



Appendix 3: STAKEHOLDER INPUT





MEMORANDUM OF MEETING

TO: Joseph Powell, NJDOT & ECG Essex-Hudson Connector Steering Committee

FROM: Mike Dannemiller, Rachana Sheth

04/04/2017 at 1:00 pm Hudson County Planning Office DATE:

ATTENDEES: See attached Sign-In Sheet

SUBJECT: ECG Essex-Hudson Greenway Connector -Kick-Off / Steering Committee Meeting

NV5, Inc. Project # J728616.0000095.04

The purpose of the meeting was to review the project scope and schedule, discuss the project objectives, conduct a virtual tour of the study area, identify issues / concerns of potential alternatives and identify stakeholders for the Routing Strategy Session with a larger group of invited stakeholders. Presentation boards of background material and the study area were utilized. The sign-in sheet is attached.

Joseph Powell, NJDOT Bicycle and Pedestrian Programs initiated the meeting with introductions and an overview of the project and previous studies already conducted. Rachana Sheth provided an overview of the project scope of work and the timeline. Mike Dannemiller provided background of the project and led a discussion of the study area, what the potential connections options we could consider for the Passaic River and Hackensack River crossings and to develop a bicycle and pedestrian friendly connection between Essex and Hudson Counties. The following summarizes the major items of discussion from the Steering Committee meeting.

Steering Committee Input and Recommendations:

- Possibility of extending the Hudson Bergen Light Rail from Rt 440 into Newark by utilizing the old Central Railroad corridor over the two rivers was discussed
- Utilizing ferries can be an option either to the northern end near the Boonton Line or to the southern end via Kearny Point
- NJDEP & ECGA will provide contact/information on ferry operating costs
- The project's phased approach will consider the development constraints and will be based on a decision matrix that could include factors such as construction costs, travel times and environmental constraints
- Widening the sidewalk of the 1&9 Truck route was discussed, however there was some concern about conflicts with truck traffic and crossings/intersection. This could be addressed via small bridges or other measures for traffic calming
- Personal safety issues in utilizing the Boonton Rail corridor or the Newark Industrial Tract was discussed
- On-going efforts to cleanup both rivers can be beneficial to the project, as there may be funding available as part of required mitigation efforts

- Newark bridges across the Passaic river will have bicycle/pedestrian accommodations Clay St Bridge, Jackson Street Bridge and Bridge Street Bridge are all planned to be enhanced
- NJIT has a bicycle share with 5 bicycles and that could be expanded (details to be confirmed
 may include five bicycle docking station locations throughout University Heights area)
- NJDOT Local Aid has a project that includes on-road bicycle accommodation enhancements connecting Newark Broad Street Station and Penn Station
- There is potential to investigate public-private partnerships, Blue Cross Blue Shield headquarters is located within the study area and can be approached to coordinate public health initiatives
- Efforts should focus on ensuring this plan results in a buildable project

Next Steps:

- Develop alignments options and screening matrix that includes criteria such as travel time, environmental constraints and construction costs
- Summarize ferry operating costs and logistics
- Review NJDOT related projects, including bridge-related projects in the study area
- Utilize google docs to share the invited stakeholders list with the Steering Committee
- Conduct a doodle poll regarding potential dates for the next Steering Committee meeting, anticipated to be scheduled in May. Check with John Trontis about availability of the Liberty State Park Rail Terminal venue.

Attachments:

- Meeting Invitation and Agenda
- Attendee List

Meeting Photos







DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

CHRIS CHRISTIE

Governor

RICHARD T. HAMMER

Commissioner

KIM GUADAGNO

Lt. Governor

March 2nd, 2017

<Name>

<Title>

<Department>

<Address>

RE: East Coast Greenway: ESSEX / HUDSON GREENWAY CONNECTOR ROUTING PLAN

Dear Stakeholder:

On behalf of the New Jersey Department of Transportation (NJDOT) and the East Coast Greenway Alliance (ECGA), I would like to invite you to participate on a Steering Committee to develop a routing plan for an Essex – Hudson Greenway Connector for the East Coast Greenway.

The East Coast Greenway (ECG) is a developing trail system (www.greenway.org) linking the major cities of the Eastern Seaboard between Canada and Key West, Florida. Over 30 percent of the route is already on traffic-free greenways, creating safe, accessible routes for people of all ages and abilities. NJDOT has supported the development of ECG for over 10 years by conducting routing studies, preparing concepts, construction of trail segments, developing a tour guide for ECG in New Jersey, etc.

The ECG is lacking critical connections between the areas of Newark (University Heights area) and Jersey City across the Passaic and Hackensack Rivers. Given the large population of these cities and the redevelopment activity in the surrounding municipalities of Harrison, Kearny, East Newark and Secaucus, providing a convenient off-road shared use path would offer key recreational and utilitarian travel to a large population. NJDOT has brought in NV5 (formerly the RBA Group) to assist the ECGA on this project, see attached overview map.

You (or a key member of your organization) are invited to be part of the Steering Committee on this exciting and unique project. Steering Committee members are an integral part of the planning process as they provide important background information, help develop options, identify key stakeholders to include in the process and help gain support for the project. Steering Committee members are expected to attend no more than four (4) Steering Committee meetings over the next six (6) months and one routing strategy session with a larger group of invited stakeholders. Please join us for the first Steering Committee/Project Kick-off meeting tentatively scheduled for <u>Tuesday, March 14th from 1:00 – 3:00 p.m.</u> at the <u>Hudson County Division of Planning</u> office located at Bergen Square Center, 830 Bergen Avenue, Suite 6A, Jersey City, NJ 07306. There is on-street metered parking available near the venue.

Please RSVP and let us know if you (or a member of your organization) will be participating on the Steering Committee <u>AND</u> if you will be able to attend the Project Kick-Off Meeting on Tuesday, March 18th. Please RSVP by March 9th to Rachana Sheth at NV5 at:

Email: Rachana.Sheth@NV5.com

If you feel that you may not be able to commit to attending the four planned meetings, but can share resources and insights, let us know and we will keep you apprised of the project as it develops.

If you have any questions in the meantime, please feel free to contact me.

We look forward to working with you to make this vital East Coast Greenway connection a reality.



Joseph Powell
Principal Planner, Transportation,
Office of Bicycle & Pedestrian Programs
New Jersey Department of Transportation
1035 Parkway Avenue
PO Box 600
Trenton, NJ 08625-0600
609-530-5290

AGENDA



STEERING COMMITTEE KICK-OFF MEETING

Monday, April 3rd, 2017 1 p.m. – 3 p.m. Hudson County, Division of Planning Conference Room, Floor 6A 830 Bergen Avenue, Jersey City, NJ 07302

Purpose: To introduce the ECG Essex-Hudson Greenway Connector Routing Plan; review the project scope, schedule & outcomes; and begin identifying potential routing options

- I. Welcome & Introductions Joe Powell, NJDOT
- II. East Coast Greenway Overview Bruce Donald, ECGA
- III. Project Scope of Work, Schedule and Outcomes Mike Dannemiller / Rachana Sheth, NV5
- IV. Virtual Tour Mike Dannemiller / Rachana Sheth, NV5
- V. Discussion / Next Steps





Name	Organization	Title	Phone	Email Address	Signature
Bet Tourson	~ Newwh	planner	973733	4300 tanzpoub @ a.n.	ewarm of us
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				2.0	
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Name	Organization	Title	Phone	Email Address	Signature
Andrew Hamilton	9/11 Memorial Trai	9/11 Memorial Trail Board	(267)236-3407	ancyhamilton9:Inmt@gmail.com	Ch XIC
Brandee Chapman	NJDEP	State Trails Coordinator, Recreational Trails Program	(509) 984-0500	Brandge,Chagman@dep 1).gov	BCE
Cyndi Steiner	NIGWC	Executive Director	(973 886-4142	cyndi.ste:ner@r/bwc.org	CX
Cavid Antonio	Essex County	Division of Planning	(973 226-8500	cantonio@essexcountyn; org	MA
Jason Bottcher	-050 0.00	Division of Flanning		jbottcher@honj.us	Sevice fran
Jahn G. Trontis	NIDEP	Assistant Director of Parks & Fotestry	(609)292-2772	john.trontis@dep.nj.gov	M
Joseph Powell	TOOLY	Principal Planner, Transportation	(609) 530-5290	Joseph.Powell@dot.nj.gov	QU
Liz Sewell	Rails-To-Trails	Trail Development Manager, RTC Northeast	(908) 705-5762	elizabeths@railstotrails org	,
Megan Massey	Kudson County	Dission of Planning	(201)217-5137	mmassey@hchj.us	Muric
R. Bruce Gonald	East Coast Greenway	TK-State Coordinator	(860)707-2888	bruce@greenway.org	May 1
Uzoma Anukwe	Newark	Division of Traffic & Signa's, Department of Engineering	973-733-8520	anukweu@ci newark.n, as	120
Michael Cannemiller	NV5	Principa Engineer	973-9465526	mithse-dannemiler@ny5.com	
Rachana Sheth	NV5	Urban Cesigner / Planner	973-946-5685	rachana sheth@nv5.com	mary)





MEMORANDUM OF MEETING

TO: Joseph Powell, NJDOT & ECG Essex-Hudson Connector Steering Committee

FROM: Mike Dannemiller, Rachana Sheth

05/23/2017 at 1:00 pm Essex County Planning Office DATE:

ATTENDEES: See attached Sign-In Sheet

ECG Essex-Hudson Greenway Connector – Steering Committee Meeting SUBJECT:

NV5, Inc. Project # J728616.0000095.04

The purpose of the meeting was to review the project scope and schedule, review potential alternatives for the ECG Essex-Hudson Greenway Connector Routing Plan, begin prioritizing options, and strategize for the larger Routing Strategy Session. Presentation boards of background material and the study area were utilized in addition to utilizing Google Earth to review alignment options. The sign-in sheet is attached.

