

The 1983 New Jersey Transit Rail Strike: A Systematic Emergency Response

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ABSTRACT

Many recent experiences with transportation system disruptions have affected the transit system distribution networks of urban core areas. The United Transportation Union strike of New Jersey Transit (NJ Transit) Rail Operations, Inc., during March 1983 represented a unique situation. In this case, a statewide public transportation system, geared for the provision of long-distance line-haul access to a large urban center, implemented an emergency contingency plan to provide an alternative to this line-haul service. NJ Transit's contingency planning and implementation processes are described. The processes and results are compared with those of other large public transportation systems that have recently experienced service disruptions. A number of conclusions are drawn based on NJ Transit's performance in responding to the strike and the comparison with experiences of other transit agencies. The findings illustrate the importance of (a) predicting the necessity of having a plan and having the lead time to develop one and (b) establishing and maintaining close working relationships with other agencies whose cooperation is vital to successful plan implementation.

On January 1, 1983, the New Jersey Transit (NJ Transit) Corporation officially took over the operation of its nine rail lines, which until that time had been operated by the Consolidated Rail Corporation (Conrail). This occurred in response to a congressional mandate issued the previous year that directed Conrail to divest itself of all passenger service operations in the Northeast Corridor.

In April 1982, NJ Transit indicated that it would assume the operation of its rail lines. Because it was the first of the affected agencies to do so, this marked the first time that a state agency, created to administer and provide public transportation, would operate a commuter railroad. [Eventually, New York Metropolitan Transportation Authority (MTA), Maryland MTA, and the Southeastern Pennsylvania Transportation Authority (SEPTA) did likewise.]

NJ Transit is New Jersey's statewide public transportation agency. It is different from most other large public transportation authorities in both size and mission. It oversees a statewide public transportation network, providing a wide range of services, including local-urban bus, suburban-to-urban commuter bus, and commuter rail. Each service category is composed of additional subgroups of distinct service performance. The average daily performance of each of the three major service segments is summarized as follows (data are from the NJ Transit Department of Planning, June 1983):

<u>Service</u>	<u>No. of Daily Passenger Trips</u>	<u>Avg Trip Length (miles)</u>
Rail	138,000	20.9
Local bus	276,000	4.3
Commuter bus	<u>84,000</u>	11.0
Total	498,000	

Every day 500,000 trips are made along NJ Transit's extensive bus and railroad networks. Its nine railroad lines, which provide intensive long-distance service between points in northern New Jersey and New York City, account for 69,000 of those riders, including 58,000 during the 6:00 to 9:00 a.m. morning peak period. The ridership distribution by line is shown in Figure 1. Figure 2 and Table 1 show NJ Transit and Port Authority TransHudson (PATH) rapid transit peak-period ridership.

A key goal of NJ Transit when it made the decision to assume operation of its rail lines was to achieve significant operating efficiencies by negotiating changes in antiquated and inefficient work rules with the operating unions. When NJ Transit let these intentions be known, it received clear signals from labor indicating that such a strategy would be challenged and could result in a system shutdown. At that point (September 1982), it was decided that a contingency plan for providing alternative service for railroad passengers would be developed.

Recent experiences in several large cities that have suffered prolonged transportation system disruptions point out the importance of creating and using contingency plans to minimize the negative impacts. Otherwise, the resulting "congestion in core areas can become unmanageable to the point of endangering public safety and adversely affecting the economic health of core area businesses" (1). The availability of contingency plans that outline crisis response actions and delegate roles and responsibilities to various actors can be useful to maintain order and to help commuters cope with the situation. Therefore, several operators and responsible government agencies have developed plans designed to help the public cope with transportation disruptions and the means with which to implement them. The purpose of this paper is to examine NJ Transit's contingency planning process and the eventual implementation of that plan. Results from recent research of transportation contingency planning efforts are used to provide important characteristics of planning and implementation. These characteristics are used as bases of comparison for NJ Transit's experience. They are also used to distinguish some characteristics of contingency plan preparation and implementation that are unique to transit agencies similar to NJ Transit.

CHARACTERISTICS OF CONTINGENCY PLANNING

A significant amount of literature has been published regarding governmental and community preparations for transportation supply disruptions (in addition to work on organized response to natural disasters). This research has resulted in the iden-

tification of potentially important characteristics for contingency planning efforts. Meyer and Belobaba identified four issues that must be dealt with uniformly when crisis-response plans are developed (2):

1. Clear identification of priorities for governmental response,
2. Interorganizational coordination,
3. Delineation of specific tasks and responsibilities, and
4. Relation of the likely forms of behavior of disaster and crisis victims to the measures incorporated into a contingency plan.

