Interstate 84 Viaduct Study

Public Workshop #1
November 19, 2009

How this Process Got Started

- Citizen group formed in response to 2006 CTDOT Viaduct Study—Hub of Hartford
- Mayor Perez asks CTDOT to engage the City in Planning; CTDOT agrees to participate
- CTDOT advances short-term repair project
- This study begins exploration of long-term options

Viaduct Study

- Explore multiple options for the Viaduct
- Consider community/urban design, economic development and transportation perspectives
- Three phases of work: analysis, preliminary alternatives, composite alternatives
- Complete process in April/May 2010
- Three public workshops
- Set stage for more detailed study by CTDOT

Today's Agenda

- **Review** of current conditions
- **Case studies**: What can we learn from other communities?
- **Small group discussions**—community/urban design; economic development; transportation
- **Report back** on small group discussions
- Discussion about potential **future alternatives**
- **Set stage** for beginning next phase of this study


Upper Albany
Clay Arsenal
Asylum Hill
West End
Downtown
Frog Hollow
Parkville
N
Image U.S. Geological Survey
Google

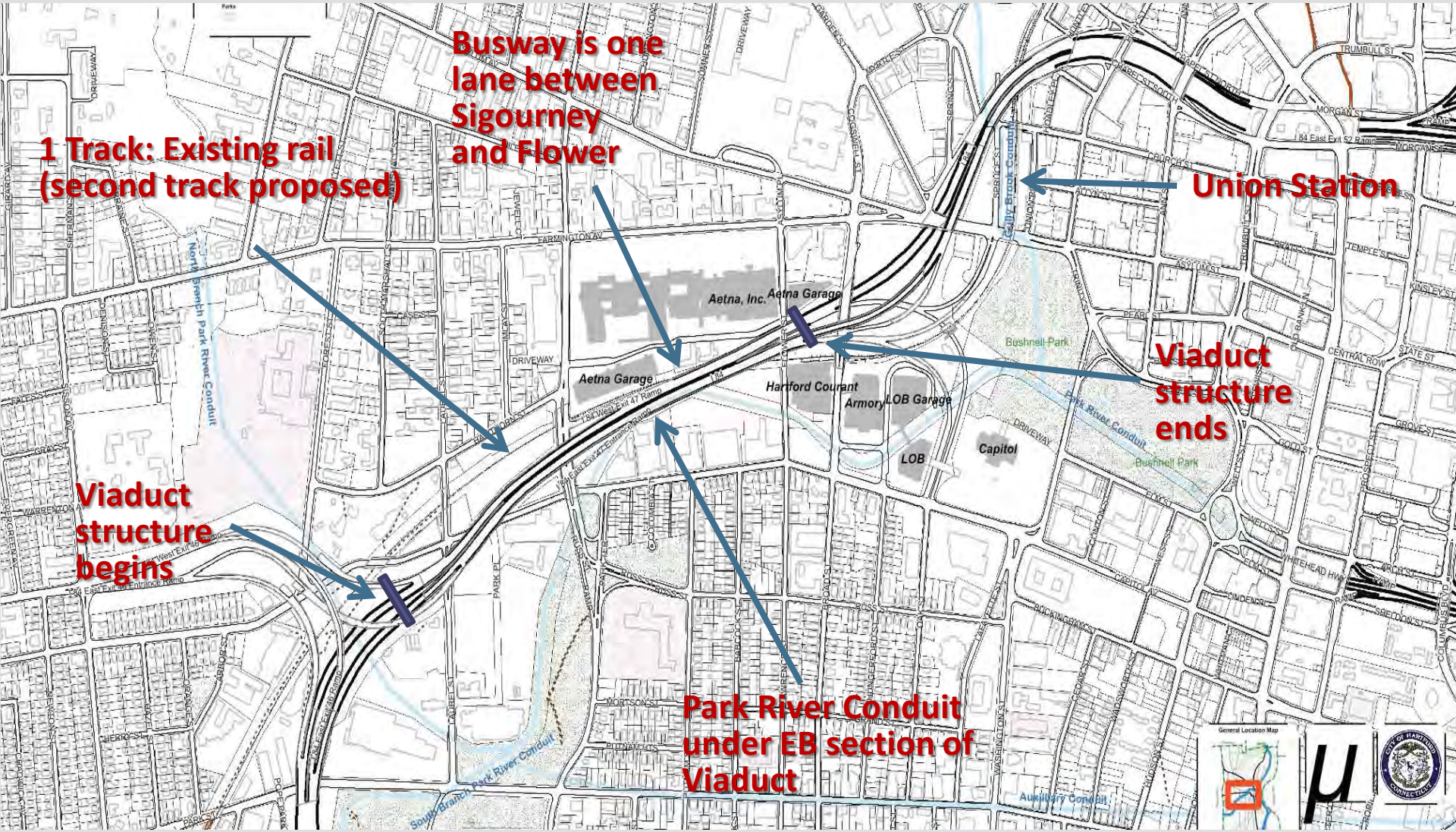
Viaduct Today: Physical Conditions

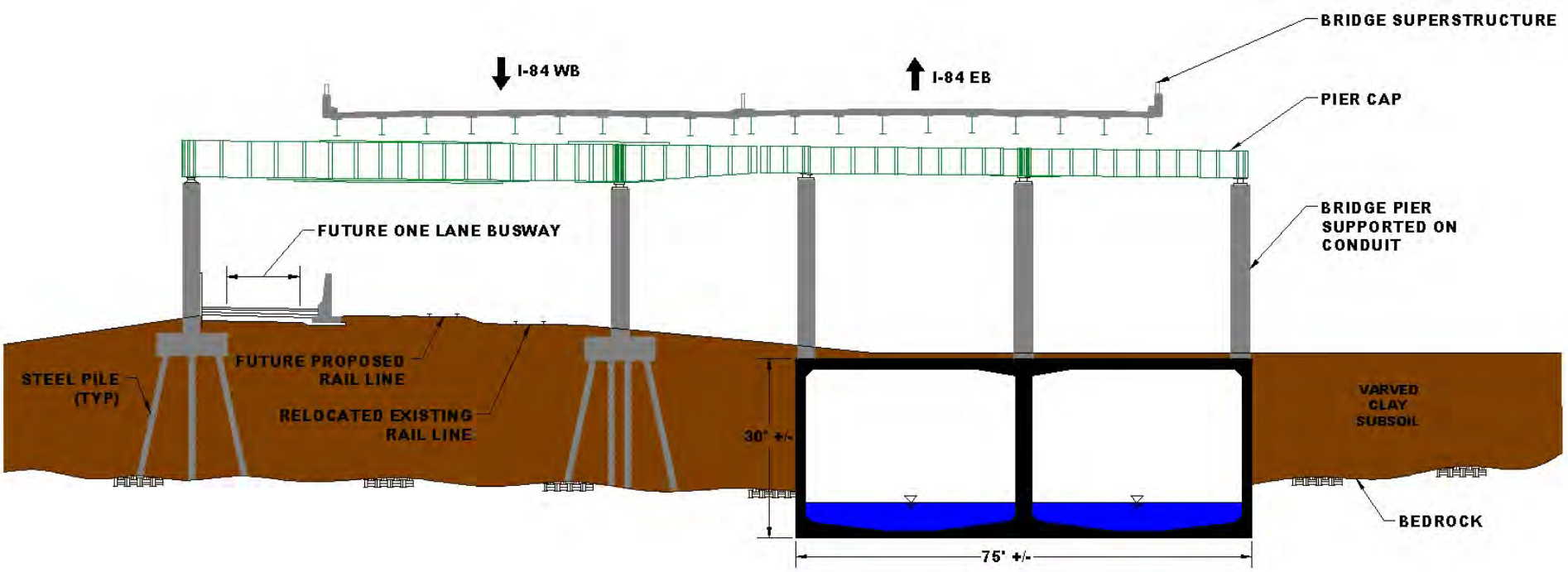
- Carries 176,000 vehicles per day
- Eight highway ramps between Sigourney Street and Asylum Avenue
- Requires extensive ongoing maintenance
- Divides the city—community, environmental, economic and transportation consequences
- Creates unattractive environment—underutilized land

