NJTPA 2016 Local Concept Development Study Bergen & Essex Counties Kingsland Avenue Bridge over the Passaic River



Community Stakeholders Meeting





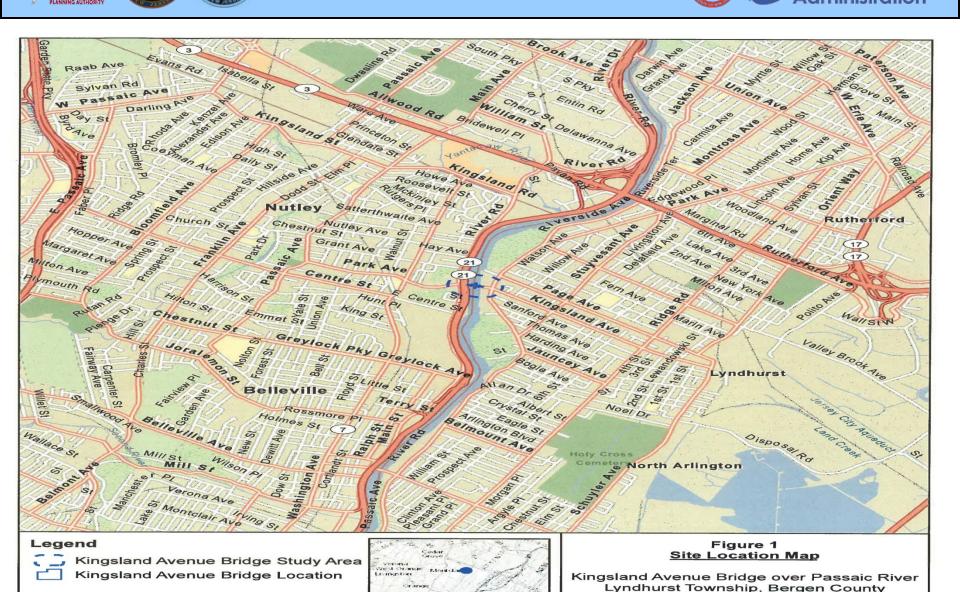




Project Site Location Map



and Nutley Township Essex County, New Jersey



Project Overview and Background

- Bridge Spans the Passaic River connecting the Townships of Nutley & Lyndhurst
- Kingsland Avenue Bridge was built in 1905.
- Bridge is in need of major rehabilitation or replacement.
- Routine maintenance can no longer address deficiencies.
- NJTPA/Bergen & Essex County Local Concept Development (LCD) Study initiated June 2016 utilizing federal funding
- Local Capital Project Delivery Process provides opportunity to advance this project with public input and agency collaboration.









Local Capital Project Delivery Process

Local Concept Development	Local Preliminary Engineering	Final Design/ Right of Way Acquisition	Construction
Data Collection Purpose and Need Statement	Approved Design Exception Report	Construction Contract Documents and PS&E package	Complete Construction
Concept Development & Alternatives Analyses	Cost Estimates (Final Design, ROW and Construction)	Environmental Reevaluations	Continue Public Outreach
Selection of Preliminary Preferred Alternative	Approved Environmental Document	Secure Environmental Permits	As-Builts
Environmental Screening Report & NEPA Classification	Preliminary Design	Acquisition of ROW	Update and Finalize Design Communications Report
Concept Development Report	Preliminary Engineering Report	Final Utility Relocation Schemes	Close-out Documentation
Initiate Public Outreach & Involvement	Continue Public Outreach & Involvement	Continue Public Outreach & Involvement	











