<table>
<thead>
<tr>
<th>Then</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>• HTP Held “Political Hostage” by Federal Government</td>
<td>• Gateway Development Commission up and running</td>
</tr>
<tr>
<td>• EIS Stuck</td>
<td>• Strong Partnership with Federal Government</td>
</tr>
<tr>
<td>• No Permanent Project Sponsor</td>
<td>• States’ Funding Plan in Place</td>
</tr>
<tr>
<td>• No States’ Funding Plan</td>
<td>• Completed Hudson Tunnel Project EIS</td>
</tr>
<tr>
<td></td>
<td>• Completed GEOTECH and permitting requirements</td>
</tr>
<tr>
<td></td>
<td>• FTA Project Rating Increased to Qualify for Federal Funding</td>
</tr>
<tr>
<td></td>
<td>• Entry to Engineering Application Completed</td>
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<tr>
<td></td>
<td>• GDC assumed role of Permanent Project Sponsor</td>
</tr>
<tr>
<td></td>
<td>• RFQ for Project Delivery Partner</td>
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<tr>
<td></td>
<td>• Early Work This Year</td>
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</table>
Gateway Development Commission (GDC) – What is it?

- Bi-State entity in charge of delivering the most urgent infrastructure project in the nation
  - 7 Member Commission
  - 3 New York – 3 New Jersey – 1 Amtrak
  - Oversees the development of the Gateway Program

- GDC now serves as Project Sponsor for Hudson Tunnel Project

- New leadership joined in Summer 2022 to rapidly advance the project and secure necessary federal funding

- Staffing, budgeting demonstrating technical, legal and financial capacity
HTP Cost Estimate & Schedule

Cost Estimate

- **Total** $16.1B
  - **Financing** $2B
  - **Capex** $14.1B

- **August 2021 Estimated Project Cost** $12.3B
- **August 2022 Estimated Project Cost** $14.1B

Total project cost estimate can be reduced with additional Federal grant funding to as low as $14.7B.

Schedule

- Construction early work NY/NJ **2023**
- Full Funding Grant Agreement **Spring 2024**
- Start of Major Construction **Fall 2024**
- New Tunnel Complete **2035**
- NRT Rehab Complete **2038**
Key Recent Accomplishments

Critical Work on Multiple Fronts to Meet Project Schedule Milestones

✓ **August 2022:** Prepared an updated estimated cost and schedule

✓ **October 2022:** GDC assumed the role of Project Sponsor

✓ **October 2022:** GDC submitted Request to Enter Engineering Phase, Updated Financial Plan

✓ **November 2022:** Finalized Project Development Agreement Between New Jersey, New York, Amtrak, and GDC

✓ **December 2022:** Submitted CRISI grant application for the Tonnelle Avenue Bridge & Utility Relocation Project

✓ **December 2022:** GDC passed 2023 capital and operational budget

✓ **December 2022:** GDC launched the Request for Qualifications (RFQ) for Project Delivery Partner

✓ **February 2023:** President Biden announces Federal Mega grant for Hudson Yards Concrete Casing

✓ **February 2023:** Industry Outreach event and one-on-one meetings to gather market feedback
Key Next Steps

Full Funding Grant Agreement
Spring 2024

Start of Full Construction
Fall 2024

- 2023 – Complete Risk Assessment for Full Funding Grant Agreement
- 2023 – Finalize organizational technical, legal, and financial capacity required by USDOT
- 2023 – Pursue Federal-State Partnership Grant
- 2023 – Undertake Build America RRIF Loan Process
- 2023 – Finalize procurement of PDP
- 2023 – Commence Early Work NJ/NY
Early Work – 2023

Planned early work in both New York and New Jersey

• Helps de-risk the project
• Advances start of construction
• Projects:
  • Hudson Yards Concrete Casing Section 3
  • Tonnelle Avenue
Hudson Yards Concrete Casing Section 3

- Hudson Yards Concrete Casing will provide critical connection to Penn Station
- Federal mega grant announced 1/31/23
Tonnelle Avenue Bridge and Utility Relocation Project