Context: Many Related Parts

- Hartford Plan of Conservation and Development
- Hartford 2010 – Tridents
- Tiger Grant Proposal
- I-Quilt
- Hartford-New Britain Busway
- New Haven-Hartford-Springfield commuter rail; high-speed rail

Other Key Factors and Constraints





I-84 VIADUCT AT PARK RIVER CONDUIT

Interviews: Overview

- The Viaduct is both an **asset and a liability**.
- Creative solutions are needed that respond to **multiple goals**—community, urban design, economic development, transportation.
- **Improve connections** among city neighborhoods/ districts, including Frog Hollow, Asylum Hill, West End, Parkville, Clay/Arsenal, Upper Albany, Downtown.
- **Improve connections** between downtown and Asylum Hill job centers.
- Viaduct replacement is both **needed and expensive**.
- **Public resources** at the state and federal levels are strained to meet infrastructure needs.
- There is **no easy answer.**

Viaduct Sections Presents Different Challenges

- Sisson/Capitol
- Sigourney
- Flower
- Asylum/Farmington/Broad


Sisson


NO
CROSSING
TO
FLATBUSH
EXIT 45
CONSTRUCTION
AHEAD


Sigourney


Budget


STRENGTH AND
COMMITMENT.
People's United
Bank
DO NOT
ENTER


Flower


EXIT 46


SPEED LIMIT 5
WEST LOT
PARKING
FOR
HARTFORD COURANT EMPLOYEES ONLY
VISITOR PARKING is available in BROAD ST. LOT
NOTICE
This Area is Under
24 hour CCTV Surveilla
TRESPASSERS WILL B
PROSECUTED
AVISO
Esta Area Es Vigilada
Las 24 Horas Del Dia
TRANSGRESORES SERA
PERSEGUIDOS FOR LA L


The Hartford Courant
The Hartford Courant
EAST
Boston
NORTH
Bradley International Airport
PARKING
NOTICE


Asylum/Farmington/Broad


EAST
Boston


SPEED
LIMIT
50


Stowe Center
Twain House
Elizabeth Park
St Francis Hosp
U of Hartford
TO
84
INTERSTATE
91


Boston
GARDEN


DO NOT
ENTER


PENSKE
01764


Welcome to Hartford
Home of Raymond Law
539
62
ART SHOW


SPRUCE ST
Welcome to Hartford
haymondlaw.com
Home of Hay
800-HA
PEDESTRIANS CROSS ASYLUM STREET AT UNION PLACE