Local Concept Development Process

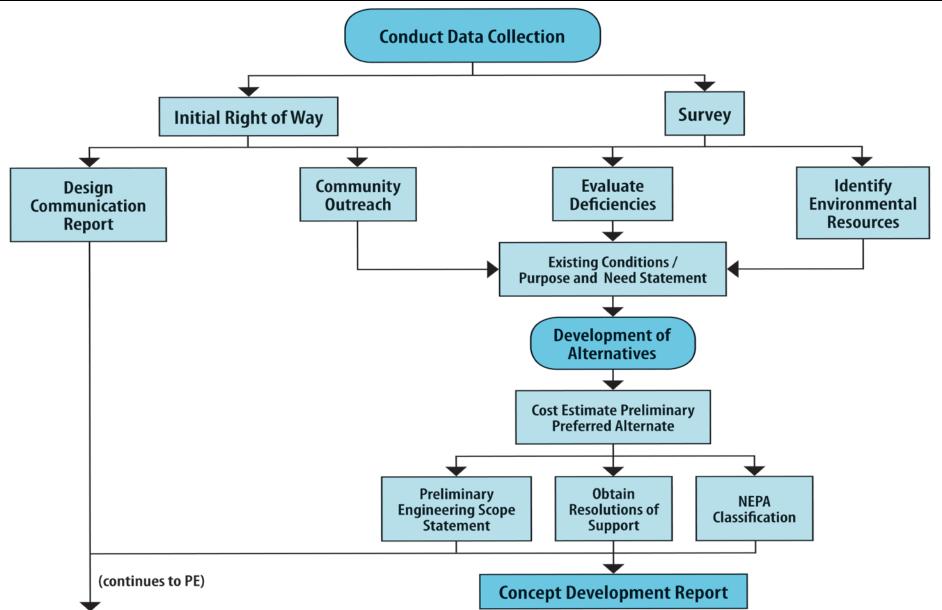












Environmental Process

- Federally funded projects require NEPA (National Environmental Policy Act) documentation
- Identify environmental resources and concerns
- Avoid, minimize and or mitigate environmental impacts
- Coordination with permitting agencies
- Process includes public input and community development









Bridge Street Bridge Data

- Year Built: 1905 (Major rehab. 1986)
- Bridge type: 4 spans- two-span riveted Warren throughtruss rim-bearing swing center span (204 ft), west and east approach steel through pony truss spans (80 ft)
- Overall Length: 364 feet
- Bridge Roadway Width: 29' 3"
- No Shoulders on bridge
- 6 foot wide cantilevered sidewalk on both sides
- Bridge Navigational Vertical Clearance in closed position:
 7 feet (at MHW); Horizontal Clearance = 65 feet









- Bridge in poor overall condition and is Structurally Deficient (2014 Bridge Re-evaluation Report)
- Sufficiency Rating = 24.3 (out of 100)
- Superstructure in poor condition: Rating = 4 out of 10 (severe corrosion and/or loss of section of below deck truss members, gusset plates, floor beams, and stringers)
- Bridge may soon need to be load posted due to advancing deterioration of steel support members











Existing Bridge Condition (continued)

- Substructure in satisfactory condition Rating = 6 out 10
- Bridge railings are substandard
- Bridge operating machinery in overall fair condition but has only one set of brakes and the span lock machinery has failed (both conditions non-compliant with AASHTO)
- Bridge electrical and control systems are in overall fair condition, although many parts do not conform or are in violation of current standards
- Needs approx. \$ 7.3 M in remedial repairs











Bridge East Approach Roadway Looking West - Note no shoulders



Bridge Opening Looking West at Route 21 & Township of Nutley













West approach to bridge at River Road & Park Avenue intersection



West approach to bridge at intersection with Route 21 ramps & Park Ave.











Bridge looking east towards Township of Lyndhurst



Bridge Opening Looking East at Township of Lyndhurst











Kingsland Ave & Riverside Avenue intersection looking east



Project Goal: Improve Bicycle Compatibility













Project Goal: Compatibility with Passaic River Waterfront Walkway

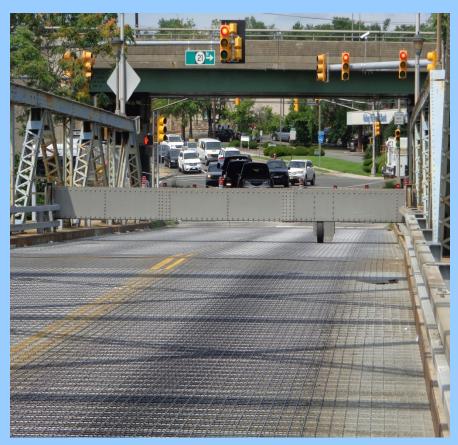
Passaic River Waterfront Walkway looking south











