

NORFOLK CENTRAL

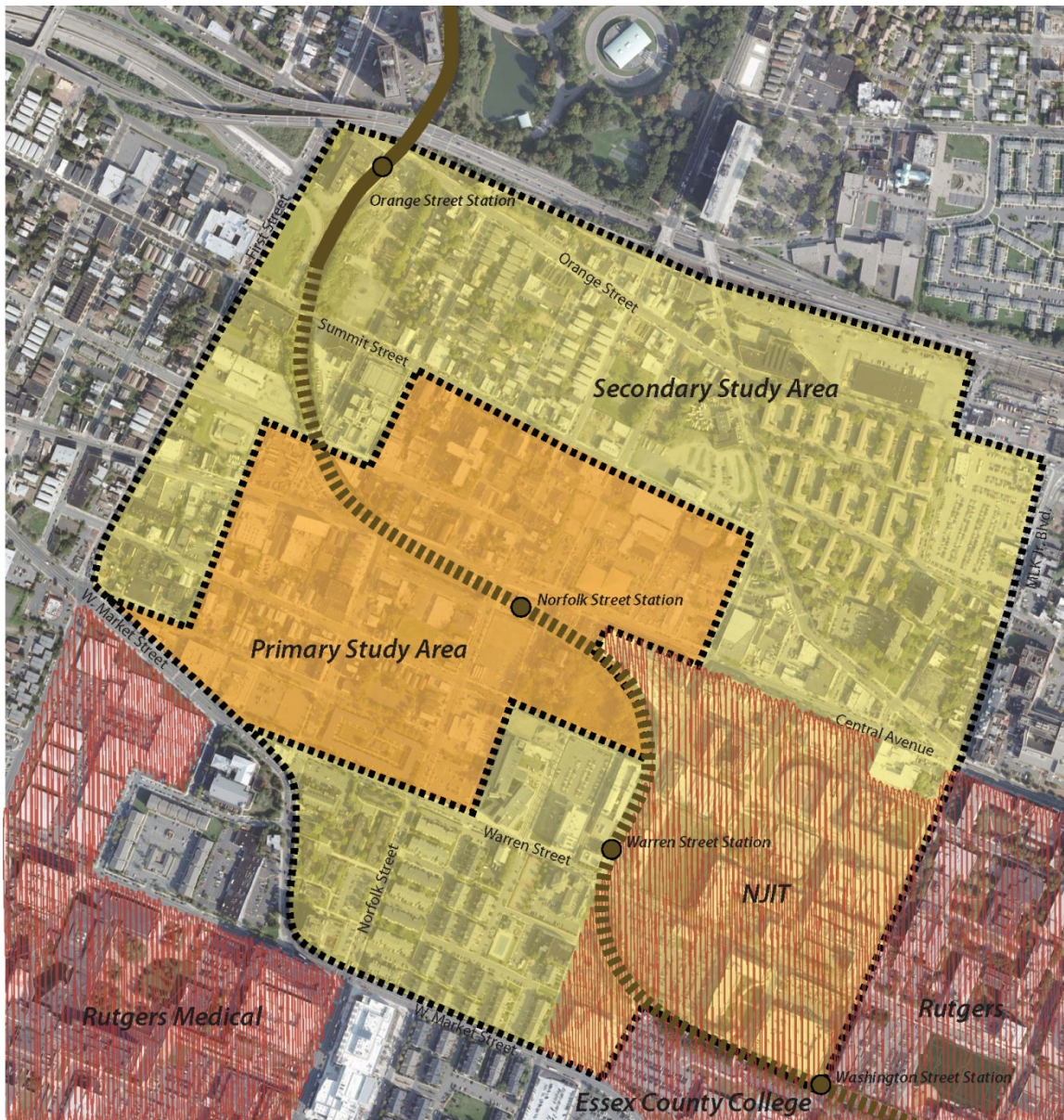
AN EXAMINATION OF THE AREA
SURROUNDING NORFOLK LIGHT RAIL
STATION
Newark, NJ

INTRODUCTION

The following document is supporting information for “Norfolk Central” a redevelopment study undertaken by a group of graduate students attending the Edward J. Bloustein School of Planning and Public Policy.

