NJTPA 2016 Local Concept Development Study Essex & Hudson Counties Bridge Street Bridge over the Passaic River



Public Information Center







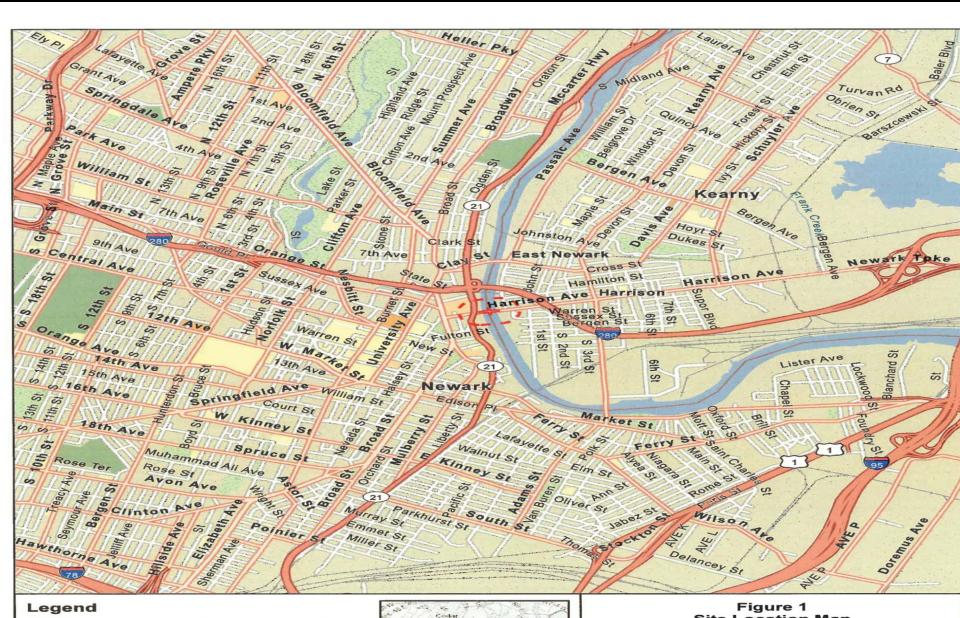




Project Site Location Map







Project Overview and Background

- Bridge Spans the Passaic River connecting the City of Newark & the Town of Harrison
- Bridge Street Bridge was built in 1913.
- Bridge is in need of major rehabilitation or replacement.
- Routine maintenance can no longer address deficiencies.
- NJTPA/Essex & Hudson 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	