Of course, contingency planning and implementation processes differ depending on the nature of the crisis. Different types of emergencies will elicit varying responses from the general public. For example, the amount of advance warning and the degree of consensus among government authorities

will vary by type of emergency (e.g., a natural disaster, an energy shortfall, or a transit shut-down). However, accurate anticipation of public reaction and strong, direct action are critical elements of contingency plans in any situation. The finer points of public policy should always yield to the necessity of a clear governmental presence, which is perceived as helping to maintain reasonable public order (3).

Although some correlations exist between contingency planning for transportation disruptions and other types of crisis planning, each process has characteristics that differ from those of the others. After researching several transit system disruptions, Meyer and Belobaba concluded that for transportation contingency planning, there are three such attributes (2):

1. Planning efforts tend to become politicized. Measures are selected for political reasons, actors' roles depend on responsibilities given to them, and

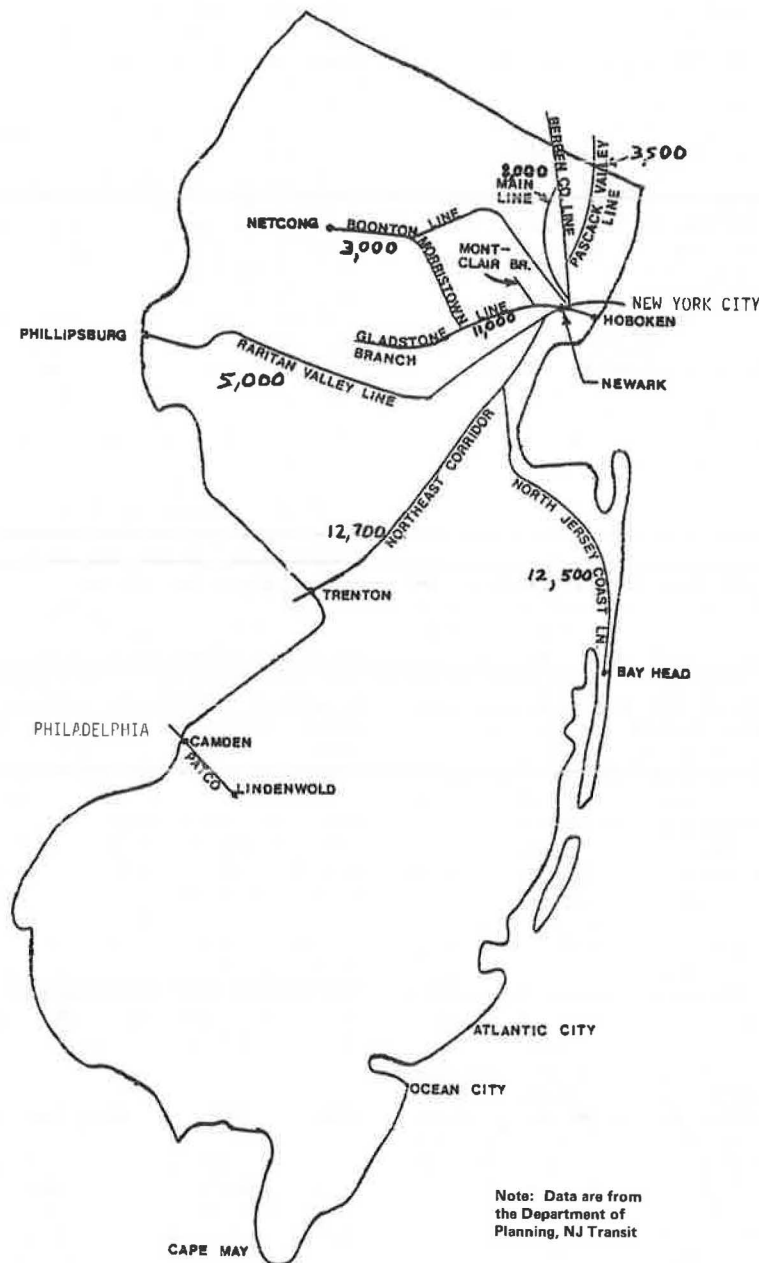


FIGURE 1 Average peak-period ridership, New Jersey passenger railroads.

