

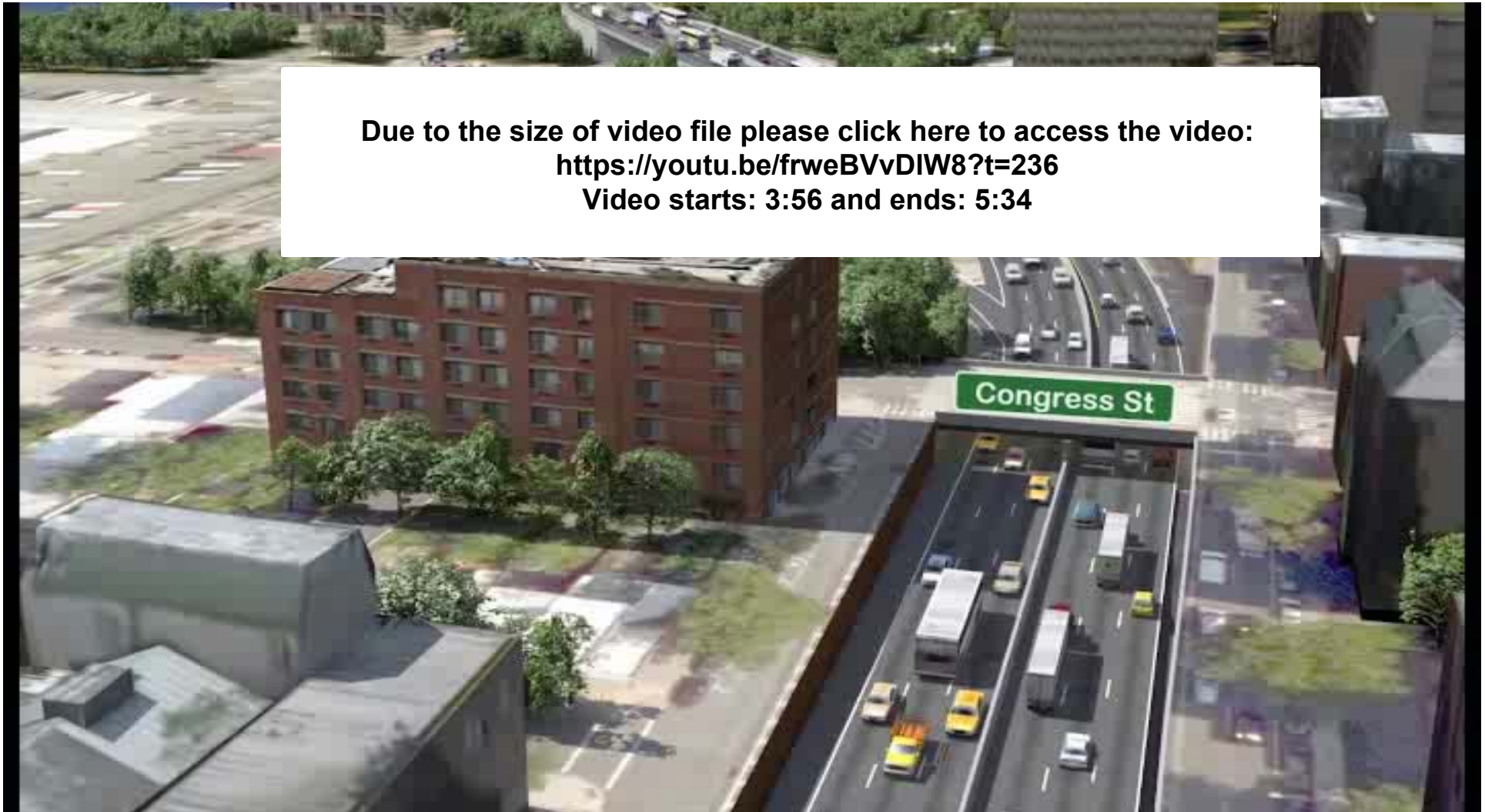
# The Brooklyn-Queens Expressway Atlantic Avenue to Sands Street Project



