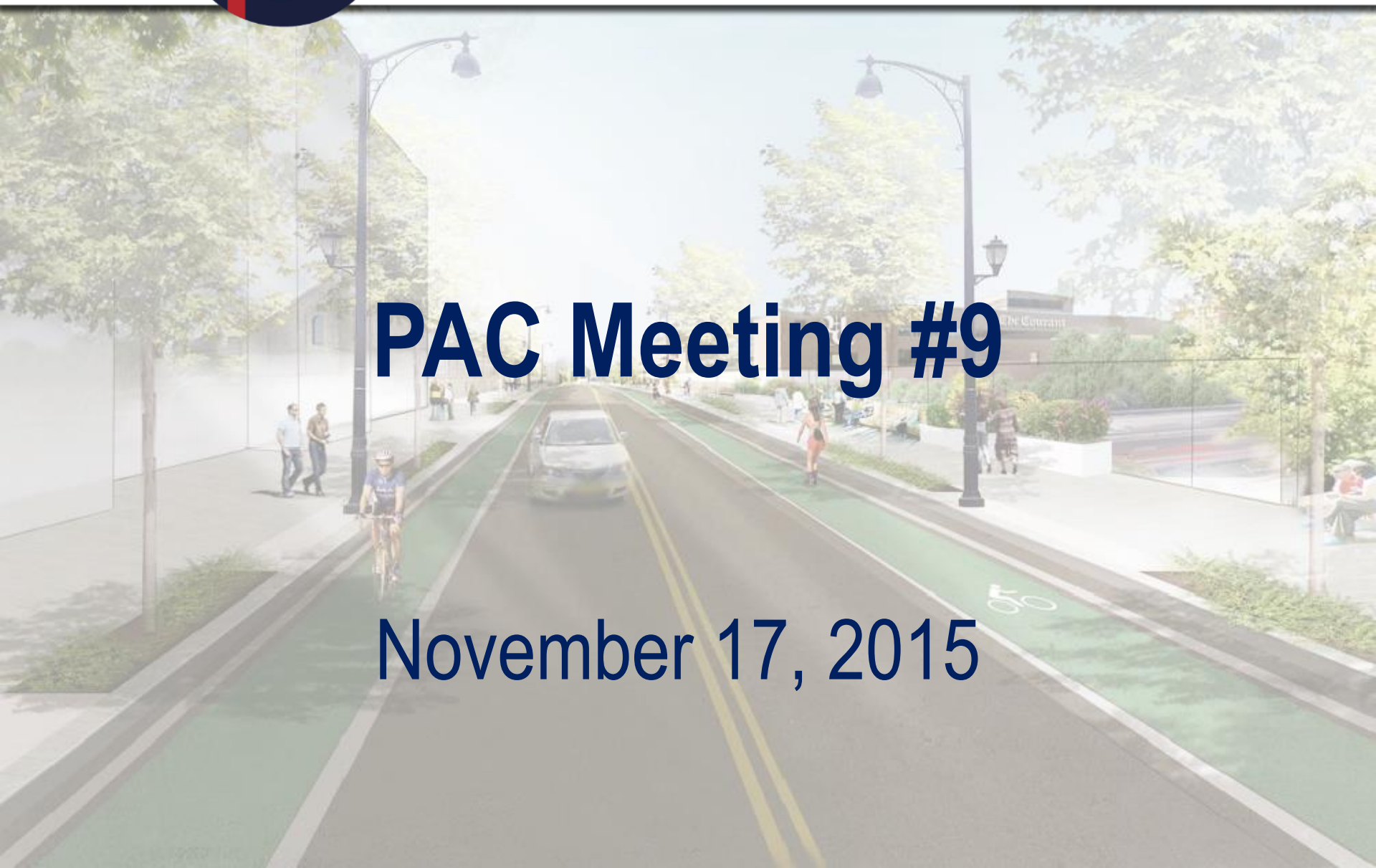




I-84 HARTFORD PROJECT

PAC Meeting #9

November 17, 2015





Meeting Purpose

The I-84 Hartford Project Team is screening Alternatives and continuing the conversation on potentially eliminating some for further consideration. The purpose of today's meeting is to explain our thoughts and get your feedback.



Meeting Agenda

1. **What we've been doing**
2. **Alternative 4 (Tunnel)**
 - a. What we are hearing
 - b. How we have responded
 - c. Questions/comments
3. **Alternative 2 (Elevated)**
 - a. What we are hearing
 - b. Analysis results
 - c. Questions/comments
4. **Alternative 3 (Lowered)**
 - a. What we are hearing
 - b. Analysis results
 - c. Railroad relocation update
 - d. Other considerations
 - e. Questions/comments
5. **Discussion/poll**
6. **Next steps**



