Bergen County / Essex County Kingsland Avenue (Avondale & De Jessa Memorial) Bridge Replacement over the Passaic River Township of Lyndhurst and Township of Nutley, New Jersey

**Local Preliminary Engineering Phase** 















Community Stakeholders Meeting No. 1 April 25, 2023

# **Online Meeting Guidelines**

- Please keep all phones/mics on mute unless speaking.
- If possible, please submit questions anytime during the presentation using the Chat Box feature, located in upper margin.
- During Q&A after presentation, questions and comments will be read aloud in order of receipt in Chat Box and a Project Team member will respond.
- After Chat Box comments are addressed, participants can use Raise Hand feature and the Project Team will address verbal input.
- Cameras may be on during introductions and Q&A, but please turn off during the presentation.
- Meeting is being recorded, for internal project team use only.

# **Meeting Agenda**

- I. WELCOME AND INTRODUCTION
  - Project Overview & Update
  - Local Project Delivery Process Local Preliminary Engineering Phase
- II. BERGEN COUNTY KINGSLAND AVENUE (AVONDALE & DE JESSA MEMORIAL) BRIDGE REPLACEMENT
  - Project Status and Schedule
  - LPE Work Effort Surveying and Bridge Structure
  - Environmental Process CED and Cultural Resources Study
  - Community Involvement Project Website and Public Outreach Meetings

#### III. DISCUSSION

• Q & A - Community Input - Interests, Issues, Improvements

#### IV NEXT STEPS

- Public Outreach:
  - Website Updates; Public Information Center (PIC) online Fall 2023/Winter 2024
- Project Website: <u>www.kingslandavenuebridge.com</u>
- Project Email: <u>kingslandavenuebridge@gmail.com</u>
- Feedback and Closing Remarks

### **Project Team**

#### **Bergen County Department of Planning & Engineering**

- Joseph A. Femia, P.E., Department Director / County Engineer
- Joseph Baladi, P.E., P.P., CME, Division Head-Planning (Bergen County Project Manager)
- Martin Maver, P.E., Principal Engineer-Bridges
- Adam Camerlengo, Engineering Aide

#### **Essex County Division of Engineering**

- Sanjeev Varghese, P.E., P.P., Public Works Director / County Engineer
- Luis E. Rodriguez, Assistant County Engineer
- Andres F. Gomez-Ortiz, P.E., Principal Engineer

#### **New Jersey Department of Transportation (NJDOT)**

- Nabil Ayoub, Supervising Engineer, Local Aid District 2
- Paul Miranda, Project Manager, Local Aid District 2
- Sean Warren, Section Chief, Bureau of Environmental Program Resources
- Sean Ream, Environmental Project Manager, Bureau of Environmental Program Resources

#### North Jersey Transportation Planning Authority (NJTPA)

• Rich Brundage, NJTPA Project Manager

#### **Hardesty & Hanover Team**

- Glen Schetelich, P.E., Principal in Charge, Hardesty & Hanover
- Bruce Riegel, P.E., *Project Manager, Hardesty & Hanover*
- Brian Medino, P.E., Deputy Project Manager, Hardesty & Hanover
- Matt Witkowski, P.E., Traffic Engineer, Hardesty & Hanover
- Sue Quackenbush, PWS, Environmental Specialist, Davey Resource Group
- Lynn Alpert, Principal Senior Architectural Historian, Richard Grubb & Associates, Inc.
- Martine Culbertson, Community Involvement Facilitator, M.A. Culbertson, LLC

# Project Overview and Background

- Built in 1905, major rehabilitation in 1986
- Spans the Passaic River connecting Townships of Lyndhurst and Nutley
- Under jurisdiction of and maintained by Bergen and Essex Counties
- NJTPA Local Concept Development (LCD) Study completed in June 2020
- Federally funded



