



Frelinghuysen Corridor Redevelopment Plan

Fall 2018 Graduate Design Studio

Client: City of Newark

Edward J. Bloustein School of Planning & Public Policy

Rutgers, The State University of New Jersey

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DESIGN STUDIO SEQUENCE 2017-2019

- Part 1: Newark at the Crossroads, Bloustein Fall 2017, Graduate Studio
- Part 2: Newark Aerotropolis, Bloustein Spring 2018, Graduate Studio
- Part 3: Dayton Neighborhood, Bloustein Spring 2018, Graduate Studio
- Part 4: Weequahic Neighborhood, Bloustein Spring 2018, Graduate Studio
- **Part 5: Frelinghuysen Avenue Corridor Study, Bloustein Fall 2018, Graduate Studio**
- Part 6: NJIT NACA – Headhouse, Fall 2018, Graduate Studio
- Part 7: Airport City, UPENN Spring 2019, Graduate Studio

AGENDA

- Introduction
- Redevelopment Area
- Vision
- Existing Conditions
- Real Estate Value Analysis
- Demographics
- Alternative 1: 'Portal to the World'
- Alternative 2: 'Adaptive Reuse'
- Q&A

THE REDEVELOPMENT AREA

- Plan Area is located in southern tip of **Newark, NJ**, 4 miles west of **Newark Liberty Airport**
- Approximately **290 acres**
- Bounded by **Weequahic Park** to the west, railroad tracks parallel to Frelinghuysen Ave to the east, I-78 Express to the north, and Virginia St to the south.
- 4 miles west of **Newark Liberty Airport**
- Historically **industrial**.
- Site area likely qualifies as an “area in need of redevelopment” (N.J.S.A. 40A:12A-14) given its **vacant and boarded up buildings** and **trash and weed-ridden environment**.



FRELINGHUYSEN 2050

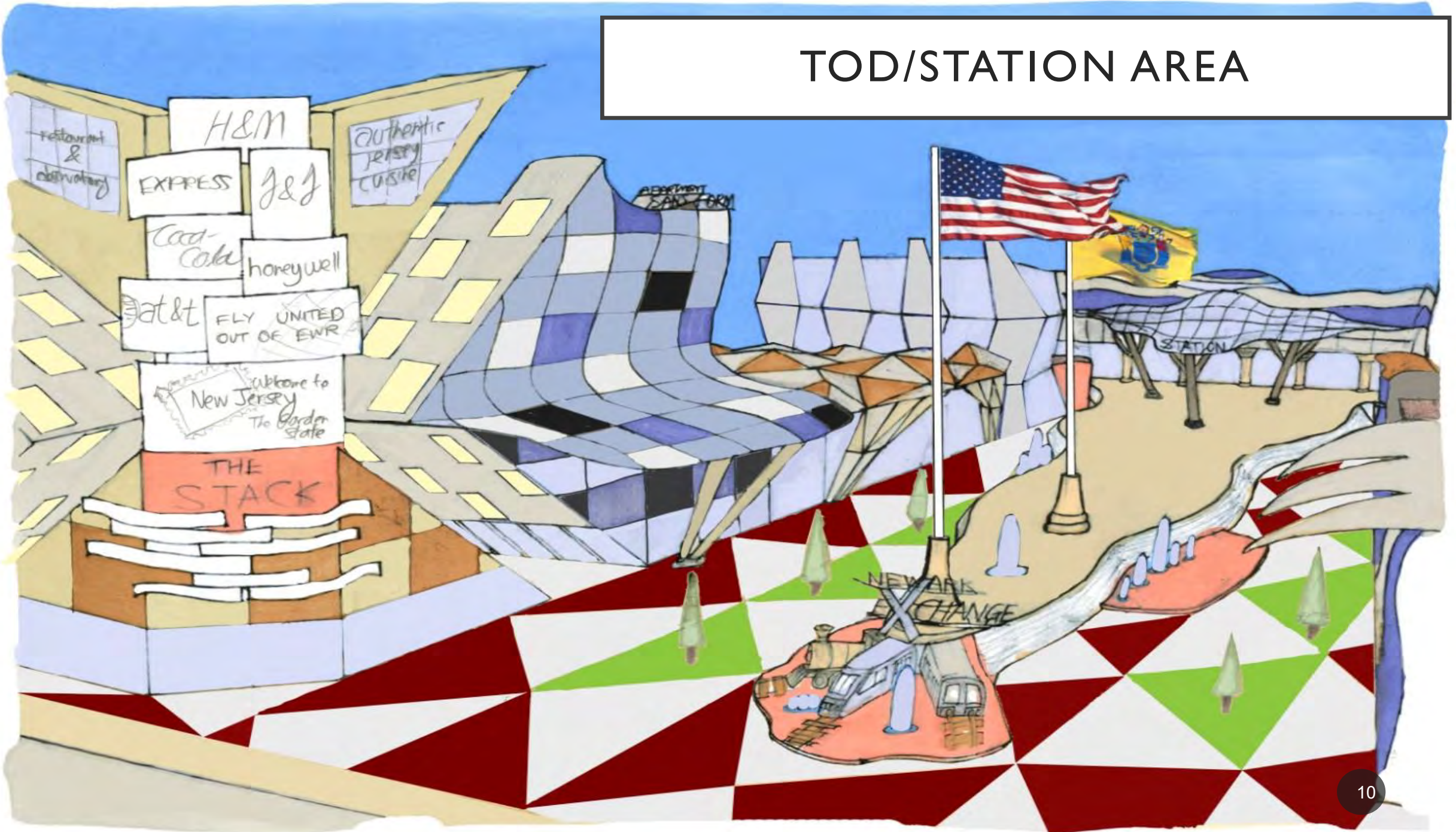
Our Vision

- Build **DIVERSE** and **WELCOMING** communities that are multicultural, intergenerational and affordable
- Spur **ECONOMIC GROWTH** in the site area and facilitate creation of **LOCAL BUSINESSES** and high-quality **JOBS** for residents
- Promote **ACTIVE LIVING** and **HEALTHY** lifestyles through design
- **BEAUTIFY** the neighborhoods' buildings and landscapes
- **RESTORE** the site area from contamination

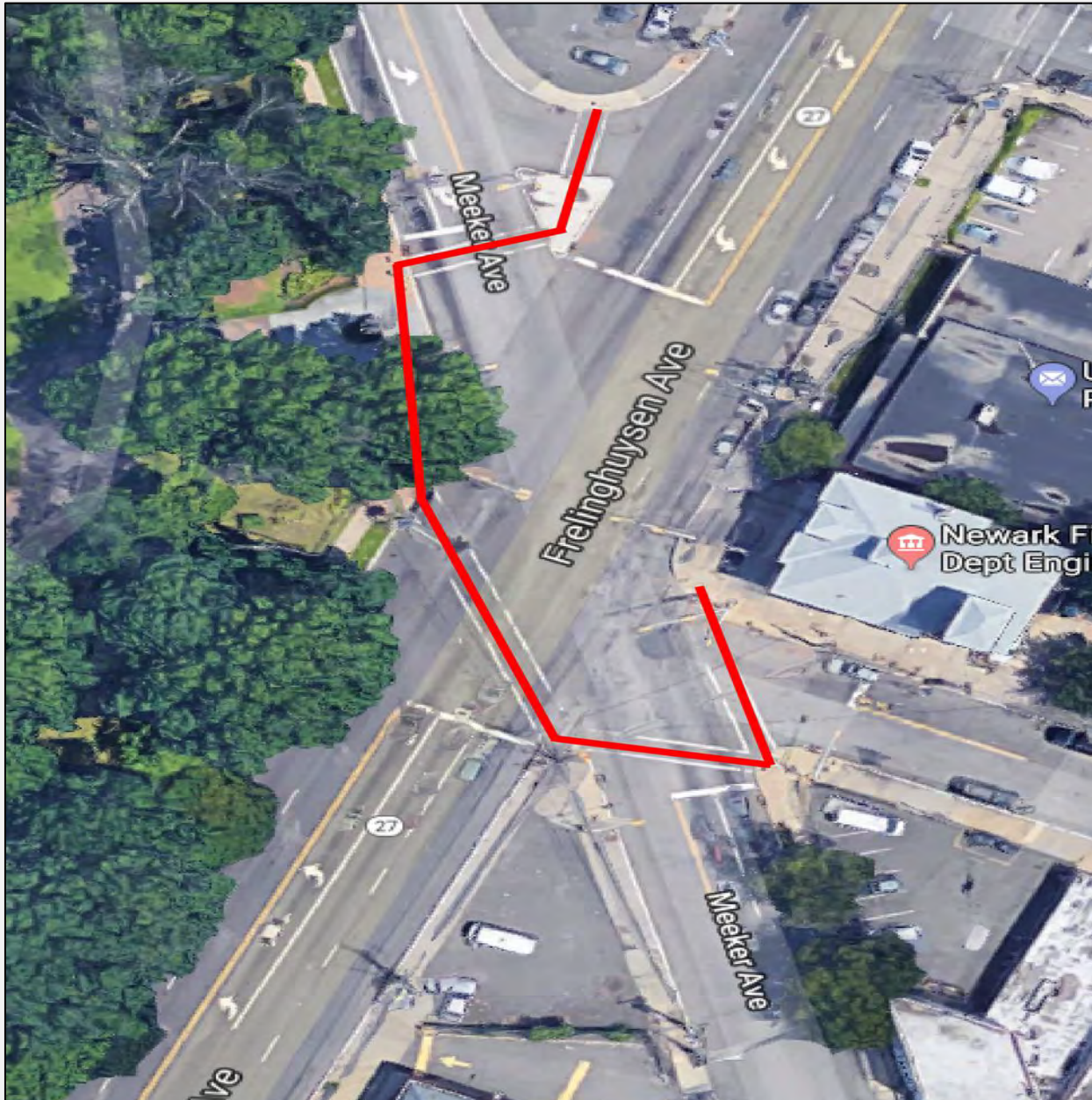


INSPIRATION THROUGH 3D HAND RENDERINGS

TOD/STATION AREA



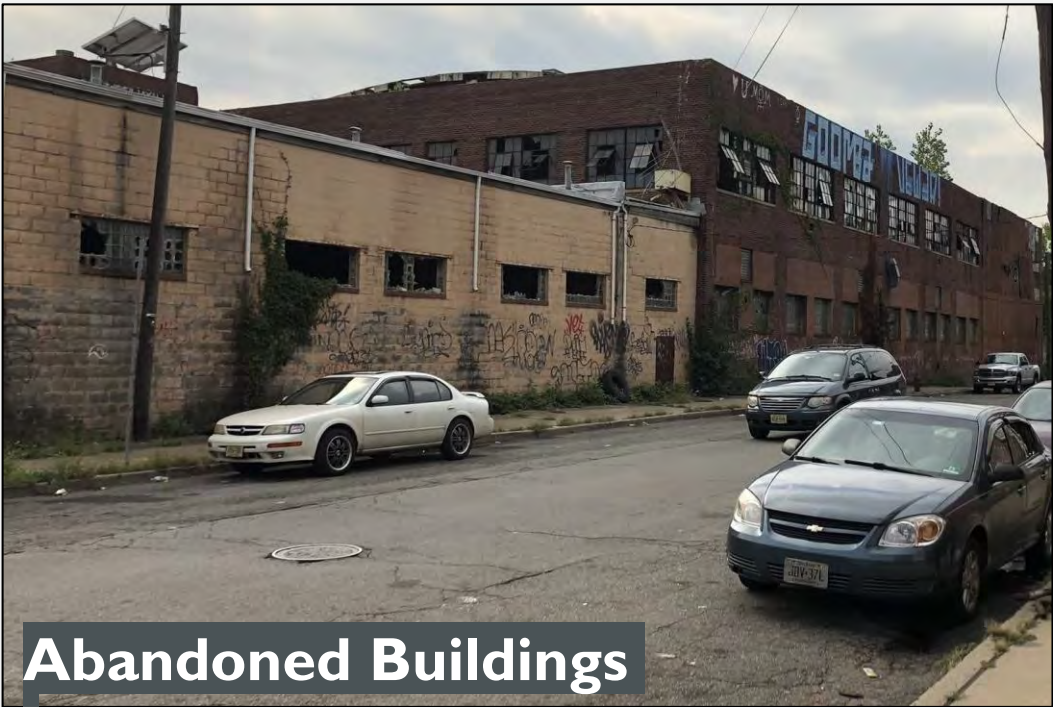
EXISTING CONDITIONS



Dangerous Intersections and High Speed Limits

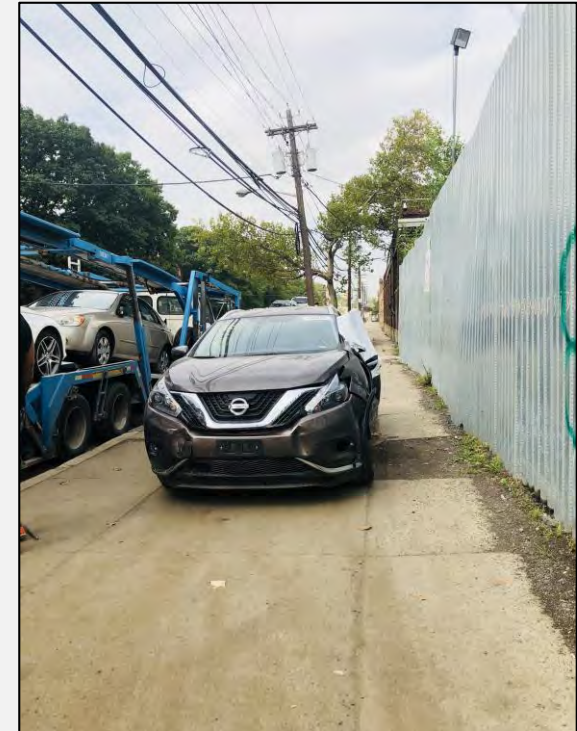
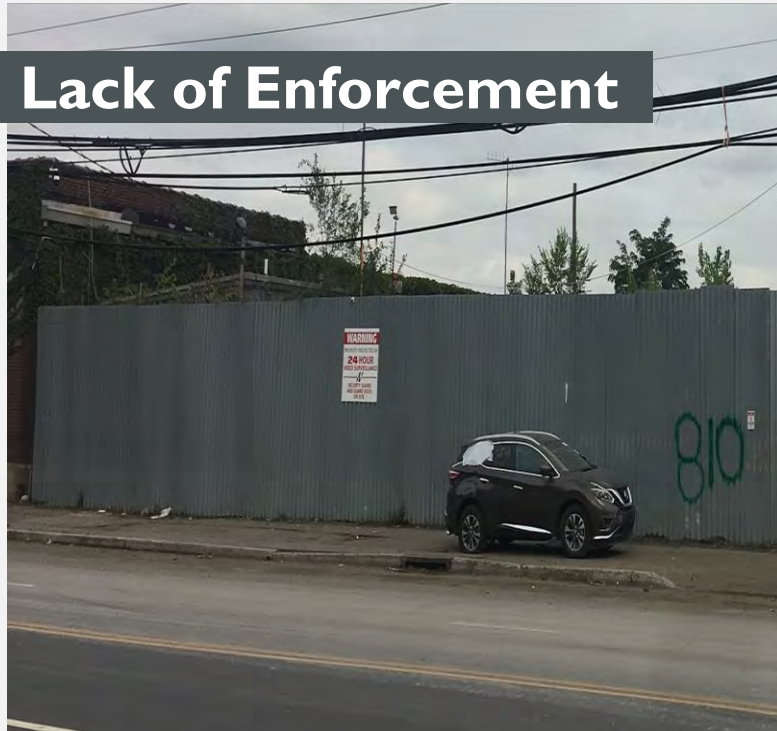


Abandoned Seth Boyden Housing Projects



Abandoned Buildings

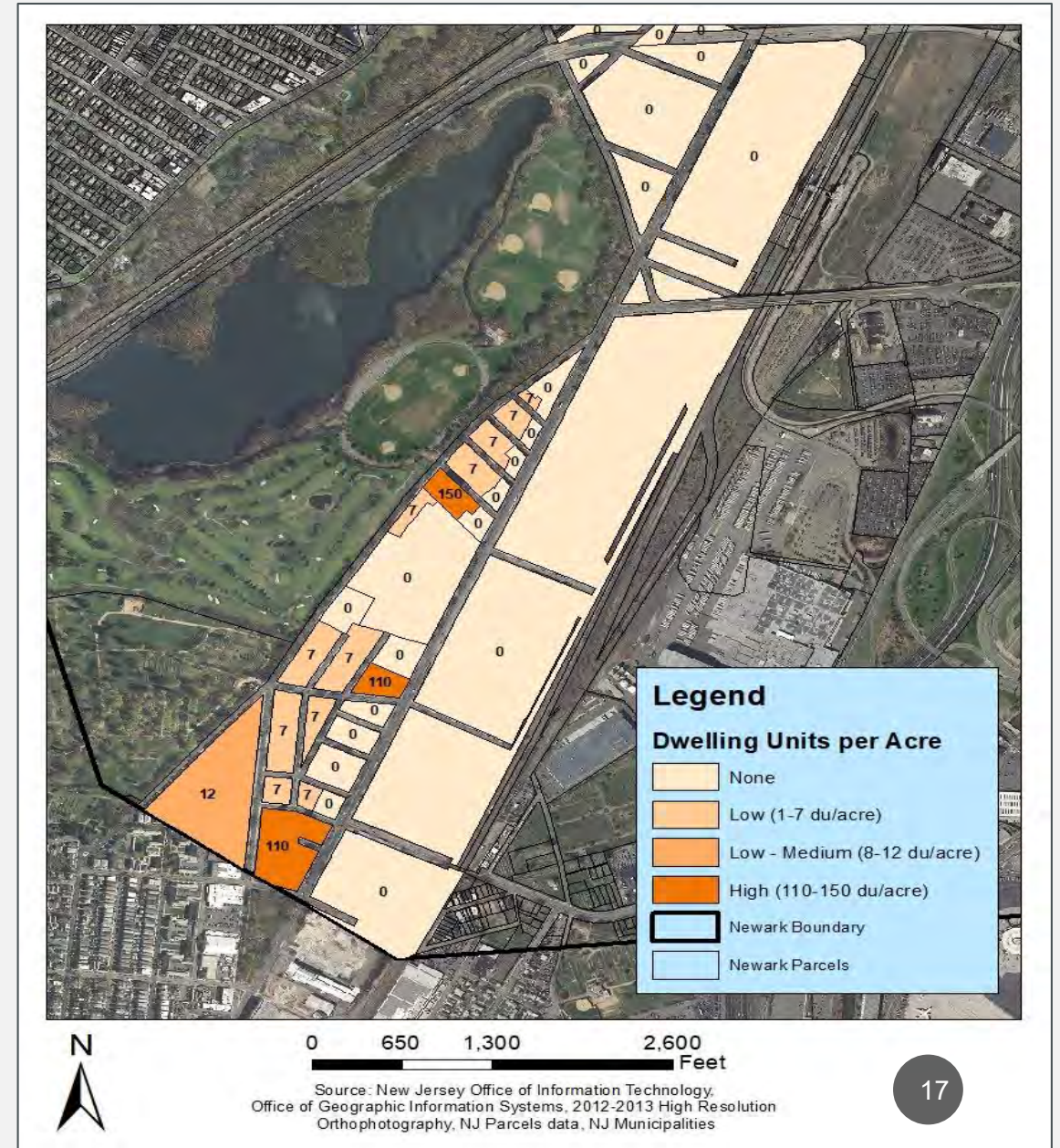
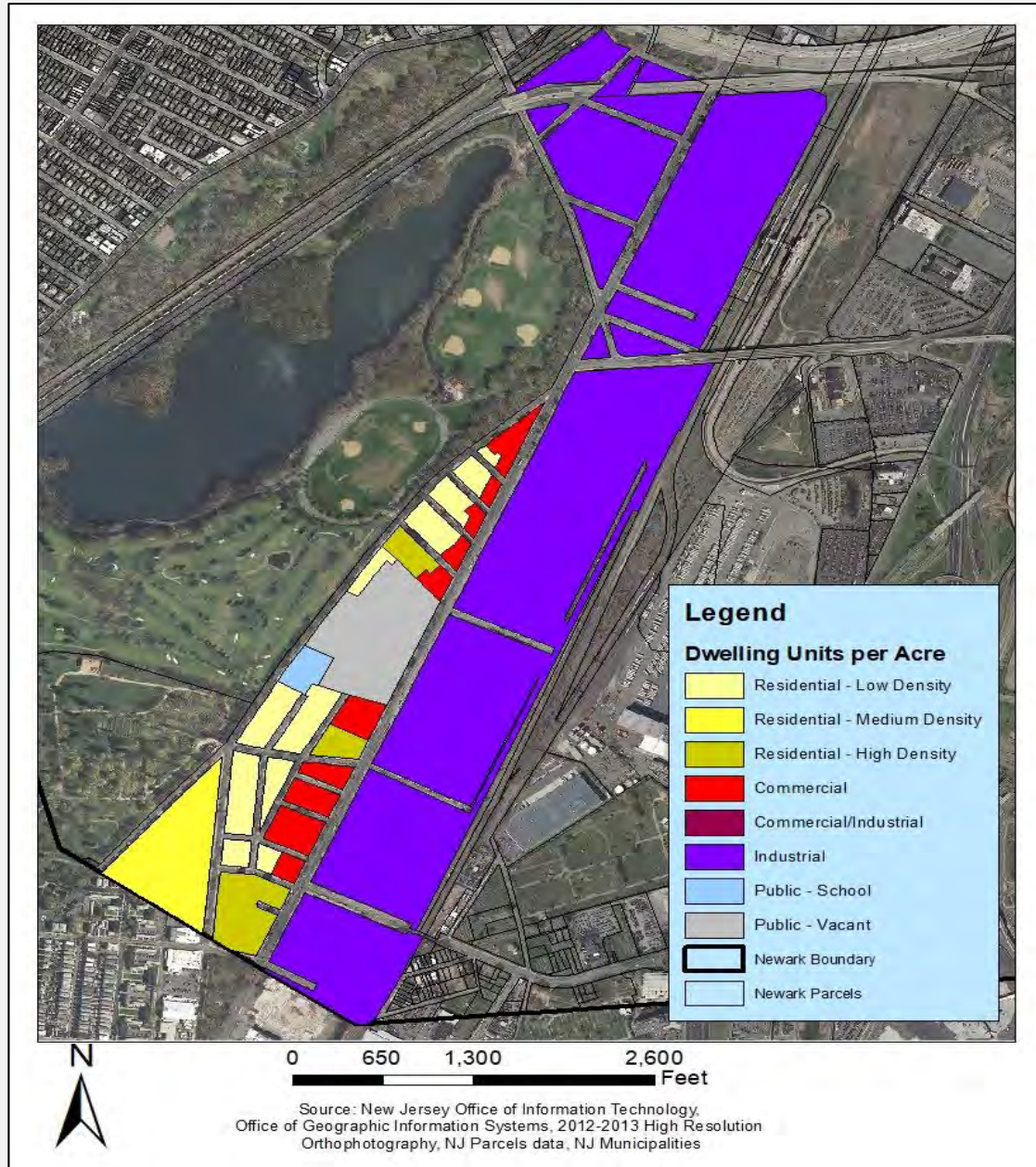
Illegal Parking and Lack of Enforcement



Poor Sidewalk Maintenance



Existing Land Use and Residential Density



PUBLIC PROCESS



Faith Leaders Community Meeting (10/11/2018)

Dayton Community meeting (11/13/2018)

Spur economic development

- Local businesses
- Skills development centers

Revitalize Seth Boyden site

- Include civic centers and low-income housing for families

Build a welcoming, livable community

- Create mixed-use development (4-8 stories) with ground-level commercial
- Ensure that train and bus systems are connected.
- Increase opportunities for homeownership.

