

NEWARK LIBERTY AIRPORT

arriving at aerotropolis

URBAN DESIGN STUDIO
FALL 2017/SPRING 2018



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy



dayton team

Professor Barbara Faga

Newcome Edwards, MCRP '17

London, UK

M. Nolan Gray, MCRP '18

Lexington, KY

Richard Hunt Jr, MCRP '17

Pemberton, NJ

Austin Maitland, MCRP '18

Ontario, NY

Lorenzo Waters III, MCRP '18

Accokeek, MD

fall 2017

Riya Debnath, MCRP '18

Kolkata, WB, India

Samantha Donovan, MCRP '19

South Burlington, VT

Nathaniel Erwin, MCRP '19

Ridgewood, NJ

Elias Guseman, MCRP '18

Ocean City, NJ

Sribhava Kakani, MCRP '18

Vijayawada, AP, India

Benjamin Peacock, MCRP '18

College Station, TX

Vishal Ream-Rao, MCRP '18

Sacramento, California

Ian Rynex, MCRP '18

Phoenix, AZ

Angello Salazar, MCRP '18

Kearny, NJ

Lindsey Sigmund, MCRP '18

Toms River, NJ

spring 2018

Andrew Wilson, MCRP '18

Wyckoff, NJ

Chongrui Yang, MCRP '18

Yunnan, China

weequahic team

Professor Barbara Faga

Thomas Allen, BS Urban Planning '18

Brick, NJ

Julia Furmanek, BS Urban Planning '18

Jersey City, NJ

Hailey Graf, BS Urban Planning '18

Secaucus, NJ

Jasmine Jones-Bynes, BS Urban Planning '18

Piscataway, NJ

Shweta Puri, MCRP '19

Chandigarh, India

Simran Riar, BS Planning & Informatics '18

Carteret, NJ

Adarsh Shah, BS Urban Planning '18

Union, NJ

spring 2018

aerotropolis team

Professor Tony Nelessen

Samuel Bellamy, MCRP '18

Keyport, NJ

Nicholas Christopoulos, BS Urban Planning '19

River Edge, NJ

Michael Davis, BS Urban Planning '19

West Deptford, NJ

Ketki Kulkarni, MCRP '19

Bhopal, India

Rena Pinhas, BS Urban Planning '18

Manalapan, NJ

Justin Singleton, BS Urban Planning '18

Parsippany, NJ

Patrick Vanbernum, BS Urban Planning '19

Riverton, NJ

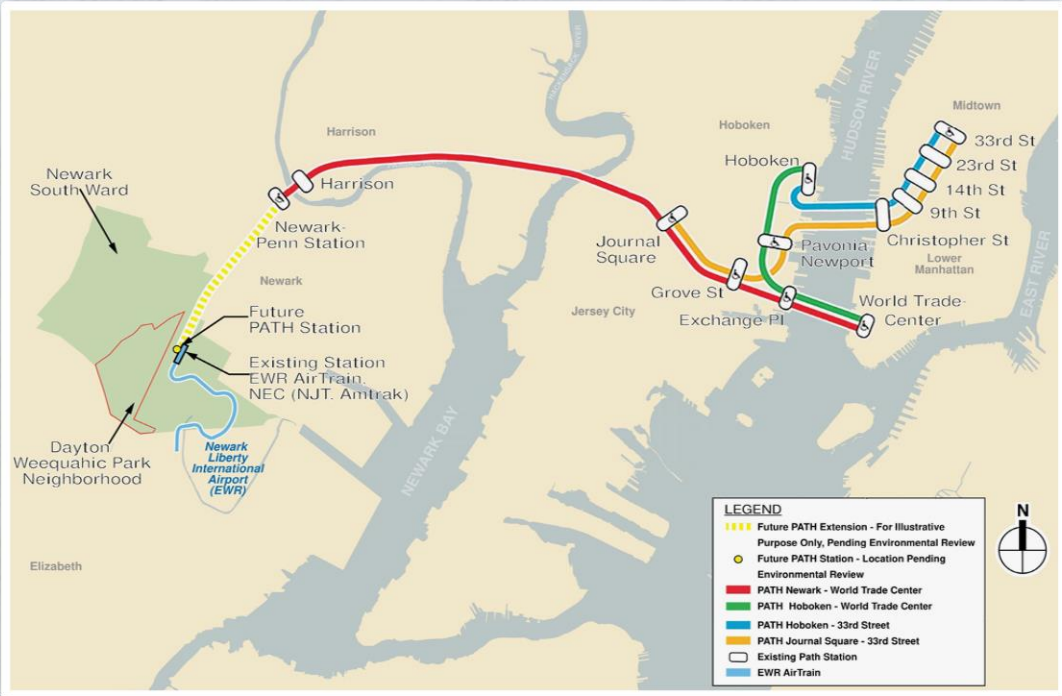
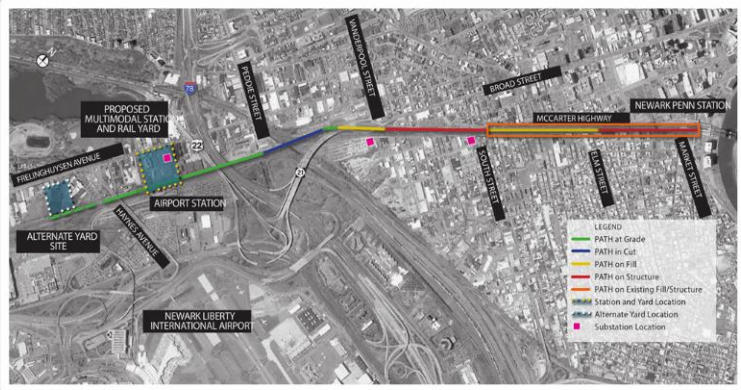
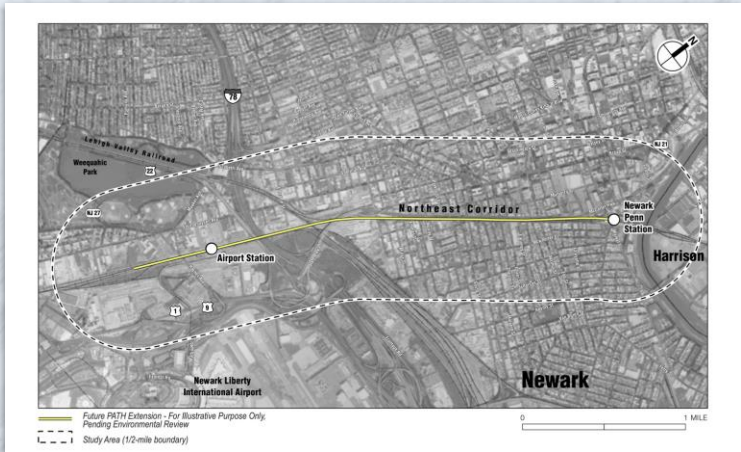
Yingija Zhou, BS Urban Planning '20