# Project Corridor

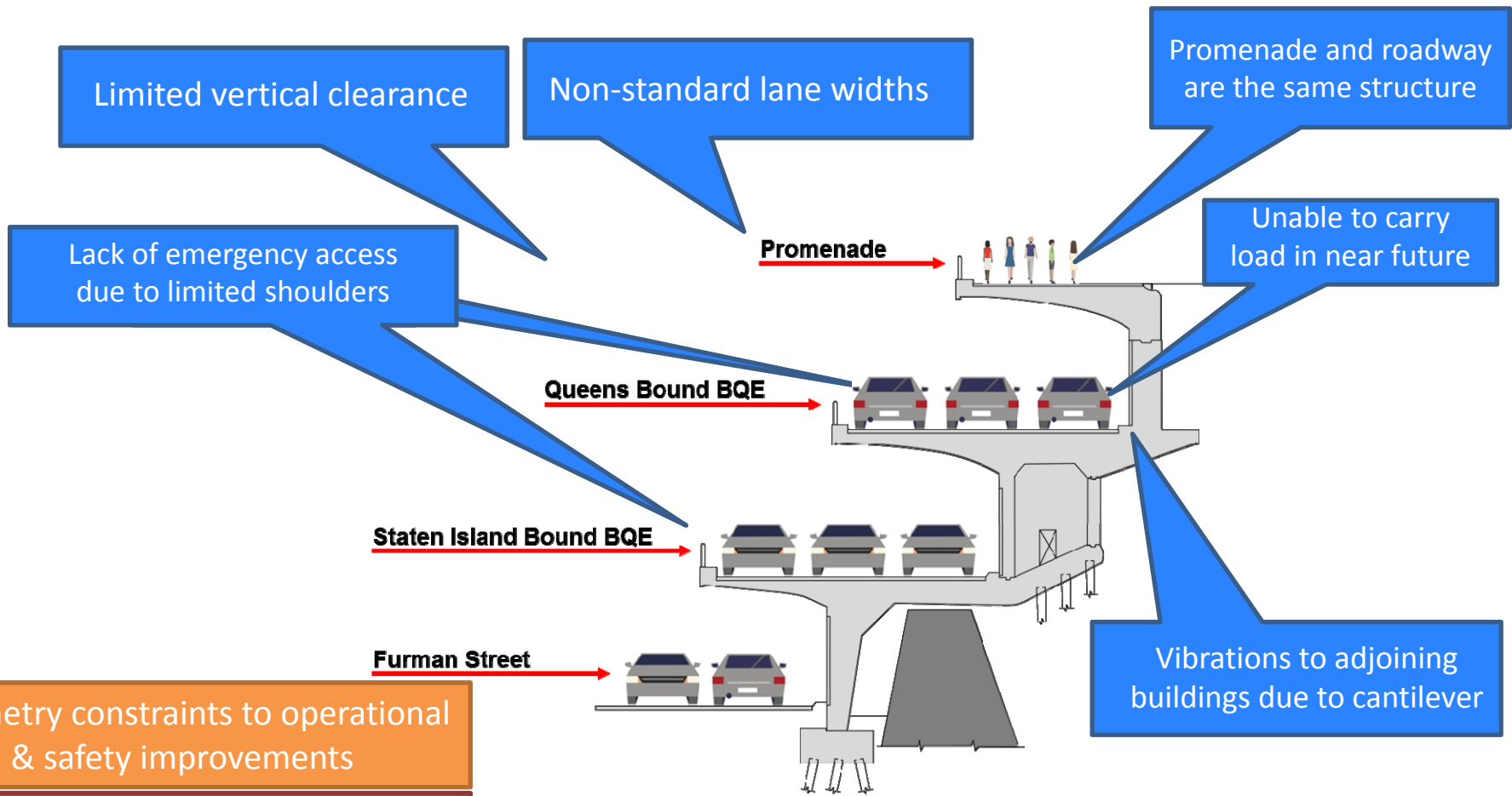


**Due to the size of video file please click here to access the video:  
<https://youtu.be/frweBVvDIW8?t=236>  
Video starts: 3:56 and ends: 5:34**





# Existing Conditions



Geometry constraints to operational & safety improvements

Crash rate exceeds, in places, up to 10 times the statewide average

**Triple Cantilever Cross Section**

# In-Depth Inspections



Without this project, we anticipate that we will need to close the triple cantilever to trucks by **2026** due to deterioration.



# The BQE Today: Heavy Usage



The BQE is one of the most heavily traveled roadways in NYC, with an average daily volume of 153,000 vehicles, including over 15,000 trucks:

|                                |                         |
|--------------------------------|-------------------------|
| I-93 (the Big Dig, Boston):    | 200,000 vehicles        |
| Queensboro Bridge:             | 170,000 vehicles        |
| <b>BQE:</b>                    | <b>153,000 vehicles</b> |
| Tappan Zee Bridge:             | 140,000 vehicles        |
| FDR Drive:                     | 136,000 vehicles        |
| Cross Bronx Expressway:        | 115,000 vehicles        |
| Alaskan Way Viaduct (Seattle): | 110,000 vehicles        |
| West Side Highway:             | 105,000 vehicles        |



Key freight route: peak volume of up to 1,100 trucks per hour (500-600 per direction) during weekday mornings.



# Community Process



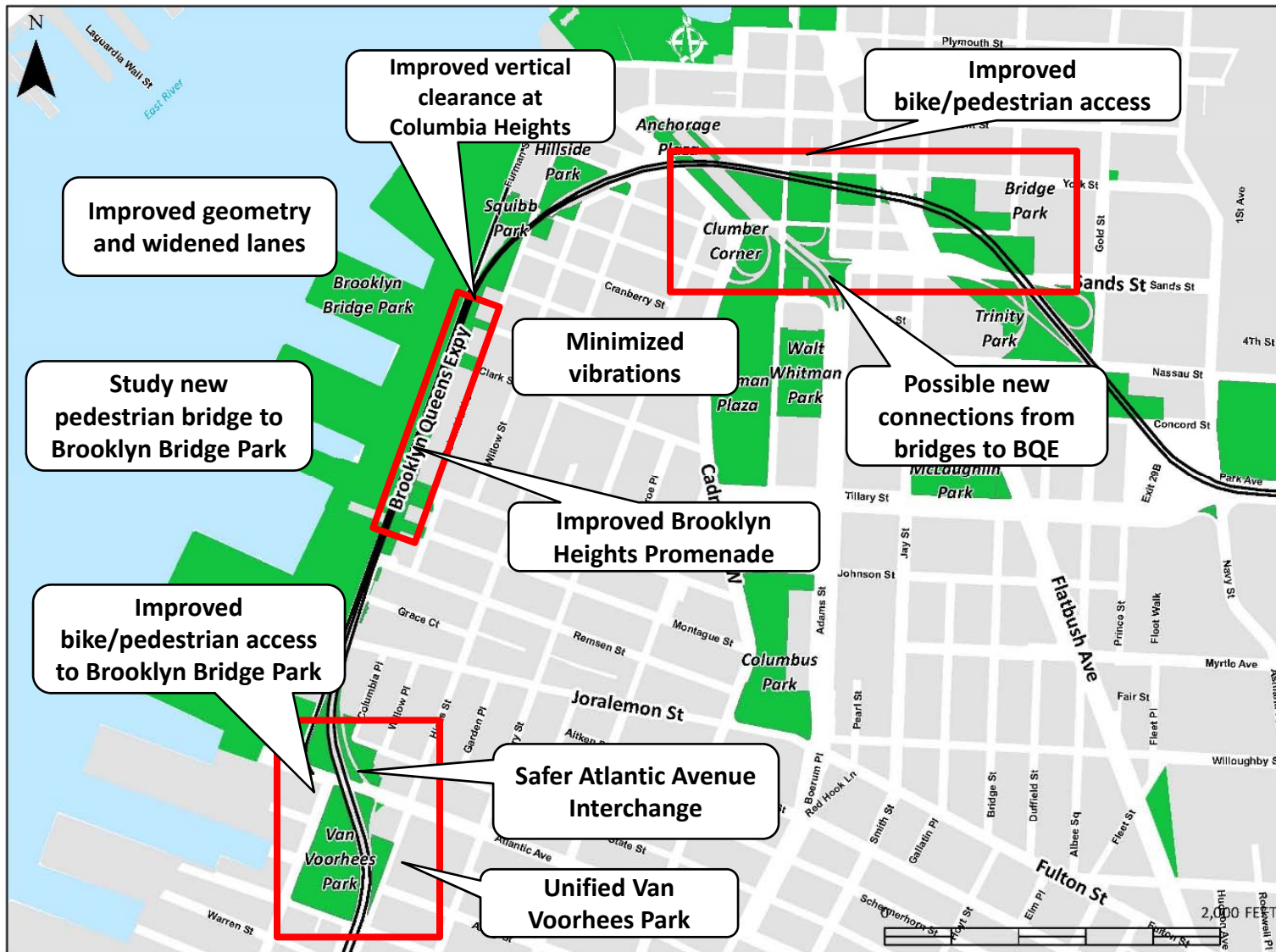
- Over the last few months, DOT has been engaging with residents, stakeholders and elected officials to hear their ideas
- DOT will engage with groups that want to meet and discuss workable alternatives or share feedback
- In the following slides, we'll briefly be taking you through some of the options we've looked at to help provide some background
- The environmental process will ultimately require us to study viable options – your feedback and suggestions will be an important part of that process

