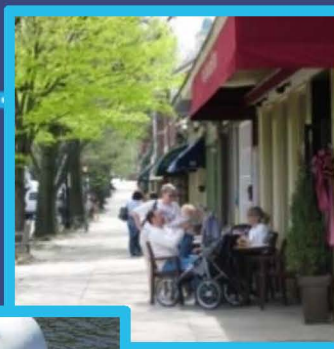


# Sitting in traffic again?



We all have better things to do...



## Inside:

New tools *and* what you can do to reduce congestion

## This Edition:

I-295 in the vicinity of I-76 & NJ 42



Congestion costs each traveler in this three-mile section \$1,000 per year!

**Managing congestion** is hard in the 21<sup>st</sup> century – insufficient funding and ever-increasing traffic pose a challenge to providing an efficient transportation system for all. Fortunately, we now have a new generation of analytic tools, enhanced strategies, and better cooperation among organizations. Here is one of the many stories that illustrate the new era in managing congestion.

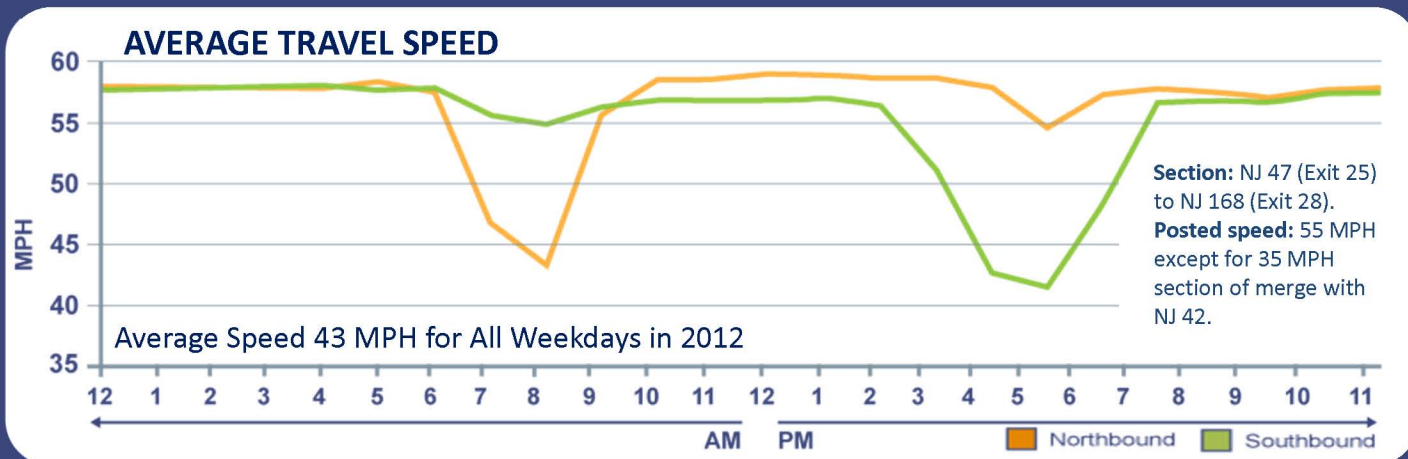
## The Story of One Corridor: I-295 in the Vicinity of I-76 and NJ 42

I-295 carries over 100,000 vehicles a day and is somewhat congested on an average morning, but things frequently go very wrong. Investments that improve reliability would help in this situation.



### Recurring Congestion

On average weekdays in 2012, northbound travel speeds on the three-mile section between NJ 47 and NJ 168 drop from approximately 60 MPH to 46 MPH during the morning peak hour (see below). This is the average of faster and slower days. The average, though, doesn't tell the whole story.



### Non-Recurring Congestion

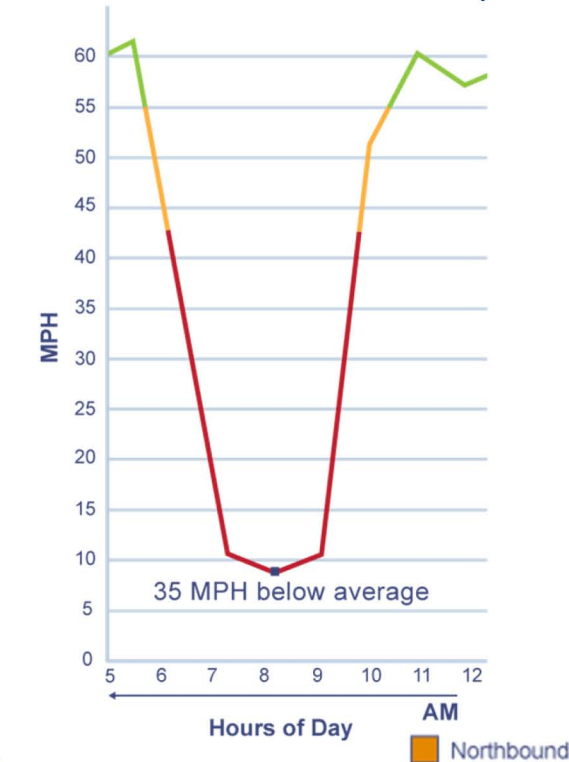
Crashes, construction, and weather are among the reasons for frustrating non-recurring congestion. For example, on June 25<sup>th</sup>, 2012, a crash in a northbound lane in this section at 6:30 AM caused a traffic jam for at least 2 ½ hours. Improving safety protects you and your family while reducing non-recurring congestion.

