

*Transform*CT

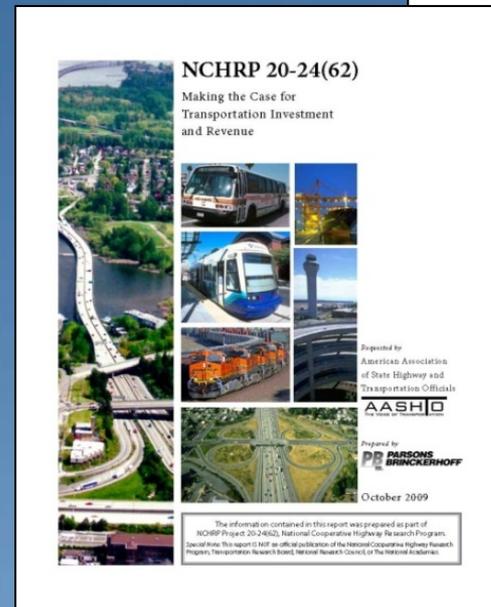
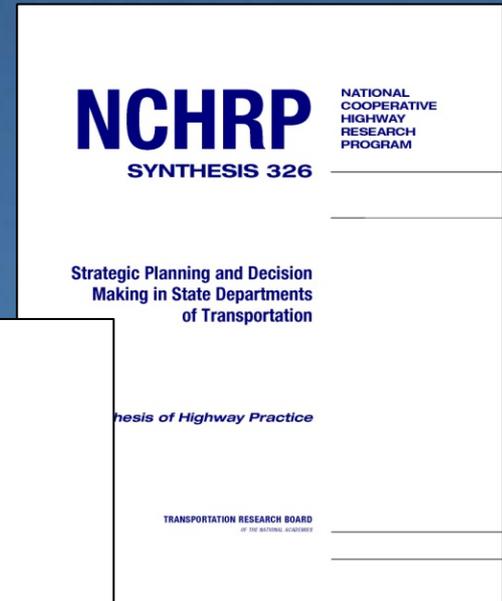
The logo for 'TransformCT' features the word 'Transform' in a white, italicized serif font and 'CT' in a white, bold, sans-serif font. Below the text is a row of icons: a farm with a silo and barn, a white car in a blue arrow-shaped frame, a green tree next to a grey house, a white high-speed train in a blue arrow-shaped frame, a white stick figure in a blue arrow-shaped frame, a classical building with columns, a green tree, and a grey skyscraper.

SIPRAC Meeting

September 11, 2014

TransformCT is not a conventional plan

- Visionary
- Quantitative
- Action oriented
- Investment driven
- Measurable Objectives
- Long-Range Vision
- Sustainable



Strategic planning- *"disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it."*

-Bryson 1996.

Support Other State Initiatives



Economic growth

Sustainable development

Affordable housing

Energy conservation

Preserve & enhance CT's

- **Environment**
- **Quality of life**

Overview

- **Visioning**
- **Public Engagement**
- **Baseline Revenue Forecast**
- **System Needs Analysis**
- **Scenario Development/Economic Modeling**
- **Strategic Management**
- **Identify Strategies for Implementation**

We are here



Long Range Multi-Modal Vision

50 year plan

- Rail
- Highway
- Ports
- Transit
- Bike/Ped
- Aviation
- Freight



Why 50 Years?



Vision: An Iterative Process

- **Extensive Public Engagement**
 - ❖ Full sweep of Connecticut
 - ❖ Outreach online, in person, & non-traditional methods too.
- **Identify Needs**
- **Build a Vision**
 - ❖ Backbone & Framework of the Plan



Show us what makes Connecticut great!
ADD A PHOTO

PROJECT DETAILS
About the Project
How It Works
Who's Listening?
Release Materials

Select Language
Powered by Google Translate

CONTRIBUTORS

Rank	Contributor	Weekly Active Users
1	Jason C20	220
2	Sam G3	186
3	Charles B24	80
4	Klah P	100

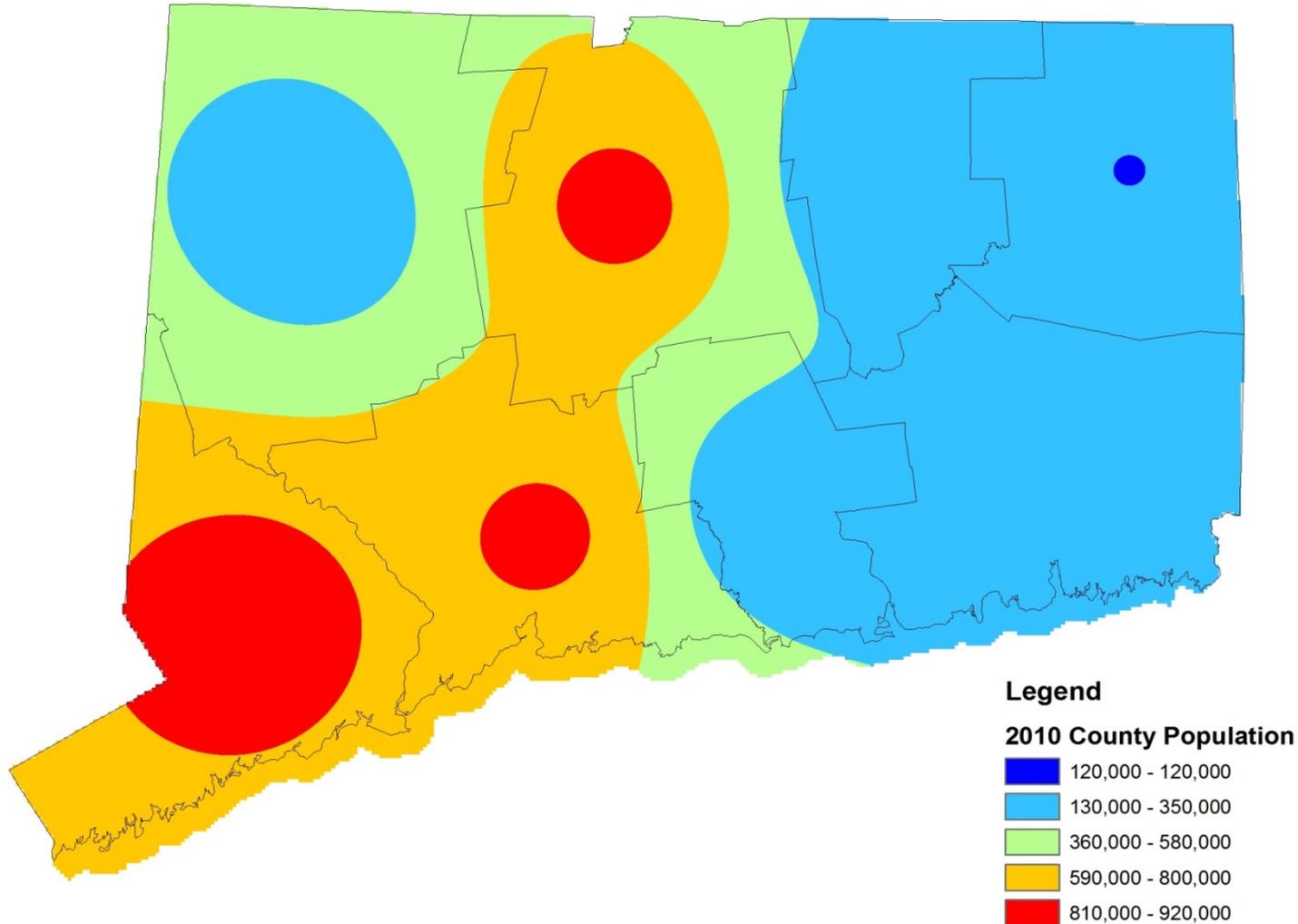
Future Transportation in Connecticut

What is your vision for transportation in Connecticut?
Imagine getting around in Connecticut in 10 or 20 years. What do you think should change over the course of time to make it easier to get from here to...
12798 views 2933 replies 22 Days Remaining
My Idea Is... **Add Idea**

