Changes in Texas Highway Use

	Vehicle Miles of Highway Travel (billions of miles)	Highway Use of Gasoline (millions of gallons)
1970	68.0	5841
1971	71.9	6192
1972	76.6	6694
1973	80.6	7112
1974	78.7	6885
1975	84.6	7261
1976	92.0	7735
1977	99.3	8175
1978	102.6	8472
1979	101.6	8165
1980	114.2	8937

Source: Texas Transportation Institute, *Energy and Texas Transportation*, July 1980, p.3.

Dallas experienced 20% more transit riders while on some lines in Dallas, Fort Worth and Houston, ridership increased by over 100% in 1973-74. In 1979, state transit ridership rose by 8%. In Dallas, the increase was 9%, 14% in Fort Worth and 19% in San Antonio[8].

These rapid ridership increases often caused problems for the transit operators. Bus fleets were often not large enough to handle peak hour ridership as buses filled to capacity. In addition, the higher fuel prices dramatically increased the operating costs of transit systems. The Dallas Transit System's operating expenses, for example, increased by nearly 17% from 1973 to 1974, while revenue rose less than 2%. In 1973, fuel accounted for 4% of operating expenses, while for 1974 it nearly doubled to 7.8%[9].

The use of carpools and vanpools in Texas also increased during the fuel shortages. The number of carpools in the Dallas-Fort Worth area increased in a single year by 20% from 1973 to 1974, for example[11]. Computerized carpool matching services began operation in the state's larger urban areas (Dallas, Fort Worth, Houston, El Paso) and many employers initiated their own employee rideshare matching and vanpool programs. Employer-sponsored vanpools also increased rapidly. From January 1978 to January 1982 the number of known state vanpools increased from 196 to 2572[13].

Economic Impacts

The fuel shortages and corresponding price increases during the past decade have produced national economic problems. A study on the economic impacts of the 1973-74 shortage by the U. S. Department of Commerce concluded that economic difficulties existing prior to the embargo, such as a weak housing market, were compounded by the embargo and produced a significant impact on economic growth, unemployment, income distribution and industrial output[12].

As may be expected, industries dealing directly with transportation-related activities, such as automobile dealers and service stations, were the most adversely affected. Industries relying on automobile travel, such as tourist sites, hotels, and outlying shopping areas, also experienced declines in business.

Higher transportation and fuel costs also strained the budgets of state and local governments. A survey of Texas cities and counties after the 1973-74 oil shortage indicated that 69% of the local governments experienced budget problems due to high fuel costs. Larger cities and urban counties had more fuel related problems than their smaller, rural counterparts[13]. Because auto travel was reduced and state gasoline sales declined, Texas state gasoline tax revenues which are dedicated for state highway and education uses, decreased (Table D-3). This resulted in less funds available to build and maintain the state's highways.

Table D-3
Texas Gasoline Tax Collections

Fiscal Year	Revenue ($million)	
1972	320.1	
1973	343.8	
1974	343.7	(oil embargo)
1975	350.1	
1976	376.3	
1977	388.2	
1978	412.8	
1979	417.3	
1980	399.5	(Iranian crisis)
1981	397.4	

Source: Budget and Research Division, State Comptrollers Office

National unemployment increased during the 1973-74 fuel shortage. Industries sensitive to an energy shortage reduced employment due to diverse reasons. Some reduced employment because of difficulty in obtaining petroleum supplies (e.g. plastics); some were affected by the change in consumer buying patterns associated with the energy shortage (e.g. automobile and recreational vehicle sales) and others due to the general reduction in public travel and economic activity (e.g. hotels, air transportation). In Texas, employment was not affected to any great extent directly from the shortages. In 1973-74, for example, energy-related unemployment constituted less than one percent of total state claims compared to 9% of national unemployment[14].

FOOTNOTES

[1]Federal Energy Administration, The Economic Impact of the Oil Embargo on the American Economy, August, 1974, p.2.

[2]U.S. Department of Energy, Final Report to the President on Oil Supply Shortages During 1979, Washington, D.C., July, 1980, p. 15.

[3]Federal Energy Administration, "The Energy Crisis: How Did It Happen?", Energy Reporter, December, 1976/January, 1977.

[4]North Central Texas Council of Governments, A Metropolitan Transportation Plan for National Energy Contingencies, Arlington, Texas, August, 1977, p. III-38.

[5]Texas Transportation Institute, Energy and Texas Transportation, College Station, Texas, July, 1980, p. 9.

[6]Ibid.

[7]American Public Transit Association, Transit Fact Book 1981, Washington, D.C., October, 1981, p. 54.

[8]State Department of Highways and Public Transportation, 1979 Texas Transit Statistics, Austin, Texas, December, 1980, p. 11.