What we are hearing

- The tunnel will...
 - 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

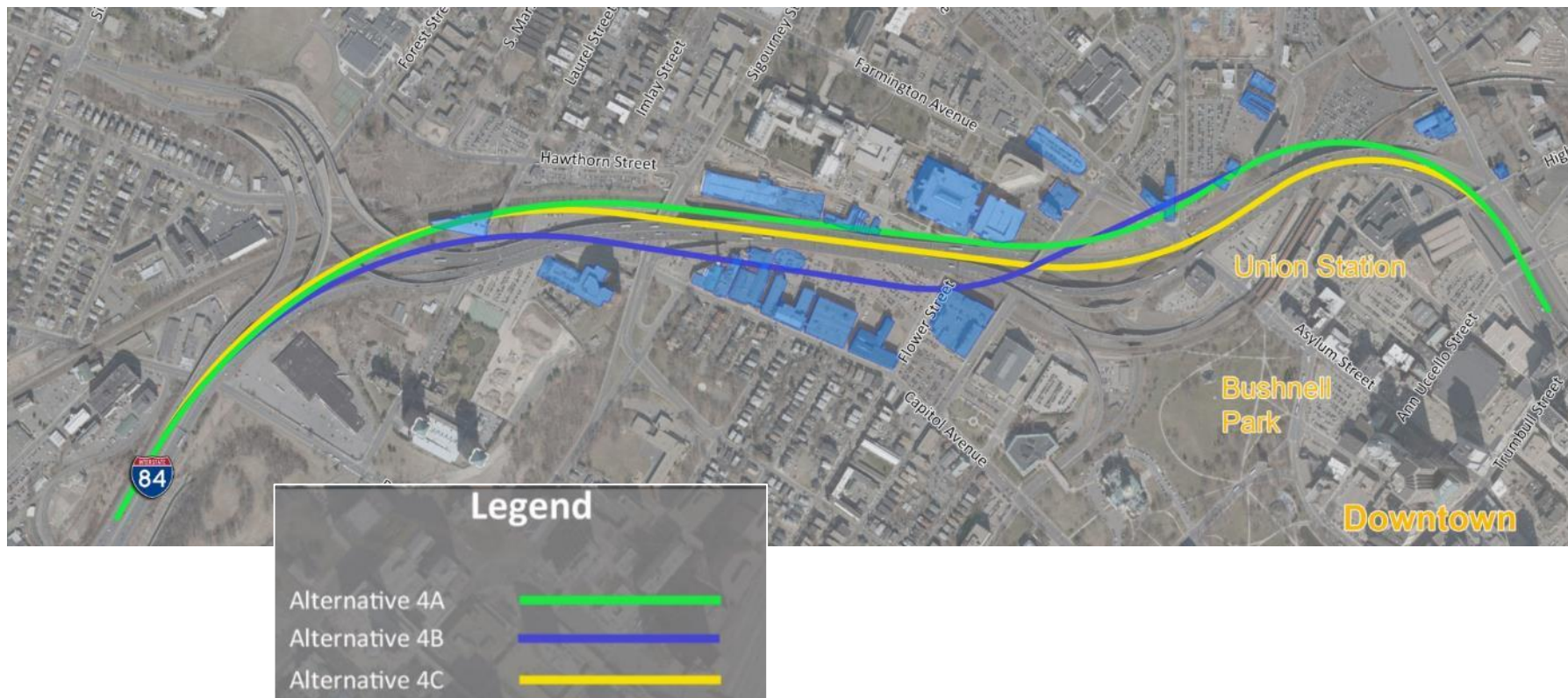


How we have responded

- 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

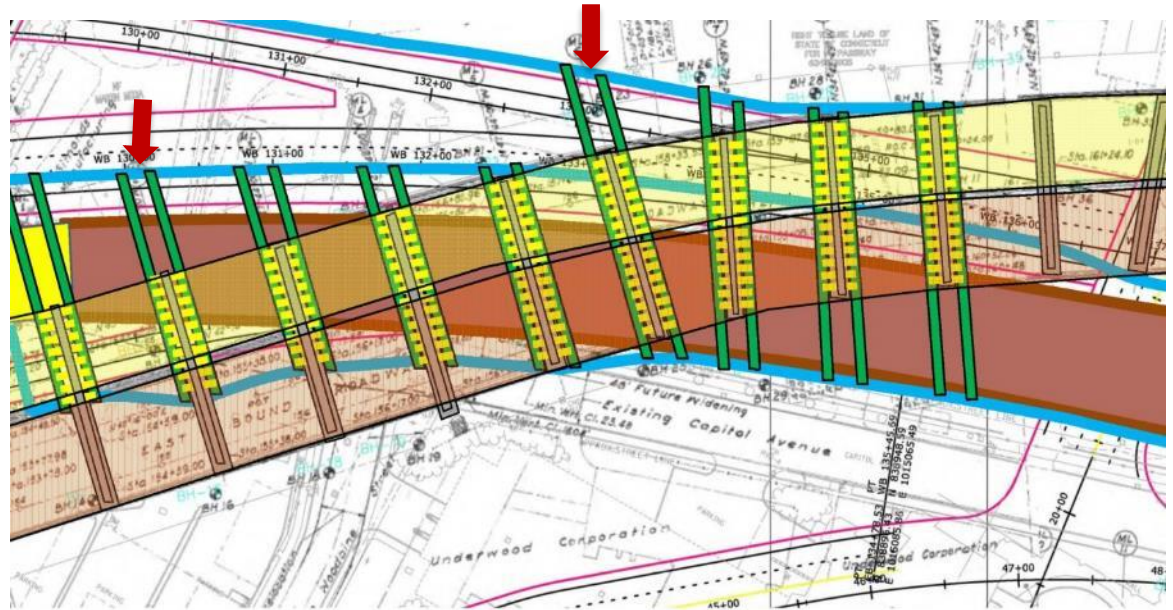
Construction staging



Ctfastrak



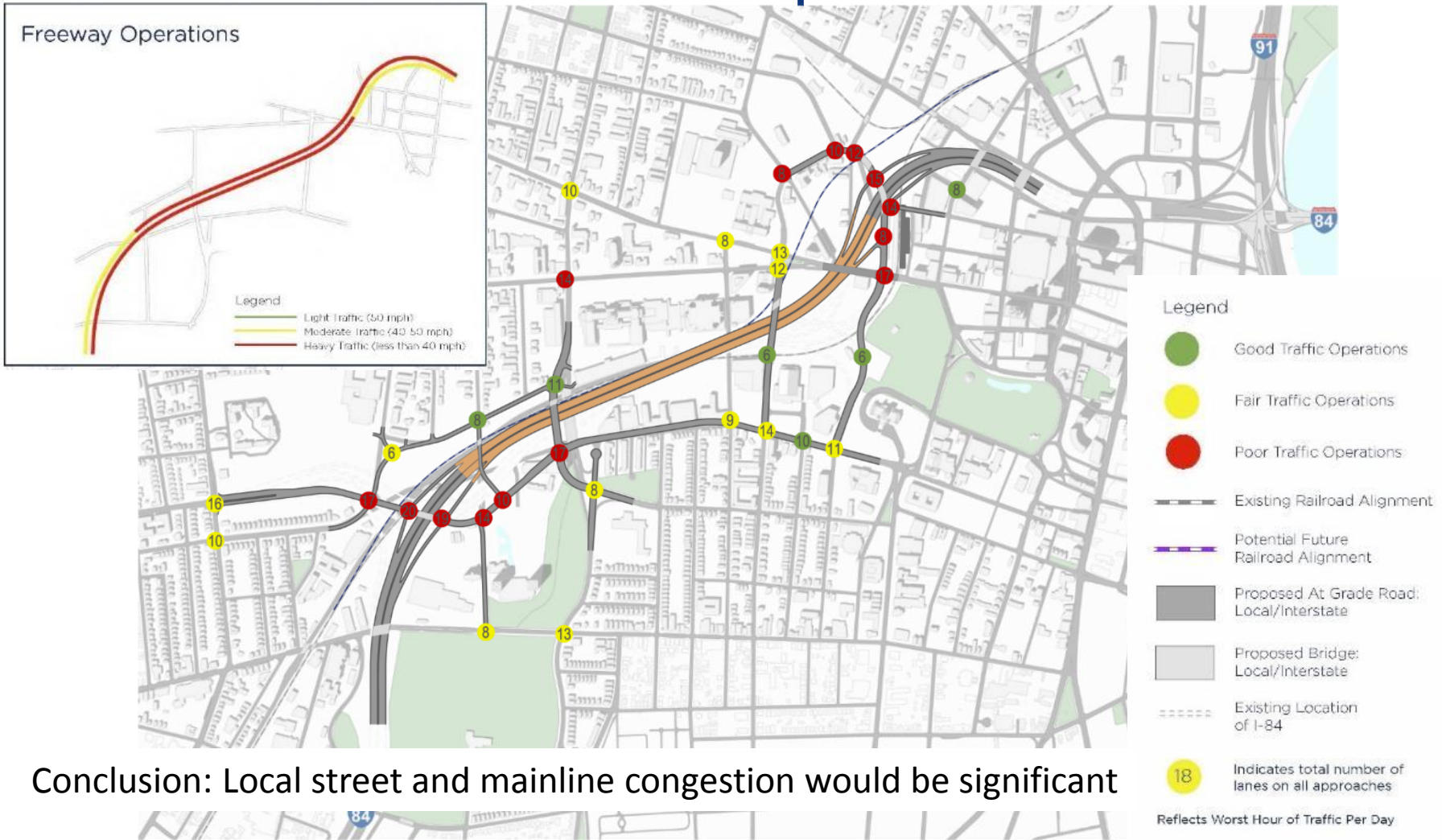
Temporary underpinning



Preliminary engineering for I-84 tunnel underpinning

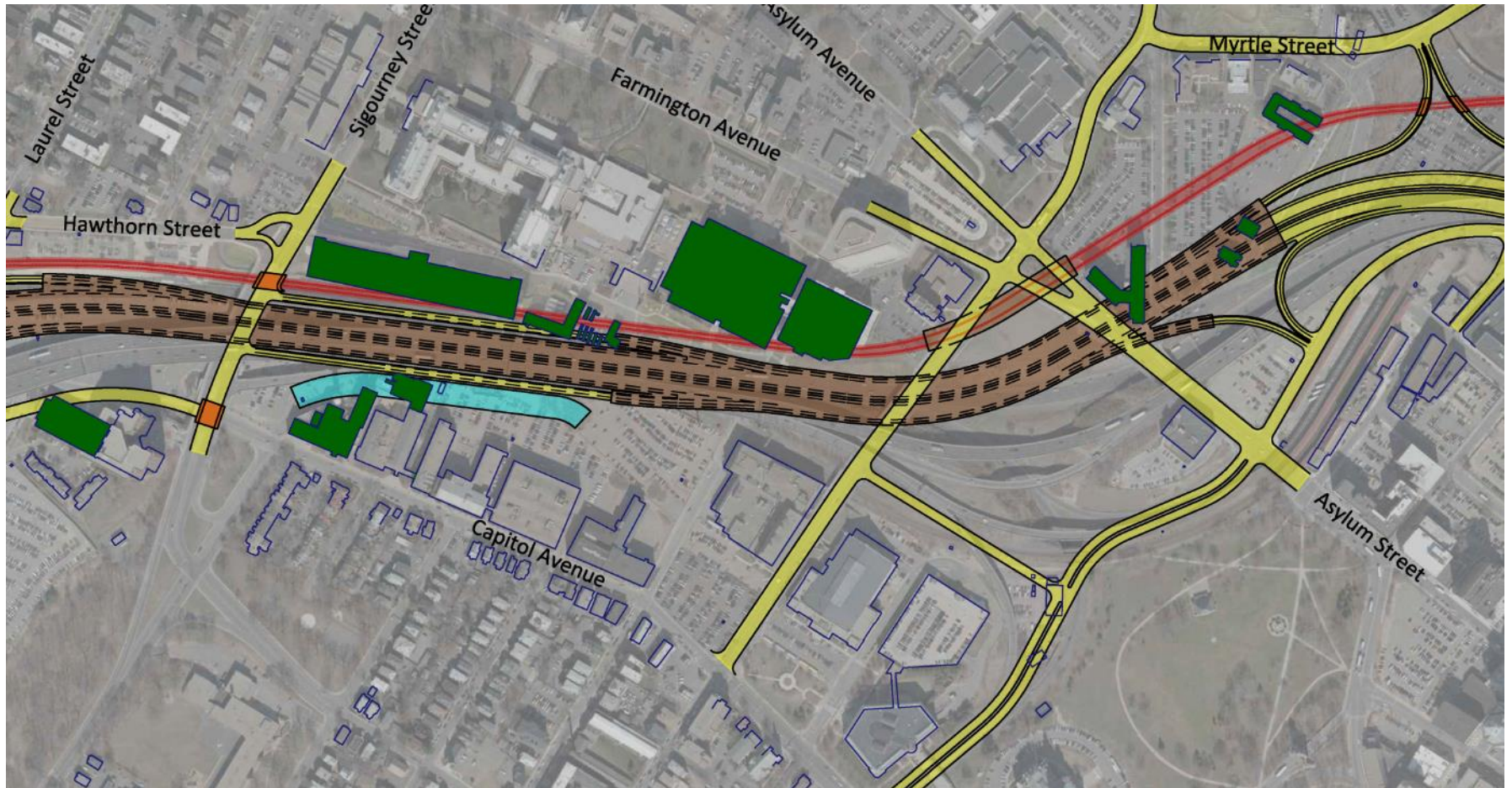
Conclusion: Underpinning requirements will add significant duration to project

Traffic impacts