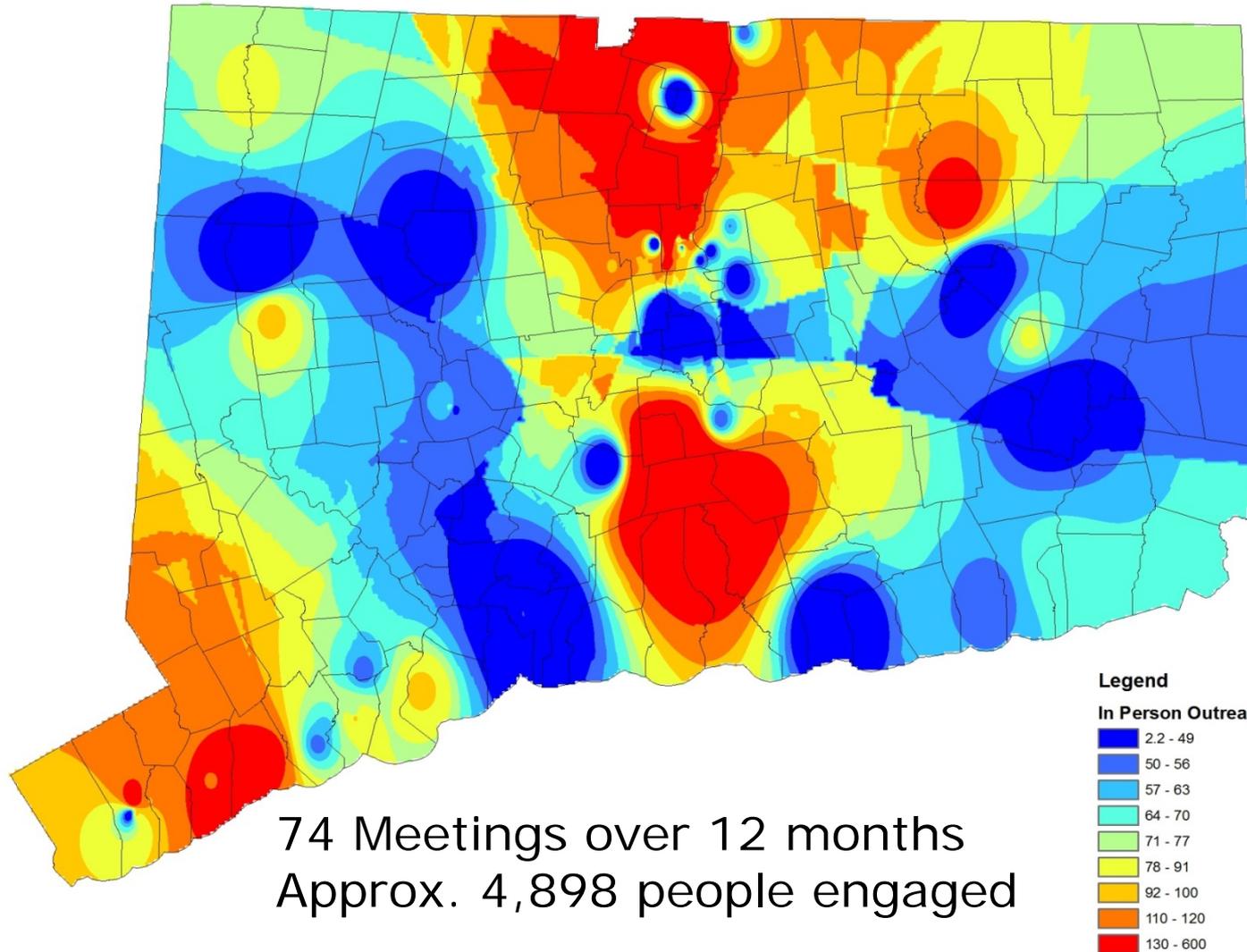
More of These Types of Improvements

What transportation systems or elements of transportation systems do you admire in other locations around the country?
Are there specific places that you admire for their transportation system and its impacts on the community, the environment, the economy, etc.? If so...
1027 views 186 replies 22 Days Remaining