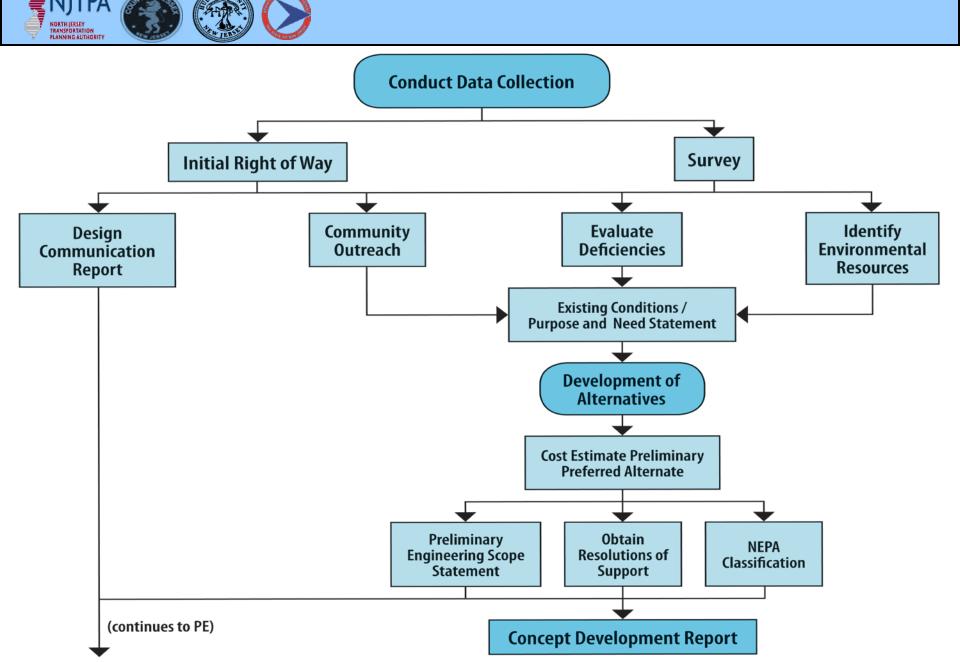








Local Concept Development Process



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: 1913 (Major rehab. 1981, Next rehab. 2016)
- Bridge type: 3 spans- Pratt truss rim-bearing swing center span (244 ft), west and east approach riveted deck girder spans (65 ft)
- Overall Length: 374 feet
- Bridge Roadway Width: 39' 0"
- No Shoulders on bridge
- 7 foot wide cantilevered sidewalk on both sides
- Bridge Navigational Vertical Clearance in closed position:
 7 feet (at MHW); Horizontal Clearance = 80 feet





- Bridge in poor overall condition and is Structurally Deficient (2014 Bridge Re-evaluation Report)
- Sufficiency Rating = 48.5 (out of 100)
- Superstructure in poor condition: Rating = 4 out of 10 (localized advanced material losses to steel truss members and to girders & floor beams in swing span)
- 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 system in overall poor condition with much equipment nearing the end of its service life
- Bridge can only be operated at creep speed which does not meet AASHTO standards (1 minute to both open & close)
- Needs approx. \$ 7.5 M in remedial repairs









Bridge East Approach Roadway Looking West - Note no shoulders



Bridge Opening Looking West at McCarter Highway & City of Newark









West approach to bridge looking east towards Town of Harrison



Bridge Opening Looking East at Town of Harrison







East Approach Roadway looking towards Passaic Avenue



West Approach to Bridge looking towards McCarter Highway



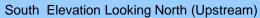


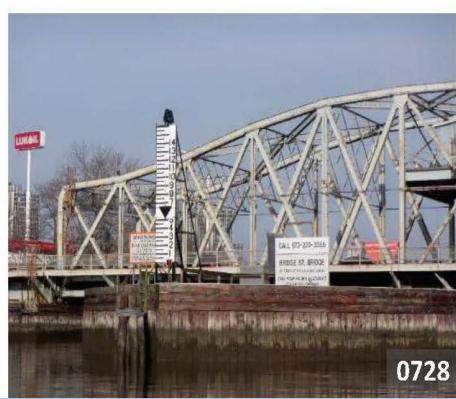


Bridge Navigation Data

Name of Bridge	River Mile	Bridge Clearance		
		Horizontal (ft)	Vertical MHW ¹ (ft)	Vertical MLW ² (ft)
Bridge Street Bridge	5.6	80	7	12.5







4 Hour Advance Call Notice for Bridge Opening



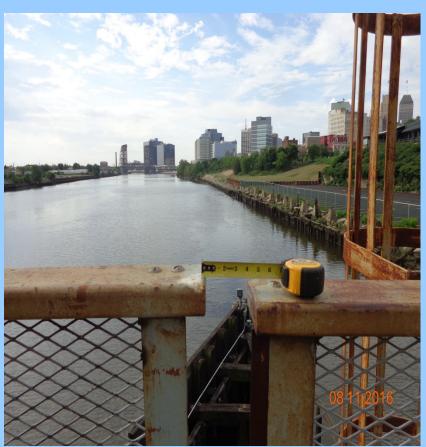




Passaic River Navigation



South Elevation Looking Upstream (North)



Looking downstream (South) from Bridge Street Bridge









Section loss of gusset plate in south truss at east swing



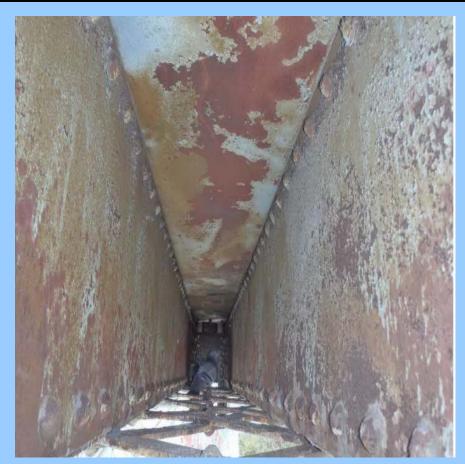
Severely corroded and deteriorated floor beam web and bottom flange in the south truss west swing span