Wuxi, China

spring 2018

PATH RAIL EXTENSION

Connecting Dayton to Over **270,000** Daily PATH Riders by 2026



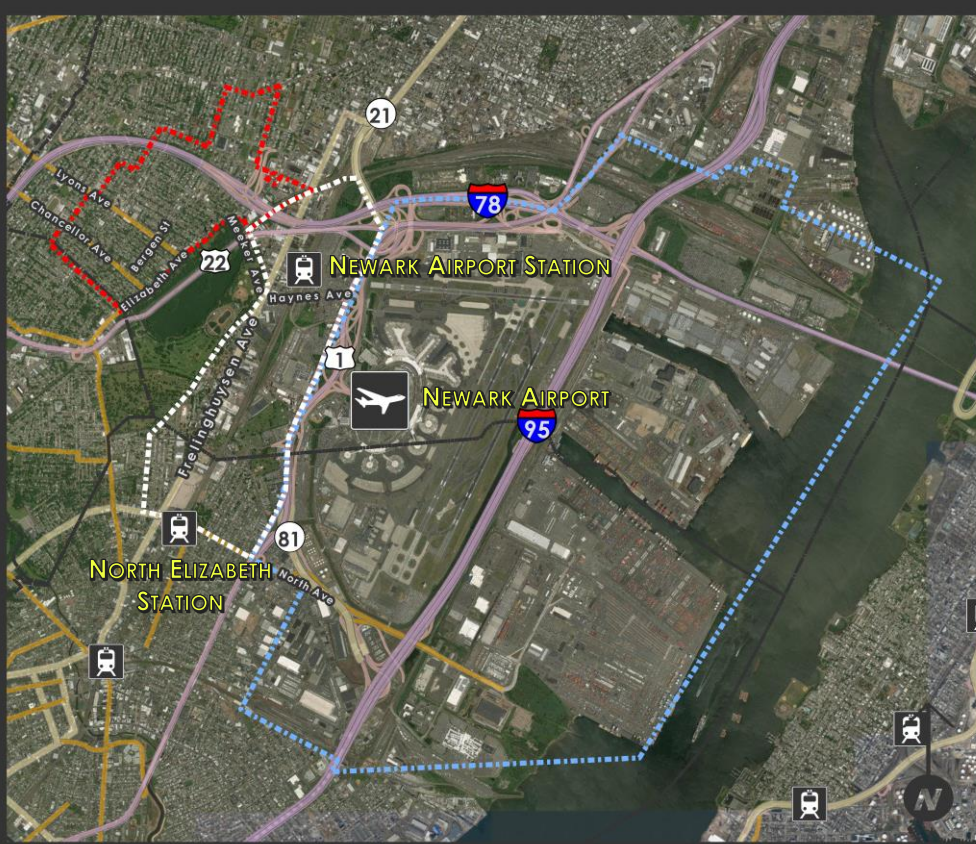
Study Areas

Whole Study Area

-  Dayton
-  Aerotropolis
-  Weequahic
-  Municipalities

1/2 mi

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User



Nearly 1/3 of Newark

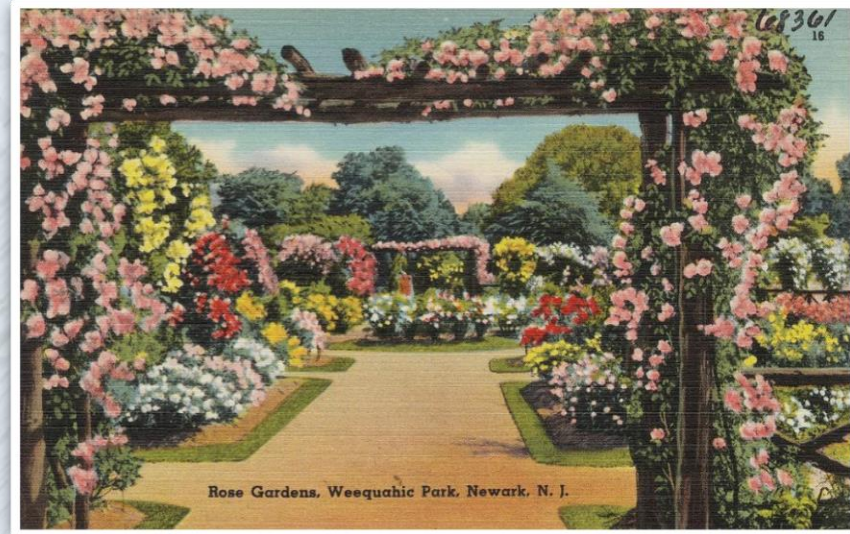
BACKGROUND & PROCESS

● Initial Task

- Leverage proposed extension of PATH rail into transit-oriented redevelopment for the Dayton-Weequahic Park neighborhood

● Thank you

- **Upendra Sapkota**, AICP, LEED AP
- **Juan O'Neill**
- City of Newark
Economic & Housing Development
- Office of Planning, Zoning, & Sustainability (OPZS)



BACKGROUND & PROCESS

- **Seth Boyden Terrace**

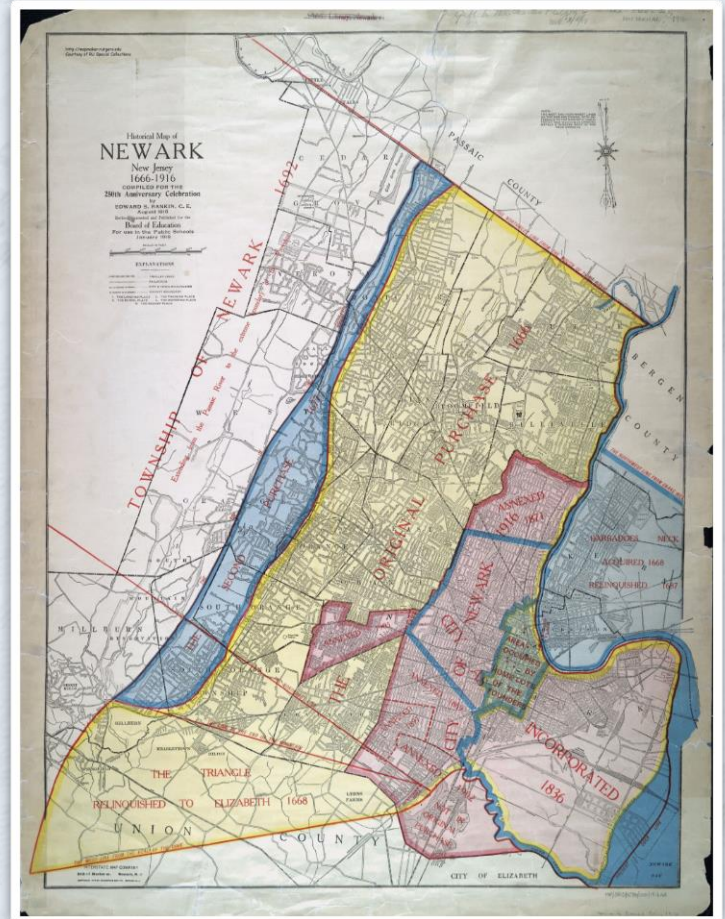
- Public housing project developed in the 1930s that closed in 2012

- **Weequahic Park**

- Designed by firm of Frederick Law Olmsted, Jr. in 1905

- **White Flight/Disinvestment**

- Once major Jewish community
- Hit hard by political upheaval, deindustrialization in 1960s/70s