(p)
park

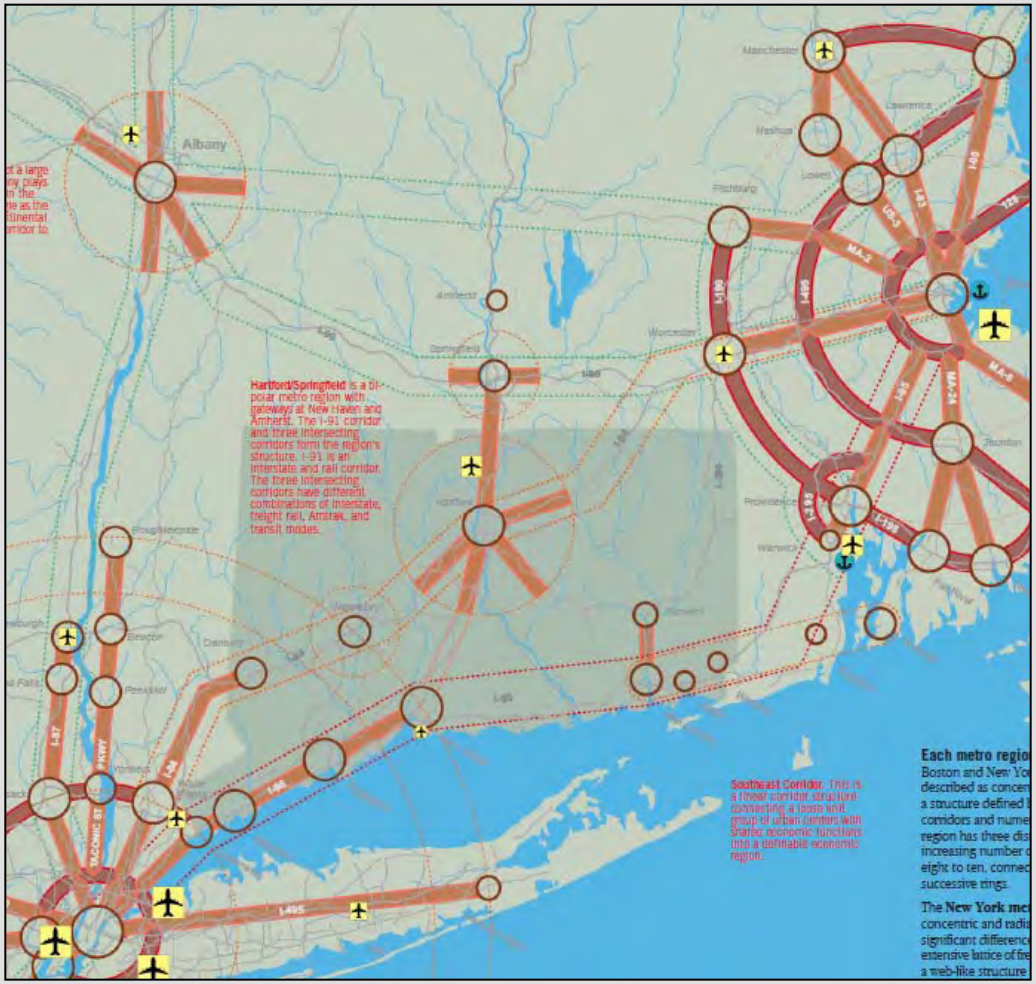

WEST
84


Asylum/Farmington/Broad
Flower
Sigourney
Sisson

Viaduct Today: Economic Framework

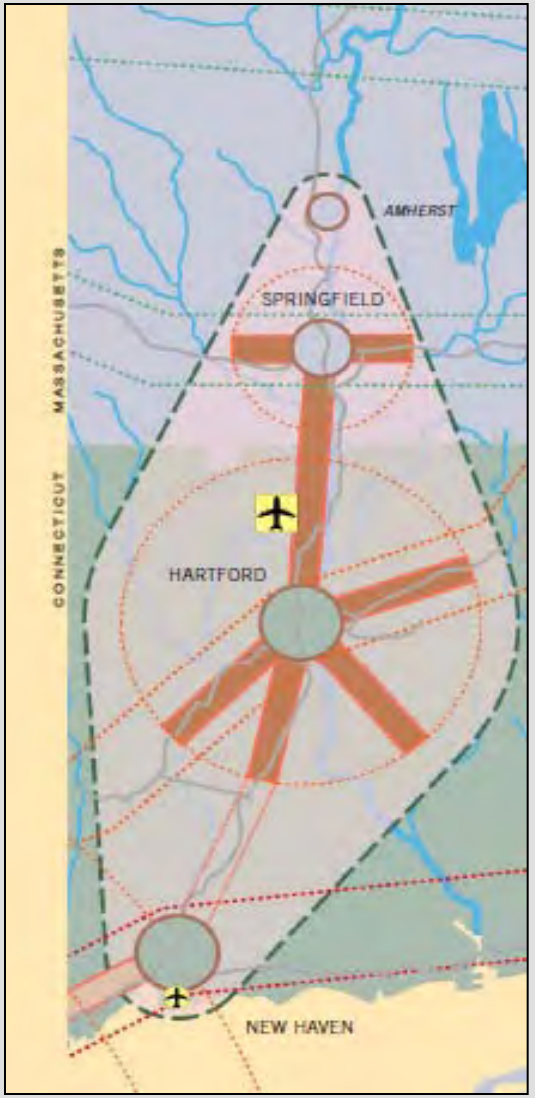
- Hartford Metro Area's economic potential ***depends*** on its access and relationships with the Boston and New York markets

- I-84 & rail lines are important east/west links to these markets



Viaduct Today: Economic Framework

- The I-91/Connecticut River Valley is a “Knowledge Corridor”
- Potential to be Connecticut’s “Silicon Valley”
- Downtown Hartford an important anchor
- Downtown must be an attractive place to live, work and play.