2010 Decennial Census Population by County of Residence

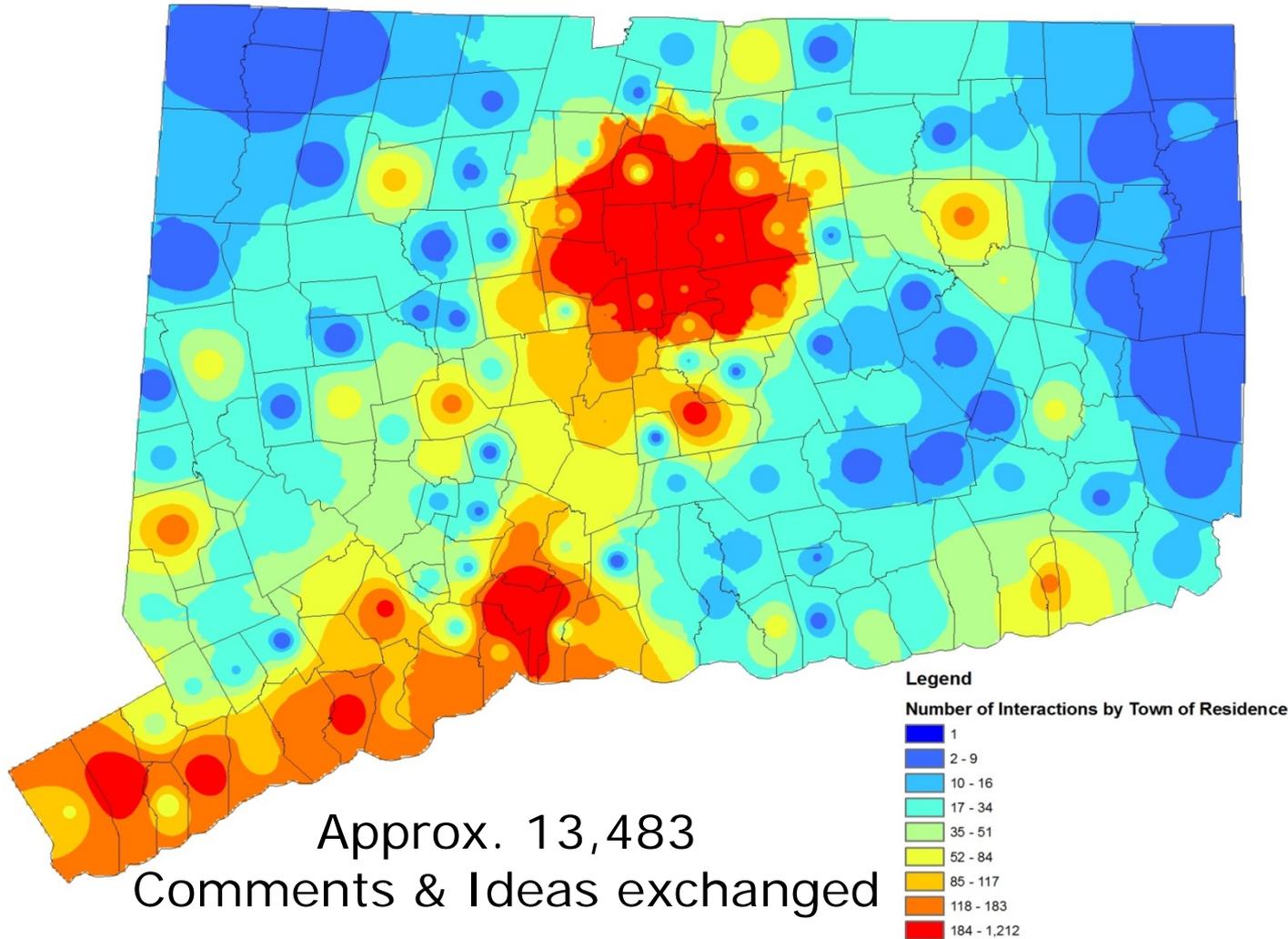


In Person Outreach Density Map



Online Interactions

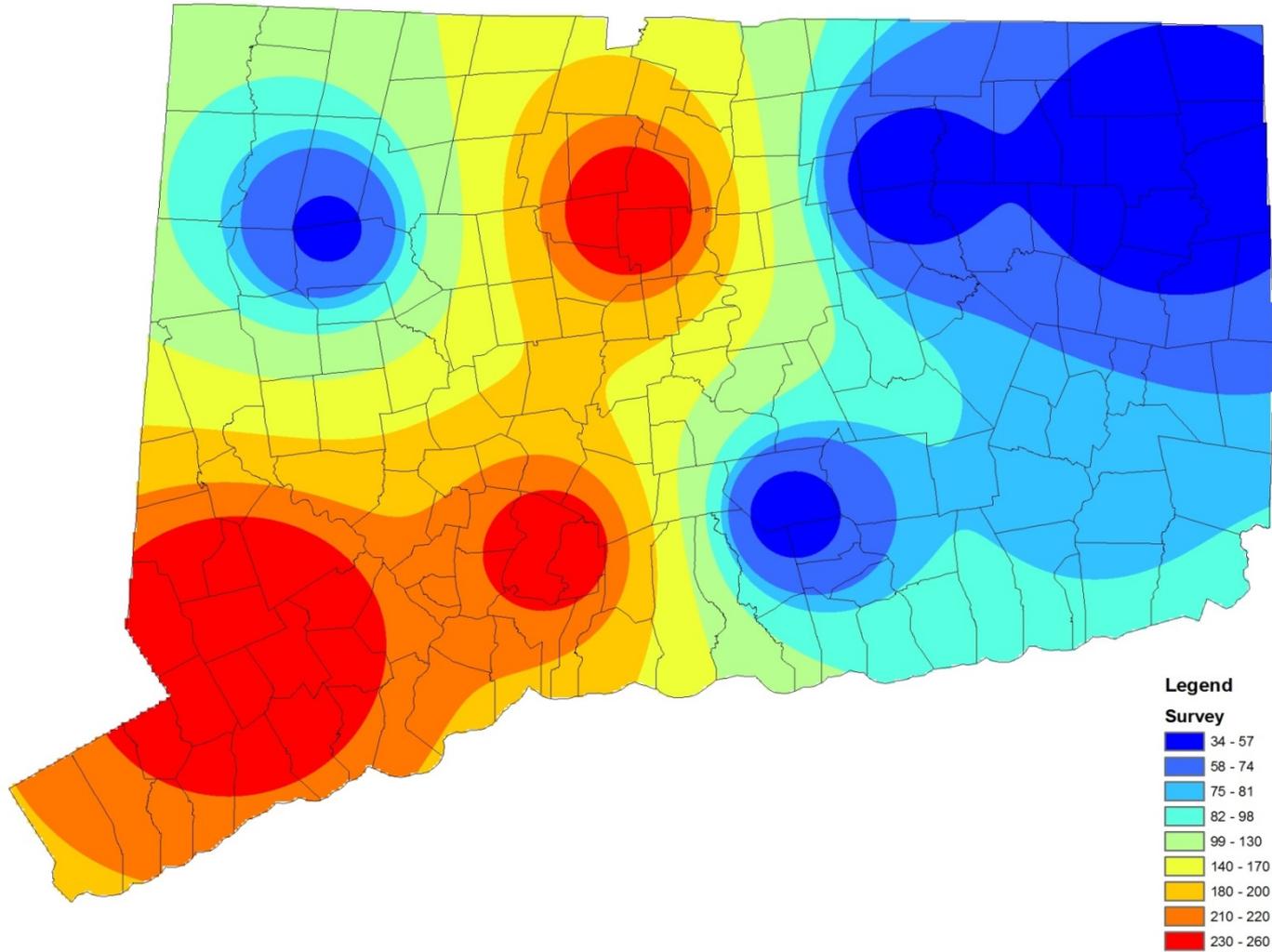
www.TransformCT.org



Approx. 13,483
Comments & Ideas exchanged

Household Survey

of Respondents by County of Residence



Federal Funding Concerns



Concerns about the U.S. Highway Trust Fund

Federal gas tax is not indexed to inflation

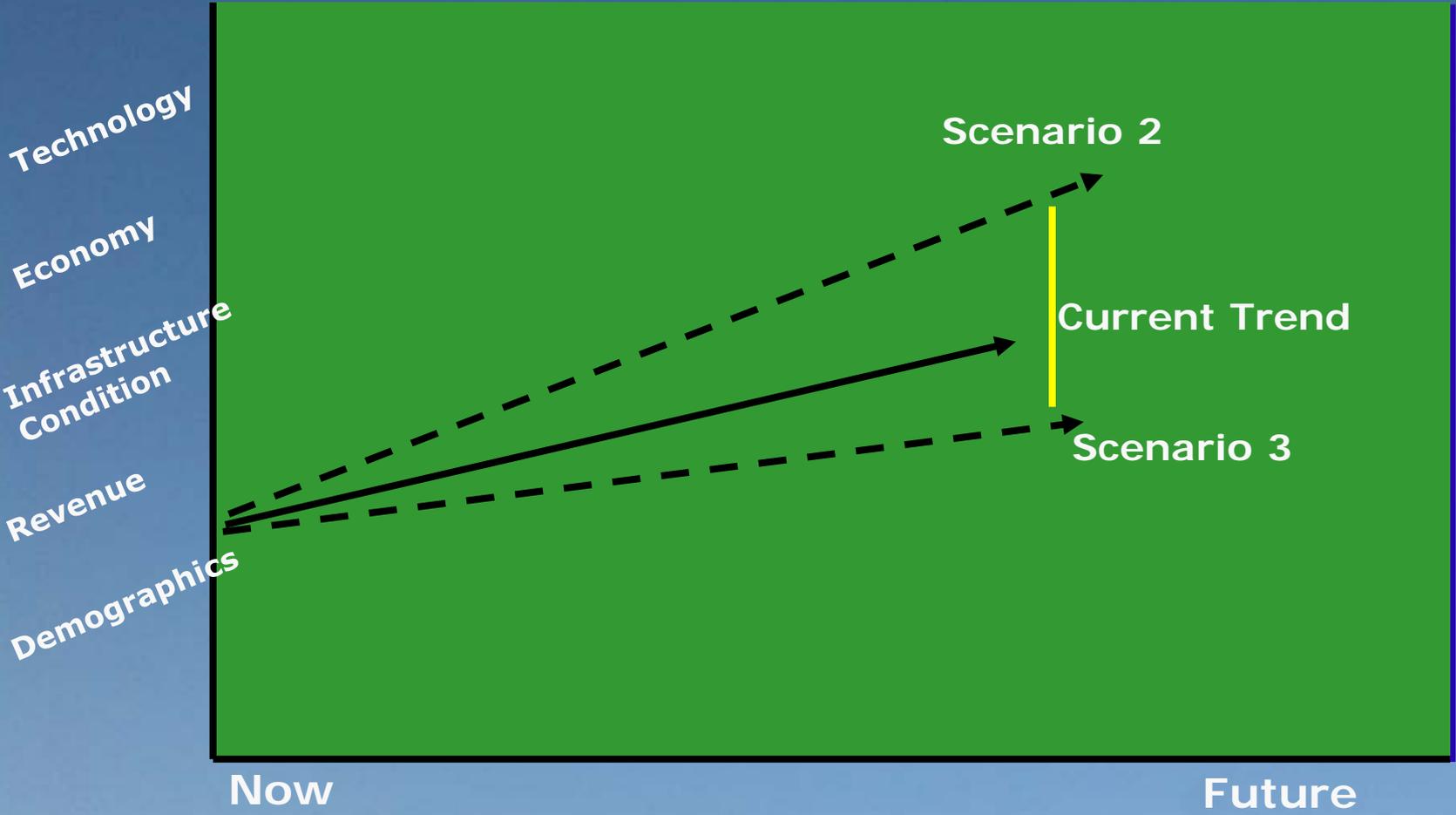
Since 1993...

- Federal gas tax remains 18.4 cents / gal.
- Fuel efficiency standards have risen significantly, meaning diminishing tax revenue
- Federal Highway Trust Fund lost 33% in purchasing power

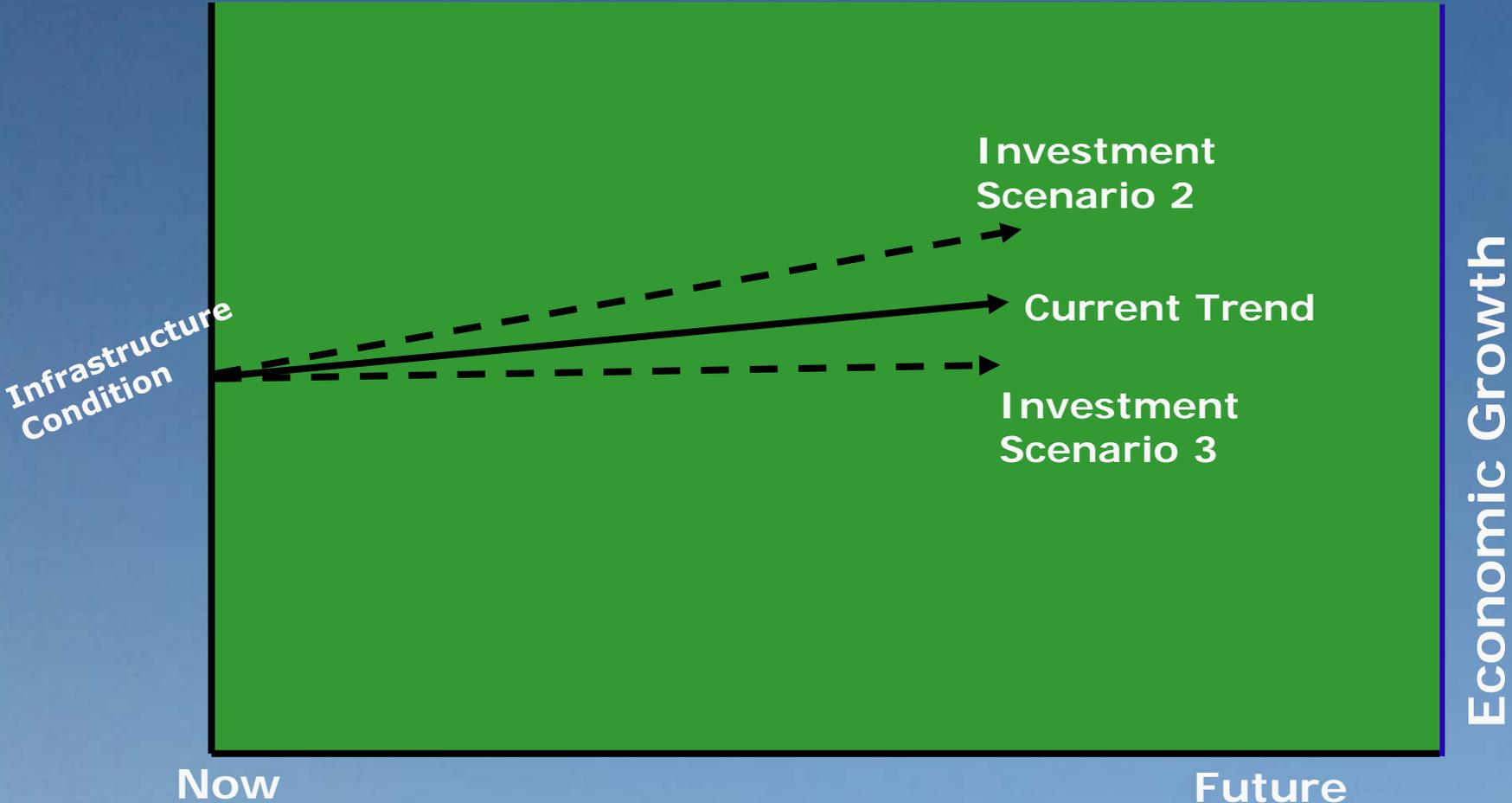
\$53.3 billion needed from U.S. general fund since 2008 for federal transportation needs

Source-Basso, 2012, Transportation Research Board, 282nd session.