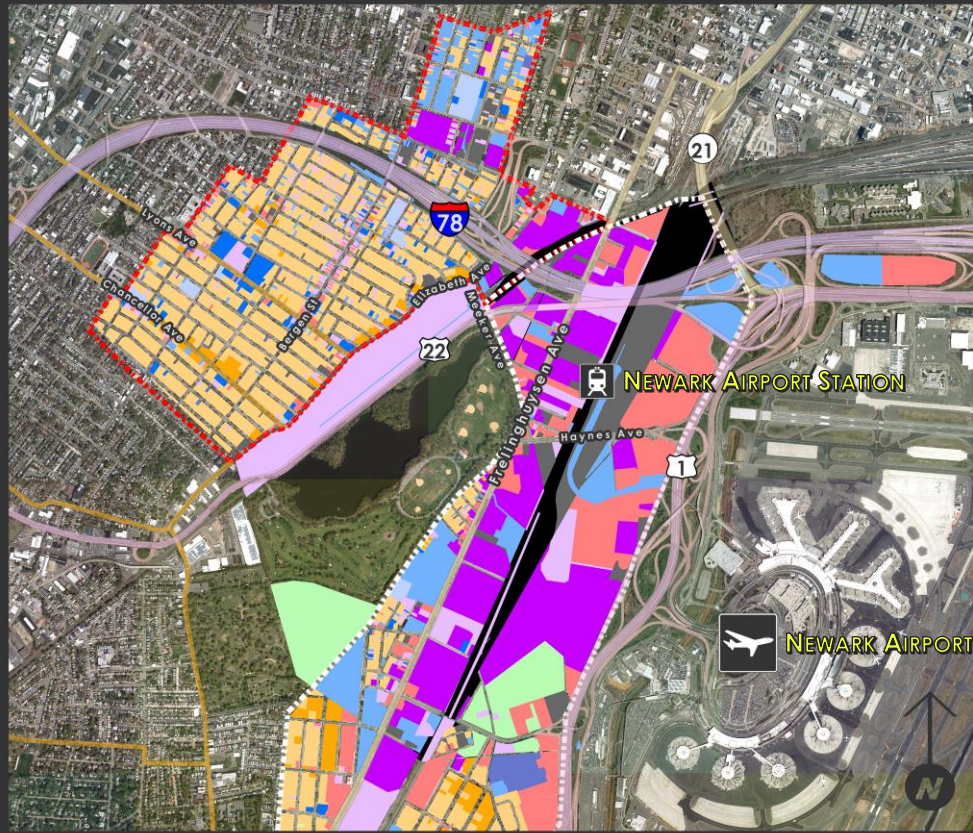
Land Uses

Weequahic
and Dayton

-  Residential-SFH
-  Residential-MFH
-  Commercial
-  Industrial
-  School Uses
-  Public Uses
-  Institutional Uses
-  Other Exempt
-  Cemeteries
-  Vacant
-  Railroad
-  Other

1/2 mi

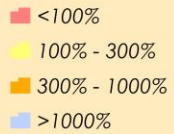
Information, Shapefiles and Aerials
from NJGIN



- Primarily industrial
- Low density housing
- Senior housing
- Rail barrier
- Hospital

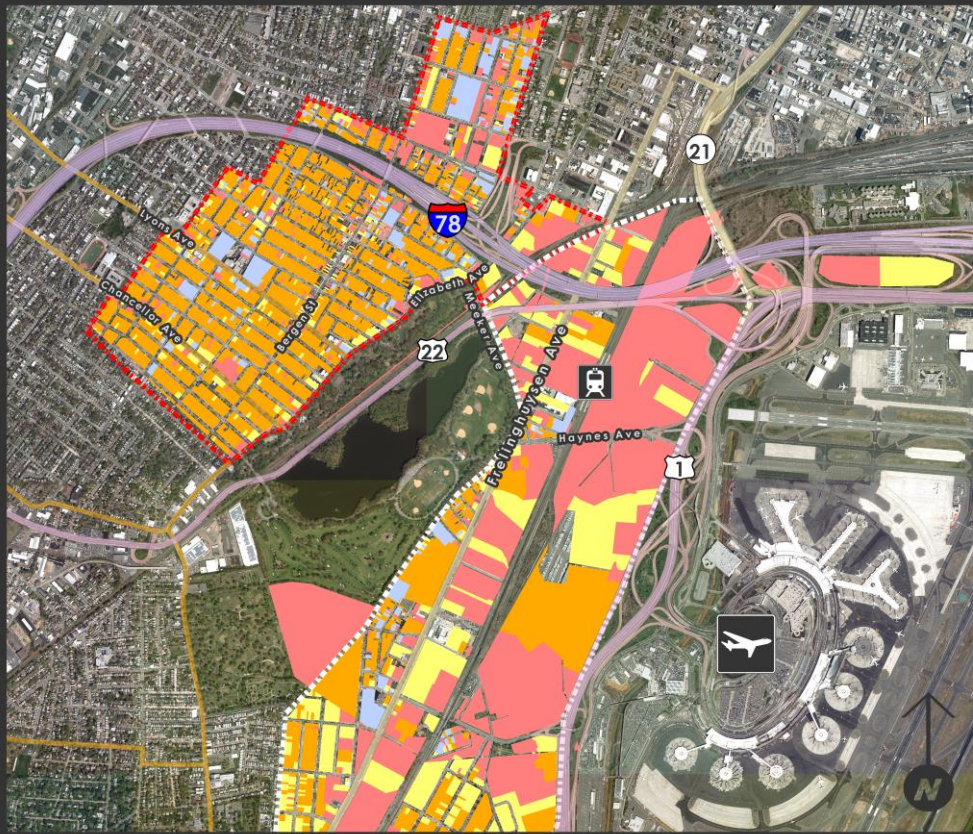
Parcel Value Analysis

Weequahic
and Dayton



1/2 mi

Information, Shapefiles and Aerials
from NJGIN



- ❑ Underutilized industrial parcels
- ❑ Vacant land with few improvements
- ❑ Surface parking