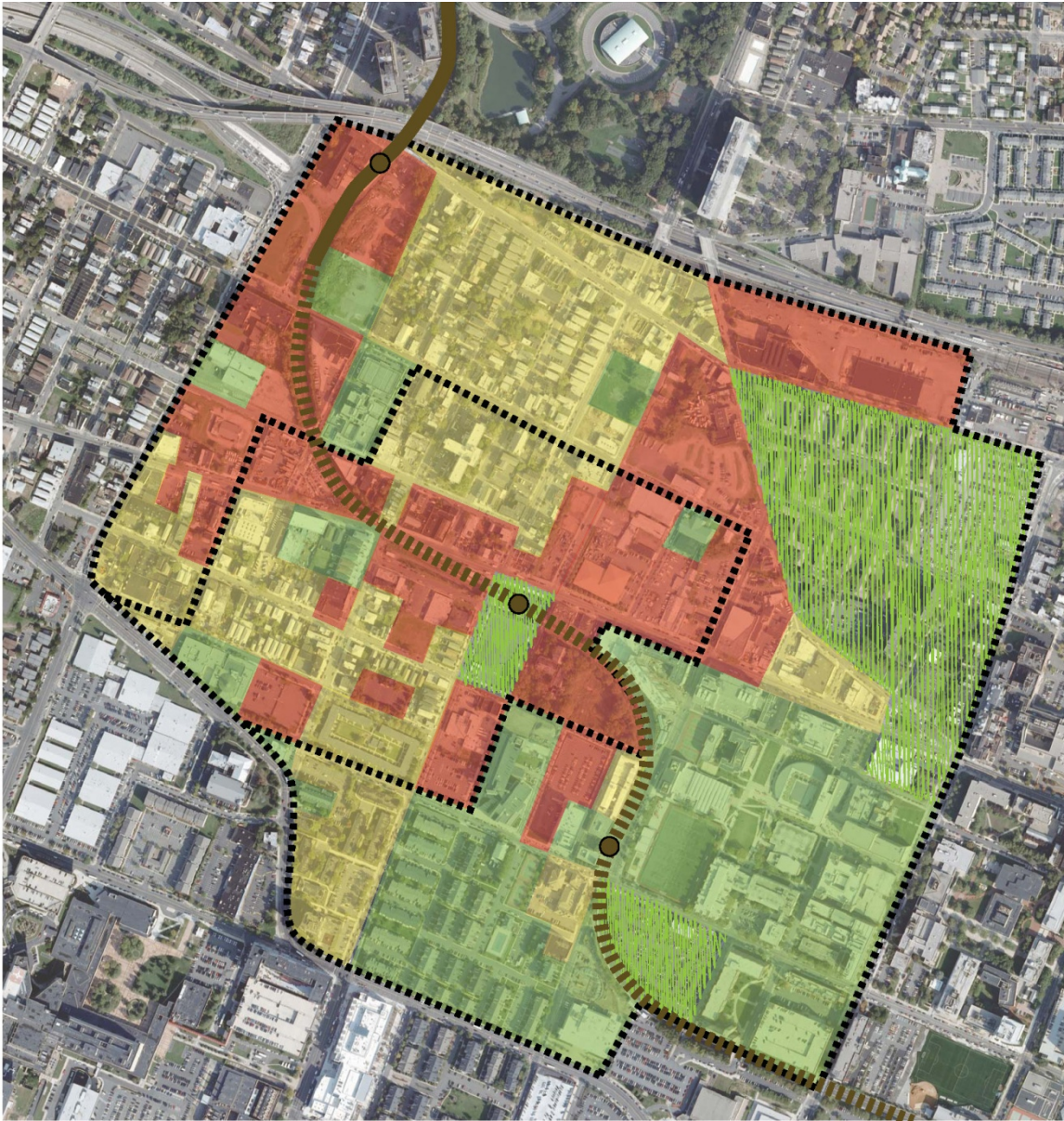
STUDY AREA INFORMATION

STUDY AREA



The Norfolk study area is a combination of Census Tract 10 and 11 in Newark, NJ. The area directly surrounding the Norfolk Street Light Rail station is identified as the primary study area, and the yellow zone just beyond is the secondary study area.

OPPORTUNITIES



The areas in red are either abandoned, vacant or have land uses that may be susceptible to change. For example, several of the red zones highlight parking lots, which require little preparation work for new construction or temporary purposes. The areas in yellow identify sections of land or empty lots that may provide unique albeit more limited opportunities for development. Finally, the green areas are areas that most likely will not change any time in the near future due to their high productivity and quality design. Some green areas are hatched to identify impending changes, such as the planned Bio Trial site just south of the station.

AREA ASSETS

- Many vacant buildings for potential for adaptive reuse
- Transit Options: Norfolk Light Rail Station; Proximity to major destinations; Newark Penn Station → NYC; Norfolk Light rail Station (about 5 minutes or 3 stops from Penn Station); About a mile and half away from Newark Penn Station to NJ Transit rail and PATH)
- Educational Institutions: NJIT, Rutgers, UMDNJ, Essex County College
- Business: Science Park, BioTrial

- New Development: Baxter Park, Society Hill
- Open Space: Branch Brook Park – less than a quarter mile away
- Churches: New Hope; Bethany

PATNERSHIPS

BACKGROUND INFORMATION ON LOCAL INSTITUTIONS

- NJIT:
 - Total enrollment: 9,950
 - 1, 634 students live on campus in five residence halls and apartments
- Rutgers:
 - Enrollment (fall 2012) Total: 12,011
 - On-campus Residents: 1,280
- 27.2 % of the residents do not have a high school degree.
- 17.9% of the residents have a college degree or higher.
- About 30% are enrolled in a college or graduate program.

Business Incentives

- University Grants/ Incubator
- STEM/ Tech-Sector Incentives
- City, State, and Federal Tax Credits

IDENTIFIED STAKEHOLDERS

- Existing churches in the study area and surrounding neighborhood
 - Bethany Baptist Church
 - New Community Corporation
 - New Hope
- Brick City Development Corporation (BCDC)
- CHEN (Council for Higher Education in Newark)
 - <http://www.chen-nj.org/>

PARTNERSHIP/ORGANIZATION OPTIONS

Partnership/Organization Options			
Organization Type	Community Development Corporation (CDC)	Business Improvement District (BID)/ Special Improvement District (SID)	Special Services District
What is it?	A not-for-profit organization incorporated to provide programs, offer services and engage in other activities that promote and support community development. CDCs usually serve a geographic location such as a neighborhood.	A commercial district in which property owners or businesses pay an additional tax or fee in order to fund supplemental services or improvements within the district's boundaries.	Its mission, organizational structure, and tasks function as a BID.
Benefits	Information: Forum for research and collaboration, resulting in fresh perspectives on both sides Resources: Provision of human, physical, and financial capital Influence: Increased political influence for community residents and credibility for the university with its relationship with the community and local government		

Negative Aspects	No definitive funding source; Require major leadership	Small businesses may be priced out of the area due to the rental values.	Financed by voluntary contributions (dependent on donations, fundraising efforts, and grant) → lack of a permanent funding stream
Examples	University Circle (Cleveland, OH)	Newark Downtown District (NDD); Ironbound Business Improvement District	University City District (Philadelphia, PA) and Town Green
More information	Building Higher Education-Community Development Corporation Partnerships” (see below for citation)	Newark’s Business Districts [BCDC Site] Improvement District (ID) Programs [NJ DCA Site]; “Starting a Business Improvement District...”	“New Boundaries of Urban Governance: An Analysis of Philadelphia’s University City Improvement District” (see below for citation)

BCDS Site: <http://bccdnewark.org/business-development/business-climate/newark-business-districts/>

NJ DCA Site: <http://www.nj.gov/dca/divisions/dhcr/offices/idp.html>

Starting a BID: <http://www.drexel.edu/~media/Files/publicpolicy/Starting%20a%20BID%20in%20Philadelphia.ashx>

CASE STUDIES

University City District & The University of Pennsylvania

- One of the earliest examples of a university led community organizing model
- Penn was the leader in the process, recruited other area institutions to join in the partnership
- In addition, to creating UCD, Penn maintains the Office of City and Community Relations(OCCR). OCCR regularly meets with neighborhood leaders and acts as representation when dealing with the city.
- Major improvements in:
 - Commercial Development
 - Clean Streets
 - Housing and Home Ownership
- Success was determined by full commitment from area institutions as well as significant community involvement. Being a SSD allowed for community engagement.