# **Local Capital Project Delivery Process**

Local Concept Development  Completed June 2020	Local Preliminary Engineering Anticipated Completion Spring 2024	Final Design / Right of Way Acquisition  Anticipated Summer 2024-Summer 2026	Construction  Anticipated Fall 2026-Spring 2028
Purpose and Need Statement	Determine Access & Right of Way Impacts	Construction Contract Documents and PS&E package	Implement Construction
Data Collection and Environmental Screening Report	Cost Estimates (Final Design, ROW & Construction)	Environmental Reevaluations	Create As-Builts
Selection of Preliminary Preferred Alternative	Complete Environmental Documentation	Secure Environmental Permits	Update and Finalize Design Communications Report
NEPA Classification	Establish Project Footprint and Complete Preliminary Design	Acquisition of ROW	Close-out Documentation
Concept Development Report	Preliminary Engineering Plans & Report	Final Utility Relocation Schemes	Continue Public Outreach & Involvement
Initiate Public Outreach & Involvement	Continue Public Outreach & Involvement	Continue Public Outreach & Involvement	



# Project Location



# **Challenges and Limitations**



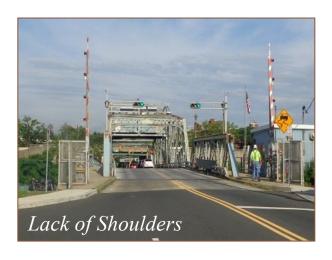


# Existing Conditions

# Kingsland Avenue Bridge - Facts and Figures

- Overall length: 364 feet
- 4 spans: 2-span riveted warren through-truss rim-bearing swing center span (204 feet); west & east approaches steel through pony truss spans (80 feet)
- Bridge roadway width: 29 feet, 3 inches
- 6-foot-wide cantilevered sidewalk on both sides
- No shoulders on bridge
- ADT = 20,808 (2016)
- Bridge navigational vertical clearance
  - Vertical (closed): 7 feet (at MHW)
  - Horizontal: 65 feet

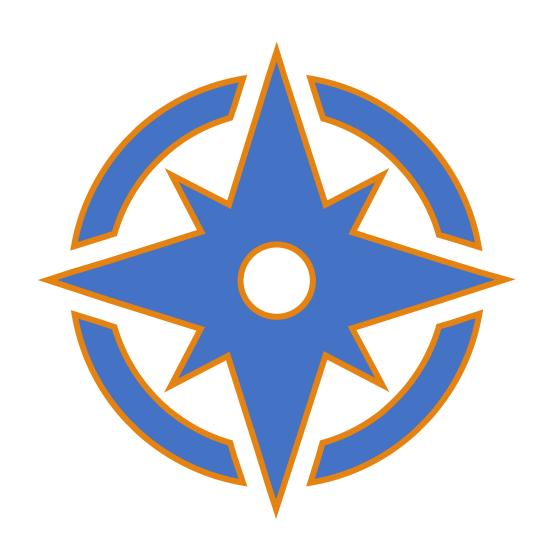




# <u>Kingsland Avenue Bridge – Existing Condition</u>

- 2016 Bridge Re-evaluation Survey Report
  - Poor overall condition
  - Structurally deficient
- Sufficiency Rating = 24.3
- Superstructure
  - Poor condition, Rating = 4 (severe corrosion and/or loss of section of below deck truss members, gusset plates, floor beams, and stringers)
- Substructure
  - Satisfactory condition, Rating = 6
- Substandard bridge railings





Passaic River
Waterway
Navigational
Channel

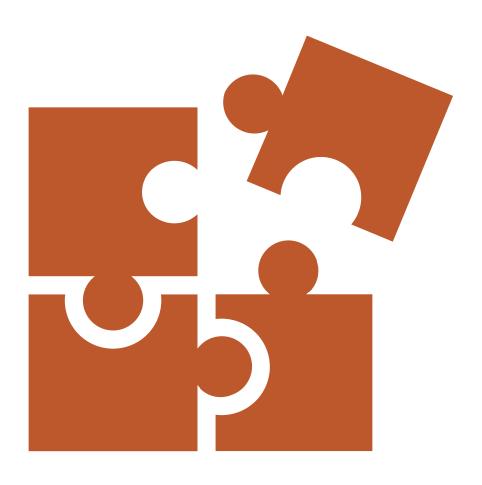
# Kingsland Avenue Bridge over the Passaic River: Navigation Impact Report