DEMOGRAPHIC SNAPSHOT

	Weequahic	Dayton	Newark	Elizabeth	NYC Metro
Median HH Income	\$34,443	\$13,689	\$33,025	\$43,831	\$69,211
Average Commute Time	41 min.	54 min.	35 min.	27 min.	36 min.
Unemployment Rate	15.4%	13%	10.7%	7.1%	5%
% in Labor Force	68.1%	41%	62.4%	69.7%	64.8%

Data from 2016 ACS, aggregated from Social Explorer



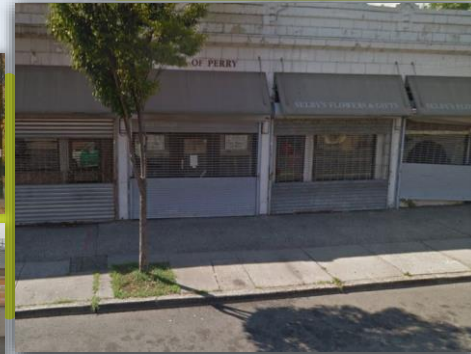
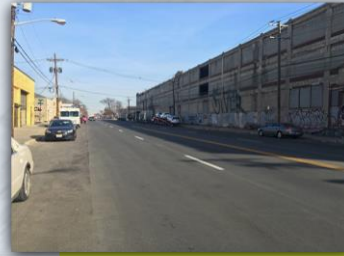
STREET NETWORK

● Dayton

- General conditions – Irregular blocks, deterioration, inadequate street lighting, lack of green infrastructure, unsafe crossings, lack of connectivity, no bike lanes
- Frelinghuysen - lined with vacant or abandoned development on most sections
- Dayton - Poor access to park, crime hot spots





● Weequahic

- Bergen - poor pavement condition
- Lyons - no bus shelters
- Elizabeth - no bike lanes
- Chancellor - poor streetscape



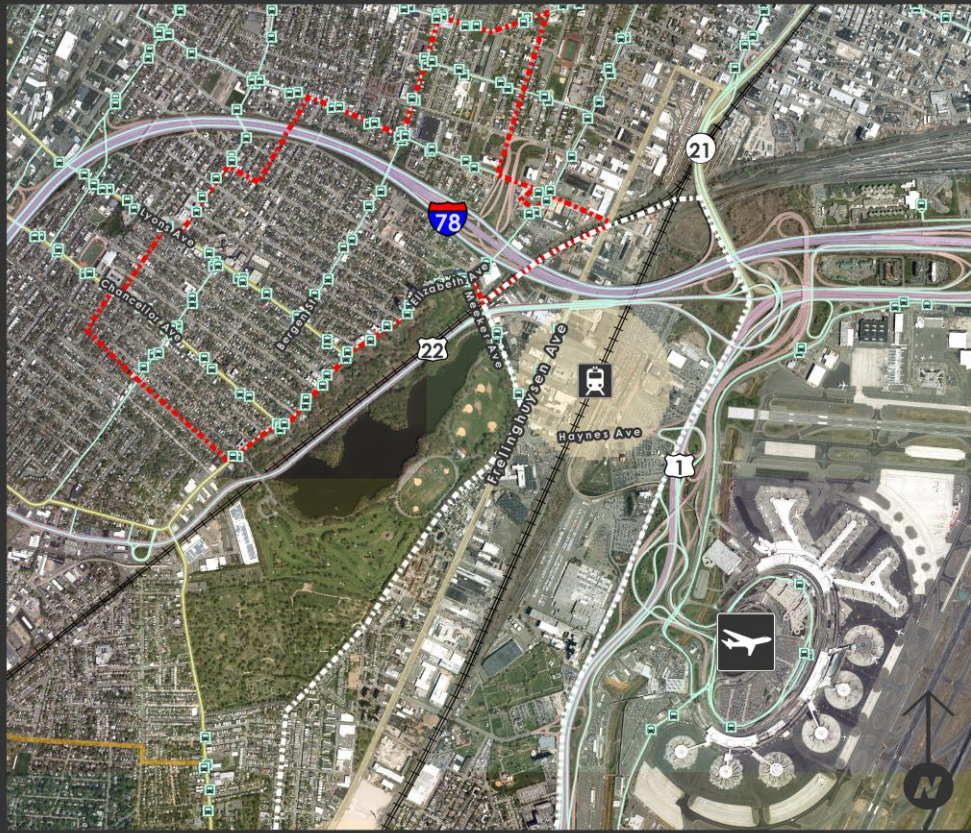
Transit

Weequahic
and Dayton

-  Bus Stops
-  Bus Routes
-  Railroad Track
-  1/4 Mile Buffer

1/2 mi

Information, Shapefiles and Aerials
from NJGIN



- No train station access
- Gap in bus network
- Most bus stops have no shelters
- Many routes over 40% recovery on the ticket revenue

