

North Brunswick Traffic Management Program, 1987 to 1990

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In October 1987, the township of North Brunswick, New Jersey, passed an innovative traffic management ordinance that required commercial and residential developers, property managers, and employers of 50 or more employees to make annual travel surveys, promote ridesharing, and set aside preferential parking for ridesharers and van pool staging and park-and-ride lots for commuter bus service to New York City. Work schedules must be concentrated so that no more than 60 percent of the total workforce is scheduled to begin or end work regularly during the morning and afternoon peak periods (7:20 to 9:10 a.m. and 3:50 to 5:40 p.m.). The traffic management ordinance is reviewed from the appointment of a task force to its implementation through December 1990.

This document is a comprehensive report on the evolution and implementation of the township of North Brunswick, New Jersey, Traffic Management Program. North Brunswick's efforts are nationally significant because of the adoption of a comprehensive traffic management ordinance in October 1987.

The traffic management ordinance required all employers of 50 or more employees in the township to survey their employee commute patterns to North Brunswick. They were also required to submit surveys from at least 75 percent of their workforce, both full- and part-time employees. If 60 percent or more of these employees commuted in the a.m. peak period (7:20 to 9:10 a.m.) or p.m. peak period (3:50 to 5:40 p.m.), or if 40 percent or more were concentrated to begin or end work regularly during any specific 15-min time slot in the defined a.m. or p.m. peak periods, they were required to prepare and submit traffic management plans to the Office of Traffic Management (OTM).

Developers of 20 or more new residential units were also required to survey buyers of these units as to their commute patterns and interest in park-and-ride facilities, shuttle service to mass transit, and vanpooling opportunities. Developers of 350 or more new residential units were required to construct park-and-ride facilities at a ratio of one parking space for every 10 units in the development. There were also requirements for developers of 15,000 ft² or more of nonresidential complexes, such as submission of traffic management plans.

An employment survey was also developed and distributed to the 23 largest employers in the township to gather information on scheduled work hours. The results revealed that the concentration of starting and ending times during rush hours for employees with fixed schedules were a major factor contributing to the existing levels of traffic congestion.

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1988

In January 1988, the township implemented the ordinance's first requirement, that companies of 100 or more employees participate in surveying their employee commute patterns. A total of 29 employers of 100 or more employees were identified, and all ultimately submitted survey results of their work force.

In this first year, the responses from the affected companies were mixed. According to the ordinance, companies required to perform surveys were also required to submit surveys from 75 percent of their entire work force. As a result of their surveys, 10 companies were found to be out of compliance. Three companies failed to receive a 75 percent response from their employees, yet, this was considered to be a huge success because this action was the first that the Office of Traffic Management required of the businesses. Few businesses, however, were induced to develop significant traffic reduction plans. An obvious conclusion was that additional staff effort to work with employers was needed.

One major accomplishment of the first year was the appointment of 29 employee transportation coordinators (ETCs), one at each township firm with more than 50 employees. These people are charged with the responsibility of putting forth their company's traffic management program. This established a good foundation from which a partnership could be developed between the township and the private sector.

1989

It had become evident that it was necessary for OTM to not only simplify the survey form, but also provide assistance in processing the survey data and implementing plans. By providing these services, OTM took a considerable burden off the companies, especially concerning data analysis. Data reliability was also improved. As in the first year, all the companies were still required to survey their entire work force and receive at least a 75 percent response rate. The number of businesses required to participate in the survey process (29) remained the same as the first year. The image of program materials was also upgraded considerably in the second year.

The key aggregate results of the 1989 employee transportation surveys were as follows.

- 46 percent of the responding employees commuted in the a.m. peak period (7:20 to 8:40 a.m.),
- 40 percent of the responding employees commuted in the p.m. peak period (3:50 to 5:10 p.m.),

- 14 percent of the responding employees commuted in the largest-concentration period of 7:47 to 8:01 a.m.,
- 87.2 percent of the responding employees drove alone,
- 5.9 percent of the responding employees were either car- or vanpool drivers,
- 3 percent of the responding employees were car- or vanpool passengers,
- 2.1 percent of the responding employees were dropped off at work,
- 0.7 percent of the responding employees walked to work,
- 0.7 percent of the responding employees took the bus,
- 0.3 percent of the responding employees took the train, and
- 0.1 percent of the responding employees said "other."

In October 1989, after considerable assessment by OTM of the overall results achieved to date, the ordinance was amended by the township council to improve its impact. The 1989 survey data base was used to assess the impacts of a number of alternate formal changes to the ordinance. Modifications were also made concerning administrative procedures. As a result of these changes, employers of 50 to 99 employees became subject to the same requirements as those with 100 or more employees. The specified peak periods were also broadened to reflect congested conditions that existed over longer periods of time compared with those that existed in 1987 when the ordinance was adopted. The new designated peak periods were 7:20 to 9:10 a.m. and 3:50 to 5:10 p.m., versus the original indicated hours of 7:20 to 8:40 a.m. and 3:50 to 4:40 p.m. These changes resulted in more companies being required to develop traffic management plans. Additional administrative changes were also adopted at this time.