Joseph Powell, NJDOT Bicycle and Pedestrian Programs initiated the meeting by stating the overall status of the project and the purpose of the meeting. Rachana Sheth provided an updated schedule, overview of the project timeline. Mike Dannemiller and Rachana Sheth provided an overview of the project, reviewed project vision, goals and objectives, and led a discussion of the six initial planning alternatives developed by the project team. For each alternative, the project team highlighted the pros and cons, using the following criteria:

- % on-road / off-road
- Traffic Safety (number of intersections)
- Personal Safety (distance to closest public right-of-way)
- Width
- Trail Connectivity
- Length
- Commuting Time on bicycle

- **Environmental constraints**
- Link to local destinations
- Route status
- Construction requirements and impacts
- Time-frame
- Ownership status
- Estimated construction costs

The following summarizes the major items of discussion from the Steering Committee meeting. **Steering Committee Input and Recommendations:**

Newark Section

- o Option 3 (red line) in Newark should follow Bridge Street Bridge instead of Clay Street bridge
- o Option 4 (blue line) along Raymond Boulevard should include Ferry Street to accommodate two-way travel
- o Portion of option 6 (purple line) near the industrial areas is not an ideal bicycle and pedestrian route and should be eliminated given the heavy truck traffic, especially on Avenue P. Roanoke Ave and Doremus Ave
- o The hanging bridge over the Passaic River should be considered if feasible

 Essex County does not permit bicycling on park paths and it was recommended that in Branch brook park, bicyclists would travel on the park roads, or the policy must be changed

• <u>Kearny / Harrison Section</u>

- Route 1&9 Truck Option 4 (blue line) should connect to Wittpenn Bridge upon crossing the Passaic River as travel along Route 1&9 Truck is not ideal given the conflicts at intersections with heavy truck traffic.
- Option 5 (green line) was deemed unfeasible as the possibility of extending the Hudson Bergen Light Rail from Rt 440 into Newark by utilizing the old *Central Railroad corridor* over the two rivers would be too expensive and with many environmentally impacts
- Options 2 & 3 to be modified to utilize access roads to the terminus of the Boonton Line near the Hackensack River
- o Utilizing a ferry to cross the Hackensack River along the Boonton Line was a preferred crossing over building a bridge to cross the river

• Jersey City Section

- One of the options should terminate in Hoboken utilizing underused rail right-ofway, NJ TRANSIT shared use path and Observer Highway shared use path / cycle track to the Hoboken Terminal
- Option 5 (green line) was deemed unfeasible as there was no additional right-ofway along the Hudson-Bergen Light Rail to accommodate a path
- Personal safety issues in utilizing the Boonton Rail corridor or the Newark Industrial Tract
 could be addressed with lighting and adding other safety features such as emergency phone
 boxes, signage etc.
- The invited stakeholder list for the ECG Routing Strategy Session was discussed and modified

Next Steps:

- Revise alignments options and maps
- Check with NJDEP about availability of the Liberty State Park Rail Terminal venue for the Routing Strategy Session
- Conduct targeted interviews to review alignment options

Attachments:

- Meeting Materials / Handouts / Boards
 - o Agenda
 - Vision Statement & Goals
 - o Initial Planning Level Alternative Maps & Matrix
- Sign-in Sheet



Meeting Photos









AGENDA



STEERING COMMITTEE ROUTING WORKSHOP

Tuesday, May 23rd, 2017 1 p.m. – 3 p.m. Essex County DPW- Cedar Grove Complex 99 West Bradford Avenue (Conference Room) Cedar Grove, NJ

Purpose: To review potential alternatives for the ECG Essex-Hudson Greenway Connector Routing Plan; begin prioritizing options, review the project scope, schedule & next steps; and strategize for the larger Routing Strategy Session.

- I. Welcome & Introductions Joe Powell, NJDOT
- II. East Coast Greenway Overview Bruce Donald, ECGA
- III. Review Project Scope of Work, Schedule and Outcomes *Mike Dannemiller / Rachana Sheth,* NV5
- IV. Visioning and Goals Mike Dannemiller / Rachana Sheth, NV5
- V. Opportunities & Constraints / Environmental Issues Mike Dannemiller / Rachana Sheth, NV5
- VI. Routing Options / Matrix Mike Dannemiller / Rachana Sheth, NV5
- VII. Routing Strategy Session & Next Steps Mike Dannemiller / Rachana Sheth, NV5





VISION

The vision for this study is to create an off-road shared use path connection between Essex County (Newark's University Heights) and Hudson County (Jersey City Waterfront) to significantly benefit local and regional communities as well as overall connectivity for the East Coast Greenway across New Jersey.

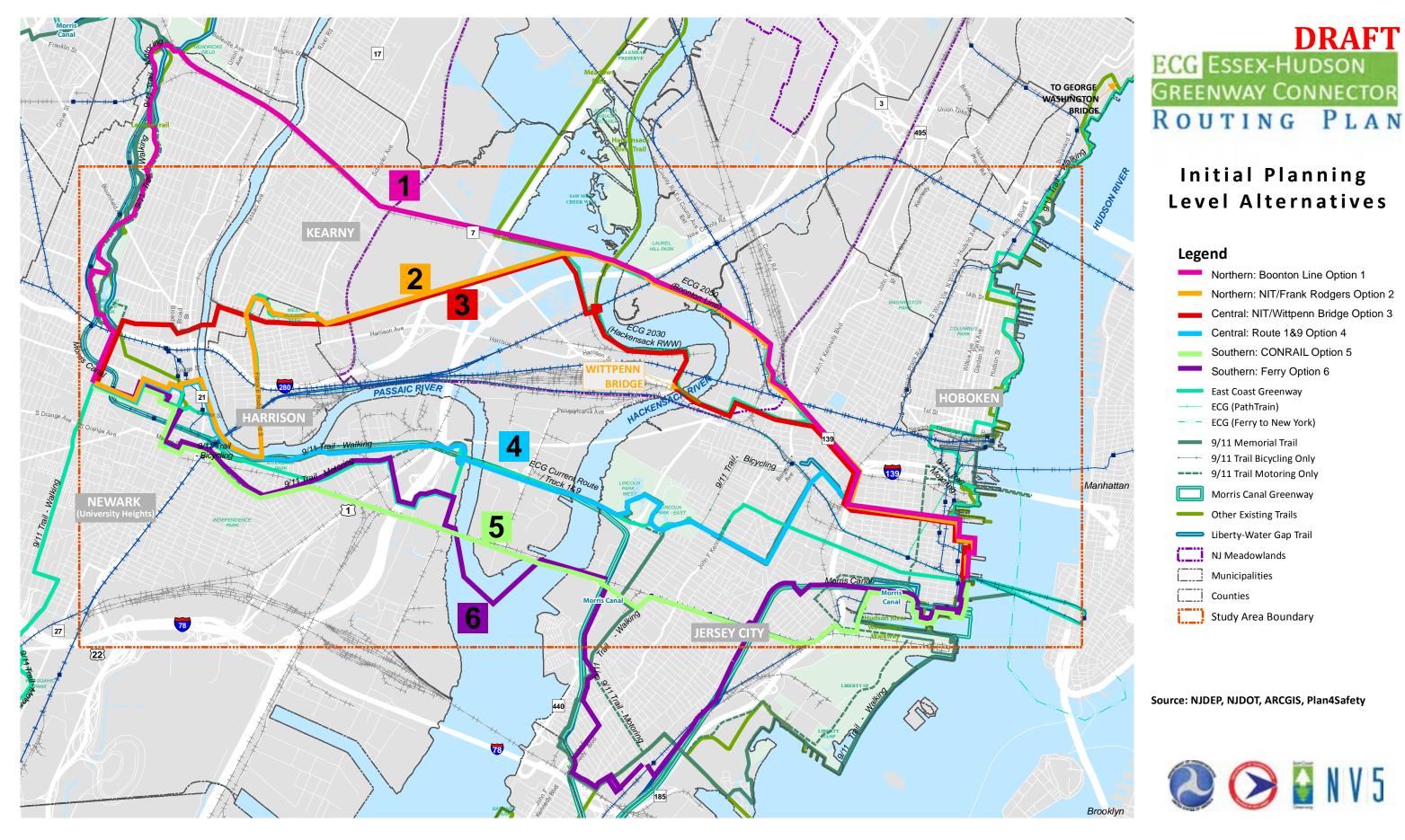




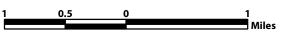
GOALS

- → Create an off-road shared use path
- → Utilize existing and underused right-of-ways
- → Minimize environmental and neighborhood impacts
- → Design for multiple users (pedestrians and bicyclists)
- → Enhance the visual character of the area
- → Integrate into existing / planned trails system
- → Create a plan for and with local champions
- → Focus on safety (personal and traffic)
- → Create a flexible and responsive study
- → Develop medium and long-term options