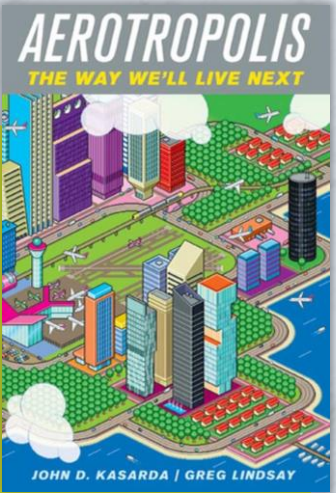
BACKGROUND & PROCESS

- **Connected with Experts**

- **Benjamin DeCosta**, former Aviation General Manager of Newark International Airport
- **Shelley Lamar**, Executive Director of the Aerotropolis Atlanta Alliance
- **Adelee Marie Le Grand**, AICP, Chief Strategy Officer/Vice President of Transdev
- **Louis E. Prezeau Jr.**, Director of Community and Economic Development, La Casa de Don Pedro

- **Design Charrette**

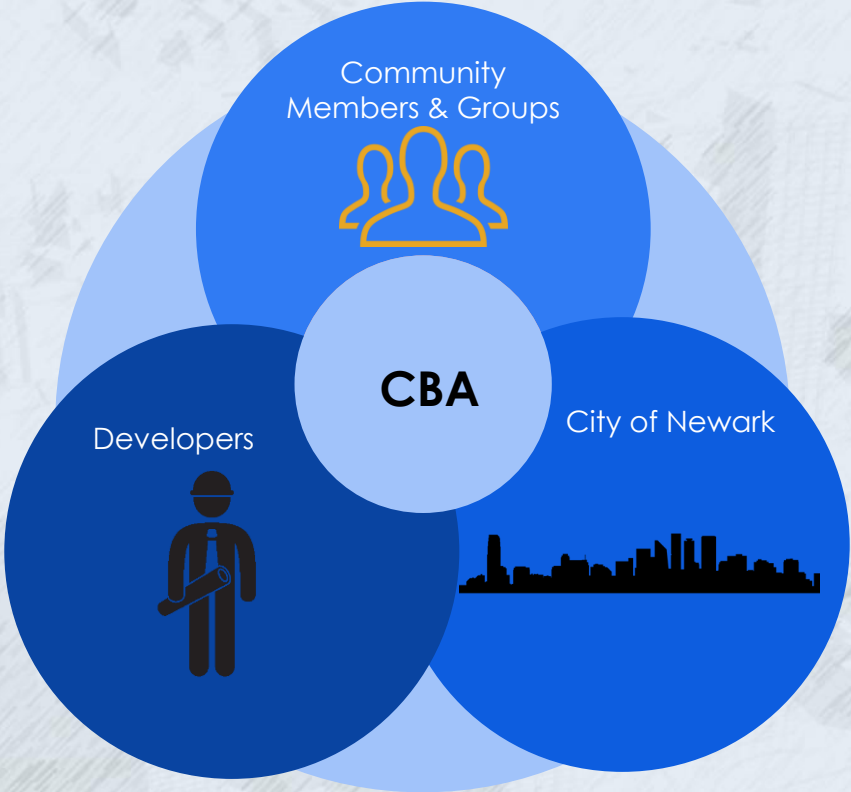
- **Aerotropolis**



PRINCIPLES

- Embrace a *Dynamic* and *Urban* Future
- Prioritize *Affordability* and *Accessibility*
- Recognize the *Airport* as the *Catalyst*
- Incorporate the Future *PATH Station* into the *Fabric* of the Community

COMMUNITY BENEFITS



CBA's are facilitated by the city and created based on negotiations between a developer and community organizations that represent the individuals impacted by the proposed development

SOLUTIONS

Job creation → *First source hiring program*

Job training → *Coordinate job training programs with appropriate community-based organizations & anchor institutions*

Affordable housing → *Increase affordable housing requirements*
→ *Explore dynamic housing solutions*

Expanding access to mass transit → *Locate stops around concentration of jobs & activities*
→ *Set asides for transit passes*

Parks + green infrastructure → *Mitigate environmental constraints*
→ *Improve active transportation network*

Land banking → *New parks and affordable housing*

Beautification → *Murals, tree plantings, rain gardens*

Potential Community Groups

Newark Community Economic Development Corporation, Youth-Build Newark, Newark Alliance, Newark Training Center (Newark 2020), Leadership Newark, Newark Regional Business Partnership, Habitat for Humanity for Greater Newark, Greater Life & other faith-based organizations, Greater Newark Conservancy, Forward Ever, cWow, Gateways to Newark