[9]NCTCOG, Short Term Transit Options for Restricted Energy Scenarios: A Case Study of Dallas Transit System, Arlington, Texas, May, 1977, p. 12.

[10]NCTCOG, A Metropolitan Transportation Plan for National Energy Contingencies, August, 1977, p. III-56.

[11]TENRAC and TTI, The Texas Vanpool Census, Austin, Texas, January 1982, p. 1.

[12]U.S. Congress, Office of Technology Assessment, Energy, the Economy and Mass Transit, Washington, D. C., December 1975, p. 33.

[13]Cinda Calderon and David MacKenna, Energy and Local Government, Arlington, Texas, University of Texas at Arlington, September, 1974, p. 31-38.

[14]U.S. Department of Labor, Secretary of Labor's Report on the Impact of Energy Shortages on Manpower Needs, Washington, D.C., March 27, 1974.

APPENDIX E

Probable Impact of Oil Interruption on Texas

The impacts of past shortages combined with current economic trends provide some insight on the probable effects of future disruptions. The following national impacts would likely occur during a moderate interruption of U.S. petroleum imports.

General Economic Impacts[1]

1) The economy could experience negative real growth due to the supply-side reduction in energy availability, an important factor of industrial production.

2) The economy could experience a consumer recession, a demand-side reduction in discretionary consumer durables purchases due to a general decline in consumer confidence. For the economy as a whole, this would be eased in the short term by increased net business inventory investment brought about by expectations of rising materials prices and fears of shortages. In an extended energy crisis (over one year), this would deepen the recession due to excess inventory accumulation, causing production cutbacks and layoffs.

3) The induced recession could be uneven across the various economic sectors. The impacts among industries will be of differing severity since each industrial group moves on a somewhat different business cycle and also has its own particular sensitivity to petroleum price, interest rates, and consumer confidence. Within the public sector, local governments will experience a budget crisis as unemployment and inflation cause a rise in revenue needs not met by collections, which decrease with the recession. Texas, however, would probably escape this budget problem as rising oil prices increase state severance tax collections.

4) Long-term interest rates could increase while short-term interest rates could become volatile. Inflationary expectations and general business uncertainty would cause the increase in long-term rates. The course of short-term interest rates would depend heavily on Federal Reserve monetary policy, which most probably would be to contract the money supply to dampen oil price inflation and to accommodate the lowered short-term business demand for borrowing.

Transportation Related Impacts

1) Gasoline prices could rise dramatically, depending on the severity of the shortage and the extent of federal price control policies imposed.

2) Long lines of motorists might develop at gas stations, first in large urban areas and later in other areas of the state as the shortage becomes more severe.

3) Some motorists could attempt to reduce fuel consumption through such actions as using transit, carpooling or vanpooling, traveling less and driving slower.

4) Transit ridership during peak periods could overload system capacity in most large cities. The use of additional buses and other capacity-increasing measures would be tried to help alleviate this problem.

5) Retail gasoline stations might reduce hours or days of operation. This would result in a feeling of public uncertainty on the availability of gasoline, and possibly "panic" buying.

APPENDIX E

PROBABLE IMPACT OF OIL INTERRUPTION

ON TEXAS

APPENDIX F

PETROLEUM SHORTAGE CAUSES

Petroleum Shortage Causes

Petroleum shortages of a magnitude which could impact the national, state or regional economy may occur from a multitude of external and domestic causes. Although the chances of any single event occurring during the near future may be slight, the numerous possibilities of an oil supply disruption increase the likelihood of such an event. Possible causes include:

- Embargoes - This is a political decision which would prohibit the shipment of oil into the nation. In October 1973, for example, during a war between Israel and Arab nations, Arab oil importers imposed an embargo to prohibit oil shipments from their countries into the U. S. and other Western countries. This embargo lasted nearly a year and precipitated the 1973-74 U.S. petroleum shortage.

  An embargo can also be imposed by the oil importing countries. After the seizure of American hostages by militant Iranians in 1979, for example, the U. S. suspended receiving shipments of Iranian oil. More recently, the U. S. imposed a ban on imports of Libyan oil.

- War/Revolution - Armed conflict in oil producing nations, either caused by internal strife or war with other countries can cause severe disruptions in oil production and exports. Several past examples of this can be cited, including the Iranian Revolution in 1979, the Iran-Iraq war of 1980-81 and the Nigerian Civil War of 1967-70. The severity of shortages from similar causes is a factor of existing reliance on that country's oil and the severity and duration of the conflict. If oil installations are damaged or destroyed, it may take up to several years for the producer to resume normal export levels. In addition, during times of war, large amounts of oil are used for military purposes, thereby reducing supplies available for domestic use.

