### Recommendation

That there be an integrated system of traffic signal synchronization, such as that occurring in the Burlington/Camden County areas with the fiber optic network being constructed along Routes 73, 70 and 38.

### How Congestion Is Reduced

A synchronization along this lines will allow for structured timing of traffic signals that keeps the flow moving in the directions of highest demand depending on the events and times of the day.

### Who Is Affected?

All of the commuting public.

### Costs/Savings

Would assume that the existing Traffic Operations Centers will have an increase in operating costs and the need for more equipment and space. The systems are very expensive to install and likely expensive to maintain. Cost savings would potentially include a reduction in construction and lane widening.

# Submitted By

Bill Ragozine – Traffic Management Subcommittee

## Recommendation

Establish and promote a program to encourage the use of either state or employer-sponsored shuttle services linking job sites to nearby train and bus stations or to park and ride facilities. The program could use transit vehicles and vans for reverse commuting, including the element of computerized dispatching and guaranteed or emergency rides home. *(expands SOV recommendation)*. Give free or subsidized transit passes for all government employees who work in congested corridors.

Further, alter government-employee start and end times to outside of the peak hours, with some government employees' schedules remaining within the peak hour worktimes. Encourage government employees to schedule meetings and conferences for start times outside of peak hours.

Secondary Phase: Target a few large employers along certain segments of congested highways (e.g., Rte. 287) to alter employee start-end times. *(similar to SOV Report)* 

# How Congestion Is Reduced

Targets a specific and "understanding" significantly sized group of travelers to encourage utilization of mass transit vs. cars.

# Who Is Affected?

All State Employees, NJ Transit and State Budget

Secondary Phase: Large employers along heavily-traveled routes.

# Costs/Savings

Need to quantify costs – an estimate is \$2 million/year

# Submitted By

## Recommendation

Implement, maintain, and/or expand off-peak value pricing toll incentives programs on all tolled facilities.

### How Congestion Is Reduced

Already-demonstrated reduction in peak-hour travel on the NJ Turnpike. This reduction should be witnessed on the other major tolled roadways as well.

### Who Is Affected?

All Toll Authorities and Agencies.

### Costs/Savings

Budgetary impact on toll roads and authorities needs quantification. NJTurnpike, NJ Highway Authority, and PANYNJ have already determined these numbers, since peak-hour pricing is in place for these roadways/bridge-tunnel facilities.

#### Submitted By

#### Recommendation

Enact real-time traffic and alternative routing information systems for the general public and commerce to help divert demand away from congested roadways. Provide timely and accurate travel information to the general public including the prospective utilization of "#511" – the federally-established national traveler information number similar to the "911" concept – will enable the public the means by which to make well informed decisions about travel alternatives. Both the means to communicate the availability of alternatives plus the means to determine those alternatives should be considered. Widely Publicize the information system.

Expand existing transportation agency systems to incorporate GPS Routing and real-time traffic and transportation information. Could be broadcast through existing HAR locations, radio stations (perhaps devoted station for 24-hour traveler information), and in-vehicle devices (perhaps consumer subscription service?).

## How Congestion Is Reduced

Provision of timely and accurate travel information to the general public including the prospective utilization of N511 -- the federallyestablished national traveler information number similar to the "911" concept -- will enable the public the means by which to make well informed decisions about travel alternatives. Both the means to communicate the availability of alternatives plus the means to determine those alternatives should be considered. Providing pertinent and timely information could enable the individual to make an informed choice of mode, route and departure time, so as to avoid congestion, and thereby alleviate it. The information regarding viable alternatives should be reliable, and easily and readily conveyed to individuals so that travelers actually utilize the alternatives. TRANSMIT and TRIPS 1,2,3 plus Route Guidance Systems, Incident Management Systems, and NJ Transit/mass transit information systems are first steps toward building an extensive information system, but innovative ways to allow everyone to make better informed congestion-relation choices about mode, route and departure time, must also be developed. This includes both pre-trip information for travelers as well as in-vehicle communications. Such information systems could be developed and implemented on a staggered schedule to effect gradual but lasting and long-term congestion relief. Promotion of the developed systems for general use would be key to achieving significant diversions from congested arteries. Working with the Ports, Trucksheds, Shippers and Receivers, provide real-time traffic information so that effective freight transport scheduling and schedule modifications can be accomplished. Combining real-time traffic and alternative routing information with real-time freight scheduling will enable more efficient transport time utilization (trucks not stalled in traffic impacting unscheduled arrivals contributing to port and truckshed congestion, etc.), thereby reducing costs as well as congestion.