Conclusion: Local street and mainline congestion would be significant

New tunnel option to address traffic



Conclusion: Significant property impact and conduit and power plant relocation



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



Qualitative urban design assessment

- Land over the highway not well-suited to support future development:
 - behind buildings and adjacent to the rail line and has 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 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

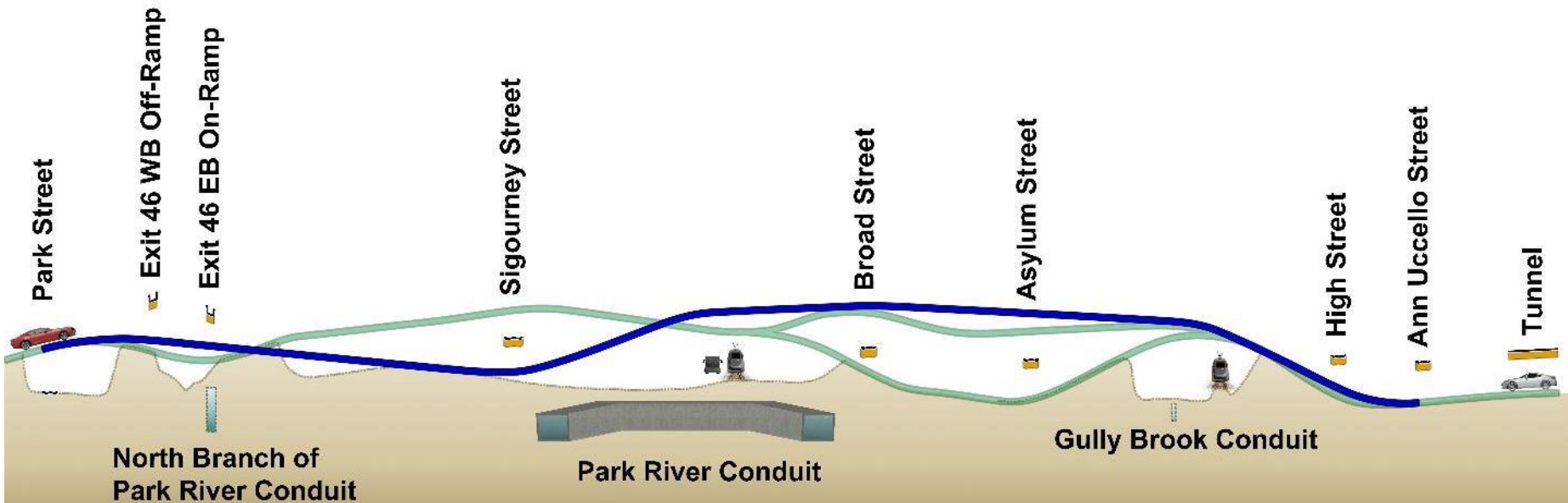


Tunnel questions and comments:





Alternative 2 - the elevated highway



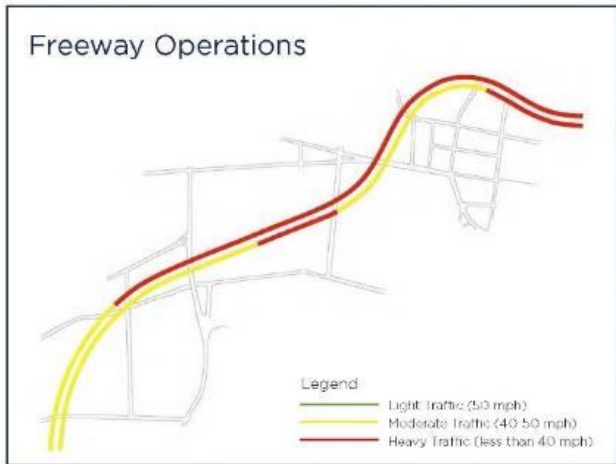


What we are hearing

- Least commented-on alternative
- Very few people want to see a highway on structure
- Traffic is worse than today, so why consider it?
- Project would be considered a failure if this was built



Traffic impact



Conclusion: Ramps to Broad and Asylum inhibit mobility

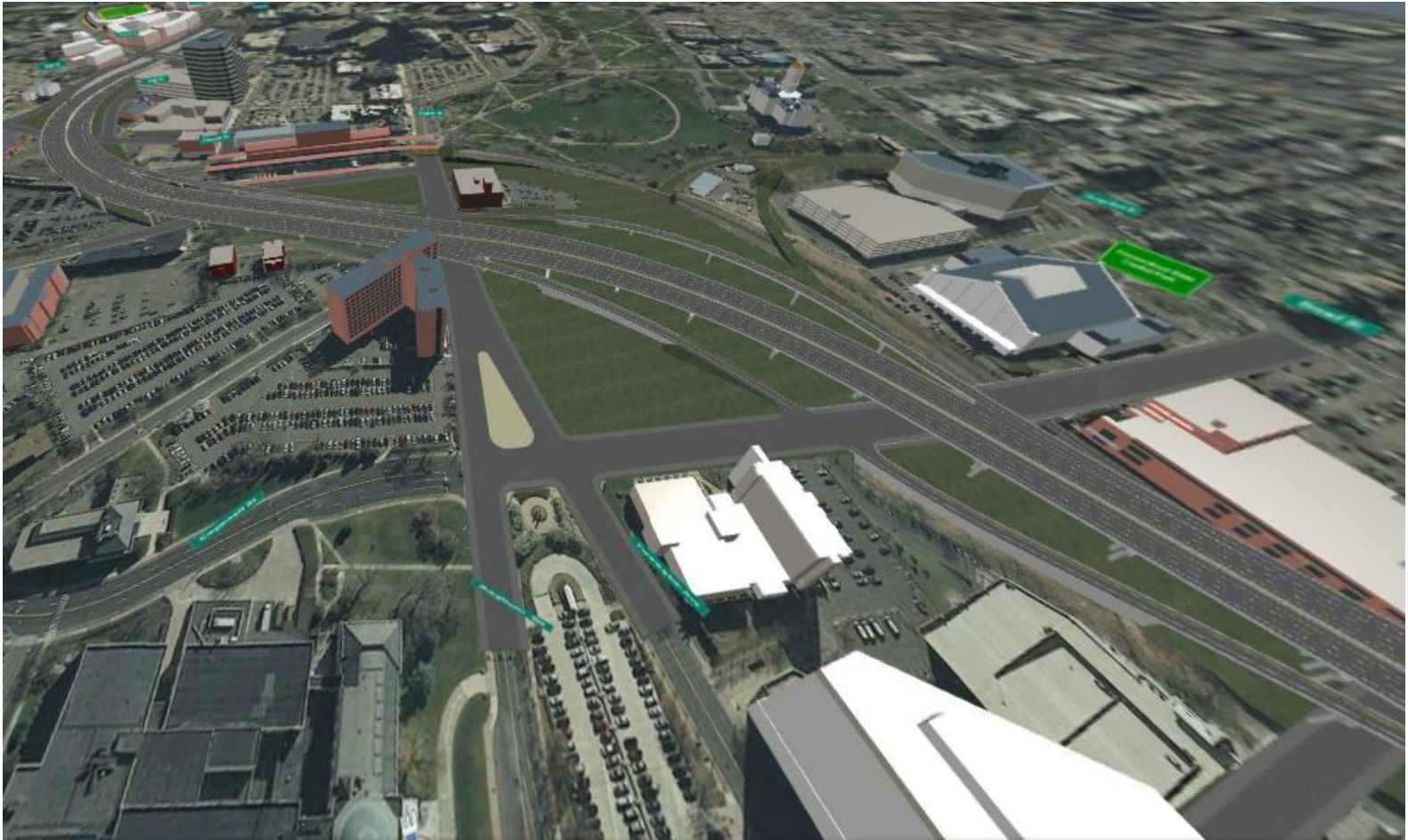


Other conclusions

- \$5-\$6 billion
- Long-term maintenance costs
- Longer construction duration
- Fewest building impacts
- Least amount of potential developable land
- Doesn't improve rail operations