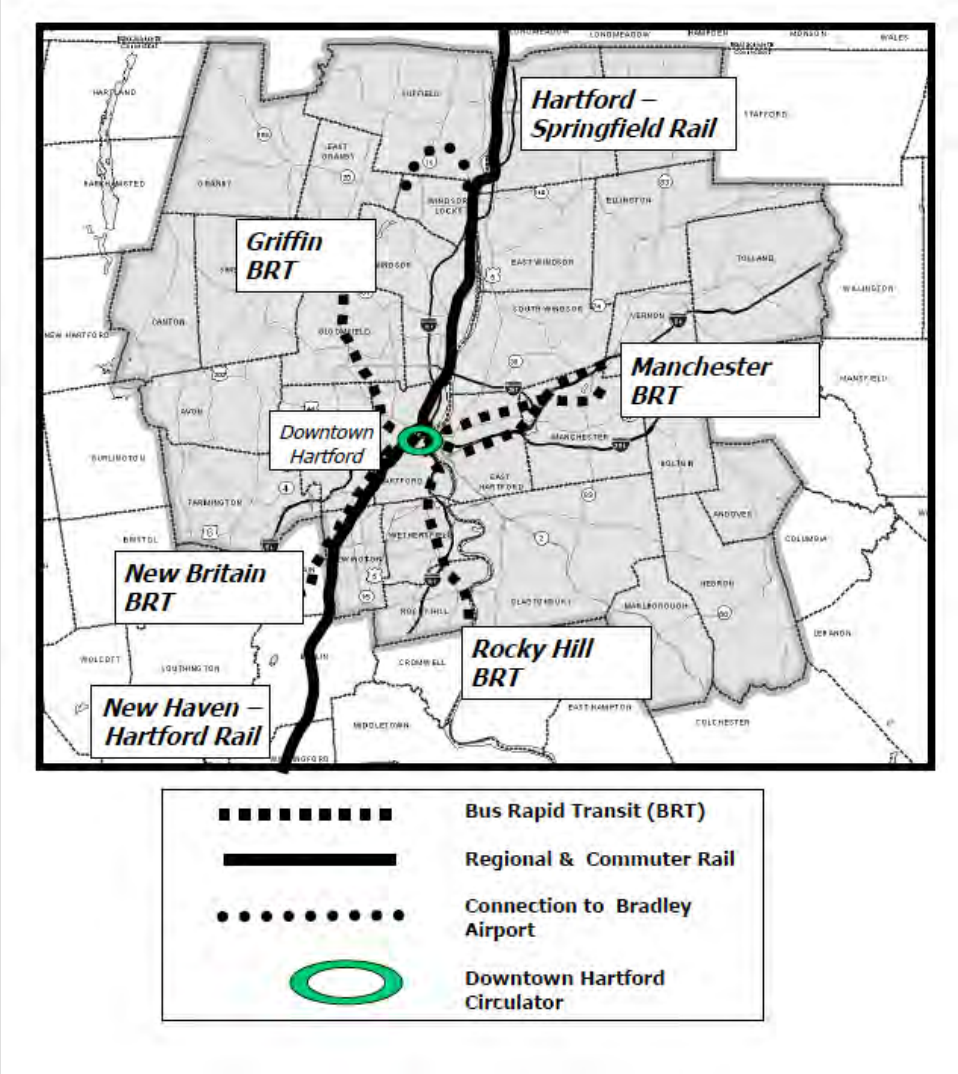


Economic Framework

- Connecticut is one of the oldest states in the country
- The aging workforce will need replacements
- The State experienced a 14% ***decrease*** in population within the 25-44 age group between 1990 and 2004.
- Again, Downtown must appeal to the younger generations by offering an inviting urban environment

Economic Framework

- Union Station potential to become an economic engine
- With transit convergence can be economically explosive



Thinking Ahead

- Market Access
  - Inter & Intra Regional Access
  - Neighborhood Access to Downtown
  - Employee access to job

- Development Opportunities/Value Creation
  - Supports evolution of Union Station
  - Development parcels
  - Transit-oriented development opportunities

- Quality Environment
  - Better connections
  - Remove barriers

Viaduct Today: Transportation Conditions

- High congestion/delays
- High volumes
- Regional, sub-regional and local use
- Function/safety characteristics not optimal
- Frequent repairs required

How do I-84 Viaduct Traffic Volumes Compare to Other Roads?

