

NOV 3 1980

JTC

NOV 1 0 1980

G. L. McD



transportation energy contingency strategies

S.C.R.T.D. LIBRARY

part three the case of the "yourtown" urbanized area

august 1980

		,

STATE OF TRANSPORTER

DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20590 SEP 2 4 1980

> REFER TO: HHP-32

Dear Transportation Colleague:

The fragile nature of this country's petroleum supplies has been dramatically revealed by the shortages of 1973-74 and 1979. The disruption caused by these shortages, especially to the transportation needs of commuters, clearly points out the critical need for preparation for future shortages. The development of energy contingency plans has been strongly encouraged by the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA). We have completed a series of reports aimed at assisting local and State officials to prepare transportation contingency strategies to respond to future shortages.

The enclosed report, "Transportation Energy Contingency Strategies, Part Three: The Case of the Yourtown Urbanized Area," has been preceded by Parts One and Two, "The Planning Process: Roles and Responsibilities," and "Synopsis of Actions," respectively. Part Three, the final report in this series, presents a description of the energy contingency planning process, concentrating on ridesharing, transit, and paratransit actions, in the hypothetical urbanized area of Yourtown. The various institutional relationships, types of analysis performed, agreements reached, and other activities are described in a manner which should be helpful to areas conducting actual contingency planning.

We hope that these reports prove valuable to you. Should you not presently have copies of Parts One and Two, they may be obtained by contacting: The Department of Transportation, Technology Sharing Office, I-40, Washington, D.C. 20590.

John S. Hassell, Jr.

Federal Highway
Administrator

Theodore C. Lutz

Urban Mass Transportation

Administraton

Enclosure

Technical Report Documentation Page

			·	
1. Report No.	. Government Acces	sion No.	Recipient's Catalog N	о.
4. Title and Subtitle			Report Date	
Transportation Energy Continge	ency Strategi		August 1980	
Part 3: The Case of the "Yourto	own" Urbanize		Performing Organization HHP-32/UPM-13	on Code
		8.	Performing Organization	on Report No.
7. Author's) Frederick Salvucci, Michael Myer	Thomas F. Hun	nphrey,		
9. Performing Organization Name and Address		10.	Work Unit No. (TRAI	5)
Massachusetts Institute of Tec				
Center for Transportation Stud Cambridge, Massachusetts 0213		111.	Contract or Grant No	•
landinge, massachusetts 021	,	13	*	
12. Sponsoring Agency Name and Address		13.	Type of Report and P	eriod Covered
*Federal Highway Administration	on		Final Report	
*Urban Mass Transportation Adm			•	
400 7th Street, SW.		14.	Sponsoring Agency C	ode
Washington, D.C. 20590				
15. Supplementary Notes *FHWA Contract Manager - Gary *UMTA Contract Manager - Richs Division				
This report represents a furth to provide technical assistant contingency plans, particular services. This report provide planning and implementation of	ce to State a ly focused on es guidance t	nd local governme transit, paratra o the myriad of a	ents in prepar insit, and ride actors involve	ing energy esharing d in the
The report is presented in the	ee parts:			
Part 1 - The Planning Process:	Roles and	Responsibilities		
Part 1 describes the organizat officials develop a basic comp of various transportation opti	onent of the			
Part 2 - Synopsis of Actions				
Part 2 describes specific activarying conditions, including required for planning and implanting their timely adoption and impl	severity and ementation o	duration of shor	tfalls, the lo	ead time
Part 3 - a model case study of	the conting	ency planning pro	cess	
17. Key Words Transportation, Energy Conting	rency	18. Distribution Statement		the public
Strategies, Transit, Paratransit,		This document is available to the public through the National Technical Information		
Ridesharing	Service			
19. Security Classif. (of this report)	20. Security Class	sif. (of this page)	21. No of Pages	22. Price
Unclassified	Unclassifi		77	
CHCTGSSTITEG	OUCTASSILL	Eu	1	Į.

			•

TRANSPORTATION ENERGY CONTINGENCY STRATEGIES

PART THREE

THE CASE OF THE "YOURTOWN" URBANIZED AREA

SPONSORED BY:

FEDERAL HIGHWAY ADMINISTRATION OFFICE OF HIGHWAY PLANNING

AND

URBAN MASS TRANSPORTATION ADMINISTRATION
OFFICE OF PLANNING MANAGEMENT AND DEMONSTRATIONS

PREPARED BY:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR TRANSPORTATION STUDIES CAMBRIDGE, MASSACHUSETTS

IN COOPERATION WITH

OFFICE OF THE SECRETARY TECHNOLOGY SHARING PROGRAM

AUGUST 1980

TABLE OF CONTENTS

		PAGE
Ι.	Preface	1
II.	Introduction	4
III.	Background Information on the Yourtown Urbanized Area, Fall, 1980	12
ΙV	Organizing a Metropolitan Transportation Contingency Planning Process for Yourtown	16
	A. Early Preparations	18
	B. Meeting of the MPO Advisory Committee	22
	C. The MPO Policy Committee Meeting	28
	D. Preparations for the Thirty-Day Plan to be Presented at a Major Public MPO Meeting	30
٧.	Coordinating the Development of the Metropolitan Contingency Plan	37
,	A. The Public MPO Meeting for the Presentation of the Thirty-Day Draft Plan	37
	B. Aftermath of Presentation of Draft Thirty-Day Plan; Initial Meeting of Task Forces	50
VI.	Coordination of Draft "Ninety-Day" Contingency Plan	69
VII.	Preparing for Implementation	73
/III.	Conclusion	76

			7
			*

ENERGY CONTINGENCY PLANNING

THE CASE OF THE YOURTOWN URBANIZED AREA

I. PREFACE

The purpose of this document is to describe the actions taken in an idealized metropolitan area, the Yourtown Urbanized Area, to develop an energy contingency plan focusing on transit, paratransit and ridesharing measures. The specific objective of this idealized case study is to assist local level elected officials, planning agencies, and transportation operating agencies in developing local contingency strategies by describing the kind of preplanning and interaction needed to prepare a metropolitan area for dealing with a fuel shortage. Throughout this description the participants must deal with seven categories of problems which will occur universally, and which the idealized case study illustrates in a specific setting:

- The need for public education of the severe consequences of the absence of a contingency plan. Mobilizing resources to deal with the problems which are not yet visible to the general public will be extremely problematic, so actions must be taken to heighten public awareness of the potential problems that they must be prepared to deal with.
- The need to involve the diverse participants who control critical actions. There is temptation to "assign" the preparation of energy contingency plans to one agency, when in reality the capacity for action is divided among several different public and private entities. Even when one agency "coordinates" with others, the coordination often occurs with individuals who do not control the capacity of a particular organization to act. Thus, the role of the lead agency in the contingency planning situation is not to develop a unitary plan, but rather a "plan for planning"—a process to elicit real participation from each actor, wherein each actor identifies the actions he will assume responsibility for, communicates that to others, and takes the necessary steps to prepare for a crisis situation.
- 3. The need for the plans of each actor to be open-ended and action-encouraging. The capacity of each participant in a metropolitan area to act is constrained by other

institutions. If each participant accepts those constraints, nothing significant will occur. Each participant must devise ways to prepare his own actions and communicate clearly those areas where success will depend upon the actions of others in such a fashion that the others will be encouraged to respond.

- 4. The need for the elements in a strategy to be sufficiently independent. If the failure of one element in the strategy will, through a "domino effect," undermine the entire value of the plan, the plan is vulnerable. Each actor must continually seek to maximize his own flexibility to perform even if other actions important to his performance fail to materialize.
- The need for specific new ways of doing business. The situation for which the contingency plans are prepared involves massive action, much more critical and visible than the normal functions of the organizations whose actions are being mobilized. If preparations are made simply by continuing past behavior with slight expansions in effort and resources, insignificant results are likely. The actors in this process must be continually aware of the need for new approaches to meet this challenge.
- 6. The need for "real" rather than on-the-shelf plans. Contingency plans are often thought of as being produced when there is no crisis, and then put "on the shelf" for use if a crisis develops. This attitude will reinforce the opinion of key operating personnel that the preparation of a contingency plan is not serious, resulting in the development of "on-the-shelf" plans that will be unworkable when the time comes for implementation. By focusing instead on plans which call for immediate implementation, the attention of people with implementation responsibility is assured, and the plans can be "debugged" during noncrisis times. If some conservation takes place prior to a crisis as a result of this approach, that is beneficial on its own merits. However, in most cases the response to a new initiative will be relatively modest until a shortfall occurs.
- 7. The need to continually update the plan. Many of the initiatives to be taken by various actors may be new, and the environment for action significantly changed due to the potential shortage of gasoline and its significantly higher price. Therefore, experiences of the past are much less reliable to depend on for guidance. There will be a need for each actor to continually try new programs, evaluate them in light of the potential crisis environment, and modify them. In addition, the plan will be a mixture of short and long range actions. Because of the interdependence of the various actors, it will be important to continually monitor behavior and update the plan.

The tone of this case study is perhaps overly optimistic. The process is depicted as functioning very smoothly in the face of severe deadlines, much more smoothly than is likely in a real world situation. Also, the actors may seem more responsive and cooperative than is usually the case. However, at the same time the case study attempts to be realistic in explaining the kind of "enlightened self-interest" which might encourage cooperative behavior and which needs to be orchestrated in achieving a workable plan. Finally, while the combination of so many initiatives in one metropolitan area certainly does not exist in any particular metropolitan area, virtually all of the ideas used in this case study are actually under discussion or implementation in one or more areas at the present time. Therefore, in that sense they do have a real-world basis for discussion.

Clearly, the most appropriate and effective planning approach will vary in different metropolitan areas in both methodology and time frame, depending on the nature of local problems, issues, and characteristics of the area. However, this idealized case study illustrates many of the conflicts that will most likely arise in efforts to develop an energy contingency planning process, and it can serve as a point of departure for the discussions that are sure to occur in most metropolitan areas.

II. INTRODUCTION

In the Fall of 1981, a series of terrorist acts in the Persian Gulf resulted in a significant loss of American petroleum imports. The Federal government immediately established a mandatory gasoline conservation target for each state and initiated the mechanisms to establish gasoline rationing. Within three months, the metropolitan area of Theirtown was in a shambles. Lines at the pump were severe, and several incidents of violence had occurred. Peak hour traffic had not changed much in volume or auto occupancy, but gasoline was simply not available at night or on weekends and recreational and commercial business was severely impacted. Absenteeism and tardiness at most work sites had risen severely, companies were docking workers for tardiness and there had already been three wildcat strikes over the issue in area plants. Ridership on the transit system had increased by 10 percent, but crowding conditions were intolerable. In addition, several bus routes had been cancelled in order to reassign the equipment to higher priority areas. The public information system had failed to effectively communicate the change, so the passengers along the discontinued routes were outraged and the transit workers' union was threatening to go on strike over an issue concerning use of overtime. Meanwhile, the Transit Authority announced that the new service it had added was forcing expenditures at a rate greater than the budget authorized, which would create a fiscal impasse for the next quarter unless additional funds were appropriated.

Elderly and handicapped people were unable to get taxi services, and service in the minority and low-income areas had disappeared as taxicabs were spending much of their time in gas lines and had shifted their

activities to concentrate on the boom demand for taxi service at the airport. In one suburban town, the town manager had proposed a shift in school hours in order to allow the use of school buses to provide supplementary transit service to downtown. The Teachers Union, however, objected to any change in hours without reopening their contract, and the Parent Teachers Association also objected to any significant changes. The Mayor of Theirtown publicly criticized the Governor for lack of an adequate contingency plan for dealing with the situation; the Governor, in turn, blamed the Federal government for not being prepared, as well as the Mayor for not cooperating.

By contrast, in Yourtown metropolitan area (in a neighboring state) the transportation system adapted to this major shock with relatively little confusion. Peak hour auto occupancy had risen by twenty percent and transit ridership was up by twenty-five percent, yet the quality of service was considered reasonable because a major shift to flextime by area employers had helped to even out peak loads. Lines at the pump were not severe, peak hour congestion had diminished, and for the first time since regular testing commenced seven years ago, air quality was in compliance with Federal standards. Gasoline was available on weekends (because of State regulations on station hours), and recreational and commercial activities while affected, were not as severely impacted as in neighboring states.

Even more significantly, Yourtown was characterized by a "we're all in this together" spirit, with many different institutions doing their part to continue their activities in ways that required less gasoline.

Employers had established an organization modeled on the United Way called United Ride, which was run by a board composed of major employers

and labor unions. United Ride had been aggressively promoting employer involvement in the journey to work for over six months. Each employer of over fifty people was encouraged to participate in the program, whereby he would analyze his own employees' commuting situation with the assistance of expert help provided by United Ride. The employer was expected to pay 10 percent of the cost of the United Ride service so he would have a real stake in the process, but the bulk of the service was financed by State and Federal highway funds. So far, 85 percent of the employers of over 500 employees, and 40 percent of employers of more than 100 had participated. The strategy of United Ride was to aggressively encourage major employers to participate, starting with firms of over 1000, then 500 to 1000, then 100 to 500, and eventually 50 to 100, and to respond to any employer of more than 50 people who asked to participate.