Advancing Early Work

- Construction of a new roadway bridge to carry Tonnelle Avenue over a new railroad right-of-way
- Utility relocation to allow new NEC alignment in the area of Tonnelle Avenue
- Creates the access point to the New Jersey portal and construction area of the new Hudson River Tunnel
Federal and State Partnerships will allow GDC to advance program with full support

- Federal partners to provide critical funding commitment
- State partners united in support of GDC as the organization to deliver this program
- GDC has engaged technical resources to move ahead according to ambitious but achievable timeline
2018/2019 Project Packaging Strategy

Package 0: HYCC-3
- Hudson Yards
- Concrete Casing
- (Section 3) **

Package 1: HRT Civil Works
- Palisades Tunnels
- Hudson River Tunnels
- Manhattan Tunnels

Package 2: HRT Systems
- Palisades Tunnels Internal Concrete
- Hudson River Tunnels Internal Concrete
- 12th Ave. Fan Plant & Manhattan Internal Concrete
- Railroad Systems & NJ Surface Trackwork
- Fan Plan MEP & Electrical Substation Installation

Package 3: NJ Surface Alignment
- NJ Surface Alignment

Package 4: Tonnelle Ave. Bridge
- Tonnelle Ave.
- Overhead Bridge**

Package 5: NRT Rehabilitation
- North River Tunnels

**Already 100% Designed
Package 1

Subject to Change

C03: Palisades Tunnel
- Palisades Portal Open Cut Excavation
- Hoboken Shaft Excavation
- TBM Tunneling and Tunnel Lining
- TBM Electrical Power Substation Procurement & Setup
- Cross Passage Excavation and Lining

C05: Hudson River Tunnel
- Hoboken Shaft Excavation
- Ground Improvement Including Low Cover Area in Hudson River
- TBM Tunneling and Tunneling Lining
- Cross Passage Excavation and Lining
- Underpinning of Willow Avenue Bridge

C07: Manhattan Tunnels
- 12th Avenue Shaft SOE, Ground Improvement & Excavation
- SEM Tunnels Under 12th Avenue; Ground Improvement, Excavation, Support of Utilities & Backfill
- SEM Tunnels Under 30th Street; Ground Improvement, Utility Relocation, Excavation & Concrete Lining
- Manhattan Bulkhead Mitigations
C02: 12th Avenue Fan Plant Construction including Plenum Excavation and Structure, Ventilation Shaft Internal Concrete

- Tunnel Internal Concrete
- MEP in Tunnels (Invert Drainage, Conducts in Benches)
- Ventilation Duct Wall (Precast Wall) in TBM Tunnels
- Tonnelle Avenue to tunnel Portal Retaining Structure & Building
- Tunnel Portal Building MEP & Finishes
- Trackwork from tonnelle Avenue to Hoboken Shaft

C08: 12th Avenue Fan Plant & Manhattan Internal Concrete

- 12th Avenue Fan Plant Construction including Plenum Excavation and Structure, Ventilation Shaft Internal Concrete
- Tunnel Internal Concrete from 12th Avenue to 10th Avenue
- Fan Plant Building MEP & Finishes
- Trackwork from 12th Avenue to 10th Avenue

C09: Railroad Systems (Full Alignment) & NJ Surface Trackwork

- Traction Power Substation Equipment And Distribution
- Ancillary Devices (Switch Heaters, Remote Terminal Units, Sectionalizing Switches, Etc.)
- Tunnel Lighting, OCS, and Emergency Communications
- Catenary Poles and Appurtenances
- SCADA Control Systems for Fan Plants
- Security Provisions, Signals and Communications Equipment
- Trackwork Allied to Tunnel Portal (Except for Special Trackwork)

C11: 10th Avenue Cut and Cover Tunnel, Connection to A-Yard, A-Yard Fan Plant

- 10th Avenue Cut and Cover SOE, Excavation and Concrete
- Brookfield Building Underpinning
- A-Yard Fan Plant Construction
- Trackwork Connection to A-Yard from 10th Avenue

C10: Fan Plant MEP (Ventilation Systems) & Electrical Substation Installation

- Provision, Installation and Testing of all Fan Plant Equipment
- Permanent Power Substations
- Emergency Power Generators
- Fire Protection and Detection Equipment
- Sump Pumps and Fire Pumps