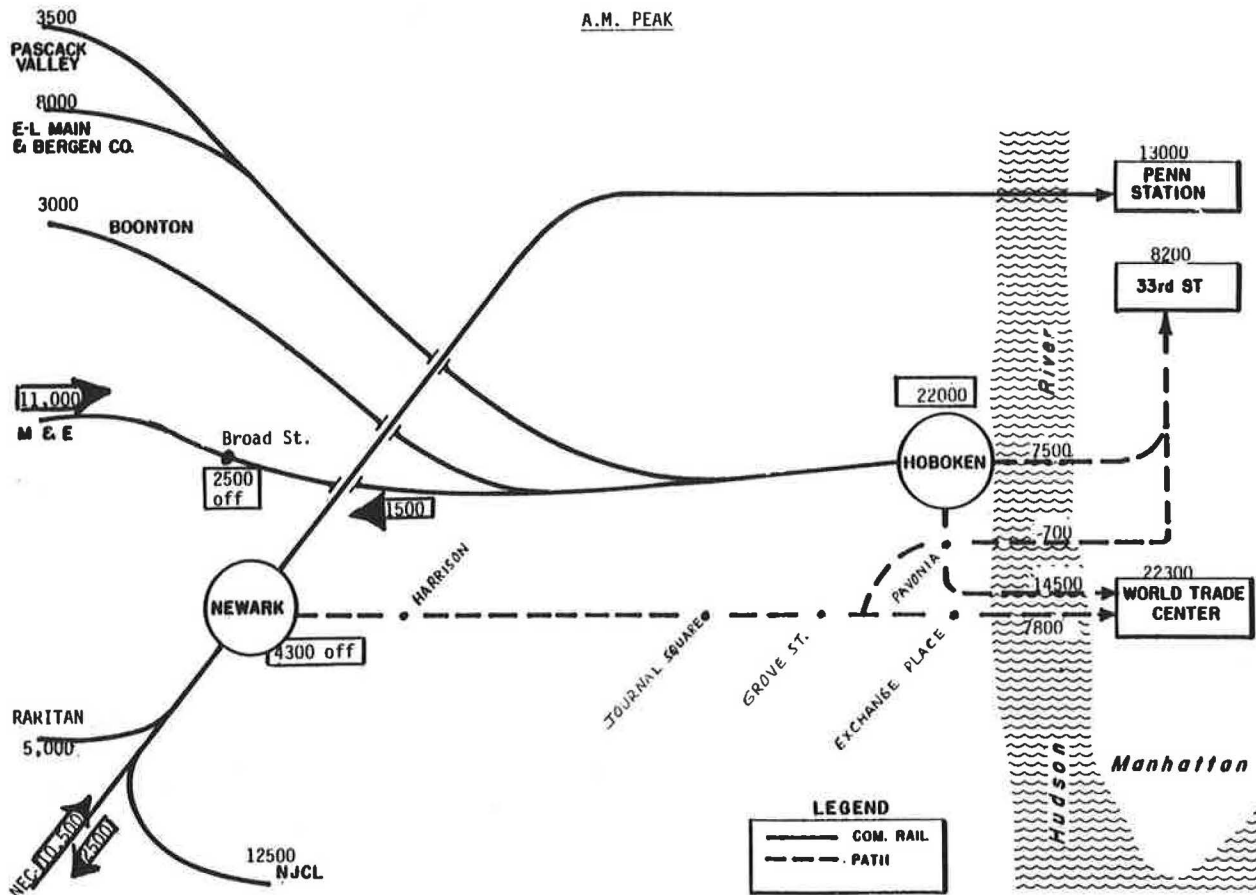


FIGURE 2 NJ Transit rail passenger movements.

TABLE 1 NJ Transit Peak-Period Rail Ridership

Location	No. of Riders	Location	No. of Riders
Inbound			
New Jersey Division		New Jersey Division	
From		To	
Northeast Corridor	10,500	New York Penn Station	13,000
North Jersey Coast Line	12,500	PATH	
Raritan Valley Line	5,000	33rd Street	700
Subtotal	28,000	World Trade Center	7,800
		Newark	4,300
		Points before Newark	2,200
		Subtotal	28,000
Hoboken Division		Hoboken Division	
From		To	
Morristown and Essex Line	11,000	PATH	
Main and Bergen Line	8,000	33rd Street	7,500
Pascack Valley Line	3,500	World Trade Center	14,500
Boonton Line	3,000	Newark Broad Street	2,500
Subtotal	25,500	Points before Newark and Hoboken	1,000
		Subtotal	25,500
Total	53,500		53,500
Outbound			
Northeast Corridor	2,500		
Morristown and Essex Line	1,500		
Other	500		
Total	4,500		

plans often become a source of leverage for influential interest groups. Emphasis is given to crisis management and program implementation.