Address environmental concerns

- Improve storm water management to prevent flooding
- Clean up contaminated sites

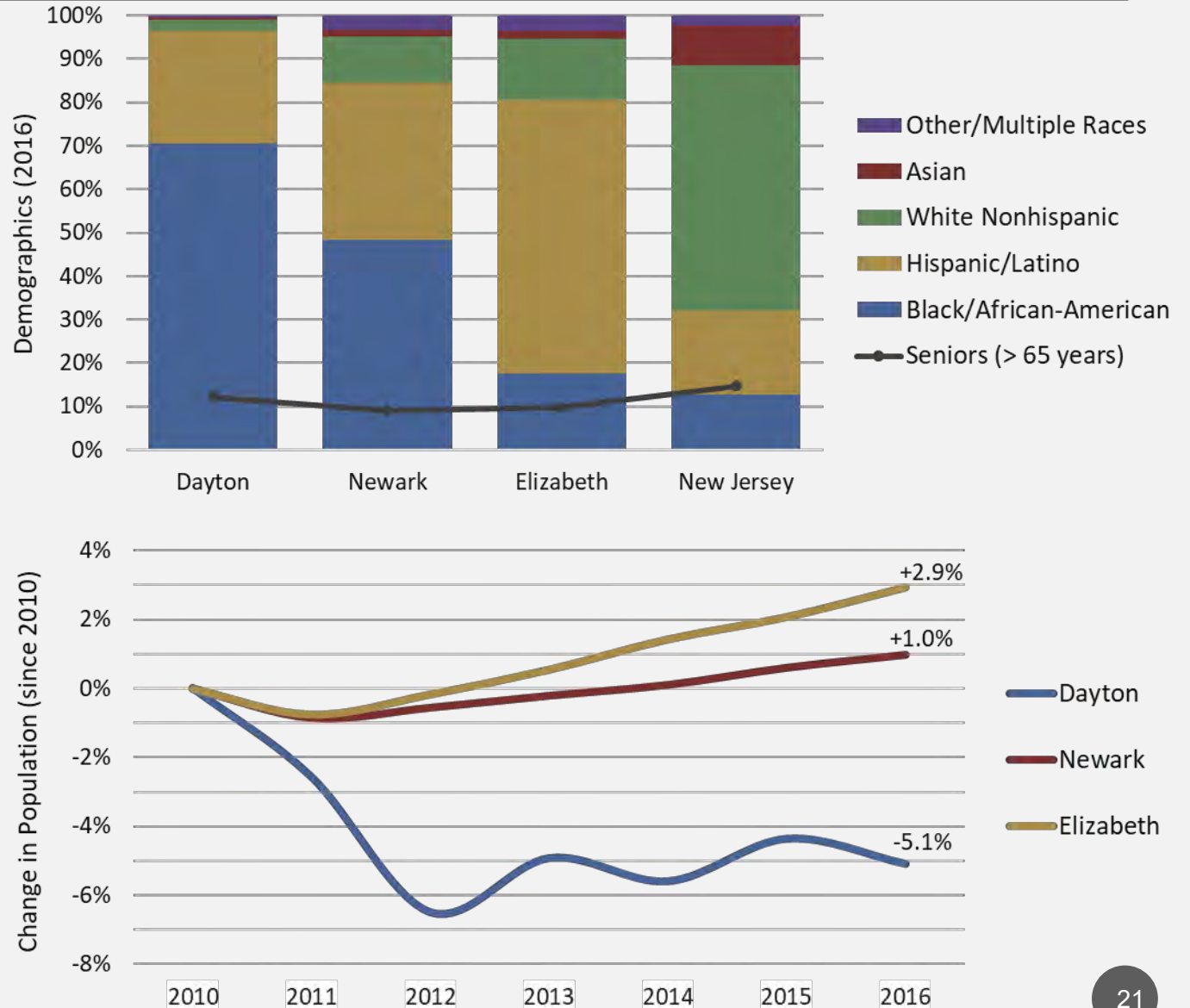
DEMOGRAPHICS

DAYTON – FRELINGHUYSEN CORRIDOR: DEMOGRAPHIC PROFILE

- Home to about 3,300 people in 2016
 - Pop. Density = 7,700 / sq mile (excluding park)
 - Less dense than Newark overall (11,580 pop/sq mile)

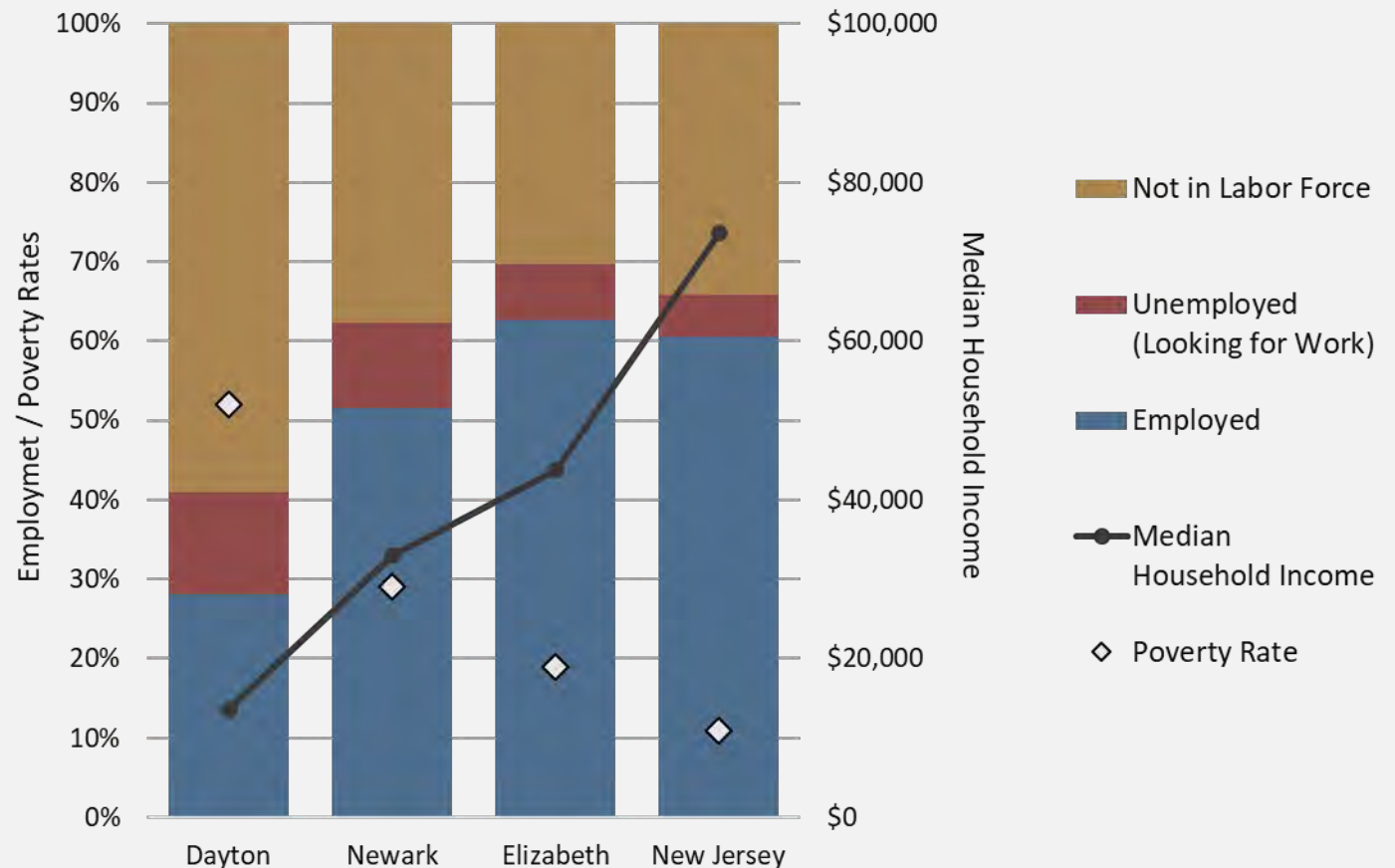
- About 58% of households live in public housing.

- Population has decreased -5.1% since 2010.
 - Newark (+1.0%) and Elizabeth (+2.9%) have increased total population over that time.



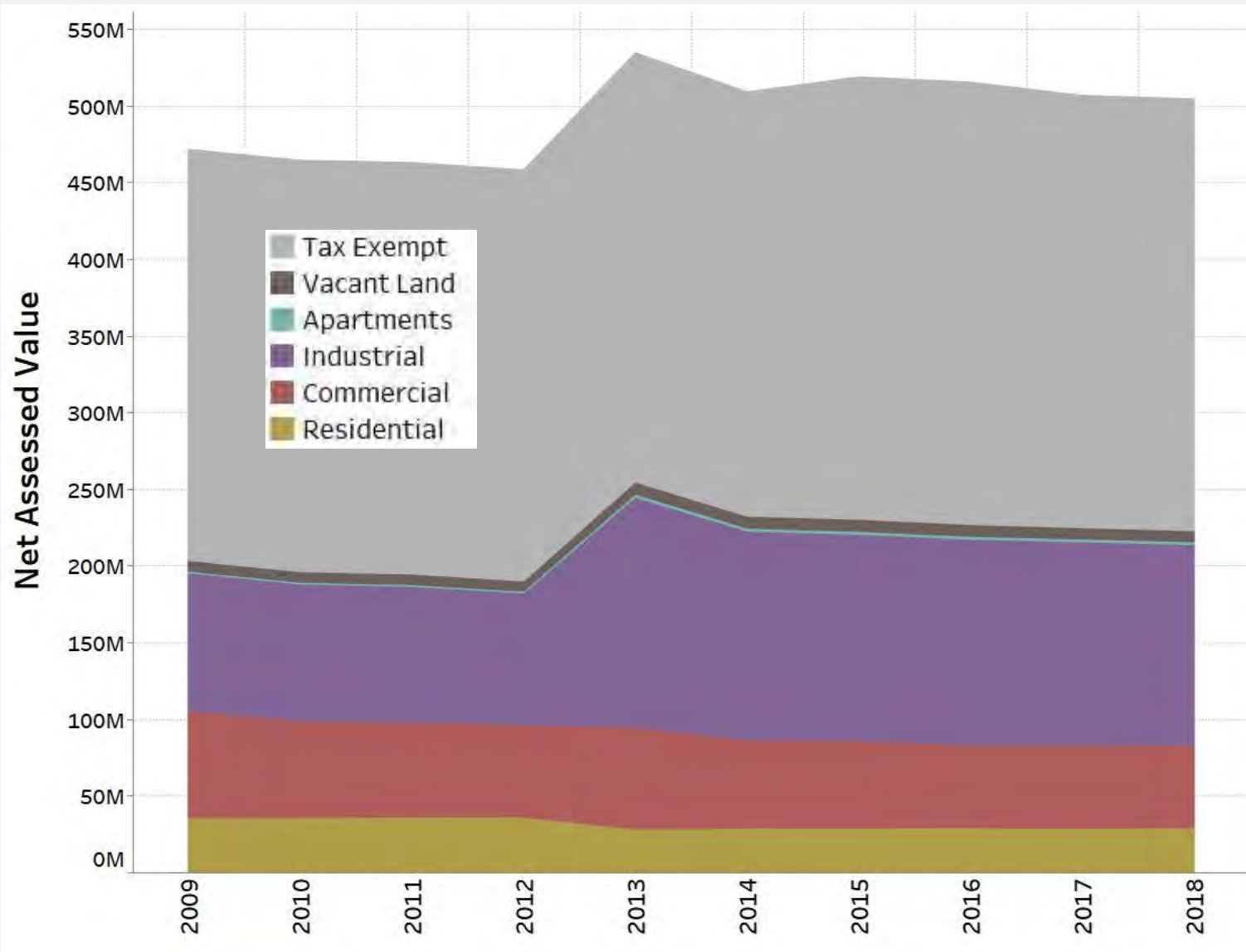
DAYTON – FRELINGHUYSEN CORRIDOR: SOCIOECONOMIC PROFILE

- Median Household Income = **\$13,690**
 - Far lower than Newark overall (median income = **\$33,025**)
- Economic divide between low-income public housing tenants and middle-class homeowners
 - About 6.5% of households own their home
 - Median household income among homeowners = **\$105,670**
 - Higher than median homeowner income in Newark overall (**\$63,790**)
- 59% of population is out of the labor force (retired or gave up looking)



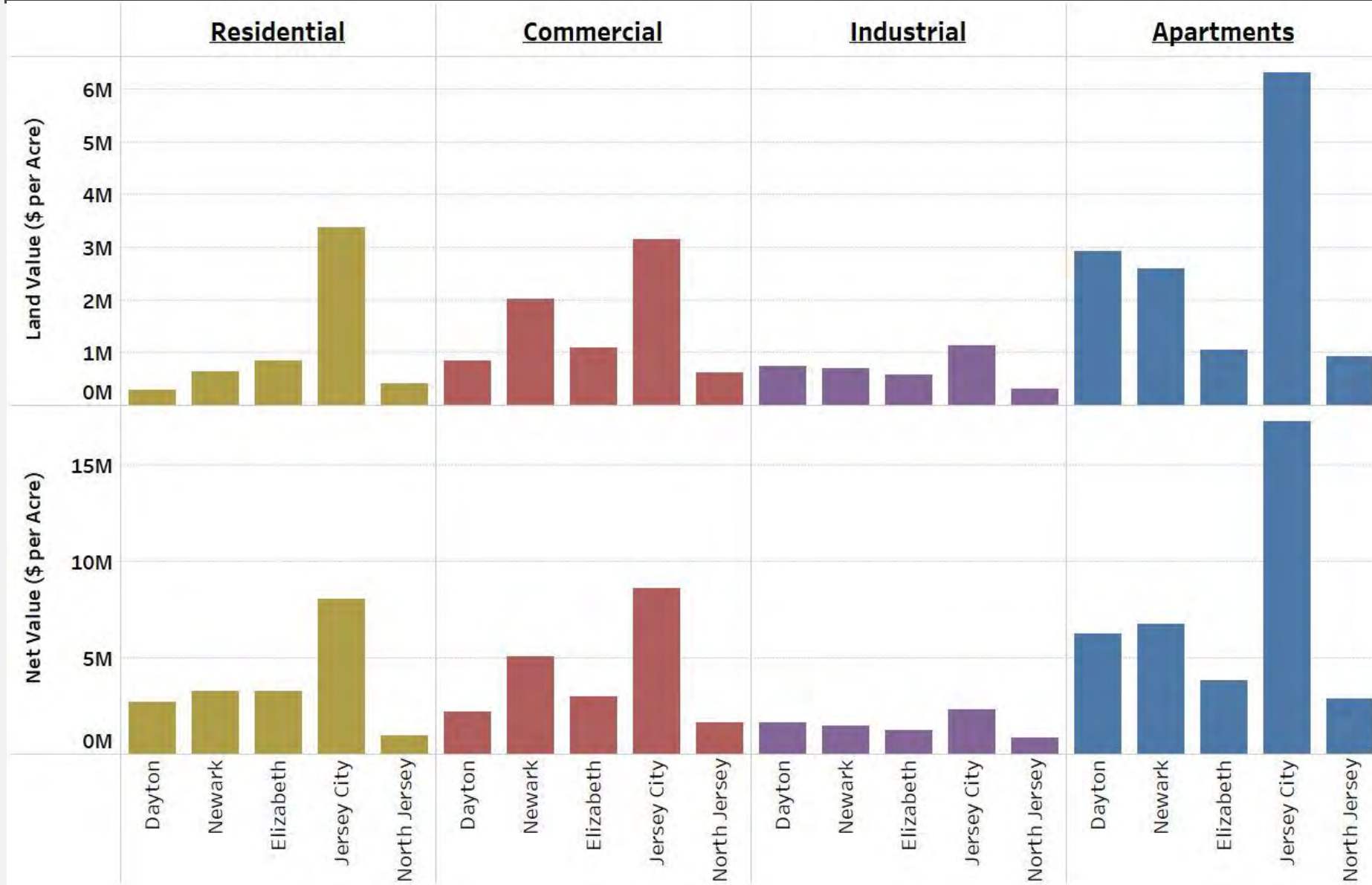
REAL ESTATE VALUE ANALYSIS

DAYTON – FRELINGHUYSEN: TAX BASE BY PROPERTY CLASS (2009 - 2018)



- Majority of property value in corridor is tax-exempt
 - Exempt property is mostly composed of public housing
- Industrial property is the largest share of net taxable value
 - Only class that has been growing since 2009
- Multifamily apartments (besides public housing) are currently a tiny share of the building stock
 - Opportunity for multifamily redevelopment of Seth Boyden site?

REAL ESTATE VALUE BY PROPERTY CLASS: DAYTON – FRELINGHUYSEN AND REGIONAL PEERS (2018)



- Residential and commercial values slightly lag neighbors
- Industrial is regionally competitive, but the lowest-value land use across the board
- Small commercial and apartment supply in Dayton

CURRENT HOUSING STOCK: DAYTON – FRELINGHUYSEN CORRIDOR

Private single-family homes

- Fairly large, well-maintained homes on low-density lots
- Large homes possible because land is relatively cheap
 - Land = **10.8%** of net assessed value
 - Compared to 19.4% in Newark; 26.3% in Elizabeth
- Only one low-rise privately-owned multifamily property



(142-156 Dayton St)

- Greater housing density would be expected to raise land values.

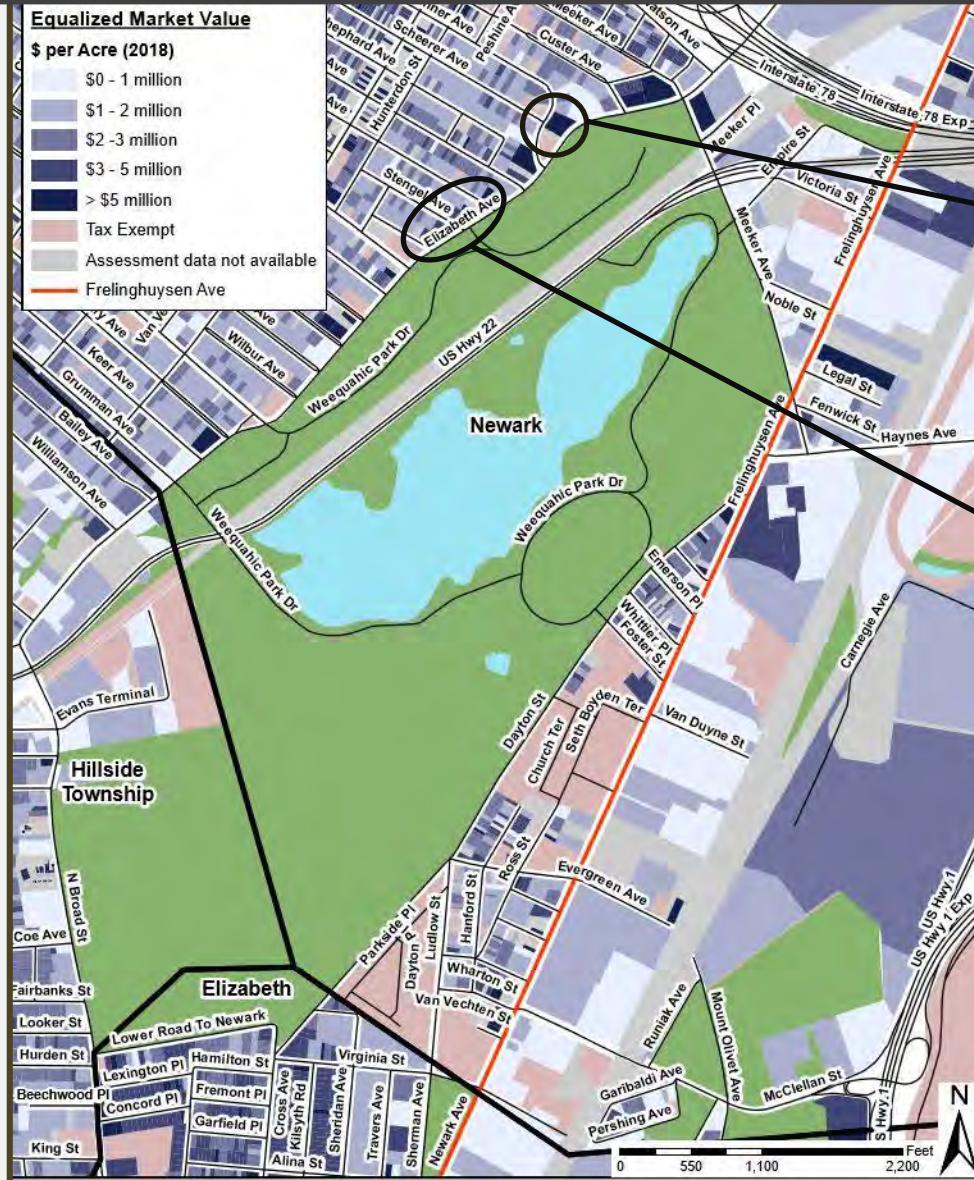


Newark Housing Authority

- Senior apartment housing at Seth Boyden and Otto Kretchmer (1,024 units)
- Townhomes at Otto Kretchmer (142 units)



LOCAL MARKET COMPARABLE: HIGHER-DENSITY APARTMENTS ACROSS WEEQUAHIC PARK



▪ Zion Towers (515 Elizabeth Ave)

- 268 units of low-income housing
- Built in 1969
- Sold in 2017 for \$28 million, developer plans to renovate



▪ Three apartment buildings sold to private investors in 2016 give a sense of multifamily valuations at medium densities



585 Elizabeth Ave
\$3.7 million



595 Elizabeth Ave
\$1.3 million



603 Elizabeth Ave
\$5.0 million

FINANCING REDEVELOPMENT: PUBLIC – PRIVATE PARTNERSHIPS

We expect that redevelopment of the Frelinghuysen Ave corridor will be driven by combination of **private market** forces and strategic **public investment**:

- Private developers will respond to fundamentally changing market conditions
 - We anticipate that addition of new PATH station with access to NYC will significantly increase residential demand
 - Changing zoning regulations to allow higher residential density will encourage private redevelopment, given sufficient demand.
 - Population growth from new housing and foot traffic from PATH station will provide customer base to support retail development
- PATH station adds substantial value to land along corridor, and we expect it to catalyze higher-density development if permitted.