Scenario Planning



Scenario Planning



Change in Business Practice

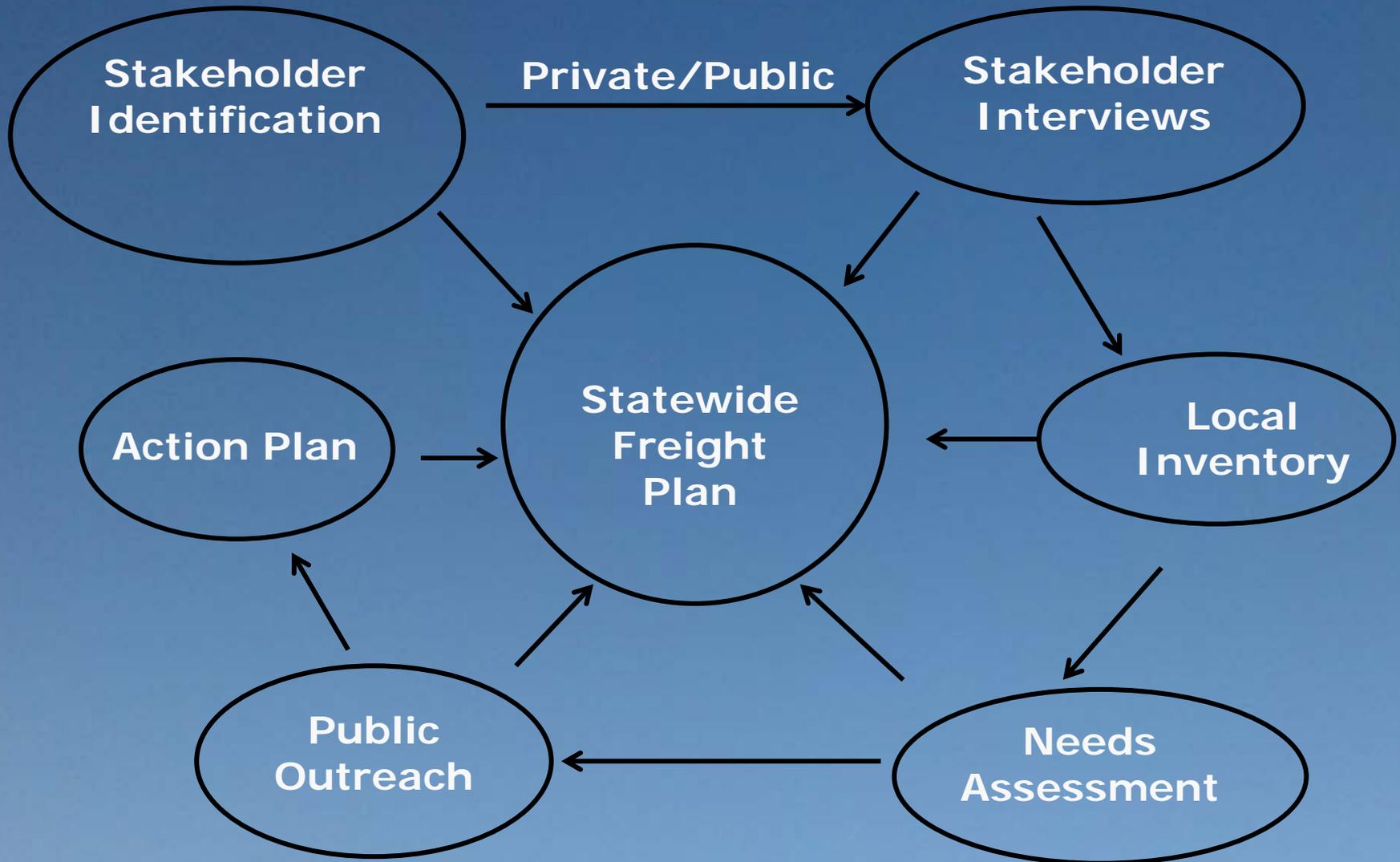
- Asset Management
- Performance Management
- Strategic Management
- Transparency
- Credibility
- Customer Service

Freight Planning

Statewide Freight Plan

- Support Economy through the efficient movement of goods
- Create an Action Plan per Moving Ahead for Progress in the 21st Century (MAP-21)
- Establish a State Freight Advisory Committee
- Establish System Performance
- Extensive Engagement with the Private Sector
 - ie. Distributors, shippers, and operators
 - Key to successful Action Plan

Freight Planning



Congestion Relief

I-84, Hartford Metropolitan Area

I-95, NY to New Haven

How can we relieve congestion

What is electronic tolling?

vastly different from the old manned toll booths used in the past



Tolling in CT circa 1980

Toll booths created traffic problems

- Congestion
- Accidents
- Air quality problems

New Electronic Methods

do not create traffic problems



Electronic sensors mounted overhead on special gantries

- EZ Pass readers
- Cameras for video tolling
 - for drivers without EZ Pass



- no booths
- no stopping
- no need to slow down
 - no traffic delays
 - no safety problems

Congestion Pricing is a congestion relief method that works by managing demand during peak traffic periods

Congestion pricing uses **higher toll rates** during peak periods to encourage drivers to:

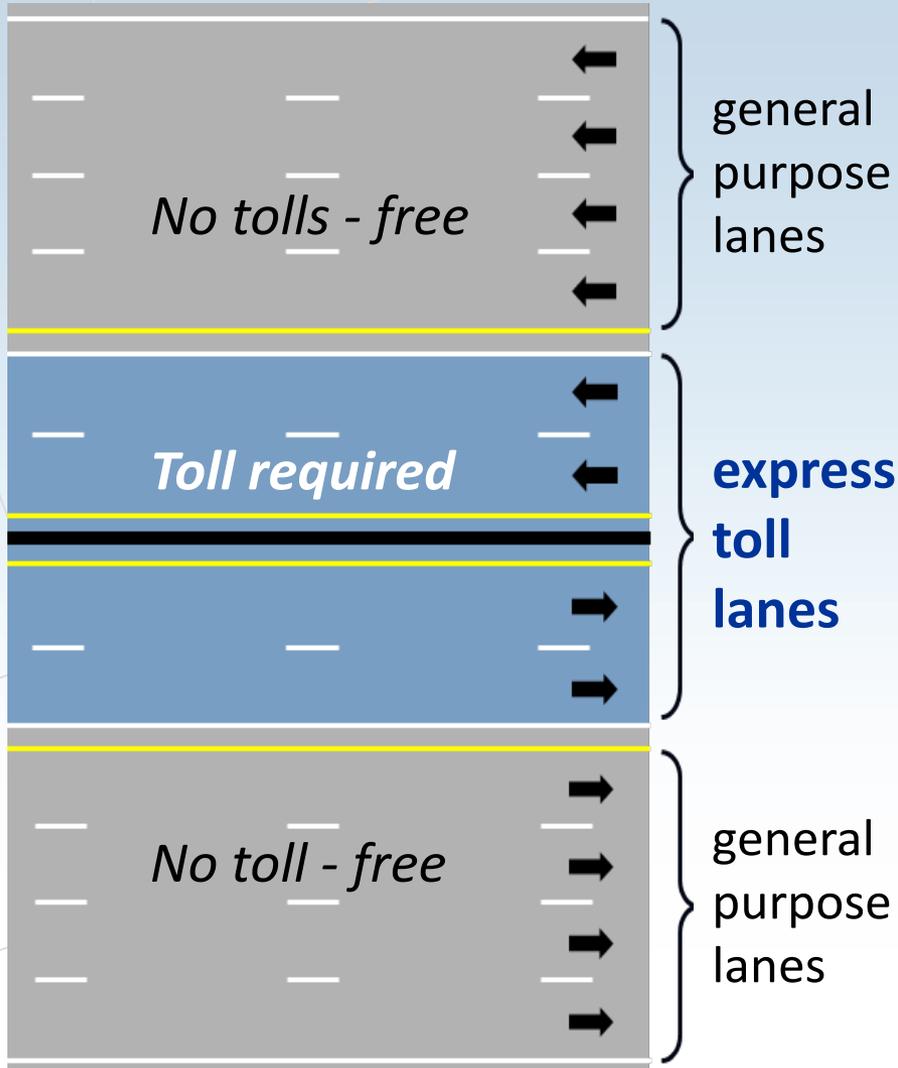
- shift to ***less congested times***
- shift to ***less congested routes***
- shift to ***transit***
- shift to ***other lanes***
 - ***key factor for express toll lanes***



Congestion pricing can provide ***sustainable relief*** by managing peak use even as demand grows demand

Shift to other lanes:

‘Express Toll’ or ‘Managed’ Lanes: *form of congestion pricing*



Most popular tolling method for new projects

Gives drivers a **choice**

- pay a toll & bypass congestion
- most drivers value having a choice
 - across all income levels