United Ride provided experts who analyzed the characteristics of the company, such as its location, accessibility to transit and highways, any clustering of employee residential patterns and the like. They then recommended in-house programs involving carpool, vanpool, subscription bus, prepaid transit pass, shuttle bus between transit stops and employment sites, priority parking for high-occupancy vehicles, shifts in free parking policies, introduction of flextime (particularly in the case of employers served by transit, or near congested highway facilities) and similar programs. The employer made a commitment in advance to maintain a relationship with United Ride to monitor the success (or failure) of programs. United Ride also encouraged each employer to participate in a test drill called "Wednesday is Ridesharing Day." In this case, employers were asked to make a special effort to

get employees to avoid the use of single-occupant vehicles on the first Wednesday of each month, so that in the event of an emergency they would have had some experience in using an alternative means of traveling to work. Participating employers were asked to promote this effort with in-house raffles and prizes, and two local radio stations were involved in publicizing it.

Metro Info, a metropolitan public information program funded by State and Federal highway and transit funds, provided public information on how to reduce the need for gasoline, responded to requests for information, and handled overflow telephone calls to the community affairs department of the Yourtown Transit Authority (YTA). Metro Info had a liaison network of staff people located in the town hall of each participating town, as well as a central staff located in the same building as the YTA Community Affairs department. Before the crisis occurred Metro Info had provided information through the media and through the schools promoting ridesharing and public transportation, encouraging people to seek help from their employer, and promoting programs to reduce gasoline consumption by proper automobile and tire pressure maintenance, driving at or below the speed limit, and the like. In addition, liaison staff located at the city and town halls served as outreach for the metropolitan carpool matching service, YTA, and other locally provided, publicly available transportation. These local operations, called Local Transportation Coordinators, had become an important source of information for planning new routes, services, and park-and-ride facilities. Metro Info, staffed by the Metropolitan Planning Organization (MPO), provided training, coordination, and information resources to the local operations.

The Yourtown Transit Authority (YTA) was heavily involved in the employer effort. For the past eight months a special subcommittee of United Ride had targeted employers near transit services to encourage participation in flextime and the prepaid transit pass program. Major shifts in commuting had occurred which expanded the "peak" capacity of the transit system by 30 percent. Several major employers had added a 25 percent subsidy of the prepaid transit pass as a fringe benefit to offset parking privileges (since they didn't feel they could "take away" the parking fringe benefit). Services had been restructured well before the crisis hit to expand capacity on trunk lines. Maintenance had been scheduled to allow for a ten percent increase in peak hour vehicle availability, and a limited number of part-time drivers were handling the peak of the peak in accordance with a special agreement with the transit workers union. An expanded in-house, on-line information system fed information to the Community Affairs department to handle public information, and the overflow for information requests was being handled by the Metro Info service. The newspapers carried a centerfold page transit system map, along with information on how to use the transit system. Finally, a downtown transit mall combined with increased pedestrian amenities had just received federal capital grant approval, and considerable development activity was under way in the downtown area. The Downtown Merchants Association was actively promoting "carfree" access to the Yourtown shopping district.

Six months earlier, the three <u>area colleges</u> had introduced a free inter-campus shuttle and a fifty percent subsidy on prepaid transit passes.

A recreation complex located twenty miles from the center city had

negotiated with the three <u>intercity bus carriers</u> which served Yourtown to provide a coordinated public transportation express link to the center city bus terminal. The proprietor of the complex provided discounted tickets to customers, and business had actually increased as a result of the superior car-free access. In addition, the bus companies leased several school buses to provide a farebox-supported service from center city to nearby beaches beginning at the end of the school year. Several suburban towns had refused to lease their school bus vehicles, and they were instead making plans for their own beach shuttles.

Over half of the suburban municipalities had become heavily involved in transportation. Many were acting as agents for the state's park-and-ride program. They negotiated commuter parking rights at shopping centers, churches, and schools (financed by the State Department of Transportation), and many had negotiated restructured transit service with the YTA or their school bus operators to provide service throughout the day. This provided local service primarily for young people between twelve and eighteen, to reduce the need for "parent chauffeuring," and reduce the pressure for teen auto use. These local services (which served many of the park-and-ride locations) were being heavily used by commuters to get to their vanpool, carpool, and transit assembly points. Since the crisis, several of the towns had made slight shifts in school schedules to accommodate this increased demand (under agreements which had been prenegotiated with teachers' unions and parents). The Transportation Coordinators in several towns initiated a "drive a friend" program. Its purpose was to match up riders for local trips, with a twenty-four hour advance notice phone-in service which was

particularly directed at elderly people.

The <u>Central City</u> had authorized expansion of its elderly and handicapped transportation brokerage system to cover the close-in suburbs. This system had been established earlier, when the city had required its human service institutions to provide transportation only through the elderly and handicapped brokerage, which in turn utilized private taxicab and other providers. Notwithstanding the gasoline shortage, elderly and handicapped people were having minimum problems getting service.

The city had taken the initiative to buy some closed gas stations, and operate them for taxicabs, limousines, and preregistered vans in order to avoid any problems with access to gasoline. In exchange, taxi providers were strictly adhering to requirements for providing services without discrimination to poor and minority sections of the city, and they had shifted to a shared ride mode in order to expand capacity. Jitney franchises had been permitted along the busiest transit routes to handle excess demand during peak hours and provide "night owl" service, but existing taxi companies had been given first option to provide that service. The local Transportation Coordinator services in the city neighborhoods were concentrating on "reverse" carpools and vanpools to provide access to suburban jobs and marketing of transit within the city, including sale of a prepaid transit pass with a 25 percent discount financed by the city.

The Central City had also been a model employer for the past year, providing flextime for 60 percent of its employees, subsidizing prepaid transit passes, and initiating a system of employee parking rights whereby non-drivers could collect an extra travel "fringe" benefit of

\$30 per quarter (the estimated value of the free parking sticker given to drivers). Work trip mode split in the core area had shifted from 30 to 50 percent transit, and from 20 to 35 percent shared ride.

Finally, individual residents of Yourtown had undertaken a myriad of activities to solve their own problems. This included rearranging trip patterns; combining or eliminating some trips; increasing the utilization of more fuel-efficient vehicles among multi-car families; increasing the use of walking, bicycling and public transit modes; shifting activities to more accessible locations; and other more energy-efficient travel actions. These kinds of individual initiatives were also encouraged through public information efforts provided by government, several image conscious major companies and media outlets. A panoply of community organizations, including all of the social service and fraternal organizations, had organized efforts to encourage conservation minded behavior by individual citizens. It was estimated that a significant proportion of the accommodations to the shortfall was accomplished by these individual adjustments.

The only significant controversy in Yourtown was the competing claims of the Mayor, the Governor, the Yourtown Transit Authority, and the Chamber of Commerce, that each was responsible for the remarkably tension-free accommodation to gasoline shortages which had occurred.

Why was Yourtown so much better able to cope than Theirtown? What kind of preparation had made this possible? To understand this better, it is necessary to turn the clock back one year, to Fall, 1980, in Yourtown...

III. BACKGROUND INFORMATION ON THE YOURTOWN URBANIZED AREA - FALL, 1980

In Fall, 1980, the Yourtown urbanized area had a population of 750,000. The Yourtown Transit Authority (YTA) operated peak and off-peak period buses over local, express, and crosstown routes. With Federal assistance from the Urban Mass Transportation Administration (UMTA), the bus fleet had been renewed and expanded, and a proposed downtown transit mall was in the advanced planning stage as the centerpiece of a strategy to dramatize "carfree" access to the downtown.

The urban area was also served by the following transportation organizations and services, complementing the services provided by the YTA:

- Three taxicab companies.
- Three intercity bus companies.
- ACCESS, an experimental brokerage specializing in serving elderly and handicapped people.
- A social service agency, operating ten vans for the elderly and handicapped.
- Four other social service agencies providing a total of eight vans for a variety of purposes.
- A fleet of school buses, providing transportation services for children within the core and in the suburban communities of the area.
- The State DOT had established an areawide carpool matching program. This program is funded partly by Federal Highway Administration (FHWA) planning and Federal Aid Urban Systems (FAUS) funds. The program had been established primarily in response to the requirements of the 1970 Clean Air Act, and it was also included in the Transportation Systems Management (TSM) element of the transportation plan. The area was in violation of Clean Air standards so Environmental Protection Agency (EPA) Section 175 planning funds were also being used for this activity.
- There were no formal vanpools in operation under sponsorship of any Federal or State agency. However, it

was known that about one dozen vanpools had been formed in various parts of the urban area at the intitiative of several of the region's larger employers.

- Three auto rental companies were in operation in the area. Their major base of operation was at the regional airport facility.

A Metropolitan Planning Organization (MPO) had been designated by the Governor, in accordance with the requirements of Federal regulations. The MPO (staffed by the regional planning agency) was Federally funded by UMTA and FHWA, with some additional funds made available by the Environmental Protection Agency (EPA) under Section 175 of the Clean Air Act. No U.S. Department of Energy (DOE) funds were included in the MPO budget, as all of the available energy funding went directly to the State Energy Office for use on statewide programs.

Although the region's transportation planning process had been certified annually by the Federal agencies, there were still some problems to overcome in carrying out a comprehensive and coordinated approach to transportation planning. The MPO was looked upon as the agency to coordinate efforts that required the action of more than one agency, and to develop the documentation necessary to satisfy federal planning requirements. However, past experience had shown that the operating agencies were by far the most important actors in the process. An example of this was the MPO's attempt to establish a formal TSM planning process in the region in response to the U.S. Department of Transportation (DOT) regulations of September 17, 1975. The MPO had established a TSM Task Force with responsibility for guiding TSM activities in the region, and suggested several formats for establishing a formal TSM planning process. The operating agencies and local

officials, however, showed little interest in such a process and had instead recommended that the MPO devote most of its energies to the analysis of the proposed downtown transit mall, a project which was viewed as having a potentially large impact on economic development in the area. Thus, the MPO-coordinated TSM process as it existed in the Fall of 1980 consisted of monthly meetings of the TSM Task Force at which progress was reviewed for various studies which the MPO had initiated with the cooperation of the Yourtown Transit Authority, the Yourtown Department of Public Works, and the State DOT.

The Yourtown Urbanized Area had already experienced a gasoline shortage during the Spring of 1979. Unfortunately, the State plans to cope with this situation were of little help to Yourtown. In accordance with the Energy Policy and Conservation Act of 1975, the State had prepared an energy conservation plan (and updated it yearly) consisting of the following elements:

- Enforcement of 55 mph speed limit;
- The establishment of a carpool matching program in the state's largest urbanized areas;
- The establishment of traffic regulations allowing for right-turn-on-red;
- The coordination of state and federal transportation programs designed to reduce travel by single-occupant driving, improve the flow of vehicles on existing highways and encourage auto drivers to switch to ridesharing and public transportation.

Although the above programs could have potentially promoted some conservation, it was generally agreed that minimal results had actually been achieved.

In the Spring of 1979, prior to the shortage, the U.S. Department of Transportation issued guidance strongly encouraging the incorporation

of energy contingency planning efforts into the unified transportation work program. The experience of the late spring gasoline lines had dramatically reinforced this need, so planning work had been programmed and staff capability for handling energy issues was expanded. A test of the effectiveness of these efforts was soon to occur.

IV. ORGANIZING A METROPOLITAN TRANSPORTATION CONTINGENCY PLANNING PROCESS FOR YOURTOWN

Spurred by the spot shortages of petroleum that occurred during the Spring and Summer of 1979 and by the growing awareness of the fragile nature of foreign supplies of petroleum, the U.S. Department of Transportation issued various technical materials to the states, MPOs, and transit authorities to assist in the development of emergency transportation contingency and conservation measures. The U.S. Department of Energy also urged state, regional, and local officials to begin a concerted effort to prepare for similar situations that might again occur, and they distributed materials that would be of assistance.

In November, 1979, the Emergency Energy Conservation Act of 1979 was approved, providing authority for the President to establish mandatory conservation targets for the states. In March, 1980, the U.S. DOE issued voluntary transportation conservation targets for gasoline use in each state. Since the targets were voluntary, the states were not required to prepare and submit a transportation conservation plan. However, DOE and the President strongly urged each state to actively begin the planning process, if they had not already done so.

Federally imposed gasoline rationing or mandatory conservation programs were to provide a framework for dealing with shortages, and state governments were to be heavily involved, particularly in strategies dealing with gasoline. The actual implementation of programs to provide for personal mobility under the stresses of gasoline shortages, however, were to occur principally at the metropolitan area

and local government level, where the institutions which regulate transportation and provide transit, paratransit and ridesharing services principally operate.

In response to the voluntary target set by DOE, the Governor of Yourstate decided to initiate a planning process at the State level to develop action plans that could respond to the following situations:

- Long-term conservation strategies, with anticipated benefits at the state level more than one year after implementation;
- 2. A contingency plan to deal with a short duration gasoline supply interruption, similar to the 1979 situation;
- 3. A contingency strategy to deal with a six month shortfall of about 8 to 12 percent; and
- 4. A severe shortfall of 12 to 20 percent which would last longer than six months and be serious enough to possibly warrant a mandatory rationing program.