- The City of Newark has low-cost tools available to support redevelopment
 - PILOT property tax relief
 - Tax Increment Financing (TIF)
 - Land sales from public inventory
- Local investments can be leveraged with federal tax credits or subsidized loans.
 - LIHTC for affordable housing
 - NMTC for job-creating commercial development
 - Regional CDFIs (e.g. NJCC, Reinvestment Fund) have specialized loan funds for designated uses
 - e.g. affordable housing, supermarkets, healthcare
 - Corridor is in a qualified low-income Census tract for many federal subsidies.

SUMMARY – REAL ESTATE AND REDEVELOPMENT

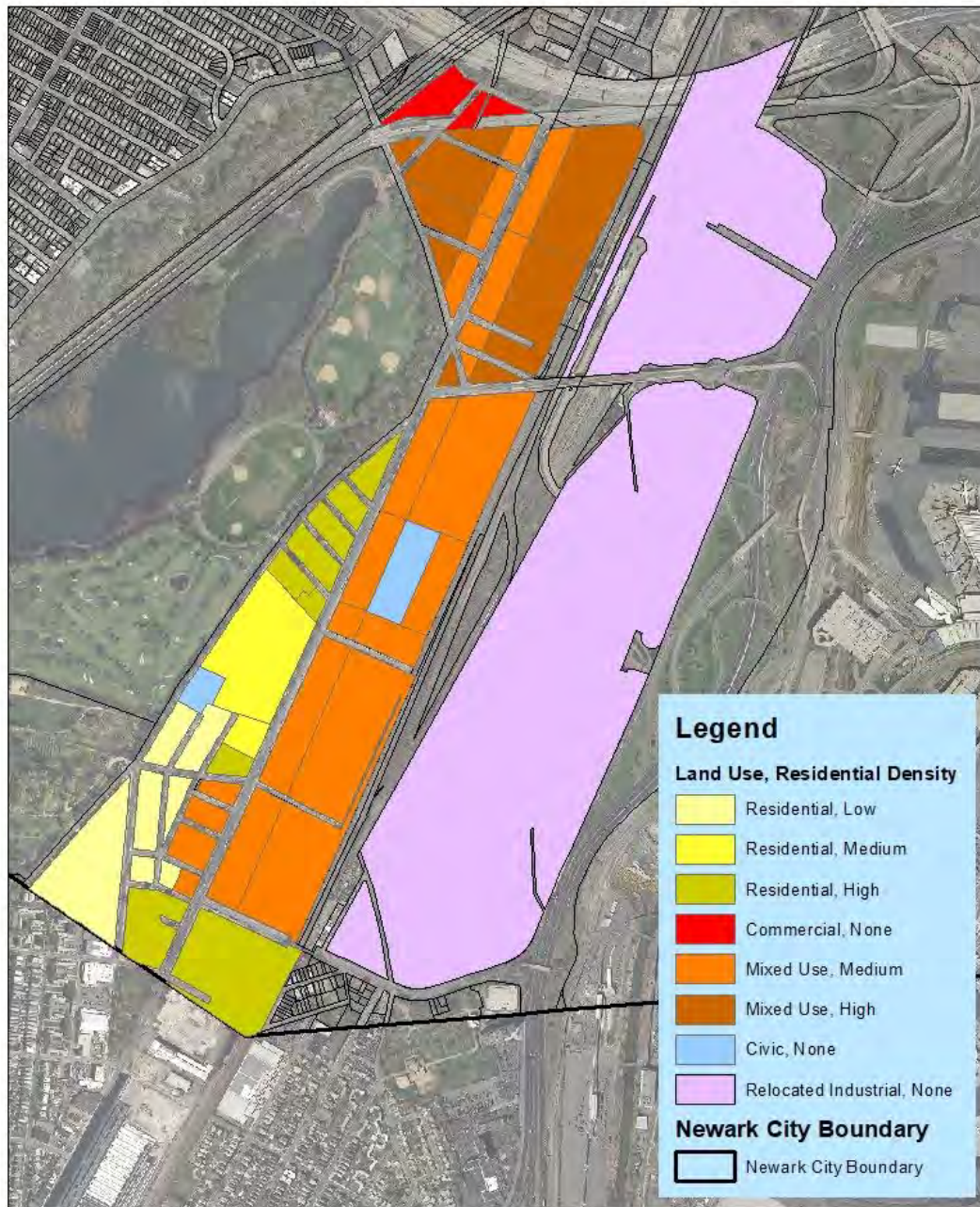
- Frelinghuysen Ave has historically been an industrial corridor, but the addition of the PATH station is likely to generate new demand for residential and commercial real estate. This creates opportunities for public-private redevelopment:
 - City can stimulate and influence redevelopment with its land resources and PILOT authority. Federal tax credits and nonprofit lenders can help bridge financing gaps.
 - Market activity on Elizabeth Ave shows existing demand for dense apartment housing along Weequahic Park.
- Potential challenges and constraints to redevelopment include:
 - Potentially high environmental remediation costs when redeveloping industrial sites.
 - Uncertain future of abandoned Seth Boyden site.
 - Current lack of local jobs or consumer base.

'Portal to the World'

Alternative I

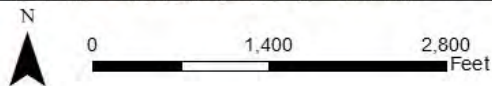


LAND USE RECOMMENDATIONS



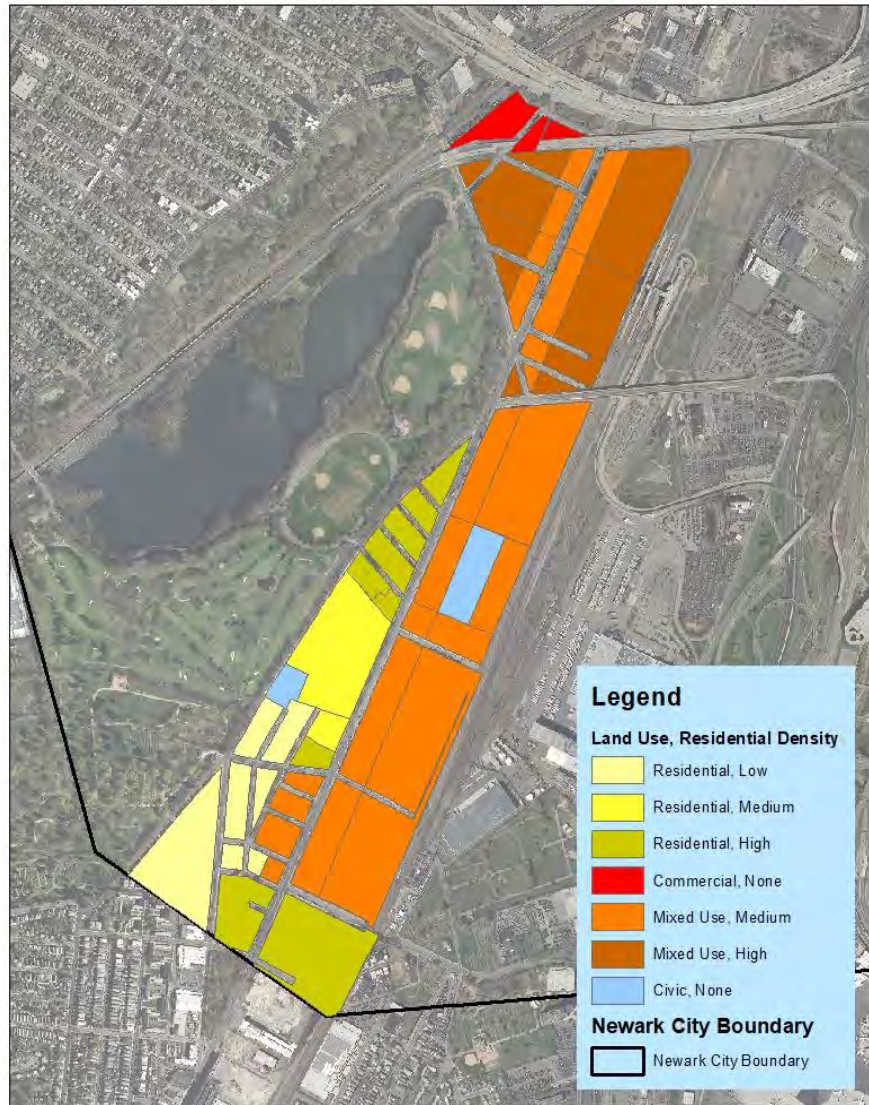
- TOD near PATH station
- Pedestrian pathway from train station to park
- Compact low and mid-rise housing in Seth Boyden
- Mid to high-rise residential buildings facing park
- Existing low-density residential will remain
- Existing industrial relocated to east of rail lines

Project Phasing: Approximate build-out by 2050

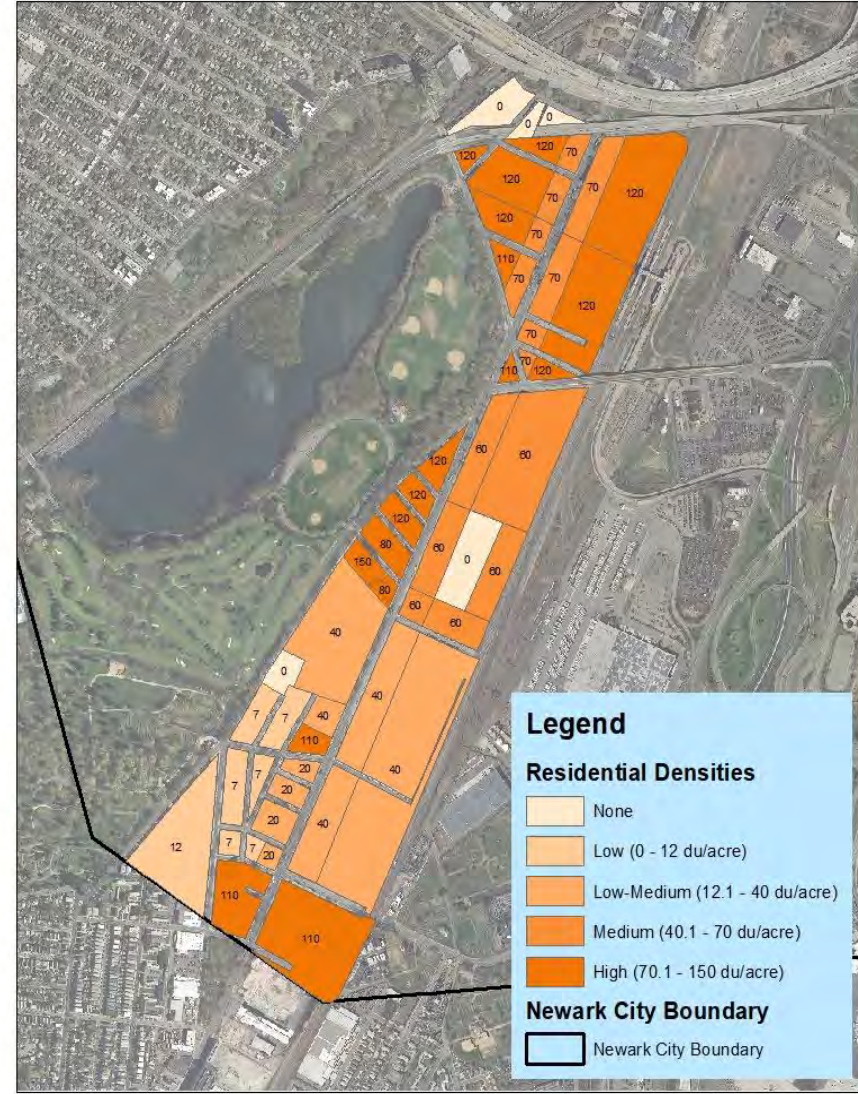


Source: NJ Office of Information Technology, Office of GIS, New Jersey 2012-2013 High Resolution Orthophotography, State of NJ Composite of Parcels Data, 2012 Land Use/Land Cover Wetlands, Municipalities of New Jersey, Road centerlines

Residential Densities and Population Demographics



Source: NJ Office of Information Technology, Office of GIS, New Jersey 2012-2013 High Resolution Orthophotography, State of NJ Composite of Parcels Data, 2012 Land Use/Land Cover Wetlands, Municipalities of New Jersey, Road centerlines



Source: NJ Office of Information Technology, Office of GIS, New Jersey 2012-2013 High Resolution Orthophotography, State of NJ Composite of Parcels Data, 2012 Land Use/Land Cover Wetlands, Municipalities of New Jersey, Road centerlines

Estimated Densities:

- 18,100 units
- Low: 39,900 people
- High: 51,300 people

Target Populations:

1. Local residents
2. NYC commuters attracted to more affordable housing
3. Employees for Newark Airport and related industries
4. People who can access other areas of Newark and northern New Jersey through newly created Bus Rapid Transit system

LAND USE ALTERNATIVE I



Existing Built Fabric

LAND USE ALTERNATIVE I- PHASE I



Phase I

Development of PATH STATION

LAND USE ALTERNATIVE I- PHASE I



Phase I

Development of **PATH STATION**
TOD around the station

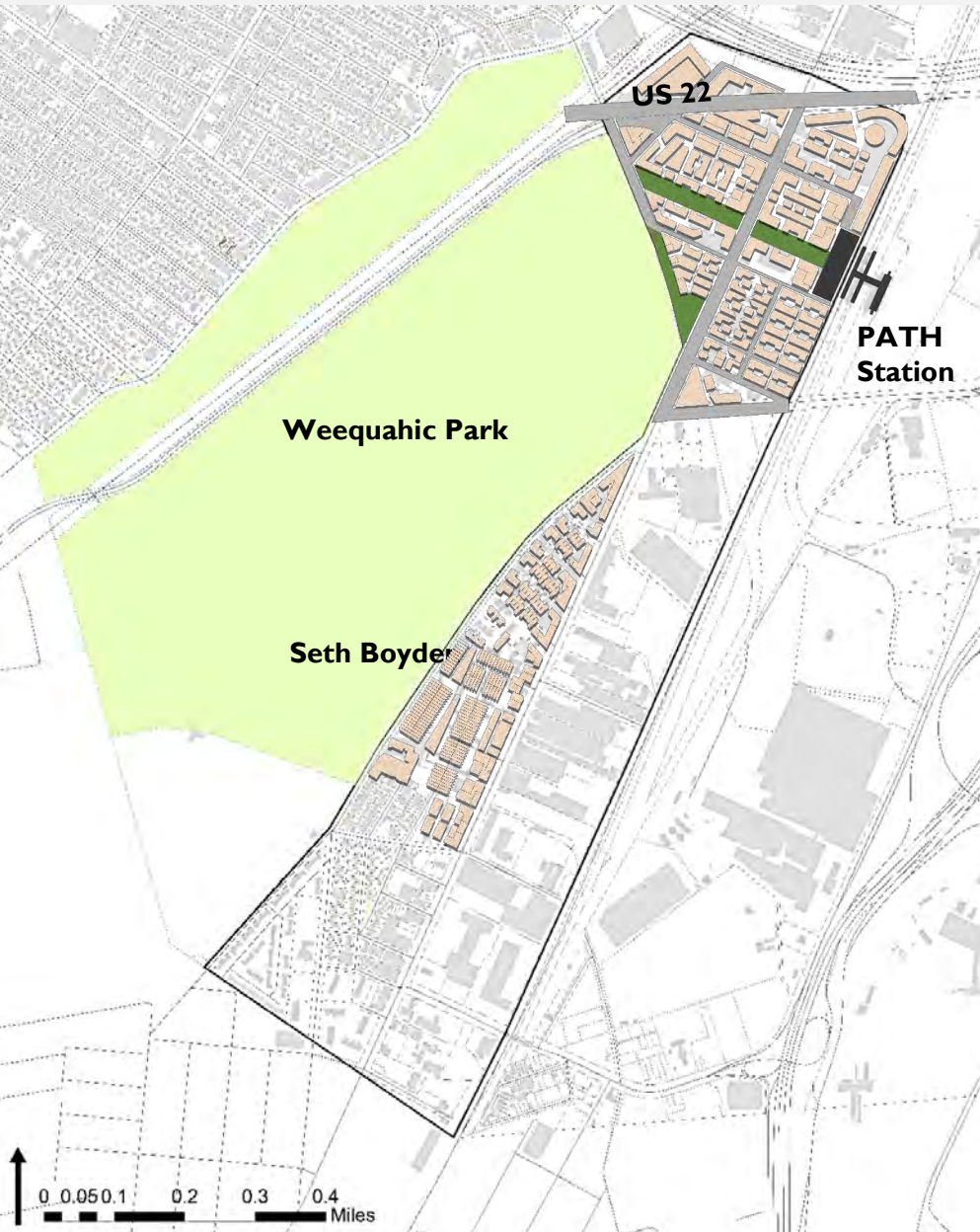
LAND USE ALTERNATIVE I- PHASE I



Phase I

Development of **PATH STATION**
TOD around the station
STREET NETWORK and **PLAZAS**

LAND USE ALTERNATIVE I- PHASE II



Phase I

Development of **PATH STATION**
TOD around the station
STREET NETWORK and **PLAZAS**

Phase II

Development of high-density **HOUSING** near the park

LAND USE ALTERNATIVE I- PHASE II



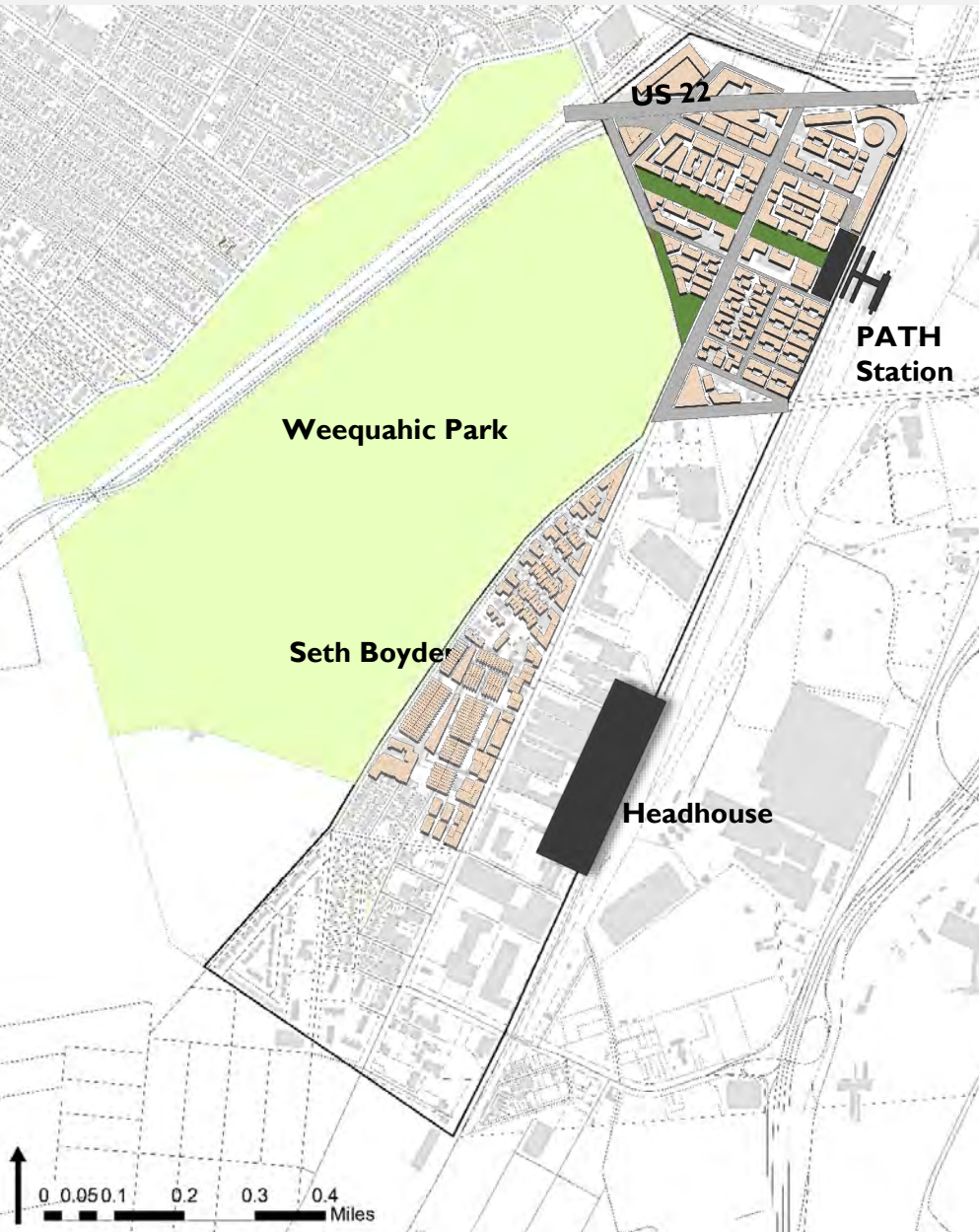
Phase I

Development of **PATH STATION**
TOD around the station
STREET NETWORK and **PLAZAS**