2. Effective response to a crisis situation requires a management structure with clear lines of authority and communication.

3. Crisis situations offer unique opportunities to implement actions that under normal circumstances would not be adopted or would take a long time for approval. A need for quick governmental action often dissipates routine implementation obstacles. (For example, during the 1966 New York City transit strike, Fifth Avenue and Madison Avenue were converted into one-way streets to improve traffic flow. The proposal had previously met stiff opposition but was kept in place after the strike.)

The characteristics of contingency plan implementation are also important. Implementation "must not be conceived as a process that takes place after, and independent of, the design of policy. Means and ends can be brought into somewhat closer correspondence only by making each partially dependent on the other" (4). In other words, policy makers should pay as much attention to the machinery necessary for executing a program as they do to that for launching one. Lloyd and Meyer identified a set of characteristics for project implementation, many of which can be applied to contingency plan implementation (4):

1. Successful implementation requires a group of individuals who are committed to orchestrating the innumerable events necessary to overcome implementation obstacles.

2. Responsible agencies must maintain a flexible approach toward implementation and be willing to make adjustments.

3. Developing and maintaining a constituency that can support the plan from development through implementation is vital to success.

4. Consistent communication and feedback designed to gauge the response of constituents and modify strategy accordingly are necessary.

5. A marriage between the goals of the professional advocates of the plan and the objectives of those wielding political power is an important ingredient for success.

PREPARATION OF RESPONSE TO NJ TRANSIT STRIKE

Shortly after the NJ Transit Board of Directors voted to assume operation of its railroad from Conrail, a small task force was established to develop a rail strike contingency plan (5). The task force included staff from NJ Transit corporate headquarters, the NJ Transit bus operations subsidiary (NJT Bus), and the newly formed rail operating subsidiary (NJT Rail). In addition the task force included representatives from the New Jersey Turnpike Authority, the Port Authority of New York and New Jersey (PANYNJ), New York MTA, the New Jersey Highway Authority, and the New Jersey Department of Transportation (NJDOT).

From the outset, the task force had two goals. First, rail management was directed to provide for the orderly shutdown of the railroad. This called for the manning of towers and bridges for freight movements, protection of rail equipment, ticket agency audits, and the closing of stations, yards, and other facilities.

Simultaneously, NJT Bus began to develop plans for substitute bus service. After close work with staff from the Port Authority Bus Terminal (PABT) and the PATH rail system, a preliminary plan was agreed on by September. Essentially, the plan was to

deploy substitute buses along many of the affected rail corridors.

The Plan

The plan consisted of three elements designed to meet the varying needs within each rail corridor. Priority would be given to the peak-hour travel needs of commuters bound for Manhattan, Newark, and Jersey City. This would require busing for approximately 40,500 riders through a combination of regular routes and satellite park-and-ride bus service. [This assumed that 25 percent of normal rail passengers would carpool or buspool and that riders normally boarding at Newark could continue to board PATH trains bound for lower Manhattan or National Railroad Passenger Corporation (Amtrak) trains for midtown Manhattan there.] The plan was as follows:

1. Rail riders would be accommodated, to the extent possible, on regular routes operated by NJT Bus and the state's private interstate carriers.

2. In those instances when there was no regular route service available within the proximity of a rail line or the number of rail riders far exceeded the available capacity of regular routes, a satellite parking system would be established. Rail riders would be shuttled to major gateways to New York City (such as the PATH stations at Hoboken, Jersey City, and Newark).

3. Single-occupancy vehicle restrictions would be established. Rail riders would be encouraged to ride in carpools, vanpools, and buspools in order to minimize the impacts of additional traffic volume on the state's already congested highway network.

Plan Development

The plan raised a number of questions regarding the operation of regular route and satellite services:

1. How many additional NJT Bus vehicles and drivers would be available for substitute bus service?

2. Would private carriers be able or willing to provide service where NJ Transit could not?

3. Could an adequate number of available parking facilities for satellite bus service be identified?

4. Could the major bus terminals absorb the new demand generated by the rail strike?

5. What would be the projections of displaced rail passengers by corridor?

6. Would municipal governments and police departments be willing to cooperate?

Regular Route Service

NJ Transit's ability to meet the needs of rail commuters depended on the availability of certain resources. First, the initial delivery of 700 new commuter buses, expected during the latter part of 1982, was delayed by a strike at the factory. The number of buses that were available by the beginning of 1983 was to determine the ability of NJT Bus and private carriers to augment regular route service.