Geometric Constraint for Raising Park Avenue Roadway Profile: Route 21 Bridge



Route 21 Ramp approaching Park Avenue





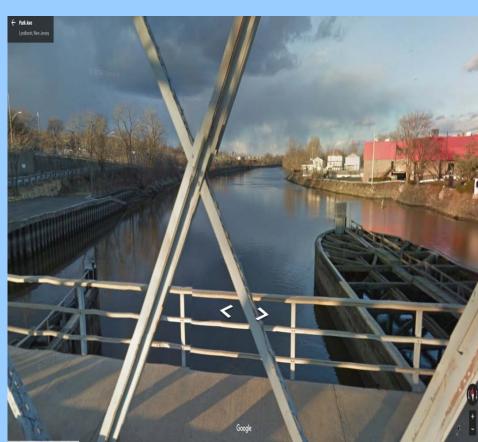




Passaic River Navigation



Bridge Navigation: 7-ft vertical clearance at MHW, 65-ft channel width



Looking upstream from bridge; note boat ramp on west bank









Passaic River Navigation



Looking Downstream from bridge



Looking upstream from boat ramp on west bank

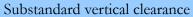














Substandard bridge railing (typical)













Floor beams & stringers of East Approach Span



Section loss of gusset plate in East Approach Span













Severe corrosion in top flange of north curb line steel stringer



Moderate to heavy corrosion of stringers in swing span













Severe corrosion of stringers in West Approach Span

Moderate to heavy corrosion of stringers in swing span











Additional Significant LCD Phase Elements

- Navigation Impact Report for Clay Street Bridge
- Entire Completion of Cultural Resources (Section 106) Process
- Value Engineering
- Risk Analysis Assessment











Environmental Constraints





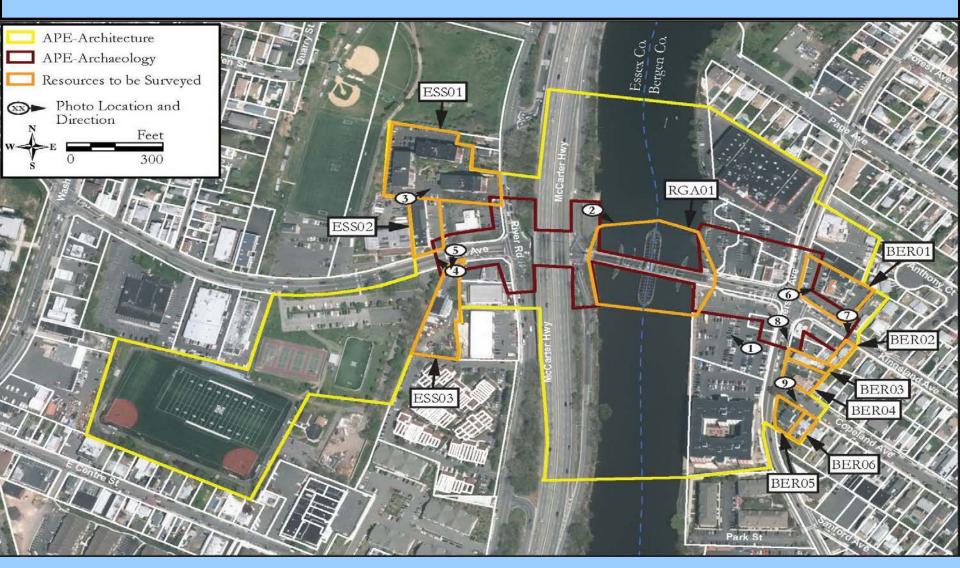








Cultural Resources













Project Status

- Work began June 2016
- Data Collection On-Going
 - 1. Project Mapping & Field Survey
 - 2. Environmental Screening
 - 3. Cultural Resources Study
 - 4. Verification of Utilities
 - 5. Obtain Bridge Inspection Reports, Traffic Data, Crash Data
 - 6. Conduct Traffic Counts
 - 7. Identify Existing Substandard Design Elements
 - 8. Local Officials, Stakeholders and Public Outreach & Input
 - 9. Project Fact Sheet
 - 10. Develop Project Purpose and Need