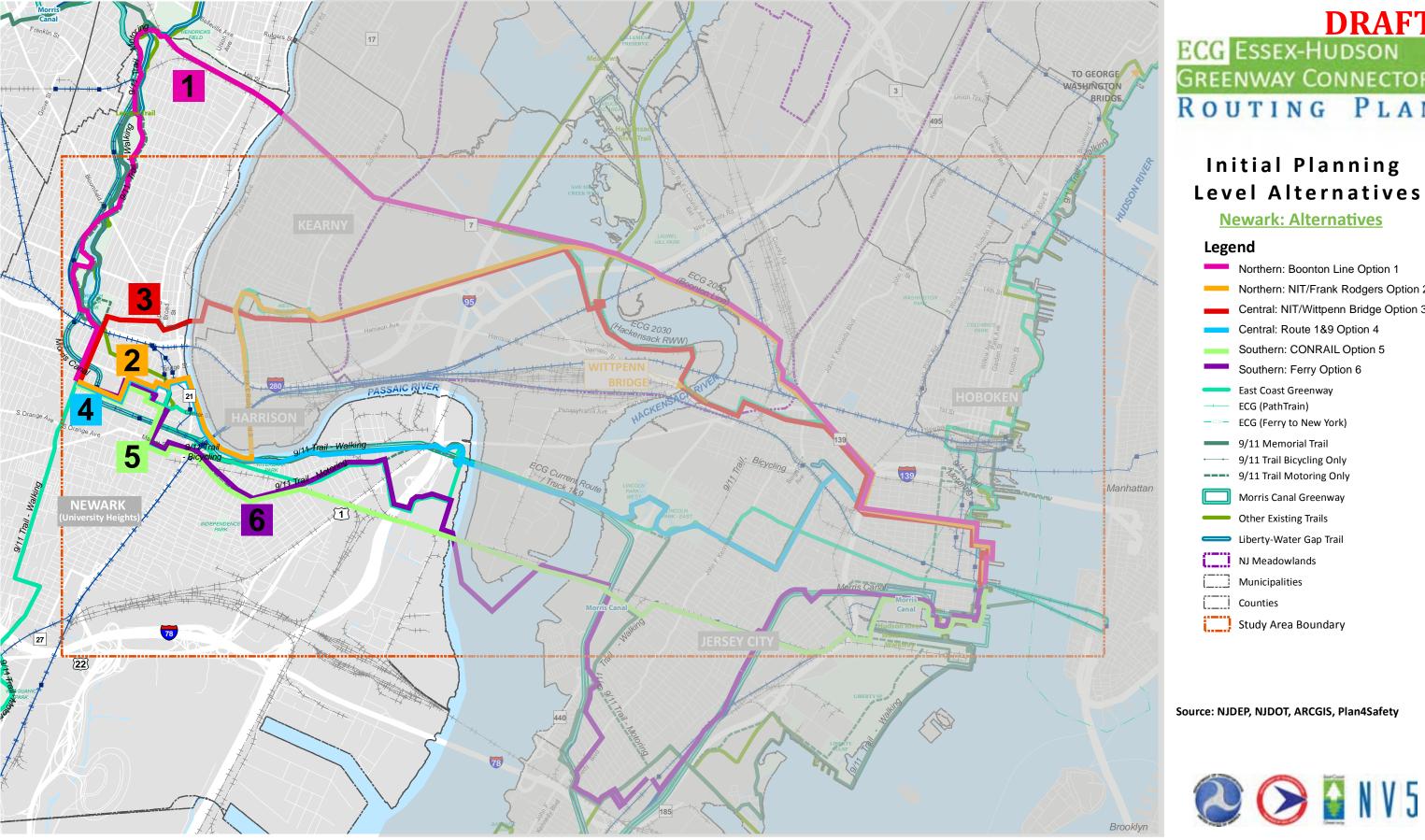








NEWARK ALTERNATIVES		Option 1: Northern Connector (Pink Line)	Option 2: Frank Rodgers Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Northern Connector (Blue Line)	Option 5: Southern Connector (Green Line)	Option 6: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY							
Municipal Corridors (Off-road, On-road)	<u>Newark</u>	Branch Brook Park Path, Boonton Line	Warren St, MLK Blvd, Central Ave, Passaic River Waterfront Walkway	7th Ave, Norfolk Ave, Clay St	Warren St, MLK Blvd, Central Ave, Passaic River Waterfront Walkway, Raymond Blvd	Warren St, Bleecker St, New St, Broad St, Edison Pl, Market St, Ferry St, Historic RR Corridor	Warren St, Bleecker St, New St, Broad St, Edison Pl, Market St, Ferry St, Foundry St, Avenue P, Doremus Ave
RATING CRITERIA							
% On-Road / Off-road		10% On Road & 90% Off Road	55% On Road & 45% Off Road	100% On Road & 0% Off Road	65% On Road & 35% Off Road	70% On Road & 30% Off Road	100% On Road & 0% Off Road
Traffic Safety (traffic conflicts)		22 intersections	19 intersections	23 intersections	31 intersections	51 intersections	63 intersections
Personal Safety (distance to closest public	c way)	600 ft	500 ft	NA	600 ft	1500 ft	NA
Width		10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes)	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes)
Trail Connectivity (to other trails)		Morris Canal Greenway, Liberty-Water Gap, 9/11,	Morris Canal Greenway, Liberty-Water Gap, 9/11, Passaic River Waterfront Walkway	Morris Canal Greenway, Liberty-Water Gap, 9/11,	Morris Canal Greenway, Liberty-Water Gap, 9/11, Passaic River Waterfront Walkway	Morris Canal Greenway, Liberty-Water Gap, 9/11	Morris Canal Greenway, Liberty-Water Gap, 9/11
Length		4.5 mi of 13.2 total	2.2 mi of 12.3 total	1.3 mi of 9.0 total	4.3 mi of 10.4 total	4.3 mi of 10.3 total	5.5 mi of 15.6 total
Commuting time on bicycle (assume 10 mph average)		27 mins of 1 hours 20 minutes total	10 mins of 1 hour 15 minutes total	8 mins of 55 minutes total	26 mins of 1 hour 5 minutes total	26 mins of 1 hour total	33 mins of 1 hour 45 minutes total
Environment Constraints		•	river • Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o James Street Commons Historic District	Historic properties and districts listed or eligible for listing on the National Register: Colonnade Park Historic District and contributing elements □ Pavilion Apartments O Newark City Subway District (Historic) o Morris Canal o Essex County Jail historic property o Old Main Delaware, Lackawanna and Western Railroad Historic District	Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o James Street Commons Historic District o Riverbank Park	 Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o James Street Commons Historic District o Four Corners Historic District 	 Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o James Street Commons Historic District o Four Corners Historic District
Link to Destinations		Branch Brook Park, University Heights	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC	Branch Brook Park, University Heights	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC, Ironbound	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC, Ironbound	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC, Ironbound
Current Route Planning Status (Existing / Fothers/ Proposed in this study)	Planned by	Existing / Planned	Existing / Planned	Existing / Proposed in this study	Existing / Planned by others/ Proposed in this study	Planned by others/ Proposed in this study	Planned by others/ Proposed in this study
Construction concept		Path construction on historic railroad corridor	Signs and striping, Walkway construction	Signing and striping only	Signs and striping, Walkway construction	Path construction on historic railroad corridor, Signs and striping	Signs and striping
Construction impacts		Commercial staging along Boonton Line	Lane configuration, waterfront properties multiple ownership	Lane configuration	Lane configuration, waterfront properties multiple ownership, Easement on private property	Lane configuration, Historic rail road corridor impacts	Lane configuration, Easement on private property
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	Under 2 years	2+ years	2+ years	2+ years
Ownership Status		County Parks & Railroad Corridor	Newark & Essex County roads, Waterfront ownership TBD	Newark Public roads	Newark & Essex County roads, Waterfront ownership TBD	Newark & Essex County roads, RR Corridor ownership TBD	Newark & Essex County roads, Private owners
Estimated Construction Costs (Low =< \$2 M, Medium \$2M- \$10M, High =\$10M +)		Medium	Medium	Low	High	High	Low





Initial Planning Level Alternatives

Newark: Alternatives

- Northern: Boonton Line Option 1
- Northern: NIT/Frank Rodgers Option 2
- Central: NIT/Wittpenn Bridge Option 3
- Central: Route 1&9 Option 4
- Southern: CONRAIL Option 5
- Southern: Ferry Option 6
- East Coast Greenway
- ECG (PathTrain)
- ECG (Ferry to New York)
- 9/11 Memorial Trail
- → 9/11 Trail Bicycling Only
- 9/11 Trail Motoring Only
 - Morris Canal Greenway
- Other Existing Trails
- Liberty-Water Gap Trail
- Municipalities