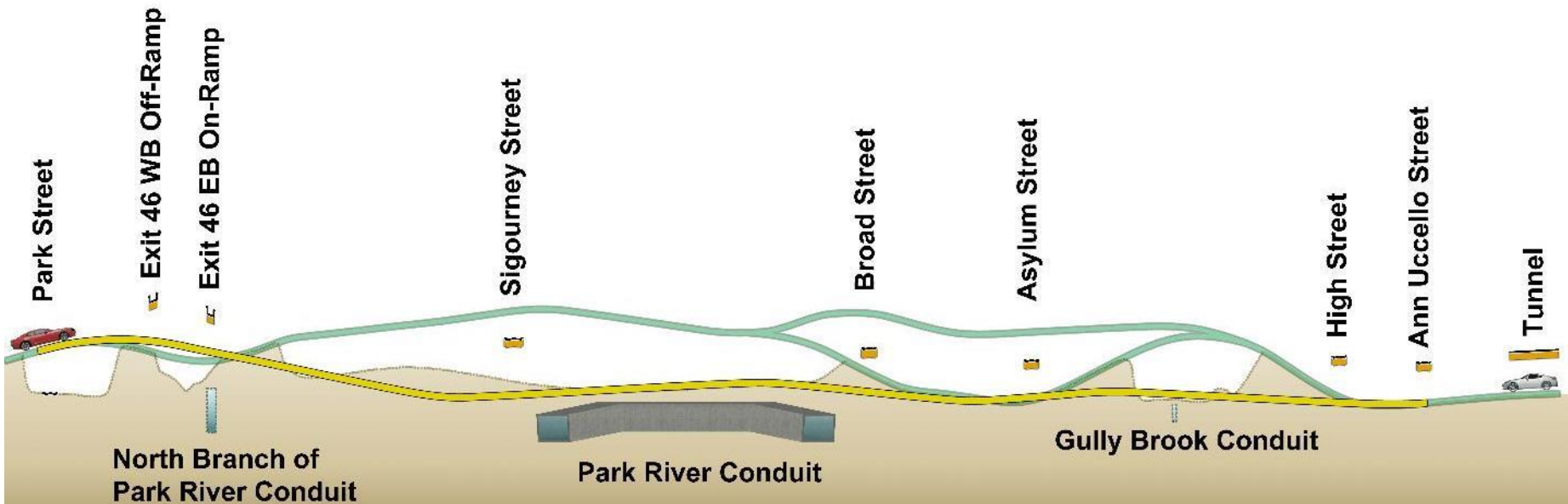


Elevated highway questions and comments:





Alternative 3 - the lowered highway

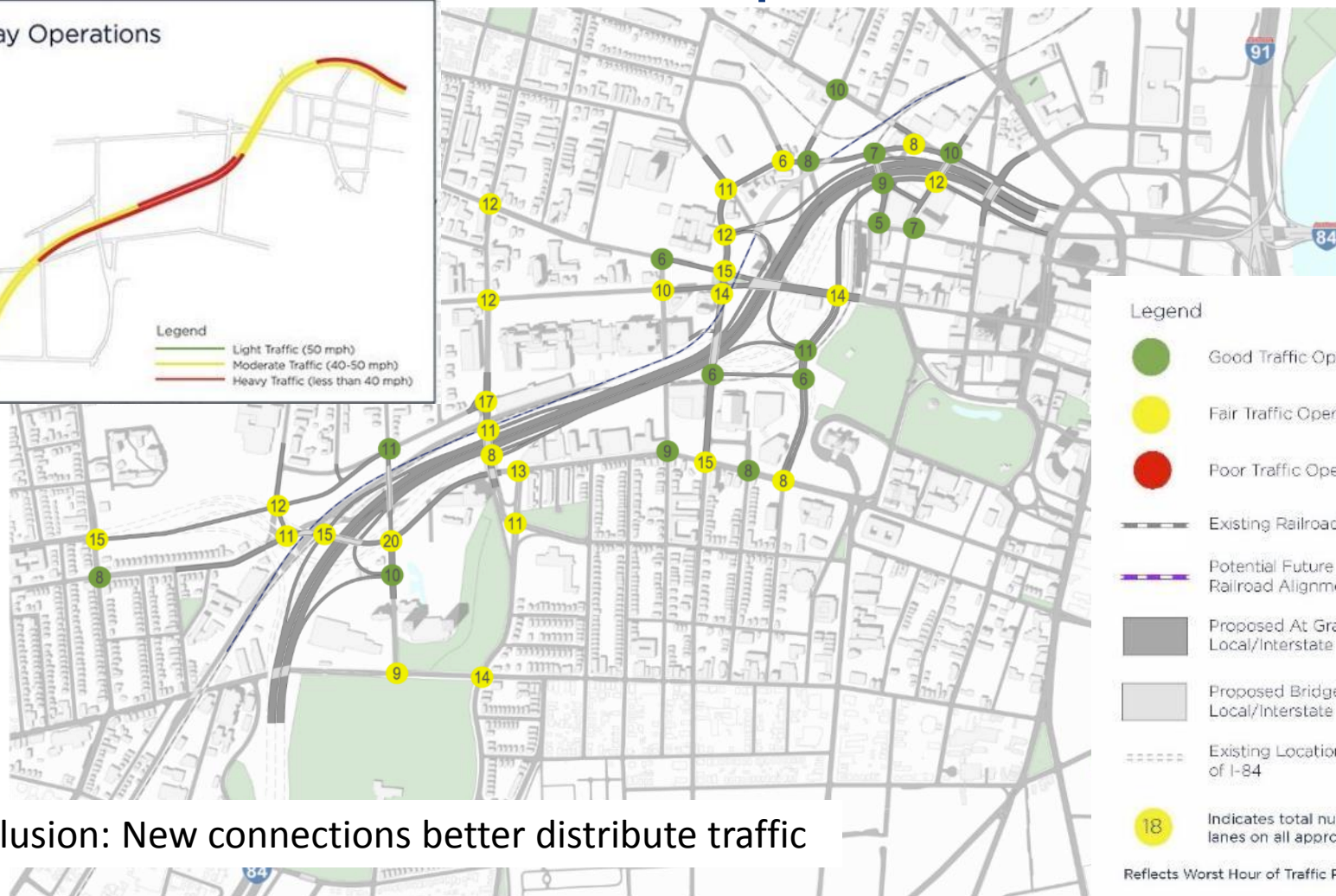


What we are hearing

- The lowered highway will:
 - provide opportunities for a ‘partial’ tunnel
 - improve safety and highway efficiency
 - rebuild cross streets to accommodate bicycles and pedestrians
 - may still be a barrier between neighborhoods
 - better connect Asylum Hill with Downtown