Jersey City’s McGinley Square Development Plan

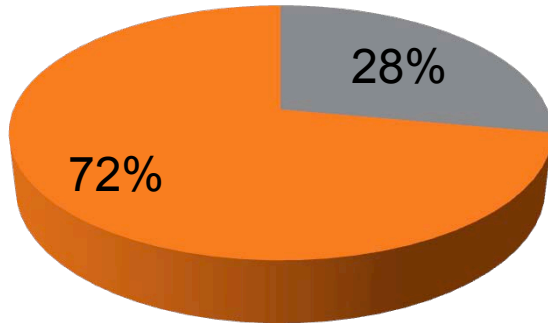
- Major redevelopment plan for McGinley Square commercial district initiated by St. Peter’s College
- The Jersey City Planner provided some advice in light of his experiences
 - The ground level public outreach should begin with the colleges since they have the biggest stake in the plan and the process.
 - The public outreach should be widespread and inclusive. Ideally, an entire public outreach plan should be formulated as part of the planning process. It is necessary for a widespread plan to have a shot.
 - Formulate messaging to highlight how the benefits would be widespread.
 - Good example to present to local residents: An improved commercial district would provide more commercial options and more development would bring in more patrons for local business.
- For an electronic copy of the plan: <http://www.cityofjerseycity.com/hedc.aspx?id=1170>

FUNDING SOURCES

- HUD’s Office of University Partnerships (<http://www.oup.org/>)
 - The Hispanic-Serving Institutions Assisting Communities (HSIAC) grant program
- Private Sector
- Corporations (ex: upcoming BioTrial)

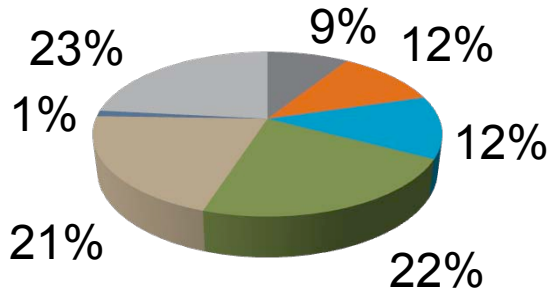
HOUSING

Home Ownership and Rental Rates



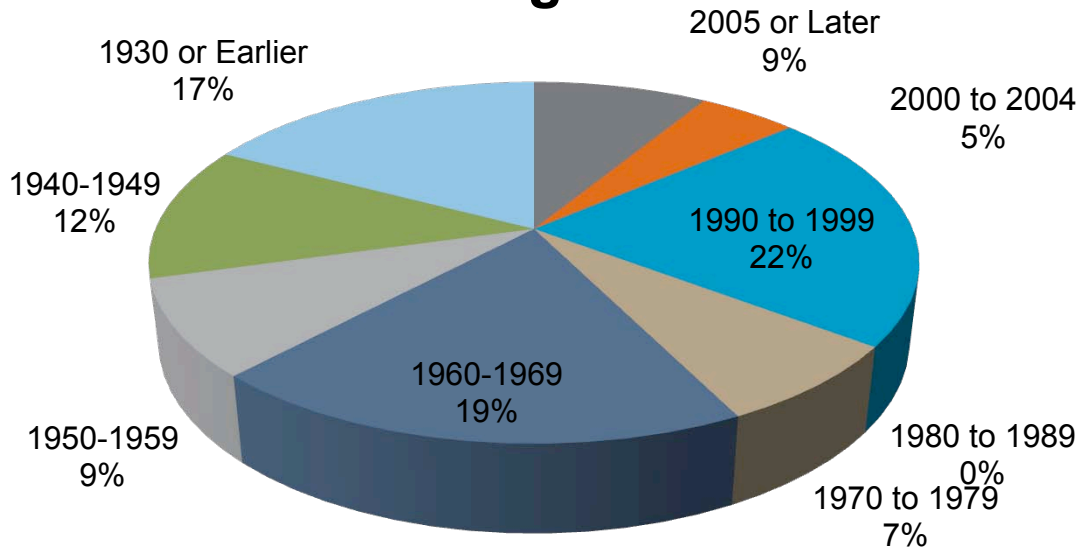
- Owner Occupied
- Renter Occupied

Percentage By Housing Type



- 1-Unit, Detached
- 1 Unit, Attached

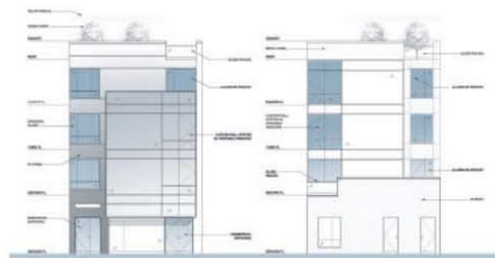
Housing Stock



- Vacancy rate: 22%
- Median home price \$299,200
- More than ½ of the residents spend more than 30% of income on rent

Source: U.S. Census Bureau; American Community Survey, 2011 American Community Survey 5-Year Estimates

POTENTIAL DESIGN GUIDELINES



STREETSCAPES

[PEDESTRIAN ISLANDS](#)

The following excerpt is taken from the Federal Highway Administration's Proven Safety Countermeasures and supports the implementation of pedestrian islands:

“Raised medians (or refuge areas) should be considered in curbed sections of multi-lane roadways in urban and suburban areas, particularly in areas where there are mixtures of significant pedestrian and vehicle traffic (more than 12,000 Average Daily Traffic (ADT)) and intermediate or high travel speeds. Medians/refuge islands should be at least 4 feet wide (preferably 8 feet wide to accommodate pedestrian comfort and safety) and of adequate length to allow the anticipated number of pedestrians to stand and wait for gaps in traffic before crossing the second half of the street.”