- Channel usage
  - Predominantly recreational (R.M. 2.2 13.2)
  - Commercial businesses along Newark Bay (R.M. 0.0 – 2.2)
- 16 Feet\* minimum vertical clearance above MHW
  - Vicinity of Kingsland Avenue Bridge (PVSC skimmer vessel)
  - \*12 feet with mitigation
  - USCG, July 10, 2019 letter
- Maintain one 75-foot channel for future navigation
  - USCG, October 3, 2019 e-mail
- 150 feet existing federally authorized channel at Kingsland Avenue



Looking north

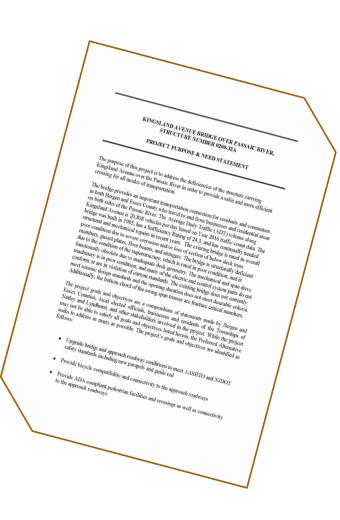
<sup>\*</sup> Deauthorized October 23, 2018



# Purpose & Need

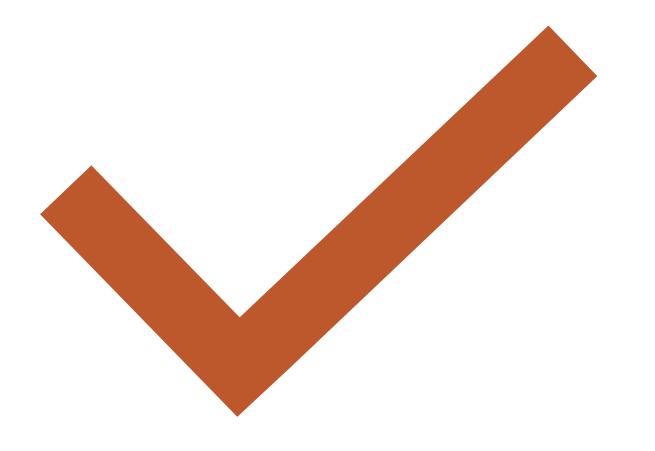
# Purpose & Need Statement

- Purpose
  - Address deficiencies to provide safer and more efficient crossing
- Need
  - Critical transportation connection for residents and commuters
  - Bridge condition
    - Overall poor condition
    - Sufficiency rating of 24.3
    - Structurally deficient/ functionally obsolete (inadequate deck geometry)
    - Mechanical span drive machinery poor condition
    - Bottom chords of steel truss are fracture critical members



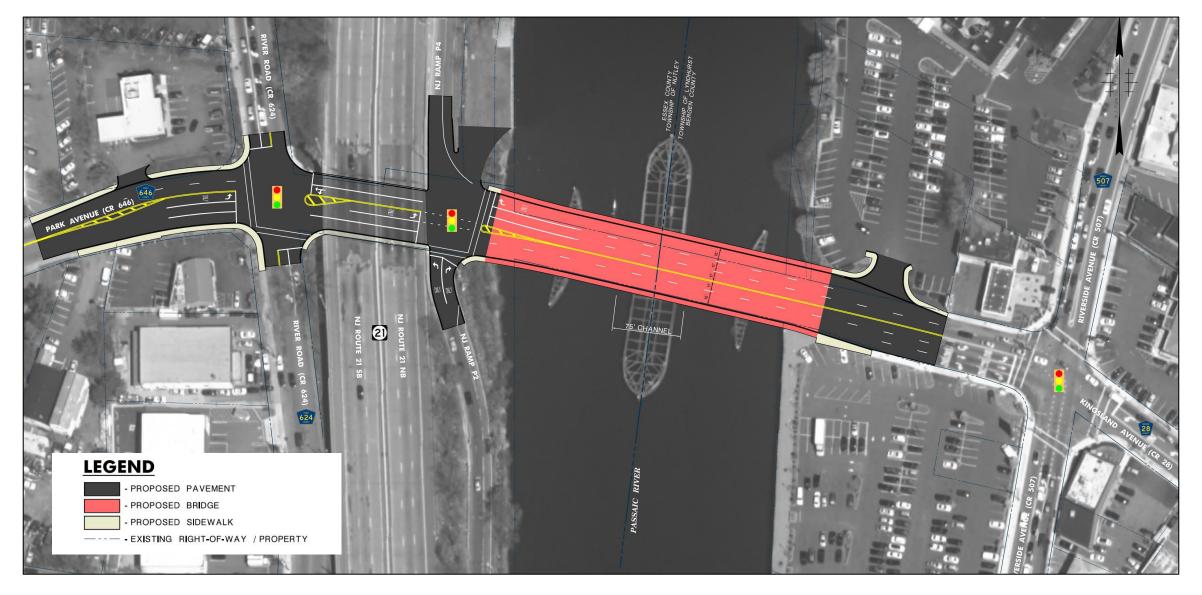
# Purpose & Need Statement: Goals and Objectives