Zoning

Weequahic
and Dayton

Residential

- Low/Moderate
- Medium
- High

Commercial

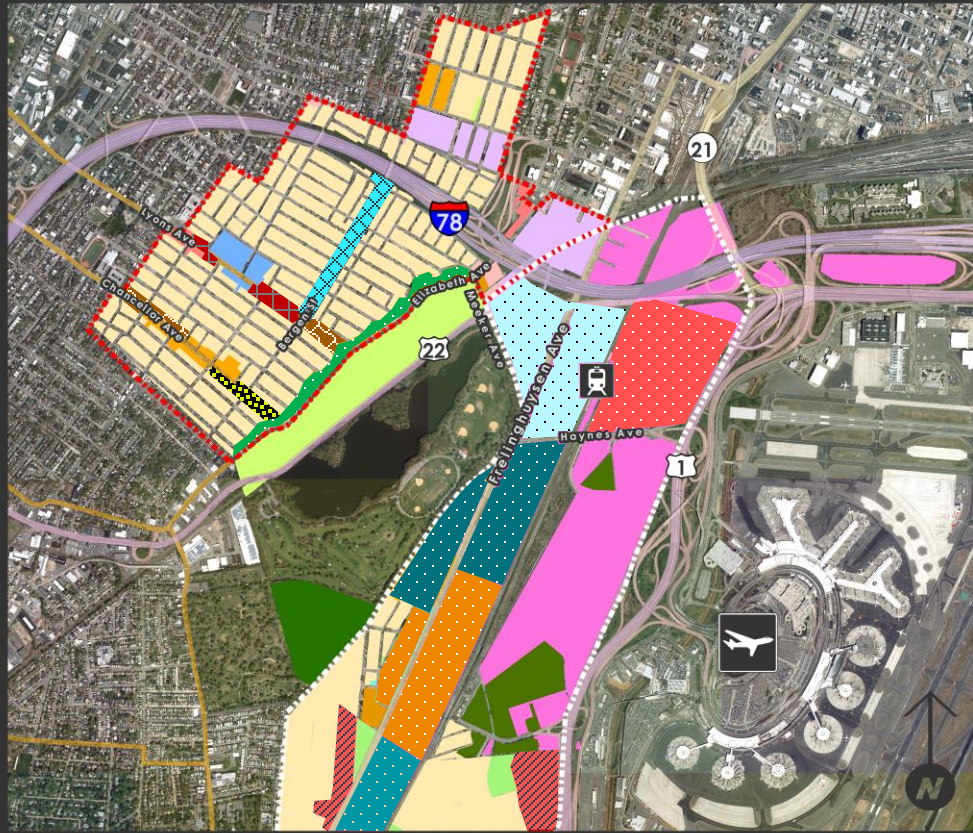
- Community
- Regional
- Highway
- Mixed Use-Low

Other

- Ind-Light/Medium
- MRC
- EWR
- Institutional/Public
- Open Space
- Cemetery

1/2 mi

Information, Shapefiles and Aerials
from NJGIN



- ☐ Mostly low density housing
- ☐ Encourage more mixed use
- ☐ Low Density Commercial