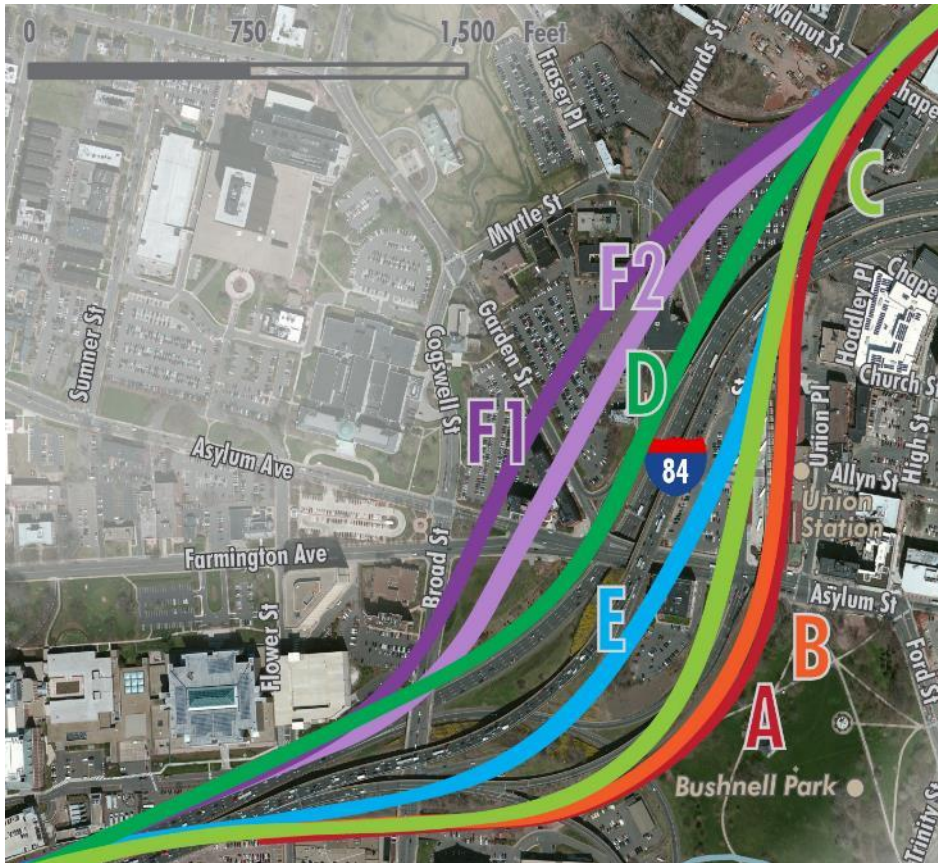
Traffic impact



Conclusion: New connections better distribute traffic



Rail relocation has service benefits



Source of Concepts:

Hartford Rail Alternatives Analysis

State Project No. 170-3196





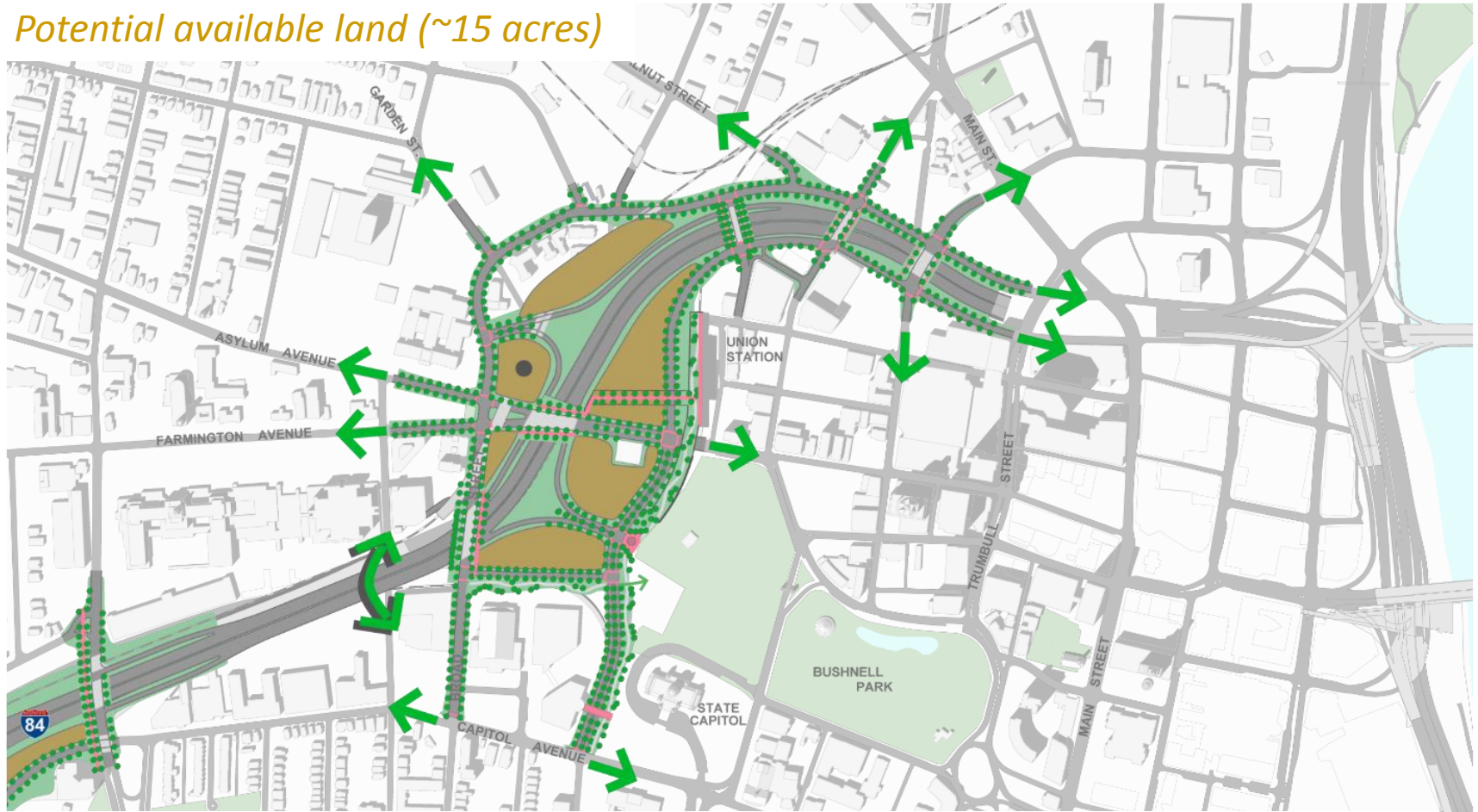
Multimodal corridor solution

| Alternative | Benefits (Opportunities) | | | Costs (Impacts) | | |
|-------------|--------------------------|--------|------|-----------------|--------|------|
| | LOW | MEDIUM | HIGH | LOW | MEDIUM | HIGH |
| A | | | | | | |
| B | | | | | | |
| C | | | | | | |
| D | | | | | | |
| E | | | | | | |
| F1 | | | | | | |
| F2 | | | | | | |

Conclusion: Optimal transportation benefits result when projects are integrated

Potential available land

Potential available land (~15 acres)



Conclusion: Offers possibility of a 'tunnel' where it has greatest benefit



Urban mobility enhancements



Realigned Capitol Avenue

Existing Street View Looking East



Urban mobility enhancements



Realigned Capitol Avenue

Potential Street View Looking East



Urban mobility enhancements



Asylum Avenue

Existing View Looking East Toward Downtown



Urban mobility enhancements



Asylum Avenue

Potential View Looking East Toward Downtown



Other conclusions

- \$4-\$5 billion to construct – least costly
- Could have significant building impacts
- Enhances Asylum Avenue and Broad Street corridors
- Improves mainline geometry/safety
- Improves rail operations