- Provide bicycle compatibility & connectivity to approach roadways
- Provide ADA-compliant pedestrian facilities, crossings & connectivity to approach roadways
- Upgrade bridge & approach roadway conditions to meet AASHTO & NJDOT safety standards including new parapets
   & guide rail
- Correct controlling substandard design elements (CSDE)
- Avoid or minimize social, economic & environmental impacts
- Reduce frequency of major bridge maintenance activities that disrupt traffic
- Maintain traffic operations & volume with minimal disruption & delay during construction
- Maintain pedestrian & vehicular access to properties during construction & minimize detours
- Provide accommodations for current & future users of the Passaic River
- Address high rate of vehicular crashes at Kingsland Avenue & Riverside Avenue and at Park Avenue & River Road
   intersections
- Address traffic signals operating at peak hour congestion at all approach roadway intersections



Preliminary Preferred Alternative (PPA)

Bridge Replacement

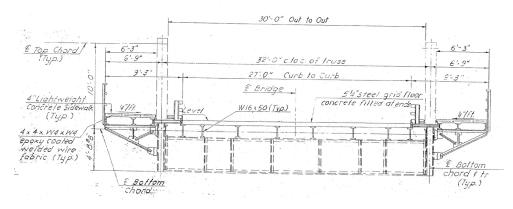


Kingsland Avenue Bridge PPA

# **Bridge Replacement & Intersection Improvements (PPA)**

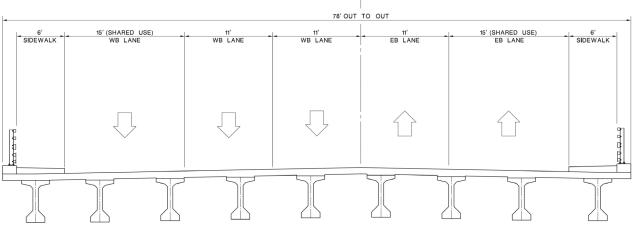
- New fixed bridge
  - Width = 78 feet
  - Additional westbound lane justified by traffic analysis
  - 15-foot outside lane (bicycle compatibility)
  - 6-foot sidewalks, both sides
- Intersection improvements at all three intersections
  - ADA-compatible curb ramps
  - Pedestrian countdown heads and pushbuttons, crosswalks & traffic calming elements to address pedestrian safety
- Requires mitigation
  - PVSC vessel needing less than 12-ft vertical clearance to perform river skimming program

# **Existing Bridge Section & Proposed Section**



#### KINGSLAND AVENUE BRIDGE

EXISTING BRIDGE SECTION
(LOOKING EAST)