Most of this section of highway has a high\* crash rate. In 2012, crashes directly affected over 900 people. Specifically:

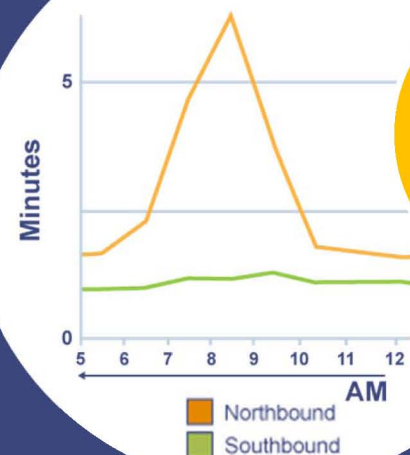
- 1 person died in a crash;
- 97 people were injured; and
- 434 crashes were reported to police, though many more occurred.

\*Compared to similar roads (DVRPC *Congestion Mgmt. Process*)

### TRAVEL SPEED ON JUNE 25TH, 2012



### PLANNING INDEX TIME



**“I need to budget triple the time?!!”**

-A frustrated commuter

### Reliability

On a calm morning it takes about **3 minutes** to drive through this segment. However, travel frequently slows down due to factors such as crashes, construction, and weather. To almost surely be on time you would need to budget almost **11 minutes**--triple the time!

## Effective, Low-Cost Strategies Current and Potential Use on I-295

### Recurring Congestion

Traffic signal optimization reduces traffic on I-295 by making it more attractive for local trips to be made on local roads. The New Jersey Department of Transportation (NJDOT) optimized 211 signals between September, 2011 and March 2013, resulting in:

- Average reduction in travel time is 5-15% per vehicle during the peak period at the relatively low average cost per signal of \$10,000 to \$15,000
- Benefit to Cost (B/C) ratios range between 4 and 56 per dollar invested
- Reductions in emissions: 3 to 16%
- \$147,400 saved for road users during peak periods due to reduced time in traffic

### Non-Recurring Congestion

NJDOT's **Safety Service Patrol (SSP)** helps reduce congestion on I-295 by getting crashes, broken-down cars, and debris off the travel way quickly. Statewide, the 52 SSP trucks cover 225 miles of highway to provide:

- Benefit to Cost (B/C) ratio of 33 to 1
- Upwards of 100,000 assists per year within a budget of approximately \$6 million
- Help for emergency responders at incidents
- DVRPC's *Transportation Operations Master Plan* recommends increasing to all-day coverage on I-295

One source of more strategies is:

<http://ops.fhwa.dot.gov/travel/plan2op.htm>

# What Can We Do?

## Decision-Makers

We can no longer just build our way out of congestion. Transportation investments must be spent on maintaining the existing system and improving operations to reduce congestion. When possible, find dedicated, additional funding for transportation.

## Planners, Engineers, and Other Partners

- Consider operations strategies, such as Safety Service Patrol, incident management task forces, traffic signal coordination, and intersection improvements.
- Incorporate Transportation Demand Management (TDM), for example, by making it more desirable to live near jobs and more convenient to walk, bicycle, and take transit; we need to address demand as well as supply of transportation.
- In addition to reducing congestion, review other ways to help freight move reliably.

## All of Us

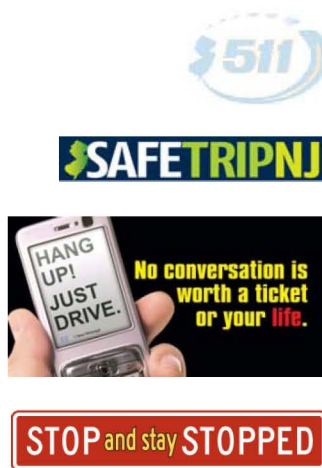
- Check conditions before departing to consider mode (such as taking transit), route, and least-congested time to travel if you have flexibility.
- Don't cause crashes—drive safely.
- Learn about and participate in transportation planning and funding decisions.

## Agencies at Work

**Delaware Valley Regional Planning Commission (DVRPC)** builds consensus among transportation agencies in the Philadelphia metropolitan region of New Jersey and Pennsylvania. [www.dvrpc.org](http://www.dvrpc.org)

**NJDOT** uses its Capital Investment Strategy (CIS) to evaluate efficient ways to invest the limited funds it has available. The current Direct Connect project will help the I-295 corridor. [www.state.nj.us/transportation](http://www.state.nj.us/transportation)

**New Jersey Transit** uses surveys, real-time data, and traffic signal prioritization to get people where they want to go. [www.njtransit.com](http://www.njtransit.com)



## Everyday Resources

NJ 511 - [www.511nj.org](http://www.511nj.org)

NJ Turnpike Safe Trip NJ App - [http://www.state.nj.us/turnpike/safetripnj\\_info.html](http://www.state.nj.us/turnpike/safetripnj_info.html)

Hang up! Just drive! - [www.njsaferoads.com](http://www.njsaferoads.com)

NJ Pedestrian Safety - [www.nj.gov/lps/hts/pedestrian.html](http://www.nj.gov/lps/hts/pedestrian.html)

**Abstract:** Congestion is getting harder to manage, but tools to analyze it and cost-effective measures are getting better. This is the first in a series of brochures using archived operations data to understand the causes of congestion and what can be done about it. The focus corridor for this edition is I-295 in the vicinity of I-76 and NJ 42, however the emphasis on operations, multimodal approaches, and partnerships as realistic approaches to congestion are widely applicable.

The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with the common vision of making a great region even greater. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey.

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