Second, the number of available drivers involved the potential use of retired drivers to supplement the regular work force. Issues of compensation needed to be determined for these workers.

Third, a list of all available entry points to Manhattan had to be determined. Initially, consideration was given to the area's major bus terminals, including the Port Authority Bus Terminal (Manhat-

tan), Penn Station (Newark), and Journal Square (Jersey City). The Staten Island Ferry (Staten Island) was added to avoid overloading Journal Square. These urban terminals were to serve as the destination for satellite lot and regular route bus services, facilitating transfer to PATH and New York City Transit Authority (NYCTA) subways to connect with major work destinations.

Fourth, the degree of cooperation that could be expected from the private carriers was unknown, as was their capacity to expand service. Several carriers, however, did indicate willingness to provide extra regular route and contract service.

It was decided that the decision of how many additional buses to place in regular service was to be decentralized. The private carriers were asked to schedule additional service on their routes as demand warranted and were to bear full responsibility for the financial consequences. The number of additional NJ Transit buses and drivers to be added was to depend on the numbers of rail riders displaced within NJ Transit bus route corridors and the availability of extra drivers and buses.

Satellite Park-and-Ride Service

The initial determination of additional bus capacity available for regular route service underscored the need for providing shuttle bus service from major park-and-ride locations in the various rail corridors. Five major rail corridors served by seven rail lines were targeted for satellite park-and-ride lot development. It was estimated that 13,000 riders could be accommodated through expanding regular route service to the urban terminals. Thus, approximately 27,000 riders would have to be served through satellite park-and-ride service.

Initially, utilization of existing park-and-ride lots at major railroad stations was considered. However, the possibility of picketing by striking railroad workers forced the task force to seek other locations.

The process of locating candidate parking areas began with setting goals for total spaces for each rail corridor. Ideally, each lot was to accommodate a minimum of 500 cars and support a 10-bus operation. An inventory of major shopping centers and industrial and public facility parking lots was compiled by contacting local Chambers of Commerce, retail associations, county planning departments, and state and local economic development organizations. In addition, leading commercial and industrial realtors and corporations were contacted to obtain leads on underutilized or vacant parking areas.

Because there was no funding available for the leasing of parking space, the number of available locations was quite limited. The search produced 17 locations having a combined total of 15,400 parking spaces. Letters of agreement were individually tailored to the specific needs of NJ Transit and the site owner. Each agreement contained clauses governing the hours and duration of operation, insurance coverage, and the installation of communications equipment and trailers.

Finally, eight parking facilities with a capacity of 11,000 spaces were secured for use during the strike. In addition, five rail station parking lots were used, despite the threat of picketing, to supplement these facilities when the demand warranted additional capacity.

Chartering Private Carrier Service

NJ Transit's ability to provide service for these special park-and-ride locations was constrained by

the number of additional drivers and vehicles that were to be available. NJ Transit eventually committed itself to providing an additional 109 vehicles for regular route and satellite bus services. However, the projected vehicle requirements for the satellite system alone totalled 324.

Eventually, 13 private bus carriers agreed to provide service from satellite facilities located in their service areas. Buses had to be chartered on a per-bus basis, and payment had to be guaranteed, whether or not the bus was actually needed on any given shift. This lack of scheduling flexibility made the chartered service one of the more costly elements of the contingency plan. In return, riders were to be guaranteed high-quality, frequent bus service in lieu of their trains.

Terminal Capacity

Questions regarding the adequacy of terminal capacity necessitated a high degree of cooperation between NJ Transit and the Port Authority of New York and New Jersey to

1. Expand the capacity at PABT in midtown Manhattan and
2. Reschedule PATH trains to meet increased demand at Newark Penn Station and Journal Square.

The plan called for 47 percent of the added buses to use Newark Penn Station as a gateway to New York City. Thirty-nine percent of the buses were to go directly to PABT; the remaining 14 percent were to go to Journal Square in Jersey City.

The decision to maximize use of Newark Penn Station was the result of several factors. First, it could accommodate riders to Newark, Jersey City, Hoboken, and midtown and downtown Manhattan. Second, this terminal could be approached by arterial and limited-access highways from several directions. Finally, the availability of PATH and many NJ Transit bus routes made this location an excellent transfer point.

It was determined that PABT could accommodate 198 extra buses. Many of the major satellite locations, including the Meadowlands Sports Complex, were to send buses there. The use of Staten Island represented an approach to reducing the overcrowding of PATH station terminals such as Journal Square by commuters destined for lower Manhattan. The biggest obstacle anticipated for this gateway was one of perception.