### Who Is Affected?

NJ Transit; TRANSCOM; Toll Agencies and Transportation Authorities; NJDOT; traveling public

### Costs/Savings

Need to quantify costs to develop, implement, and operate the system.

# Submitted By

### Recommendation

Provide an information system to enable any caller or website visitor to obtain directions and real-time travel time information to get from any place in New Jersey to any other place in New Jersey or neighboring major cities (e.g., NYC, Philadelphia) using NJ Transit and other ridesharing programs (such as those offered by many TMAs) which provide shuttle services to/from transit stations. Start with Northern New Jersey, Trenton Area, and Camden-Philadelphia Area. Enhance the system to establish real-time shuttle/bus travel/schedule information and reserved parking system for park and ride lots. Widely publicize the information system.

### How Congestion Is Reduced

Encouragement and promotion of mass transit utilization to move people out of cars and into trains and buses particularly during heavy commuter hours.

## Who Is Affected?

NJ Transit, TRANSCOM, North Jersey Transportation Planning Authority, DVRPC,

NJDOT Traffic Management Operations – North and South Jersey, Park and Ride Lot Operations, including reservation system and operation

# Costs/Savings

Need to quantify cost of information system for one area and then multiply it by at least 3. Total = \$25 million (estimate). Plus need cooperation of (provision of real-time data by) toll agencies, TRANSCOM, NJDOT Operations, etc.

Plus Ongoing Operations Costs

# Submitted By

#### Recommendation

Identify specific congestion-reducing (not sprawl) capital projects such as I-78 missing ramps on the Garden State Parkway and widening of the NJHA Driscoll Bridge; NJ Turnpike, Route 1, Route 287, southern NJ Roadways, etc.

Construction of new ramps via affected roadways/facilities/jurisdictions.

#### How Congestion Is Reduced

Alleviates congestion at roadway/facility exits by "spreading it out" to other exit points along the facility/roadway.

#### Who Is Affected?

NJ Highway Authority NJ Turnpike NJDOT Local Municipalities

#### Costs/Savings

Capital improvement costs To Be Determined.

#### Submitted By

# Recommendation

Implement Traffic Responsive Signals and Ramp Metering to manage traffic flow.

Implement Automatic Incident Detection to decrease the impact of the major causes of congestion.

Expand the derivative uses of the E-Z Pass infrastructure platform to include traffic volume monitoring for use in providing timely, efficient, and accurate information to the traveler; publicize and broadcast this information.

Broadcast through existing HAR sites, expansion of HAR sites, radio broadcasts, plus potential website and telephone VRU-provided information.

# How Congestion Is Reduced

Better management of traffic flow through traffic signal monitoring and adjustment.

Reduction in congestion resulting from roadway/facility

accidents/incidents by rapid detection, response, and clearance of incident.

Provision of travel-time delay information will encourage traveling public to avoid congested roadways and seek alternative routes or travel times.

# Who Is Affected?

NJDOT Toll Agencies and Transportation Authorities Traveling public

# Costs/Savings

Expansion of TRANSMIT costs need quantification.

Implementation of at incident detection systems on major roadways, plus ongoing operation costs.

Traffic signalization, remote monitoring and adjustment, and ongoing operational costs.

# Submitted By