# Project Concepts



- Concepts to be evaluated:
  - Full replacement with a temporary roadway
  - No Build (deterioration and tear down options)
  - Rebuilding to a lesser capacity
  - Rehabilitation
  - Other ideas
- Some of these concepts rely on reduced traffic volume on the BQE.
  - Demand management solutions require cooperation from potentially multiple State agencies including the Port Authority, MTA, and New York State DOT.
  - These solutions could include:
    - Congestion pricing
    - Tolling
    - Verrazzano Bridge two-way tolling
    - Freight management strategies

# Re-Envisioning The BQE





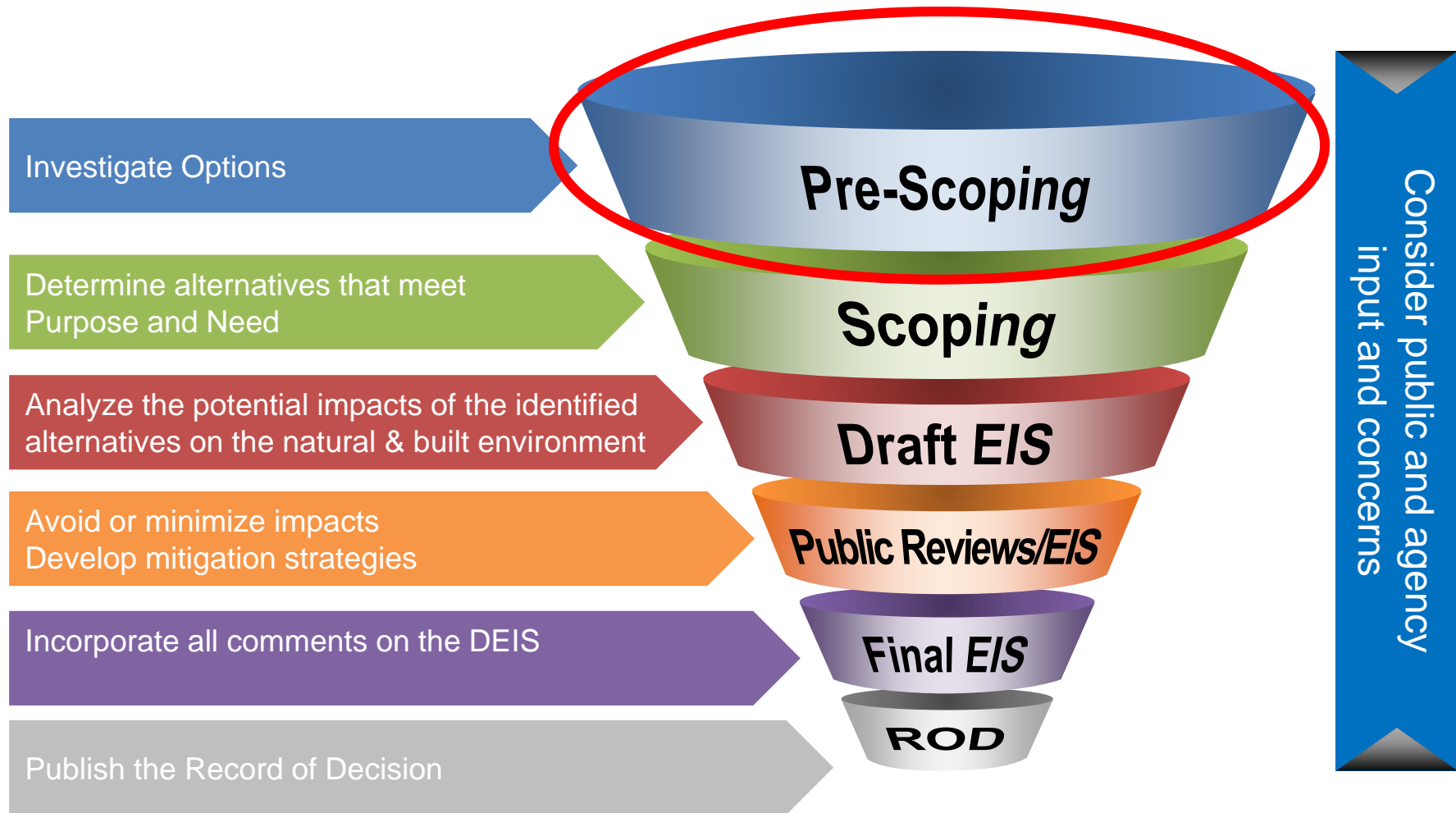
# Promenade



- DOT is committed to reconstructing the Promenade and will require this as a contract condition, meaning reconstruction will be a mandatory part of any project; as the project moves forward, DOT will work closely with the community on Promenade design concepts – we welcome your thoughts
- Section 4(f) of the Transportation Act requires DOT to minimize the use of recreation areas, parkland, and historic properties and the NEPA process requires identification of measures to mitigate impacts in the EIS document