Source: NJDEP, NJDOT, ARCGIS, Plan4Safety

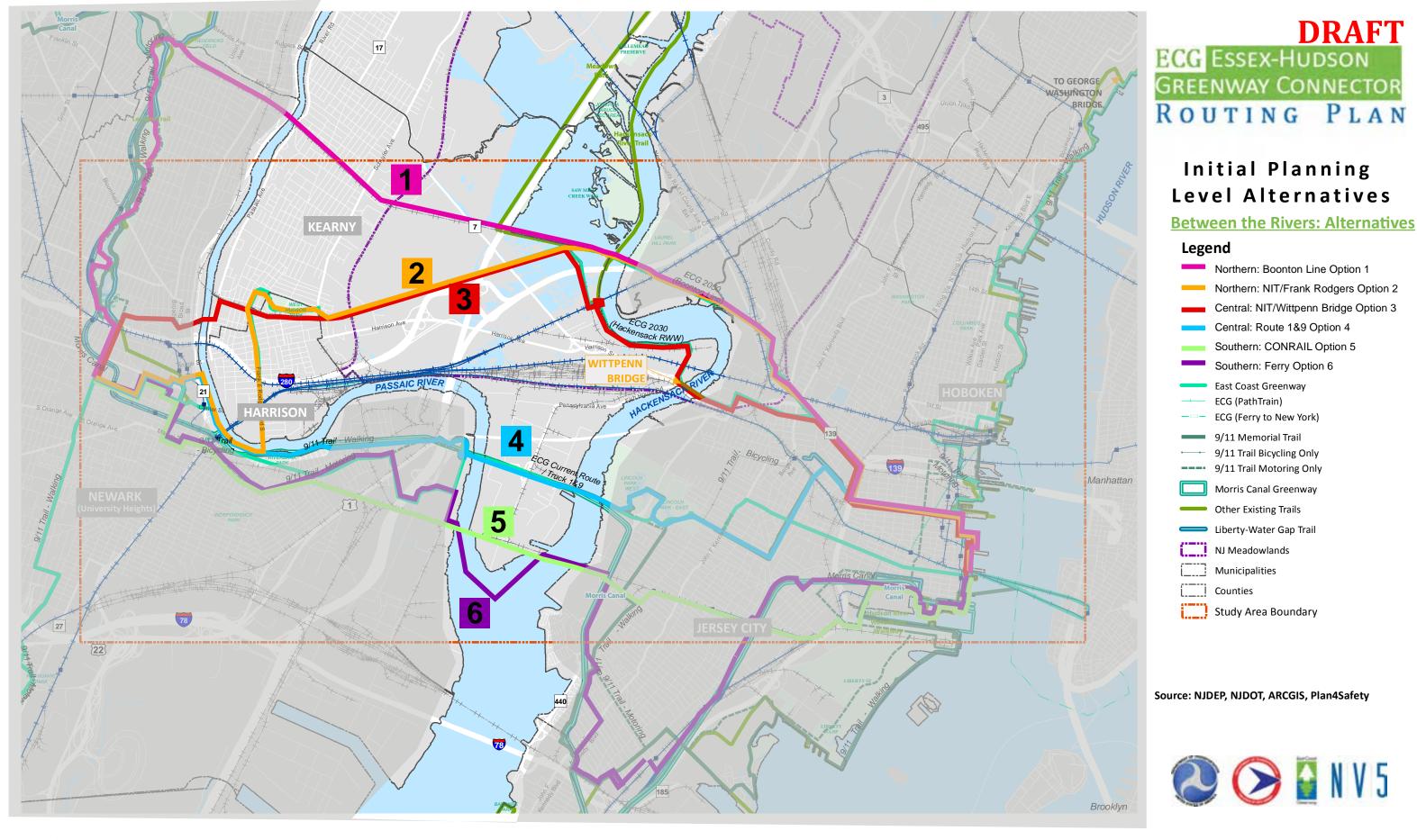






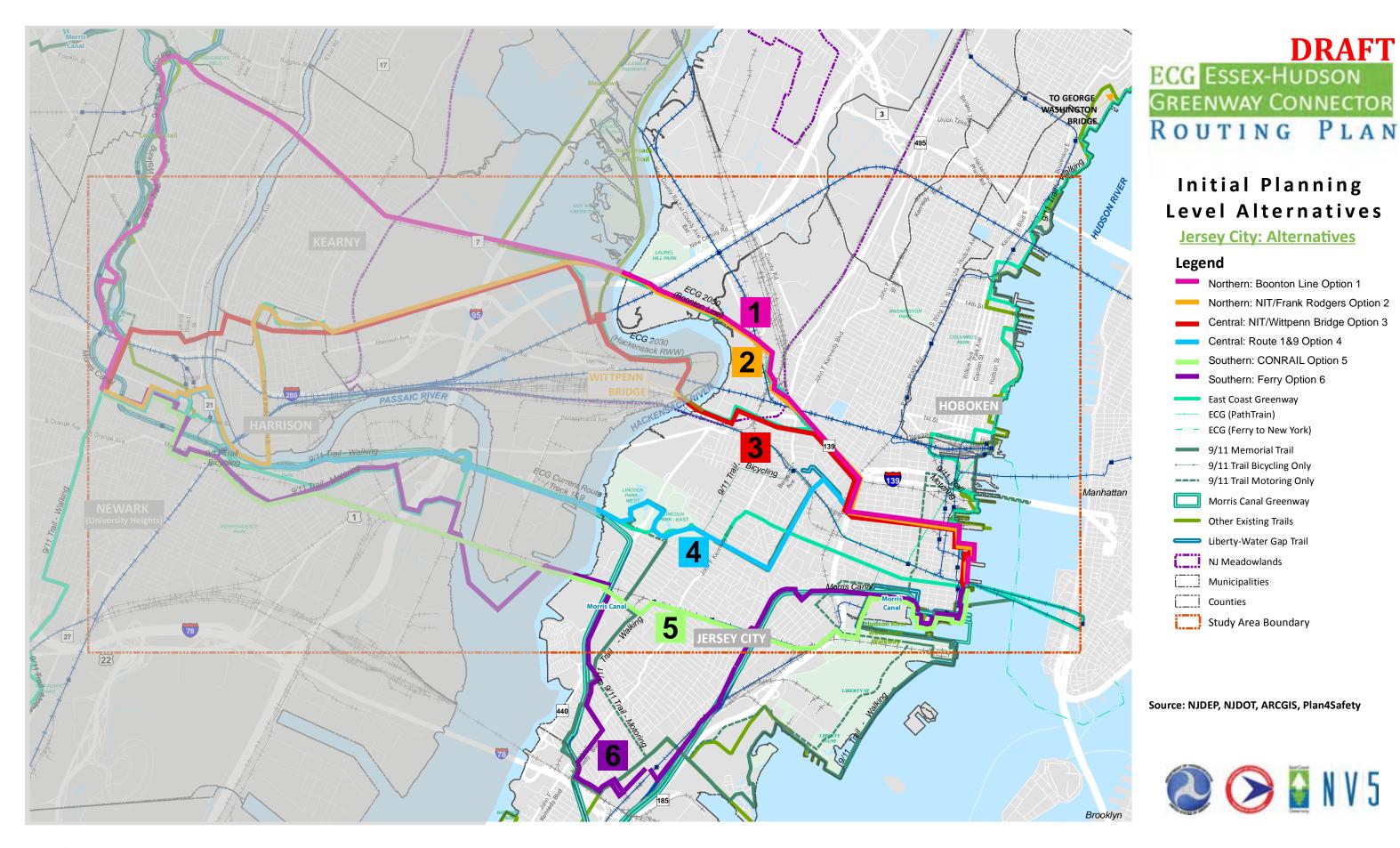
Initial Planning Level Alternatives Matrix

BETWEEN THE RIV		Option 1: Northern Connector (Pink Line)	Option 2: Frank Rodgers Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Northern Connector (Blue Line)	Option 5: Southern Connector (Green Line)	Option 6: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY							
River Crossings	Passaic River	Existing Boonton Line RR Bridge	Frank E Rodgers Blvd Bridge - Sidewalk / Shoulders	Clay Street Bridge	Truck Route 1 & 9 - Sidepath	CONRAIL Newark-New York Branch - New Bridge	New Ferry from Newark to Kearny Point
(Off-Road, On-Road, Ferry)	<u> Hackensack River</u>	Ferry or New Bridge	Wittpenn Bridge - Sidewalk	Wittpenn Bridge - Sidewalk	Truck Route 1 & 9 - Sidepath	CONRAIL Newark-New York Branch - New Bridge	New Ferry from Kearny Point to JC
Municipal Corridors (Off-road, On-road)		Boonton Line	Newark Industrial Track	Newark Industrial Track	Truck Route 1 & 9 - Sidepath	CONRAIL	Ferry
RATING CRITERIA							
% On-Road / Off-road		0% On Road & 100% Off Road	30% On Road & 70% Off Road	5% On Road & 95% Off Road	0% On Road & 100% Off Road	0% On Road & 100% Off Road	0% On Road & 100% Off Road
Traffic Safety (traffic conflicts)		3 intersections	31 intersections	5 intersections	7 intersections	0 intersections	0 intersections
Personal Safety (distance to closest public	c way)	4400 ft	4400 ft	4400 ft	NA	3500 ft	NA
Width		10 -1 4'	10 -1 4'	10 -1 4'	8'-10'	10'-14'	NA
Trail Connectivity (to other trails)		Meadows Path, Hackensack River Trail, Ice & Iron Trail	Meadows Path, Hackensack River Trail, Ice & Iron Trail	Meadows Path, Hackensack River Trail, Ice & Iron Trail	Morris Canal Greenway, Liberty-Water Gap, 9/11	Morris Canal Greenway, Liberty-Water Gap, 9/11	Morris Canal Greenway, Liberty-Water Gap, 9/11
Length		3.4 mi of 13.2 total	4.8 mi of 12.3 total	4.0 mi of 9.0 total	1.3 mi of 10.4 total	1.3 mi of 10.3 total	1.3 mi of 15.6 total
Commuting time on bicycle (assume 10 mph average)		20 mins of 1 hours 20 minutes total	29 mins of 1 hour 15 minutes total	24 mins of 55 minutes total	8 mins of 1 hour 5 minutes total	8 mins of 1 hour total	20-30 mins of 1 hour 45 minutes total
Environment Constraints		 Freshwater wetlands, especially within Branch Brook Park Waterfront development Historic properties and districts listed or eligible for listing on the National Register: 	 T&E species habitat may occur on site Freshwater wetlands Waterfront development Historic properties and districts listed or eligible for listing on the National Register: o Pennsylvania Railroad New York to Philadelphia Historic District o Morris Canal 	 T&E species habitat may occur on site Freshwater wetlands Waterfront development Historic properties and districts listed or eligible for listing on the National Register: Clay Street Bridge (Clay Street/W. Central Ave. over Passaic River) historic property Pennsylvania Railroad New York to Philadelphia Historic District Jersey City Waterworks Historic District Hackensack River Lift Bridge Historic District 	 T&E species habitat may occur on site Waterfront development Tidal wetlands Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o Federal Shipbuilding & Dry Dock Co., Kearny Shipyard Historic District 	1	T&E species habitat may occur on site Waterfront development
Link to Destinations		New Jersey Meadowlands	New Jersey Meadowlands, West Hudson Park, Red Bull Stadium, Harrison Path	New Jersey Meadowlands, West Hudson Park	Kearny Point, Penitentiary	Kearny Point	Kearny Point
Current Route Planning Status (Existing / others/ Proposed in this study)	Planned by	Planned by others	Planned by others	Planned by others	Planned by others	Proposed in this study	Proposed in this study
Construction concept		Path construction on historic railroad corridor	Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor	Widen sidewalk to 10 foot wide (minimum) Shared Use Path	Elevated bridges	Docks/ Landings
Construction impacts		Historic Rail Road Corridor	Lane configuration, Historic rail road corridor impacts	Historic Rail Road Corridor	Easements to widen sidewalk	Historic Rail Road Corridor	Easement on private property including docks & landings
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	2+ years	2+ years	2+ years	2+ years
Ownership Status		Norfolk Southern	Hudson County & Harrison, Kearny & East Newark Roads	State, County & Local Roads	NJDOT	CONRAIL Newark-New York Branch	Private, Public
Estimated Construction Costs (Low =< \$2 M, Medium \$2M- \$10M, High =\$10M +)		Low	High	High	Low	High	High