New Jersey commuters were unfamiliar with the time involved in traveling to lower Manhattan via the Staten Island Ferry. They perceived this as being a much longer trip as opposed to traveling via PATH. Commuters had a negative attitude toward this point of entry because at least two modal switches would be required to complete a trip (car to bus, bus to ferry, and ferry to subway). As a result of light patronage, buses originally intended to terminate at the Staten Island Ferry were rerouted to the Journal Square PATH station.

Implementation

On February 26, 1983, the United Transportation Union (UTU) announced that they would strike the NJ Transit rail system effective the following Tuesday, March 1. (NJ Transit had assumed operation of the rail system on January 1, and labor negotiations took place over the ensuing 7 weeks.) On that day, all commuter rail service was idle, forcing 69,000 commuters to find alternative means of transporta-

tion. The strike lasted 34 days; rail service was resumed on April 4, 1983.

Strike Preparation

During the weekend before the strike, the strike task force contacted each of the private bus carriers, satellite lot owners, and other transportation authorities to reestablish the commitments made during December. Originally, the strike contingency plan was completed and details were released to the public on December 21, 1982, with the expectation that a shutdown would occur when NJ Transit began self-operation of rail service on January 1, 1983.

The verification of letters of commitment received from the lessors of the satellite parking lots did not present a problem. Dates and contract specifications were changed to meet the needs of the owners and NJ Transit. More than 500 private and NJ Transit buses were made available for the strike contingency effort by the evening before the strike. Directors of other transportation authorities were contacted to provide sufficient lead time to prepare for the strike.

An emergency press conference was held on Sunday, February 28, 1983, to inform public officials and the media of the impending shutdown of rail service. Communicating the details of the rail strike contingency plan to the public was a critical element of the implementation process. Printed material designed to inform elected officials, news media, unions, and commuters about the substitute bus service was issued on Monday. Substitute bus service brochures describing the available bus service with respect to frequency, cost, and destinations by rail corridor were distributed on trains and at rail stations and provided to the news media. Toll-free telephone information centers were added to handle the increased number of calls expected on Monday.

In addition to communicating the details of the substitute bus services, NJ Transit informed the public of the unresolved labor issues that led to the strike. In addition, progress made in negotiating these labor agreements was continuously updated.

Manpower needs to support the substitute bus operations required the performance of strike duty by NJ Transit management staff. On the Monday before the strike, employees were assigned to serve as ticket sellers, bus starters, and other functions to supplement experienced bus operations personnel.

Bus Terminal Activities

The anticipated problems of bus and passenger overcrowding at the major urban center terminals were negligible during the strike. In New York City, PABT was able to adequately handle the increased bus arrivals and departures during the commuter peak periods. Additional NJ Transit personnel were assigned to facilitate the loading and departure of evening rush-hour buses.

The terminals in Jersey City and Newark did not experience overcrowding on bus loading platforms, but congestion from additional passengers and automobile traffic resulted in bus delays and passenger confusion on the first day of the strike. In Newark, the joint action of local police and traffic personnel working with NJ Transit bus operations staff eliminated the traffic flow problems affecting commuter use of the terminal.

The biggest single problem encountered at the urban terminals involved disseminating commuter information. Uncertainty in locating bus departure platforms within the terminals during the evening

rush hour presented the greatest source of inconvenience to commuters. NJ Transit management personnel were assigned to direct commuters to buses, and temporary signs were posted to direct passengers both outside and within the terminal buildings.

Satellite Lot Operation

Although accommodation of substitute buses was handled without any serious disruption of normal operations, the satellite lots presented several problems requiring adjustments in operating policy on the first day. After the second day, buses providing substitute service to lower Manhattan via Staten Island were rerouted to Journal Square, Jersey City. This change entailed the issuance of additional tickets for Jersey City and the redeployment of NJ Transit support personnel to handle the additional demand to this location. By the second day, these adjustments had been implemented.

The lack of additional capacity for ticket sales at the urban terminals necessitated the institution of a pay-as-you-leave policy on the evening buses. Commuters boarded the buses at the urban terminal and either presented a ticket or paid cash at the outbound destination. At satellite locations served by charter bus services, sufficient staff were deployed to collect cash and record the ticket sales. By the end of the first week of the strike, the availability of tickets at the satellite lots (and on a limited basis at the urban terminals) eliminated the need for pay-as-you-leave ticket collection.

Evening ticket sales were made available to commuters at the larger satellite lots. This convenience freed commuters from long morning ticket lines when they were rushing to get to work.