The Governor asked each metropolitan area accelerate the process of preparing local contingency and conservation plans to deal with the four scenarios cited above, and which would form the basis for the transportation section of the State energy contingency plan. After discussions between State DOT and DOE officials and the directors of each MPO in the State, the following schedule for MPO action was agreed to:

- 1. Within 30 days prepare and submit a preliminary local contingency plan, to be coordinated with the state level plan. This will be done concurrently with development of the state plan.
- 2. Within 90 days prepare an updated and more comprehensive plan, incorporating comments received during the above review process. This version of the plan should include schedules for implementation and fixed budget estimates;
- 3. Within 180 days have all preplanning completed, so that each short-term measure will be ready for implementation.

A. Early Preparations

After learning that an enhanced energy contingency planning process had been requested by the Governor, the director of the Yourtown MPO discussed the situation with the MPO chairman and then held a meeting with key division heads and the staff members who had been working on the energy studies. It was decided that a proposal for an expanded MPO-coordinated energy conservation/contingency planning process would be submitted at the next MPO Policy Committee meeting (to be held in two weeks). The staff team was expanded by reassigning existing employees working on the TSM program, to form a larger combined team. The first task was to finalize the design for the energy contingency planning process which had already been prepared. In order to encourage more active participation of public and private agencies and citizen groups that would likely be affected by the energy initiative, a discussion was scheduled for the MPO Advisory Committee meeting. This meeting was also to involve the planning staffs of the major transportation agencies and the members of the citizens' transportation advisory group, and it was scheduled for one week in advance of the MPO Policy Committee meeting. This timing was important so that the MPO members would have the benefit of some prior work and public discussion when the issues were before the MPO meeting, and so that the agencies at the staff level and the interest groups at the grass roots level could begin preparing to focus on this effort.

The groups invited to attend the MPO Advisory Committee meeting included:

1. Chairman of the MPO Citizens Advisory Committee, and all its members

- 2. The Central City (the largest city within the urbanized area) -- Representatives from the Mayor's Office, Department of Public Works, Department of City Planning, and other relevant agencies
- Representatives from smaller cities and towns in the metropolitan area
- 4. Regional Chamber of Commerce, Chairman of the Transportation Committee
- 5. Chairman, Association of Municipal Public Works Directors
- 6. Carpool/Vanpool Coordinators of the five largest employers in the urbanized area
- 7. General managers of the area's three taxicab companies
- 8. Business agents of the area's three non-public labor unions
- 9. Business agent from the Yourtown Transit Authority labor union
- 10. General manager, Yourtown Transit Authority
- 11. Representative of the school bus providers
- 12. State Director of Rideshare (Areawide carpool matching program)
- 13. Coordinator, regional social service transportation provider
- 14. A representative of the State Highway Office in the State Department of Transportation (director of park-and-ride programs)
- 15. Representative of the intercity bus carriers
- 16. Chairman of the statewide organization of fuel suppliers
- 17. Representatives from State agencies other than the State Department of Transportation concerned with energy programs (State Energy Office, State Clearinghouse, etc.)
- 18. Representatives from consumer groups and organizations.
- 19. Local area State legislators, staff of State Legislative transportation committees, and staff of local Congressman

In preparation for the meeting, the MPO staff arranged the following agenda for discussion by the participants:

- 1. Discuss experiences with prior shortages.
- 2. Identify and discuss what planning and implementation actions have already been taken which could help in a future shortfall (and discuss the good and bad features of each).
- Identify immediate actions that can be taken now or in the very near future and discuss responsibilities for taking action.
- 4. Describe the longer-term study and analysis process, and identify responsibilities.
- 5. Establish timetables for each item, identify both the timing needed to fit with the overall strategy, and the time likely to be necessary to accomplish the objectives
- 6. Assess the resources currently available and begin to forecast what might be available and needed in the future.

In addition to circulating these materials to the parties invited to the meeting, the MPO staff discussed possible ways of organizing the process with several of the invitees. It was anticipated that a large number of participants would attend the first meeting. Thus, unless some firm proposals were available for discussion and participants prepared to assume some responsibility, the chances were good that little or no progress would be made in agreeing on future actions. Wherever possible, preliminary meetings were held with staff members in other agencies to lay the groundwork for the proposed planning process.

The MPO staff proposed a study procedure. Given the diverse set of institutions whose active participation was needed to develop an effective strategy, the study procedure was designed to elicit activity and commitment from each participant rather than to generate the expectation that one agency was to do all the planning so everyone else could relax. At the same time, it was deemed desirable to avoid unnecessary duplication and necessary to develop reasonable coordination among the actions of different agencies.

A twelve step procedure had been described for each major actor in a Federal DOT publication. It was decided to recommend the use of that procedure to help organize the planning process. It included the following:

- 1. Assess the national, state, and local impacts of the 1973-74 and 1979 fuel shortages on automobiles and the demand for public transportation and ridesharing services using data available from current sources.
- 2. Analyze current fuel supply conditions at the local level and evaluate procedures that are available for monitoring changes in fuel supplies and consumption.
- 3. Analyze existing transit, paratransit, and ridesharing services, vehicles and ridership to determine available capacity and fuel requirements, and to plan better use of existing services.
- 4. Analyze the likely demand for multi-passenger transportation services (both its magnitude and location) which will be stimulated by future fuel shortages of varying severity.
- 5. Analyze and select actions which can increase the capacity of existing services.
- 6. Analyze and plan new services which could be instituted in response to another fuel shortage.
- 7. Develop a fuel management plan which includes fuel conservation measures as well as steps to increase fuel supplies.
- 8. Coordinate the comprehensive contingency plan with the individual elements of the plan that are prepared by providers of mass transit, paratransit, ridesharing and other governmental organizations. In particular, this coordination must communicate the limits of each organization's efforts, so that other entities clearly understand the boundaries of actions by individual agencies.
- 9. Coordinate the plan with other on-going local programs, most notably those that have been undertaken to reduce air pollution and traffic congestion.

l"Transportation Energy Contingency Strategies": "Part One, The Planning Process: Roles and Responsibilities," and "Part Two, Synopsis of Actions," March 1980, U.S. Department of Transportation.

- 10. Integrate the plan with actions that the state and federal governments will take in response to fuel shortages.
- 11. Prepare an implementation strategy for the plan, including assignments of resonsibility and the timing of various actions.
- 12. Periodically update the plan.

The MPO staff proposed that they prepare a draft report covering steps one through four, in order to assure a common point of departure for all the major actors. They also recommended that several task forces be established to work on steps five through eight. This approach would help to assure coordination and mutual understanding of the position of other institutions. Based upon the dialogue of the task forces, each institution would define those actions for which it would be responsible. Each actor would then continue to be responsible for carrying out the coordination activities of steps nine to twelve, with the MPO playing a facilitative role. Table 1 at the end of this report summarizes responsibilities assigned for each of the twelve steps.

B. Meeting of the MPO Advisory Committee

A remarkably large number of representatives from the invited groups and agencies attended the first meeting of the Advisory Committee. The MPO director began the meeting by discussing some of the work the MPO had already accomplished on energy contingency planning. He pointed out that there had been inadequate support in developing an areawide contingency plan. While individual agencies or organizations had felt some responsibility to develop their own plan, they did not have the

resources or incentive to be concerned about the impacts of the actions of others upon their own plans. In addition, the day-to-day responsibilities of each agency had limited the attention committed to contingency planning.

During a brief discussion by the participants, it was agreed that a better coordinated effort was necessary to prepare for future gasoline shortages. Among other items, it was pointed out that most of the MPO members had become accustomed to sending delegates to MPO meetings (usually planning directors), and that the kind of actions required for an effective contingency strategy would require the involvement of many operating departments of the agencies which were often not involved with (and not very cooperative about) "planning" matters. The director suggested that each MPO member (or representative) at the meeting make a special point of briefing their chief executive officer concerning the likely importance and visibility of this effort. In order to be certain that appropriate operating departments be effectively involved in this process, the chief executives should participate personally in the approaching MPO meeting, with the directors of the appropriate operating departments in attendance as well as planning department personnel. Everyone agreed the point was valid and should be addressed as suggested.

In discussing immediate problems to be faced in the region, each participant summarized his own perception of the problem. They were summarized by various attendees as follows.

1. The Transit Operator of the Yourtown Transit Authority (YTA) stated that transit ridership had increased about 10 percent areawide since the Spring of 1979. However, this had been accomplished with no increases in the number of buses or bus runs, and only minor changes in schedules. Unless substantially increased funds were made available, it would be impossible to expand the fleet or the number of

drivers. However, there were some possibilities for making better use of the existing fleet if some of the following actions could be effectively implemented:

- During previous energy crises there had been an overwhelming demand for information on bus service for peak and offepeak periods. The YTA had not been able to handle all the requests for information. An expanded information service needed to be established immediately to overcome this problem. Such a service would have some immediate benefit, in addition to being more responsive to an energy crisis.
- b. Work hours should be staggered to significantly spread out the morning and evening peak hours.
- c. Fringe parking lots should be provided outside the city limits to be served by express buses. If the express buses were given priority on expressways and arterials the same bus and driver could be used for at least two runs (and in some cases three) during the peak hours.
- d. The YTA had initiated a prepaid pass program in addition to accepting cash fares. Introduction of a one-day pass sold at convenience stores could expand the use of the pass system. Although this would not necessarily improve the efficiency of the service, it might induce more people to use it and reduce delays during peak hours for change making.
- e. Finally, an overriding issue was funding. If transit was to be given a high priority, then a serious effort must be given to determining exactly how this service will be funded.
- 2. The Representative of School Bus Operators stated that every time there was a discussion about providing emergency transportation services there was a temptation to seriously consider the use of school buses. Although it was true that in a crisis school buses could fill an important need, there were some critical problems that must be resolved. The most important and obvious were the following:
 - a. There was a conflict in the desired hours of operation. Although school buses could be very helpful during midday and evening hours and on weekends for social, recreational, and shopping trips, their use during the peak hours was impossible unless school hours were changed. To change school hours would require agreement from the local school board, the State Board of Education, and the teacher's unions.

- b. There was a state law prohibiting the use of school buses for non-school purposes without a special license.
- c. The cost of such an effort could be extremely high and the use of school buses could be complicated by:
 - Higher maintenance costs
 - Possible need for new insurance
 - No fare subsidies available
- d. There could be disagreement from the various labor unions that are affected; in particular workers of the transit union could feel that "their work" was being taken by school bus drivers while on the other hand school bus drivers, particularly if federal funds were involved, could feel they would enjoy the protection of Section 13c (federally mandated labor protection) agreements.
- The State Ridesharing Director stated that carpools and vanpools provided the greatest potential for maintaining mobility during an energy crisis. However, there were relatively few incentives for people to form carpools or vanpools, except for the trip to work. The 1979 gasoline shortage had resulted in an estimated increase in ridesharing of about 10 percent during the peak hours. This was a positive result, but it was not enough.

During the Spring and Summer of 1979 the four person staff at the State Department of Transportation had been overwhelmed by requests for help by the general public. People wanted to know how to find a bus, in addition to looking for someone with whom to form a carpool. Although the communication system was in place, it could not approach handling all the requests for assistance. Thus, substantial improvements would be needed in terms of people, equipment, and public information if public officials were to be able to respond to future crises.

Finally, there was still the problem of having adequate supplies of fuel for carpools and vanpools. This was especially true for vanpools which ordinarily must travel great distances each day.

A Representative of Major Employers stated that the 1979 gas shortage made it very clear that productivity declined substantially because people had great difficulty getting to work on time. Because a priority was given to the work trip, many social and recreational trips had to be eliminated, which had severely damaged the recreation and commercial sector. This also helped contribute to a developing low morale among employees.

Employers had been seriously considering taking action to help employees commute more efficiently and in a way that would minimize a serious disruption to lifestyles. Consequently, some of the major employers who had the financial ability to do so had initiated programs such as ridesharing, priority parking, etc. They had received some assistance from state and local agencies, but found it not to be particularly helpful. They said that they did not want the government to become actively involved with company policies on employee assistance. However, they did not rule out some publicly financed technical assistance, since they felt strongly that the government had a responsibility to provide appropriate transportation services and facilities and it was not a primary responsibility of business to do so.

A Representative of Intercity Bus Carriers explained that the three carriers provided transporation to substantial numbers of commuters each day, as well as to many other travelers. These private companies had an additional 15 percent peak hour seating capacity for long distance commuters. However, the public needed to be made aware of the availability of such services.

They felt that it would be impossible to expand commuter services in the short run, because extra buses were not readily available. Even over a longer period of time private bus companies could not make the capital investment necessary to expand their fleets unless there were some assurance that there would be a long and continuous demand for such services.