- Natural Disasters - Hurricanes, earthquakes, floods or other natural disasters can cause damage to oil producing facilities, refineries or supply lines which could result in fuel shortages. While no examples of major disruptions of this type have occurred recently, the location of major supply lines and producing

and refining areas in locations such as earthquake-prone Southern California or the hurricane-susceptible Gulf Coast presents the potential for such disasters. Because these disasters generally affect relatively small areas, their impacts would probably be localized and of short duration.

- Man-Made/Accidental Disasters - Work strikes, singular acts of terrorism or accidental disasters can cause damage to oil producing, refining, storage or transport facilities. Examples of such incidents include the oil production slowdown by Iranian workers in 1979 and recent oil spills caused by oil well blowouts and tanker collisions. Pipelines and oil supply routes, such as shipping lanes through the narrow Straits of Hormuz in the Persian Gulf or the Suez Canal are particularly vulnerable to acts of terrorism which could disrupt oil shipments. Closer to home, a fire at the Phillips Refinery in Borger, Texas, one of the region's largest producers of aviation gasoline, caused a state shortage of that fuel in 1980.

- Production-Supply Disruption Policies - Reductions in oil production and exports resulting from government management policies can cause fuel supply shortages. Producing countries may, for example, want to limit oil production in order to increase prices or to avoid a rapid depletion of oil reserves. Exporting countries may, for economic reasons, decide to sell more oil to one country at the expense of another if that country is willing to pay more for the oil. During 1979, a large quantity of Indonesian oil, which would normally have been sent to the U. S., was shipped to Japan where higher prices could be obtained. The resulting reduction of Indonesian oil exports to the U. S. contributed to the 1979 U. S. oil shortage.

Another type of oil management policy which could result in a U. S. fuel shortage would be the activation of the International Energy Agreement for petroleum sharing. Under this program, which is described in more detail in the following chapter, the U. S. and its allies would share a major oil shortage in any of its member nations even though there may be no U. S. shortage at the time.

FOOTNOTES

[1] TENRAC, "Economic Impacts of Oil Supply Disruptions", Draft, Austin, Texas, February, 1982.

APPENDIX G

PETROLEUM SHORTAGE SCENARIOS

APPENDIX G

Petroleum Shortage Scenarios

The need to implement specific energy contingency actions should generally be determined by the severity of the fuel shortage on the state or regions of the state. Four petroleum shortage disruption scenarios can be identified for planning purposes: preemergency, mild, moderate and severe. The "preemergency" phase occurs at the first signal of an impending petroleum shortage, such as a declared oil embargo or war in producing nations. At this time the state will activate measures such as monitoring the fuel supply and demand situation, establishing a statewide communication and information plan and gearing up to implement other state actions. Consumers will have little or no difficulty in obtaining fuel during this period, although a tightening of fuel supplies by marketers in response to future uncertainties may produce an artificial shortage.

During a "mild" fuel disruption scenario, some difficulty in purchasing gasoline or other fuel supplies will occur as a result of reduced gasoline station operating hours. Some lines will occur at open service stations, but general economic disruption will be minimal. Petroleum product fuel prices will begin to rise assuming no price regulations are in place. The state will implement measures such as voluntary conservation programs and prepare fuel management plans.

A moderate disruption phase, in the absence of governmental intervention, would be characterized by increased difficulty in purchasing motor fuel, long gas lines and noticeable adverse impact on the state or local economy. Motor fuel prices will rise sharply under a free market. The state will initiate measures such as an odd-even fuel purchase plan or a state motor fuel set-aside program to assure fuel supplies to priority users.

During a severe disruption, local and state economies would be substantially damaged by high fuel prices and fuel shortages. Large increases in energy-related unemployment, extreme reductions in mobility and a considerable drop in state productivity would occur. The state, and most likely the federal government, could be forced to impose mandatory fuel demand restraint measures.

APPENDIX H

FEDERAL ENERGY CONTINGENCY AUTHORITIES

APPENDIX H

Federal Energy Contingency Authorities

While it is commonly thought that Federal involvement in U.S. oil supply and pricing policies began with the advent of the Arab Oil Embargo in 1973, various Federal programs addressed these issues either directly or indirectly much earlier. Following World War II, for example, American oil companies substantially increased their investments in foreign oil producing properties, particularly in the Middle East. Because of low production and transportation costs, imported oil was reaching U.S. refineries at a lower cost than domestically produced oil. Since it was thought that this would discourage U.S. domestic oil production and thus be harmful to U.S. security interests, the Trade Agreements Extension Act of 1955 was passed authorizing the President to curb oil imports if they were determined to be detrimental to national security.

Similarly, the Mandatory Oil Import Program (MOIP) was established in 1959 to set quotas for permissible levels of monthly imports to U.S. refineries. This, in effect, protected domestic producers from lower world prices. This established the Federal government's role as distributor of crude oil. Later laws further authorized presidential control of imports and exports to protect economic and military security. The Trade Expansion Act (TEA) of 1962 provides primary authority to control imports and the Export Administration Act provides similar authority for the control of exports. It was under the authority of the TEA that President Carter unsuccessfully attempted to impose a crude oil import fee in 1980.