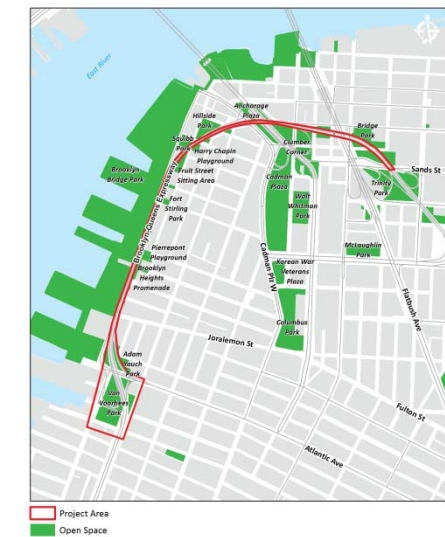
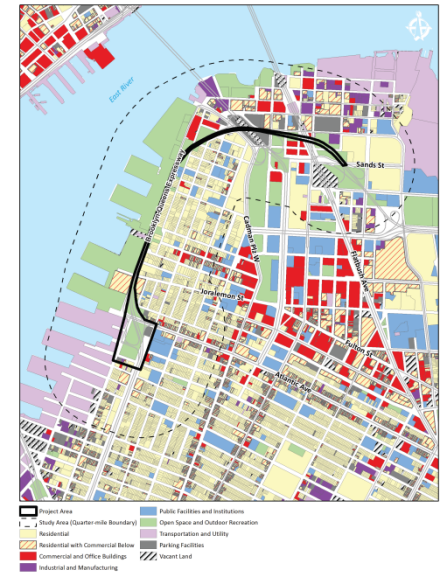
# NEPA Process



# Technical Areas Considered Under NEPA

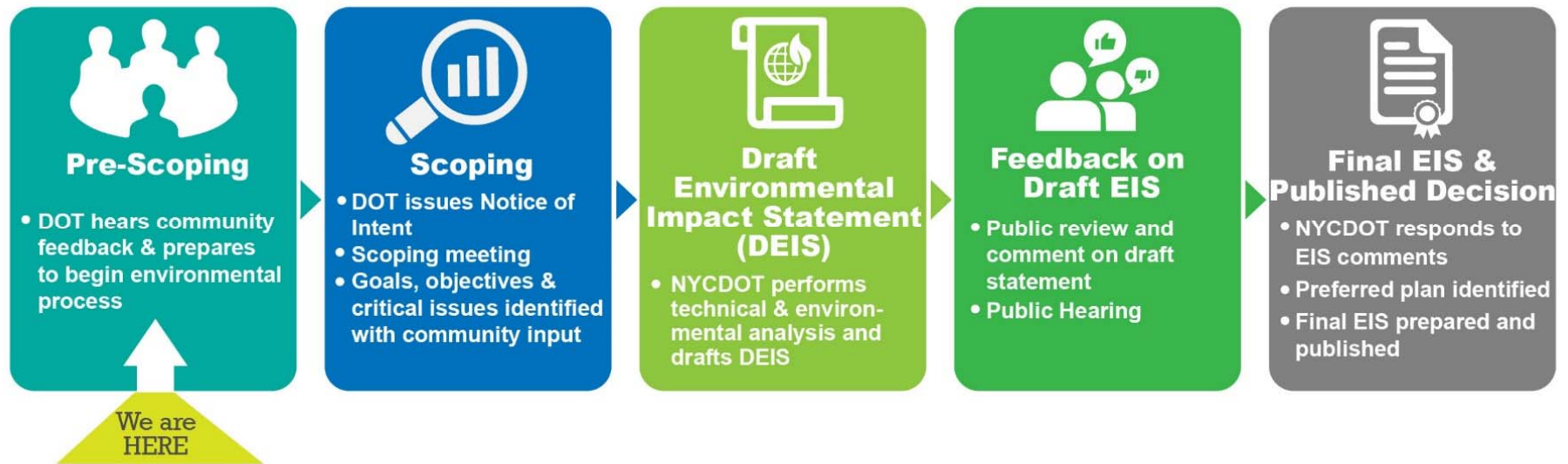


- Engineering feasibility and reasonableness
- Transportation
- Air Quality
- Noise and Vibration
- Energy
- Land Use
- Communities and Socioeconomic Conditions
- Environmental Justice
- Federally Owned Land, Open Space, Parklands, and Conservation Easements
- Property Acquisition
- Visual and Aesthetic Characteristics
- Contamination and Hazardous Materials
- Hydrologic/ Water Resources
- Biological Resources
- Endangered Species
- Secondary and Cumulative Effects
- Construction Impacts
- Historic Resource Impacts
- Economic Impacts