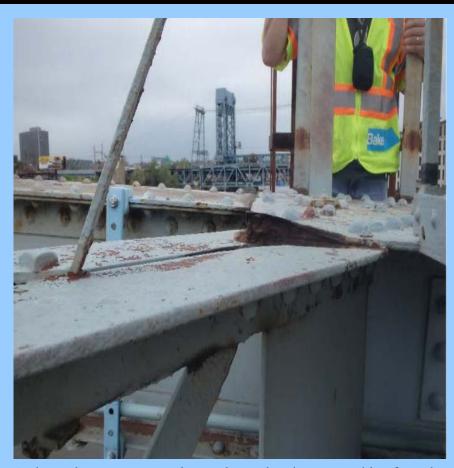








Typical localized material loss and heavy pitting in north truss members



Pack rust between gusset plate and sway bracing at top side of north truss











Rusting of gusset plate in truss leg



Localized section loss and heavy pitting of floor beams and stringers in swing span











Section loss and heavily corroded floor beams in swing span



Localized section loss of floor beams and stringers in swing span











Steel deck grating in swing span



Substandard bridge railing (typical)











Drum girder and tapered rollers



Heavy corrosion and section loss of tapered roller support









Additional Significant LCD Phase Elements

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







Environmental Constraints



Bridge Street Bridge Study Area

Bridge Street Bridge Location

Rank 4 Habitat [State Endangered]

03_297253 & 03_297254 - Glossy Ibis (Foraging), Little Blue Heron (Foraging), Peregrine Falcon (Urban Nest), & Snowy Egret (Foraging)



Sources:
GIS Coverages for the State of New Jersey, New Jersey Department of Environmental Protection (NJDEP),Office of Information Resources Management, Bureau of Geographic Information Systems, 2015.
Preliminary Digital Floor dinsurance Rate Map (DFIRM) Databases, for New Jersey, Federal Emergency Management Agency, Tederal Insurance and Miligation Administration, Washington, DC; Bergen County issued August 2014, and Fudson County issued Way 2014, and Hudson County issued January 2016 agreety, NaDas State Plane Feet, MrSID Tites, State of New Jersey, Office of Information Technology (NJOTT), Office of Geographic Information Systems (OGIS), Trenton, NJ, March 2013.
This (map/publication/report) was developed using New Jersey information systems (OGIS), Trenton, NJ, March 2013. This (map/publication/report) was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Environmental Constraints Map

Bridge Street Bridge over Passaic River Town of Harrison, Hudson County and City of Newark Essex County, New Jersey

ASGECI Project # 3994



ENVIRONMENTAL

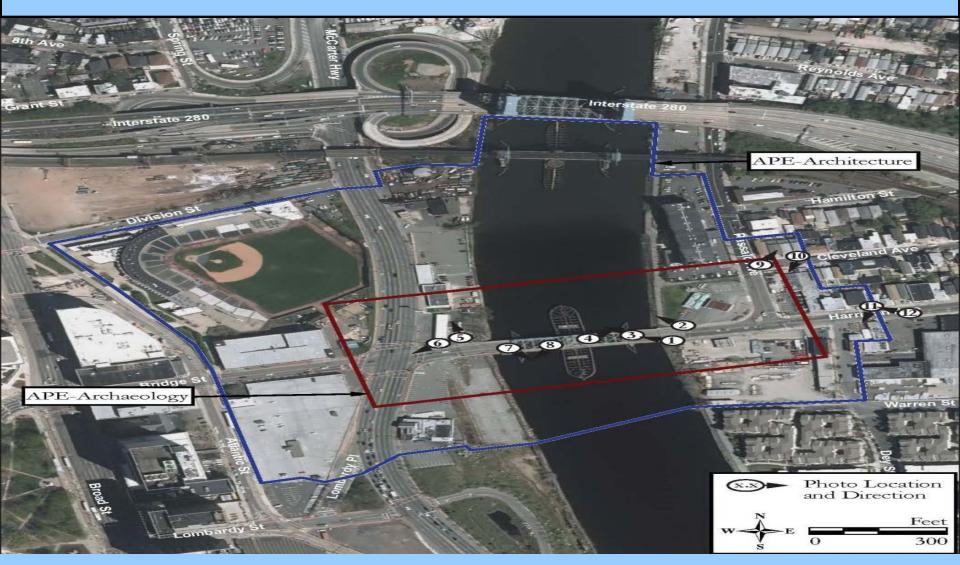








Cultural Resources











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 & Perform Traffic Analysis
 - 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
 - 1. Local Officials Briefings: Project Purpose & Need July 26, 2016 (Town of Harrison); September 12, 2016, City of Newark
 - 2. Stakeholders Meeting No. 1: Purpose & Need Sept. 19, 2016
 - 3. Public Information Center Meetings (No. 1): Project Purpose & Need October 18, 2016 (Town of Harrison & City of Newark)
 - 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 (Town of Harrison & City of Newark)
- 7. Local Officials Briefings (No. 3): Obtain Resolution of Support for Preliminary Preferred Alternative (Town of Harrison & City of Newark)