C04: Palisades Tunnel Internal Concrete

- Tunnel Internal Concrete
- MEP in Tunnels (Invert Drainage, Conducts in Benches)
- Ventilation Duct Wall (Precast Wall) in TBM Tunnels
- Tonnelle Avenue to tunnel Portal Retaining Structure & Building
- Tunnel Portal Building MEP & Finishes
- Trackwork from tonnelle Avenue to Hoboken Shaft

C06: Hudson River Tunnel Internal Concrete

- Tunnel Internal Concrete
- MEP in Tunnels (Invert Drainage, Conducts in Benches)
- Ventilation Duct Wall (Precast Wall) in TBM Tunnels
- Hoboken Fan Plant Building with MEP & Finishes
- Trackwork from Hoboken Shaft to 12th Avenue Shaft
Package 3

Subject to Change

• Modification of East Abutment of County Road Bridge
• New Structure for Secaucus Road Bridge
• Retaining Walls and Concrete Viaduct Structures
• Drainage Structures (Box Culverts/Pipe Extensions)
• Through Girder Railroad Bridge Over Conrail and NYS&W
• Foundations and Platforms for Signals and Communications Bungalows Foundations for Catenary Poles
• Ductbank and Manholes for Railroad Systems
• Contract C09
• Grading Of The Subgrade under Tonnelle Avenue Overhead Bridge

C01: NJ Surface Alignment
Package 4

Subject to Change

C02: Tonnele Avenue Overhead Bridge

- Retaining Wall Along South-side of Sub 42
- Repair of Wing Walls and Abutment as required
- Installation of Roadway Deck
- Traffic Signal on Tonnelle Avenue North of Construction
- Utility Work to Facilitate Bridge Construction and Provide Power Source for TBM
- Maintenance and protection of Traffic to Permit Lane Closures
GDC is Considering Potential Additional Early Works Opportunities to Reduce Interface Risk

In addition to HYCC-3 and Tonnelle Avenue Bridge and Utility Relocation, GDC is considering potential additional early works projects:

- In-River Low Cover Work (NY) – P1
- Bulkhead Work (NY) – P1
- 10th Avenue Cut and Cover Work (NY) – P2
- Excavation Work Near 12th Avenue (NY) – P1
- Tonnelle Avenue Portal Preparation Work (NJ) – P1
2018 feedback led to a delivery approach; we are revisiting the strategy

<table>
<thead>
<tr>
<th>Package #</th>
<th>Description</th>
<th>2018/2019 Strategy</th>
<th>Strategy Under Consideration Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HRT Tunnels</td>
<td>Design Build</td>
<td>Design-Build, Design-Bid-Build, or Progressive Design Build</td>
</tr>
<tr>
<td>2</td>
<td>HRT Tunnels / Systems Fit Out</td>
<td>Design Build</td>
<td>Design-Build, Design-Bid-Build, or Progressive Design Build</td>
</tr>
<tr>
<td>3</td>
<td>NJ Surface Alignment</td>
<td>Design Build</td>
<td>Design-Build, Design-Bid-Build, or Progressive Design Build</td>
</tr>
<tr>
<td>4</td>
<td>Tonnelle Avenue Bridge &amp; Utility Relocation</td>
<td>Design - Bid - Build</td>
<td>100% Designed- Procurement Forthcoming</td>
</tr>
<tr>
<td>5</td>
<td>North River Tunnels</td>
<td>Design - Bid - Build</td>
<td>Design-Bid Build</td>
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Ongoing Industry Dialogue

Specific areas of interest

• Project delivery: what is your firm’s preferred delivery method (DB, progressive DB, DBB, CMAR or other), and for which packages? Please share thoughts on how to de-risk if we use multiple contracts

• Project packaging: please comment on your preferred approach to packaging and maximum capacity for a single package, either as a sole bidder or as part of a consortium

• Bonding and insurance: comment on market capacity, market conditions, and examples of successful strategies

• Innovation: we invite suggestions on opportunities to innovate, in design, financing/funding, and construction means and methods

• Enabling works: what discrete work(s) can Owner advance in order to de-risk the program?

• Other: Please list your other top 3 factors the Owners should contemplate in putting together this procurement