Phase II

Development of high-density **HOUSING** near the park
STREET NETWORK around the station

LAND USE ALTERNATIVE I - PHASE III



Phase I

Development of **PATH STATION**
TOD around the station
STREET NETWORK and **PLAZAS**

Phase II

Development of high-density **HOUSING** near the park
STREET NETWORK around the station

Phase III

Establishment of **HEADHOUSE**

LAND USE ALTERNATIVE I- PHASE III



Phase I

Development of **PATH STATION**
TOD around the station
STREET NETWORK and **PLAZAS**

Phase II

Development of high-density **HOUSING** near the park
STREET NETWORK around the station

Phase III

Establishment of **HEADHOUSE**
MIXED USE development along the Headhouse

ILLUSTRATIVE SITE PLAN



STREET NETWORK



Legend

----- Highway

STREET NETWORK



High Traffic Flow

Frelinghuysen Avenue
Middle Street

Legend

- Highway
- - - - High Traffic

STREET NETWORK



**PATH
Station**

Weequahic Park

Headhouse

Frelinghuysen Ave Proposal 1

Frelinghuysen Ave Proposal 2



STREET NETWORK



STREET NETWORK



Medium Traffic Flow

Legend

- Highway
- - - - - High Traffic
- Medium Traffic

STREET NETWORK



Legend

- Highway
- High Traffic
- Medium Traffic



STREET NETWORK

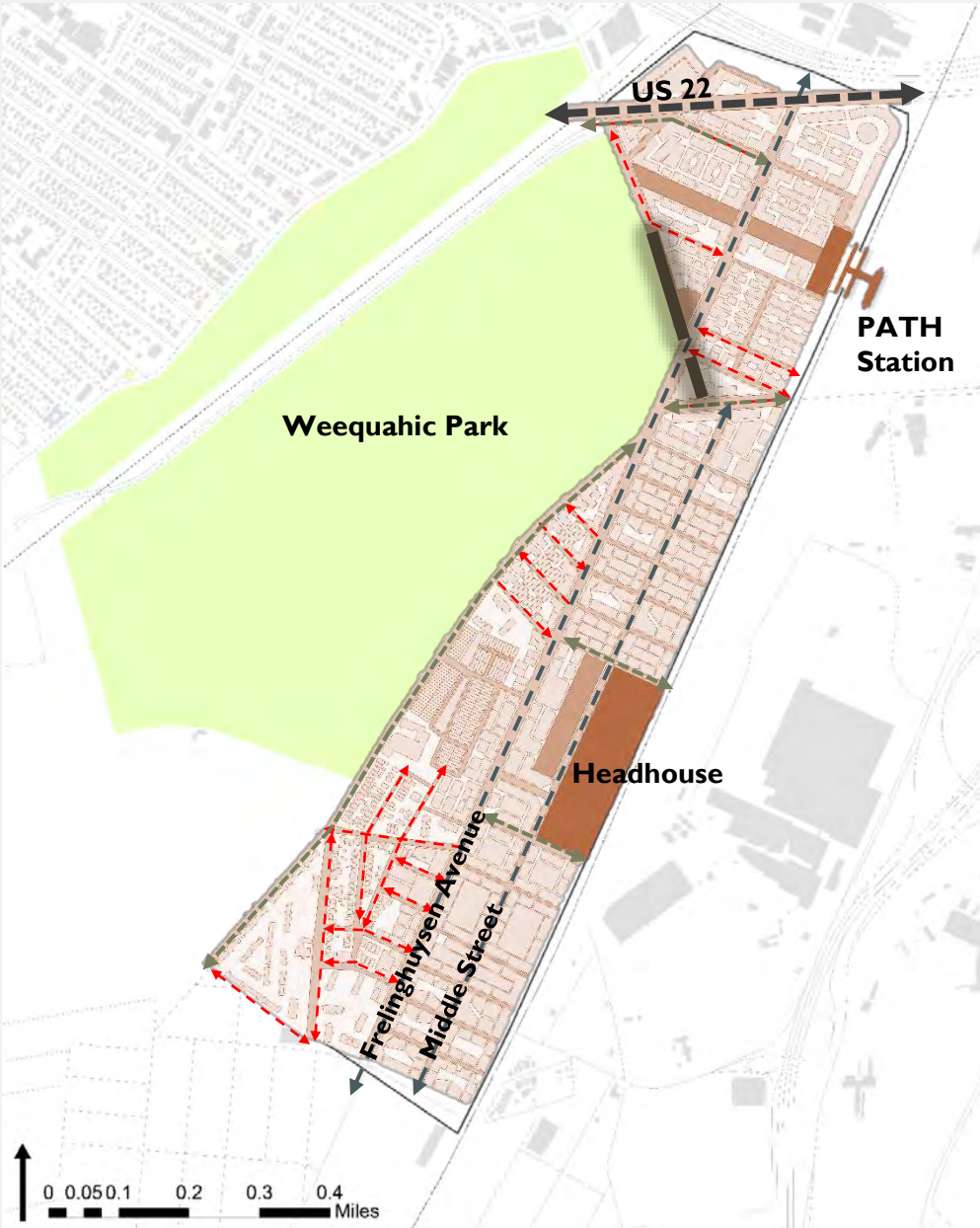


Low Traffic Flow (Residential Streets)

Legend

- Highway
- High Traffic
- Medium Traffic
- Low Traffic

PROPOSED ROAD CLOSURE



Times Square, New York

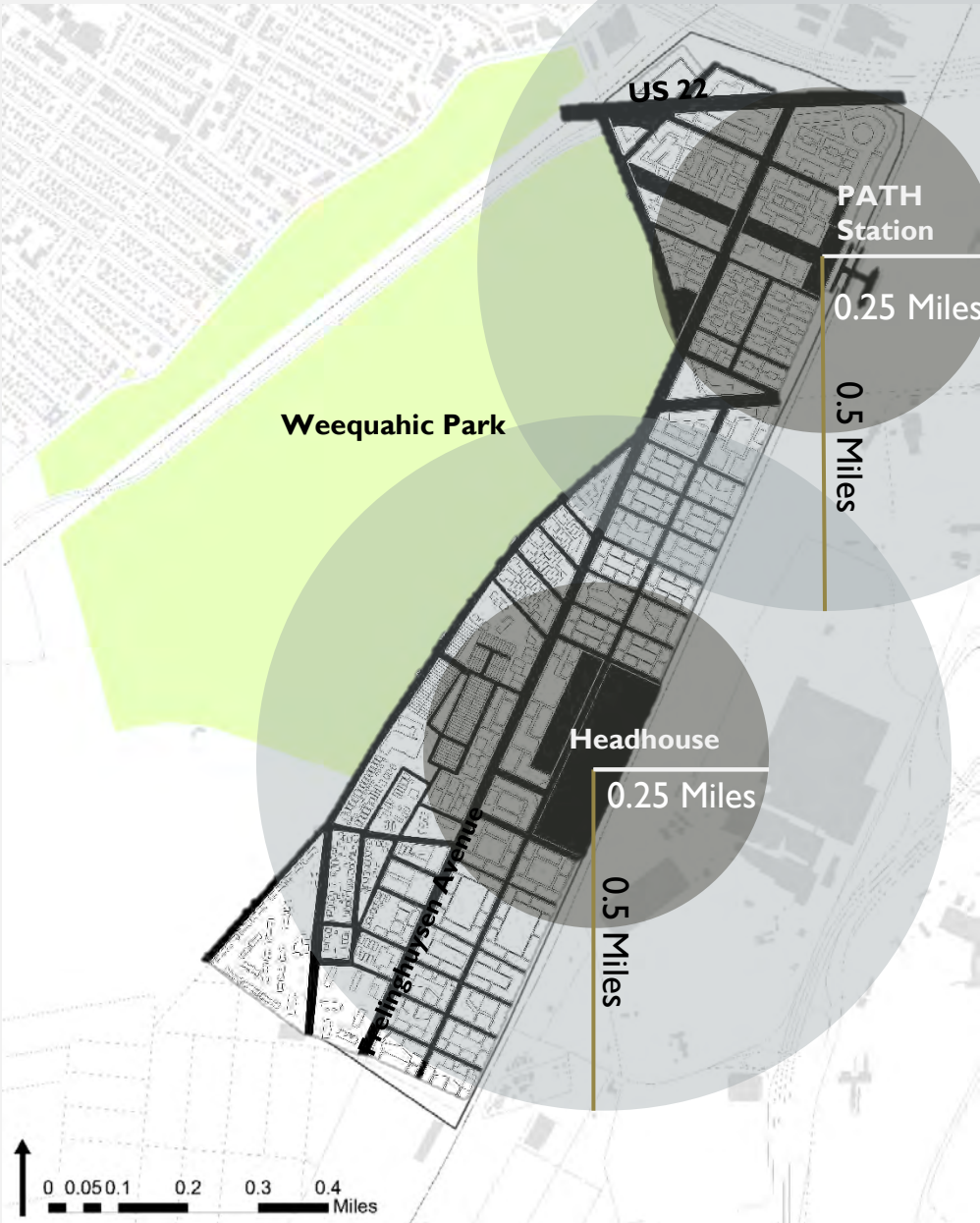


Legend

- Highway
- - - - - High Traffic
- Medium Traffic
- - - - - Low Traffic

————— Proposed Road Closure

TRANSIT COVERAGE



PATH Station
Headhouse

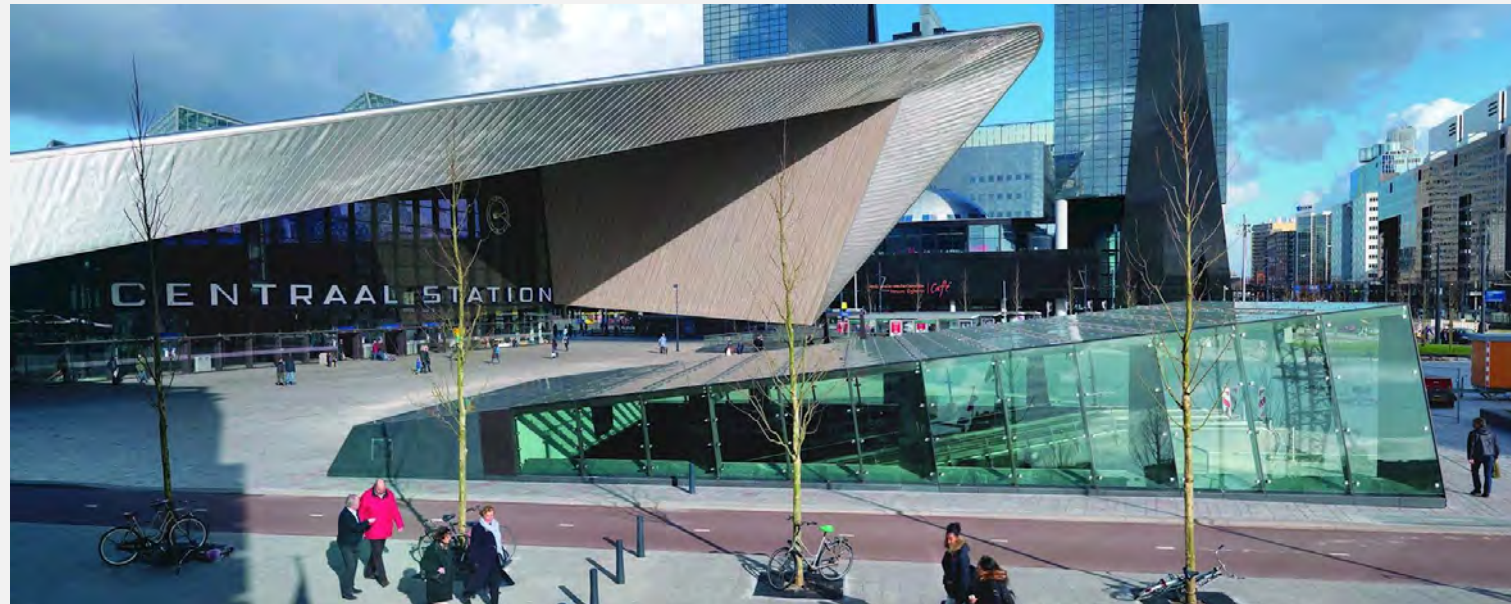
Legend

- 0.25 Miles sq. Buffer
- 0.5 Miles sq. Buffer

IMAGE BOARD – TRANSIT STATIONS



PATH Station



Rotterdam, Netherlands

IMAGE BOARD - TRANSIT STATIONS

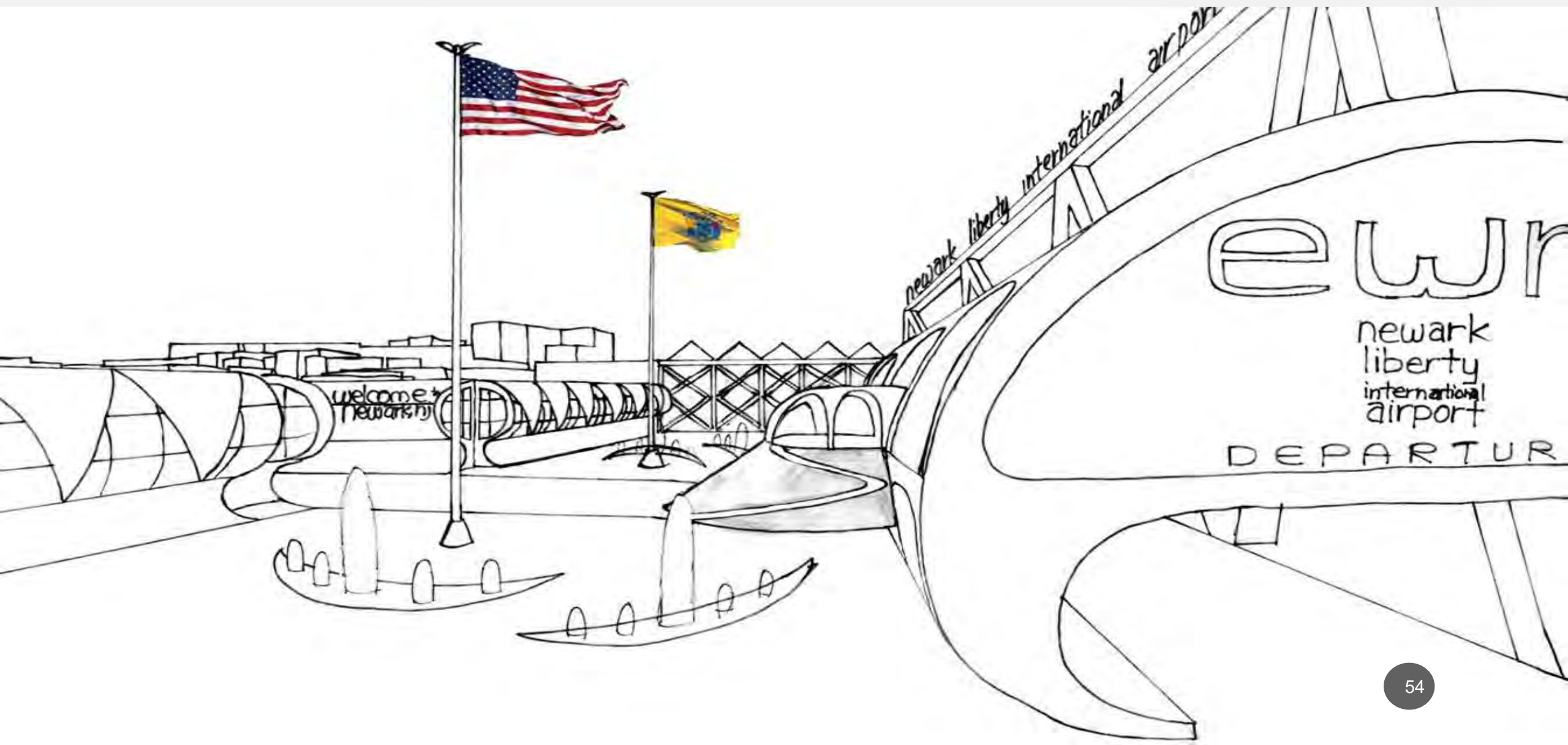


PATH

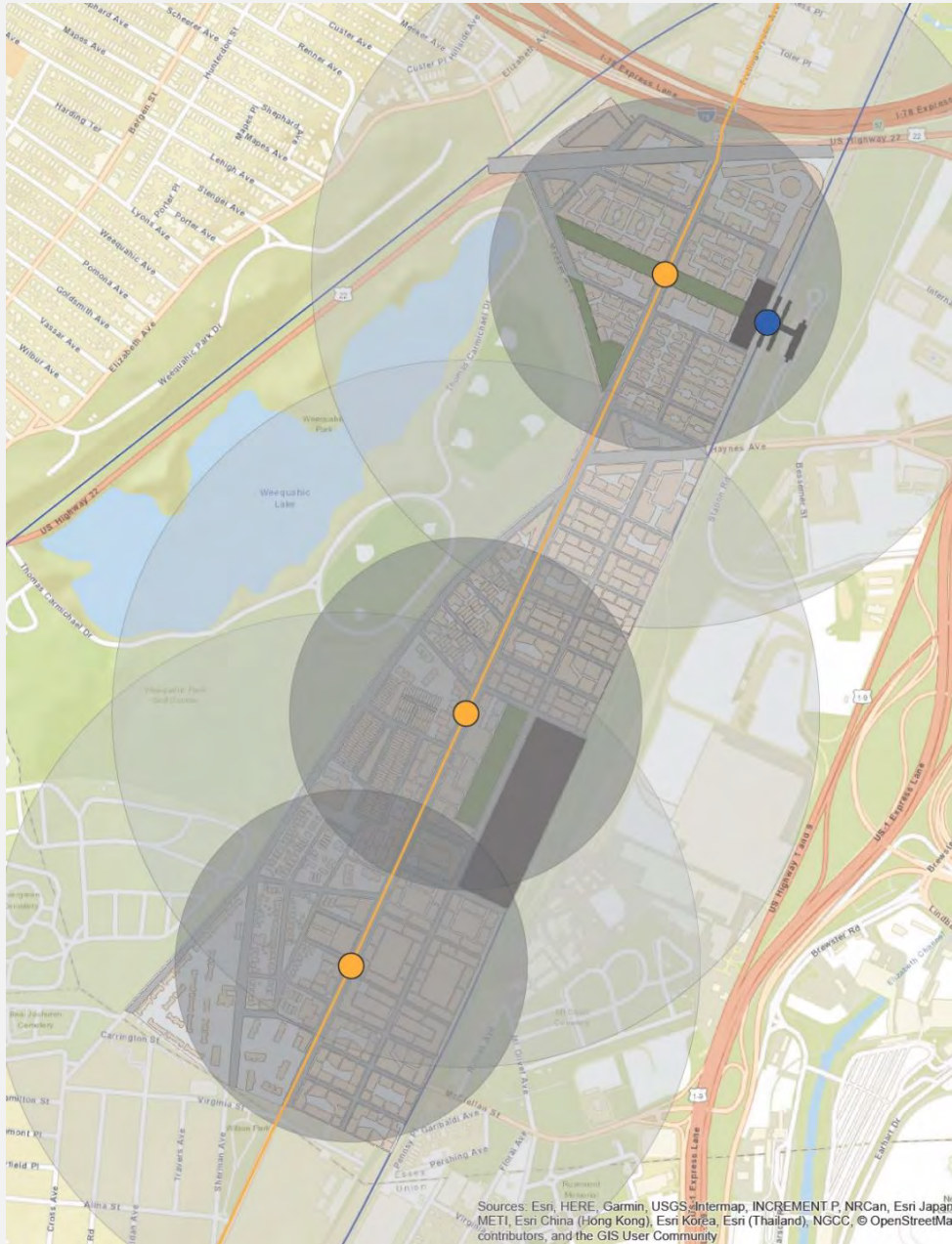
T-REX / NORTHEAST CORRIDOR

RPA Headhouse Plan

HEAD HOUSE AREA



BRT STOPS

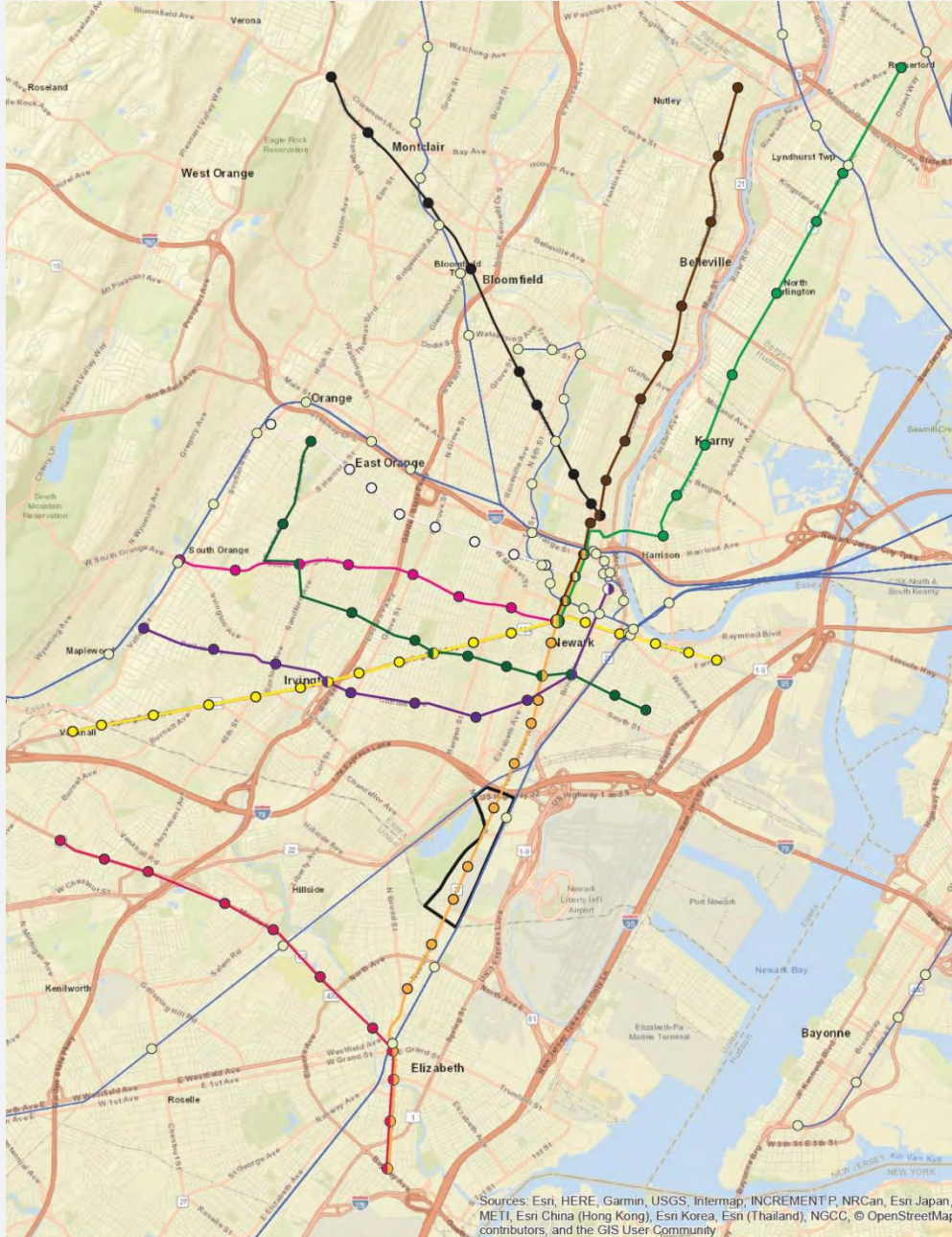


- The 3 stops are spaced between .3 and .6 miles apart
- The entire neighborhood is within a 5 or 10 minute walk of any station