Fall 2017 Studio



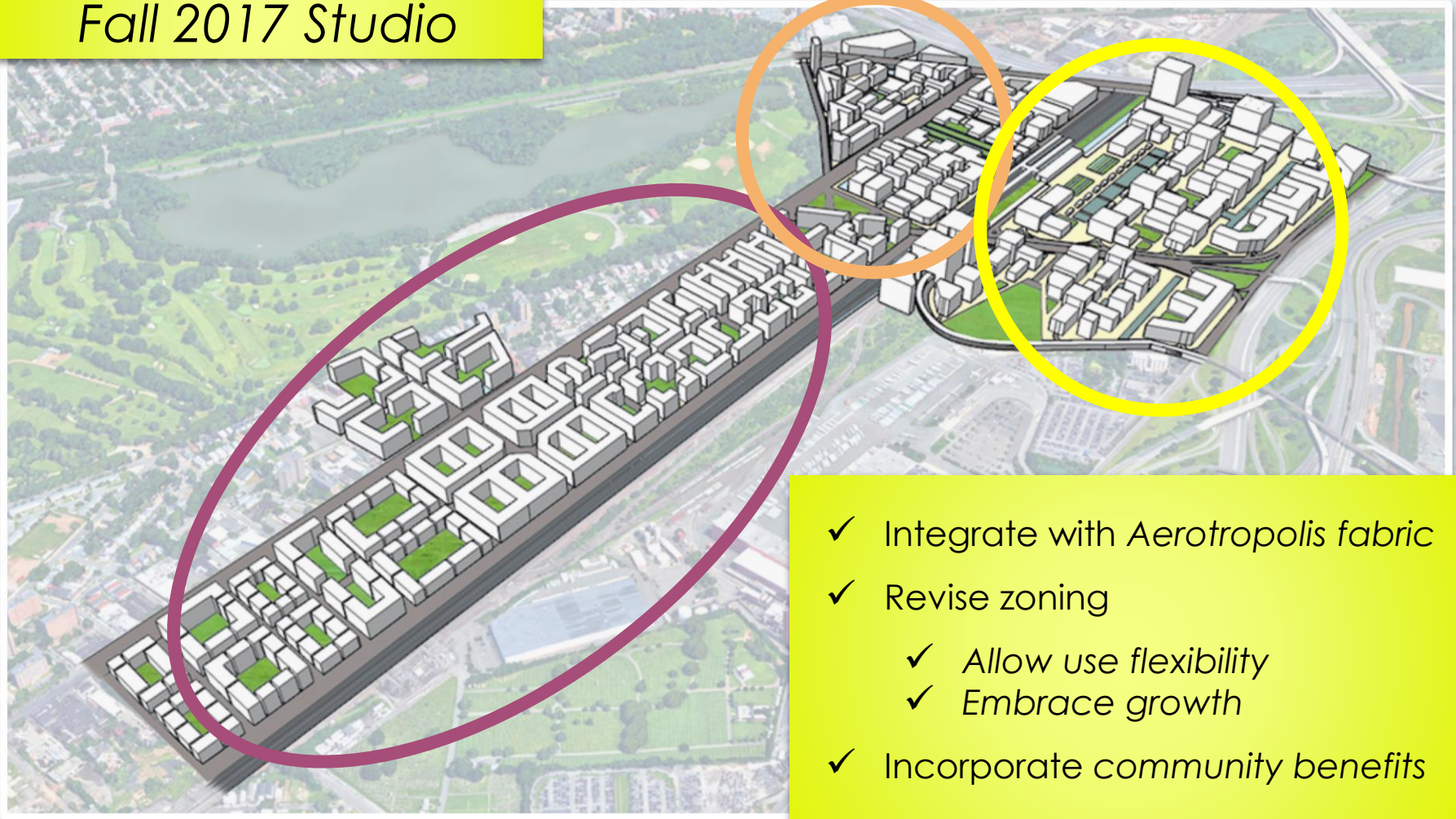
Weequahic Park

Seth Boyden

Newark Airport Station

Budweiser Plant

Fall 2017 Studio



- ✓ Integrate with *Aerotropolis fabric*
- ✓ Revise zoning
 - ✓ Allow use flexibility
 - ✓ Embrace growth