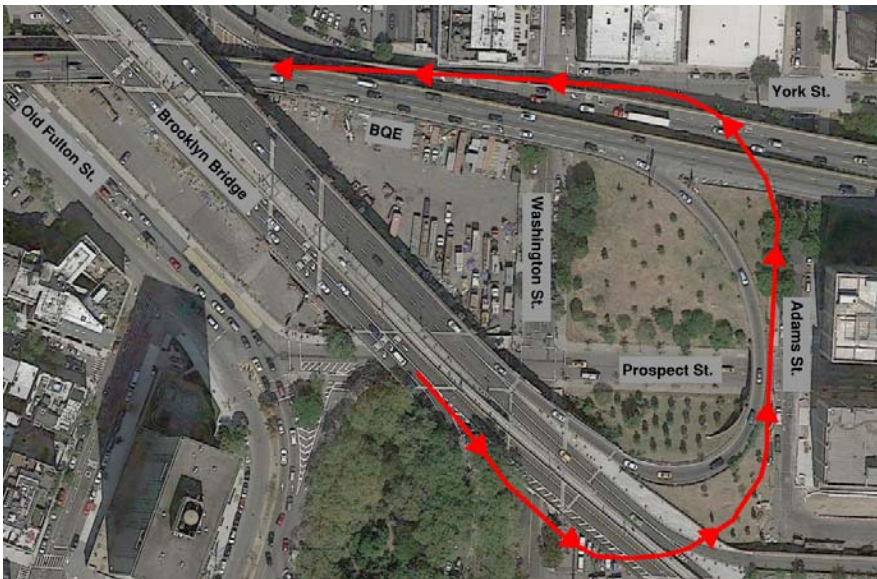
# NEPA/CEQR Plan for BQE



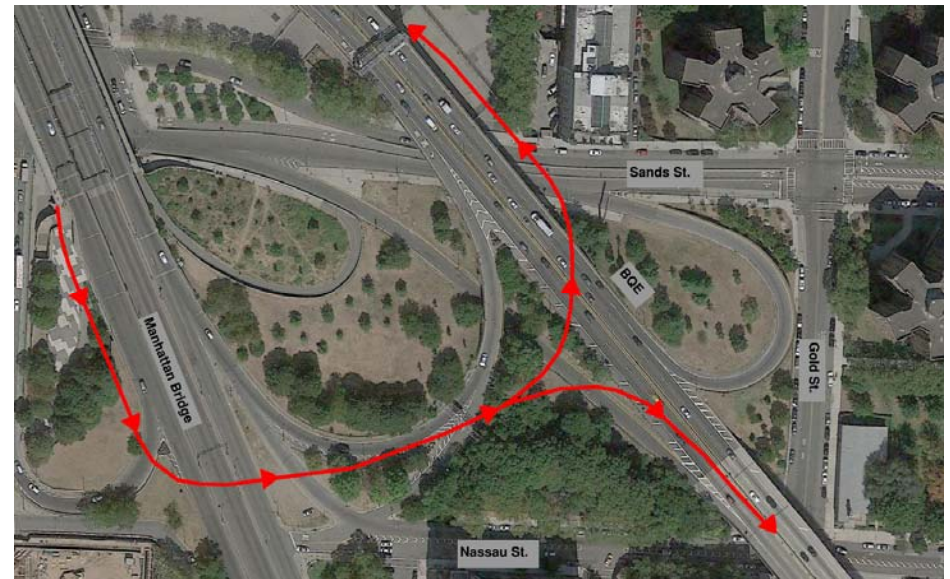
# Potential Direct Bridge Connections



## Brooklyn Bridge

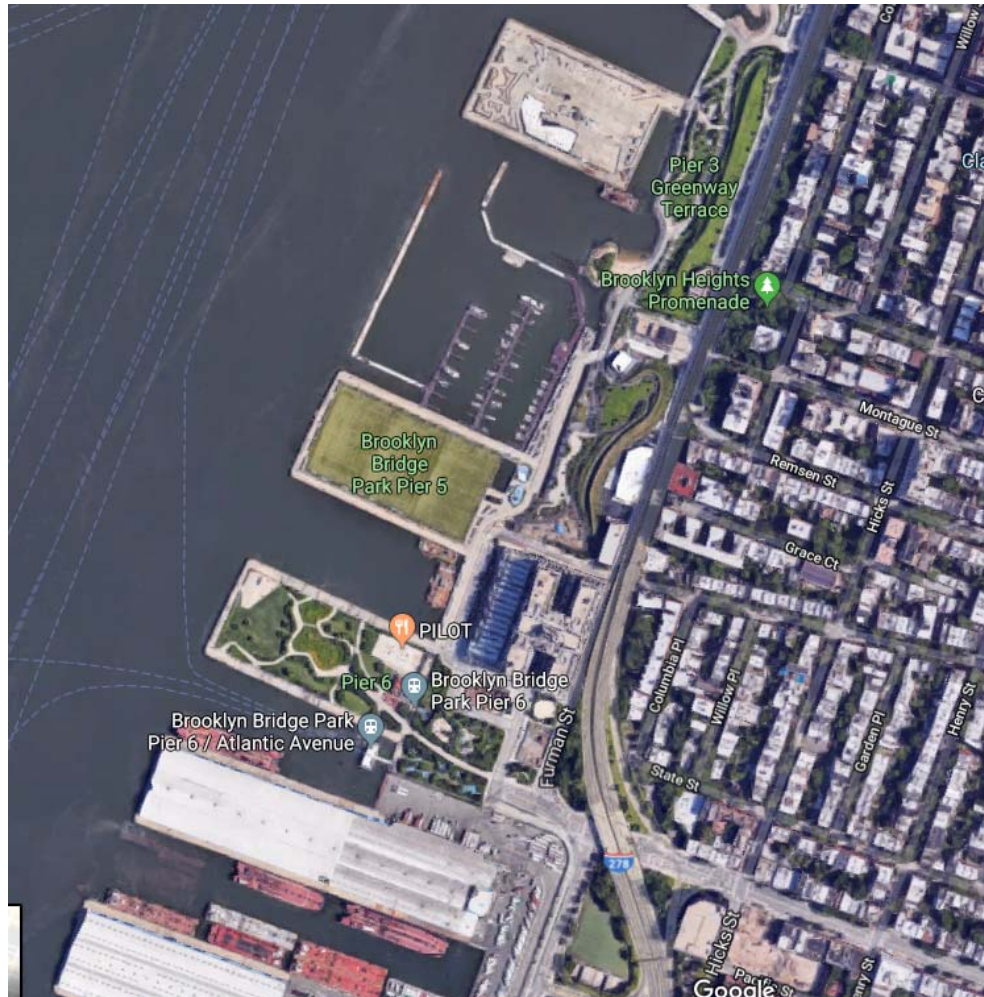


## Manhattan Bridge





# Brooklyn Bridge Park Alignment



- There have been proposals to utilize portions of Brooklyn Bridge Park (particularly the berms)
- BHA's proposal utilizes the BBP berms and parts of the lane-by-lane approach
- DOT is currently evaluating BBP alignment options