The International Emergency Economic Powers Act (IEEPA) of 1977 gives the President additional authority to regulate international economic transactions during periods of war or national emergency. Under this authority, the President may freeze or regulate petroleum or petroleum products in which a foreign country or national thereof has an interest and over which the U.S. has jurisdiction. It was under this authority that President Carter froze Iranian assets in 1979.

There are several Federal authorities which can be used to stimulate domestic supply and production. Under the Outer Continental Shelf Lands Act and the

Mineral Leasing Act, the President may establish domestic petroleum production rates, may order increased production from Federal lands, may allocate materials and supplies to maximize domestic energy production.

Federal authority to allocate petroleum can be found in the Defense Production Act (DPA) of 1950 and the Energy Security Act of 1980. The DPA allows presidential intervention in the event of reductions in the availability of critical and strategic materials, including energy, which would adversely affect the defense preparedness of the U.S. Under this authority the President may only allocate petroleum in the civilian market if he finds: 1) that such material is a scarce and critical material essential to the national defense and 2) that the requirements of the national defense for petroleum cannot be met without creating a significant dislocation of its normal distribution in the civilian market.

Other major statutes and agreements which give the Federal government authority to act in a petroleum shortage are described below:

Energy Policy and Conservation Act

The provisions of the Energy Policy and Conservation Act (EPCA) of 1975 include:

- authorization of the President to restrict exports of petroleum products and related equipment,
- authorization to develop a Strategic Petroleum Reserve,
- development of an energy conservation contingency plan,
- development of a fuel rationing plan,
- authorization to participate in an international oil allocation agreement,
- energy efficiency standards for consumer products, and,
- development of state energy conservation plans.

EPCA required the President to develop "one or more energy conservation contingency plans" and to transmit them for Congressional approval within 180 days. No plans were transmitted to Congress until 1979 when President Carter submitted three demand restraint measures during the Iranian oil shortage. These three measures were for:

- o limitations on outdoor advertising lighting;
- o restrictions on weekend gasoline sales; and,
- o emergency building temperature restrictions.

Of the three, Congress approved only the emergency building temperature restrictions. This was put into effect nationwide in July 1979 and was operational until it was revoked in February 1981. The authority for this measure still exists and many commercial establishments continue to observe its guidelines voluntarily[1].

Section 251 of EPCA authorizes the President to take action to implement U.S. obligations under the International Energy Program (IEP) relating to the allocation of oil. Regulations under EPCA for the domestic allocation of oil to meet U. S. obligations under the IEP continue in effect even though the authority for general domestic allocation regulations expired in September, 1981 along with the Emergency Petroleum Allocation Act of 1973. EPCA authorities are to expire on June 30, 1985.

Emergency Energy Conservation Act

The Emergency Energy Conservation Act (EECA), passed in November 1979, was developed as an alternative to EPCA's unsuccessful contingency planning attempt. The Act consists of authorities to establish national and state emergency conservation targets, to develop state emergency conservation plans and to develop a standby federal conservation plan.

Under EECA, states have a primary planning role. If the President finds that an energy emergency exists or is imminent, he can publish state energy emergency reduction targets. Each state then can submit its own emergency demand restraint plan to DOE. DOE is required to develop a standby federal emergency conserva-

tion plan for backup use if states' plans are not acceptable or fail to achieve the necessary energy savings.

Although EECA encourages the states to submit their emergency conservation plans without waiting for a supply disruption, it does not require them to do so. An interim version of the standby plan, published in February 1980, contained nine measures for federal or state use and identified additional measures for the states to consider. Only two of the measures, a public information program to encourage reduced motor fuel use and a minimum motor fuel purchase plan, were included in the final regulations issued in February, 1982. EECA authorities are to expire on July 1, 1983.

International Energy Agency

In the aftermath of the 1973-1974 oil embargo, the United States and 15 other industrial oil importing countries signed the Agreement on an International Energy Program in November 1974. Five additional countries joined later. This Agreement was designed to foster cooperation on energy policy issues among consuming nations and to decrease their vulnerability to supply interruptions through a program for the equitable sharing of oil supplies among signatory countries in the event of a significant supply shortfall.

To carry out the broad mandates of the International Energy Program Agreement, the International Energy Agency (IEA) was established as an autonomous unit within the Organization of Economic Cooperation and Development. A Governing Board, consisting of ministers or their high-ranking representatives from each member country, exercises final decision-making authority on IEA matters. Various standing groups and advisory boards, composed of representatives from member countries as well as participating oil companies, perform vital staff functions, such as collection of petroleum supply data, and provide policy input to the IEA Secretariat.