Project Schedule

- 18 to 21 month completion schedule
- Major Milestones
 - 1. Project Purpose and Need Fall 2016
 - 2. Development of Conceptual Alternatives Winter 2017
 - 3. Determine Preliminary Preferred Alternative (PPA) Fall 2017
 - 4. Submit Draft Concept Development Report Fall 2017
 - 5. Completion of Concept Development Phase Winter 2018











Community Involvement

- Community Involvement Schedule
 - Local Officials Briefings: Project Purpose & Need July 25, 2016 (Twp. of Nutley); July 27, 2016, Twp. of Lyndhurst
 - 2. Stakeholders Meeting No. 1: Purpose & Need Sept. 29, 2016
 - 3. Public Information Center Meetings (No. 1): Project Purpose & Need Oct. 17, 2016 (Townships of Nutley & Lyndhurst)
 - 4. Stakeholders Meeting No. 2: Input on Alternatives Winter/Spring 2017
 - 5. Local Officials Briefings (No. 2): Input on Alternatives & Determine Preliminary Preferred Alternative Spring/Summer 2017











Community Involvement (continued)

- 6. Public Information Center Meetings (No. 2): Input on Alternatives & Determine Preliminary Preferred Alternative Spring/Summer 2017 (Townships of Nutley & Lyndhurst)
- 7. Local Officials Briefings (No. 3): Obtain Resolution of Support for Preliminary Preferred Alternative (Town of Harrison & City of Newark)











Local Officials Briefings (7/25 & 7/27/16)

Comments from Local Officials Briefings No. 1 (Townships of Nutley & Lyndhurst)

- Need to maintain and improve pedestrian and bicycle access and connectivity
- Need wider bridge for the addition of outside shoulders
- There is heavy traffic congestion on the bridge at peak hours that extends to Park Avenue & Route 21 & Riverside Avenue & Kingsland Avenue
- Results of Navigation Impact Study at Clay Street Bridge will impact any replacement bridge at Kingsland Avenue











FY 2016 BERGEN COUNTY AND ESSEX COUNTY LOCAL CONCEPT DEVELOPMENT STUDIES

ORGANIZATION CHART









NJTPA PROGRAM MANAGEMENT / PROJECT SPONSOR

PRINCIPAL-IN-CHARGE Glen Schetelich, PE*

CONSTRUCTABILITY REVIEWS Brendan O'Shea, PE*

PROJECT MANAGER Bruce Riegel, PE*

QUALITY ASSURANCE / QUALITY CONTROL

Tom Faranda, PE

TRAFFIC ENGINEERING TEAM LEADER Matthew Witkowksi, PE*

TRAFFIC DATA COLLECTION & CRASH **ANALYSIS**

Matthew Witkowski, PE

TRAFFIC MANAGEMENT STUDIES & OPERATIONAL ANALYSIS

Matthew Witkowski, PE

HIGHWAY LIGHTING ANALYSIS

Lee Adams, PE

UTILITY ENGINEERING TEAM LEADER Pankil Patel, PE* (NCG)

UTILITY DISCOVERY & COORDINATION Pankil Patel, PE (NCG)

RISK MANAGEMENT Charlie Geer, PE*

* Denotes resume included in proposal.

