#### **Tunnel Discussion**

#### What we are hearing

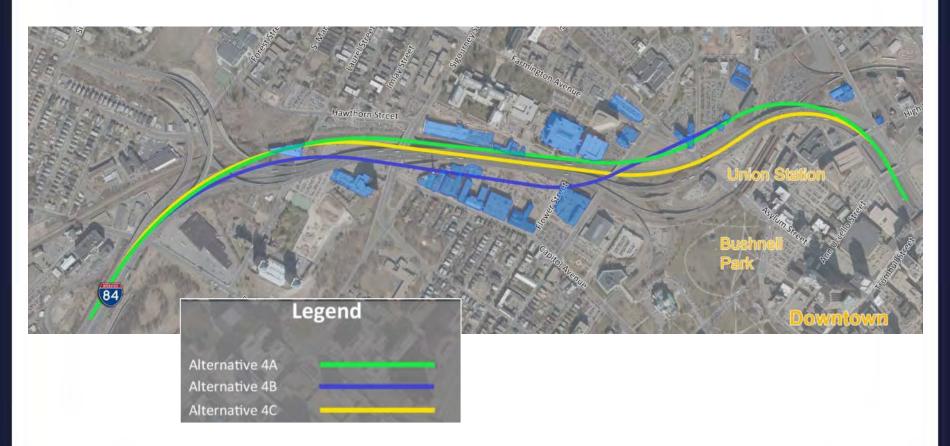
- Make the impact of the highway go away
- Better connect neighborhoods
- Provide economic development opportunity
- Connect parks via a multiuse trail
- Reduce noise and air quality impact
- Improve aesthetics

#### How we have responded

We agree that the tunnel offers many opportunities, so we explored it in more detail:

- 3 separate alignments
- Construction staging plan
- Traffic assessment
- New option to mitigate traffic impact
- Qualitative air and noise assessment
- Qualitative development potential assessment
- Detailed cost estimates

# 3 Alignments



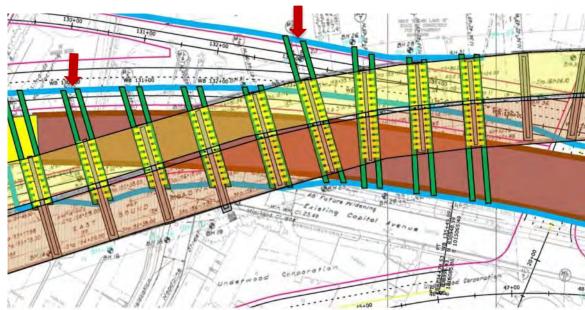
Conclusion: Alignment 4C is only option that avoids massive property impacts

### Construction staging





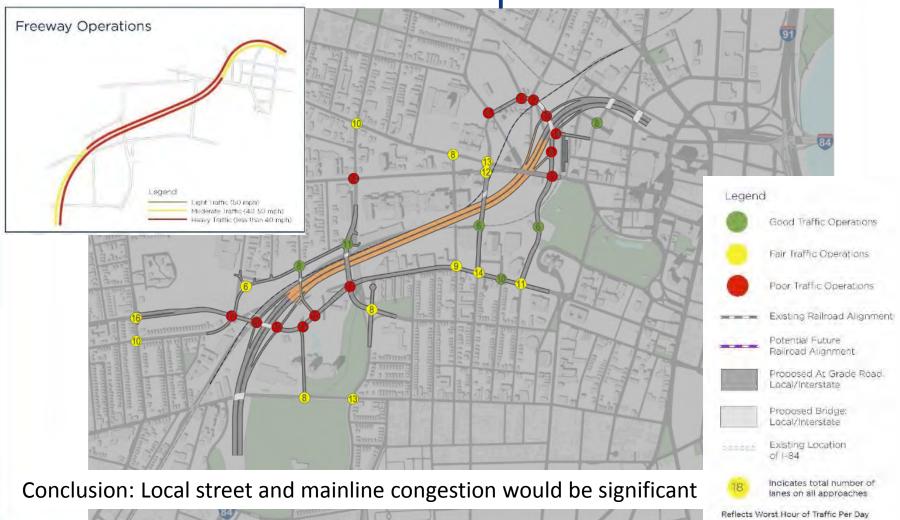
Temporary underpinning



Preliminary engineering for I-84 tunnel underpinning

Conclusion: Underpinning requirements will add significant duration to project

Traffic impacts



#### New tunnel option to address traffic





- Interchange ramps at Sigourney Street
- Acceptable traffic operations
- Significant property impacts