Site Area Legend

- Proposed BRT Stations
- Proposed BRT Line
- NJ Transit/PATH Station
- NJ Transit/PATH Rail Line
- 5 Minute Walk Radius
- 10 Minute Walk Radius

BRT SYSTEM FOR THE REGION



The system connects the Dayton Neighborhood to

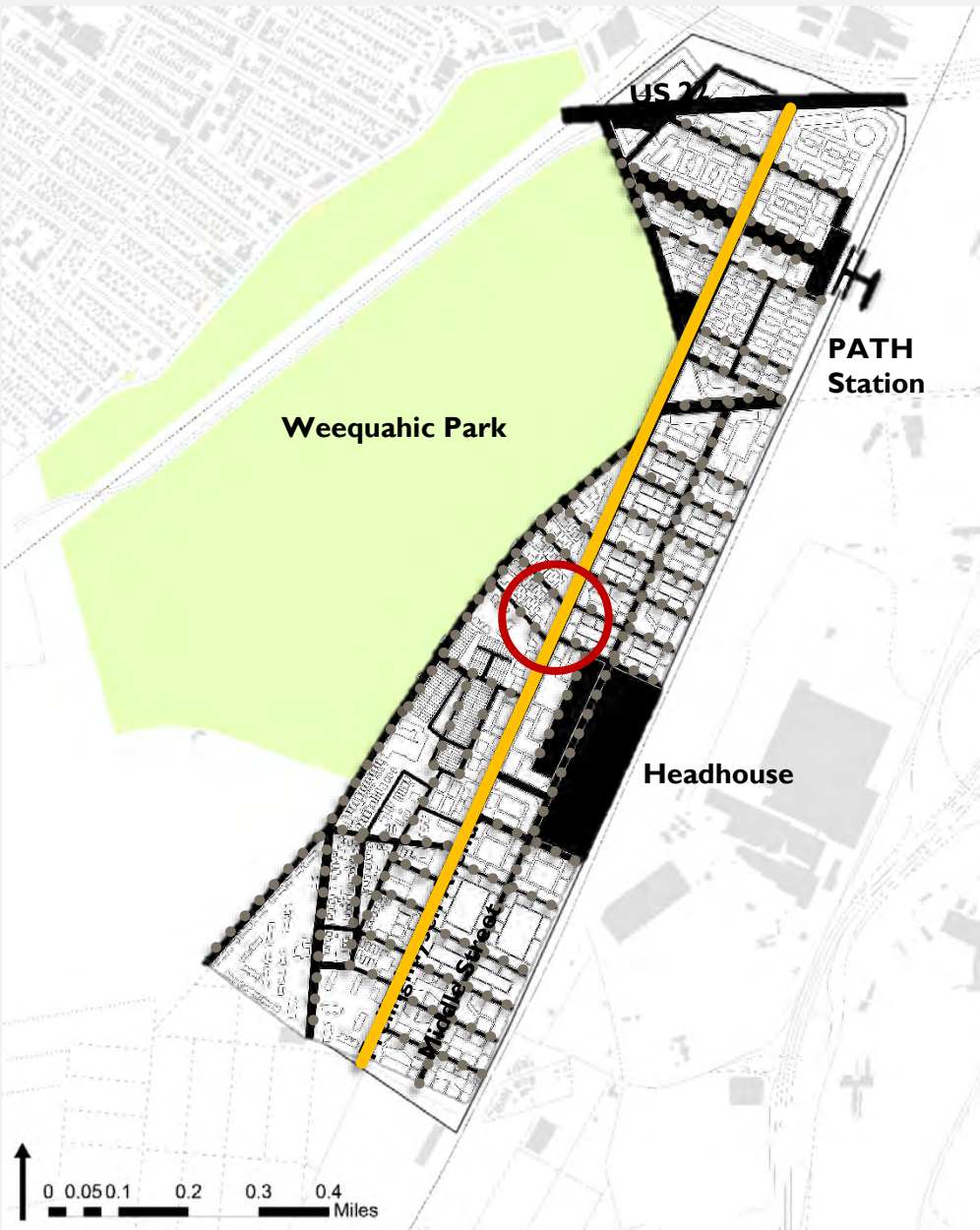
- Major Universities
- Central Business Districts
- Health Centers
- NJ Transit & Amtrak Rail
- Regional Employers
- Areas of Entertainment

Proposed BRT System

- Frelinghuysen Line
- Kean Univ. Line
- Irvington Line
- Crosstown Connector
- Vauxhall Line
- South Orange Line
- Central Line
- Bloomfield Line
- Broadfield Line
- Rutherford Line
- NJ Transit/PATH

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

IMAGE BOARD - BRTS



Cleveland BRT

BICYCLE NETWORK



Legend




-  2 Way Bike Lane
-  Cycle Track
-  Sharrow

IMAGE BOARD – BIKE WAYS



Phoenix – Cycle Track



Netherlands – 2 Way Bike Lanes

OPEN SPACES AND GREEN PATHS



Legend

 Green Spaces

IMAGE BOARD – STREET SIDE PLAZAS



San Francisco, California

IMAGE BOARD – PATH STATION PLAZA



Melbourne, Australia

IMAGE BOARD - HEADHOUSE PLAZA



Nara Prefecture, Japan

IMAGE BOARD - HIGH DENSITY HOUSING



Alexandria, Virginia

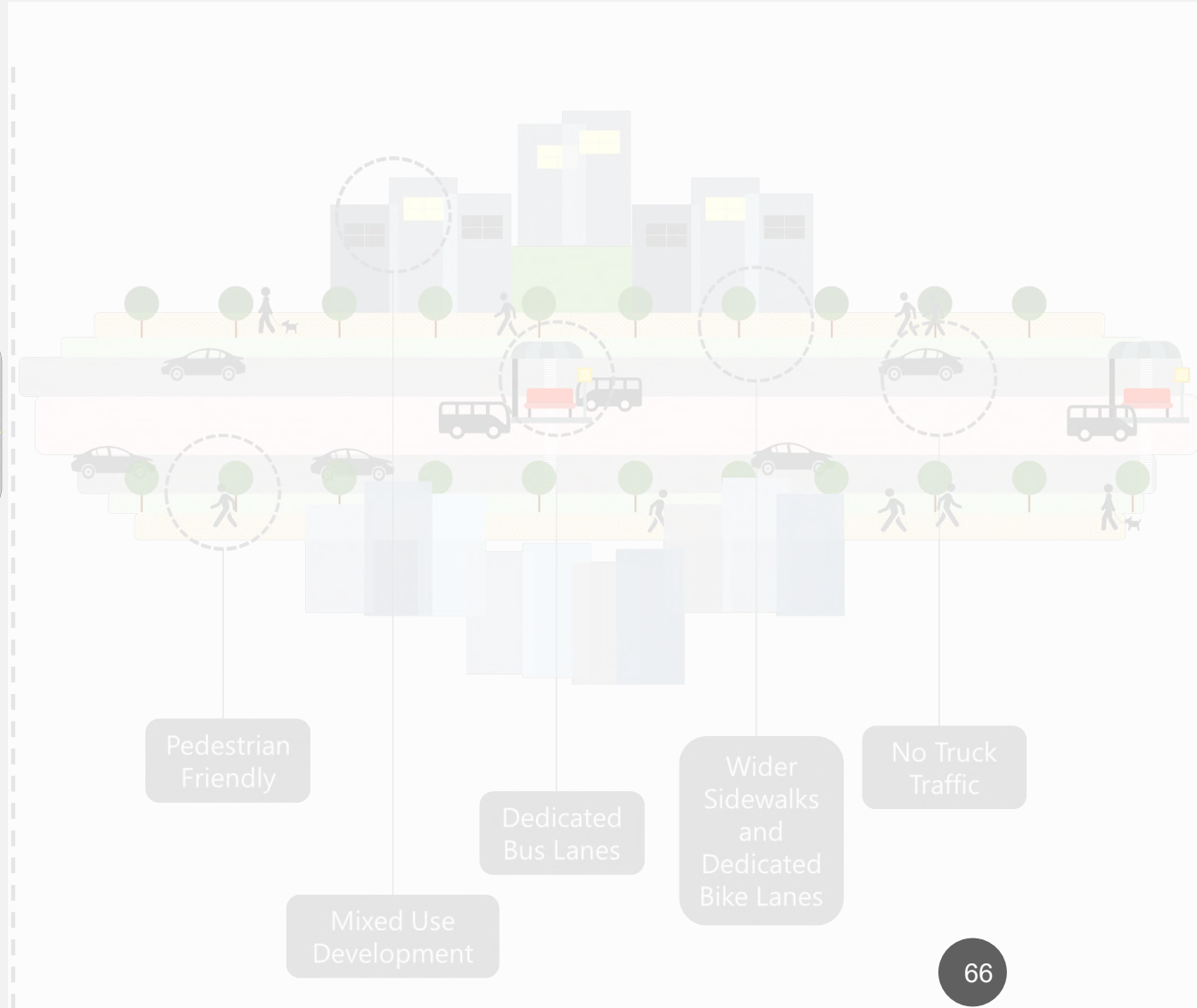
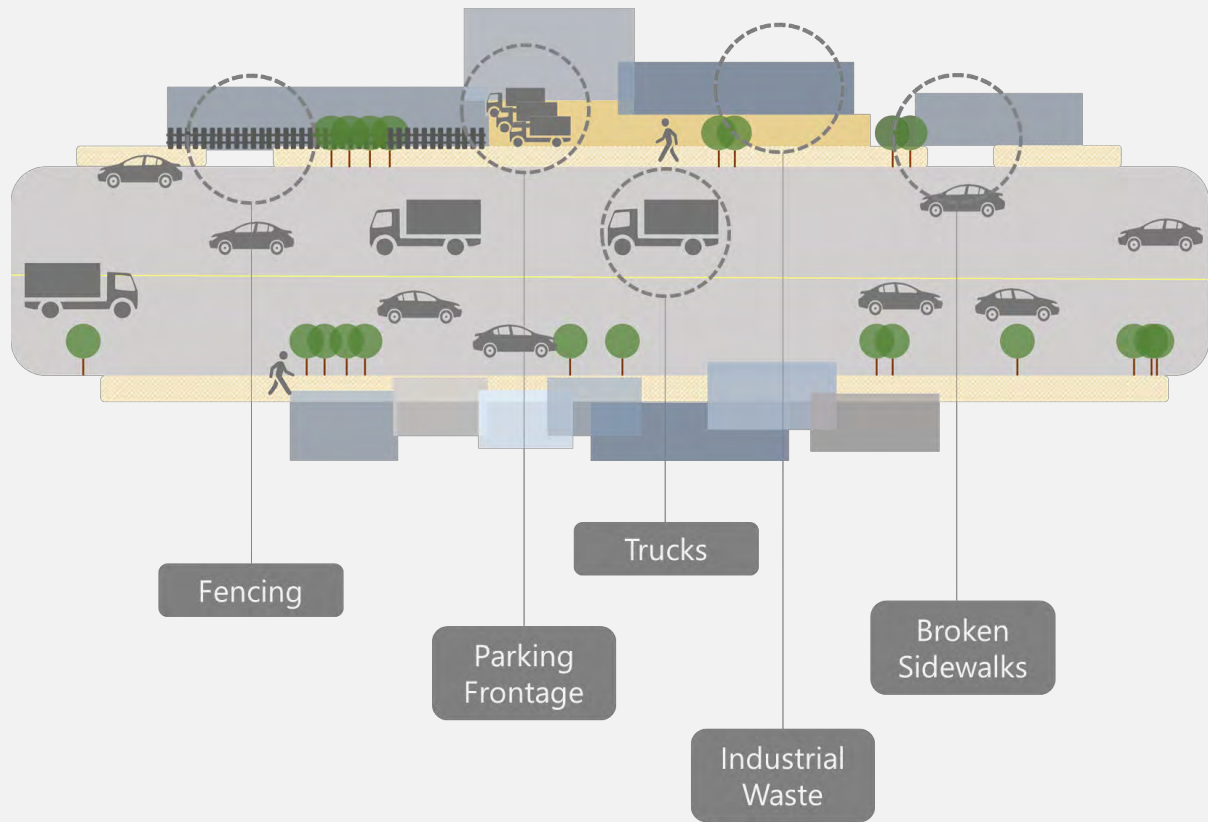
IMAGE BOARD – MIXED USE DEVELOPMENT



Omaha, Nebraska

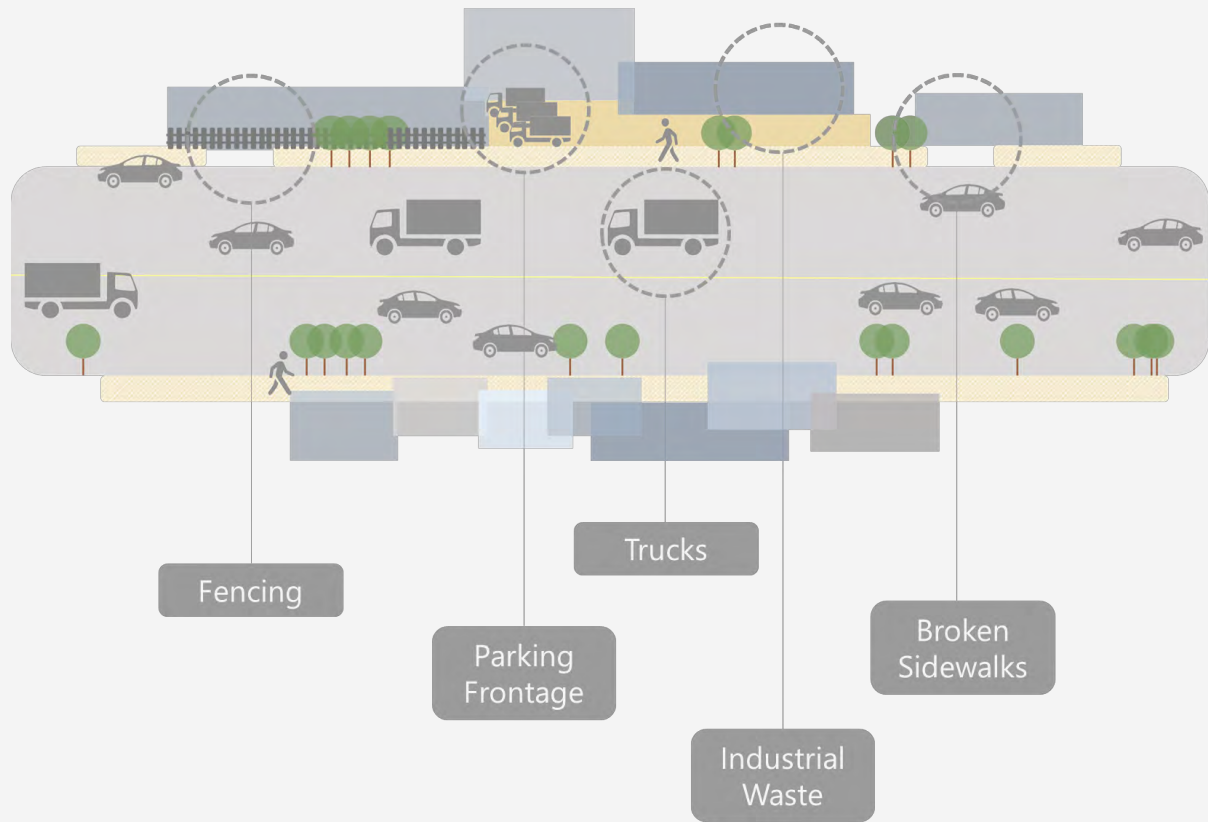
FRELINGHUYSEN AVENUE

Before

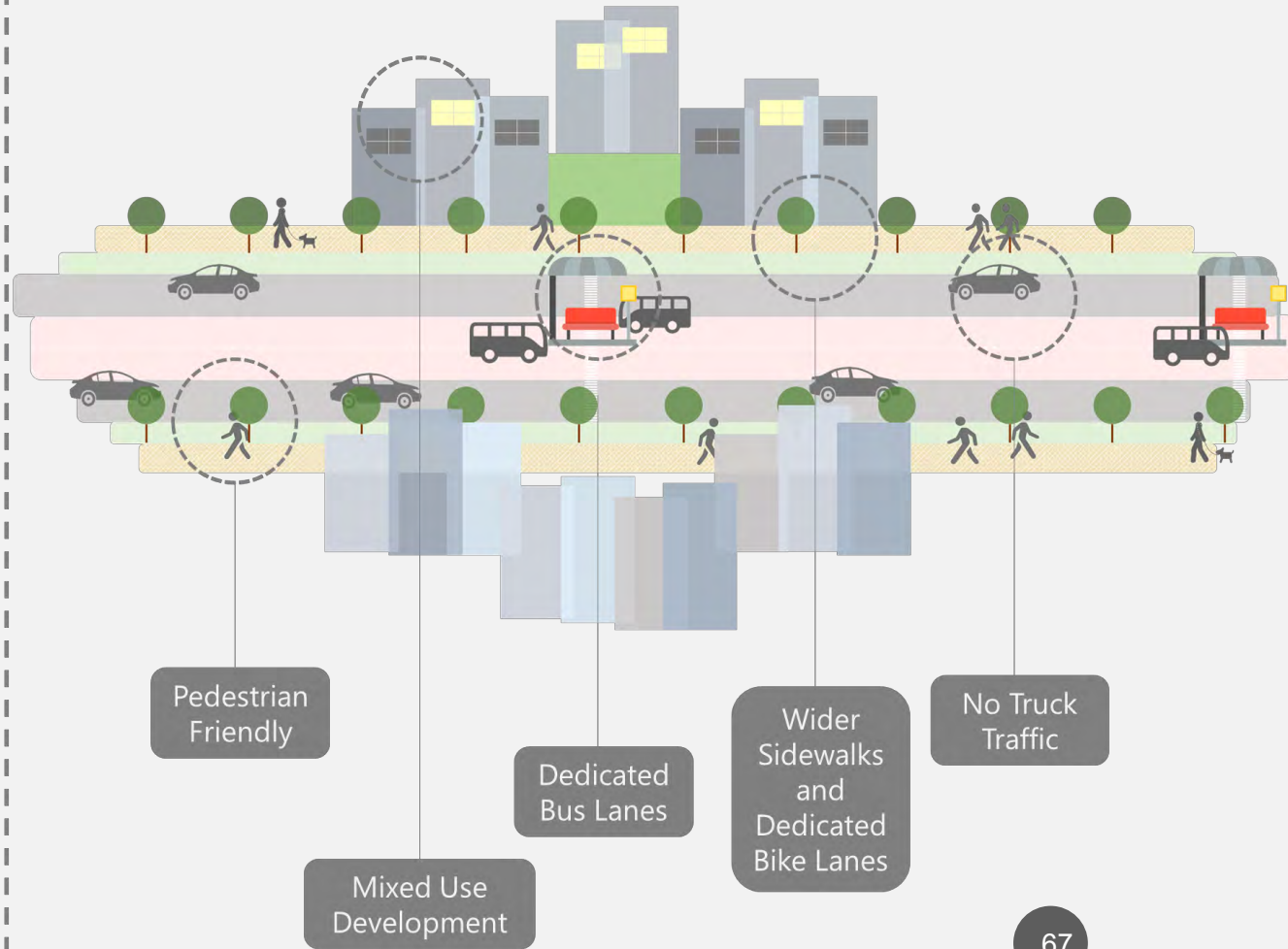


FRELINGHUYSEN AVENUE

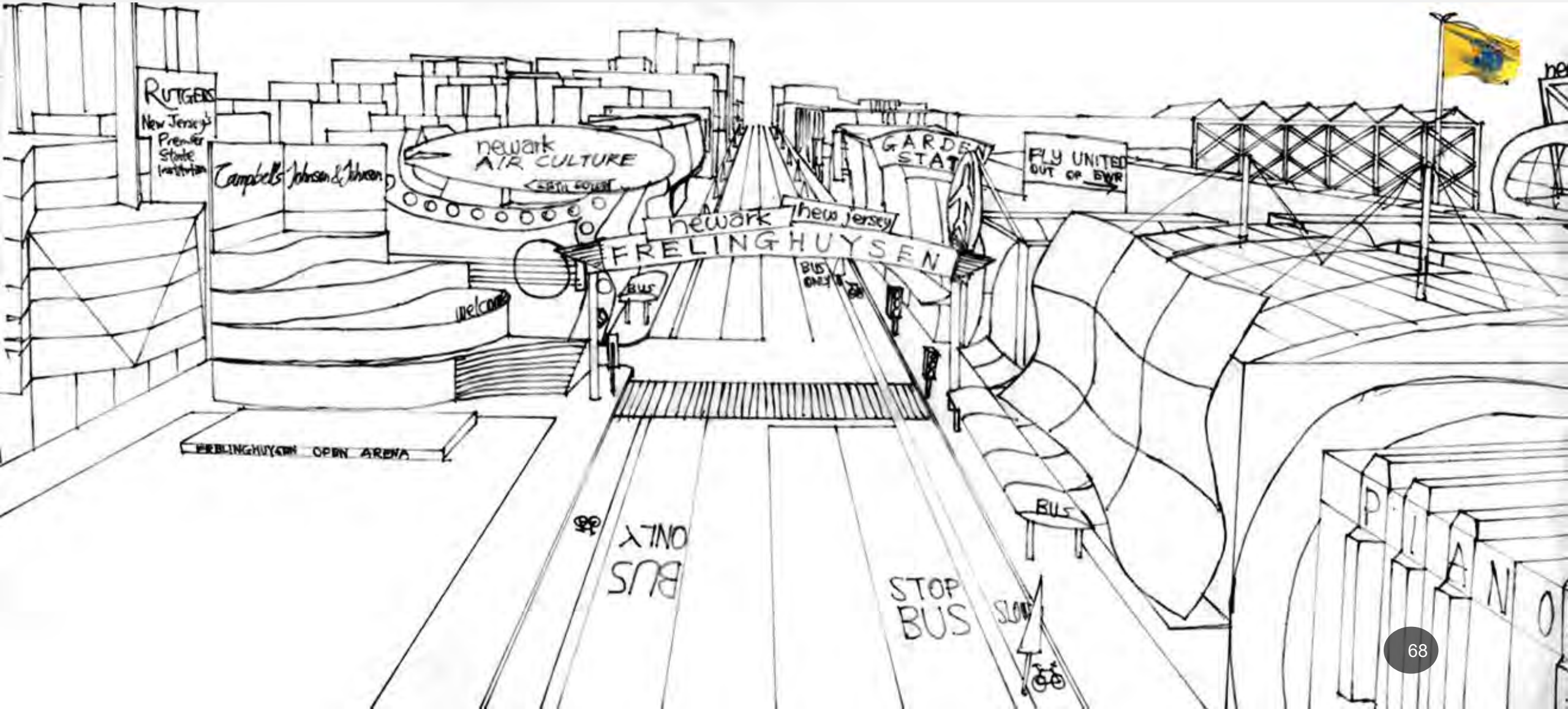
Before



After



FRELINGHUYSEN AVENUE



SETH BOYDEN RESIDENTIAL COMPLEX



ESTIMATED-CONSTRUCTION COSTS AND JOBS

- Approximately **53 million** square feet of new development
- Redevelopment construction costs are approximately **\$7.9 billion**