The agreement includes a provision for an Emergency Sharing System (ESS) designed to respond to an oil shortage of seven percent or more to one or more member countries. The agreement details the establishment of institutions, programs and procedures by which the participants can counter oil shortfalls through demand restraint, emergency reserves and supply sharing based on a

formula responsive to individual member country oil needs. The IEA also depends on the cooperation and involvement of international oil companies. Forty-seven companies voluntarily participate in IEA activities, including 21 U.S. oil companies.

There are two trigger mechanisms which may invoke the emergency oil sharing provisions of the IEA system. Under the general trigger mechanism, if overall oil supplies for all IEA countries are seven percent or more below consumption levels of an historic base period or are projected to be so, the IEA Secretariat may present such a finding to the Governing Board. The Secretariat's emergency finding is then implemented, and the oil sharing system activated, unless both 60 percent of the combined votes of member countries (weighed to include amount of consumption) and 50 percent of the general votes (currently 11 countries) on the Governing Board disagree. The second possible implementation mechanism, the selective trigger, only requires a seven percent or greater supply shortfall in a single-member country. If the Secretariat makes a finding of need to implement the sharing system on a selective basis, 17 countries on the Governing Board must vote to override the finding to prevent activation.

Once the emergency sharing provisions have been invoked, estimated supply data and required demand reduction obligations (each country must restrain demand 7 percent or more when the supply shortfall is from 7 to 12 percent and at least 10 percent when the shortage is 12 percent or greater) are used to calculate each participating country's "supply right". Estimates of the available supplies are based on reports and data from oil companies and governments. Then, when each country's "supply right" has been calculated and a forecast of total oil supplies available to a particular country has been made, the country either has a right to receive additional oil supplies from the group or has an obligation to give up a portion of its available supplies.

After these calculations have been made, the IEA emergency system relies on the major oil companies to shift portions of their supplies from countries having a supply obligation (excess supplies under the IEA calculations) to countries having an allocation right. It is then left up to the companies to negotiate these exchange transactions and agree on specific supply and price terms.

There are three important provisions of the ESS designed to contend with the emergency once it is declared. These are: 1) the international allocation of available oil supplies, 2) demand restraint by member countries, and 3) development of emergency reserves in each member country. These provisions impose some obligations on the U.S., including:

- Maintenance of emergency oil stocks (and/or standby production capacity or fuel switching capacity) sufficient to sustain oil consumption for 90 days with no net imports. The U.S. generally meets this requirement through normal inventory levels on hand to operate refineries and distribution systems. Continued development of the Strategic Petroleum Reserve capacity will significantly increase U.S. petroleum reserves.

- Maintenance of the ability to reduce consumption of oil by 10% or readiness to draw down oil stocks in excess of the 90-day commitment sufficient to supply up to 10% of normal consumption. The capability of the U. S. to meet this commitment at this time might be questioned with the absence of any standby allocation authority.

- Participation in the IEP emergency sharing system by both the U.S. Government and private firms. This measure is intended to limit net oil imports during a disruption. Federal government and private involvement in this program is authorized under the EPCA provisions.

It should be noted that, because the emergency oil sharing provisions of the IEA have never been instituted, their ability to deal with an international fuel shortage is unknown.

Strategic Petroleum Reserve

In order to reduce U.S. vulnerability to the effects of a severe oil supply interruption and to carry out U.S. international energy commitments under the IEA, the Energy Policy and Conservation Act of 1975 authorized the creation of a Strategic Petroleum Reserve (SPR) to stockpile up to one billion barrels of crude oil. A Strategic Petroleum Reserve Office was also created to establish, manage, and maintain the Reserve.

By the beginning of 1982, approximately 250 million barrels of oil were stored in underground salt domes in Texas and Louisiana. This is equivalent to about 45 days of normal U. S. oil import supplies. Current drawdown capacity of the reserves is at a rate of 1.6 million barrels a day [2] which would equal 11% of the nation's current oil use or 30% of its imports.

General provisions for the distribution of SPR petroleum supplies during a shortage have been outlined.[3] The crude oil will be sold only to refiners which have executed a Basic Sales Agreement which will be announced in a Notice of Sale. Recipients of SPR crude oil will be selected from among those refiners offering to buy SPR oil on the basis of criteria announced in the Notice of Sale. The DOE will establish the selling prices of the SPR crude based on market prices at the time of the withdrawal. Specific provisions for the implementation of this plan have not been established at this time, however.

FOOTNOTES

[1]U.S. General Accounting Office, The United States Remains Unprepared for Oil Import Disruption, Washington, D.C., September, 1981, p. 26.

[2]Ibid., p. 13.