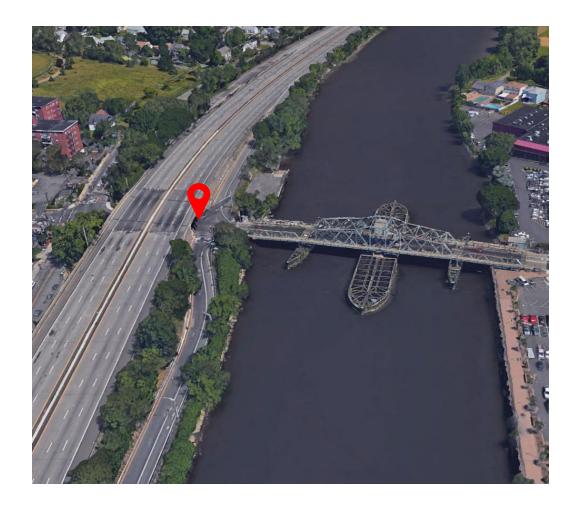
#### KINGSLAND AVENUE BRIDGE

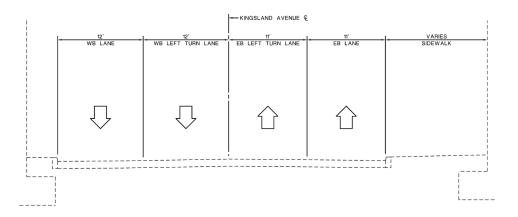
- KINGSLAND AVENUE ₽ & P.G.L.

PROPOSED 5-LANE BRIDGE SECTION (ADDITIONAL WESTBOUND LANE)

(LOOKING EAST)

# Lane Configuration under Route 21 Freeway Bridge

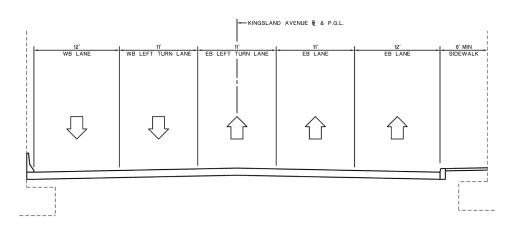




#### KINGSLAND AVENUE BRIDGE

EXISTING 4-LANE ROADWAY SECTION (UNDER ROUTE 21)

(LOOKING EAST)

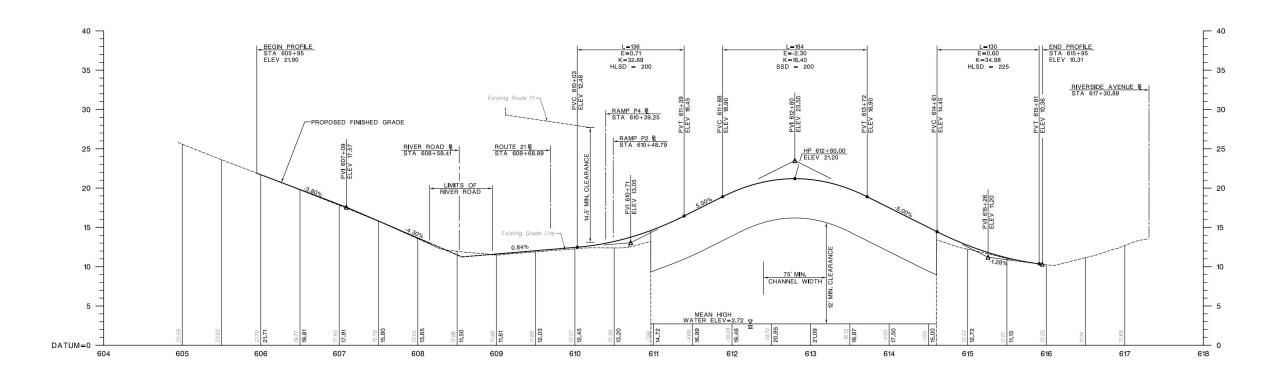


#### KINGSLAND AVENUE BRIDGE

PROPOSED 5-LANE ROADWAY SECTION (UNDER ROUTE 21)

(LOOKING EAST)