- 6. A Spokesman for the Taxicab Companies stated that taxis were severely limited by State and local laws from providing more energy efficient services. (Shared-ride taxis were prohibited in Yourtown. However, they had become popular and successful in many other metropolitan areas. Such services could supplement buses during peak hours, be used to feed express buses, and reduce the need for making short auto trips during the midday periods.) However, because of concern for excessive competition, the taxi owners were not favorably inclined to changing the rules to allow shared-ride services. They were even more strongly opposed to jitney type services that they felt would provide unfair competition to taxis. The cab companies felt that the major problem was getting gasoline for cabs without waiting in line. That waste of time is what had created the shortage of cab service in the past.
- 7. A Spokesman for the Labor Unions emphasized that the labor union membership included the people who would provide the various transportataion services being discussed here as well as many of the people who are the users and would be directly affected by whatever decisions were ultimately made. They said that the unions would cooperate to the degree necessary to meet the needs of an emergency. However, they would not concede any agreements that had already been reached in previous union negotiations.

8. A Spokesman for the Elderly and Handicapped persons explained that fuel shortages usually had a more severe impact on poor, elderly, and handicapped people than on the rest of the population. He urged taking great care to insure that these segments of the population were not unfairly impacted.

Numerous other problems were also raised at this initial meeting. The major ones included the following:

- Can it be determined when a real gas shortage exists and for how long it will exist? The answer to this question would greatly influence the kinds of strategies to be proposed.
- Will new funds be available for planning and for implementation or will existing funds have to be re-programmed? What potential sources exist?
- 3. Will the same solutions apply if mandatory rationing is imposed nationwide?
- 4. What actions will the State take before and during an energy crisis?
- 5. How will the contingency plan for this area relate to those for other areas in the state and the overall state strategy?
- 6. How much time is available to do this?

By far, the last question generated the most discussion. Many of the meeting participants expressed a great deal of concern about the limited amount of time available for developing a plan. The Governor had requested that the first draft of a contingency plan be submitted for a comprehensive review within thirty days. Allowing for review and comments by state, regional, local and private sector concerns within another thirty-day period, a second draft of the local plan had been requested within the next thirty days. Thus, a total of ninety days from the starting date would be available for plan preparation.

It seemed highly likely that new initiatives introduced during the first thirty days could be very counterproductive, because they would probably arouse opposition before being adequately examined. In order

to comply with the State timetable, yet not jeopardize the development of new initiatives, the MPO staff recommended that the thirty-day submittal be totally non-controversial; essentially, they suggested a reformating of the already approved TSM and State Implementation Plan (SIP) actions, revised to account for any minor divergence of energy concerns and clean air and TSM objectives. In this way, at least the ninety days could be used to develop some reasonable support for any new elements to be proposed in the longer term energy plan.

The MPO staff described the twelve-step study procedure it had discussed with several of the agencies, and how it could fit into the timetable and financial constraints. The MPO Advisory Group agreed to support this general approach, and recommend its adoption to the MPO Policy Committee. It would also recommend a budget based upon a revision in the Unified Work Program to reprogram some FHWA and UMTA funding.

C. The MPO Policy Committee Meeting

The MPO staff director presented to the MPO Policy Committee the overall framework for undertaking an energy contingency planning process recommended as a result of the Advisory Committee meeting. Although most MPO members agreed that such an activity was important, there was some concern that many of the other MPO activities would suffer if significant resources were shifted to the energy task. Many others doubted that the "plan" could be produced within the established timetable. Given past failures at cooperative planning efforts, was it realistic to expect a preliminary plan to be developed within thirty days?

The MPO staff director agreed that many of the points raised by the members were indeed valid, but that never before had Yourtown faced such a strong mandate for planning. Failure to be prepared, if an emergency occurred, could seriously undermine public support for all of the transportaion agencies and the construction programs. The MPO staff had, prior to the state initiative, already begun to examine the energy issue. This new mandate simply catalyzed a process already occurring. The director did agree, however, that the MPO staff resources were limited to confront such a major problem. He therefore emphasized that the approach would need to rely on initiatives from other participants. Further, the process would have to be structured so that inability to reach consensus on one particular issue would not delay the whole process.

The representative of the Mayor of the Central City agreed with the MPO staff director that energy contingency planning had to become a top priority activity. However, she observed that the major changes in travel patterns required to accommodate the shortfall levels being discussed would necessitate changes much more significant than any recent public program, and a great deal of public focus and cooperation would be required. This could obviously not occur prior to the excessively brief thirty—day timetable, but the first draft plan (of non-controversial items) could be assessed for its adequacy relative to the four different possible shortfall situations. Thus, the publication of the first draft plan could be used to dramatize the inadequacy of current programs to deal with the possible levels of shortfall, and the very serious consequence of that lack of preparedness (such as severe gasoline lines, decreased business activity, severely crowded buses,

inaccessibility of taxicab service, etc.). The draft plan should not simply be a paper plan to satisfy the Governor's timetable, but it should serve as an accurate picture of how the region would fare in a shortfall. It would also inform the public of the need for more comprehensive plans. The draft plan could be released at a public MPO meeting, accompanied by presentations made by several major actors on their concerns about the draft plan and the kind of initiatives they felt were needed to improve the plan.

By implementing the process with a great deal of public exposure, several objectives could be attained:

- 1. All the major actors would be encouraged to begin or expand their individual contingency planning efforts to protect their own self-interest, or enhance their public image.
- 2. A sense would be developed that all are better off if actions are coordinated, at least with respect to sharing information and mutual support.
- 3. The MPO could clearly be established as the appropriate forum for information sharing and coordination.
- 4. Next steps and tasks would be clearly identified, primary responsibility established, and participation secured for the various initiatives.
- 5. A broad base of public support would be initiated which would eventually be needed to support the results of the planning process.

There was a consensus on this approach, so a public MPO meeting was scheduled with thirty days lead time to discuss the draft plan and the point of view of individual participants.

D. Preparations for the Thirty-Day Plan to Be Presented at a Major Public MPO Meeting

In order to prepare the thirty-day draft plan to comply with the State timetable, as well as to provide a uniform basis for the

activities of the various participants who would be involved in the eventual plan, the MPO staff prepared the materials described earlier as steps one through four of the twelve-step process which had been adopted by the MPO. The following is a summary of those actions:

1. Assess National, State, and Local Impacts of the 1973-74 and 1979 Fuel Shortages

The MPO staff had improved its expertise in the area of contingency planning since the Spring of 1979, when they received the DOT advisory memo to introduce energy contingency planning into the unified transportation work programs. The DOT publications, "Transportation Energy Contingency Planning: Local Experiences," (July 1979); and, "Transportation Energy Contingency Strategies," Parts One and Two, (March 1980), provided useful technical assistance. The MPO staff had also gathered information on contingency plans from other states and MPO's, and they developed staff communication with contingency planning efforts at the Yourtown Transit Authority, the State ridesharing program, the State's park-and-ride programs, the State Energy Office, and the cities and towns of the metropolitan area. A staff report had been prepared on the 1973-74 and 1979 gasoline shortage experiences in the area. The report also identified promising initiatives to deal with the shortages, in particular the identification of items within the SIP and TSM programs which deserved special priority as a means of dealing with energy, air pollution, and congestion in a coordinated way. The report indicated that during the brief gasoline shortage of 1979, most of the existing transit, paratransit and ridesharing programs could not keep pace with the demand. Very visibly, the telephones in the offices of the YTA and ridesharing matching program were not answered, and major overcrowding occurred on the transit system.

An interesting breakdown of the differences of travel impact among sectors within the region had also been prepared. The region-wide numbers reported in the media indicated that transit utilization had risen by 20 percent at the height of the 1979 shortage. The staff report estimated that in regional terms, the journey to work mode split changed as follows:

Preshortfall Conditions	Actual Conditions in 1979		
10 percent transit	to	12 percent transit	
5 percent walk and other	to	6 percent walk and other	
25 percent ridesharing	to	28 percent ridesharing	
60 percent single occupant	to	54 percent single occupant	
vehicle		vehicle	

This showed a 5-1/2 percent decrease in auto vehicle to work (i.e., both single and multiple auto) trips to work with total number of journey to work trips having remained essentially stable. The larger part of the 10 percent fuel shortage had been absorbed in a 12 percent decrease in recreational and convenience travel.

On a subregional basis, the journey to work in the core region changed as follows:

Preshortfall Conditions		Actual Conditions in 1979
25 percent transit	to	27.5 percent transit
12 percent walk and other	to	14.5 percent walk and other
30 percent ridesharing	to	33 percent ridesharing
33 percent single occupant	to	25 percent single occupant
vehicle		vehicle

The suburban sectors changed as follows:

Preshortfall Conditions		Actual Conditions in 1979
6 percent transit	to	8 percent transit
2 percent walk and other	to	3 percent walk and other
22 percent ridesharing	to	25 percent ridesharing
70 percent single occupant	to	64 percent single occupant
vehicle		vehicle

That is, while the transit journey to work modeshare increased overall by 20 percent, it increased only 10 percent in the traditional core of the system, and over 30 percent in the suburban services. This apparently occurred in part because the core service was already more crowded and had less reserve capacity. In the core, transit riders outnumbered ridesharing passengers and almost equaled the total number of ridesharing passengers plus drivers. In the suburban area, total ridesharing dominated transit by a three-to-one ratio. In the suburban areas the "target" population of single occupant vehicle commuters represented over two-thirds of the commuters, while in the urban area this was under one-third (and probably much closer to some limit, assumed to be under 20 percent). The report suggested a need to expand transit and ridesharing capacity throughout the system, with a particular emphasis on ridesharing and new kinds of service in the suburban areas to absorb the larger target of potential new patrons.

In the event of a 15 percent shortfall, if commuter travel were to absorb a proportionate share of the shortfall, transit and ridesharing levels of twice those experienced in the 1979 shortage would be required. Significantly more would be needed if a goal was to absorb proportionally more of the shortfall in the work trip in order to minimize the adverse economic impact of reduced recreational and other discretionary travel. It was clear that this indicated shifts in behavior patterns much larger than any recent experience, and that the adjustment time might be very short.

2. Analyze Current Fuel Supply Conditions

The MPO established a working relationship with the State Energy
Office and DOT to develop and understand the methods used to estimate

the consumption of fuel in the region. They considered three ways to develop those estimates (all of which were unreliable):

- a. From State gas tax revenues, which provide data from the entire State; those data could not be broken down by subregions.
- b. From estimates of vehicle miles of travel in combination with average vehicle fuel consumption rates. These numbers could be broken down into regional totals using the transportation models in use. However, these were considered less reliable.
- c. From estimates provided by the fuel suppliers in the State. This would probably give the best estimates of consumption for the state and by subregions. However, the mechanism for gathering these data had not been adequately developed.

A subcommittee was established consisting of representatives from the fuel suppliers, State DOE, State DOT, and the MPO to develop a fuel consumption estimating technique that would give more accurate estimates on a short-term (say month-to-month) basis than had been possible to date. Meanwhile, the traditional estimating procedures had to be used.

3. Analyze Existing Transit, Paratransit, and Ridesharing (TPR)

Services (Vehicles and Ridership) to Determine Available

Capacity and to Plan Better Use of Existing Services,

Equipment, and Labor

The MPO, working with the Yourtown Transit Authority, did a detailed survey and analysis of the following:

- a. Current bus service
- b. Potential new routes and service areas
- c. Potential park-and-ride locations
- d. Potential location of high-occupancy vehicle lanes
- e. Strategies to reduce the YTA internal fuel consumption
- f. Strategies to increase the capacity of the existing bus fleet
- g. Possibilities of purchasing new buses and rehabilitating old buses

- h. Effects of variable work hours on peak-hour services
- i. Potential changes in routes and schedules
- j. Possible modifications to vehicle maintenance practices, schedules, and standards, to increase vehicle availability during prime service hours
- k. Inventory of maintenance equipment and parts, and recently retired mechanics to assure emergency readiness
- Differences in needs of core area, suburban areas, high density corridors, etc.
- m. Revenue impacts of various contingency actions
- n. Coordination with auxiliary and paratransit services
- o. Locations that might better or as adequately be served by paratransit and ridesharing alternatives.

A similar analysis of existing capacity and services for improved utilization of paratransit and ridesharing services was also conducted. The MPO undertook these analyses with the assistance of the Mayor's Transportation Advisor, the Schoolbus Operators Association, the Taxicab Operators Association, and the Regional Ridesharing Director.

4. Analyze Likely Demand for TPR Services

The MPO analyzed the potential demand for transit, paratransit, and ridesharing services based upon varying conditions of four assumed levels of gasoline shortfall: long-range conservation strategy with no shortfall; 7 percent brief, (three-week) shortfall; 12 percent long (six-month plus) shortfall; 12 to 20 percent long (six months or more) shortfall. The MPO attempted to use its current transportation planning model, making crude adjustments to get a sense of the "order of magnitude" of demand. These estimates were heavily hand-adjusted, with the participation of personnel from the YTA, taxicab companies and

intercity bus companies, and the city traffic and police traffic control departments, in order to introduce practical judgement. Given the need for quick information, there was no time to become involved in elaborate revisions to the current models. The goal was to develop a sense of where the most pressing need for increased services was likely to occur, to serve as an input to the public understanding of the severity of the situation and to assist the ongoing task force deliberations.