• NJ Turnpike, Newark	315,000
• George Washington Bridge, NY/NJ	300,000
• I-95 Virginia/Washington DC	280,000
• I-93/Big Dig, Boston	190,000
• **I-84 Viaduct**	**175,000**
• I-195 Providence	160,000
• Gardiner Expressway, Toronto	120,000
• Alaskan Way Viaduct, Seattle	100,000
• I-90 Mass Turnpike, Boston	100,000
• I-291, Springfield	80,000
• Syracuse I-81	90,000
• I-93, Concord NH	70,000
• Embarcadero Freeway, CA	60,000
• **Farmington Avenue**	**15,000**

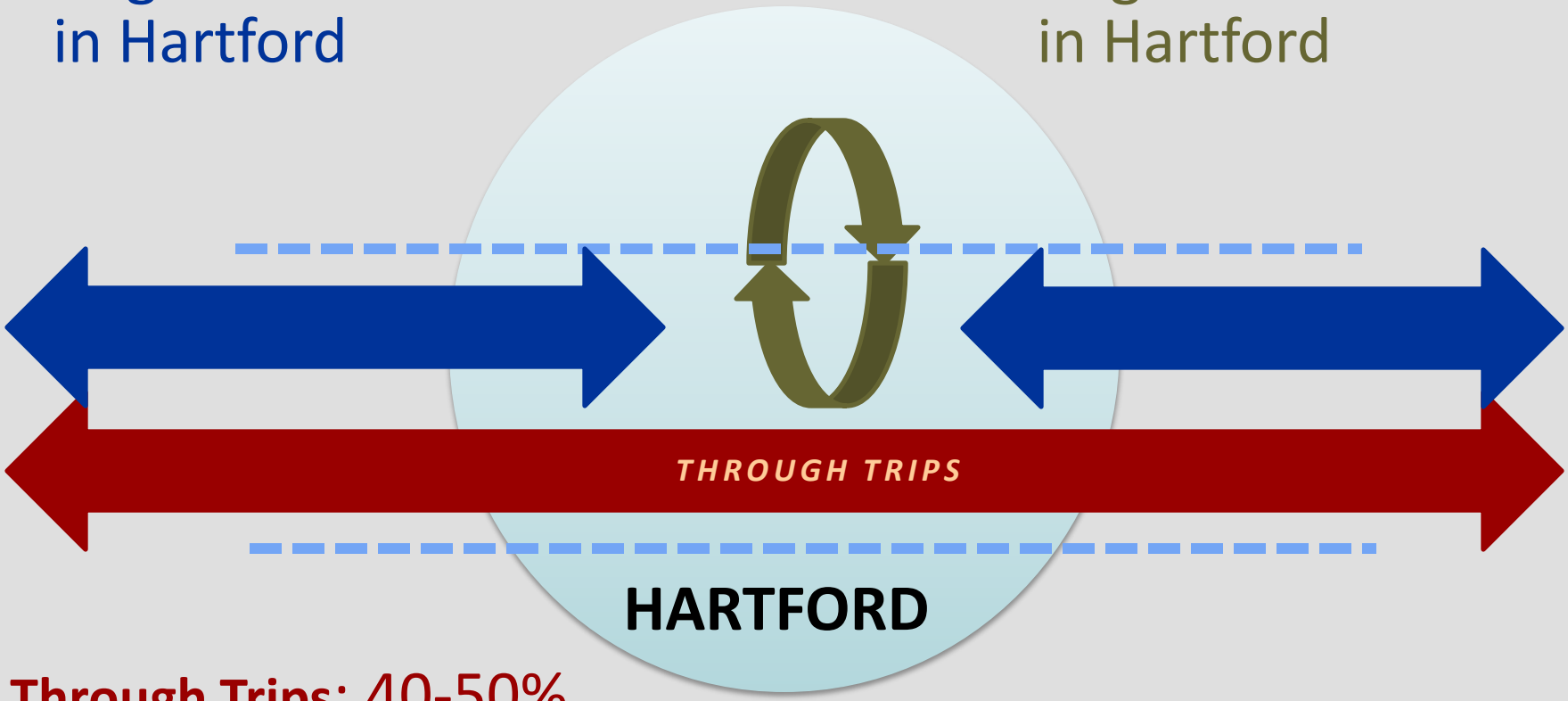
Note: daily traffic; all numbers are approximate; recorded years vary