[LANE WIDTH](#)

The table below describes the recommended lane widths described in the FHA Mitigation Strategies for Design Exceptions document. The lane configurations provide for the recommended intersection redesign in the figure below.

Type of Roadway	Ranges for Lane Width			
	Rural		Urban	
	US (feet)	Metric (meters)	US (feet)	Metric (meters)
Freeway	12	3.6	12	3.6
Ramps (1-lane)	12-30	3.6-9.2	12-30	3.6-9.2
Arterial	11-12	3.3-3.6	10-12	3.0-3.6
Collector	10-12	3.0-3.6	10-12	3.0-3.6
Local	9-12	2.7-3.6	9-12	2.7-3.6

INTERSECTION REDESIGN

The image below uses data supported in the housing and transportation sections to redesign the extremely wide Norfolk Street and Central Avenue intersection. The redesign, which could be done with initially with inexpensive, temporary materials like paint and planters, may then be made more permanent when capital funds become available. The subsequent set of images show the current conditions (left) and the potential proposed design solutions. Notice that the “after” image includes the new Bio Trial facility design by Francis Cauffman.



Image credit: Google streetview



Image credit: Aimee Jefferson

[COMBINED BIKE AND TURN LANE](#)

The guidelines below are taken from the NACTO design guidelines and support the intersection redesign proposals.

- Within the combined lane, the bicycle area width should be 4 feet minimum.
- Width of combined lane should be 9 feet minimum, 13 feet maximum. A full bicycle through lane can be accommodated if the vehicle right turn only lane can be made 14 feet or wider.
- A dotted 4 inch line and bicycle lane marking should be used to clarify bicyclist positioning within the combined lane without excluding cars from the suggested bicycle area

[MUTCD 2009](#)

- The MUTCD guidelines describes requirements for stop lines, which also support the redesign proposal:
- Stop lines should be 12 to 24 inches wide.
- The individual triangles comprising the yield line should have a base of 12 to 24 inches wide and a height equal to 1.5 times the base. The space between the triangles should be 3 to 12 inches.
- If used, stop and yield lines should be placed a minimum of 4 feet in advance of the nearest crosswalk line at controlled intersections, except for yield lines at roundabouts as provided for in Section 3C.04 and at midblock crosswalks. In the absence of a marked crosswalk, the stop line or yield line should be placed at the desired stopping or yielding point, but should not be placed more than 30 feet or less than 4 feet from the nearest edge of the intersecting traveled way.

LIGHT RAIL STATION

BEST PRACTICES FOR RAIL STATIONS

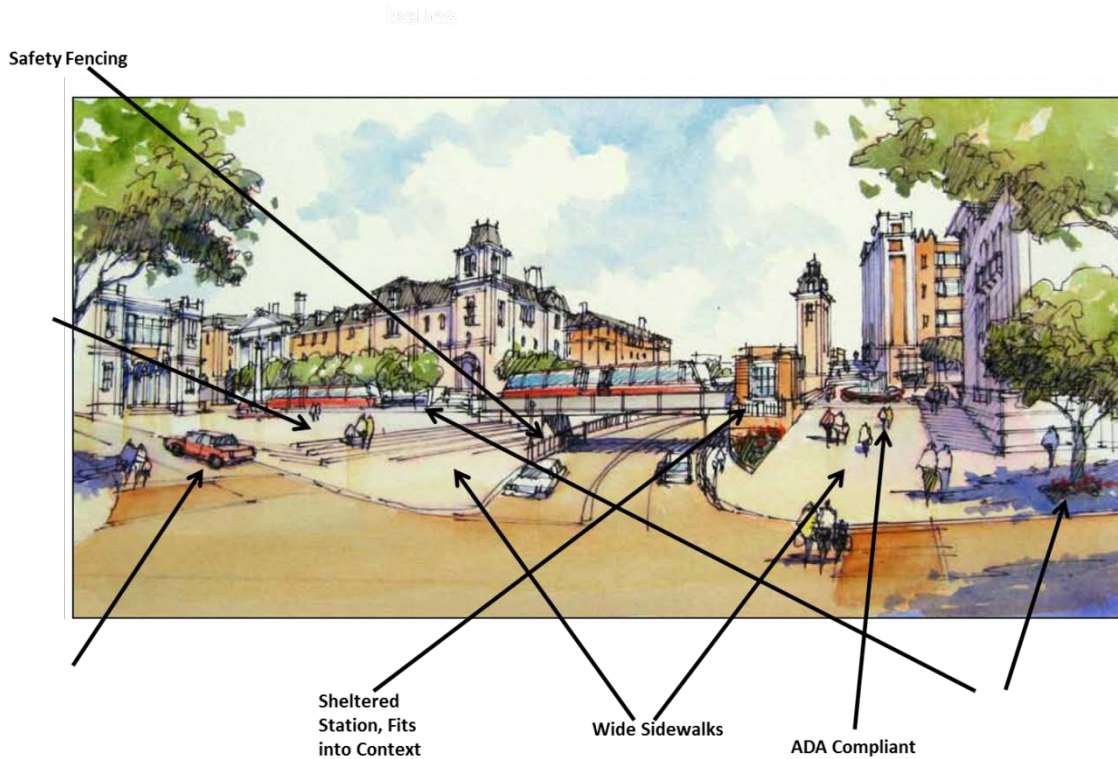
- **Beneficial lighting versus intrusive lighting**
 - Lighting should make the area feel comfortable and safe
 - Should have minimal interference with residential neighbors
- **ADA compliance**
 - Elevators
 - Ramps
- **Accessibility for people with baby strollers or hand carts**
- **Area around the station**
 - provide open space
 - offer benches and other street furniture
- **Design for the weather**
 - Shelter against rain and snow
- **Noise mitigation**
 - Prevent wheel squeals, such as with spray stations
 - Add absorbers
- **Station security**
 - Lighting
 - Security Cameras/Police Presence
 - Crosswalks/Pedestrians Lights
- **Bike racks**
 - The station should encourage multimodal transportation as a way to access the station
 - Limit barriers for bicyclists, design clear routes to the station
- **Parking**
 - Park-and-ride structures increase light rail usage
 - Parking should be designed appropriately for the number of customers
 - Address spillover parking issues
 - Appropriate on street /drop -off parking that does not block pedestrian access
- **Parking infringement**
 - address problems of people trying to park and drop off passengers around the station