Contributions of Other Transportation Agencies

A number of agencies responsible for operation of transportation facilities played a role in the implementation of the contingency plan. The cooperation of these agencies was particularly critical toward ensuring minimal traffic delays for the substitute bus service.

Although a decision was made not to implement additional bus priority lanes, both the New Jersey Turnpike Authority and New Jersey Highway Authority provided a daily monitoring of vehicles by type and occupancy to determine whether emergency bus priority measures were warranted. These two authorities also dedicated staff to handle the increased traffic at satellite and regular bus park-and-ride lots operated on their property.

PANYNJ provided monitoring staff and additional personnel to handle the increased commuter information demands at PABT. The PATH rail system proved extremely cooperative by rearranging its service schedules to reflect the increased needs at NJ Transit's Newark Penn Station and Journal Square bus terminals. NYCTA provided additional subway trains to support anticipated increases in bus passengers making connections with the subway. Cooperation from these and other agencies allowed NJ Transit to quickly respond to unanticipated commuter problems that arose during the strike.

Contingency Plan Performance

Eighty percent of all rail commuters were forced to alter their daily work and commuter schedules as a result of the strike. Still, the vast majority

TABLE 2 Alternative Mode Use During Rail Strike

Rail Line	No. of Riders	Percentage of Ridership by Mode						
		Special Park and Ride	Regular-Route Bus	Automobile	Bus with PATH	Automobile with PATH	Amtrak	Other
Morris and Essex	8,926	55.61	9.20	7.56	11.11	13.68	0.38	2.46
Boonton	3,707	13.46	29.20	24.41	17.10	8.17	-	7.66
Main and Bergen	9,127	11.93	39.49	18.31	9.97	20.11	-	0.19
Pascack Valley	4,247	4.13	61.66	15.34	3.91	14.73	-	0.24
Montclair	586	9.60	25.96	12.76	10.00	10.04	-	31.63
Northeast Corridor	11,189	21.00	23.92	12.39	4.48	5.46	32.62	0.13
North Jersey Coast	12,117	32.00	24.99	15.43	8.93	13.27	5.36	0.02
Raritan Valley	5,195	18.98	36.07	20.62	9.30	14.04	0.99	-
Total	55,094	25.40	28.78	15.07	8.76	12.69	7.96	1.33

Note: Data are from NJ Transit Rail Passenger Survey. Total number of users by mode was as follows: special park and ride, 13,996; regular-route bus, 15,955; automobile, 8,304; bus with PATH, 4,827; automobile with PATH, 6,992; Amtrak, 4,385; other, 735. Data are for a.m. peak period eastbound only.

continued to use transit as the preferred mode of travel. Seven in 10 found alternative mass transit travel, whereas 30 percent either carpooled or drove alone. Within each rail corridor, the modal split varied directly with the type and quality of alternative transit service available. The automobile use rate varied from a low of 21 percent on the Morris and Essex line to a high of 38 percent along the Main-Bergen line, reflecting the superiority of special express bus park-and-ride service in the former corridor (6). In general as the availability of special bus park-and-ride service or alternative rail services declined, automobile use increased. The percentage of riders using each alternative mode during the strike is given in Table 2.

CONCLUSIONS

The efforts made by NJ Transit to anticipate and control the effects of the railroad strike were significant in helping to mitigate its negative impacts. The preparation and implementation of the contingency plan were highly successful for a number of reasons. First, the months of advance warning of the impending walkout gave NJ Transit ample time to formulate a workable contingency plan and to reach an adequate state of preparedness. Although UTU gave only 3 days' notice of their walkout, the plan was functioning smoothly within 2 days of its implementation.

Second, there was a clear sense of priorities regarding the type of strike response necessary, which was directly translated into a plan of action: the provision of a long-distance line-haul travel alternative for the 53,000 (peak-period) New York-bound commuters. Thus, much of the focus for NJ Transit's contingency plan was already set.

Third, favorable public opinion, political good will, and a high level of motivation among the NJ Transit staff all contributed to making the plan workable. Commuters and the general public supported efforts by management to reduce operating costs to prevent the continuation of the cycle of large fare increases that had been necessary during the previous 2 years. It was widely perceived that there was much room for achieving efficiencies through the renegotiation of the labor contracts. The governor was highly supportive of NJ Transit's efforts to renegotiate the labor contracts, as was much of the state legislature. Among the hundreds of nonunion NJ Transit employees who worked overtime to perform strike-related tasks there was a sense of mission and purpose. Diligent efforts to convey these factors through the media by NJ Transit staff were instrumental in maintaining a high level of support among the general public.