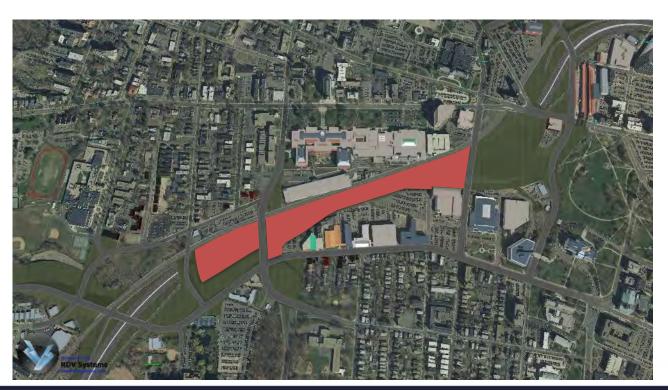
Tunnel Alternative 4C-2(S)

#### Qualitative air assessment

- Emissions are dependent on congestion ...less congestion equals better air quality
- Pollutant concentrations would likely be higher in neighborhoods surrounding the tunnel portals
- Pollutant concentrations would likely be lower in areas adjacent to the covered portion of the tunnel

### Qualitative Urban Design Assessment

- Doesn't provide noticeably more development opportunity
- Creates more urban land than other options, principally between Broad Street and Laurel Street



### Urban Design Assessment

- Land over the highway not well-suited to support future development:
  - Behind buildings and adjacent to the rail line
  - Poor access and visibility
  - Cost premiums a major financial obstacle
- Well-suited for a linear park / open space
- Could also accommodate parking
- Potentially mitigates noise / visual impacts

#### Cost versus benefit

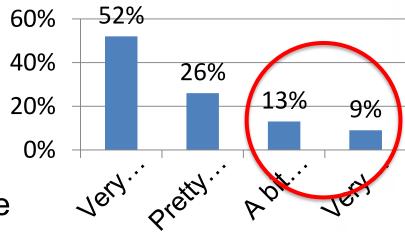
- \$10-12 billion
- Assuming we could pay for it, would it be a wise expenditure?
  - Doesn't create additional opportunity for economic growth
  - Doesn't offer new north-south connections
  - Potentially has significant property impacts
  - Has permitting challenges associate with conduit and power plant relocation



#### **Tunnel Discussion**

How comfortable do you feel about removing Alternative 4 (Tunnel) from further consideration?

- Very comfortable
- Pretty comfortable
- A bit uncomfortable
- Very uncomfortable



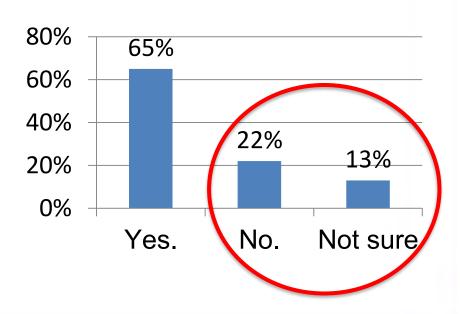
About ¼ of PAC uncomfortable with removing tunnel

#### **Tunnel Discussion**

Do you feel that we have done enough to communicate both the benefits and the limitations of a tunnel option?

- Yes
- No
- Not sure

About a third of PAC feel that more discussion is needed



#### Tunnel Alternative 4C-2(S)





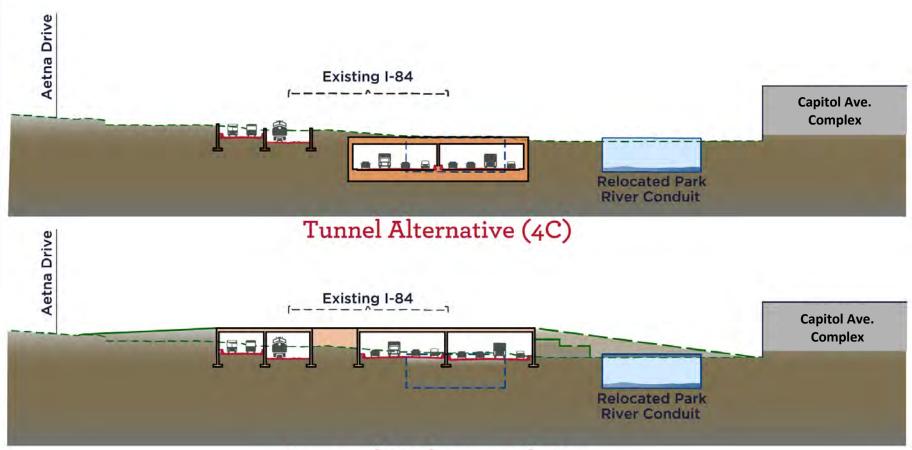
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- Significant property impacts