Lowered highway questions and comments:

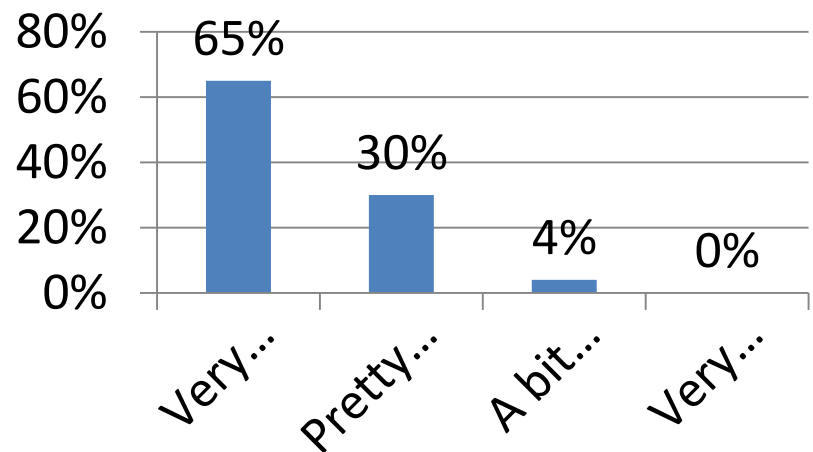




Discussion

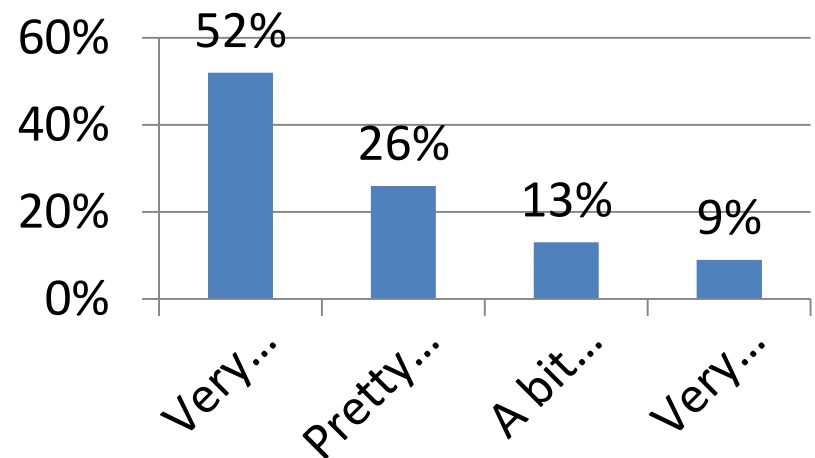
1. How comfortable do you feel about removing Alternative 2 (New Elevated Highway) from further consideration?

1. Very comfortable
2. Pretty comfortable
3. A bit uncomfortable
4. Very uncomfortable



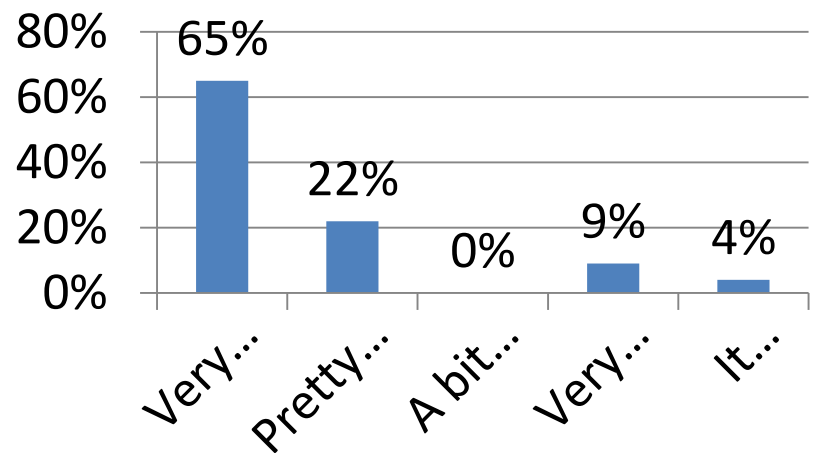
2. How comfortable do you feel about removing Alternative 4 (Tunnel) from further consideration?

1. Very comfortable
2. Pretty comfortable
3. A bit uncomfortable
4. Very uncomfortable



3. How comfortable do you feel, overall, with moving ahead with only the No Build and various options of Alternative 3 (Lowered Highway)?

1. Very comfortable
2. Pretty comfortable
3. A bit uncomfortable
4. Very uncomfortable
5. It depends.....

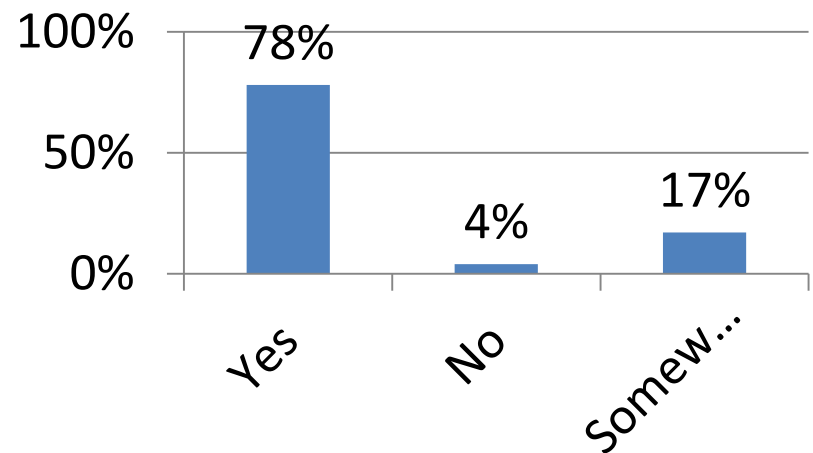


4. Do you feel we have presented you with a solid understanding of how each alternative might look or work?

1. Yes

2. No

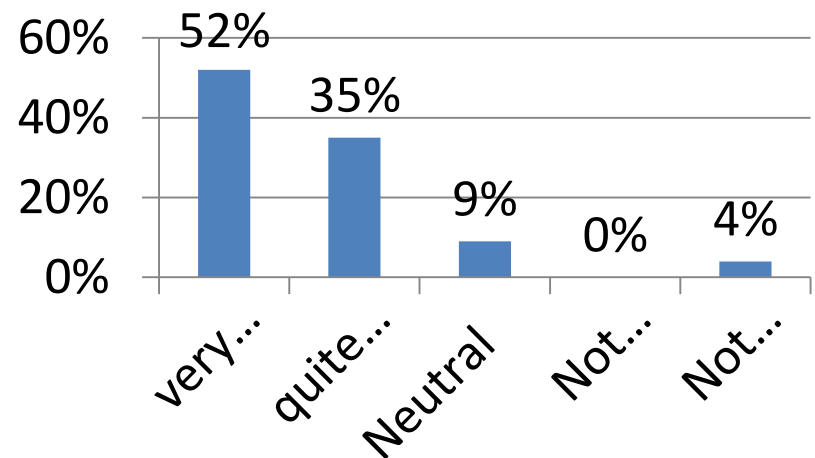
3. Somewhat, but not entirely



5. With regard to possibly removing the tunnel (or any alternative) from further consideration, what factors matter most to you in making that decision?