1990

As a result of the expansion of one-half hour on each of the designated peak periods, and applying the new peak hours to the 1989 company data base indicated that 16 businesses were out of compliance with the ordinance. Recognizing the burden of annual surveys and that the objective of the program was to implement traffic management techniques, as opposed to surveys per se, the Traffic Management Committee decided to give businesses the option of performing employee transportation surveys in 1990. If they chose not to survey, a procedure was established by which 1990 compliance was calculated using 1989 survey data. Combined with the 1989 data and the new, broader peak hours, a penalty factor was assessed for incomplete surveys. This was done because it could be assumed that most nonrespondents were single-occupancy vehicle drivers. For 1990, figures from the combination of a 50 percent penalty factor for nonresponse and incomplete surveys were applied.

If the businesses accepted OTM's findings and also were found to be out of compliance in 1990, definite recommendations were provided concerning areas of attention and specific actions that were expected to be addressed.

These typically were as follows:

1. Establish preferential parking for employees who rideshare (by carpool or vanpool).

2. Implement an employee rideshare program (by offering matching services, promotions, etc.).

3. Announce that the company would provide emergency midday travel services for ridesharers (a guaranteed ride home).

4. Establish a permanent bulletin board dedicated to the township's traffic management program (posting rideshare information, the township's traffic management F.Y.I. materials, flyers, etc.).

5. Consider adopting flextime for all employees where it is feasible (with staggered work hours or an alternate work schedule).

These five actions are now being actively pursued by the employers. OTM is visiting all affected businesses to monitor their progress.

OTHER PROGRAM ACCOMPLISHMENTS

Perhaps ultimately having the most impact on the state level, Senator Walter Rand of Camden sponsored legislation (S-348) in the New Jersey State Senate, *The New Jersey Traffic Management Act of 1990*. This legislation was modeled after North Brunswick's traffic management ordinance. It would require every business located in designated traffic "hot spots" with 250 or more employees to participate in an annual transportation survey. It would also require these employers to reduce the peak-period automobile trips of its employees to 70 percent of the trips that would be made if all employee trips were made in single-occupancy vehicles. This legislation is currently in the New Jersey State Senate Transportation and Communications Committee of which Senator Rand is the Chairman, for review. The OTM has participated in numerous hearings concerning this important initiative. This legislation is cosponsored in the New Jersey State Assembly by Assemblymen George Spadaro of Middlesex and Frank Pelly of Middlesex.

KEY INSIGHTS

There have been many insights gained from the process of implementing North Brunswick's ordinance. One is the need for flexibility. This refers to realizing that not all businesses in the township could successfully implement all of the actions that were initially required. Each business has its unique operating methods and style, and of late, employment conditions have changed in the local economy. As a result of the differing nature of the businesses, each must be considered unique. Keeping these differences in mind, the Traffic Management Committee decided that there were some actions that all employers could be required to address. Some examples of these areas are preferential parking for those who rideshare, appointment of an ETC, and dedication of a bulletin board for all traffic reduction information provided by OTM. Other actions from the traffic management agenda had to be considered more discretionary. The percentage-based standards on which the ordinance is based are a more acceptable framework for the ordinance than are any mandated specific actions.

The practice of transportation demand management is in its infancy, whereas traffic congestion has been evolving through the years. It is a function of long-term land use, employee benefits, development policies, and related factors that are deeply entrenched. The primary thing to do is to achieve small positives. Transportation demand management does not take huge amounts of traffic off the roads, but it does have valuable incremental effects. Also the public and the business community should be educated on alternatives to commuting by single-occupancy vehicles, standard working hours, etc.

CONCLUSION

Communication is key to any endeavor. Communication may be used as a way to gain and frame cooperation and consensus behavior. It is possible to downplay the punitive elements of the ordinance, because it is essentially an effective communications tool. A good example of the public-private partnership approach is a traffic management seminar that OTM

recently provided for companies to assist employees who commuted to North Brunswick. A majority of the 29 businesses required to comply with the ordinance were represented at this seminar. This seminar featured speakers on the practice of and positive results experienced from using transportation demand management.

What the future holds for traffic management in New Jersey is yet to be unveiled. Ideally, it is hoped that the ordinance concept gains acceptance and becomes a state-wide program. Yet, the pace of change has been influenced and real processes, policies, and practices to this end have been originated.

In summation, the program is growing in many directions. The ordinance holds promise as an effective tool for reducing traffic congestion. The ordinance has been proven to be an effective method for obtaining continued cooperation of all parties involved. Its continued local implementation and successful expansion geographically now seem promising.

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