[3]Strategic Petroleum Reserve Crude Oil Allocation, CFR Title 10, Ch. 2, Part 220.

APPENDIX I

STATE SET-ASIDE PROGRAM COMPUTERIZATION

APPENDIX I

State Set-Aside Program Computerization

During the peak of the 1979 petroleum shortage, over 8,000 requests a month were received by the State Fuel Allocation Office for emergency or hardship set-aside fuel. This high volume of requests, coupled with the fact that applicants asked for many times the amount of fuel available to the State, placed a severe burden on agency staff to process applications and determine emergency allocations in a timely manner. The burden on Fuel Allocation personnel, who numbered up to 18 employees (counting loan employees and temporary workers), was further increased since the entire application processing effort was manual.

In order to streamline this process and provide for more efficient and equitable assignments of set-aside fuel, efforts to automate the entire allocation system began in late 1979. The now-completed automated allocation system has three interrelated components: (1) a recordkeeping and reporting system; (2) a notification system; and (3) a decision algorithm that allocates and assigns fuel supplies. A self-coding 3-part application form (included as Exhibit 1) has been developed to provide the information necessary for this system.

The recordkeeping and reporting aspect of the system provides detailed information on each application and its disposition, which allows each request to be tracked day-to-day. Detailed and summary reports can be produced providing geographical breakouts of applicants and assignments (by county and even zip code levels), indicating amounts and types of fuel requested from each prime supplier, and identifying the priority level and end user category of the applicant. This type of information, which was almost impossible to compile with manual processing, is crucial to analyzing and understanding how limited set-aside fuel supplies are being used and how they might better be utilized. This portion of the system was completed in June 1980 and successfully used for the last nine months of operation of the set-aside program. Samples of some of these reports are included as Exhibit 2.

The second component of the computerized system is an automated notification program. This permits assignments and denials to be computer printed rather than manually written or typed, which should save a great deal of staff time in the

EXHIBIT 1

APPLICATION FOR HARDSHIP OR EMERGENCY SET-ASIDE FUEL

STATE OFFICE OF FUEL ALLOCATION
200 EAST 18th STREET
AUSTIN, TEXAS 78701
(512) 475-5491

* This application will be returned if it is not complete – PLEASE READ INSTRUCTIONS CAREFULLY

OFFICE USE ONLY

TRANS TYPE (1) | CASE NUMBER (2) | EIN OR SSN (11) | PRIORITY (20) | DATE RECEIVED (23) | AMOUNT REQUESTED (29) | SUPPLIER (36, 38) | DISTRIBUTOR (40, 44) | COUNTY (46) | ACTION (51) | AWARD AMOUNT (54) | BRAND (61) | AWARD DATE (63) | DIST. AWARD (69) | SPEC. REMARKS (103) | CARD (105) = 1

1. APPLICANT INFORMATION:

Check box if you have previously applied for set-aside fuel since January, 1981: ☐

*EIN OR SSN

*NAME (20) LAST FIRST

*MAILING ADDRESS (59)

*CITY (77) *STATE (92) *ZIP CODE (94) 2 (105)

*COUNTY *TELEPHONE ( ) –

*Applicant User Category:
- ☐ Reseller
- ☐ Wholesale Consumer
- ☐ End User

*Intended Fuel Use (Check One):
- ☐ Agriculture
- ☐ Commercial Fishing
- ☐ Logging
- ☐ Government
- ☐ Cargo Hauling
- ☐ Sanitation Services
- ☐ Construction
- ☐ Energy Production
- ☐ Emergency Services
- ☐ Passenger Transportation
- ☐ Commercial
- ☐ Service Station
- ☐ Resale to Wholesale Purchasers
- ☐ Other _____

2. PRODUCT REQUEST:

*Month that fuel is needed: _____

*Type of product requested:
☐ Gasoline ☐ Diesel ☐ Other _____

*Amount requested from set-aside: _____ gal.

*Allocation from supplier for month requested: _____ gal.

*Capacity of bulk storage: _____ gal.

*Amount of fuel on hand: _____ gal.

3. MONTHLY BULK ALLOCATION (Bulk Purchases):

* If you are applying for gasoline, list amounts purchased during the base period (see instructions). If diesel is being requested, list amounts purchased during the last 12 months:

Jan. _____	May _____	Sept. _____
Feb. _____	June _____	Oct. _____
Mar. _____	July _____	Nov. _____
Apr. _____	Aug. _____	Dec. _____

4. SUPPLIER/DISTRIBUTOR INFORMATION:

☐ My existing supplier(s), named below, is/are unable to supply the quantity of fuel needed without a set-aside award.

☐ I do not have a supplier. The two suppliers below have been contacted and could supply the product requested.