Local Officials Briefing (7/26 & 9/12/16)

Comments from Local Officials Briefings No. 1 (Town of Harrison & City of Newark)

- Bridge Street & Clay Street Bridges cannot be closed at the same time – severe traffic impacts
- Need to maintain and improve pedestrian and bicycle access and connectivity
- Need wider bridge for the addition of outside shoulders
- Look at potential development along the waterfront which may generate marine traffic passing under the bridge







Community Stakeholders Mtg. (9/19/16)

Comments from Stakeholders Meeting No. 1

- Project should be made compatible with river walkway
- Traffic analysis should include Prudential Center Arena events flow
- Need wider bridge for emergency vehicle access
- Consider future recreational uses and development on the river
- Feedback from Community Input Surveys









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

Ravmond Mankbadi, PE Yuanzhi Lin, PhD, PE

TEST BORING DRILLER

ROADWAY DESIGN TEAM LEADER Michael Swietanski, PE*

GEOMETRICS / ROADWAY ALTERNATIVES

Amy Sokalski, PE, PTOE, PTP* (MTI) (Bridge Street)

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)

TECHNICAL SUPPORT SERVICES

Interactive Communications - Cost Estimation - Primavera Scheduling - MicroStation CADD

William Romaine, PWS* (ASGEI)

ENVIRONMENTAL SCREENING

ENVIRONMENTAL SCIENCE TEAM LEADER

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

Project Contact Information

- Luis Rodriguez, Essex County Project Manager, lrodriguez@essexcounty.nj.org, (973) 226-8500
- Joe Glembocki, Hudson County Project Manager, iglembocki@hcnj.us, (201) 369-4340
- Bridge Street Bridge Project Web Site address:
 - www.bridgestreetbridge.com

Power Point Presentation will be posted on Web Site

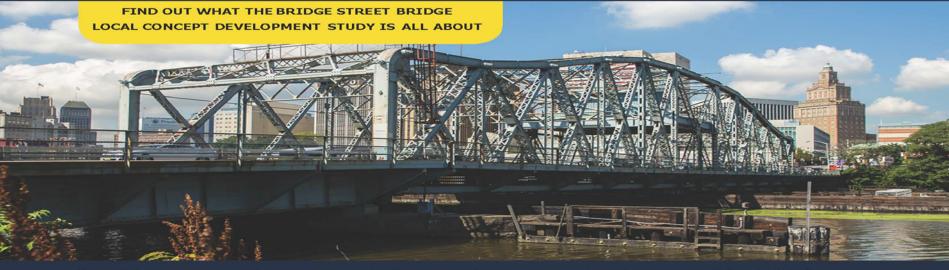
- Social Media (Twitter)
- Written comments towards Project Purpose & Need will be received until Friday, November 18, 2016







DO YOU USE THE BRIDGE STREET BRIDGE OR PASSAIC RIVER? Please visit: www.bridgestreetbridge.com



North Jersey Transportation Planning Authority (NJTPA) Local Concept Development (LCD) Study for Essex County / Hudson County Bridge Street Bridge City of Newark and Town of Harrison, NJ

LOCAL CONCEPT DEVELOPMENT STUDY FOR BRIDGE STREET BRIDGE OVER PASSAIC RIVER

The Bridge Street Bridge is such an important transportation link for so many people in the region and local communities, the NJTPA and Counties would like to encourage everyone to follow, participate and provide input on the bridge study. Please visit the project website and attend public meetings. Community involvement is a vital part of the LCD Study; your participation and comments are welcome.

ESTUDIO DE DESARROLLO DEL CONCEPTO LOCAL DEL PUENTE DE BRIDGE STREET SOBRE EL RÍO PASSAIC

El Puente de Bridge Street es un vínculo de transporte tan importante para tanta gente de la región y de las comunidades locales que la NJTPA y los Condados desean fomentar que todos sigan, participen y proporcionen información para el estudio del puente. Por favor, visite el sitio web del proyecto y asista a las reuniones públicas. La participación de la comunidad es una parte vital del Estudio de Desarrollo del Concepto Local (LCD); su participación y sus comentarios serán bien recibidos.













Questions