# Kingsland Avenue Bridge Profile

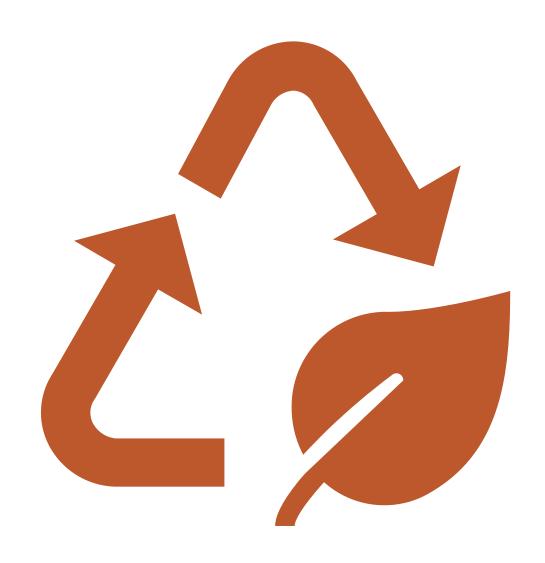


# Kingsland Avenue Bridge Conceptual Rendering - Aerial



# <u>Kingsland Avenue Bridge Conceptual Rendering – River View</u>





Environmental and Cultural Resources

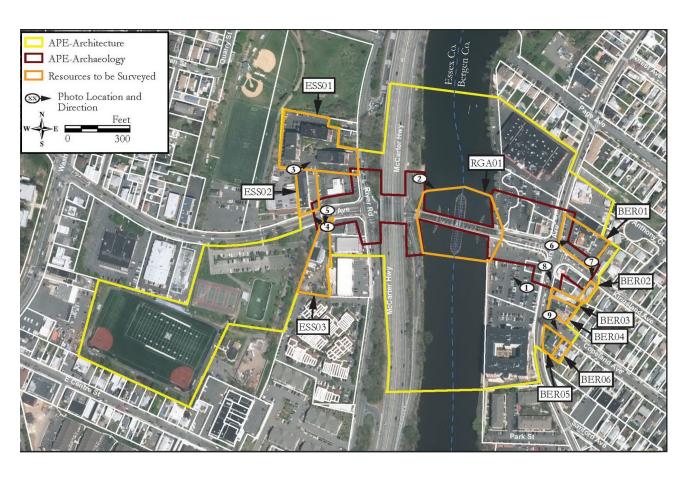
# **Environmental** Screening -**Constraints** Map



AMY GREENE

## **Cultural Resources**

Advanced coordination with NJHPO for cultural resources – completed in LCD



- Kingsland Avenue Bridge
  - Likely eligible for National Register of Historic Places (NRHP) / Rare bridge type: Swing span

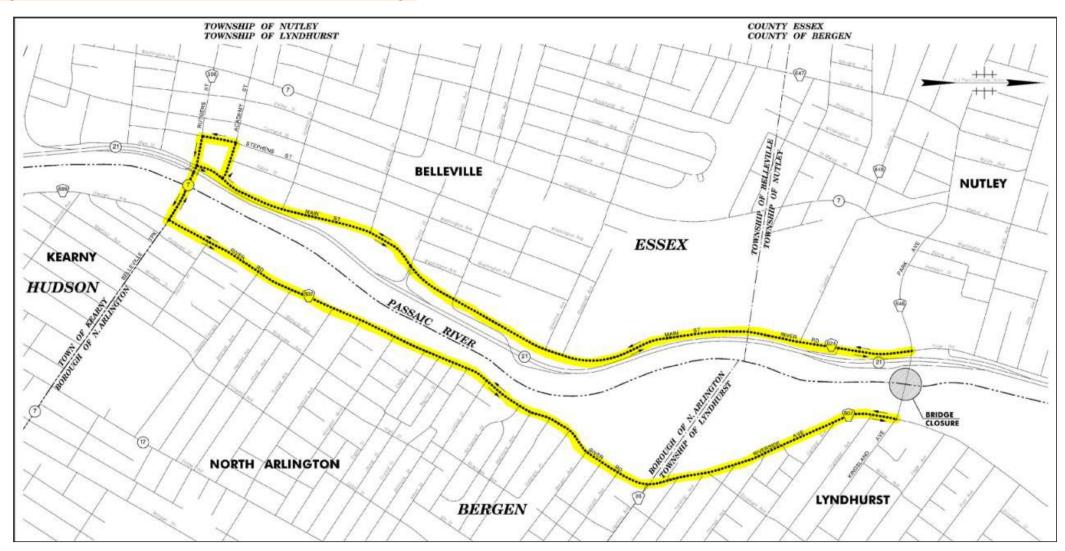
### PPA – Environmental Documentation

- LCD Phase
  - No significant impacts
  - Community support for PPA
- LPE Phase
  - Categorical Exclusion Document (CED) needed
  - Section 106 (Cultural Resources) & Memorandum of Agreement
  - Programmatic Section 4(f) historic bridge