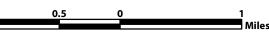




JERSEY CITY ALTERNATIVES		Option 1: Northern Connector (Pink Line)	Option 2: Frank Rodgers Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Northern Connector (Blue Line)	Option 5: Southern Connector (Green Line)	Option 6: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY							
Municipal Connections (Off-road, On-road)	Jersey City	Boonton Line, Bergen Arches, 6th Street Embankment, Hudson River Waterfront Walkway	Boonton Line, Bergen Arches, 6th Street Embankment, Hudson River Waterfront Walkway	St Paul's Avenue, Bergen Arches, 6th Street Embankment, Hudson River Waterfront Walkway	Lincoln Park, Baldwin Ave, Pavonia Ave, 6th Street Embankment, Hudson River Waterfront Walkway	CONRAIL Newark-New York Branch, Hudson River Waterfront Walkway	Morris Canal Greenway, Hudson River Waterfront Walkway
RATING CRITERIA							
% On-Road / Off-road		5% On Road & 95% Off Road	5% On Road & 95% Off Road	40% On Road & 60% Off Road	50% On Road & 50% Off Road		33% On Road & 67% Off Road
Traffic Safety (traffic conflicts)		4 intersections	4 intersections	17 intersections	28 intersections		54 intersections
Personal Safety (distance to closest publi	ic way)	5500 ft	5500 ft	1500 ft	1500 ft		NA
Width		10'-14'	10'-14'	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road		On-road (shared lane markings and bicycle lanes) and 10'-14' off-road
Trail Connectivity (to other trails)		Hackensack River Trail, Hudson River Waterfront Walkway	Hackensack River Trail, Hudson River Waterfront Walkway	Hackensack River Trail, Hudson River Waterfront Walkway	Lincoln Park Path, Hudson River Waterfront Walkway		Lincoln Park Path, Hudson River Waterfront Walkway, Morris Canal Greenway, 9/11 Trail
Length		5.3 mi of 13.2 total	5.3 mi of 12.3 total	3.7 mi of 9.0 total	4.8 mi of 10.4 total		8.8 mi of 15.6 total
Commuting time on bicycle (assume 10 mph average)		32 mins of 1 hours 20 minutes total	32 mins of 1 hour 15 minutes total	22 mins of 55 minutes total	29 mins of 1 hour 5 minutes total		53 mins of 1 hour 45 minutes total
Environment Constraints		Historic properties and districts listed or eligible for listing on the National Register: o Jersey City Waterworks Pipeline o Harsimus Cove Historic District o Erie Railroad Bergen Hill Tunnel (Long Dock Tunnel) o Hudson and Manhattan Railroad Transit System Historic District	 Freshwater wetlands Waterfront development Tidal wetlands Historic properties and districts listed or eligible for listing on the National Register: o Harsimus Cove Historic District o Erie Railroad Bergen Hill Tunnel (Long Dock Tunnel) o Hudson and Manhattan Railroad Transit System Historic District 	o Hudson and Manhattan Railroad Transit System Historic District	 T&E species habitat may occur on site Waterfront development Historic properties and districts listed or eligible for listing on the National Register: Morris Canal Lincoln Park Jersey City High School West Bergen – East Lincoln Park Historic District Bergen Hill Historic District Harsimus Cove Historic District Hudson and Manhattan Railroad Transit System Historic District 	Screened out not feasible	Waterfront development Historic properties and districts listed or eligible for listing on the National Register: Morris Canal Lafayette Gardens Historic District
Link to Destinations		Laurel Hill Park, Downtown Jersey City	Laurel Hill Park, Downtown Jersey City	Downtown Jersey City	Lincoln Park, Downtown Jersey City		Lincoln Park Path, Hudson River , Mercer Park, Berry Lane Park, Waterfront Walkway, Liberty Science Center
Current Route Planning Status (Existing / others/ Proposed in this study)	Planned by	Planned by others	Planned by others	Planned by others	Planned by others		Planned by others
Construction concept		Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor, Signs and striping		Path construction, Easements, Signs and striping
Construction impacts		Historic rail corridors	Historic rail corridors	Lane configuration, Historic rail corridors	Lane configuration, Historic rail corridors		Lane configuration, Easements
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	2+ years	2+ years		2+ years
Ownership Status		Norfolk Southern, CONRAIL, Jersey City Roads	Norfolk Southern, CONRAIL, Jersey City Roads	Norfolk Southern, CONRAIL, Hudson County, Jersey City Roads	Norfolk Southern, CONRAIL, Hudson County, Jersey City Roads		NJDOT, County and Local Roads, Historic Rail corridor
Estimated Construction Costs (Low =< \$2 M, Medium \$2M- \$10M, High =\$10M +)		High	High	High	Low		High









Name	Organization	Trile	Phone	Email Address	Signature
Andrew Hamilton	9/11 Memoria Trail	9/11 Memoral Trail Scard	(267)236-3407	andyhamilton911nm@gmail.com	
Brances Describe	NJDEP	State Trails Coordinator, Recreational Trails Program	(639) 984-0500	Brandee.Chapman@dep.r _. .gov	
Cyndi Steiner	NJBWC	Executive Cirector	(973)886-4142	cyndi.steiner&njbwc.org	21
David Antonio	Essex Edunty	Division of Planning) Nectur	(973) 226-8500	danter o@essexcountynj.org	Maria
Francesca Giarnatana	Hudson County	Principal Planner, Division of Planning	(201)217-5197	fgiarratana&nonj.us	
ohn G. Trontis	NIDEF	Assistant Director of Parks & Forestry	(609)292-2772	john.trontis@dep.nj.gov	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
loseph Pawell	NIDOT	Principal Planner, Transportation	609 530-5290	Loseph.Powell@dot.nj.gov	OF D
iz Sewell	Rails-To-Trails	Trail Development Manager, RTC Northeast	908 705-5762	elizabeths@railstotrails.org	Pica
Megan Massey	Hudson County	Cryision of Planning	(201)217-5137	mmassey@inany us	YIMU
R. Bruce Danald	Fast Coast Greenway	Tri-State Coordinator	(860)707-2388	bruce@greenway.org	1.1/4.1.1.01
Michael Dannemiller	NVS	Principa Engineer	973-9465626	mithae dannemille/@nv5.com	Wike D
Rachana Sheth	NVS	Urban Cesigner / Planner	973-946-5685	rachana.sheth@rw5.com	Markens
Betn Tanzo Sa	city of news	Photipa Planner	973 733 48	sa tanzosh ba ci. new	ark.ni.us
Home Achtuic	0 1	Principal Planner	072-722-14	so tanzosh be cine	1 us MA





MEMORANDUM OF MEETING

TO: Joseph Powell, NJDOT & ECG Essex-Hudson Connector Steering Committee

FROM: Mike Dannemiller, Rachana Sheth

DATE: 06/22/2017 at 9:00 a.m. Liberty State Park

ATTENDEES: See attached Sign-In Sheet

SUBJECT: ECG Essex-Hudson Greenway Connector - ROUTING STRATEGY SESSION

NV5, Inc. Project # J728616.0000095.04

The purpose of the East Coast Greenway (ECG) Essex-Hudson Greenway Connector Routing Strategy Session was to introduce the project and to present and prioritize the alignment alternatives developed with the Steering Committee to a larger group of invited stakeholders with the end goal of strategizing next steps and future projects for the ECG.

The meeting was held on June 22nd, 2017 from 9:30 a.m. – 11:30 a.m. at the Central Railroad Terminal in Liberty State Park (invitation is attached). The session was attended by over 20 stakeholders including regional and local representatives, Office of Bicycle and Pedestrian Programs at NJDOT and the project Steering Committee. A copy of the sign-in sheet is attached.

Participants included the following:





























Joseph Powell, NJDOT Office of Bicycle and Pedestrian Programs initiated the meeting with an overview of the project, the purpose of the session and introductions. Bruce Donald, East Coast Greenway Alliance, presented a brief overview of the ECG in New Jersey. Mike Dannemiller, NV5 provided an overview of the project scope of work, study area limits, the methodology for selection of the alignment alternatives, the format of the session and the next steps. The study area was divided into three sections - Newark, River to River (Kearny/Harrison) and Jersey City. Mike Dannemiller and Rachana Sheth then facilitated a discussion of the five alignment alternatives in

NV5 July 26, 2017 Page 2

each section and the relevant pros/cons or rating criteria for each of the alignment options. The rating criteria for each of the options included the following:

- % on-road / off-road
- Traffic Safety (number of intersections)
- Personal Safety (distance to closest public right-of-way)
- Width
- Trail Connectivity
- Length
- Commuting Time on bicycle

- Environmental constraints
- Link to local destinations
- Route status
- Construction requirements and impacts
- Time-frame
- Ownership status
- Estimated construction costs

Following the discussion of each alternative in the three sections, the attendees were encouraged to review the alignments in detail at three stations with a map, matrix and photo journey for each of the three sections of the study area. The project team facilitated discussions at those stations and clarified any routing questions.

The attendees were guided through a voting exercise to develop consensus for a refined route, including a list of potential and responsible parties for advancing the ECG across the study area. Participants were provided six dots to identify their top two preferred options in each section – Newark, Kearny/Harrison and Jersey City. The results of the voting exercise are below:

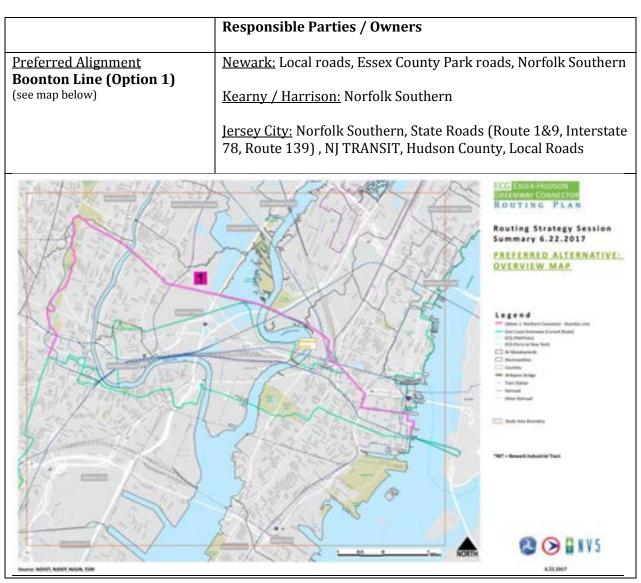
		vark aatives	1		Jersey City / Hoboken Alternatives		Total
NUMBER OF VOTES*	1 st	2 nd	1 st	2 nd	1 st	2 nd	
	Choice	Choice	Choice	Choice	Choice	Choice	
Option 1: Northern Connector Boonton Line	9	4	6	6	11	3	39
Option 2: Northern Connector Newark Industrial Tract / Frank Rodgers Blvd	4	3	3	3	4	4	21
Option 3: Central Connector Newark Industrial Tract / Wittpenn Bridge	2	6	4	4	5	2	23
Option 4: Central Connector Route 1&9 / Wittpenn Bridge	4	1	4	3	2	2	16
Option 5: Southern Connector Ferry Route	0	0	1	1	0	0	2

^{*}Note: In segments where a dot was placed on overlapping alignments, the vote was entered for all alignments within that section.



Implementation Matrix

The Boonton Line (Option 1) was selected as the preferred alignment in all three sections based on the results of the voting exercise shown in the table above. The following matrix includes a list of potential responsible parties or teams for the development of the Boonton Line for the ECG Essex-Hudson Greenway Connector.



The following summarizes the major items of discussion from the Steering Committee meeting:

- Portal Bridge south (proposed AMTRAK rail crossing of the Hackensack River) is not designed and may be an opportunity to provide bicycle and pedestrian access
- In Jersey City, there is local support (2,000 comments) in designating the 6th Street Embankment as a historic place on the National Register of Historic Places. For the interim,

an at-grade shared use path either along 6^{th} Street or on the south side of the embankment is a viable alternative

- There was a suggestion to develop all the alternatives like a bicycle / pedestrian network. However, it was decided that the ECG alignment needs to follow a single route and other trails can connect to the main alignment
- There are ways to make remote sections of trails safer even if public access is limited, such as using phone boxes at regular intervals, lighting etc
- Can a tram be used to cross the Hackensack River for the Boonton Line / Newark Industrial Tract alternative?
- Connectivity to transit in the study area should be highlighted

Next Steps:

• Develop a draft report of the ECG Essex-Hudson Greenway Connector routing study detailing the methodology, preferred alignment, next steps and potential future projects.