A.
Brand Affiliation _____
Distributor Name _____
Street Address _____
City _____ State _____ Zip _____
County _____ Phone ( ) _____

B.
Brand Affiliation _____
Distributor Name _____
Street Address _____
City _____ State _____ Zip _____
County _____ Phone ( ) _____

5. JUSTIFICATION:

*Agriculture		*Highway Fuel Uses			*Off-Road Fuel Uses		
	Acreage:	Vehicles	Miles per Gallon	Miles per Month	Equipment	Operation	Daily Fuel Use
Crops/Livestock:							
Equipment:							
Machine Operations:							

*Why is your normal allocation inadequate?

*Explain any special circumstances concerning your application.

6. PREVIOUS SET-ASIDE APPLICATIONS:

* If you have applied for set-aside fuel within the past 6 months, please list:

MONTH/AWARD AMOUNT	MONTH/AWARD AMOUNT
/	/
/	/
/	/

7. ALLOCATION ADJUSTMENTS:

* Have you applied to your supplier, the U.S. Department of Energy, or this office for:

- ☐ Allocation Increase (Date:
- ☐ Assignment of a Permanent Gasoline Supplier (Date:
- ☐ Unusual Growth Adjustment

8. CERTIFICATION AND SIGNATURE:

I certify that the above information is true, complete, and accurate and that any quantity of fuel assigned will be used for purposes herein described and will not be diverted to other uses. Any willful concealment of material facts or false or fraudulent statements is a Federal criminal offense (Title 18 USC Sec. 1001).

EXHIBIT 2

Sample Computer Reports

TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL — ER0311

OFFICE OF FUEL ALLOCATION — DATE: 10/30/81 BATCH: 0001 PAGE: 0007

NUMERIC LISTING BY FUEL TYPE

CASE NUMBER	DATE REC'D	APPLICANT NAME	SSN/EIN	CITY	PRI CODE	REQUEST AMT	CO #1	CO #2	ACT CODE	AWARD AMT	COMPANY	DATE AWARD
GR80CC042	06/02/80	ALVIN ISD	[redacted]	ALVIN	213	600	36		110	450	MOBIL	10/30/81
GR80CC043	06/02/80	GROZIER & MANN CO		WICHITA FALLS	214	60,000	41		113	6,000	SHELL	10/30/81
GR80CC044	06/02/80	F & S OIL CO		BOOKER	201	1,500	48		120	50	TEXACO	10/30/81
GR80CC045	06/02/80	FLAW,LOREN		BOOKER	215	15,000	20		123	500	DIAMOND	10/30/81
GR80CC046	06/02/80	WALDING ENTERPRISE,INC		HOUSTON	216	45,000	20		130	4,000	DIAMOND	10/30/81
GR80CC047	06/02/80	HOUSTON PILOTS		HOUSTON	217	15,000	24		133	1,500	EXXON	10/30/81
GR80CC048	06/02/80	SWIFTY		FLOYDADA	218	500	27		133	500	GULF	10/30/81
GR80CC049	06/02/80	COLONIAL DRIVE INN		HARLINGEN	219	16,000	34		204	1,600	LAGLORIA	09/06/80
GR80CC050	06/02/80	TED LOKEY OIL CO		AMARILLO	251	100	36		210	100	MOBIL	10/30/81
GR80CC051	06/02/80	PERRY CONST		CORPUS CHRISTI	252	500	41		255	240	SHELL	10/30/81
GR80CC052	06/02/80	SUN OIL CO		CORPUS CHRISTI	253	6,000	48		350	00		10/30/81
GR80CC053	06/02/80	JONES,C C		MART	254	5,000	20		255	4,000	DIAMOND	10/30/81
GR80CC054	06/02/80	LINDA'S SER STA		HOUSTON	255	300	24		255	240	EXXON	10/30/81
GR80CC055	06/02/80	NICHOLS,DAN		DENTON	256	400	27		350	00		10/30/81
GR80CC056	06/02/80	H S SHANKS & SON INC		ALICE	257	4,000	34		255	290	LAGLORIA	10/30/81
GR80CC057	06/02/80	WARNER DRIVE INN		NEW BRAUNFELS	258	12,000	34		255	880	LAGLORIA	10/30/81
GR80CC058	06/02/80	BRAZOS RIVER AUTHORITY		SUGARLAND	259	900	36		350	00		10/30/81
GR80CC059	06/02/80	MABANK ISD		MABANK	259	700	48		350	00		10/30/81
GR80CC060	06/02/80	DUKE,BILL		TEXARKANA	321	1,000	41		250	200	SHELL	10/30/81
GR80CC061	06/02/80	DUKE,BILLY		TEMPLE	322	1,500	27		350	00		10/30/81
GR80CC062	06/02/80	DUKES,BOB		MANOR	323	1,500	24		250	410	EXXON	10/30/81
GR80CC063	06/04/80	WEST,JOE		CUERO	324	20,000	34		355	00		10/30/81
GR80CC064	06/10/80	JOE WELLS & CO		MART	325	8,000	20		350	00		10/30/81
GR80CC065	06/02/80	WEELR,WESLEY		MART	331	800	24		250	220	EXXON	10/30/81
GR80CC066	06/04/80	HAESCO,INC		ORANGE	432	800	27		350	00		10/30/81
GR80CC067	06/02/80	MINERAL DRILLING CO		GEORGE WEST	433	2,000	27		350	00		10/30/81
GR80CC068	06/02/80	OWENS,ALVIN		RIVERS	434	900	34		350	00		10/30/81
GR80CC069	06/02/80	SWIFT FARM CENTER		HOCKLEY	322	800	24	36	250	220	EXXON	10/30/81
GR80CC070	06/02/80	FARM CENTER		HOCKLEY	331	350	48	41	258	280	TEXACO	10/30/81
GR80CC071	06/02/80	ALLISON,D. E.		STEPHEN	434	1,375	24	27	350	00		10/30/81
GR80CC072	06/02/80	ALLISON,D E		STEPHENVILLE	521	425	27		350	00		10/30/81
GR80CC073	06/06/80	GRIFFIN,HENRY		HARLINGEN	216	500	48	24	350	00		10/30/81
GR80CC074	06/04/80	OWENS,ALVIN		THREE RIVERS	102	600	20		100	600	DIAMOND	10/30/81
GR80CC075	06/02/80	WEST,GEORGE		MATHIS	521	100	41		350	00		10/30/81
GR80CC076	06/02/80	CROW,ALVIN		ALVIN	522	4,000	24		350	00		10/30/81
GR80CC077	06/02/80	MARK,D		PFLUGERVILLE	523	1,000	36		350	00		10/30/81
GR80CC078	06/02/80	UNIVERSAL ENGINEERING		AUSTIN	524	2,000	34		350	00		10/30/81
GR80CC079	06/02/80	PAYNE,ROBT		GEORGE WEST	525	3,575	34		350	00		10/30/81
GR80CC080	06/02/80	OWENS,ROBT		GEORGE WEST	531	350	36		350	00		10/30/81
GR80CC081	06/09/80	SIGLE,H		WASHINGTON	101	2,000	24		100	2,000	EXXON	10/30/81
GR80CC082	06/02/80	KOLA,JAMES		WASHINGTON	102	5,000	34		100	5,000	LAGLORIA	10/30/81