The MPO staff combined the analysis from these four activities, and the existing programmed SIP and TSM actions to establish a description of the likely transportation problems in each of the four scenarios called for in the State request. The thirty-day "draft plan" was prepared to show very clearly what could and could not be expected of the in-place system if a crisis occurred immediately. This would inform both the general public and the other active participants of the ability to provide transportation services during an emergency as accurately and realistically as possible.

- V. COORDINATING THE DEVELOPMENT OF THE METROPOLITAN CONTINGENCY PLAN
- A. The Public MPO Meeting for the Presentation of the Thirty-Day Draft Plan

By agreement with the MPO members, the staff presentation of the thirty-day draft plan was given to the news media the afternoon before the public meeting, so that the evening newspaper and radio and television news explained the highlights of the MPO staff report on the evening prior to the MPO public meeting and focused attention on the MPO meeting. On the day of the meeting, morning media coverage was also extensive.

The MPO director worked very hard to be sure that all the major actors were prepared to participate in the public meeting by taking the following actions prior to the meeting:

- Distributing to all invitees copies of reading materials, including all relevant DOT and DOE reports and the MPO staff report;
- Personally calling each actor responsible for a presentation to verify the date, then personally inviting the entire list by phone, identifying the kind of participation which would be helpful over the next several months and, in particular, at the first two meetings.
- Working with the media for a Saturday session and getting Sunday coverage with in-depth newspaper explanations of the process; and,
- 4. Meeting with each actor responsible for a presentation to coordinate the agenda and be sure that each had handled necessary prior communications within institutions, with unions, etc.; further, making sure there was tentative agreement on the kinds of task forces which would be proposed, that the appropriate organizations were prepared to assume the lead responsibility, and that other major actors were comfortable in participating in something other than a lead role.

At the MPO meeting, the first item was to provide a detailed presentation of the thirty-day draft plan. It highlighted the

description of the likely situation in the event of fuel shortfalls of various levels of severity, and the discussion focused on the need for more active participation to produce an improved plan to better deal with these problems. As expected, because of the limited new initiatives in the plan, it dramatically documented the vulnerability of the metropolitan area to varying levels of shortfall. Most of the day consisted of presentations by major actors of their reactions to this plan, the situation it described, and proposals on how to proceed.

After the MPO staff presented the thirty-day draft plan each of the major participants in the process made the following presentations.

- The MPO The Chairman of the MPO focused upon the need for 1. public information, for expansion of transit and ridesharing, and for actions by many different actors in an environment of shared information and coordination. He gave an overview of the purpose of this meeting and the next one scheduled in two weeks. He indicated that the main objective of this meeting was to focus on the situation as it would likely be under various levels of shortfall, given the current thirty-day plan, from the perspective of many different institutions. He expressed hope that the period between the two meetings would be one of intense further discussion and consideration of the situation, to prepare for the second meeting in two weeks. This activity would culminate in a master plan for planning, whereby major tasks would be identified, lead agencies established, and task forces involving interested parties would be formed. Each attendee was asked to focus upon the presentations by asking him or herself what role he or she would like to play in the ongoing planning process.
- 2. The Yourtown Transit Authority (YTA) The director of the Authority described what he perceived to be the most pressing items in

preparing for contingencies. He stated that the capacity of the transit system to absorb additional riders was basically a function of its "normal" capacity; i.e., additional people could be absorbed by crowding extra people into the service which exists. Because of the expense involved in preparing to carry additional people, the YTA could best finance preparedness if increased ridership were developed in advance of a crisis to sustain the cost of the larger capacity. So, the YTA sought to develop strategies which combine conservation goals of long run ridership increases with contingency goals of preparedness. There were six areas of major priority which he desired to concentrate on for this contingency planning effort.

- a. Improved public information A breakdown in public inquiry response capability was a major embarrassment in 1979. The thirty-day plan clearly indicated that similar problems would develop if a shortfall occurred. The YTA wanted to be much better prepared in a future situation, but it could not afford an ongoing response capability based upon the surge of inquiries during a crisis. The YTA proposed to participate with others to develop a multi-purpose crisis information capability within which an improved transit information system could function.
- b. Fuel efficiency programs Already underway was an internal review of methods to reduce fuel consumption in response to the increased cost of fuel.
- Expanded system capacity This included strategies to С. expand fleet availability, increase the number of trained workers, revise maintenance practices, restructure service patterns both for immediate alternatives and for "on the shelf" actions appropriate during crises, and an increased priority on the downtown transit mall project under consideration for several years. Because the program required cooperation and coordination with several other actors and affected both service level of preparedness and financial requirements, the YTA indicated an interest in chairing a task force in this area to try to develop a consensus on appropriate levels of action for the different possible levels of shortfall and the different possible levels of financial and legislative support that considers current budget constraints, changes in financial support and changes in regulations.

- d. Park-and-ride facilities During the last shortage, park-and-ride facilities were overcrowded, and severe competition developed at some facilities between carpool/vanpool and bus patrons. The MPO study indicated that this would be even more severe under the levels of shortfall hypothesized. The YTA was anxious to work with ridesharing promoters and the State's park-and-ride program to anticipate and resolve these problems in advance, but felt the lead responsibility should remain with the State.
- e. Alternative work hours The YTA's analysis of capacity had indicated that if 30 percent of downtown employment shifted to flextime, an effective 25 percent increase in peak period transit capacity would result. In addition, reduced congestion would produce bonus benefits in reduced running time for transit vehicles and improved fuel economy for general traffic. The MPO study showed clearly that no significant movement had occurred in this direction, but that the potential anticipated by the YTA was correct in order of magnitude. This was seen as a major opportunity the YTA was anxious to promote, but it seemed to be an area most appropriately chaired by some other actor with support and participation coming from the YTA.
- f. Fare increases The YTA was under severe pressure from inflation in the cost of labor and fuel, and it was already at the limits of its subsidy support levels from Federal and regional sales tax sources. At the same time there was great concern not to discourage ridership through excessive fares. The YTA offered to chair a task force to deal with the financial prospects of the next five years and to develop a strategy with the support of other actors which would include a strategy on fares, marketing, service levels, and possible new sources of finance.
- 3. State Department of Transportation The ridesharing director pointed out that ridesharing was already the major fuel efficient mode of travel in the region, especially in the suburban areas. In addition, it was the mode most feasible of expansion upon short notice in the event of gasoline shortages. Yet the "spontaneous" increase in past crises had been slight, and relatively temporary. At the same time, the public program of computer matching was totally overwhelmed by the 1979 shortage, and the vanpool program was unable to respond because of a lack of availabale vans when interest spurted because of the shortage. The MPO study showed that the slight increase in ridesharing capacity

introduced since the last shortage was inadequate to deal with the surge of interest which could be expected and should be stimulated in order to deal with the shortfall levels considered. The State DOT expressed interest in pursuing the development of expanded capacity to deal with these problems and identified FAUS funding to expand capacity if suitable institutional interest could be developed. The ridesharing director focused upon four items:

- a. Computer matching program In order to expand the capability of this system, the DOT expressed interest in supporting local community based ridesharing coordinators. They could generate increased participation in the computer matching program in advance of a crisis, and serve as an expanded response capability during crises, particularly for employees of small firms unable to form carpools with fellow workers. They could be involved in other forms of TPR (transit, paratransit and ridesharing) promotion at the local level, and be partially funded through state and federal funds. The State DOT proposed to develop this concept with interested municipalities or other institutions.
- b. Employer-based ridesharing The State DOT proposed to support a major effort with employers, in order to achieve the more extensive capability for crisis response by using the existing institutional relationship between workers and employers. Because this requires prior activation of the employer for best results, the State DOT proposed an immediate expansion of efforts in this area.
- c. Vanpool program The State DOT was in the process of developing a standby supply of vans, financed through the interim use of FAUS funds already committed but not yet into construction in order to provide quick response when vanpools are formed. They were anxious to develop an outreach program to effectively promote this activity, principally in conjunction with (a) and (b) above.
- d. Coordination with State contingency planning The State DOT was participating in the State task force on contingency planning which was just getting organized, and offered to provide linkage between the regional and statewide efforts.
- 4. <u>State Highway Office TSM actions</u>. The TSM program director proposed that several actions under existing TSM and SIP programs

deserved higher priority to better prepare for contingencies. Expanded use of flextime by downtown employers and implementation of inter-connected signal systems already under development as part of the Transportation Improvement Program (TIP) were expected to produce significant improvement in peak hour fuel economy and travel time. While the MPO staff analysis indicated that with significant levels of gasoline shortfall the levels of congestion would fall anyway, (suggesting that other TSM actions might deserve higher priority), the highway office proposed to continue with the existing initiatives in order not to lose momentum and because congestion reducing TSM actions would have energy conservation value in and of themselves. At the same time, the highway office proposed increasing the priority of other TSM elements; in particular, improving the park-and-ride program by better integrating it with restructuring of transit and ridesharing programs. In addition, new initiatives seemed appropriate to consider in the light of the gasoline conservation goal, such as converting many traffic signals to flashing during off-peak hours, and lowering speed limits in excess of 45 miles per hour. He expected that these measures, if judiciously imposed, might actually create more stable flow in many cases and reduce travel time as well as gasoline consumption and air pollution, and might be appropriate for implementation prior to a crisis in some locations. As evidence of the priority he attached to this activity, the District highway director was willing to chair a park-and-ride task force and participate in expanded funding of park-and-ride or other beneficial TSM initiatives.

5. <u>The State Energy Office</u> - The Director gave an explanation of the federal allocation system and the State set-aside program, together

with an offer of willingness to consider special arrangements to ensure availability of fuel supplies for paratransit providers, taxicabs, school buses, auxiliary transit and vans. She made it clear that the impetus for such a program should come from the metropolitan level, with participation in the planning by the fuel distributors, and emphasized that the State Energy Office wanted to cooperate but did not have the staff to design programs suited to local needs.

- 6. <u>Suburban Municipality</u> A suburban town manager discussed the town's interest in transportation. The town had formed a local transportation committee staffed by one planner and two CETA* employees. They also devised a local elderly transportation service using school buses during the midday, publicized the transit services in the town, and developed a "good neighbor" ride service, with people needing or offering rides calling a town hall number in advance. The MPO staff report indicated that more severe problems could be expected in suburban areas in the event of future petroleum shortfalls, so the town was anxious to expedite efforts by participating in several initiatives:
 - a. Increased cooperation with the regional carpool matching service to act as a local outreach for work trip matching for car and vanpooling;
 - b. **Expanding the local elderly/school bus service to handle local youth trips in order to reduce fuel consumption and traffic accidents;
 - c. Investigating the use of school buses for work trip needs in a severe energy contingency plan;

^{*}CETA is an acronym for Comprehensive Employment and Training Act, a Federally funded program.

^{**}The town had secured the agreement of the school bus contractor and school committee in exploring these concepts.

- d. Developing reciprocal taxi rights with other towns so that more efficient use would be made of the very limited taxicab services;
- e. Participating in park-and-ride and restructured transit service planning; and
- f. Exploring new State and Federal sources for funding such programs.
- 7. The Central City Mayor The mayor was the luncheon speaker. She explained that the city had been active in supporting the development of the Yourtown Transit Authority as well as a pilot elderly and handicapped brokerage program, through which city health and welfare, and handicapped services must purchase transportation within the demonstration area.

The city fared reasonably well in the 1979 gas shortage. With long distance recreation travel impaired, people increased their local recreational activities, and weekend and evening activity in the city had increased. The major problems were peak-hour crowding on the transit system and the lack of taxicab service in poor and minority areas and at the hospital, because cab demand was so great at the airport and downtown. The city staff was working closely with the MPO and the YTA. The MPO report showed clearly that the impact of the levels of shortfall examined in this study would be more severe on the city than the relatively mild problems of 1979. The Mayor was anxious to explore new and expanded programs to prepare for such a possibility by initiating activities such as:

a. A city employee plan, consisting of the introduction of flextime for 60 percent of city employees and a new travel allowance with a parking charge plan. Under this program, previously free employee parking would be "priced" at \$30 per quarter, but each employee was given a \$30 per quarter allowance to be used to purchase a parking sticker, or a

prepaid transit pass, or as a cash supplement for those who walked or bicycled to work.