Fourth, and perhaps most important, was the role that NJ Transit played. For although it was the transportation agency that was struck by a large segment of its own work force, NJ Transit was the predominant actor throughout the entire plan development and implementation process. This represents a significant departure from the experience of many other metropolitan areas that have coped with transit service disruptions. In cases such as the 1980 transit system shutdowns in New York and Boston, contingency plan preparation and coordination were the responsibilities of commissions or task forces appointed and directed by municipal governments. It appears that this distinction in roles has some significant implications for the connection between policy making and implementation in a crisis environment.

The close proximity of professional staff and personnel resources represented significant advantages for NJ Transit in its role as developer and coordinator of all facets of the contingency plan. Meetings to discuss various aspects of the plan could be assembled on short notice. Similarly, the ability to make operational adjustments after the plan had been put into effect was equally fast.

Prior Experience

New York City's Emergency Control Board (ECB) was an administrative body created by the mayor's office to coordinate responses to municipal crises such as the transit strike. The ECB did a reasonably good job of setting policy for and coordinating several agencies responsible for contingency plan implementation. Nevertheless, it was a time-consuming process to translate policy into action and to communicate adjustments in implementation to so many actors.

In preparation for an impending transit shutdown in 1980, the city of Boston formed a transit emergency task force similar in scope to New York's ECB to guide its contingency planning effort. However, Boston's contingency planning experience was characterized as a highly politicized ad hoc multiagency effort with no established framework that identified specific roles. The lack of cooperation and coordination among the several municipalities that would have been affected contributed greatly to the non-cohesive effort that characterized this experience. Boston never had to implement its plan. However, several of the analysts responsible for developing it felt that had it been put into effect, implementing agencies and several municipalities would have taken unilateral actions that might have created a very confusing situation (2).

A comparison of these experiences with those of NJ Transit illustrates the importance of some of the

previously identified characteristics necessary for a successful contingency planning effort. Among the most important are establishing and maintaining a strong lead agency or commission and clear lines of authority and establishing and maintaining a high level of interorganization coordination and cooperation.

NJ Transit's experience has also shown that minimizing politicization of contingency plan development and implementation is highly desirable. (Admittedly, this will be difficult to achieve in many environments.) Furthermore, by minimizing the gap between responsibility for the policy setting and planning functions and implementation, it is more likely that goals outlined within the plan will be achieved.

Operational Conclusions

Among the more noteworthy successes regarding plan implementation was the successful utilization of private bus carriers as an alternative to rail service. Although this strategy was somewhat expensive, their willingness to cooperate and ability to rapidly form a workable transit network proved crucial to the success of the contingency plan.

The overwhelming preference of commuters for the most direct service possible (i.e., the fewest or most convenient connections) became readily apparent after the plan had been implemented. As shown by the rejection of service to the Staten Island Ferry, commuters tend to prefer routes that are perceived to be most direct, even if it means a longer trip. This tendency toward convenience was also displayed by commuters' preference for satellite parking in outlying areas as opposed to taking advantage of special park-and-ride facilities that were deployed close to Manhattan. This was most apparent at the interim park-and-ride facility created at the Meadowlands Sports Complex, which is conveniently situated on the New Jersey Turnpike less than 5 miles from Manhattan. Utilization of this facility was far below original estimates.

Once it became apparent that the replacement bus services would achieve the goals set out in the contingency plan, there were many questions concerning the necessity of supporting the railroad. However, a number of factors indicate that the special bus system represented at best a temporary solution.

The public was supportive of the substitute bus service for three reasons: provision of express trips, artificially low fares, and the desire to see rail labor costs controlled. The first two reasons--

routing and fare levels--were quite costly (the rail cost per passenger is 20 percent less than the peak-period chartered service) and were implemented to help the rail riders cope with the crisis.

The third reason--willingness to be temporarily inconvenienced for a just cause--was not an inexhaustible resource. People were highly inconvenienced (80 percent had to leave home earlier, return home later, or both) and 30 percent were not served by substitute transit at all (6). The rail system is often superior in terms of service quality (comfort, reliability, accessibility), and it has more capacity to absorb projected growth in ridership.

Finally, the physical infrastructure of the region is not adequate to support an all-bus commuter system. The major bus terminals serving NJ Transit--PABT, Newark Penn Station, and Journal Square--are incapable of absorbing the necessary increases in bus traffic. Thus, it must be concluded that this system could not have been a suitable replacement for rail service on a permanent basis.

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