# <u>Local Preliminary Engineering Phase – Work Effort</u>

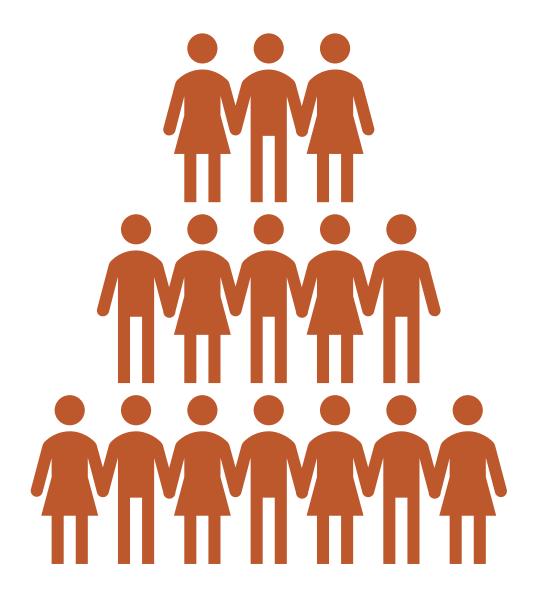
- Development of design level base plans
- Geotechnical studies for foundation and pavement design
- Structural studies that document the structural selection process and the recommended structure and aesthetic treatments
- Utility discovery and verification
- Environmental studies (including Section 106 and Section 4(f) evaluation)
- NEPA document (Categorical Exclusion)
- Preliminary drainage work
- Access and right of way impact evaluation
- Development of project cost estimates

# Proposed Detour Route Map



# **Proposed Detour Route Overview**

- Existing bridge will be closed during construction of the new bridge
- Detour route examined during LCD is south through North Arlington and Belleville to Route 7 utilizing the Belleville Turnpike Bridge
- Optional route to the north utilizing Route 3 and 21 is being evaluated
- Estimated duration of proposed detour is 18 months
- Provisions/accommodations for pedestrians and bicyclists during bridge closure will be determined



Community
Involvement
&
Public Outreach

# Community Outreach Meetings – LCD Study Phase

- Local Officials Meetings (LOMtg)
  - LOMtg No. 1 Township of Nutley July 25, 2016
  - LOMtg No. 1 Township of Lyndhurst July 27, 2016
  - LOMtg No. 2 Twp. of Lyndhurst & Twp. of Nutley October 29, 2019
- Community Stakeholders Meetings (CSMtg)
  - CSMtg No. 1 September 29, 2016
  - CSMtg No. 2 April 26, 2017
- Public Information Center (PIC) Meetings
  - PIC Mtg. No. 1 October 17, 2016
  - PIC Mtg. No. 2 December 12, 2019



# <u>Community Involvement – LPE Phase</u>

- Local Officials Meetings (LOMtg)
  - LOMtg No. 1 Twp. of Lyndhurst & Twp. of Nutley September 13, 2022
  - LOMtg No. 2 Fall 2023 / Winter 2024
- Community Stakeholders Meetings (CSMtg)
  - CSMtg No. 1 April 25, 2023
- Public Information Center (PIC) Meetings
  - PIC Mtg. No. 1 Fall 2023 / Winter 2024

Project Website: <a href="https://www.kingslandavenuebridge.com">www.kingslandavenuebridge.com</a>

Email Address: kingslandavenuebridge@gmail.com



# **Community Input - Discussion**

- Q & A
- Comments
- Feedback





# Thank You!

For information: www.kingslandavenuebridge.com

To submit questions or comments: kingslandavenuebridge@gmail.com

#### **Contact Information**

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