Congestion relief

- **proven & effective** tool for congestion management

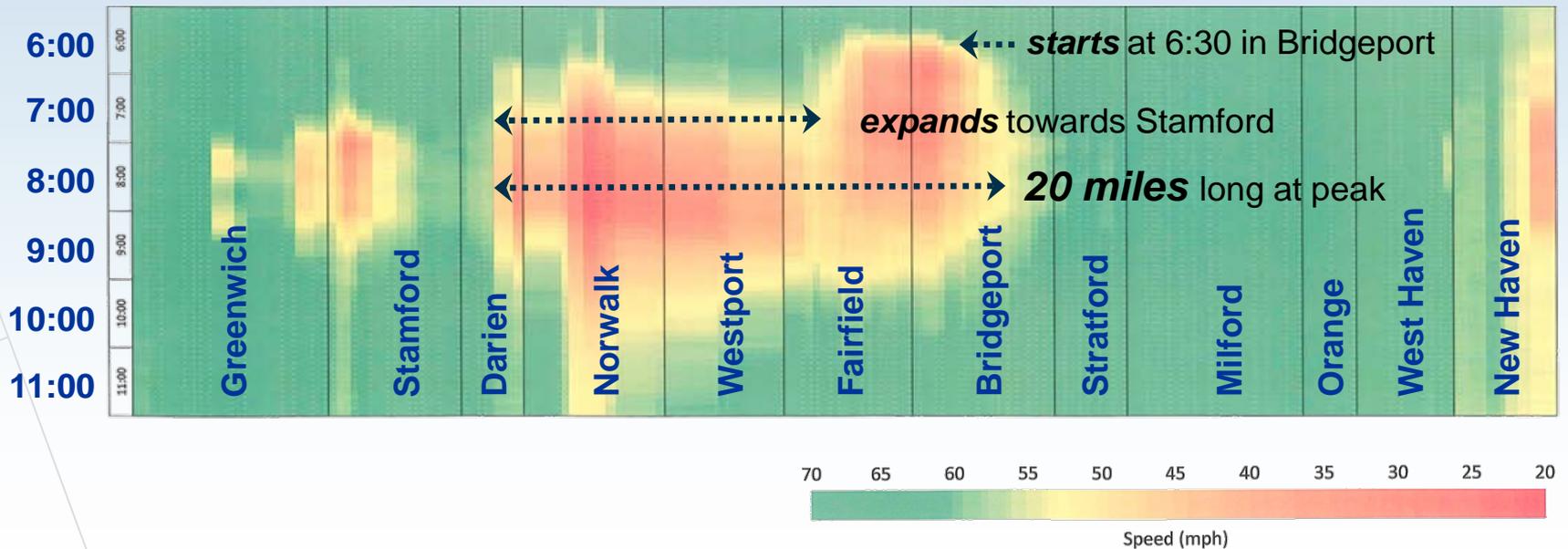
I-95 Corridor: New York/New Haven



Travel speed data illustrates *extent & duration* of the problem

Morning congestion is severe & focused in Bridgeport – Stamford section

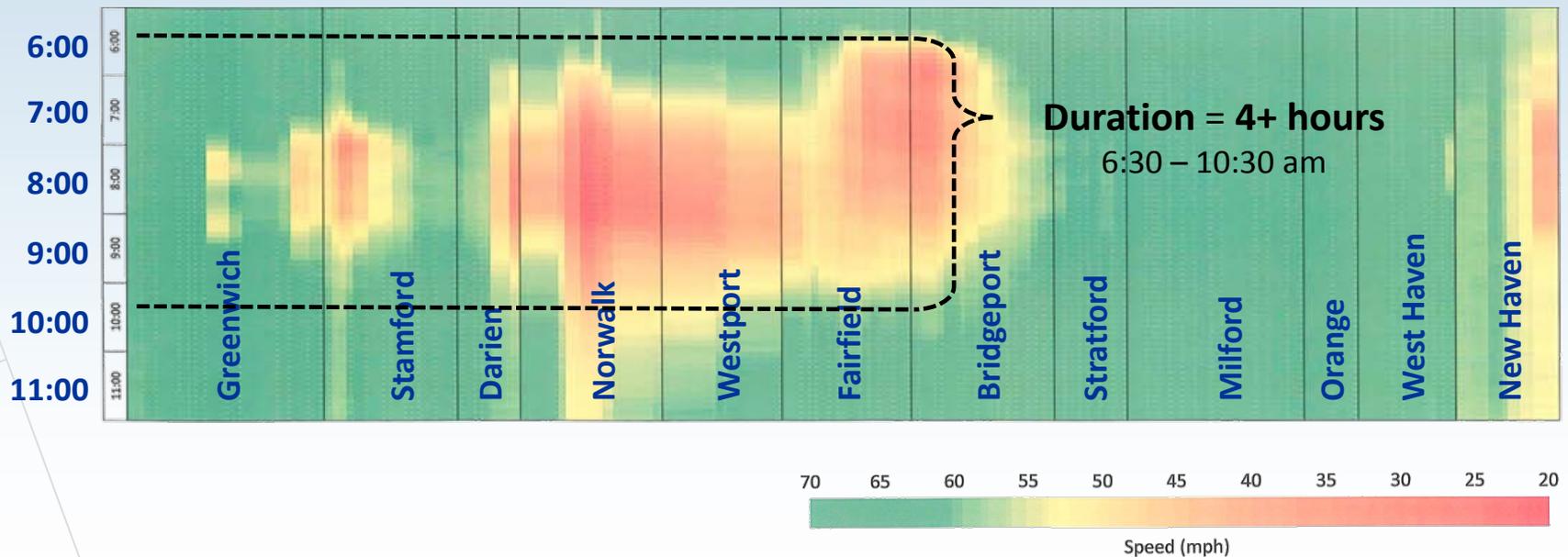
Southbound A.M. Bridgeport – Stamford Area



Travel speed data illustrates *extent & duration* of the problem

Morning congestion can last over 4 hours

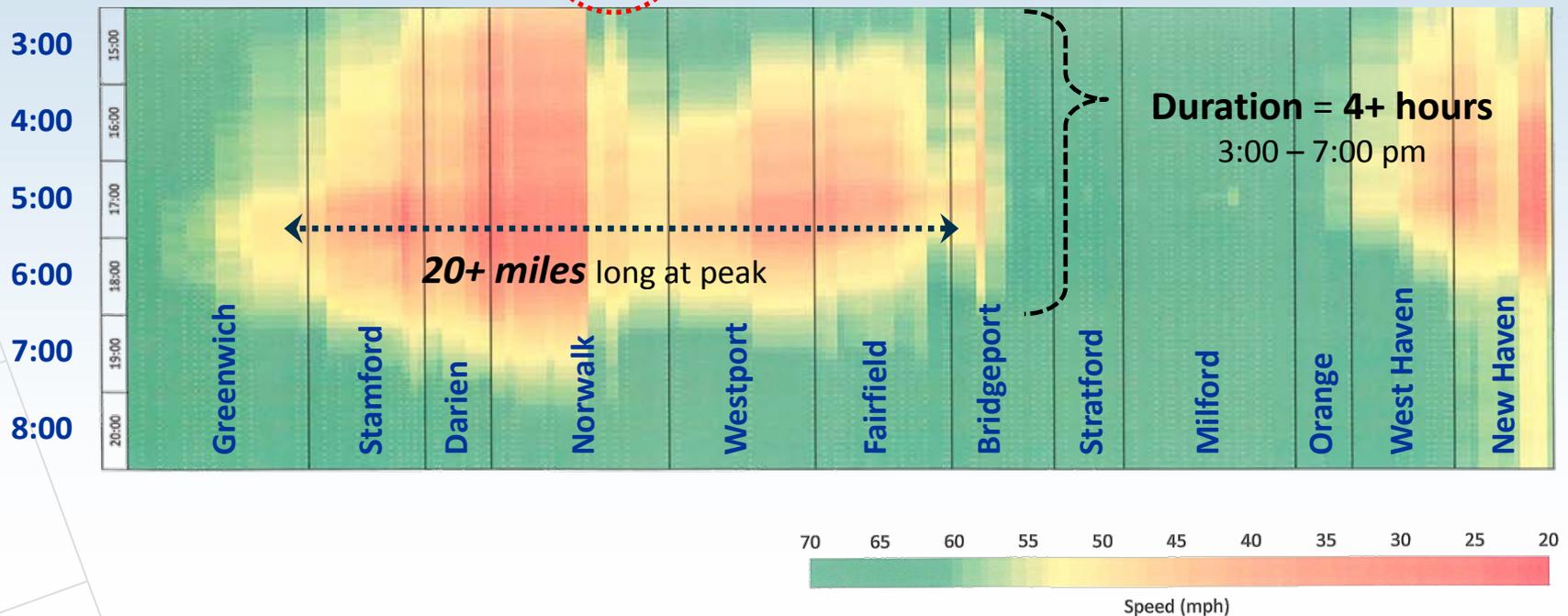
Southbound A.M. Bridgeport – Stamford area



Travel speed data illustrates extent & duration of the problem

Afternoon congestion is just as severe

Northbound P.M. period *Bridgeport – Stamford area*



Transit plays a vital role in corridor & *must be part of the solution*



What can be done to enhance its role?

Rail service

- How will I-95 tolls affect rail ridership?
- How to address parking problems?
- How to serve growing # of 'intrastate' trips?