#### Urban Design Assessment

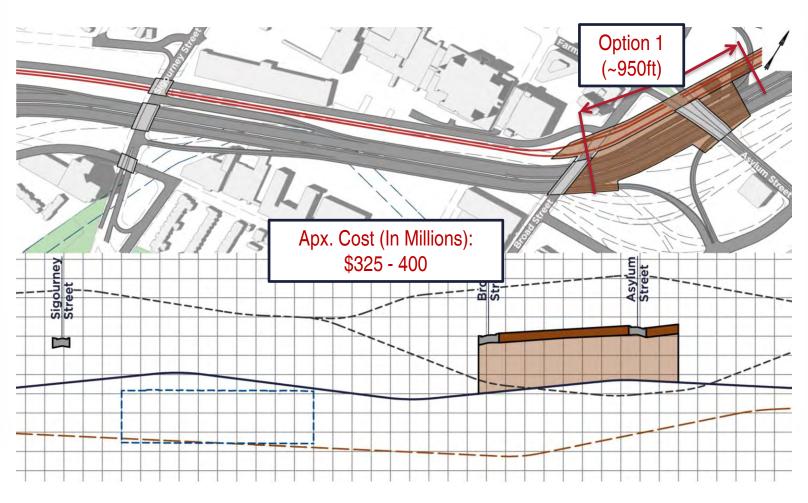
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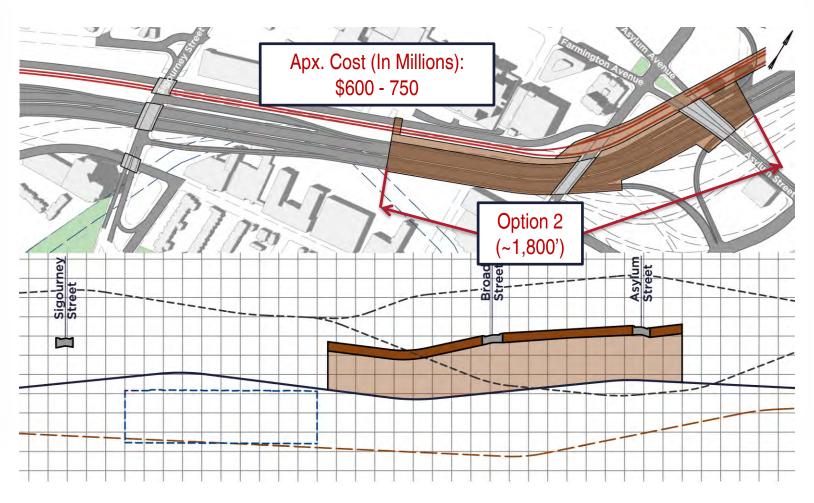
With continued input from the community, we looked for solutions to provide the benefits of a tunnel at a lower cost. The new alternative that we are presenting today is a result of that effort.

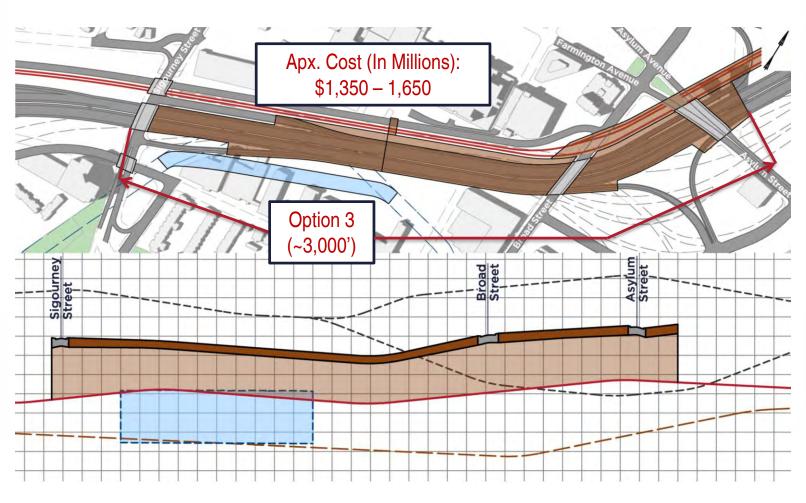




Lowered Highway with Cap















- Capping the highway will give the appearance of a tunnel at a lower cost
- Various options for capping including length and use
- Benefits vs. costs/building impacts will be assessed
- Much still needs to be learned