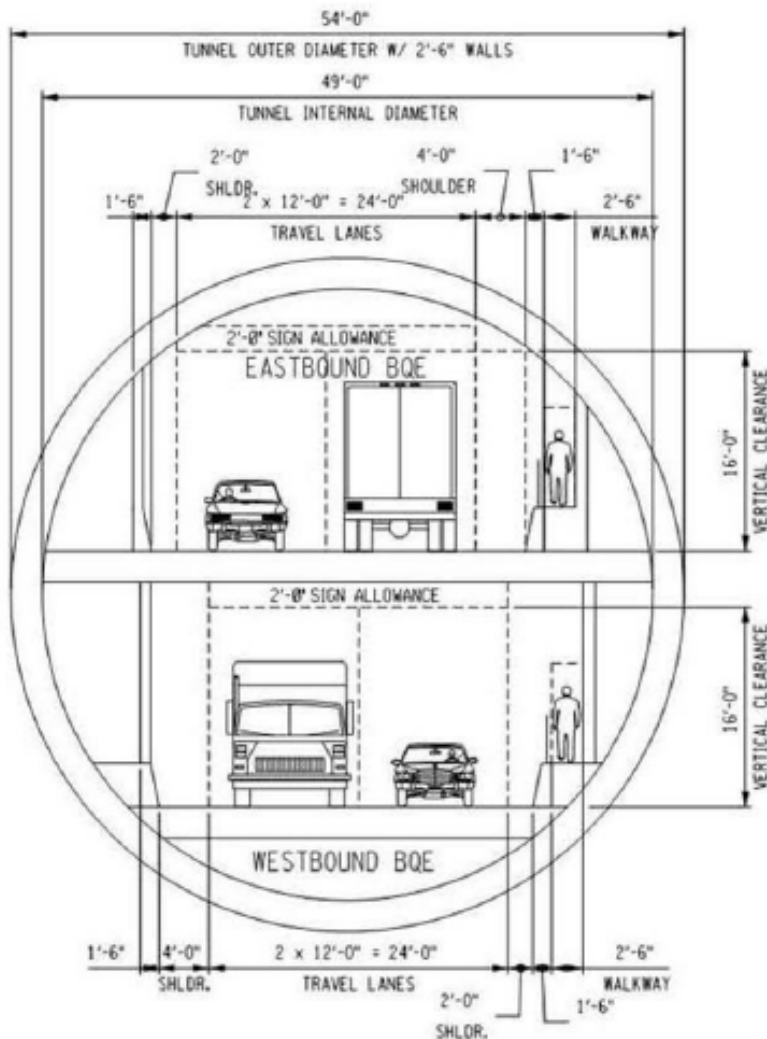


# Waterfront Alignment

- Triggers property acquisition
- Conflicts with subway lines
- Environmental concerns
- Existing ferry routes
- Blocks view plane



# Tunnel



- Only one alignment does not conflict with subway and water tunnels and bridge foundations.
- Feasible cross-section allows only two lanes of traffic in each direction.
- Requires that we also maintain the existing BQE structure:
  - To accommodate existing volume
  - To provide connectivity to local exits (about 50% of traffic uses exist that a tunnel would not serve)
- Tunnels are prohibitively expensive and prone to massive cost overruns and delays.
- Property acquisition necessary at entrance, exit, and ventilation shafts.
- Tunnel boring technology is imperfect and is particularly risky under historic Brooklyn neighborhoods due to settling and cracked foundations, etc.



# Local Traffic With The BQE

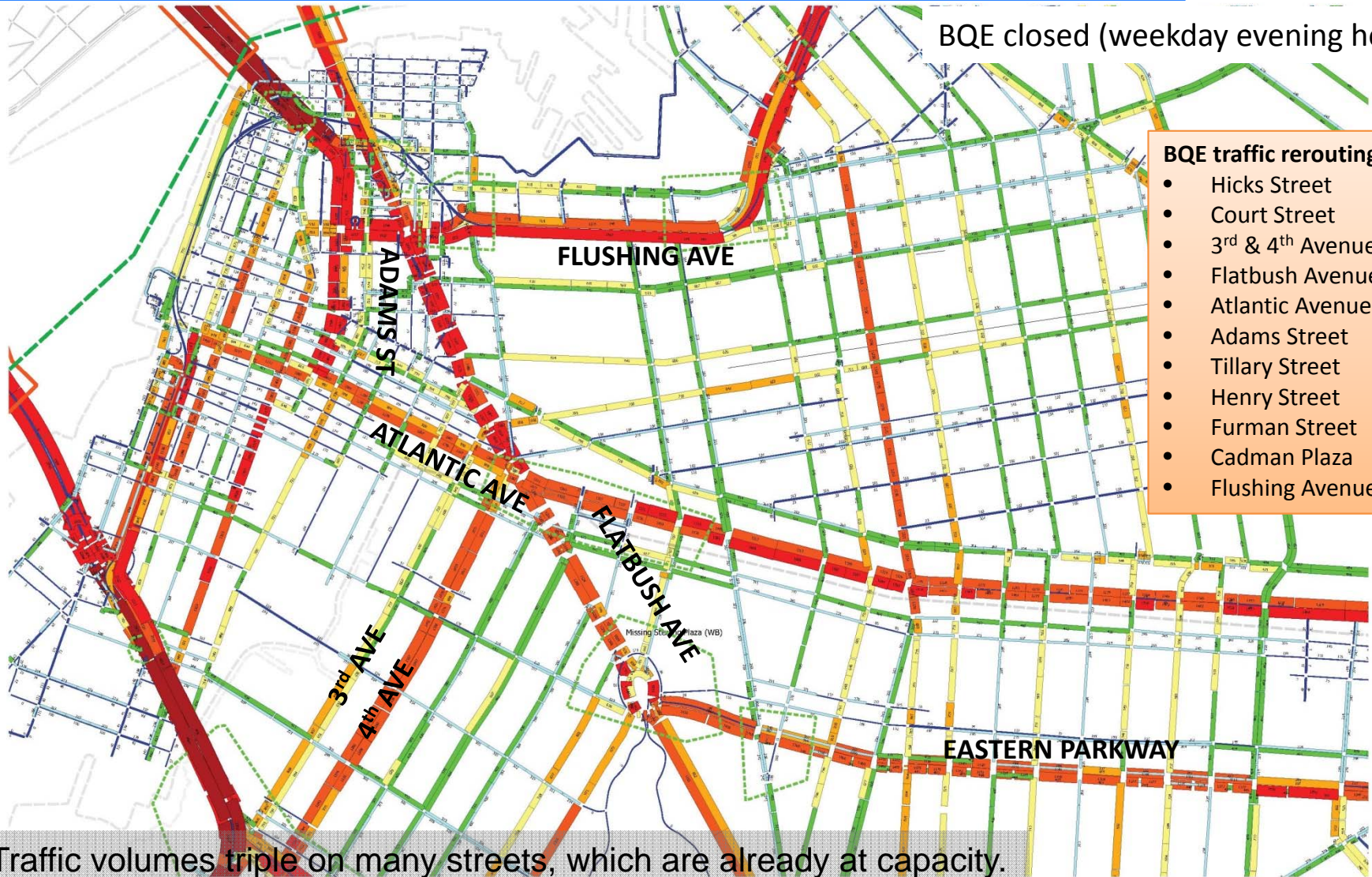




# Local Traffic Without The BQE



BQE closed (weekday evening hour)



**BQE traffic rerouting to:**

- Hicks Street
- Court Street
- 3<sup>rd</sup> & 4<sup>th</sup> Avenues
- Flatbush Avenue
- Atlantic Avenue
- Adams Street
- Tillary Street
- Henry Street
- Furman Street
- Cadman Plaza
- Flushing Avenue

Traffic volumes triple on many streets, which are already at capacity.