Sources:

Columbia River Crossing, Vancouver Working Group, "Best Practices for Light Rail Design":
<http://www.columbiarivercrossing.org/FileLibrary/GeneralProjectDocs/BestPracticesforLightRailDesign.pdf>

City of Bellevue Washington: "Bellevue Light Rail Best Practices":
https://bellevuewa.gov/pdf/PCD/062708_Final_Doc%282%29.pdf

EXAMPLE STATION

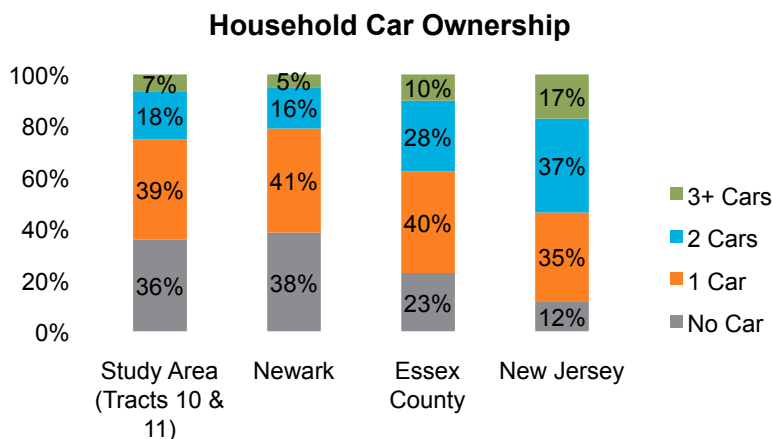


Source: "A panoramic view looking east toward the station area and Transit Plaza," Highlandtown-Greektown, Charette Report. Baltimore, MD, July 2009.

TRANSPORTATION

CAR OWNERSHIP

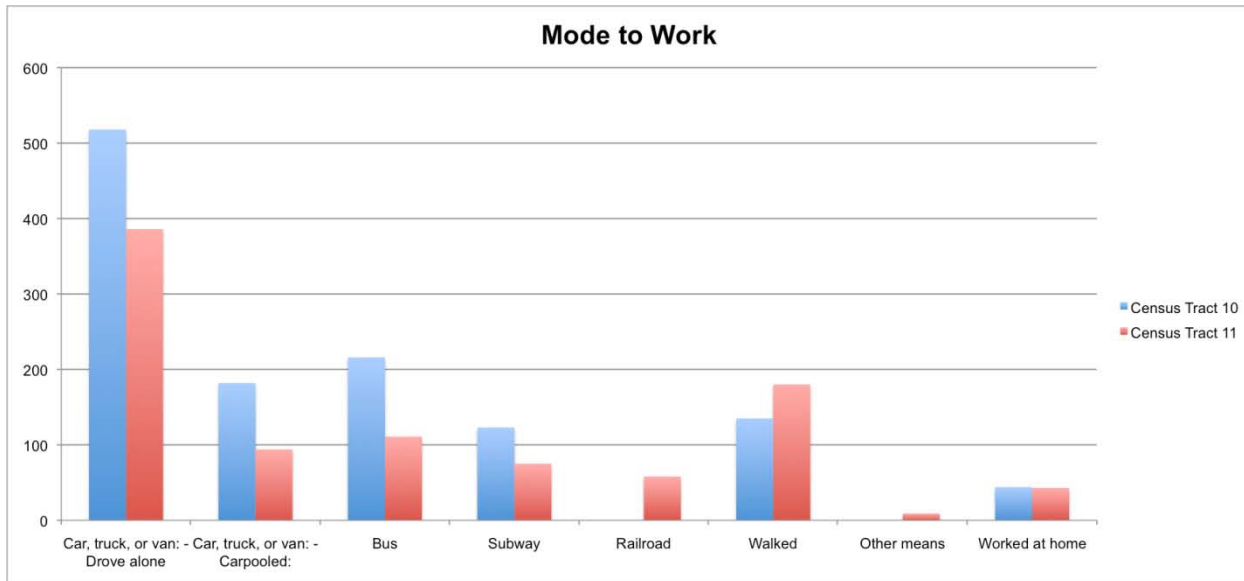
Car ownership is low in the study area, with 36% of households having no car. This is similar to the average for Newark. This emphasizes the importance of access to transit and of walking and cycling for residents of the neighbourhood for access to jobs, school, healthcare and so on.



Source: American Community Survey 2006 – 2011 5-Year Average, US Census Bureau

JOURNEY TO WORK DATA

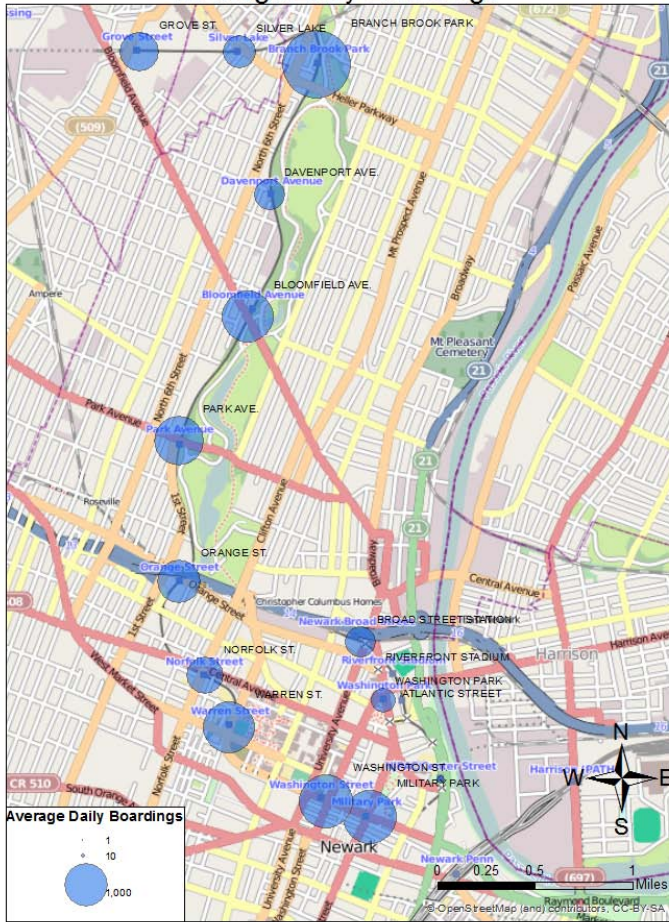
The following chart shows the number of journeys to work made by each mode. After car, the next most used mode is bus, followed by walking and then carpooling. Subway is the fifth most used mode. This emphasizes the importance of these other modes to the neighborhood.