- b. A revised taxicab plan, whereby gasoline pumps at newly opened special stations run by the city would sell gasoline to cabs to assure gasoline supply at the same time new multiple ride regulations go into effect. The Mayor also expressed interest in pursuing the use of vans as jitneys at twice the transit fare along major routes. Current taxicab operators would be offered the first opportunity to provide the new service. She also announced a desire to explore reciprocal rights with suburban towns, and the introduction of transit contracts to cabs to cover low density routes and various times of the day. The Mayor committed the city to lead a taxicab task force to explore these issues with suburban town and taxicab providers, the YTA, and state regulatory agencies.
- c. An expansion of the elderly and handicapped brokerage to cover at least the entire city, with expansion beyond to those suburban towns interested in participating. All city human service agencies were required to buy transportation service for their clients exclusively through the brokerage. The brokerage would first use existing agency-owned vans, and then purchase service from private vendors. The city was interested in pursuing the support of state human service providers and suburban towns in the service, and getting UMTA Section 5 funds to help finance the cost of subsidy.
- d. Assignment of CETA workers under supervision of two planners to provide local transportation coordination. They would each work within one section of the city to publicize alternatives to single occupant vehicle travel, particularly for the journey to work, encouraging "reverse commuters" to join the region-wide carpool matching program and urban workers to try transit or walking. They would also develop an information response capability to handle crises. The city also was interested in working with other agencies, including the ridesharing program, suburban governments and the YTA, to develop this concept.
- 8. A Major Downtown Employer One employer described the problems during past shortages of increased tardiness and absenteeism due to overcrowding on public transporation, which were as difficult as those associated with the unavailability of gasoline (over 50 percent of his workers arrive by public transportation). The employer has been a pioneer in business involvement in transportation, having been an

earlier supporter of the public transit system and one of the first firms to participate in the prepaid pass program. The MPO report indicated clearly that crowding on public transportation in the event of even a 7 percent gasoline shortfall would be much more severe than that experienced the previous year, and the employer was concerned. He was also concerned that any transit fare increase would increase inflationary pressure upon his employees (and thus on him). The firm was considering the introduction of flextime and partial subsidization of the prepaid pass, but wanted further exposure to other contingency planning efforts before making a final decision.

- 9. A Major Suburban Employer Another employer described experiences during previous shortages of increased tardiness and absenteeism. Also, as a firm with major government contracts, he explained that the firm felt a "special obligation" to help in energy conservation. (He had heard that serious conservation efforts may be required in the future, so he would like to be known as a leader in the area.) In addition, the firm was planning expansion which would reduce available parking. It had been reviewing its own situation internally and was exploring a series of options, for example:
 - a. Expanding emphasis on ridesharing through the use of computer matching services, preferential parking for carpools, organizing a vanpool program including both twelve passenger vans and four passenger autos with payroll deduction support.
 - b. Improving access to public transportation by contract service with a school bus contractor to provide a connection to a transit service available at nearby shopping centers. The firm was interested in improved transit service to that shopping center, and in cooperation with other firms, in developing a contract service distribution network from the center.

- c. Securing favorable rates on weekend car rentals for its employees as an encouragement to reduce single occupant vehicle dependency. The company leased its vehicles from the ABC Car Rental Corporation and discussed with ABC the provision of favored weekend rates to its employees.
- d. Permitting use of company vehicles for commuting purposes. The firm was exploring liability and insurance questions, and wanted to participate with other firms considering the same or similar possibilities, as well as government officials who could help with regulatory change or new legislation which might be needed.
- 10. The Antipoverty Agency Director The Director discussed the problems of the 1979 shortage experiences, when transit capacity deficiencies jeopardized access to jobs, and difficulty with cab service reduced access to medical facilities. She cited increasing hardship being caused by increased gasoline prices, insurance costs, and taxicab prices; all of which were decreasing the mobility of poor people. She viewed the MPO report as making clear that the situation could be much worse next time for an extended period of time, identified the following several areas of special concern and expressed a desire to participate early in the process.
 - Transit fares She expressed a particular concern that just as people are being driven away from auto ownership, the cost of transit would go up to help finance cost of living increases for transit workers while poor people on fixed incomes had no such benefits. Increased fares would also help finance improved transit service to suburban locations who are suddenly interested in transit. (She announced her suspicions that the real purpose of a fare increase would be to drive poor people off the system to free up vehicles to send to the suburbs.) She was also concerned that the tendency toward employer subsidization of transit passes by large employers will encourage YTA to raise fares while poor people working in marginal firms have no access to such fringe benefits.
 - b. Transit service She expressed concern that pressure to expand service to suburbs when bus fleet and driver availability were restricted would result in service cutbacks in low income areas. She indicated her interest in participating in any "restructuring of service"

			•
			•

kept pace, and with increased competition if reciprocal agreements on jitney proposals were developed. He was very interested in participating in several areas:

- a. fuel access provision
- b. any changes in taxicab regulations
- c. fare review
- d. restructuring of transit services
- 13. School Bus and Intercity Bus Operators A representative indicated that they see themselves in a position to help serve through contract services to employers and to remote commercial and recreational complexes, provided some relaxation of regulations and cooperation on insurance is feasible. He expressed concern that the higher wages at the YTA had been attracting mechanics and drivers trained by school and intercity bus contractors, so they were interested in public sector support for training new personnel for their companies.
- 14. The University Committee The Chairman described the current thinking of the Committee. The parking shortage at the Universities (exacerbated by growth in the student body, the university building program, and increasing real estate value of the peripheral parking lots owned by the university) and the increased interest in energy conservation generated by 1979 shortages had resulted in a survey of students and faculty. Because of the different individual schedules of both students and faculty, formal pooling arrangements seemed to have very little potential. Transit use seemed to have more potential for expansion, but the dispersed nature of these campuses (which collaborated in many programs) generated a premium on auto access. The Committee was currently exploring a tri-campus free shuttle, which might

both enhance the feasibility of multi-campus educational programs and reduce the need for auto access during the day and thus lead to mode shifts. The Committee was also exploring the possibility of subsidizing prepaid transit passes for students and faculty. The description of the shortfall situation in the MPO report had increased their interest in pursuing these initiatives as a major priority.

- 15. State Legislative Committee on Transportation The Chairman of this Committee spoke last, indicating his great interest in all that he had heard, indicating his intent to stay abreast of developing plans by staying in touch with local area legislators and through the efforts of his committee staff to monitor developments. Then, if need for legislative action were identified, he and his committee would be aware of the issues and able to give expedited action to any critical items.
- B. Aftermath of Presentation of Draft Thirty-Day Day Plan: Initial

 Meeting of Task Forces

The news media provided major coverage of the Saturday meeting, with a special section in the Sunday paper on gasoline contingency planning. In addition to the news stories on the Saturday event, television interviews were conducted with the Mayor of Central City, the State Secretary of Transportation, the director of the YTA, the suburban town manager, and the director of the MPO.

There was a special focus given by the MPO staff, city hall, the YTA, and the State DOT on fielding inquiries from the public which were expected to be numerous and include some important ideas. Town governments were alerted to have one town planner prepared to field inquiries of interest, develop mailing lists of people who wanted to be notified of public meetings and to participate on town transportation

energy conservation and contingency planning committees.

The MPO staff continued to consult with all the invitees to the public meeting to get reactions and identify areas of particular interest, and began to prepare a plan for task forces to present at the next public MPO meeting scheduled two weeks later.

Steps five through eight of the twelve-step process adopted in Yourtown included:

- Analyze and select actions to increase the capacity of existing services;
- 6. Analyze and plan new services;
- Develop a fuel management plan;
- 8. Coordinate the comprehensive contingency plan with individual elements.

Before proceeding with these four steps, the MPO staff held a strategy meeting. Based on the analysis of recent experiences in Yourtown with gasoline shortages, a review of the literature concerning activities in other areas, recommendations of the U.S. Department of Transportation, a review of initiatives already under consideration in the Yourtown area and the interest of major actors, the MPO staff put together a proposed list of elements to form a contingency plan. For each element, they attempted to identify a lead actor who would assume responsibility for leading a planning and implementation process and involving interested parties in the planning. Each potential lead actor was consulted first to ascertain his or her willingness to accept the responsibility. The intent was to assure that institutions capable of implementing the major elements were adequately involved in the process and that each actor in the strategy would proceed with reasonable understanding of other initiatives under way (with coordination to be

assured by MPO staff participation on each task force); however, each activity was developed relatively independently so that it could proceed into implementation even if other elements experienced some delay.

After this process of consultation, the agreed upon list of task forces included:

- A transit contingency strategy committee to be chaired by the director of the YTA. This would include representatives from the policy board of the YTA, as well as the State, Central City, some suburban towns, suburban shopping center representatives, an anti-poverty agency representative, the Chamber of Commerce Transportation Committee member, labor union representative, and the MPO.
- A ridesharing committee to be convened by the MPO, including the state ridesharing coordinator, several major employers, representatives of the Central City, a suburban town, the Chamber of Commerce, and the central labor council.
- c. A paratransit committee to be convened by the MPO, including the taxicab association, the school bus contractor association, the intercity bus carriers, appropriate representatives of the Central City, a representative of the YTA, a representative of the legislature, a major employer, the Chamber of Commerce, the central labor council, the elderly and handicapped mobility organization, and the anti-poverty agency.
- d. A park-and-ride committee to be chaired by the State Highway Office coordinator, including the YTA, the MPO, a suburban town, the State ridesharing coordinator, and a suburban shopping center.
- An employer action committee to be chaired by the suburban major employer, with participation by four additional major suburban and two urban employers, the Chamber of Commerce, plus the Central City, the university committee, the general hospital, a representative of the small business association, the Central Labor Council, the State ridesharing coordinator, the YTA and the MPO.
- f. A local community action committee to be chaired by the suburban town manager, with participation by the State ridesharing coordinator, the YTA, the State park-and-ride coordinator, several suburban towns, the MPO, and the Central City.
- g. An elderly and handicapped committee to be chaired by the City. Because of its control of several human services agencies which spend large amounts of money in this area, the

City was in a position to implement a plan and had already begun to do so on a pilot basis. The City agreed to work with representatives of elderly and handicapped groups, the antipoverty agency, the State legislature, the transit authority and the taxicab and services in the area in developing this plan.

- h. A public information committee to be chaired by the MPO, with participation by the transit authority, Central City, major suburban town, Chamber of Commerce, the major newspaper, and radio and television outlets.
- i. A fuel priority committee to be chaired by the State Energy Office, with participation by the local fuel retailers association, the taxicab association, the transit authority, the school bus association and the MPO.

It was understood that there was some overlap in these committees, but the emphasis on involving the actors with implementation powers led to a conclusion that redundancy was to be preferred over the danger of lack of active participation.

The objectives of each task force were to:

- a. Identify contingency actions that could be taken immediately in a contingency environment;
- b. Identify longer term actions that would be appropriate, but which could not be implemented without significant changes in funding, legislation, and regulation; and
- c. Recommend solutions to resolve the problems identified above.

Based upon their participation in the task force, each actor was able to prepare his own contingency plan in a context of reasonable awareness of what actions other parties were likely to be taking. The major actors reached the following conclusions:

1. <u>Employers</u> - The major employers, in addition to the concerns they had publicly articulated, also had other concerns. They worried about enrolling their employees in the metropolitan carpool and vanpool programs where their employees, riding with employees of rival companies, might compare wages, benefits, and possibly company

techniques. They were concerned with a growing tendency to finance expanded transit programs with payroll or other taxes. They were concerned that the combination of Yourtown's clean air violation and energy concerns would result in a Federally mandated plan forcing employers to take responsibility for fuel efficient commuting by their employees, and that the specifics of the government plans might be very problematic for them. Consequently, on the theory that the best defense is a good offense, the employers put together a "self-policing" approach. They proposed an organization composed of business and labor and modeled on the United Way which they called United Ride. This effort would strongly encourage employers to develop their own in-house plans, promoting ridesharing, transit and flextime. United Ride would encourage employers to subsidize prepaid transit passes as a form of employer-based transit support far preferable (for employers) to a payroll tax, since only those firms which benefited from transit would pay for it, and those employers would presumably gain more employee goodwill from such a fringe benefit than they would from a mandated payroll tax. The YTA would also have to be more responsive to service needs because of an increased demand for those services. In addition to "jawboning," the United Ride would provide technical assistance to employers to help them set up plans tailored to their situation. Ten percent of the technical assistance service would be paid for by the employers, and the rest through State and Federal highway funds made available to the United Ride through the State DOT ridesharing program.

2. Yourtown Transit Authority - It became clear during task force deliberations that any actions perceived as explicitly shifting resources away from one group and towards another would create an

extremely bitter confrontation, especially during a crisis.

Consequently, the YTA developed a plan consisting of a three-part strategy:

- a. Revise some scheduling procedures immediately, as a response to increased fuel costs and other inflationary pressures, and provide enough money to take some preparations needed in advance of any crisis.
- b. Structure "packages" to be offered to separate constituencies which would allow each group to better its own situation if it made some sacrifice of its own.
- c. Clearly spell out the kind of actions which would be needed well in advance of a crisis, even if they were not immediately feasible, so that there could be public understanding and debate, and when a crisis hit, there would be well developed proposals ready for action.

The transit plan consisted of several elements:

Improved Public Information - Beyond participating on the information committee chaired by the MPO, the YTA initiated several improvements which mainly affected its internal operations. These included:

- a. A new bus stop sign and an information system which focused on information for bus riders would be designed. Until then, the specific information on a bus stop sign was for the motorist (where not to park) and only a general message to bus patrons that buses stopped there. An added sign, to be attached at eye level, was proposed to include information on the origin and destination and frequency of those buses stopping at that location. This was to be financed with an UMTA Section 3 capital grant.
- A new transit map would be printed as a center fold for the Sunday newspaper, as part of a generally enhanced information drive.
- c. A transit education program through the public schools to encourage courtesy on the transit system and disseminate information on the transit system to the general public was to be implemented.
- d. An internal on-line information capacity building project was designed to assure that the small customer relations unit would be kept appraised immediately of schedule disruptions and/or changes.