Attachments:

- Meeting Invitation and Agenda
- Attendee List (Sign-in Sheet)
- Handouts / Boards
 - o Overview Map
 - o Initial Planning Level Alternatives Maps (Newark, Kearny/Harrison & Jersey City/Hoboken)
 - o Analysis Matrix
 - o Photo Boards

Meeting Photos













RESULTS OF VOTING EXERCISE Kearny / Harrison Alternatives Jersey

Newark Alternatives











DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

CHRIS CHRISTIE

Governor

KIM GUADAGNO Lt. Governor RICHARD T. HAMMER

Commissioner

May 30th, 2017

RE: East Coast Greenway: ESSEX / HUDSON GREENWAY CONNECTOR ROUTING PLAN

Dear Stakeholder:

On behalf of the New Jersey Department of Transportation (NJDOT) and the East Coast Greenway Alliance (ECGA), I would like to invite you to participate in a Routing Strategy Session to develop a routing plan for an Essex – Hudson Greenway Connector for the East Coast Greenway.

The East Coast Greenway (ECG) is a developing trail system (www.greenway.org) linking the major cities of the Eastern Seaboard between Canada and Key West, Florida. Over 30 percent of the route is already on traffic-free greenways, creating safe, accessible routes for people of all ages and abilities. NJDOT has supported the development of ECG by conducting routing studies, preparing concepts, construction of trail segments, developing a tour guide for ECG in New Jersey, etc.

The ECG is lacking off-road critical connections between the areas of Newark (University Heights area) and Jersey City across the Passaic and Hackensack Rivers. Given the large population of these cities and the redevelopment activity in the surrounding municipalities of Harrison, Kearny, East Newark and Secaucus, providing a convenient off-road shared use path would offer key recreational and utilitarian travel to a large population. NJDOT has brought in NV5 (formerly the RBA Group) to assist the ECGA in this project, see attached overview map.

You (or a key member of your organization) are invited to be part of this exciting and unique project. At the routing strategy workshop, we will provide an overview of the project scope, schedule and outcomes; a summary of our process / methodology and present alternatives for the connector.

Please join us for the Routing Strategy Session scheduled for 9:30 – 11:30am on Thursday June 22, 2017 at the Central Railroad of New Jersey Terminal in Liberty State Park located at 1 Audrey Zapp Drive, Jersey City, NJ 07305. There is free parking and transit access available near the venue.

Please RSVP and let us know if you (or a member of your organization) will be participating in the workshop. We will send meeting materials prior to the workshop for review. Please RSVP by June 15, 2017 to Rachana Sheth, NV5 at:

Email: Rachana.Sheth@NV5.com

Phone: 973.946.5685

If you have any questions in the meantime, please feel free to contact me.

We look forward to working with you to make this vital East Coast Greenway connection a reality.



Joseph Powell
Principal Planner, Transportation,
Office of Bicycle & Pedestrian Programs
New Jersey Department of Transportation
1035 Parkway Avenue
PO Box 600
Trenton, NJ 08625-0600
609-530-5290

AGENDA



ROUTING STRATEGY SESSION

Thursday, June 22nd, 2017
9:30 – 11:30 a.m.
Central Railroad of New Jersey Terminal in Liberty State Park
1 Audrey Zapp Drive
Jersey City, NJ 07305

Purpose: To review potential alternatives for the ECG Essex-Hudson Greenway Connector Routing Plan; present alternatives for the connector, review the project scope, schedule & outcomes; and strategize next steps for future projects.

- I. Welcome & Introductions Joe Powell, NJDOT
- II. East Coast Greenway Overview Bruce Donald, ECGA
- III. Review Project Scope of Work, Schedule and Outcomes *Mike Dannemiller / Rachana Sheth, NV5*
- IV. Overview of Initial Planning Level Alternatives / Matrix Mike Dannemiller / Rachana Sheth, NV5
- V. Open House / Questions / Comments Review of Initial Planning Level Alternatives Mapping
- VI. Recap / Voting Exercise Mike Dannemiller, NV5





ROUTING STRATEGY SESSION

JUNE 22, 2017 SIGN-IN SHEET

Name	Title / Affiliation	Email Email	Phone
JOHN G. TRENTH	Act. Dio-120BP DIV. PAR	W/FORESTRY jong transis@depin	1.90V CKIL-609-439-3425
JOHN N. WORGAM		TATION COH SMORGAN & HOBOKE	90
Magan Masar	1 theson country	MMasky caken;	20, 24-1210
BARKHA R PATEL	JERSEY CITY PLANHIN		201-547-5010
Bre Doudd	East Coast Guerra	buce a graning, m	960-701-2898
PAUL GEMBA	RA REAL STATE	NJTAINST pgembarace	injtransit 973.441.731
bEFEWELL	NUDET	JOSEPH. POWELLODOT, NJ. G	
William Ri	viere NJDOT	William Tiviore a	danjan 609 530064
Nipa Man	mar NJDOT		dot-nigov 609 530.23
Megan Vells	V NOTPA	micely enitpa on	, 00
Justin Mayo	er Sechucus	impyer @ secold	13. net 201 (17 3913
Amanda Neshein	nat Secaucus	anesheiwet@secau	cusinet 2018647336
Grec Rem	and NOMO BerxA	coeper greg erynybay	Keyper.or 888- 787
PATRICK CO	NEW BIKESC-PRI		





ROUTING STRATEGY SESSION

JUNE 22, 2017 SIGN-IN SHEET

Name	Title	/ Affiliation	Email	Phone
612 Scwell	Tra			
CYWI C	Ili.	Moud		
MIKC Y	184er	HULLO NOW CO.	MMETE	- OKYLONG. For
Luke Schro	us.	Embanhmenst	lske &schran	@gmail.com
MO Kinh	21	No Fifre	MKABES	CONTENTE CM
Ranhaha	show	by5		0
Mike Dann	emila	NV5		



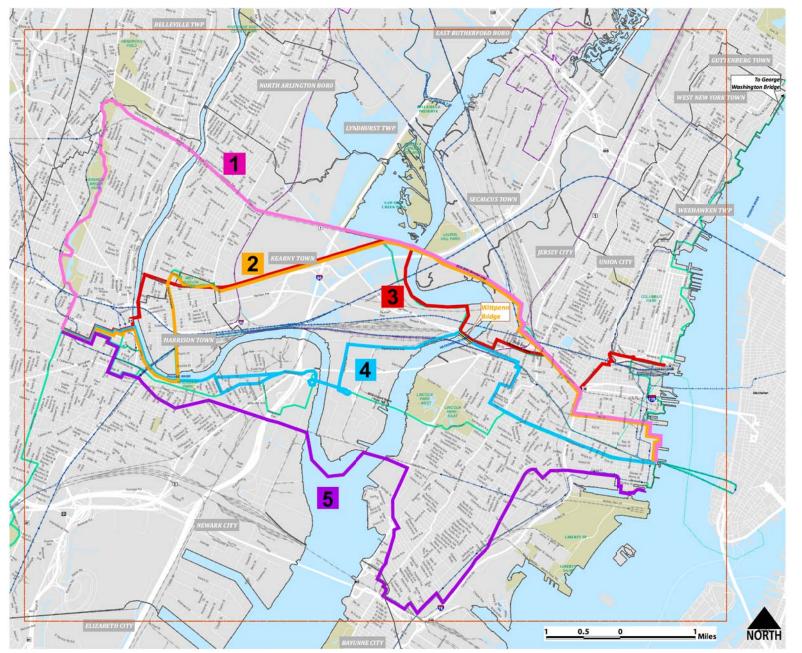




Appendix 4:

INITIAL PLANNING LEVEL ALTERNATIVES





ECG ESSEX-HUDSON
GREENWAY CONNECTOR
ROUTING PLAN

Initial Planning Level Alternatives

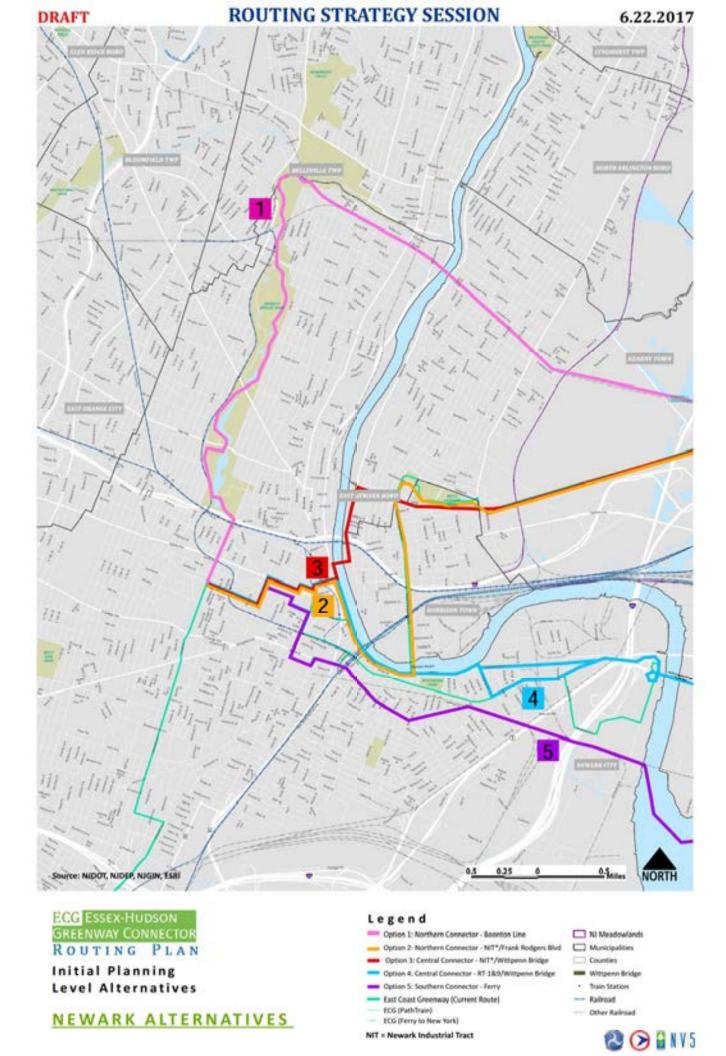
ALTERNATIVES: OVERVIEW MAP

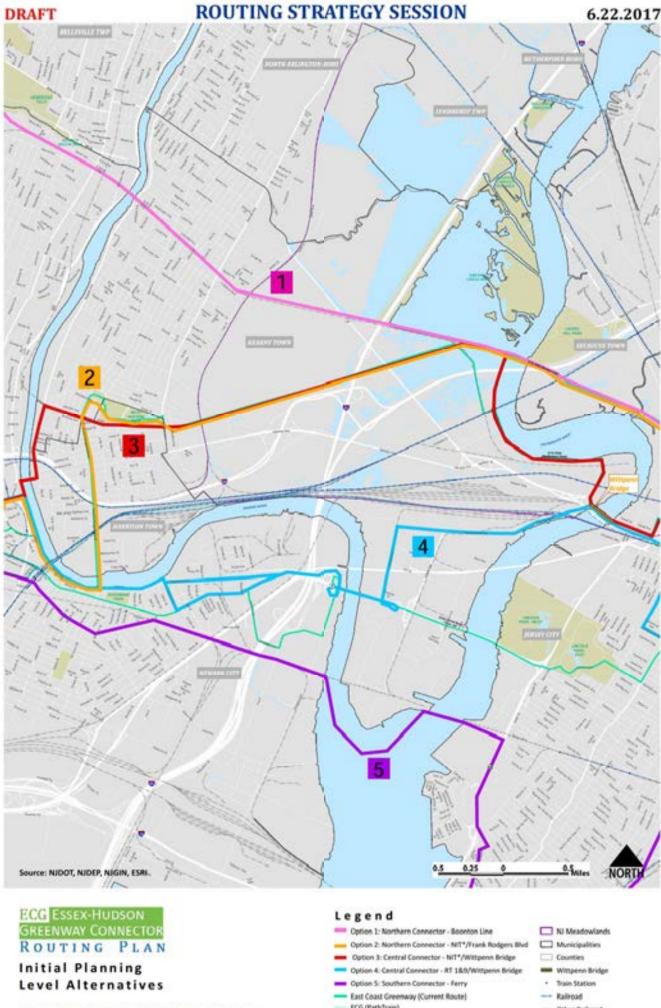


*NIT = Newark Industrial Tract



Source: NJDOT, NJDEP, NJGIN, ESRI 6.22.2017

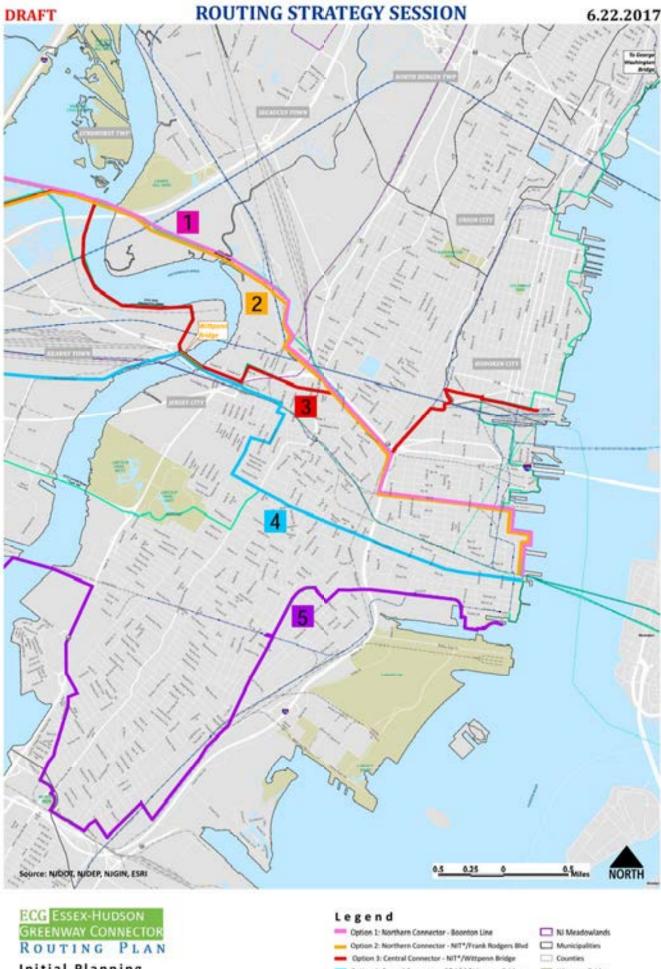




KEARNY ALTERNATIVES

- ECG (PathTrain) ECG (Ferry to New York)
- NIT = Newark Industrial Tract
- Other Railroad





Initial Planning **Level Alternatives**

JERSEY CITY ALTERNATIVES

- Option 4: Central Connector RT 189/Wittpenn Bridge
- Option 5: Southern Connector Ferry
- East Coast Greenway (Current Route) ECG (PathTrain)
- ECG (Ferry to New York) NIT = Newark Industrial Tract
- Wittpenn Bridge
- . Train Station
- -- Railroad
- Other Railroad





NEWARK ALTERNATIVES		Option 1: Northern Connector (Pink Line)	Option 2: Northern Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Central Connector (Blue Line)	Option 5: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY		No.		**************************************		100 pr
Municipal Corridors (Off-road, On-road)	Newark	Branch Brook Park Path, Boonton Line	Warren St, MLK Blvd, Central Ave, Passaic River Waterfront Walkway	Warren St, MLK Blvd, Central Ave, Passaic River Waterfront Walkway, Bridge Street	Warren St, MLK Blvd, Central Ave, Passaic River Waterfront Walkway, Raymond Blvd, Ferry Street	Warren St, Bleecker St, New St, Broad St, Edison Pl, Market St, Ferry St, Historic RR Corridor
RATING CRITERIA						
% On-Road / Off-road		10% On Road & 90% Off Road	55% On Road & 45% Off Road 100% On Road & 0% Off Road		65% On Road & 35% Off Road	70% On Road & 30% Off Road
Traffic Safety (traffic conflicts)		22 intersections	19 intersections	19 intersections	31 intersections	51 intersections
Personal Safety (distance to closest public w	vay)	600 ft	500 ft	NA NA	600 ft	1500 ft
Width		10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off- road	On-road (shared lane markings and bicycle lanes)	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'- 14' off-road
Trail Connectivity (to other trails)		Morris Canal Greenway, Liberty-Water Gap, 9/11,	Morris Canal Greenway, Liberty-Water Gap, 9/11, Passaic River Waterfront Walkway	Morris Canal Greenway, Liberty-Water Gap, 9/11,	Morris Canal Greenway, Liberty-Water Gap, 9/11, Passaic River Waterfront Walkway	Morris Canal Greenway, Liberty-Water Gap, 9/11
Length		4.5 mi of 13.2 total	2.2 mi of 12.3 total	1.3 mi of 11.1 total	4.5 mi of 11.7 total	4.3 mi of 14.4 total
Commuting time on bicycle (assume 10 mph average)		27 mins of 1 hours 19 minutes total	13 mins of 1 hour 14 minutes total	8 mins of 1 hour 7 minutes total	27 mins of 1 hour 11 minutes total	26 mins of 1 hour 49 minutes total
Environment Constraints		Freshwater wetlands within Branch Brook Park Tab species habitat within Branch Brook Park Historic properties and districts listed or eligible for listing on the National Register: Branch Brook Part Historic District and contributing elements O Cherry Blossom Tires O Forest Hill Historic District (nearby) Tiffany and Company Factory historic property	Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o James Street Commons Historic District	Historic properties and districts listed or eligible for listing on the National Register: o Colonnade Park Historic District and contributing elements o Pavillion Apartments o Newark City Subway District (Historic) o Morris Canal o Essex County Jall historic property o Old Main Delaware, Lackawanna and Western Railroad Historic District	Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Caral o James Street Commons Historic District o Riverbank Park	Possible T&E species habitat adjacent to river Historic properties and districts listed or eligible for listing on the National Register: o Morris Canal o.ames Street Commons Historic District o Four Corners Historic District
Link to Destinations		Branch Brook Park, University Heights	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC	Branch Brook Park, University Heights	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJIT. NJPAC, Ironbound	University Heights, Newark Penn, Light Rail Stations, Rutgers, NJT. NJPAC, Ironbound
Current Route Planning Status (Existing / Planned by others/ Proposed in this study)		Existing / Planned	Existing / Planned	Existing / Proposed in this study	Existing / Planned by others/ Proposed in this study	Planned by others/ Proposed in this study
Construction concept		Path construction on historic railroad corridor	Signs and striping, Walkway construction	Signing and striping only	Sign; and striping, Walkway construction	Path construction on historic railroad corridor, Signs and striping
Construction impacts		Commercial staging along Boonton Line	Lane configuration, waterfront properties multiple ownership	Lane configuration	Lane configuration, waterfront properties multiple ownership, Easement on private property	Late configuration, Historic rail road corridor impacts
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	Under 2 years	2+ years	2+ years
Ownership Status		County Parks & Railroad Corridor	Newark & Essex County roads, Waterfront ownership TBD	Newark Public roads	Newark & Essex County roads, Waterfront ownership TBD	Newark & Essex County roads, RR Corridor ownership TBD
Estimated Construction Costs (Low =< \$2 M, Medium \$2M-\$10M, High =\$10M +)		Medium	Medium	Low	High	High