Source: American Community Survey 2006 – 2011 5-Year Average, US Census Bureau

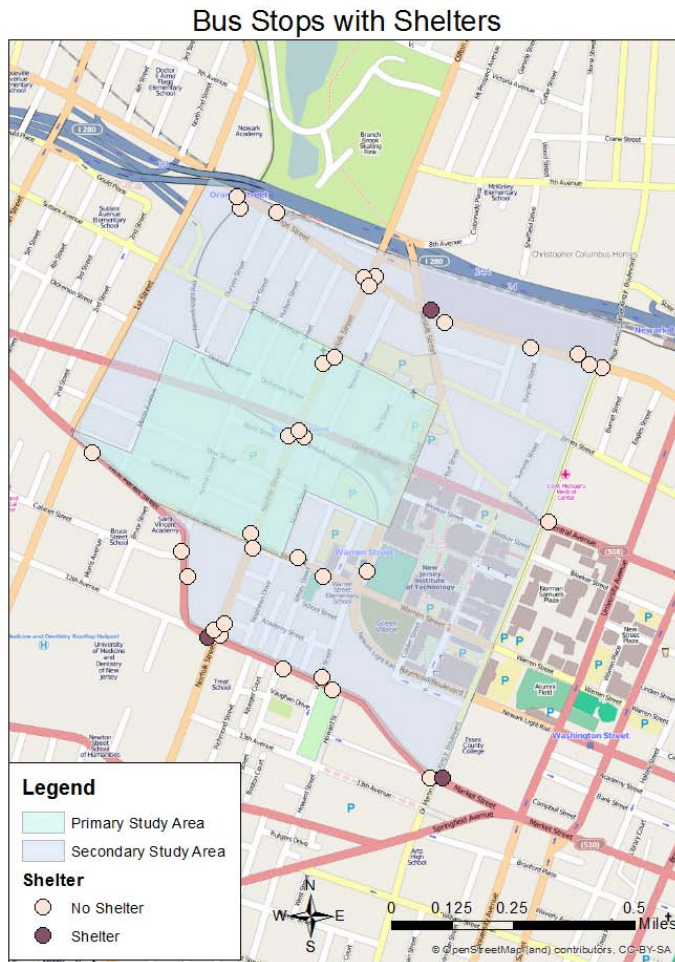
LIGHTRAIL RIDERSHIP

Average Daily Boardings



Source: NJ Transit. The following chart shows average daily boardings for Newark Light Rail Stations. Norfolk Street Station had an average of 744 boarding per day; ranking tenth out of the seventeen stations on the system and lower than the stations either side of it. This suggests there is potential to increase ridership

BUS AMENITIES



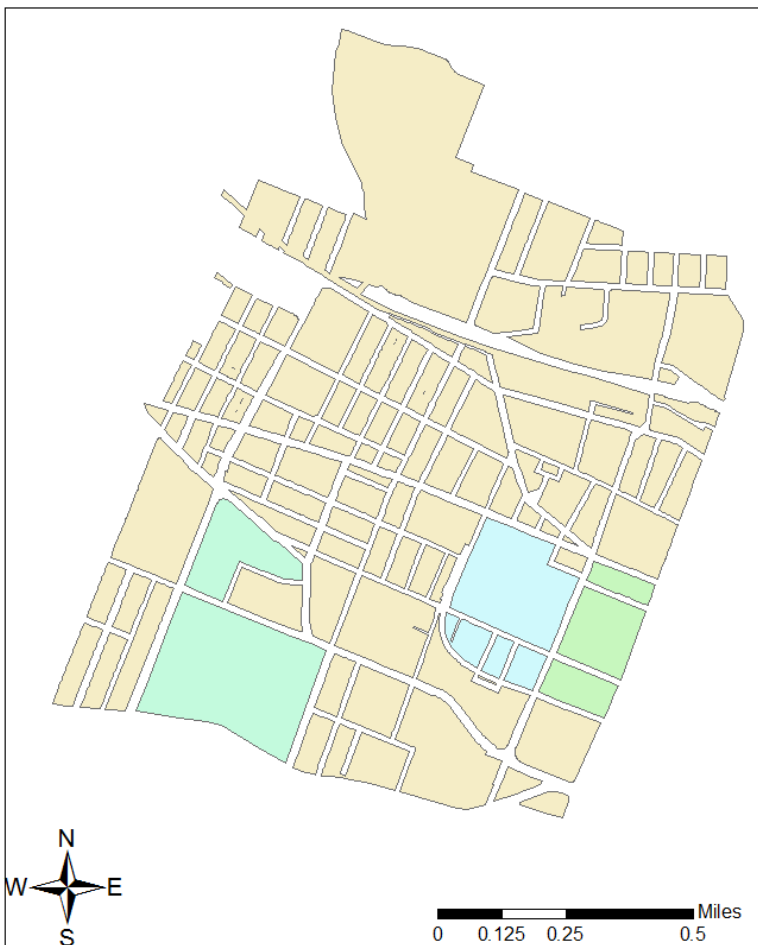
Source: NJ Transit. Only three bus stops in the study area have bus shelters. Of the stops without shelters information and signage is inconsistent and is generally lacking.