ER0346
RUN: GAS RUN A-2

TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL
OFFICE OF FUEL ALLOCATION

11/23/81
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TENTATIVE AWARDS - SUPPLIER SUMMARY REPORT
GASOLINE

<<< TOTALS FOR ALL REQUESTED SUPPLIERS >>>

	PRIORITY LEVEL	AWARDED AMOUNT (GALLONS)	AWARDED PERCENTAGE OF RUN AMOUNT	AWARDED PERCENTAGE OF MONTHLY AMOUNT	DENIED AMOUNT (GALLONS)	DENIED PERCENTAGE OF MONTHLY AMOUNT	PENDING AMOUNT (GALLONS)	PENDING PERCENTAGE OF MONTHLY AMOUNT
	0	00	0.000	0.000	00	0.000	00	0.000
	1	35,200	13.637	0.136	00	0.000	1,004,000	3.884
SET-ASIDE FOR MONTH: 25,616,648	2	54,410	21.080	0.210	00	0.000	2,443,650	9.467
SET-ASIDE FOR RUN: 258,103	3	00	0.000	0.000	00	0.000	488,370	1.892
	4	50,660	19.627	0.196	00	0.000	201,100	0.777
	5	8,460	3.277	0.032	00	0.000	17,600	0.068
	TOTAL	148,730	57.624	0.576	00	0.000	4,152,720	16.089

event operation of another set-aside program becomes necessary. Both award and denial notices have been printed and are currently in storage.

The final component of the system is a decision algorithm which automatically determines emergency allocation amounts. Based on information input to the algorithm, which includes the amount of fuel requested by the applicant, the amount of fuel available to the particular supplier requested, and the applicant's assigned priority level, the program equitably allocates existing fuel supplies to applicants based upon a series of logical equations. Most of these equations are influenced by parameters which can be varied and controlled. This flexibility allows, for example, allocation awards to be spread out over the entire month or for certain priority levels to be assured a certain percentage of their request.

It is expected that this automated system will provide substantial savings in personnel needs and money should a state set-aside program be implemented. Additionally, this system should result in more timely and equitable allocations of emergency fuel to applicants. Furthermore, the reporting component will allow for a more accurate assessment of how and where the set-aside fuel is being used and permit the State to better target supplies to areas or groups experiencing the most need.