#### I-84 Urban Design Goals

- Reconnect the City across the highway
  - Accomplish continuity of activity across the highway through location of new development
  - Create attractive, walkable, bikeable connections through Complete Streets
  - Integrate public facilities such as station access, related parking, and open space
- Strengthen the character and functioning of districts on either side of the highway
- Promote TOD around Union Station
- Integrate highway access points within urban fabric

#### I-84 Urban Design Constraints

- Privately-sponsored air-rights development will pose significant financial feasibility challenges
- The value created on air-rights will not offset the cost of deck construction or building premiums without significant public subsidy/support
- Public facilities therefore represent the most likely air-rights opportunities (rail access, open space, or parking structures)
- Air-rights development that is not implemented as an integral part of the project is unlikely to be viable at some later date (i.e. Trumbull/Main)

#### I-84 Urban Design Strategies

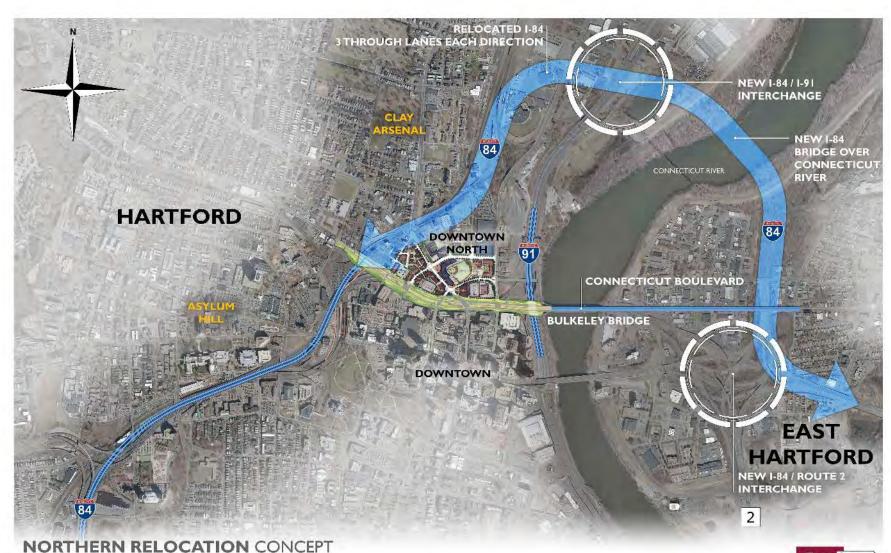
- Given feasibility challenges and costs, limit airrights development to the most critical locations
- Locate rail station / amenities, parking, and open spaces on parcels that offer limited TOD opportunities
- Consider development opportunities on parcels adjacent to the highway that foster continuity of urban activity across the highway



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I-84 CAPACITY IMPROVEMENTS

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I-84 CAPACITY IMPROVEMENTS

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### I-84 Capacity Study

#### What we've heard...

Anthony
Nick
- I saw an exciting I-84 routing concept that would convert the historic stone I-84 bridge back into a boulevard with bike/ped connections to the riverfront and an improved connection between the EH and Hartford downtowns. Now that would be stellar!!! Times saw it too. Not sure if that has gone beyond a napkin sketch.



Like Reply - Message - 6 - January 22 at 5:59pm - Edited

Nick Fabulous!

Like - Reply - Message - January 22 at 6:01pm

Tim The reroute must happen. Use Like - Reply - Message - 1 - January 22 at 6:44pm

Nick III-84 Hartford Project is thinking big, but I fear not THAT big. Looks like a great option. Maybe in 60 years from now when the highway needs another rebuild?

Like - Reply - Message - January 22 at 6:46pm

Anthony Nick Provided That reroute would allow existing route to stay open during construction. Major bonus. Has other complications. But worth having it studied.

Like - Reply - Message 1 3 - January 22 at 7:23pm

John This is brilliant! This solves three major problems; the current 84-91 interchange being two lanes, the mess that is the East Hartford interchange, and how to promote more dev north of the city. Throw in a Fastrak lane for East of the river too! And all that land that's now available in East Hartford along CT Boulevard would almost pay for the construction.

Like Reply Message d 4 January 22 at 9:35pm

Anthony Ding

Like Reply Message January 22 at 9:36pm