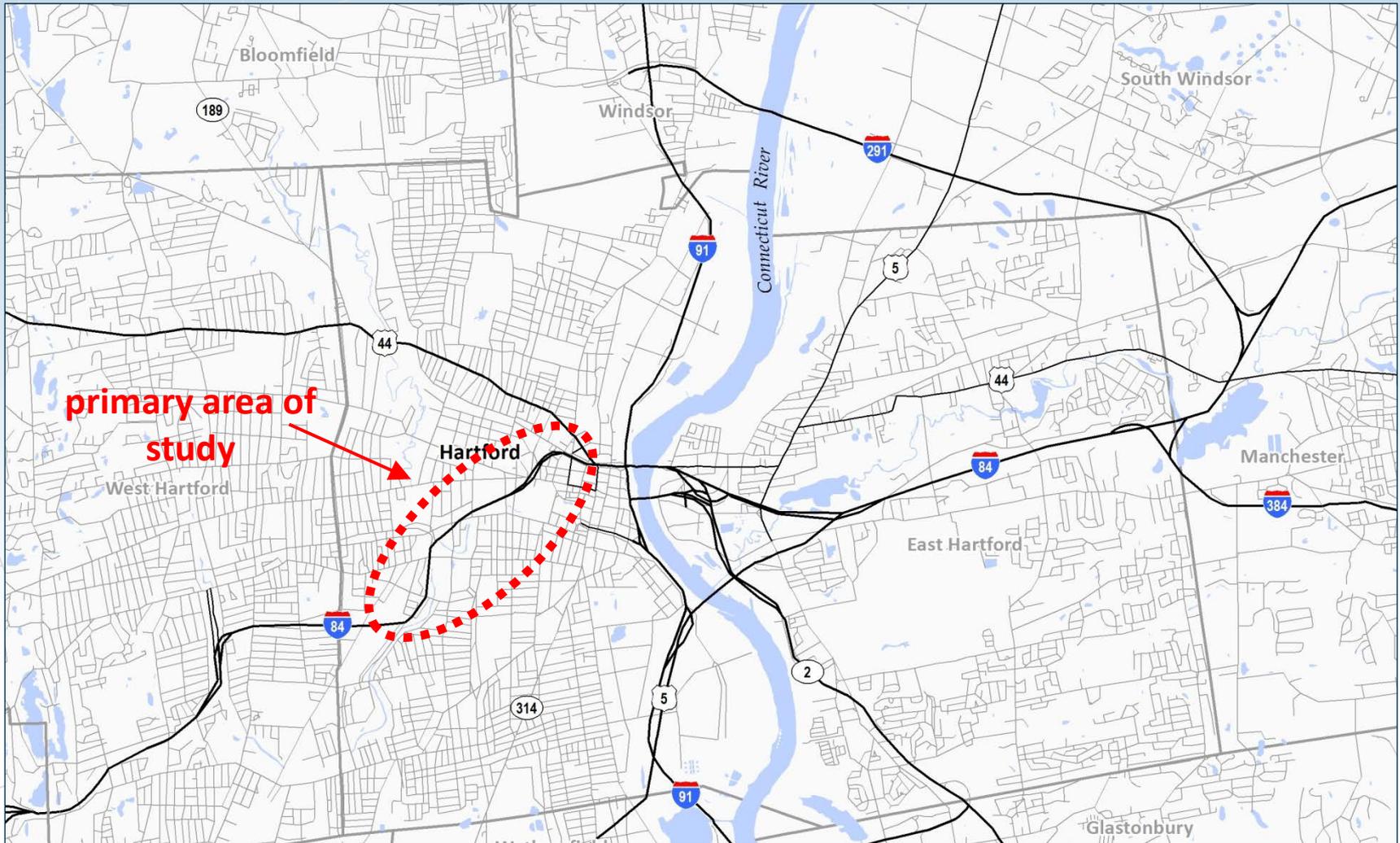
Bus service

- What bus service improvements are needed?

New opportunities: *express toll lanes ...*

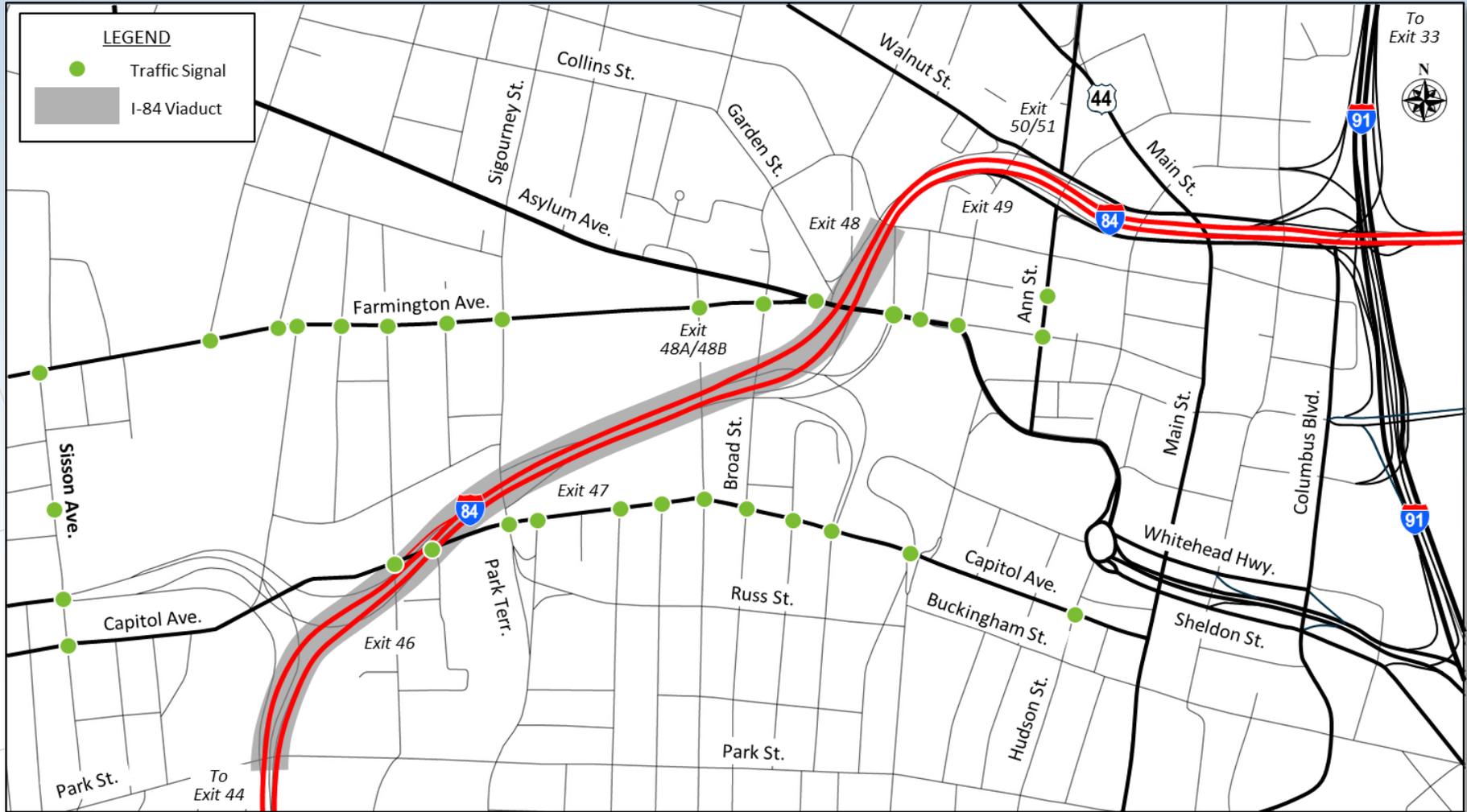


I-84 is part of regional network



I-84 Viaduct:

$\frac{3}{4}$ -mile long, 50 years old, heavily congested

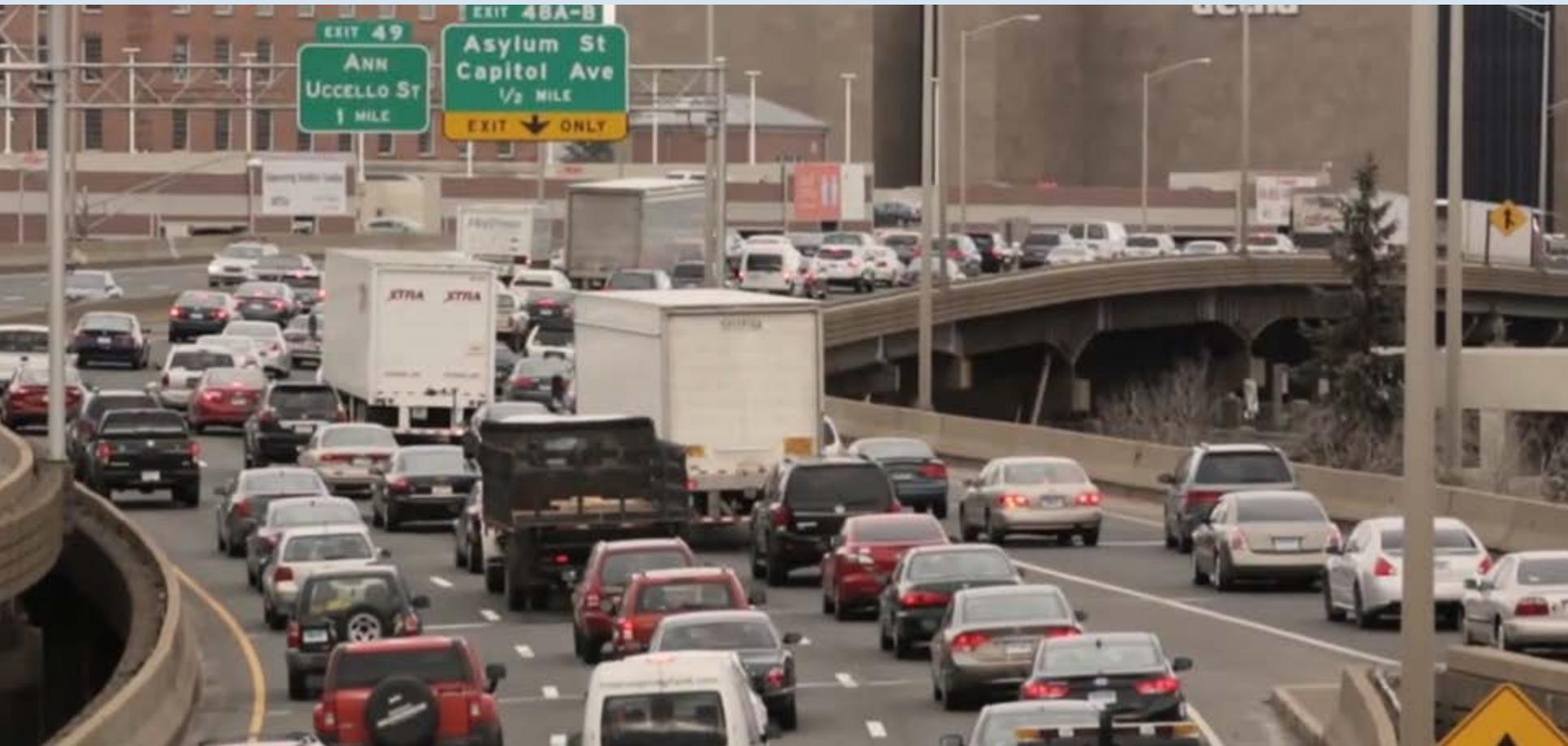


Connecticut's *busiest* freeway

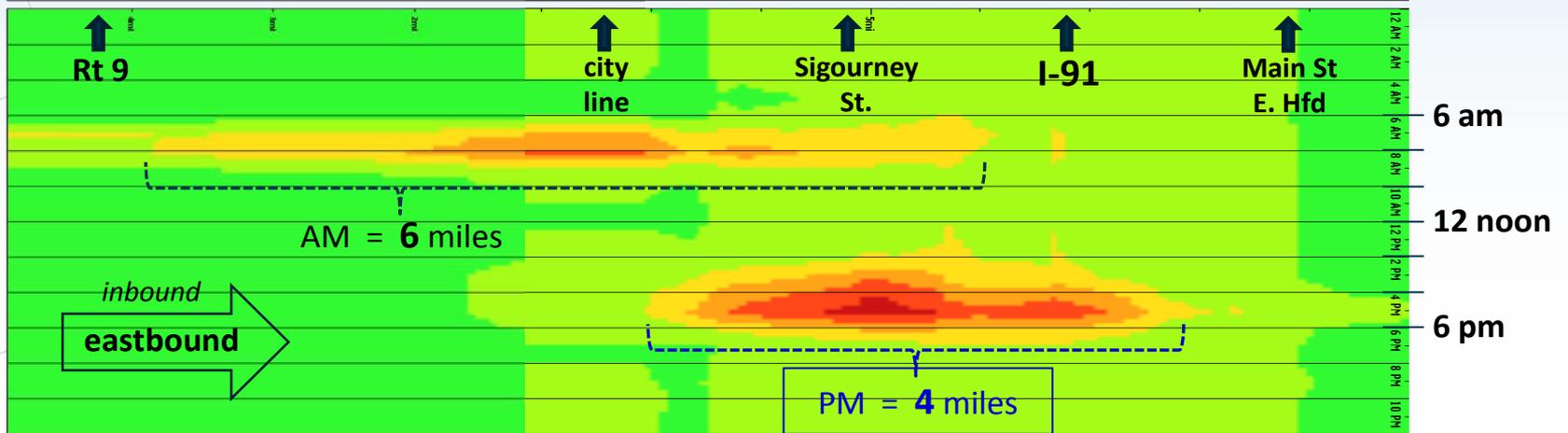
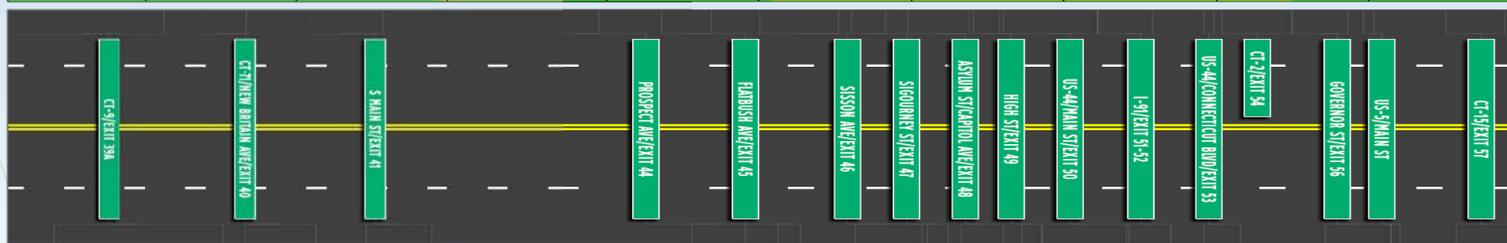
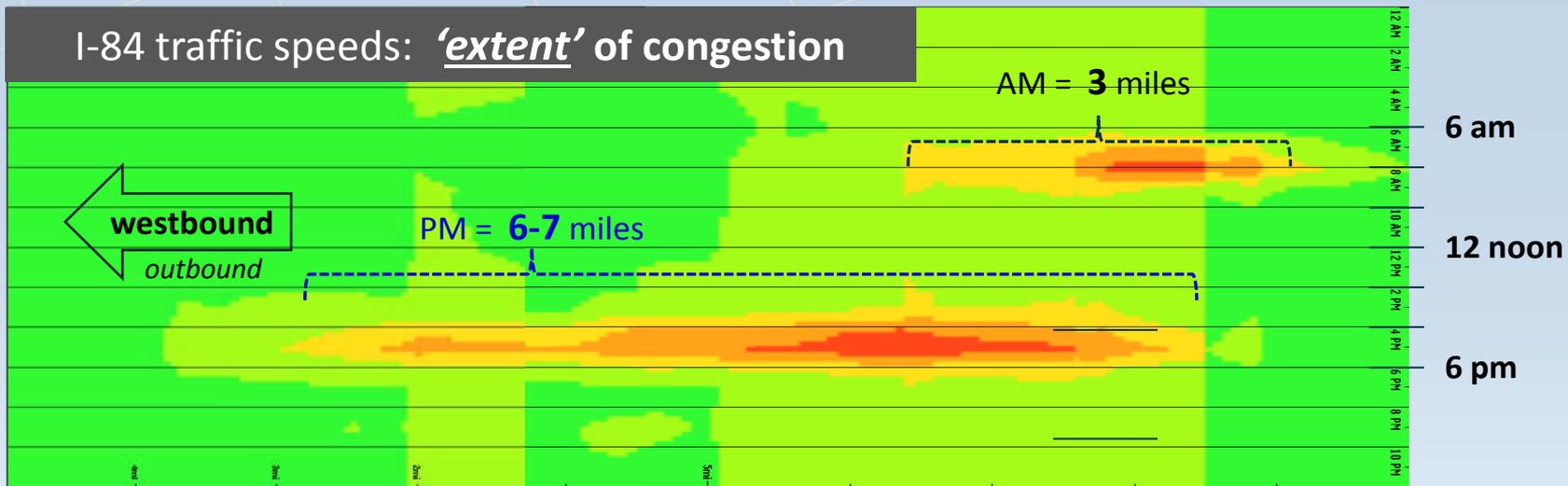
175,000 = daily traffic volume (higher than I-95)

6-7 mile traffic jams

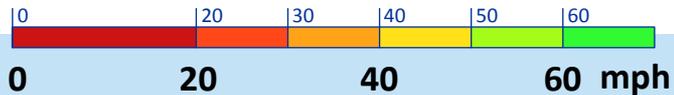
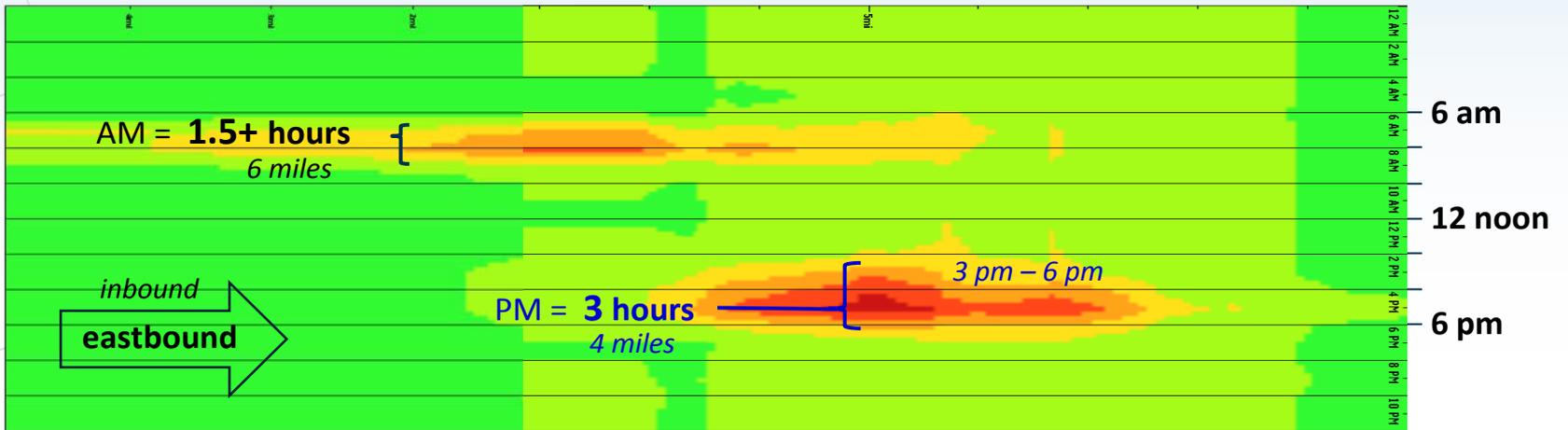
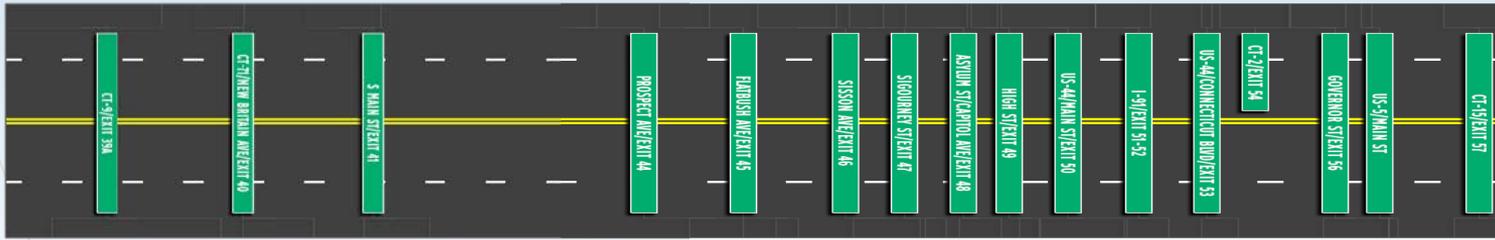
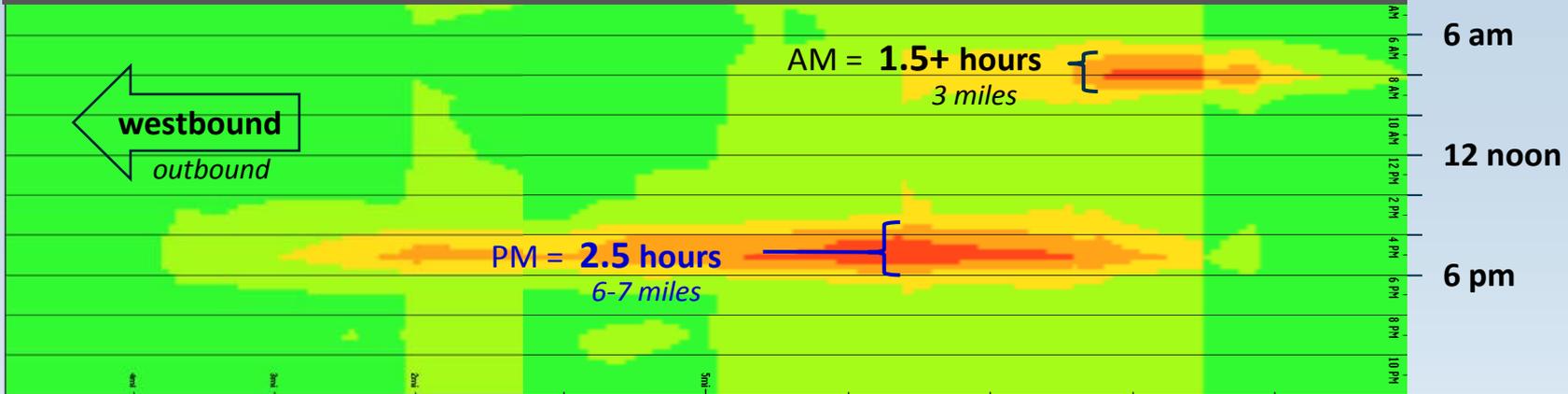
- Most congested of Hartford freeways (*nearly 50% of region's congestion*)
- Less congestion than I-95, but still a problem