Traffic Modeling

- Understanding how I-84 is used today, and who uses it, is a key step in considering future possibilities
- CRCOG has begun this process

40-50% of trips originate **or** end in Hartford

5-10% of trips originate **and** end in Hartford



Through Trips: 40-50% of trips pass through the city but **originate and end elsewhere.**

175,000 Daily Trips on the Viaduct

Estimated trip types from CRCOG model (2005)

- **10,000 originate AND end in Hartford**
  - Hartford residents or businesses travelling to other parts of the city
- **80,000 originate OR end in Hartford**
  - Trips from outside the city to Hartford
  - Residents, businesses, visitors travelling out of the city
- **85,000 originate AND end OUTSIDE of Hartford**
  - Long through trips: *diversion possible*
    - Waterbury to Boston: *good candidate*
    - Waterbury to Springfield: *less likely to divert*
  - Short trips within the region: East Hartford to West Hartford: *no diversion likely*

Note: Numbers are rounded based on 2005 CRCOG model

What can we learn from other communities?

Selected Case Studies: Overview

- Boston: “Big Dig”
- Seattle: Alaskan Way Viaduct
- Toronto: Gardiner Expressway
- San Francisco: Embarcadero
- Syracuse: I-81

Big Dig: Boston Central Artery

- Like I-84, carries regional **through traffic and downtown traffic**
- I-93 viaduct was long seen as a **barrier** between downtown, the waterfront and neighborhoods
- Approximately **190,000 vehicles per day** before project
- Project **increased roadway capacity** through tunnel and surface boulevard
- **Highway in tunnel**; surface boulevard carries local traffic
- More than **20-year** construction period
- Overall project cost $14.6 billion; **state paid approximately $6 billion**

Seattle: Alaskan Way Viaduct

- Carries primarily **through traffic**; does not provide local access
- Creates **physical barrier** between city and waterfront
- Approximately **100,000 vehicles per day**
- Current proposal: replace with a **4-lane bored tunnel** that can accommodate 80,000-85,000 vehicles per day for approximately **$4.2 billion** (state and local funds)

Toronto: Gardiner Expressway

- Carries **downtown traffic** and **some regional through traffic**
- **Barrier** between downtown and the waterfront
- Approximately **120,000 vehicles per day**
- **8-lane surface boulevard proposed** as an alternative

San Francisco: Embarcadero

- Served as a **spur connecting to Bay Bridge**
- Created **barrier** between city and waterfront
- Demolished in 1991 and replaced with an attractive **surface boulevard**
- Freeway carried approximately **60,000 vehicles** per day; replacement boulevard carries approximately **26,000 vehicles**

Syracuse: I-81

- Carries **downtown and regional through traffic**
- Approximately **90,000 vehicles** per day
- **Separates downtown** from medical/ educational institutions
- Onondaga Citizens League recently supported concept of highway removal and replacement with a **surface boulevard**
- I-481 seen as downtown **bypass** option

Small Group Discussions

- Groups
  - Community/Urban Design
  - Economic Development
  - Transportation
- What issues should this study consider?
- How would you define success?

What is the possible range of replacement alternatives?

Replacement Alternatives?

- Surface boulevard

- Replacement Viaduct
- Replacement Viaduct with surface boulevard

- Tunnel/depressed alignment
- Tunnel with surface boulevard

- Other options worth considering?

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