A) whether it helps the traffic situation on the highway

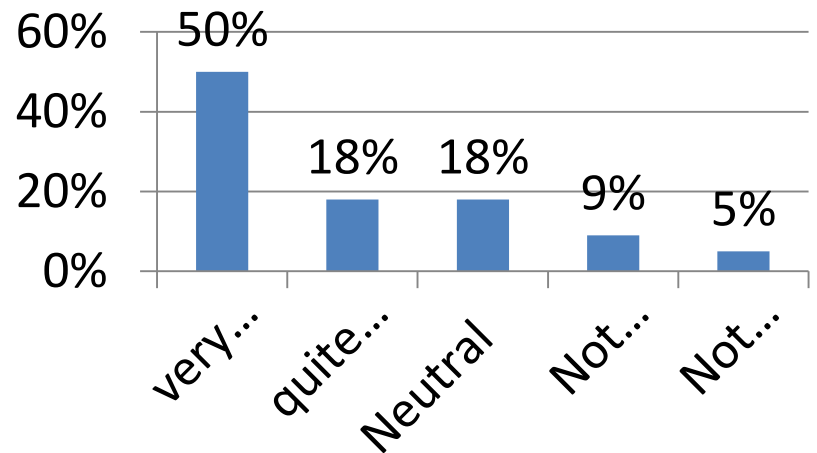
1. very important to me
2. quite important to me
3. Neutral
4. Not very important to me
5. Not important to me



5. With regard to possibly removing the tunnel (or any alternative) from further consideration, what factors matter most to you in making that decision?

B) Whether it causes local road traffic issues

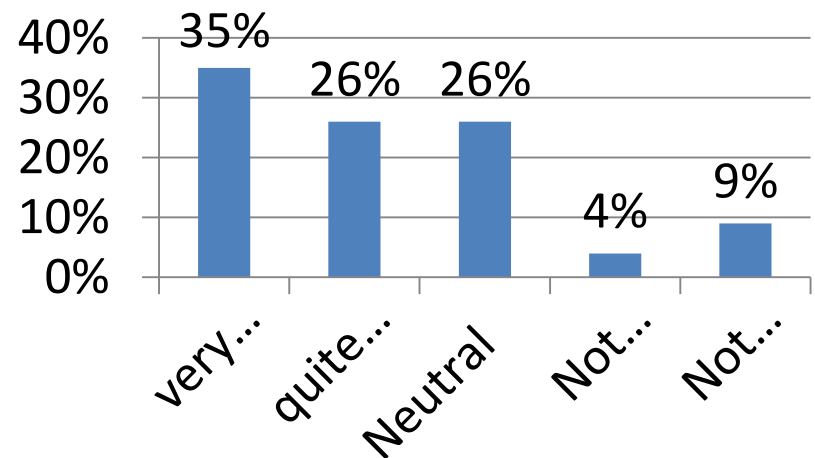
1. very important to me
2. quite important to me
3. Neutral
4. Not very important to me
5. Not important to me



5. With regard to possibly removing the tunnel (or any alternative) from further consideration, what factors matter most to you in making that decision?

C) The amount of impact to buildings/ neighborhoods/ aesthetics

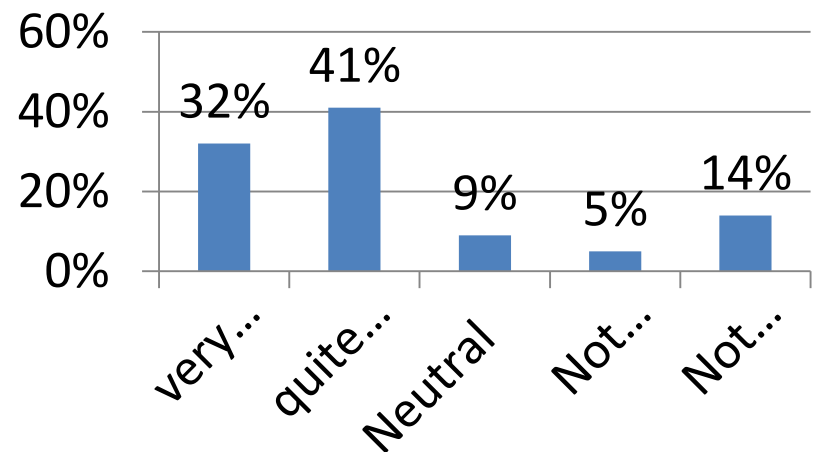
1. very important to me
2. quite important to me
3. Neutral
4. Not very important to me
5. Not important to me



5. With regard to possibly removing the tunnel (or any alternative) from further consideration, what factors matter most to you in making that decision?

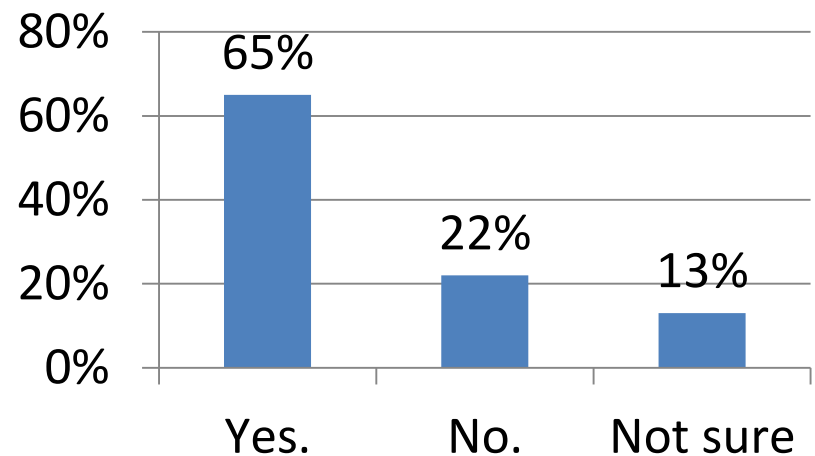
D) The cost

1. very important to me
2. quite important to me
3. Neutral
4. Not very important to me
5. Not important to me



6. Many have expressed their preference for a tunnel. Do you feel that we have done enough to communicate both the benefits and the limitations of a tunnel option?

1. Yes.
2. No.
3. Not sure





I-84 HARTFORD PROJECT

Thank you for your time!
Your I-84 Hartford Project
Team