# Anticipated Schedule & Public Outreach



- 2018/2019 – Continuing public outreach and meetings on construction concepts
  - Construction mitigations
  - Parks and playgrounds
  - Pedestrian and bike safety and connectivity
  - Aesthetics of final structure
- 2019 – National Environmental Policy Act (NEPA) process – we anticipate approx. 2 years
- 2020– Request for Qualifications
  - Draft RFP (after draft EIS)
- 2021/2022 – Notice to Proceed
- Substantial Completion
  - Temporary Elevated Roadway: 2026
  - Incremental: 2028, or later
  - Concepts including those proposed by BHA, BIG, and the Comptroller still under review, timelines TBD





# Discussion



## Stay Involved!

- Web Portal:  
[www.BQE-i278.com](http://www.BQE-i278.com)
- Email to: [info@BQE-i278.com](mailto:info@BQE-i278.com)
- Call us with questions and comments: 332-999-4520



## Previously Presented Concepts for Discussion



- Additional slides were included for discussion purposes

# Construction Methods

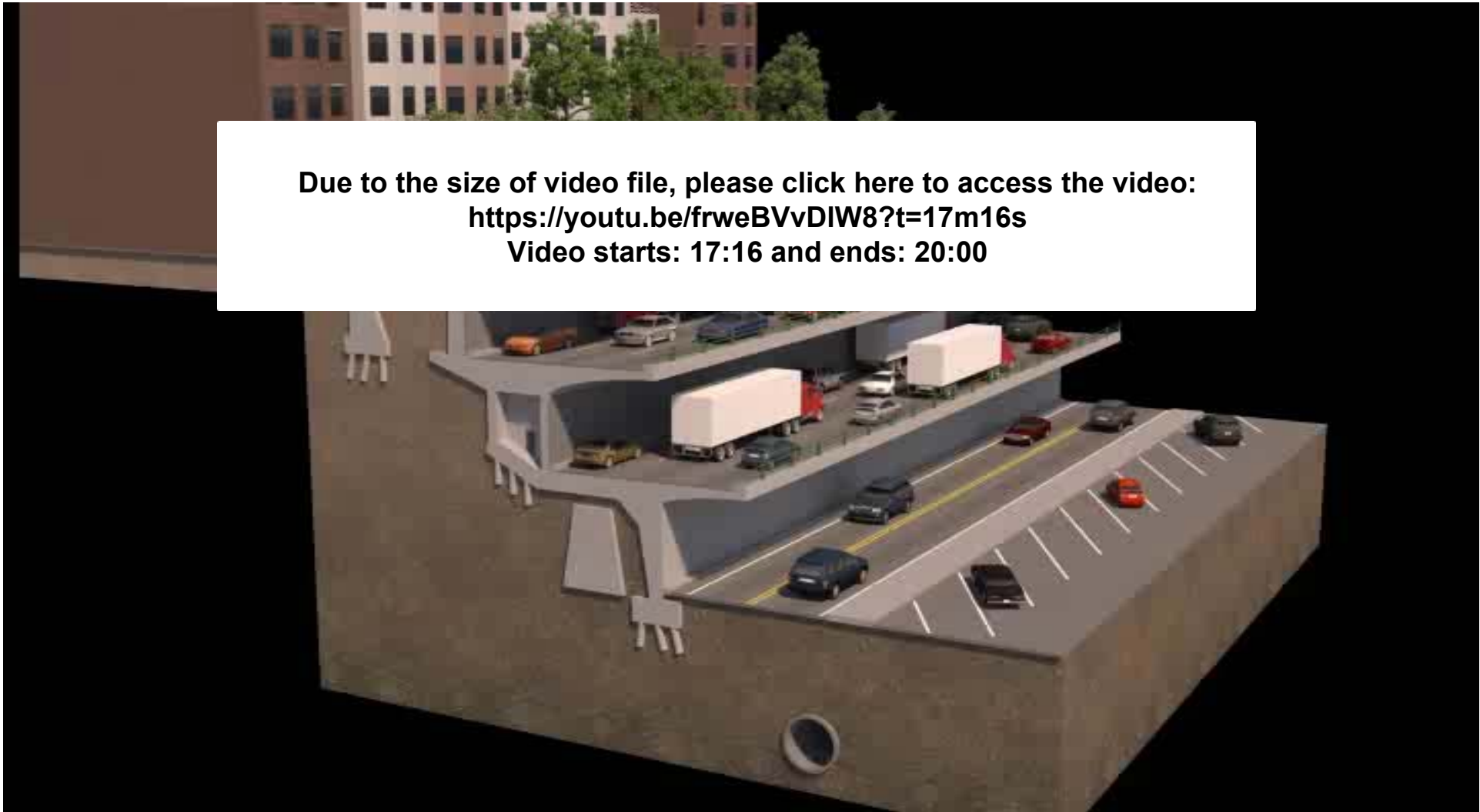


- In order to accelerate the project timeline and maintain traffic flow, the BQE project will require a **temporary roadway**
- The type of temporary roadway we use determines:
  - The form of the final structure – what do we end up building?
  - The footprint or envelope we study during the environmental process
  - The range of project options that maximize time savings and community benefits

# Incremental Method/Lane by Lane



Due to the size of video file, please click here to access the video:  
<https://youtu.be/frweBVvDIW8?t=17m16s>  
Video starts: 17:16 and ends: 20:00





# Incremental Method/Lane by Lane



The Incremental Approach allows construction of a safer highway that meets current standards, but constrains larger community improvements