PEDESTRIAN CONNECTIVITY AND SAFETY

A determining factor for how easily pedestrians can find their way around the neighborhood is a regular street grid with shorter block lengths. Shorter blocks also enable pedestrians to take a more direct route. The average block length in the study area is 377 feet. This compares well to other neighborhoods in Newark: the average block length in the Central Business District (CBD) is 354 feet and in the North Ironbound is 384 feet. (Source: Walkscore website)

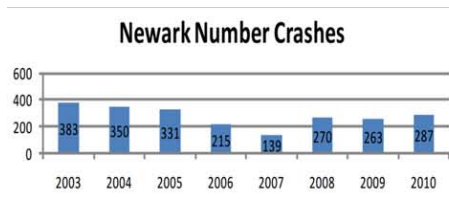
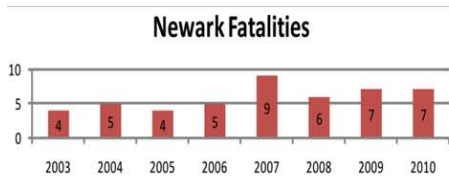
The number of intersections is important because it determines the spacing between crosswalks. The further apart crosswalks are the more likely pedestrians are to jaywalk, which increases the risk of pedestrian-vehicle accidents. The study area compares well to other neighborhoods in Newark, with an average of 185 intersections per square mile, compared to 206 in the CBD and 183 in the North Ironbound (Source: Walkscore.com).

Despite this, the presence of large blocks around the study area owned by NJIT, Rutgers and UMDNJ decrease the walkability of the neighborhood:



Source: NJ Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS)

Pedestrian Vehicle Crashes 2003- 2010



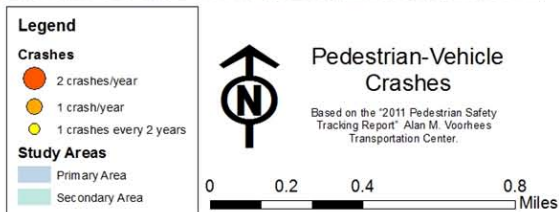
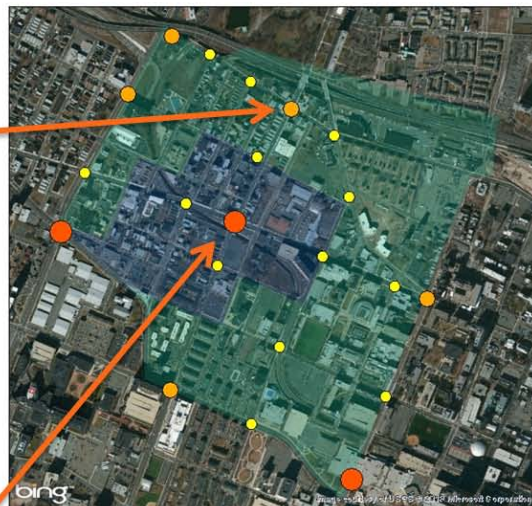
Source: New Jersey Bicycle and Pedestrian Resource Center <http://njbikeped.org/wp-content/uploads/2012/05/2011-pedestrian-safety-tracking-report-final.pdf>



Norfolk St & Orange St



Norfolk St & Central Ave



There are numerous pedestrian/automobile conflict hot spots within the study area. Two key intersections include Norfolk Street and Orange Street and Norfolk Street and Central Avenue. Our proposal has suggested both short and long term solutions to increase pedestrian safety.

POTENTIAL FUNDING SOURCES

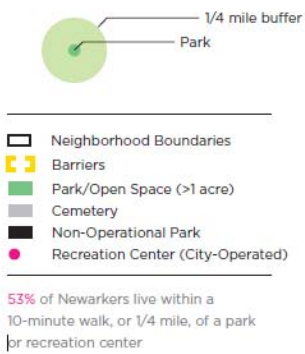
- Safe Streets to Transit
 - State program to improve safety and accessibility for people walking to transit facilities
- Bikeway Grant Program
 - NJDOT program to provide funds to promote cycling. Particularly focused on buffered bike lanes
- Municipal Aid
 - Can be used for cycling and walking projects
- EZ Ride (TMA)
 - Fund a variety of programs, including carpooling and shuttles for businesses and universities, mobility programs for seniors and people with disabilities, a bicycle locker program at stations, Safe Routes to Schools and a pilot bike share project in Newark
- Bikes Belong
 - Fund bike paths, lanes and lockers
 - Prefer to work with partnerships comprising public, private and non-profit entities

GREEN SPACE

CURRENT CONDITIONS

- University Heights only has one park, Boys Park Site in the neighborhood and another large park within walking distance for the northern section of our study area.
- Boys Park Site is 1.39 acres in size. That gives our study area 1.39 acres of open space for the 4,000 residents of University Heights.
- “Newark has one of the lowest acreages per capita of any major city in the country – with 3.1 acres per 1,000 residents.” Newark Master Plan

FIG 6.2: Access to Parks and Recreation Centers
Newark, NJ, 2012



Source: City of Newark, 2012

Orientation Scale

N
0 1/4 1/2 3/4 1

ESSEX COUNTY JAIL SITE

- The Essex County Jail site could prove to be a good prospect for a neighborhood park.
- The City of Newark owns the jail site but there is a good deal of uncertainty about what to do with this site.
- There was a plan to develop a 50-acre science and technology park but the Preservation commission rejected the plan because it doesn't want all of the existing buildings to be destroyed.
- The City of Newark secured a \$50,000 New Jersey Historic Trust grant for the jail site. The grant should prepare a study to determine existing conditions and potential for reuse of the buildings.