SUBCONSULTANT KEY

McCormick Taylor, Inc. (MTI) Naik Consulting Group (NCG) M.A. Culbertson, LLC (MAC) Amy Greene Environmental (ASGEI) Richard Grubb & Assoc., Inc. (RGA) Stokes Creative Group (SCG) Jacobs Engineering Group (JEG)

STRUCTURAL DESIGN TEAM LEADER Robert Supino, PE*

STRUCTURAL ALTERNATIVES Robert Supino, PE David Gerber, PE

STRUCTURAL EVALUATIONS

Joseph Solis, PE Maria Yap, PE

MECHANICAL / ELECTRICAL DESIGNS Steve Mikucki, PE*

MECHANICAL ENGINEERING Craig Johnson, PE* John Gimblette, PE

ELECTRICAL ENGINEERING

Alec Noble, PE* Robyn Eisensmith, PE

GEOTECHNICAL TEAM LEADER Raymond Mankbadi, PE*

SUBSURFACE INVESTIGATIONS Raymond Mankbadi. PE Yuanzhi Lin, PhD, PE

TEST BORING DRILLER

ROADWAY DESIGN TEAM LEADER Michael Swietanski, PE*

GEOMETRICS / ROADWAY ALTERNATIVES

Brian Medino. PE (Kingsland Avenue)

MAINTENANCE & PROTECTION OF TRAFFIC

Michael Swietanski, PE Jun Liu, PE

HYDRAULICS AND HYDROLOGY TEAM LEADER

Lee Adams, PE*

DRAINAGE & STORMWATER MANAGEMENT Lee Adams, PE

BRIDGE SCOUR ANALYSIS Lee Adams, PE

SURVEYING / ROW ENGINEERING TEAM LEADER Richard Baron, PLS* (NCG)

VALUE ENGINEERING ANALYSIS Richard LaRuffa, PE *(JEG)

ENVIRONMENTAL SCREENING

William Romaine, PWS (ASGEI) Robert Piel, Jr. (ASGEI)

ENVIRONMENTAL SCIENCE TEAM LEADER

William Romaine, PWS* (ASGEI)

WETLANDS DELINEATION

William Romaine, PWS (ASGEI)

CULTURAL RESOURCES

Paul McEachen* (RGA)

ENVIRONMENTAL CONSTRAINTS AND DOCUMENTATION

William Romaine, PWS (ASGEI)

PUBLIC OUTREACH Martine Culbertson* (MAC)

COMMUNITY INVOLVEMENT

Martine Culbertson (MAC) Bruce Riegel, PE (PE)

PROJECT WEBSITE & SOCIAL MEDIA (TWITTER) Matthew Touhey * (SCG)

TECHNICAL SUPPORT SERVICES

Interactive Communications - Cost Estimation - Primavera Scheduling - MicroStation CADD

Project Contact Information

- Joseph Baladi, Bergen County Project Manager, <u>ibaladi@bergen.nj.us</u>, (201) 336-6428
- Luis Rodriguez, Essex County Project Manager, lrodriguez@essexcounty.nj.org, (973) 226-8500
- Kingsland Avenue Bridge Project Web Site address:
 - www.KingslandAvenueBridge.com

Power Point Presentation will be posted on Web Site

- Social Media (Twitter)
- Written comments towards Project Purpose & Need will be received until Friday, October 28, 2016









Project Website

Kingsland Avenue (De Jessa Memorial) Bridge LCD Study
Project Overview Whats New Photos FAQ/Glossary Links Contact
Township of Lyndhurst, Bergen County

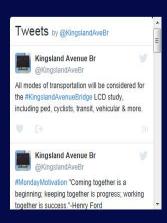
Township of Nutley, Essex County

Select Language



Welcome to the NJTPA Local Concept Development Study for the Kingsland Avenue (De Jessa Memorial) Bridge over the Passaic River in the Township of Lyndhurst, Bergen County and the Township of Nutley, Essex County, New Jersey. The County of Bergen and the County of Essex are conducting a study of the existing Kingsland Avenue (De Jessa Memorial) Bridge, also known as the Park Avenue Bridge and Avondale Bridge. The bridge is over 100 years old and has structural and functional limitations that don't meet today's design standards. The Counties are working with the municipalities in coordination with NJTPA and NJDOT to determine what bridge improvements are possible.

Community involvement is a vital part of the LCD Study and we encourage the community and general public to follow, participate, and provide input on improvements to the bridge as an important transportation link for the local communities and the region.



Questions