- Includes a partial temporary roadway
- Widened lanes, added shoulders, other safety improvements
- Mostly eliminates vibrations
- Promenade would be rebuilt at the existing width
- Includes substantial and rolling promenade closures; tree removal anticipated (landscaping to be restored)
- Some enhanced pedestrian and bike connectivity and access to BBP
- Does not allow for new direct connections from the Brooklyn and Manhattan Bridges to the BQE without extensive additional closures

# Incremental Method/Lane by Lane



- “Cattle chute” driving conditions
- Congestion and safety concerns
  - Any crashes in the narrow lane would have significant impacts on traffic
  - Slower speeds, with back-ups throughout Brooklyn (potentially bleeding into Queens and Staten Island)
  - Would be unable to process about 12,000 vehicles per day, potentially resulting in up to a 3-mile impact



# Incremental Method/Lane by Lane



- Cost and on-time completion less certain
- Vertical clearance improvements limited
- Final configuration leaves column in front of 1 Brooklyn Bridge Park
- More full weekend closures (approx. 24 weekends) and overnight lane closures (over 4.5 years)
- Reliance on greater level of overnight activity creates noise issues
- Delays in re-opening lanes for daytime hours are possible, and could result in up to a 12-mile impact



Possible Final Condition

# Temporary Elevated Roadway



**Due to the size of video file please click here to access the video:  
<https://youtu.be/frweBVvDIW8?t=23m36s>  
Video starts 23:36 and ends 25:36**

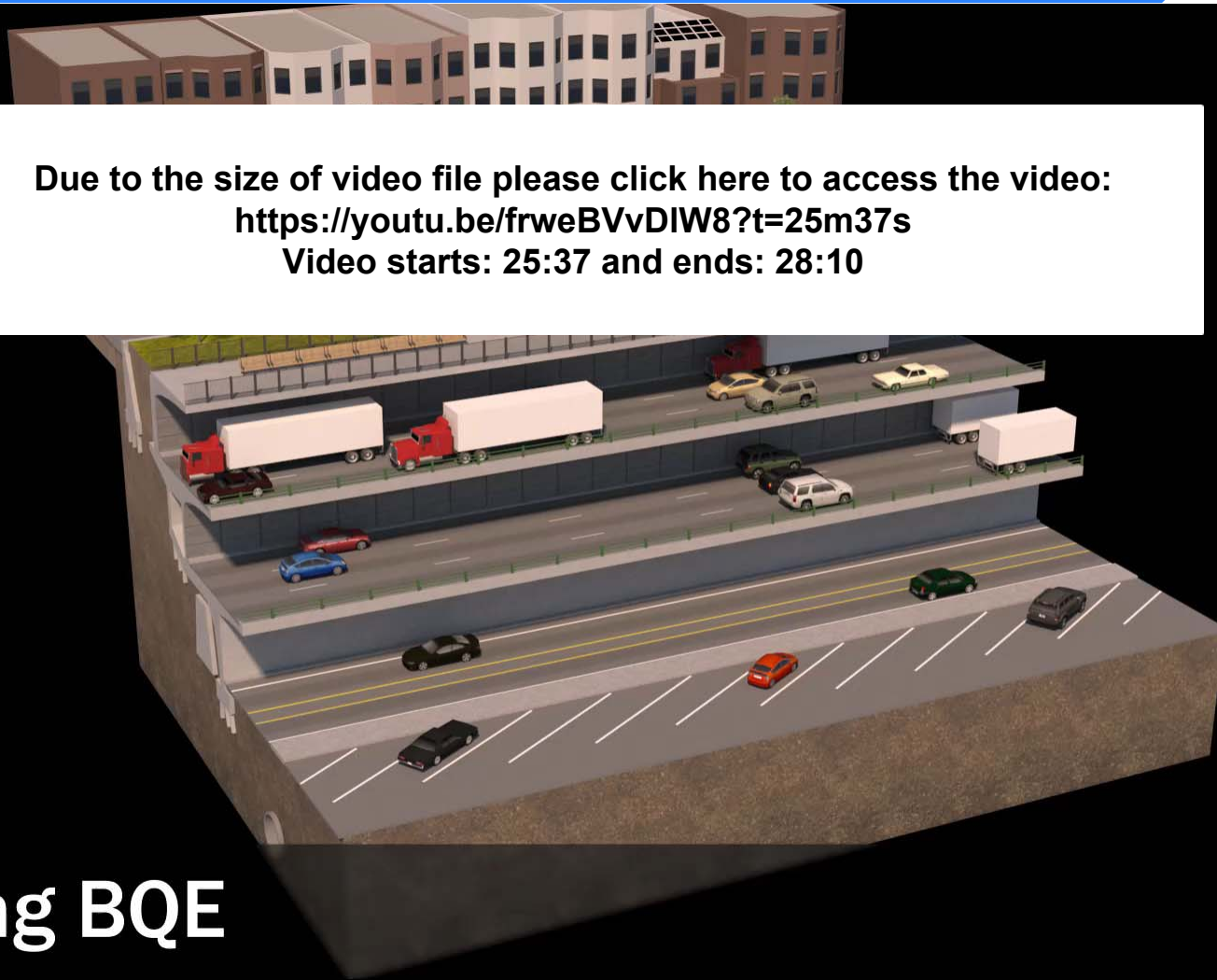




# Temporary Elevated Roadway: Staging



Due to the size of video file please click here to access the video:  
<https://youtu.be/frweBVvDIW8?t=25m37s>  
Video starts: 25:37 and ends: 28:10



Existing BQE

# Temporary Elevated Roadway: Columbia Heights



Due to the size of video file please click here to access the video:  
<https://youtu.be/frweBVvDIW8?t=28m11s>  
Video starts at 28:11 and ends at 30:44



Stage 1



# Temporary Elevated Roadway



A Temporary Elevated Roadway concept provides a greater ability to construct a safer highway that meets current standards, as well as an opportunity for nearby improvements:

- Improve clearances and geometry, provide wider lanes and shoulders
- Eliminate vibrations and minimize noise from the BQE
- Brooklyn Promenade width can increase, if desired, by approximately 35'
- Greatest opportunity for aesthetic improvements to final structure
- Enhance pedestrian and bike connectivity and access to Brooklyn Bridge Park
- Allows new direct connections from the Brooklyn and Manhattan Bridges to the BQE without additional extensive closures