Service Changes

The Yourtown Transit Authority identified maintenance procedural changes which would make available a five percent increase in peak hour capacity. Since these changes would take time to implement, the YTA had received approval of the finance committee to proceed with these changes. However, because the YTA was not in a position to add permanent drivers for what might be sporadic increases in patronage, it sought an agreement from the union to use part-time drivers to cover special peak service. The transit workers union seemed prepared to accept the use of part time drivers, providing a clear definition of emergency could be agreed upon. (Their willingness seemed related to settlement of a partial cost of living feature the union wanted in their contract.)

The YTA was prepared to add a slight service increment to "restructure" some suburban service into regional shopping centers and park-and-ride facilities. If suburban localities would supplement the basic service with local feeder service to these suburban areas, the YTA would be able (in a severe shortage) to turn back service at these "nodes" in order to increase capacity on the "trunks."

The YTA was also prepared to withdraw its historical objection to competing services by partransit providers within its service district (an action which was now pending before the State public utility commission). YTA officials stated they would object to any "diversion" of Federal UMTA Section 5 operating monies to such services, but would not object to parallel jitney type service to relieve peak crowding or to provide night owl arrangements with taxi providers. (The cities and towns had requested the cessation of regular bus service

during these hours to reduce operating costs.) This in turn had to be warranted by ridership so low as to justify such substitution, and only if there were no jobs lost among YTA employees. (The Transit Workers Union was expected to object in any case, but the YTA felt that the paycheck issues at stake in ongoing labor negotiations were of much higher priority to the union, and that their objection would not be severe as long as no jobs were actually lost.)

The Authority was prepared to develop uniform service standards and review its service level on any route where either the local municipality, or twenty-five individuals, or an employer representing 100 employees requested a review.

The YTA estimated it could expand peak capacity by 25 to 30 percent if a major commitment to flextime could be developed by employers. This would generate additional revenue at minimal cost, and would ease the fiscal problem as well as expand service. In addition to the focus on this activity by United Ride, the Authority committed some of its own resources to a targeted effort on employers which already included many transit patrons. The YTA initiated a program to sell prepaid transit passes at a favored rate to employers who allow flextime to encourage this development.

As an alternative to a fare increase, the YTA decided to heavily market its prepaid pass. It was already preparing a proposal to the State insurance commission to provide for a 10 percent discount on automobile liability insurance for holders of a prepaid pass (because they drive less, and thereby have lower accident exposure); it was also proceeding on the basis that employer subsidy of prepaid transit passes should be treated as a tax exempt fringe benefit (although it recognized

that this issue was unlikely to be finally clarified in the short run).* The YTA also proposed to meet with city and town governments to examine a proposal for selling prepaid passes to their residents at a discount. Further, the Authority would make a special effort to work with those employers and towns who participate in this program to negotiate improved service for their needs if the company (or town) would commit to providing a subsidy of the pass for its employees (or residents). Authority officials reasoned that if they could sell full cost monthly passes, (either because of convenience or partial subsidy) to people whose actual use was only 75 percent of work days, the YTA would increase its revenue without increasing cost. To the extent that ridership increased, the increase in marginal cost could be held to below the marginal revenue, especially if increased use of flextime In addition, not only would the cash position of the Authority improve, but if the base service were gradually expanded to meet real passenger growth, the crush load capacity for a crisis would be higher.

Finally, a new one-day pass and a one-week pass were developed to be marketed through convenience stores. The intent was to eventually make it feasible to phase out cash fares completely, allowing quicker boarding on the buses, and involving many retail stores in marketing the transit system.

The need for either a fare increase or increased subsidy support would be reconsidered in about a year. The YTA strategy was to fully explore the potential of flextime, the prepaid pass, service

^{*}PL 95-427 forbids the Commissioner of the IRS from issuing any rules or regulations dealing with a wide spectrum of employer provided benefits (including free parking and transit passes) prior to June 1981.

restructuring and improved productivity to generate ridership while holding costs and building a stronger constituency. Once that was done, and if there was a need for more revenue, the Authority would have more options than it had at the moment. It could increase fares, and ask employers and towns to increase their discounting of the pass to absorb part of the burden; or, it could propose increased public financial support, and use the support of the employers, towns, and other institutions who have an interest in fare stability as a basis for gaining this increased subsidy. It was also hoping that a proposal in the State legislature to convert the State gasoline tax to an ad valorem basis would pass and generate a new source of revenue before the next year.

Long Range Initiatives

The Authority decided to put a new priority on promoting the Downtown Transit Mall which had been languishing. The Transit Mall project had been proposed along four blocks of the main shopping street, and near the University and hospital complexes near the downtown. The proposal was to use the project to stimulate development activity. The Authority understood clearly that the Transit Mall would not even be operational for at least two years, and would not fully develop its increased ridership for several years after opening. However, it felt that this project was a good long range strategy to promote "carfree" mobility and was a vehicle to secure the support of the development community and the contractor and building trade labor interests (which had always been very active in the transportation planning process). The latter groups had been badly hurt by the decline in new highway construction, and felt threatened by the new emphasis on energy

efficiency and transit, paratransit, and ridersharing. The YTA saw the Transit Mall project as a very tangible way to demonstrate that the new emphasis was very compatible with, and conducive to, continued development in the region.

3. State Park-and-Ride Coordinator - Past experience had shown it was very difficult for the State to make significant progress in this area because of excessive local opposition. Local business interests and land owners generally wanted very high sale or lease prices for parking spaces, and neighbors to appropriate locations generally voiced very effective opposition to any increase in traffic (paradoxically, often while cooperating with traffic intensive developments permitted by the town which were perceived as benefiting local people by increasing its tax base). In short, the process was adversary. In addition, the State was unable to move quickly on more than a very few locations at any one time.

The strategy which emerged from the task forces recognized this experience, and built upon it. The State park-and-ride coordinator announced his preparedness to work through the town government or other local entities to respond to workable packages of appropriate size, location and community support. The State would fund the planning activity of towns interested in participating. The town would identify the location, determine reasonable interest by the owner, consult with the State on the appropriateness of location and price, and proceed to actually develop the lot, signing, etc. The State Highway Office would exercise its judgement on the appropriateness of the spaces and their costs, and finance the program. When the State was interested in a particular location for regional reasons, it would first try to ask the

local town to act as its agent to implement the program. In those cases where the town refused, the State would act, thus using State resources only where they were necessary. In this way, the capacity of the State to act quickly could be expanded and many of the adversary relationships could become cooperative ones. The new strategy was to be broadly publicized so that the general public would understand that they should look to their town government to take the initiative on park-and-ride. Those communities which were interested and which took the initiative would get facilities, while those which showed no interest would get no facilities, or get them later.

4. The Ridesharing Program of the State Department of Transportation - Past experience had produced positive, but disappointing results. Two new initiatives emerged from the task force. One was to cooperate with and fund the United Ride employer initiative described above. A second was to encourage the development of local community-based brokers who would promote ridesharing. It was expected that the United Ride program could reach about half of those employees who work in locations of over 100 employees, and be somewhat effective with the additional 25 percent at places of 50 to 100, but that many of the latter group and the smaller employers would need a different approach. The local base represented one end of the work trip, and might be perceived as less anonymous than the "metropolitan computer" approach. A few towns had tried such an approach with good results, and had been able to use the local broker to help develop local proposals for nonwork trip ridesharing as well. (The fact that the park-and-ride program was refocusing upon the local town helped to encourage this line of reasoning.) The strategy which emerged was for

the State Ridesharing Program to fund local brokerages, usually on a town basis, to develop interest in ridesharing in advance of a crisis, and to provide response capability during a crisis. Each Local Transportation Coordinator would have access to the State vanpool program, and (via remote terminal) to the metropolitan computerized carpool matching program.

In addition to responding to public interest and stimulating that interest through local activities, the local staff would train other town employees to assist in an emergency, thus greatly enhancing the response capability. The local staff could help identify parak and ride opportunities, new local public transit opportunities, responses to special handicapped and elderly needs, etc. In urban locations, the coordinators would concentrate on "reverse carpooling" to suburban job opportunities. The State DOT decided to proceed by offering to fund such efforts, working with the MPO to identify towns interested in implementing the idea, and publicizing the successes in order to interest other towns in participating.

5. <u>Town Governments</u> - Past experience with the state agencies had been adversary in nature. By opening these new options for direct participation in park-and-ride, ridesharing programs, and prepaid transit pass programs, the towns saw an opportunity to play a positive role in an area where citizens were becoming increasingly concerned. Some towns had been extremely pleased with the new program and had agreed to actively encourage participation by other municipal governments.

The towns (and Central City) were also interested in pursuing new initiatives involving their own traditional powers, but they needed help

from the State in order to do this. Following are some examples of the kinds of assistance needed.

- School bus utilization The towns were extremely interested in a. utilizing school buses to provide local mobility, particularly for young people. They calculated that high school students from age sixteen to eighteen accounted for 3 percent of the automobile ownership (usually through their families). State would permit the use of school buses for non-school transportation and partially finance the expanded cost, the parents of the high school students, (under growing pressure of inflation) might very likely decrease auto usage. This concern was heightened by the large number of twelve to sixteen year olds who depended heavily on "parent chauffeurs" for mobility. In addition, concern with teen drinking contributed to the interest in such a program. (There was also some consideration being given by the State to raising the driving age to eighteen as a contingency measure in an emergency. People were concerned that it was important to have developed some alternative mobility for teenagers if such a contingency plan were a possibility.) As a first step, there was a consensus on pursuing increased school bus finance and deregulation with the state. As a further contingency plan, a shift in school hours was seen as something appropriate only in a severe emergency, but the towns felt they would enhance the interest of the State in the first proposal if they agreed to the preparation of such contingency plans.
- b. Elderly and handicapped special brokerage The expansion of the city program to cover the metropolitan area, and to require public agency financed transportation to work through this brokerage was of great interest to other towns which were interested in joining.
- Jitney service Introduction of City permitted jitney service С. along transit routes to replace uneconomic "nightowl" service and to accommodate excessive peak hour flows from the transit system was supported by all the towns, all of whom supported the changes in state legislation necessary to permit this. They were interested in both the best use of tax dollars and the capacity to deal with crisis loads. Since the City proposed to permit only existing taxi operators to provide the new service (based upon a proportional share of existing taxi licenses), and because the City tied the proposal to access for taxicabs to the City Public Works fuel pumps during crises, the taxicab providers were willing to support the proposal. (Rumor had it that the City policy on cab fares was also a factor in their decision to support the proposal.) The Transit Workers Union had always opposed such initiatives in the past when the Transit Authority proposed them. The institutional separation of the City as the lead agent, and the influence of the City on

the YTA's finance committee which would have to approve new wage agreements, as well as a reluctance to be seen as uncooperative in crisis preparations seemed to be the major reason the issue did not develop into a major labor problem.

- d. Mutual access of taxicab jurisdiction The municipalities were interested in developing mutual agreements whereby a taxicab from one jurisdiction would be permitted to accept a fare from a passenger in a different jurisdiction provided the destination is in the jurisdiction of the taxicab, as opposed to the current rule which allowed service only to trips originating in the service area. It was clear that the new system would be more complicated to nolice, but the increase in fuel prices and concern with fuel availability warranted a different rule, and the taxicab companies were willing to support a demonstration in one corridor to "see how it worked."
- 6. The MPO In addition to its coordinating role, the MPO staff identified one action area where the MPO was uniformly well suited to play a role; specifically, that of providing improved metropolitan information. Improved public information was the key to the success of several other initiatives. Relatively early in the planning process, the news media decided that if they were too involved in the planning effort, their objectivity in reporting would be compromised. They made a commitment to give top priority news coverage to any public information the public agencies and private groups considered important, particularly if the major actors could agree to coordinate their public information concerning energy conservation and contingency actions in a coherent way. The group agreed to coordinate public information related to energy through the MPO, and the MPO hired a public information specialist to work fulltime on developing information.

The <u>first</u> task was to establish a plan for outreach, feedback, and responsiveness. With the experience in previous crises of being unable to handle information calls, a plan to deal with sudden surges in interest was clearly needed. The strategy devised was to enlist several groups in the efforts needed to provide advanced information, elementary

responsiveness, and develop a multiplicity of sources of accurate information in advance of a crisis as well as in the midst of a crisis situation. Thus, the local community based brokers and places of employment would become primary sources of information on the transportaion services available and gasoline availability. The general public would also be encouraged first to seek information at the local town hall or from their employer.

The <u>second</u> task for the MPO would be to staff up to form a core information group which could provide support to community-based brokers and employers, and continually maintain information from the transportation providers and maintain a general information telephone number. The MPO information core group would also run training sessions for employees of the State DOT and city public works department, who in an emergency would be brought in to handle telephone inquiries.

Arrangements were made with the telephone company to provide the capability to increase the number of phones at the information center, and for the YTA information line to convert into the information center.