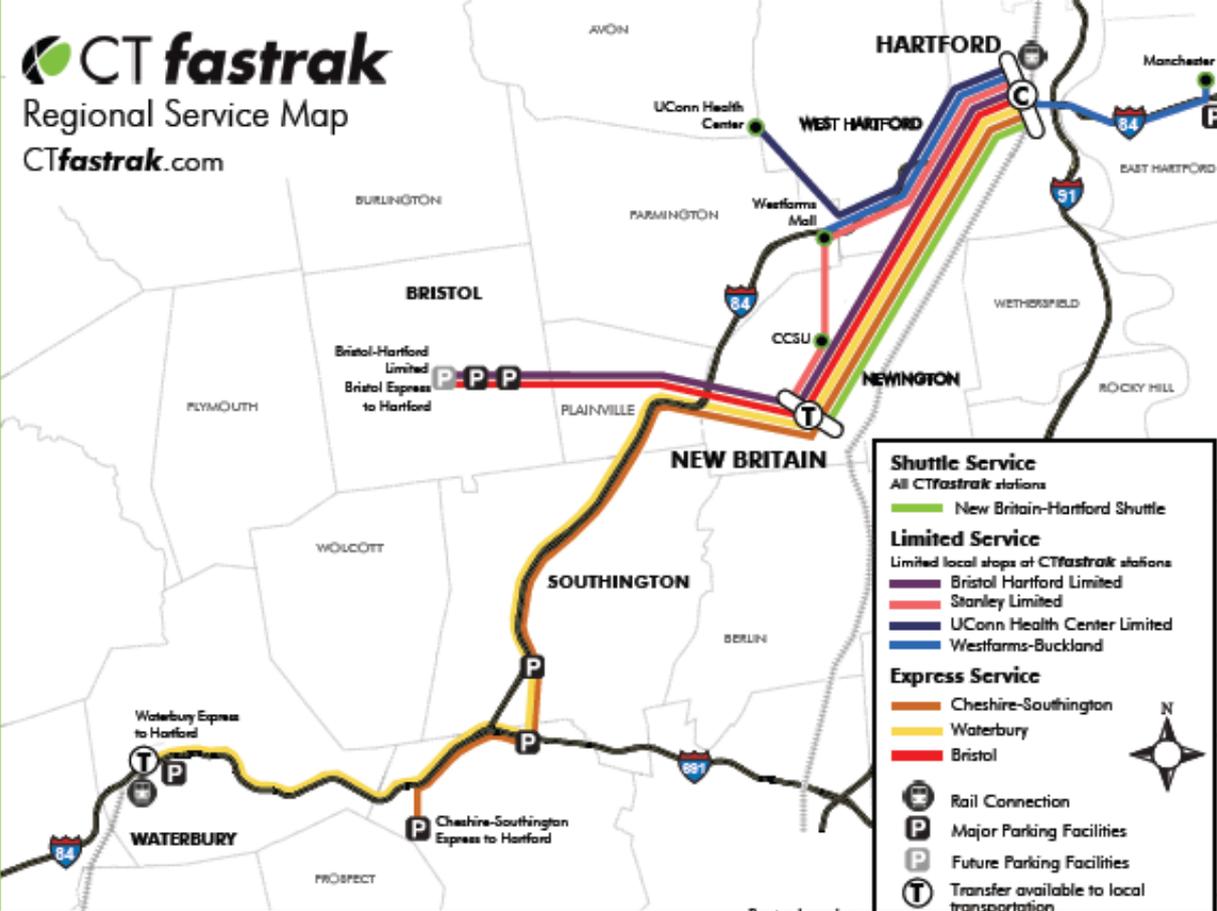


I-84 traffic speeds: 'extent' of congestion



I-84 Traffic Speeds: duration of congestion





Shift to transit
 Transit options will
 be improved
 with opening of
CTfastrak in 2015





CLIMATE CHANGE & EXTREME WEATHER EVENTS

How CT DOT Is ADAPTING

Preservation Task Force 2013-07-24

HOW EXTREME WEATHER EVENTS AFFECT DOT

Impacts differ
by type of storm
& environmental
setting:



COASTAL STORMS

- **Sea level is rising & flood zones expanding**
 - Many state facilities are **outside** flood zone
 - Some facilities **within** coastal flood zone are elevated 'above' flood level
- **Rail facilities are concentrated along coast**
 - special reason for concern

Types of Problems:

- **Beach erosion**
- **Tidal & backwater flooding**
 - Facility closure, but minimal damage
 - Some assets can be moved for storm: rail cars, buses, highway maintenance trucks
- **Wind damage ????**



INLAND STORMS



- Inland problems more extensive due to larger geography
- Inland events can be more damaging to transportation infrastructure
 - Increasing frequency
 - Increasing intensity of storms
 - Larger rainfall amounts
 - Higher flood levels in streams & rivers

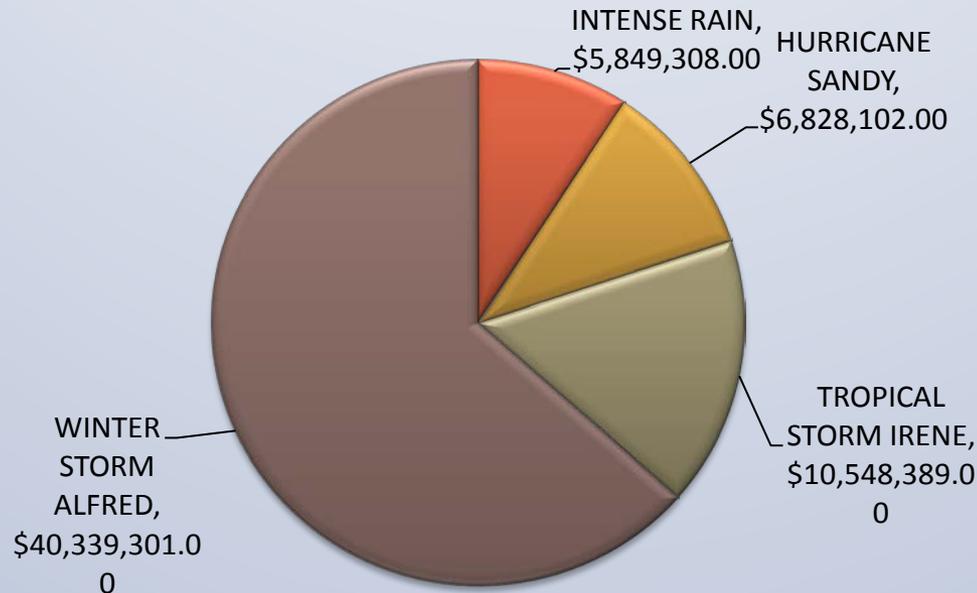
Types of Problems:

- Bridge damage
- Culverts washed out
- Roadways washed out
- Wind damage

Frequency & Budget Impacts of Extreme Events

Number of Emergency Declaration Projects Initiated by Year

- Increasing frequency trend
- Increasing Fiscal Impact on Department Budget



HOW DOT IS ADAPTING

Variety of Strategies & Responses required:

- ***Preparation for approaching storms***
- ***Storm response***
- ***Longer term strategies & adaptations***

Thank you



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