| | Construction |
|------------------|--------------|
| Total Output | \$18.6B |
| Total Earnings | \$6.1B |
| Total Employment | 155,000 jobs |

ESTIMATED - PERMANENT JOB CREATION

Ways to Create US Workforce:

Support Emerging Industries

Revive New Business Start-Ups

Attract Domestic and Foreign Investment

Workforce creation for commercial, hospitality, and medical industries are:

Total Permanent Jobs: 84,000



‘Adaptive Reuse’

Alternative 2

BOUNDARY MAP



Transit-Oriented Development (TOD)

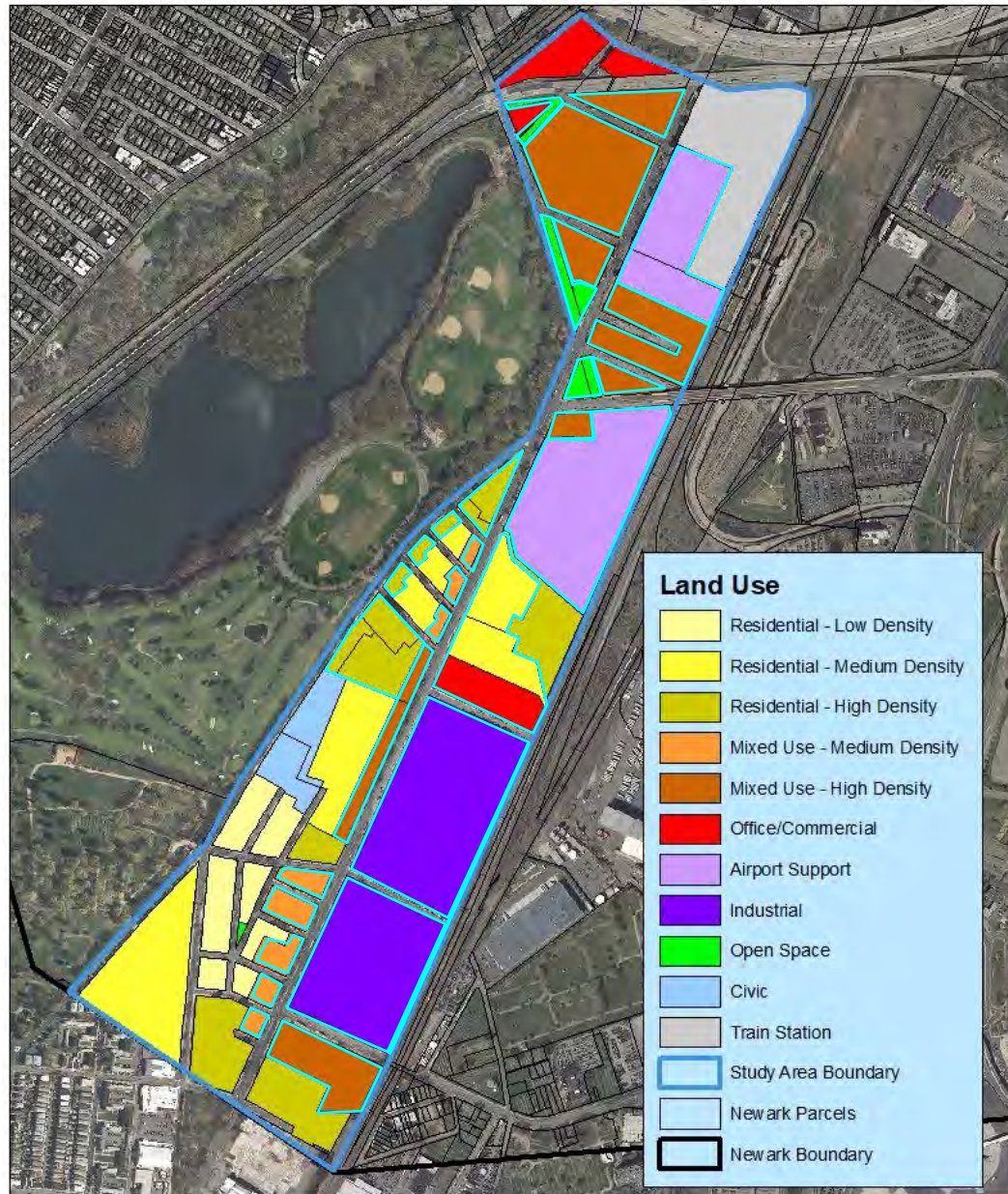
Compact, Pedestrian-Oriented, Mixed-Use Development Around a Transit Station

Transit-Oriented Community (TOC)

Focuses On Connecting Communities To Transit By More Pedestrian Friendly Streets, Bike Lanes, & More Connections To Bus Transit.

Zoning Highlights

- **Transit Oriented Development (TOD)** to create sense of place and promote economic growth around PATH Station
- **Airport support** – hotel, conference center, office space
- Street closures to promote **pedestrian safety** and create **open space**
- High-rise residential towers looking over **Weequahic Park**
- **Adaptive reuse** of dilapidated and abandoned structures for residential lofts and commercial uses
- **Truck service road** to provide better access to industrial properties and remove trucks from Frelinghuysen
- Preserve existing **industrial** uses
- **Mixed-use development** along Frelinghuysen to provide services and amenities to Dayton neighborhood



0 650 1,300 2,600 Feet
Source: New Jersey Office of Information Technology,
Office of Geographic Information Systems, 2012-2013 High Resolution
Orthophotography, NJ Parcels data, NJ Municipalities