Third, the YTA developed a revised internal on-line information capability so that the information unit had immediate access to information concerning actual conditions on transit lines, including delays, severe overloading, service cancellations or diversions.

Fourth, the elderly and handicapped service was developed with similar capability. The private taxicab companies also made arrangements for additional telephone lines and agreed to train back-up personnel to handle telephones in any emergency, but they did not want their customers "confused by calling a public number which might refer them to a competitor".

A <u>fifth</u> area of focus was outreach to publicize plans through speaking bureaus, using the energies of local community organizations, (to provide speakers) as well as public agencies. This activity would have the functions of informing the general public, gathering feedback, and informing interested citizens on how to impact on the decision making process in a namely fashion. All of the public agencies agreed to perform some of these activities but to keep a central file at the MPO of such contacts and indications of interest.

As a means of publicizing ridesharing, "debugging" the system, and encouraging all of the actors to do their parts, a media campaign was prepared to begin after a two-month period of preparation. It would encourage people to try ridesharing one day per week, so they would know how to do it if a gasoline shortfall occurred again. This metropolitan "fire drill" was called "Wednesday is Ridesharing Day." It was promoted particularly by the helicopter based traffic coordinator, radio announcers, several disc jockeys, and transit and newspaper ads.

In order to fund this increased information capacity, a combination of UMTA Section 8 planning funds and FHWA urban systems funds were assembled for first year operations.

7. Actors Not in the Public Process - It is important to emphasize that much of the activity which helped prepare Yourtown for improved gasoline conservation efforts was not formally a part of the public process. The public process, and the publicity concerning it, helped create an environment wherein individuals and private groups initiated their own actions to help themselves or improve their business situation by providing useful services marketed to capitalize on the increased public concern with gasoline conservation. The public agencies tried to

be aware of, encourage, and cooperate with these actors where help was needed on a one-on-one basis.

For example, one of the car rental and leasing companies had done some market research, including an analysis of the cost of owning and operating an automobile which indicated a growing potential market of people who could be much better off by participating in ridesharing or using transit for the journey to work, supplementing this with occasional rental of a vehicle for recreational use. The firm decided to undertake a major marketing effort, beginning with several existing relationships with major firms who leased company fleets, and then expanding to new employers. This effort also included a media campaign, offering discount rates on weekend car rentals to ridesharing participants in employer-based programs. In addition to the direct benefit of penetrating this new market, the car rental company was motivated by the belief that once a working relationship with a major firm was established for employee ridesharing, that employer would fairly soon see the advantages of leasing all its vehicles. Thus, the car rental company saw this as a major two-pronged business development opportunity which it was willing to promote vigorously. The MPO and United Ride were aware of this initiative and were very pleased that a profit-oriented marketing campaign would be supplementing their efforts, and they gave their cooperation to the car rental company.

In another case, some automobile sales outlets saw in the state vanpool program an opportunity to help get low-cost financing for customers who were discouraged from buying by high-interest rates (and help themselves sell more vans, since sales were lagging because of increased concern with gasoline price and availability). The auto sales

people dealt directly with the state vanpool organization to set up the program and publicize it.

In many other cases such as these, it was critical that the interest and energy of the private initiatives were not turned off by inviting the private parties to "coordinate" with dozens of other actors.

Instead, the public entity whose cooperation was needed by the private actor dealt directly and expeditiously with him, and the public agency assumed the responsibility of informing the MPO and other appropriate agencies.

The MPO collected, coordinated, and consolidated all of the individual agency plans into one document, described as the draft "Ninety-day" contingency plan, and generated rough estimates of the performance of these plans under the four different shortfall scenarios.

IV. COORDINATION OF DRAFT "NINETY-DAY" CONTINGENCY PLAN

Steps nine and ten of the twelve-step process included: (9) coordination with ongoing local programs, and (10) integration with State and Federal plans. To implement these steps, the first draft of the ninety-day regional contingency plan (the three-month plan) was distributed to the following:

Governor's Office

Each member of the local energy

commitee

State DOT

State DOE

Other major employers not on

the local committee

MPO Advisory Committee All the Yourtown task forces

Copies of the plan were also circulated to public libraries to allow general public review. At the same time, the MPO staff received a copy of the first draft of the Statewide Transportation Contingency Plan which had included the thirty-day document submitted by the MPO.

The State plan included four basic kinds of action:

- a) Actions to promote and encourage public order at the gasoline pump by requiring retail management actions (e.g., minimum purchase requirements, mandatory gas station hours of operation, and odd-even purchase plans.)
- b) Actions to reduce gasoline demand per vehicle mile of travel (e.g., by strict enforcement of all speed limits of 45 mph or greater; selective lowering of some speed limits; and information campaigns encouraging motorists to maintain proper tire pressure, engine tune-up, the use of low viscosity oil, improved driving techniques, etc.)
- c) Actions to reduce the number of vehicle miles traveled per person mile traveled (e.g., encouraging transit, paratransit, ridesharing). This included expanded funding for carpool and vanpool programs (by shifting some highway funds), and authority for the Governor to suspend regulations prohibiting shared riding in taxicabs, jitney operations and the use of school buses for public transportation. It also included an employer-based plan, whereby every employer of more than 100 employees would be required to provide ridesharing assistance to his employees in the event of a crisis.

d) Actions to reduce vehicle miles travelled by restricting mobility (e.g., a Sunday driving ban, a carless day plan where one carless day per week would be assigned by license plate or chosen by the motorist; a ban on travel on certain roads except in carpools; raising the driving age from sixteen to eighteen years old, a pump access plan, limiting motorists' purchase of gas to one day per week, based upon the last digit of their license plate, and a gasoline surtax of 100 percent of any increase in wholesale price byond 10 percent of the then current price with the proceeds rebated to consumers.

The State plan was remarkably compatible with the Yourtown Metropolitan Plan, but this was not an accident. In addition to the formal submission to the State of the thirty-day plan, the MPO had maintained very close liaison with the State DOT and DOE. The ridesharing, park-and-ride, and energy office representatives who had participated in the metropolitan process represented state agencies which had been participated at the same time in the State contingency planning process.

The main conflict between the metropolitan and the State plan concerned the question of new legislation and funding. The State plan had been devised to operate principally on the Governor's emergency powers, thus avoiding the need for new legislation. The metropolitan plan included several elements which required implementation well in advance of a crisis, and would require new state funding. For example, the use of school buses to provide teenage mobility, required the elimination of restrictions on the use of school buses and increased funding. Another example was a proposal to exempt taxicabs from state gasoline taxes in order to secure their acquiescence to licensing of jitney operations. A third example was the need for legislation to have the State guarantee the transit workers' pension fund, in order to secure their acquiescence to parts of the package. The State legislators who had been involved in the Yourtown contingency planning

process had discussed these matters with key members of the legislature and assured the State DOT that legislative approval would be feasible, particularly if new state funding required a local matching share by the municipalities. The MPO director felt that this requirement would reduce the number of towns which would participate, but it seemed a reasonable compromise to get some movement on legislation. In the meantime, until new legislation was approved, everyone would proceed assuming the plan based would be implemented using the Governor's emergency powers.

A public hearing for the ninety-day plan had been scheduled 120 days into the process. During the prior month, the MPO staff had numerous meetings with key participants in the preparation of the individual elements of each plan. There were differences of opinion to be resolved, as well as some misunderstanding of some of the commitments that had been included in the plan. Meetings were also held between the MPO and several state agencies to resolve questions that had arisen and to overcome inconsistencies and minor conflicts between the local plan and the State plan. Several coordinating and informational meetings were also held with the U.S. DOT and U.S. DOE, and area legislators and Congressmen.

At the public hearing, a full day was devoted to receiving written and oral suggestions. There was criticism of the plan not being comprehensive or far reaching enough. Several special interests felt their concerns had not been adequately addressed.

After the public hearing, the MPO asked each task force to meet to discuss the detailed questions and concerns that had arisen. The MPO staff continued working with the task forces and the full Advisory Committee in developing the final version of the metropolitan plan.

A second draft of the metropolitan plan was presented to the Advisory Committee of the MPO for one last set of comments. The plan was then finalized, approved by the MPO, and submitted to the Governor.

VII. PREPARING FOR IMPLEMENTATION

Steps eleven and twelve of the twelve-step process were, respectively, "implementation strategy and timing for each action," and "periodically update the plan."

The submission of the plan to the Governor represented the end of one major stage, but the beginning of another. All the actions to be implemented had been self-selected by the appropriate operating agency or institution. The early actions needed to prepare for implementation would be taken so that within three months (by day number 180) those actions would be ready for actual implementation.

The MPO took the responsibility for preparing a revised TIP to incorporate the agreed upon program changes that reflected the next priorities that had been selected. In addition, the MPO changed the Unified Work Program to reflect the new planning priorities that emerged from this process.

It was obvious that the cross fertilization of ideas in the planning process had been beneficial and stimulated many organizations to commit themselves to new initiatives. It was also predictable that there would be problems during the implementation stage where cooperation from other actors would be key. Thus, the MPO was given a role of continually monitoring progress, in order to identify problems which might benefit from coordination among metropolitan actors and with the State.

The MPO was also given the lead responsibility for further development of the contingency actions that required more analysis. Each operating agency agreed to provide the input needed for that purpose.

Recommendations that required new funding and new legislation were handled by the state or regional agency having the programming responsibility for that particular activity, with the MPO monitoring progress and keeping all the actors informed.

The strategy had been put together so that each actor knew what he was expected to do, and what he could expect of others, and everyone felt reasonably confident that the implementation would work well. What was much less clear was the reliability of the estimates on the effectiveness of this strategy under various levels of shortfall, for several reasons:

- o Many of the initiatives were new and untested.
- o The level of effort in implementation was difficult to predict in advance.
- The psychological climate during shortfall conditions was likely to be very different than "normal" times, so behavior might be very different. Thus, even where data on past experience existed, the accuracy of prediction was very questionable.

Because of the uncertainties concerning the effectiveness of various contingency measures, each organization was encouraged to implement as many of the measures as possible in the short run. This would provide an opportunity for obtaining feedback, and would allow time for making adjustments to the overall plan. In addition, initiatives which held promise but were not included in the ninety-day plan because of long lead time were pursued. The undesirability of the possible need for draconian measures such as Sunday driving bans or other restrictions on driving, combined with uncertainty about the actual effectiveness of the plan, led to continuous efforts to implement strategies as soon as possible, monitor results, improve procedures, and adopt new strategies as they become available. The MPO had the lead role in monitoring this process, and periodically updating the plan.

The MPO staff met once every month to review progress and problems. Each of the Task Forces was asked to meet as necessary to resolve particular problems that continued to emerge as the implementation details were developed. Some actions which lagged were only finally implemented by the impetus provided when the terrorist action occurred in the Persian Gulf in Fall of 1981. The MPO had been continually monitoring progress, using the good working relationship with the media to focus attention on any lagging elements wherever the necessity arose. With the added impetus of the Fall 1981, crisis, all items were implemented.

VIII. CONCLUSION

The idealized situation described in this case study might be considered unrealistic. Communication worked quickly; agreements, while rooted in self-interest, occurred without reference to the feuds and lack of information that characterize real world decision making in a governmental and political context. In addition, while a panoply of government actors and private institutions were involved in the process, much of the accommodation to the shortfall occurred through the individual decisions of people changing their own travel behavior. So, much of the government and institutional effort, one might argue, goes into changes which would have occurred anyway as people attempt to cope with long lines and closed gas stations.

This conclusion misses the point. While Theirtown consumes no more gasoline than Yourtown, the government and institutional support helping people to cope in Yourtown makes the accommodation much less onerous. That is really the major purpose of the intervention.

While no metropolitan area will be just like Yourtown, focusing upon the kind of activities (rooted in enlightened self-interest) which characterized the Yourtown idealized case can help. Real world metropolitan areas need to prepare realistic plans to help people cope with energy emergencies, and that activity should be under way now.

Table 1
Summary of Tasks and Assignment of Responsibilities for Developing a Transportation Contingency Plan

Task Resp	oonsible Actor	Major Participants Deadline
l Assess Historical Data	MPO	State DOT State DOE
2 Analyze Current Fuel Supply	MPO	State DOE
3 Assess Existing Service Capability	MPO	-Transit Authority -School Bus Operators -Taxicab Operators -State DOT -Employers -MPO
4 Analyze Potential Demand	MPO	Same as Step 3
5 Analyze Potential Capacity Increases In Existing Services	Transit Task Force Paratransit Task Force Ridesharing Task Force	Same as Step 3
6 Analyze New Services	Same as Step 5	Same as Step 3
7 Develop Fuel Management Plan	Same as Step 5	Same as Step 3
8 Coordinate All Elements of the Plan	Same as Step 5	Same as Step 3
9 Examine Linkage to Other Programs	Lead Actor	State DOT State DOE State EPA Local DPWs MPO
10 Integrate Local Plan With Other Plans	Lead Actor	State DOT State DOE MPO
ll Prepare Implemen- tation Strategy	Lead Actor	State DOT State DOE MPO
12 Update Plan	MPO, With Task Forces	State DOT State DOE

			*
			•
	•		
•			4
			,