BETWEEN THE RIVERS ALTERNATIVES		Option 1: Northern Connector (Pink Line)	Option 2: Northern Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Central Connector (Blue Line)	Option 5: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY			2			
River Crossings	Passaic River	Existing Boonton Line RR Bridge	Frank E Rodgers Blvd Bridge - Sidewalk / Shoulders	Bridge Street Bridge	Truck Route 1 & 9 - Sidepath	New Ferry from Newark to Kearny Point
(Off-Road, On-Road, Ferry)	Hackensack River	Ferry or New Bridge	Ferry or New Bridge	Wittpenn Brdge - Sidewalk	Wittpenn Bridge - Sidewalk	New Ferry from Kearny Point to JC
Municipal Corridors (Off-road, On-road)	Kearny	Boonton Line	Newark Industrial Track	Newark Industrial Track	Rt 1&9, Jacob Ave, Pennsylvania Ave, Fish House Road	Ferry
RATING CRITERIA						
% On-Road / Off-road		0% On Road & 100% OffRoad	30% On Road & 70% Off Road	5% On Road & 95% Off Road	95% On Road & 5% Off Road	0% On Road & 100% Off Road
Traffic Safety (traffic conflicts)		3 intersections	31 intersections	5 intersections	7 intersections	0 intersections
Personal Safety (distance to closest publi	ic way)	4400 ft	4400 ft	4400 ft	NA NA	NA
Width		10 -1 4'	10 -1 4'	10-14'	NA NA	NA NA
Trail Connectivity (to other trails)		Meadows Path, Hackensack River Trail, Ice & Iron Trail	Meadows Path, Hackensack River Trail, Ice & Iron Trail	Meadows Path, Hackensack River Trail, Ice & Iron Trail	Morris Canal Greenway, Liberty-Water Gap, 9/11	Morris Canal Greenway, Liberty-Water Gap, 9/11
Length		3.4 mi of 13.2 total	4.8 mi of 12.3 total	6.5 mi of 11.1 total	3.1 mi of 11.7 total	1.3 mi of 14.4 total
Commuting time on bicycle (assume 10 mph average)		20 mins of 1 hours 19 minutes total	29 mins of 1 hour 14 minutes total	39 mins of 1 hour 7 minutes total	19 mins of 1 hour 11 minutes total	30 mins of 1 hour 49 minutes total
Environment Constraints		Waterfront development	T&E species habitat may occur on site Freshwater wetlands Waterfront development Historic properties and districts listed or eligible for listing on the National Register O Pennsylvania Railroad New York to Phiadelphia Historic District Morris Canal	T&E species habitat may occur on site Freshwater wetlands Waterfront development Historic properties and districts listed or eligible for listing on the National Register: o Bridge Street Bridge historic property o Pennsylvania Railorad New York to Philadelphia Historic District o Jersey City Waterwork: Historic District o Hackensack River Lift Bridge Historic District	*T&E species habitat may occur on site *Widerfornt development *Tidal wethands *Historic properties and districts listed or eligible for listing en the National Register: O Morris Canal	T&E species habitat may occur on site Waiterfront development
Link to Destinations		New Jersey Meadowlands	New Jersey Meadowlands, West Hudson Park, Red Bull Stadium, Harrison Path	New Jersey Meadowlands, West Hudson Park	tw Jersey Meadowlands, West Hudson Park Penitentiary	
Current Route Planning Status (Existing / Planned by others / Proposed in this study)		Planned by others	Planned by others	Planned by others	Planned by others	Proposed in this study
Construction concept .		Path construction on historic railroad corridor	Path construction on historic railroad cor idor, Signs and striping	Path construction on historic railroad corridor	Widen sidewalk to 10 foot wide (minimum) Shared Use Path	Docks/ Landings
Construction impacts		Historic Rail Road Corridor	Lane configuration, Historic rail road corridor impacts	Historic Rail Road Corridor	Easements to widen sidewalk	Easement on private property including docks & landings
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	2+ years	2+ years	2+ years
Ownership Status		Norfolk Southern	Hudson County & Harrison, Kearny & East Newark Roads, Norfolk Southern	Hudson County & Harrison, Kearny & East Newark Roads, Norfolk Southern	NJDOT	Private, Public
Estimated Construction Costs (Low = < \$2 M, Medium \$2M-\$10M, High =\$10M +)		Low	High	Hgh	Low	High



JERSEY CITY ALTERNATIVES		Option 1: Northern Connector (Pink Line)	Option 2: Northern Connector (Orange Line)	Option 3: Central Connector (Red Line)	Option 4: Central Connector (Blue Line)	Option 5: Southern Connector (Purple Line)
ROUTE LOCATION SUMMARY			20 00-	design of the second of the se		
Municipal Connections (Off-road, On-road) Jersey City / Hoboken		Boonton Line, Bergen Arches, 6th Street Embankment (above-grade), Hudson River Waterfrort Walkway			St Paul's Ave, Newark Ave, Romaine Ave, West Side Ave, Montgomery St, Hudson River Waterfront Walkway	Morris Canal Greenway (Route 440, Country Village Greenway, Berry Lane Park), Hudson River Waterfront Walkway
RATING CRITERIA						
% On-Road / Off-road		5% On Road & 95% Off Road	10% On Road & 90% Off Road 40% On Road & 60% Off Road		100% On Road & 0% Off Road	33% On Road & 67% Off Road
Traffic Safety (traffic conflicts)		4 intersections	12 intersections	17 intersections 28 intersections		42 intersections
Personal Safety (distance to closest public way)	8	5500 ft	5500 ft	1500 ft	1500 ft	NA NA
Width		10'-14'	10'-14'	On-road (shared lane markings and bicycle lanes) and 10'- 14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road	On-road (shared lane markings and bicycle lanes) and 10'-14' off-road
Trail Connectivity (to other trails)		Hackensack River Trail, Hud:on River Waterfront Walkway	Hackensack River Trail, Hudson River Waterfront Walkway	Hackensack River Trail, Hudson River Waterfront Walkway	Uncoln Park Path, Hudson River Waterfront Walkway	Lincoln Park Path, Hudson River Waterfront Walkway, Morris Canal Greenway, 9/11 Trail
Length		5.3 mi of 13.2 total	5.3 mi of 12.3 total	3.3 mi of 11.1 tota	4.1 mi of 11.7 total	8.8 mi of 14.4 total
Commuting time on bicycle (assume 10 mph average)		32 mins of 1 hours 19 minutes total	32 mins of 1 hour 14 minutes total	20 mins of 1 hour 7 minutes total	25 mins of 1 hour 11 minutes total	53 mins of 1 hour 49 minutes total
Environment Constraints		Waterfront development Historic properties and districts listed or digible for listing on the National Register: Olersey City Waterworks Pipeline OH STATE OF THE REST OF	Freshwater wetlands Waterfront development Tidal wetlands Historic properties and districts listed or eligible for listing on the National Register: o Harsimus Cove Historic District o Frie Railroad Bergen Hill Tunnel (Long Dock Tunnel) o Hudson and Manhattan Railroad Transit System Historic District	Waterfront development Historic properties and districts listed or eligible for listing on the National Register: O Jersey City Waterworks Pipelire O Harsimus Cove Historic District O Fire Railroad Bergen Hill Tunnel (Long Dock Tunnel) O Hudson and Manhattan Railroad Transit System Historic District	*T&E species habitat may occur on site *Waterfrontdevelopment *Historic properties and districts listed or eligible for listing on the National tegister: o lensey (Ty High School o Bergen Hill Historic District o Harsimus Cove Historic District	Waterfront development Historic properties and districts listed or eligible for listing on the National Register: O Morris Canal Laflayette Gardens Historic District
Unk to Destinations		Laurel Hill Park, Downlown Jersey City	Laurel Hill Park, Downtown Jersey City	Downtown Jersey City	Downtown Jersey City	Lincoln Park Path, Hudson River , Mercer Park, Berry Lane Park, Waterfront Walkway, Liberty Science Center
Current Route Planning Status (Existing / Planned by others/ Proposed in this study)		Planned by others	Planned by others	Planned by others	Planned by others / Proposed in this study	Planned by others
Construction concept		Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor, Signs and striping	Path construction on historic railroad corridor, Signs and striping	Signs and striping	Path construction, Easements, Signs and striping
Construction impacts		Historic rail corridors	Historic rail corridors	Lane configuration, Historic rail corridors	Lane configuration	Lane configuration, Easements
Time-frame (Short = Under 2 yrs, Long = 2+ yrs)		2+ years	2+ years	2+ years	2+ years	2+ years
Ownership Status		Norfolk Southern, CONRAIL, Jersey City Roads	Norfolk Southern, CONRAIL, Jersey City Roads	Norfolk Southern, CONRAIL, Hudson County, Jersey City Roads	Hudson County, Jersey City Roads	NJDOT, County and Local Roads, Historic Canal corridor
Estimated Construction Costs (tow =< \$2 M, Medium \$2M-\$10M, High =\$10M +)		High	High	High	Low	High

NEWARK ALTERNATIVES ROUTING STRATEGY SESSION (6.22.2017)

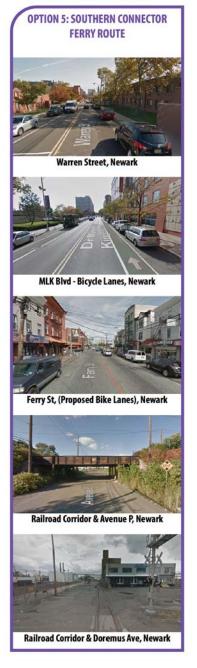












KEARNY / HARRISON ALTERNATIVES ROUTING STRATEGY SESSION (6.22.2017)





Boonton Line at Passaic Avenue, Kearny



Ice & Iron Trail, Highland Ave, Newark
Concept/Rendering

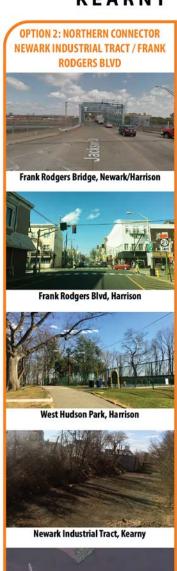


Boonton Line: Forest St, Kearny



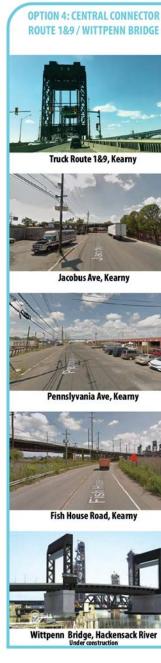
Boonton Line: Kearny

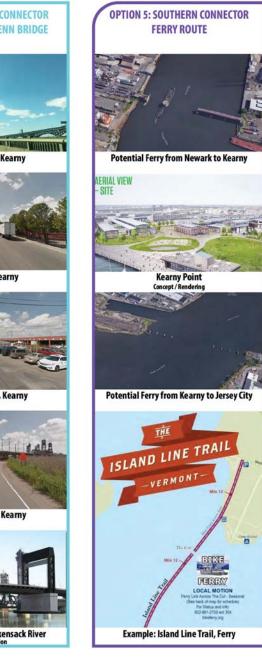




Boonton Line: Hackensack River)











JERSEY CITY / HOBOKEN ALTERNATIVES ROUTING STRATEGY SESSION (6.22.2017)





Boonton Line: Hackensack River



Laurel Hill Park, Secaucus



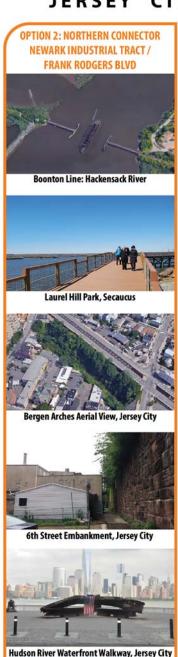
www.bergenarches.com, Jersey City Concept / Rendering



www.embankment.org, Jersey City

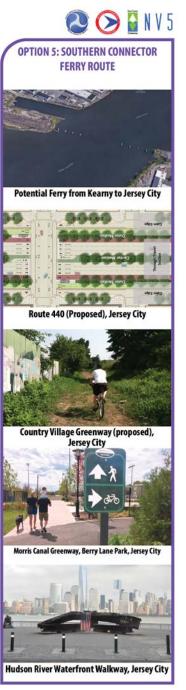


Hudson River Waterfront Walkway, Jersey City









ECG ESSEX-HUDSON GREENWAY CONNECTOR ROUTING PLAN