Transit-Oriented Development



Transit – Oriented Development



Mixed-Use Developments



Range of Affordable Housing Options

Range of Affordable Housing



High-Rise Development Along The Park

High-Rise Development Along The
Park



Highway Capped Commercial/Office Development

Highway Capped Commercial/Office
Development



Major Transit Head-House

★ Major Transit Head-House



Path Station



★ Path Station



High-Rise Residential Developments



High-Rise Residential Developments

Industrial Developments



Industrial Developments

High-Rise Mixed-Use Developments

High-Rise Mixed-Use
Developments



Public Open Spaces & Plazas

Public Open Spaces & Plazas



Public Open Spaces & Plazas

Public Open Spaces & Plazas



Street Furniture

Street Furniture



Bike Sharing Along Frelinghuysen

Bike Sharing Along
Frelinghuysen

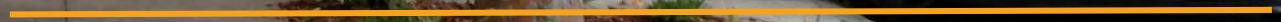


Bike Racks At Transit Hubs



Bike Racks At Transit Hubs

Picturesque & Walkable Corridor



Picturesque & Walkable Corridor VVVC110

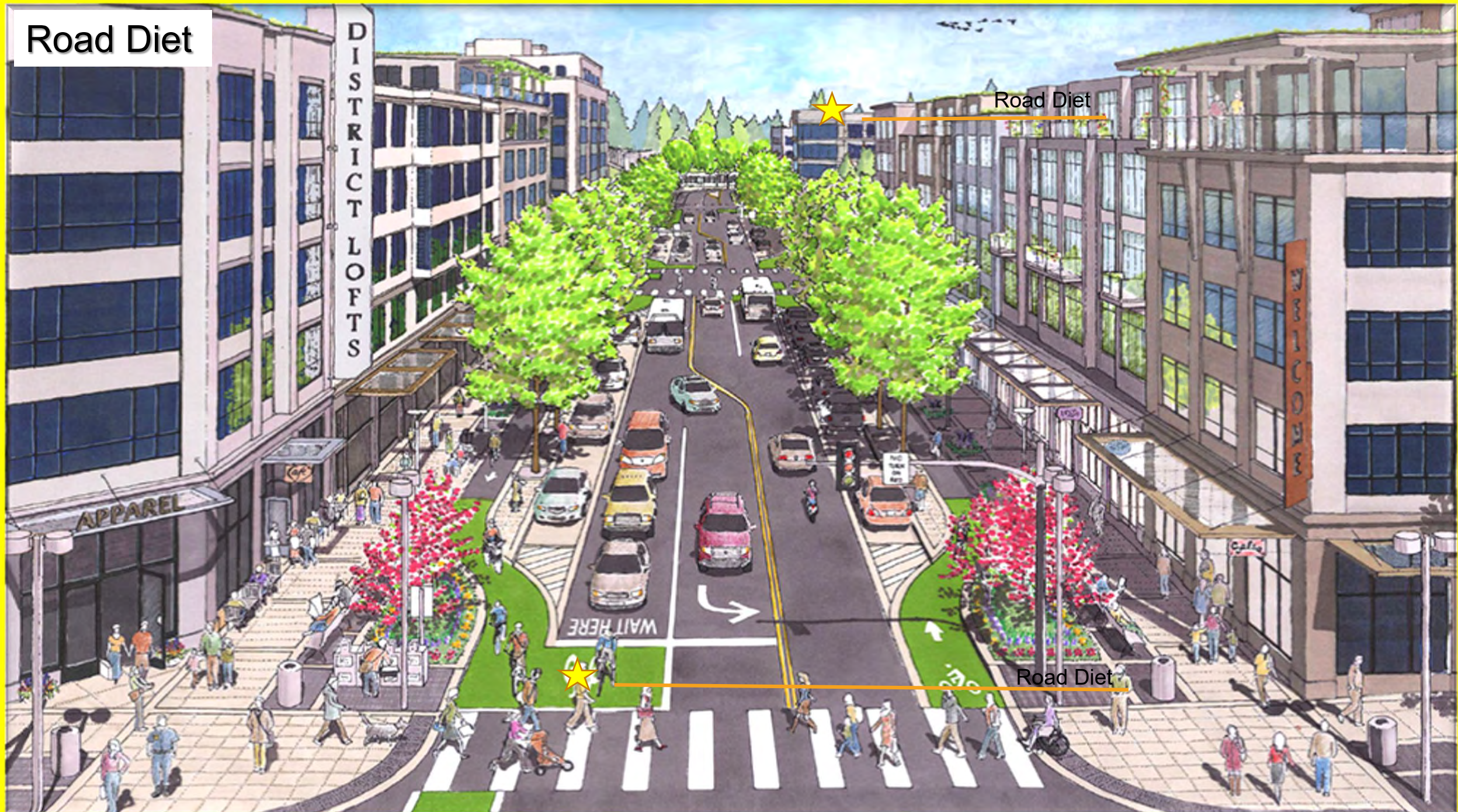
Page Street, San Francisco

Picturesque & Walkable Corridor

Picturesque & Walkable Corridor



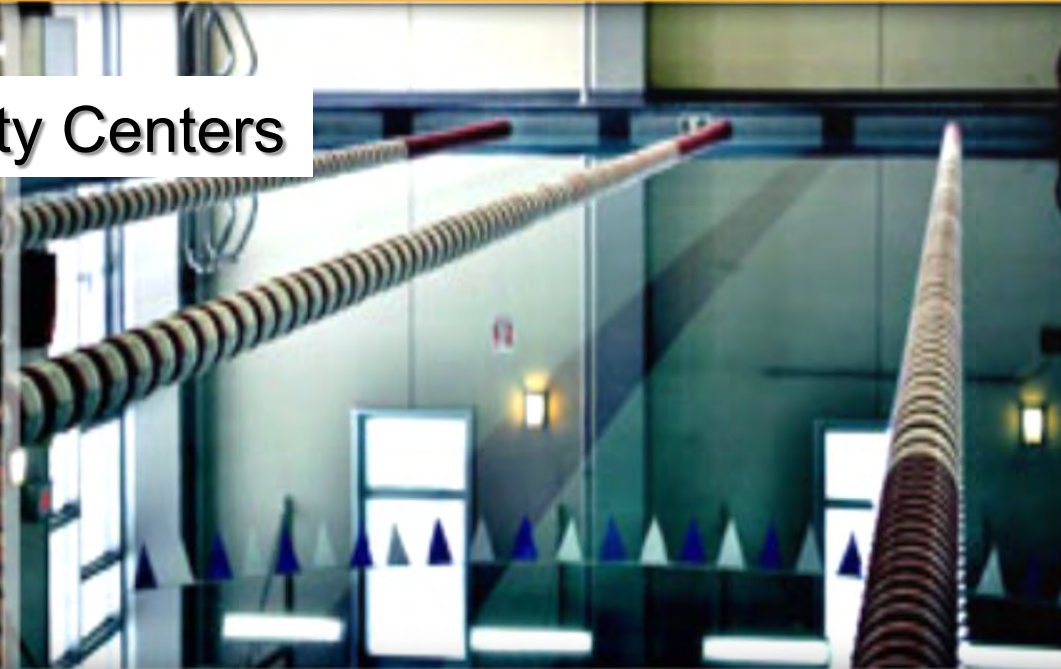
Road Diet



Road Diet

Road Diet

Centralized Community Centers

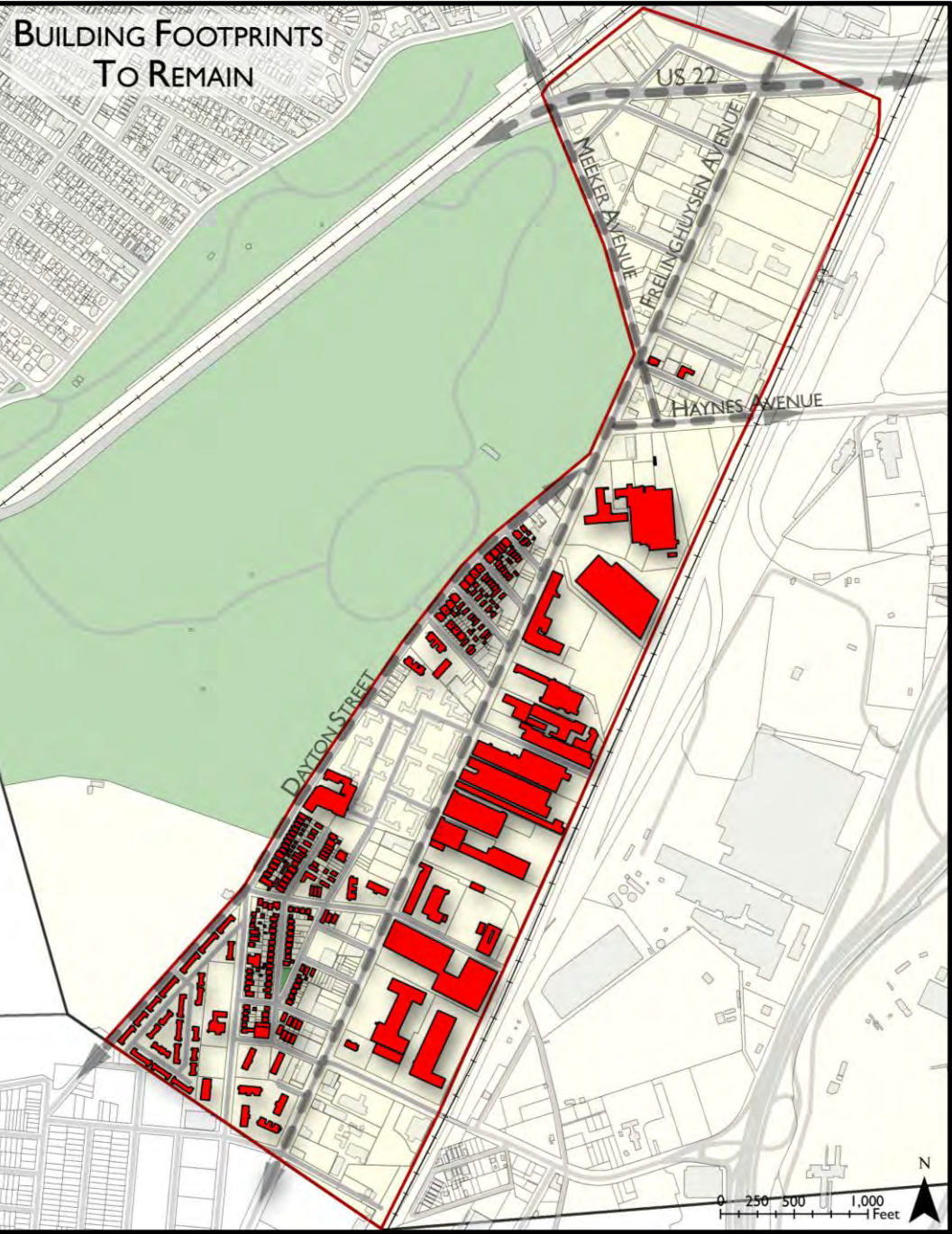


Murals Along Industrial
Section Of Frelinghuysen

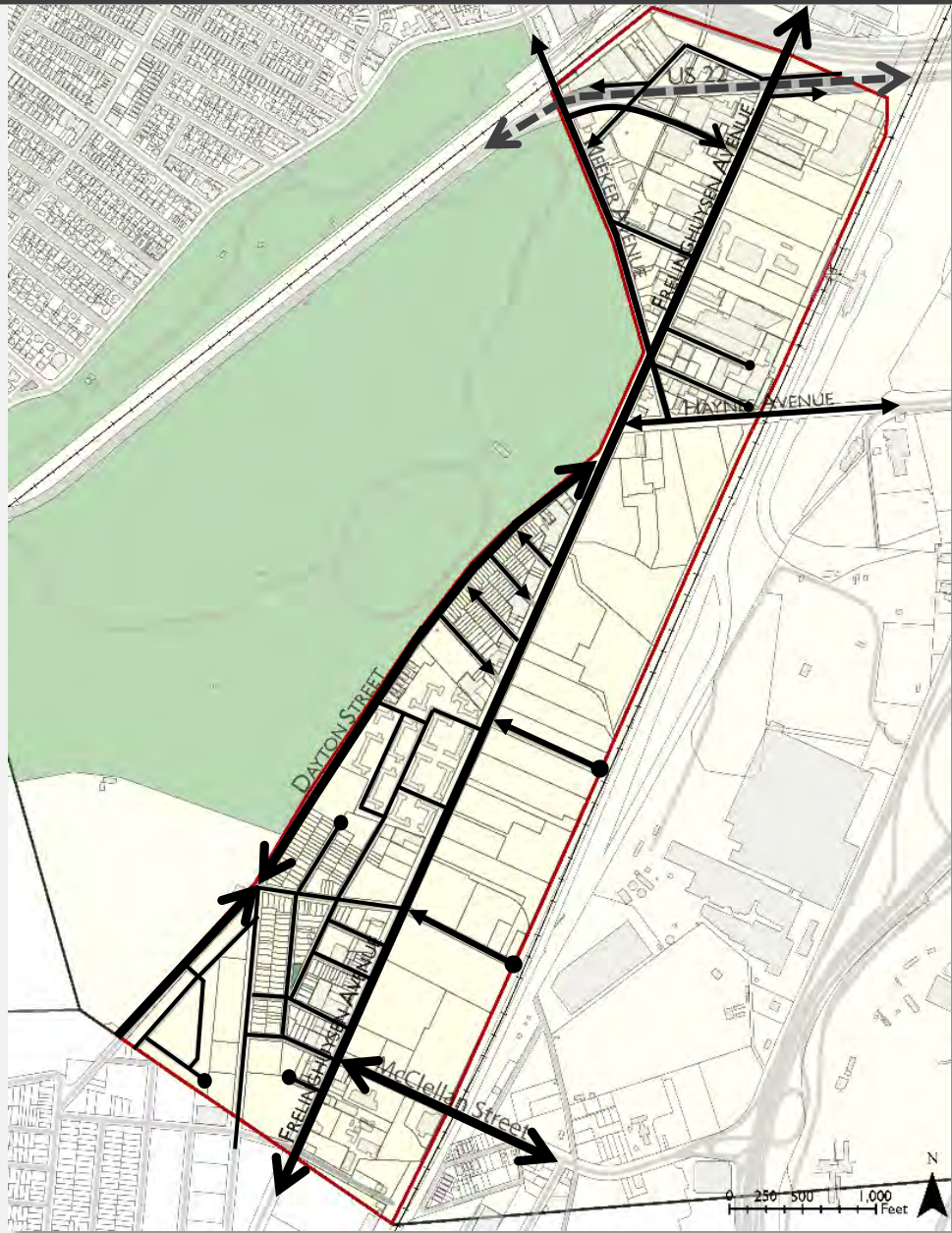


Murals Along Industrial Section

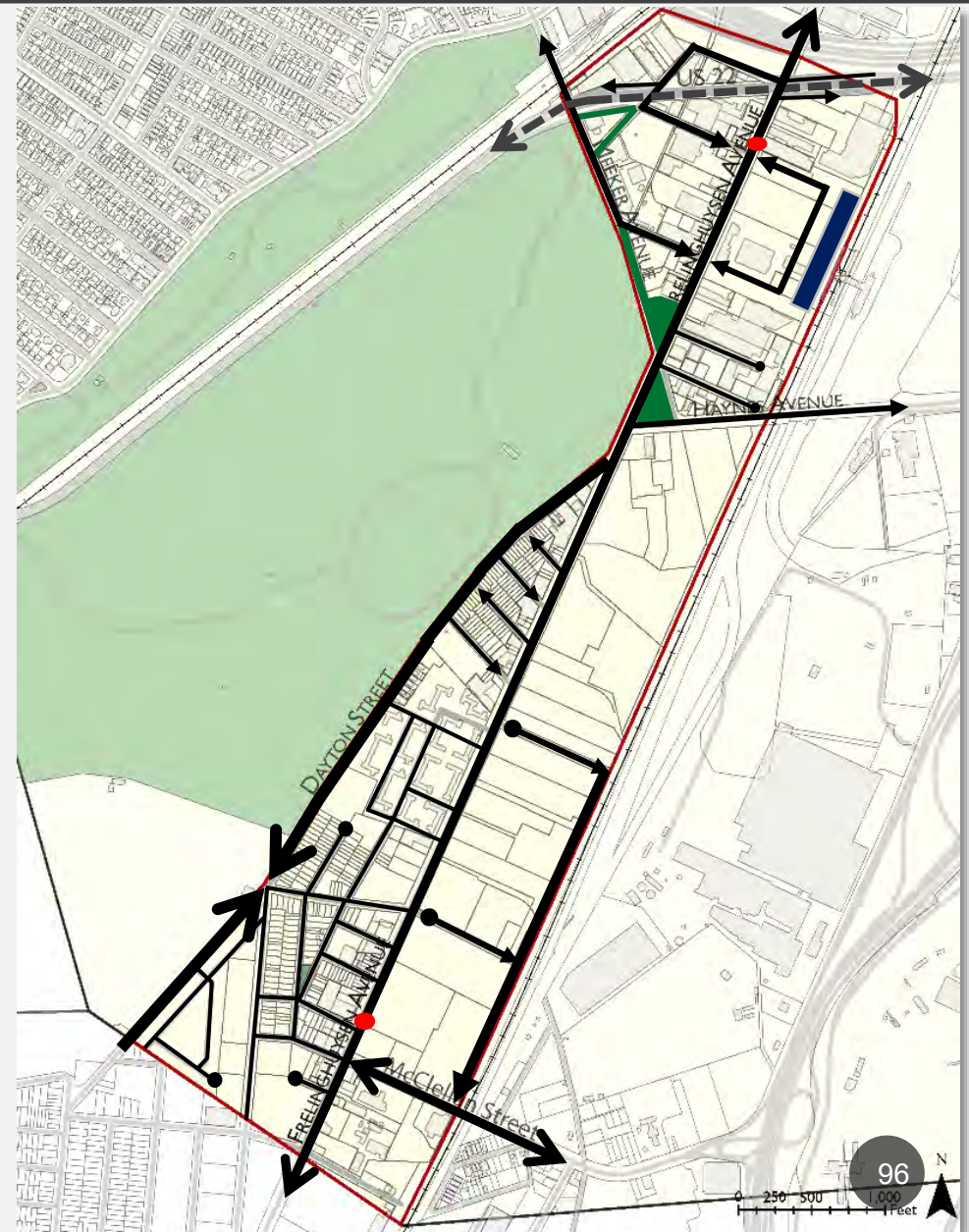




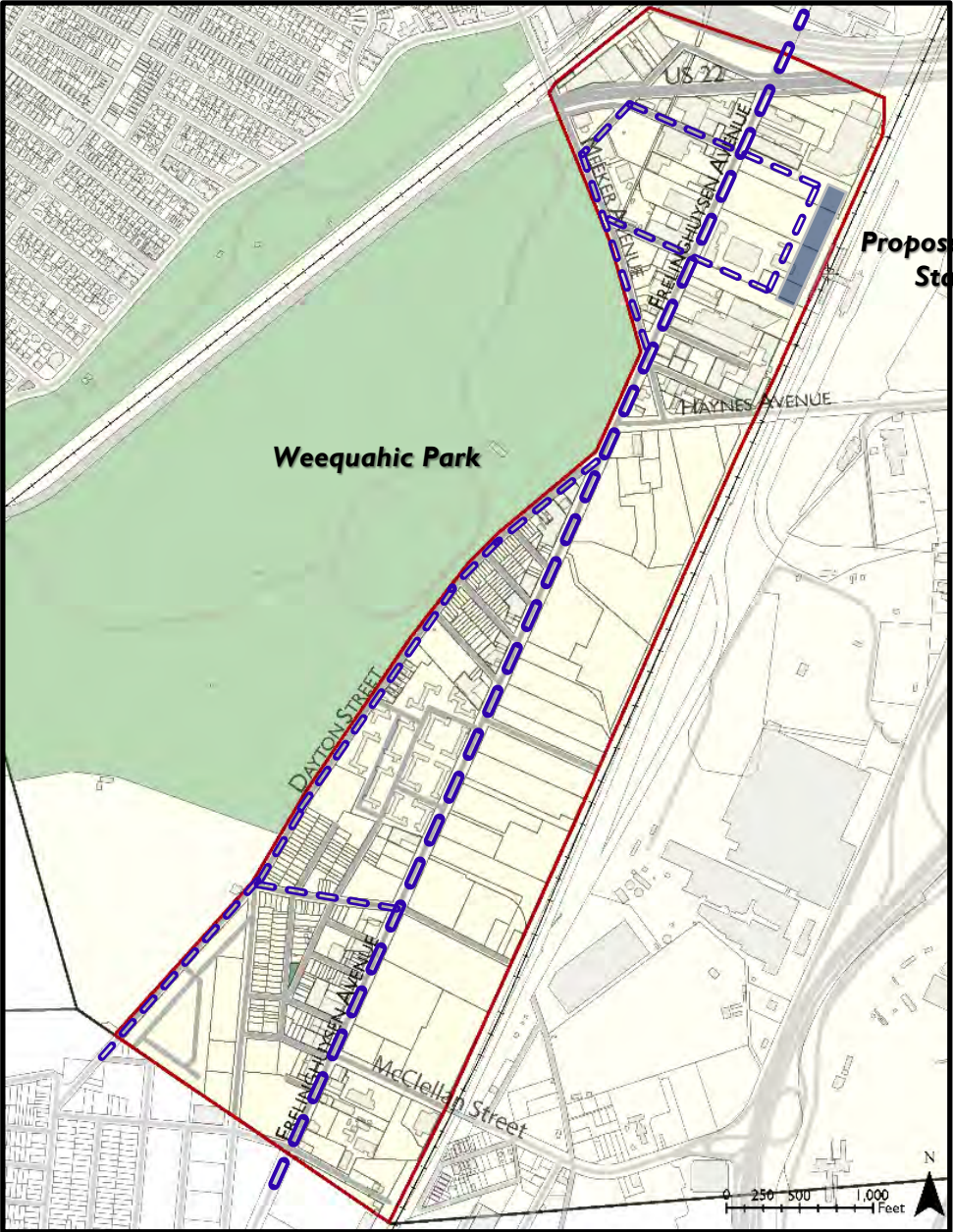
EXISTING VEHICULAR CIRCULATION



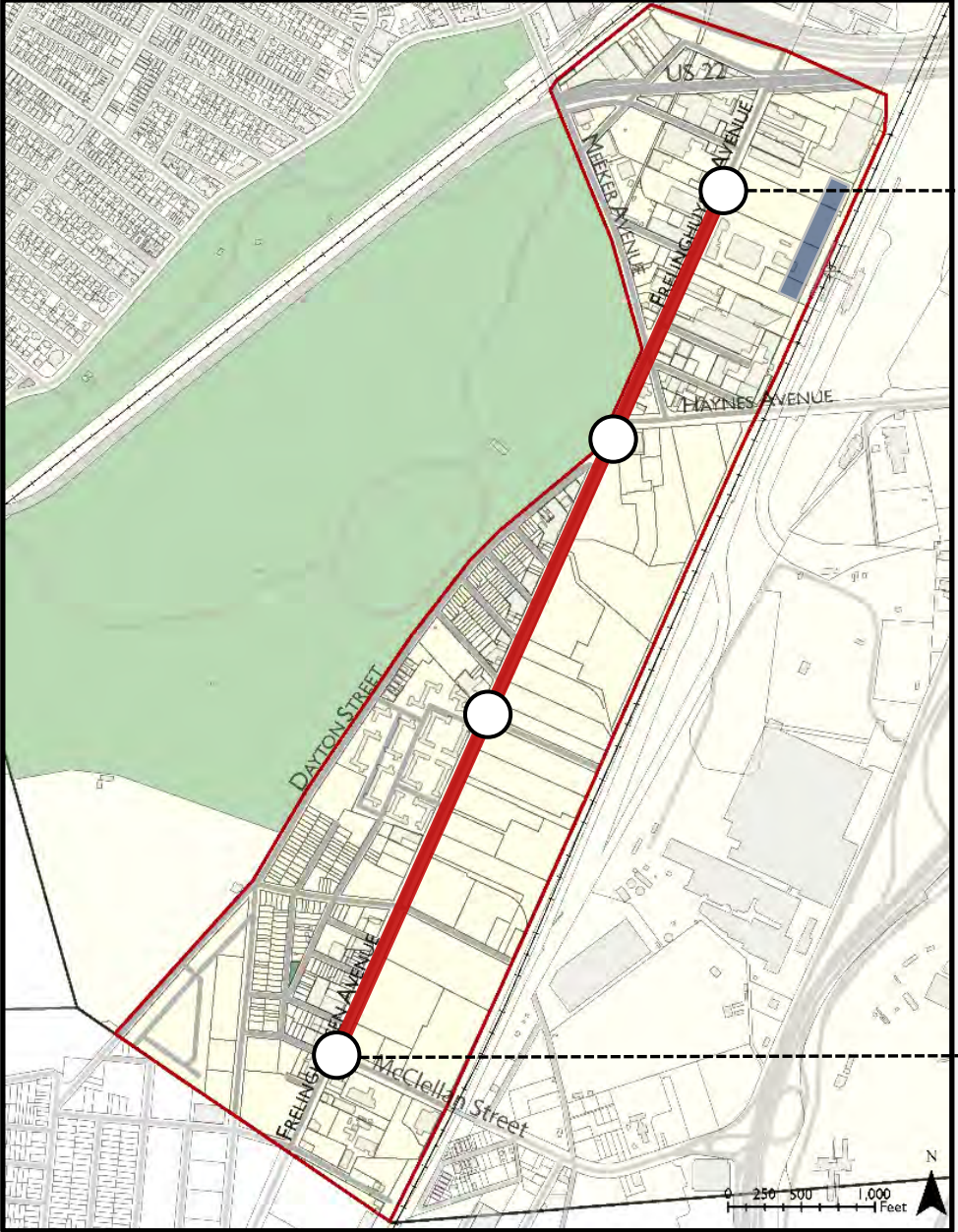
PROPOSED VEHICULAR CIRCULATION



PROPOSED BICYCLE CIRCULATION



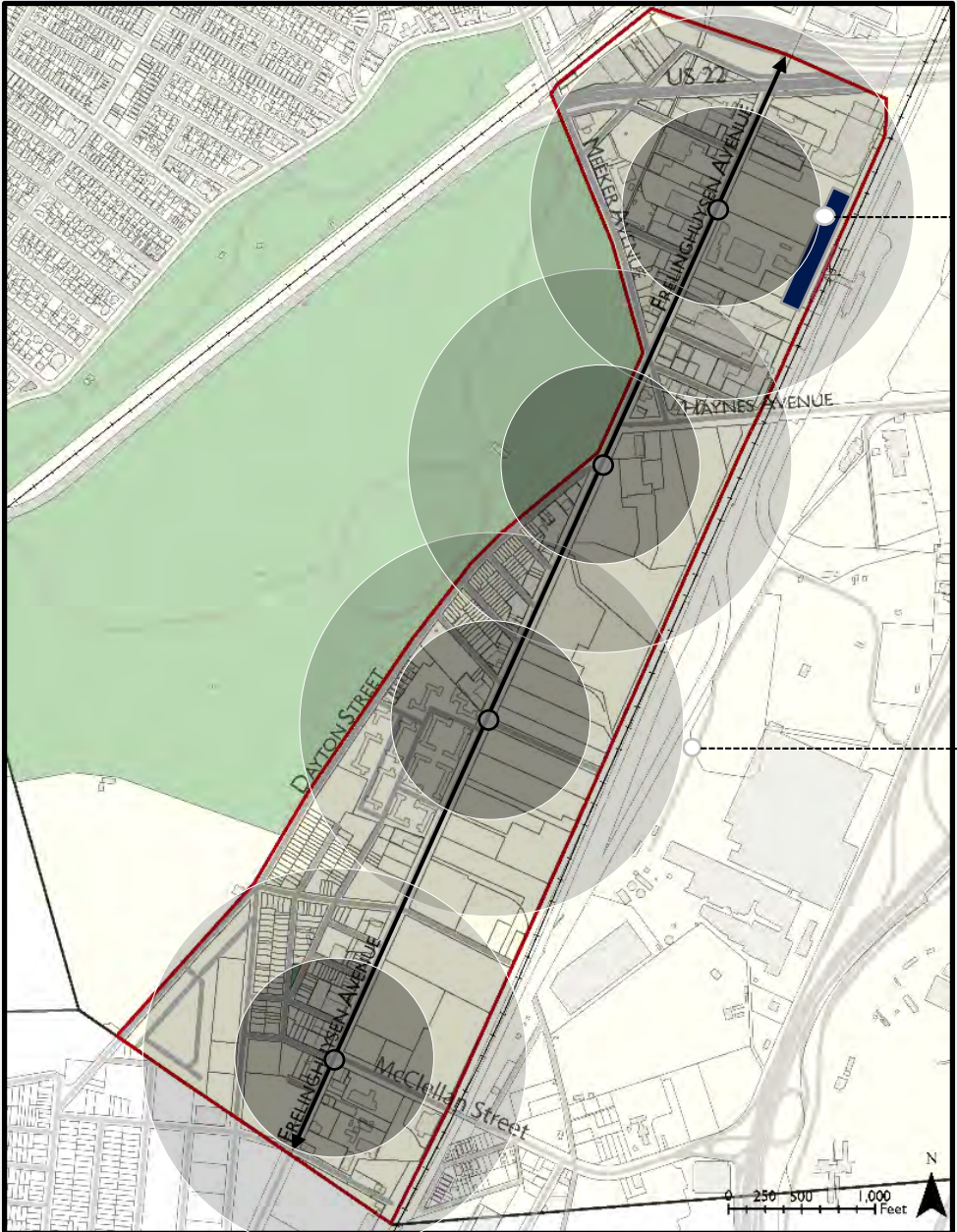
PROPOSED BUS RAPID TRANSIT (BRT)



From Liberty Street

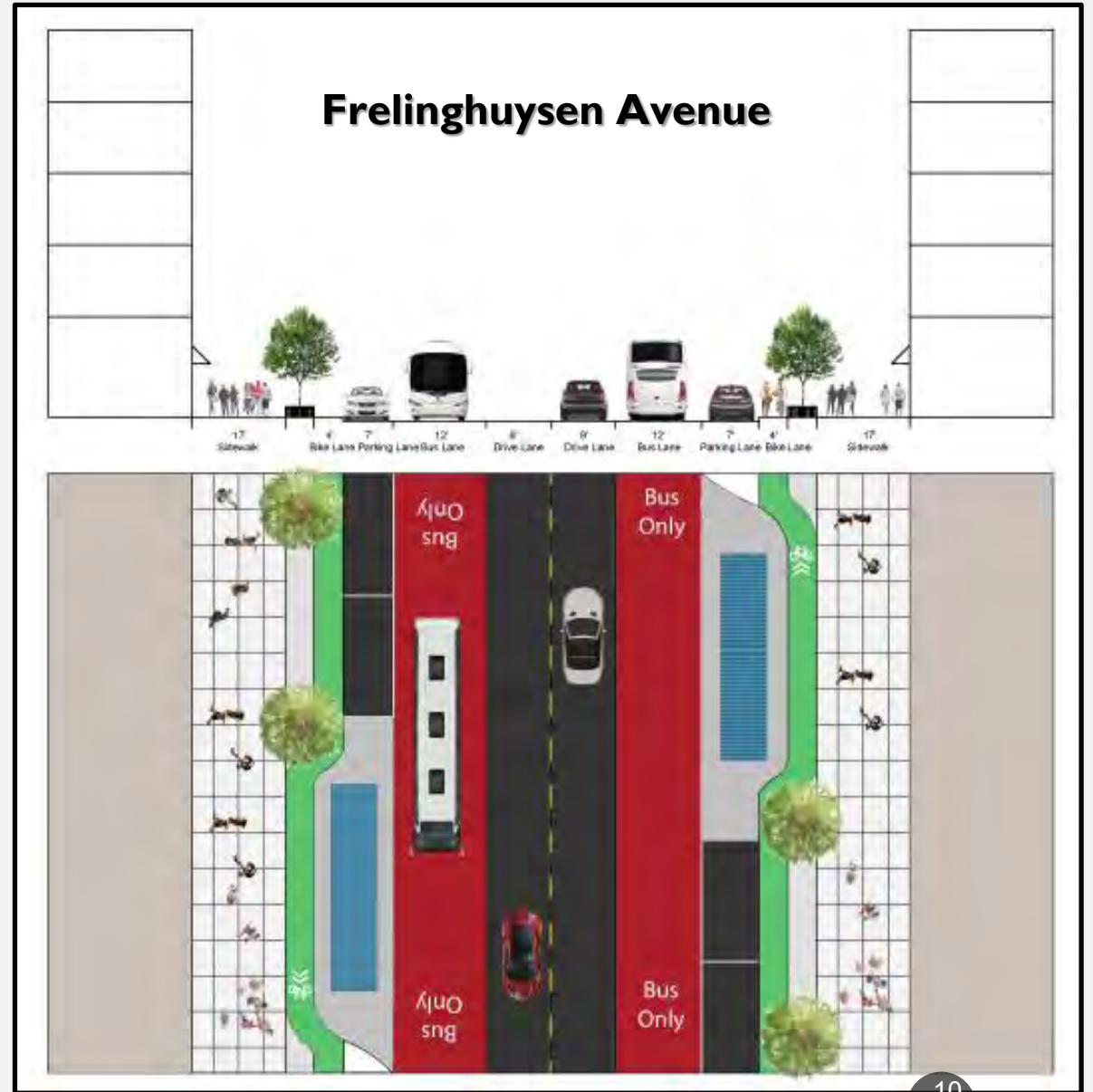
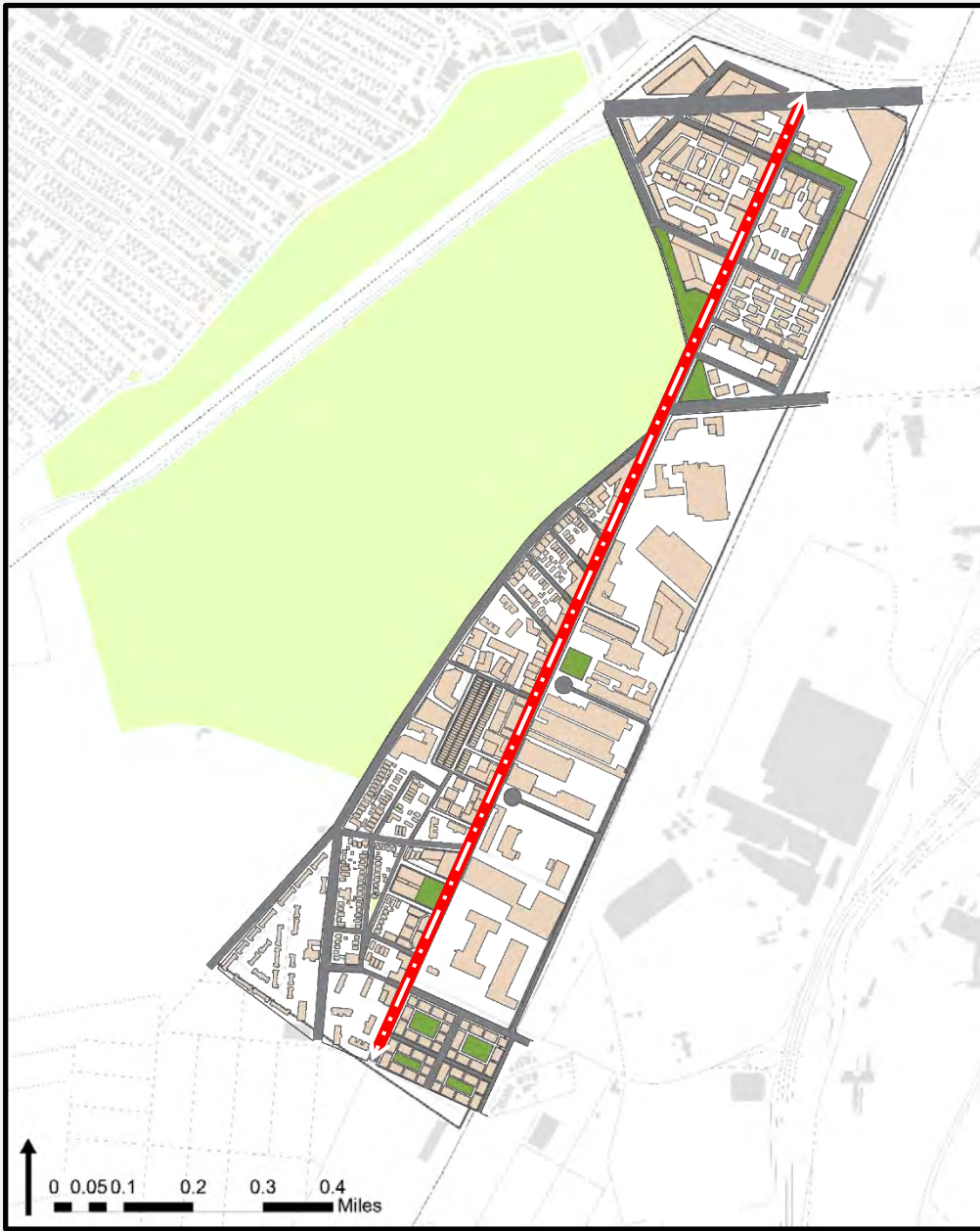
To McClellan Street