Source: Citynoise.org



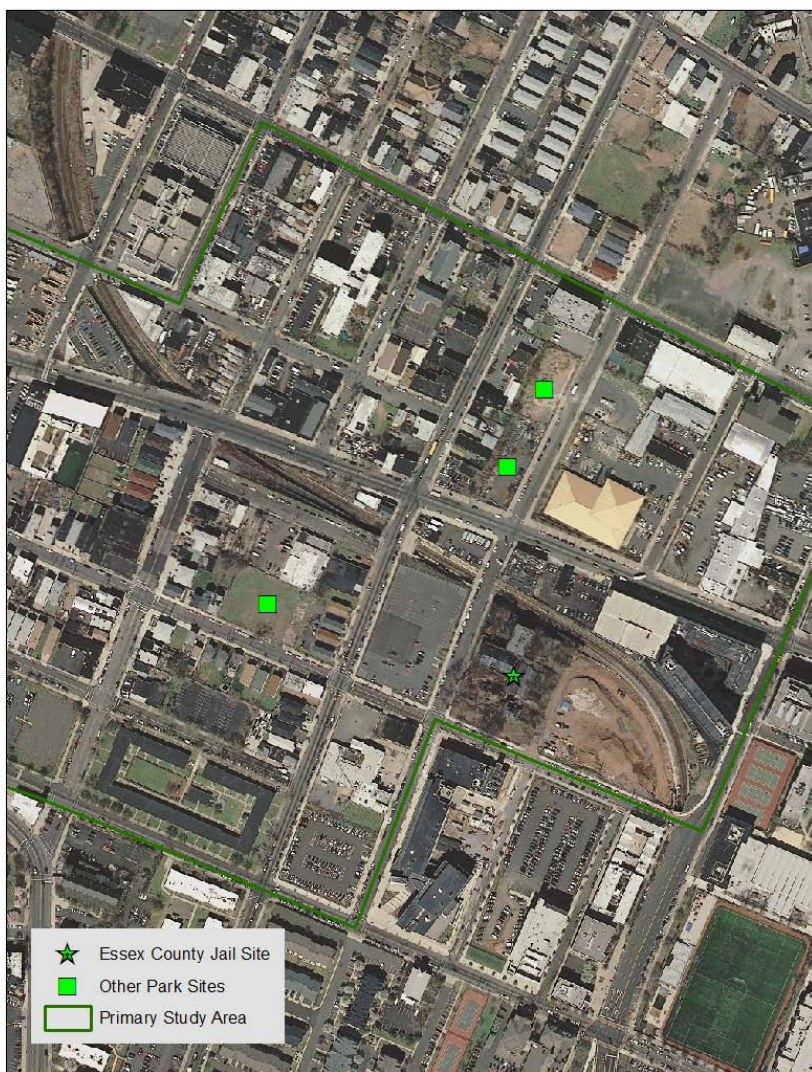
Source: Citynoise.org

Scenarios for Essex County Jail Site

Option	Pros	Cons
Historical Landmark Park	<ul style="list-style-type: none"> Gain revenue from the sale of tour tickets Create an attraction for the station and neighborhood Give the community some sense of identity 	<ul style="list-style-type: none"> Clean up and restoration would take time and money Tours may not be possible because of the state of disrepair Charging the public for tickets may upset the study area population
Park with Renovations	<ul style="list-style-type: none"> The park could be visited by all without the obstacle of tour fees The remaining structures would be an integral part of the park and will retain some historical significance The preservation committee or cultural arts could help run the park and a neighborhood park is added to this area 	<ul style="list-style-type: none"> Determining which buildings to keep or demolish will take time and money Upkeep of the remaining structures may be expensive
Brand New Park	<ul style="list-style-type: none"> A neighborhood park is added to the area The neighborhood park gives 	<ul style="list-style-type: none"> Cleanup and continued funding of the park may not be possible

	many residents and a school an open recreational space within walking distance.	
No Park	Space could be used for a Science Park development City could sell the land for revenue to a developer	The site will continue to be derelict and decompose further, making it unsafe and blighted If developed, the historical significance of the jail will be lost Residents in the study area will not have a park within walking distance The site may become dangerous to public health

OTHER POTENTIAL PARK SITES



Corner of Central and Newark Ave.

- This lot could potentially serve as a temporary playground or community garden until the city finds a use for it
- It would take a significant effort to clean up and create a temporary playground or community garden

RECOMMENDATIONS

PARTNERSHIPS

- Create a partnership: “Build organizational capacity for planning among universities and neighborhood residents to address the larger educational and economic development needs of the City” (Newark Master Plan, 2012)
- Public outreach campaign and survey
- Identify stakeholders from the community
- Organize planning committee
- Explore funding Opportunities
- Determine community organization structure
- Create a neighborhood plan with an open and inclusive process.
- Explore local hiring programs through educational institutions.
- Continue to develop community cohesiveness and strengthen the links between surrounding neighborhoods

HOUSING & ECONOMIC DEVELOPMENT

- Extend the Brick City Development Corporation’s College Town Incentive Program to include our study area
 - Provides rental subsidies and grants for renovating existing structures
- University Grants/ Incubator
 - Housing Grants for University Employees
- Science, Technology, Engineering, Mathematics Sector
 - Similar to those found in Washington, Massachusetts, & Florida
- City, County, State, and Federal Tax Credits & Programs
- Community Development Block Grants, Brownfields Economic Development Initiative, Urban Transit Hub Tax Credit, New Markets Tax Credits, Urban Enterprise Zone, Business Employment Incentive Program

TRANSPORTATION AND LIGHTRAIL STATION

- Modernize the station
 - Improve visibility
 - Protection against the elements
 - Improve entrances and add landscaping
- Consider a small park near the station
- Incentive drivers to take preferred routes with effective street design
- Address accident-prone spots
- Utilize a mix of traffic calming measures, street design etc. where appropriate
- Make improvements consistent with a Complete Streets Plan (Traffic Calming) and Box & beyond Guidelines
- Follow new master plan guidelines on zoning and development possibilities
- Add additional way finding signs for pedestrians
- Improve pedestrian amenities (sidewalk connectivity and safety)
- Install bus shelters
- Enhance personal security of people waiting at stops

GREEN SPACE

- Short Term
 - Redevelop the jail site
 - Start community gardens on vacant lots
 - Clean up garbage and debris
 - Improve connections to Branch Brook Park

LONG TERM VISION

- New neighborhood node with mixed use/retail/restaurants along Central Avenue/ Norfolk Street
- Use of a developed Complete Streets Policy to remedy safety issues
- Urban Plaza at the Light Rail Station for increased pedestrian and bike amenitie
- Increase Green Space, especially with pocket parks throughout the neighborhood and expanded Essex Jail Park including urban agriculture and gardens
- Medium Density, 6-8 Stories with Corner Accents along corridors
- Neighborhood townhouses and housing infill using design guidelines to address housing affordability along residential streets
- Expansion of Science Park with more incubator companies, STEM, and tech-related corporations
- The Community Partnership within the neighborhood becomes a leader in making these visions elements a reality



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