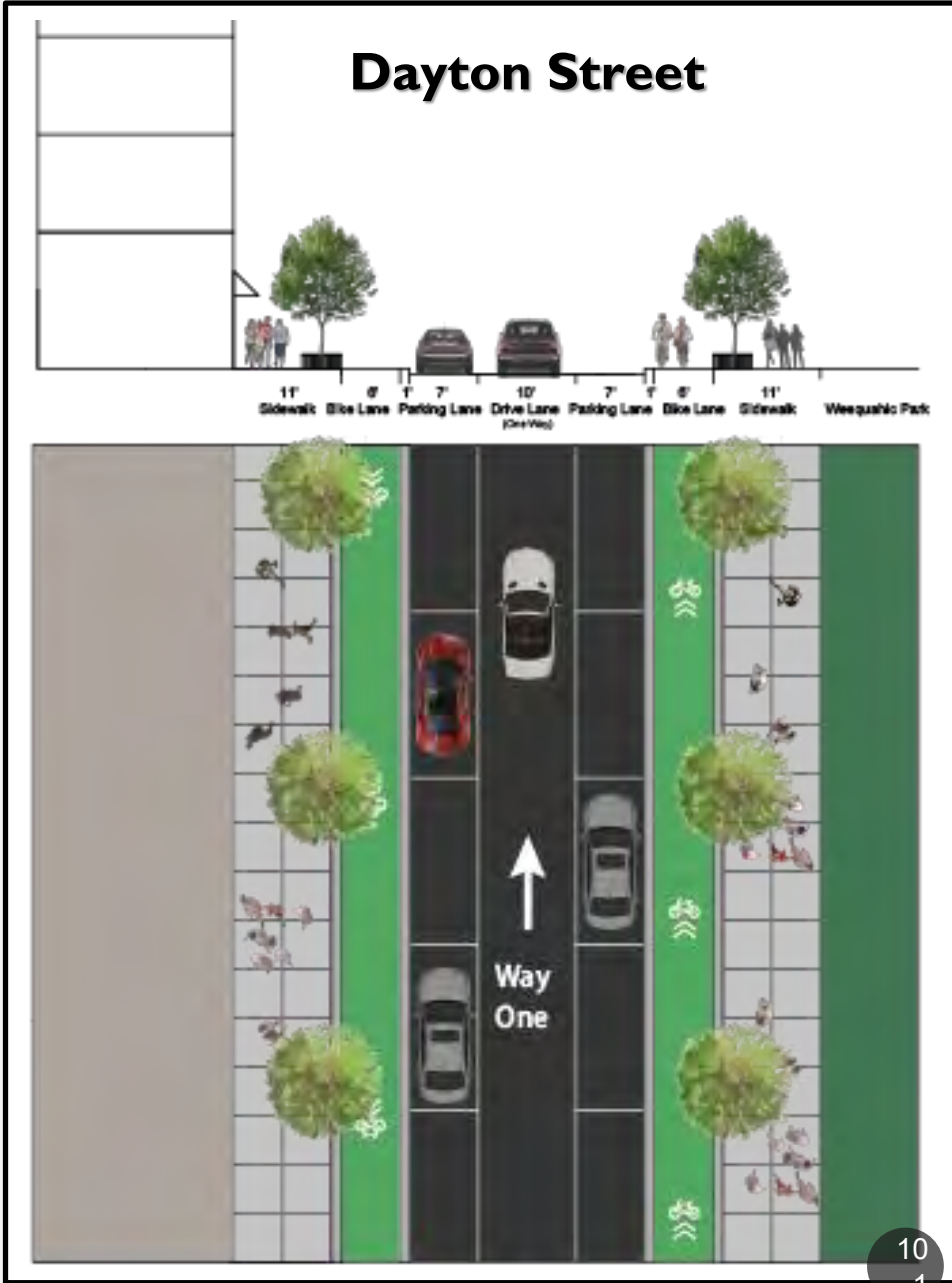
BRT/TRANSIT ACCESS

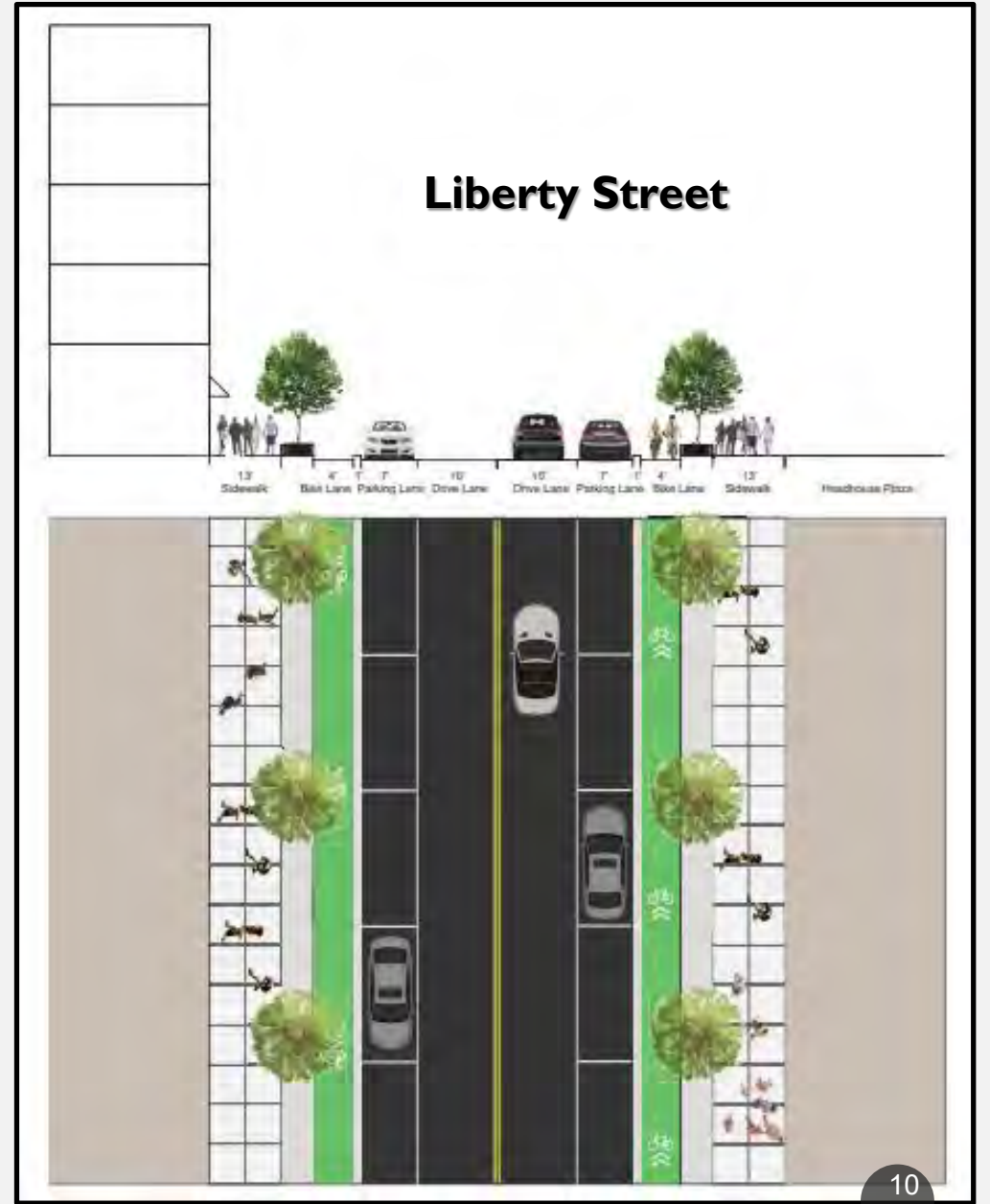


5-Minute Walking Distances:
¼ a mile or 1,320 feet

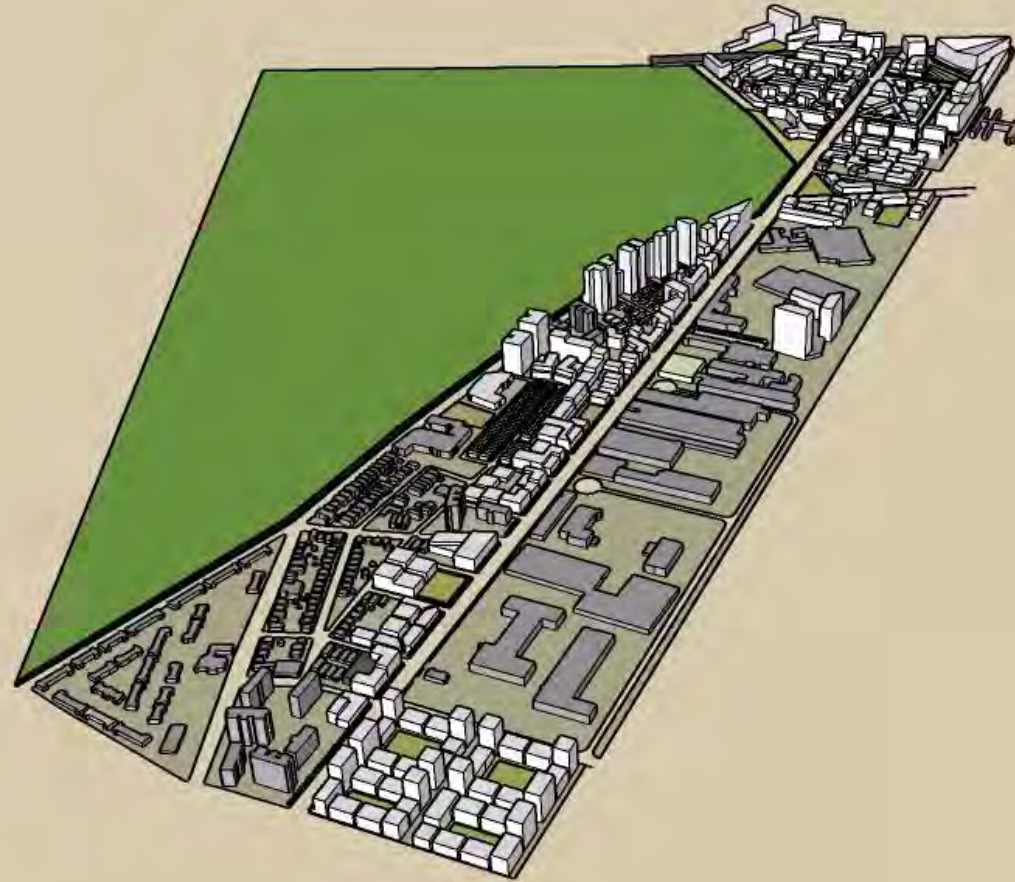
10-Minute Walking Distance:
½ a mile or 2,640 feet







3D FRELINGHUYSEN CORRIDOR – ALTERNATIVE 2



RESIDENTIAL DENSITIES

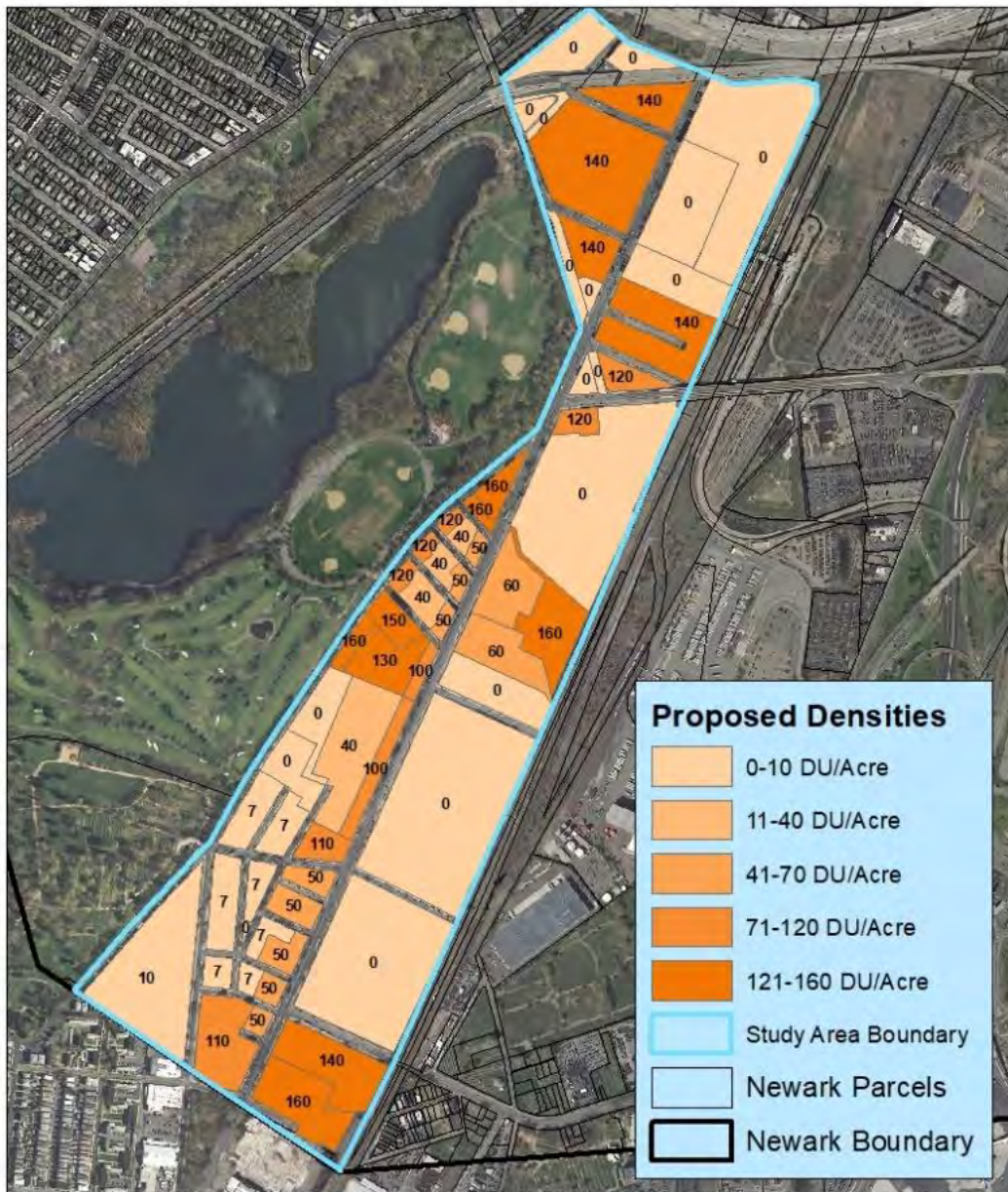
Projected Growth:

Units: 10,679

New Residents: 23,482 - 29,885

Target Population:

1. **Employees of Newark Airport** and supporting industries
2. **NYC commuters** searching for more **affordable housing** options
3. People who want **access to public transit** networks that **connect** them to other parts of **Newark and Northern New Jersey**



Source: New Jersey Office of Information Technology,
Office of Geographic Information Systems, 2012-2013 High Resolution
Orthophotography, NJ Parcels data, NJ Municipalities

ESTIMATED—CONSTRUCTION COSTS AND JOBS

- Approximately **6.3 million** square feet of new development
- Redevelopment construction costs are approximately **\$952 million**

| | Construction |
|------------------|---------------|
| Total Output | \$2.2 billion |
| Total Earnings | \$722 million |
| Total Employment | 18,000 jobs |

ESTIMATED PERMANENT JOB GROWTH

Goals:

- Provide jobs to residents in Dayton and surrounding neighborhoods.
- Tie new development along Frelinghuysen with the Newark Airport
- Promote diversity of economic industries that can attract a variety of job types, including office, industrial, retail, restaurant, and hotel jobs.

Jobs:

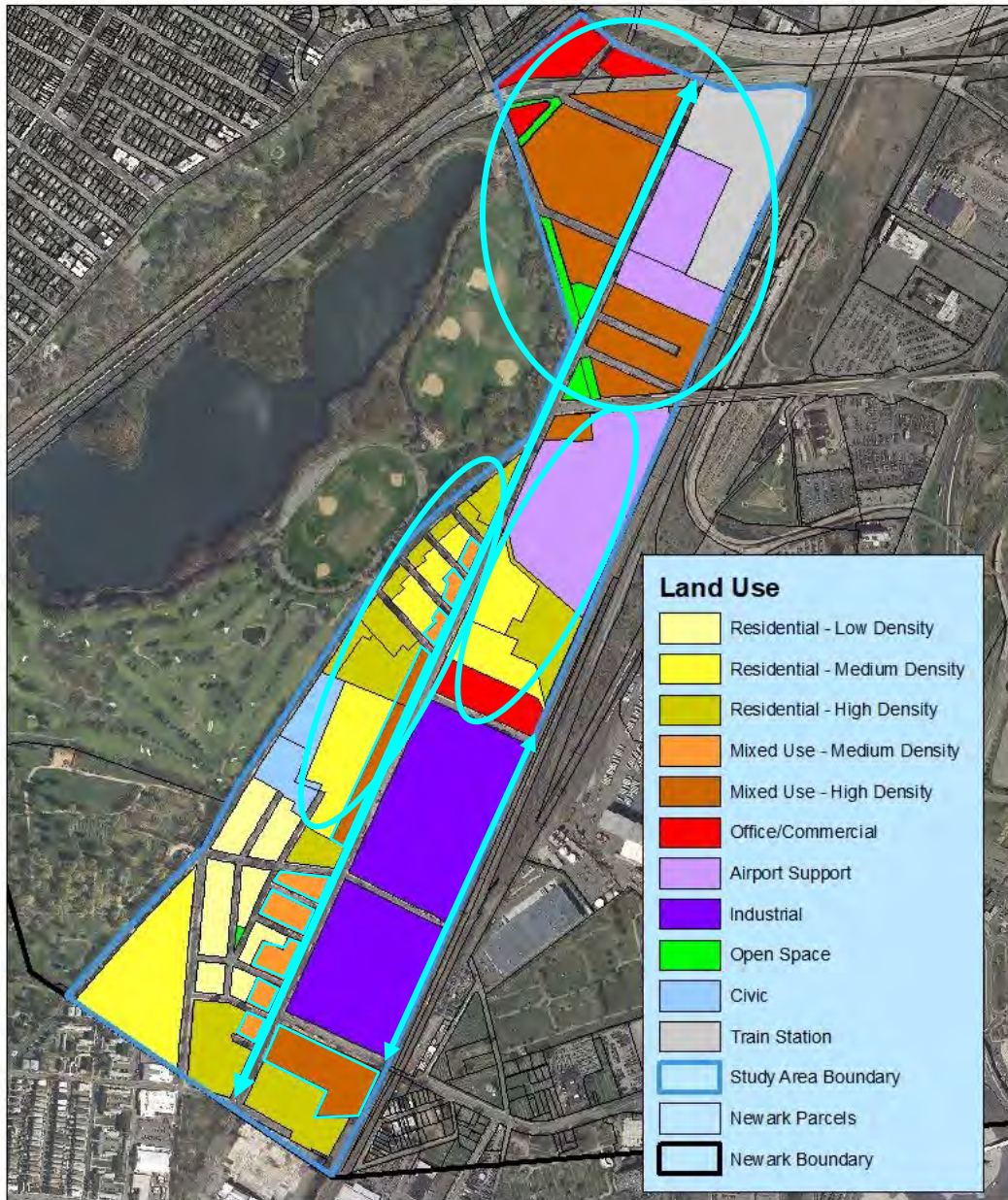
- Commercial: 29,100
- Industrial: 2,100
- Hospitality: 3,500

Total: **34,700**

Project Phasing

Approximate build-out by **2050**

- Phase 1
 - **Frelinghuysen Road Diet**
 - Eminent Domain on industrial/warehousing properties on industrial properties east of Frelinghuysen for designate **private truck service road** (40 ft. ROW)
- Phase 2: **Convert dilapidated industrial structures north of Haynes Avenue into mixed-use development**
- Phase 3: Encourage **redevelopment of industrial sites** north of Van Duyne Street into airport support, office, residential, and commercial uses. Encourage more **compact development** around **Weequahic Park**, in **Seth Boyden**, and along **Frelinghuysen**



0 650 1,300 2,600 Feet
Source: New Jersey Office of Information Technology,
Office of Geographic Information Systems, 2012-2013 High Resolution
Orthophotography, NJ Parcels data, NJ Municipalities

THANK YOU!

Questions?