- ✓ Incorporate community benefits



PATH to Park Axis

Pedestrian Mall





Porta Nuova Garibaldi, Milan



Covered spine with
2 MSF international
exhibition center

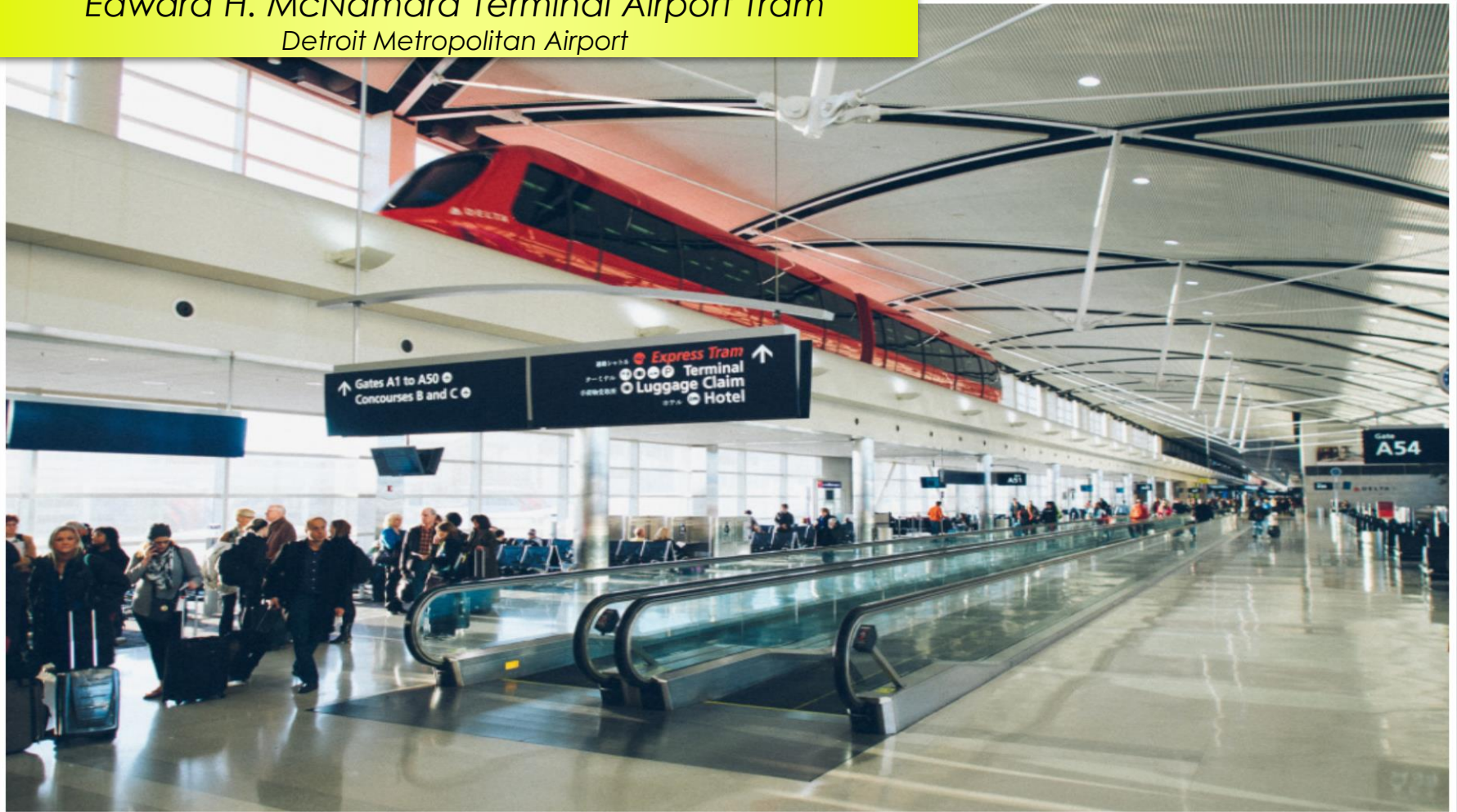


Atlantic Station, Georgia

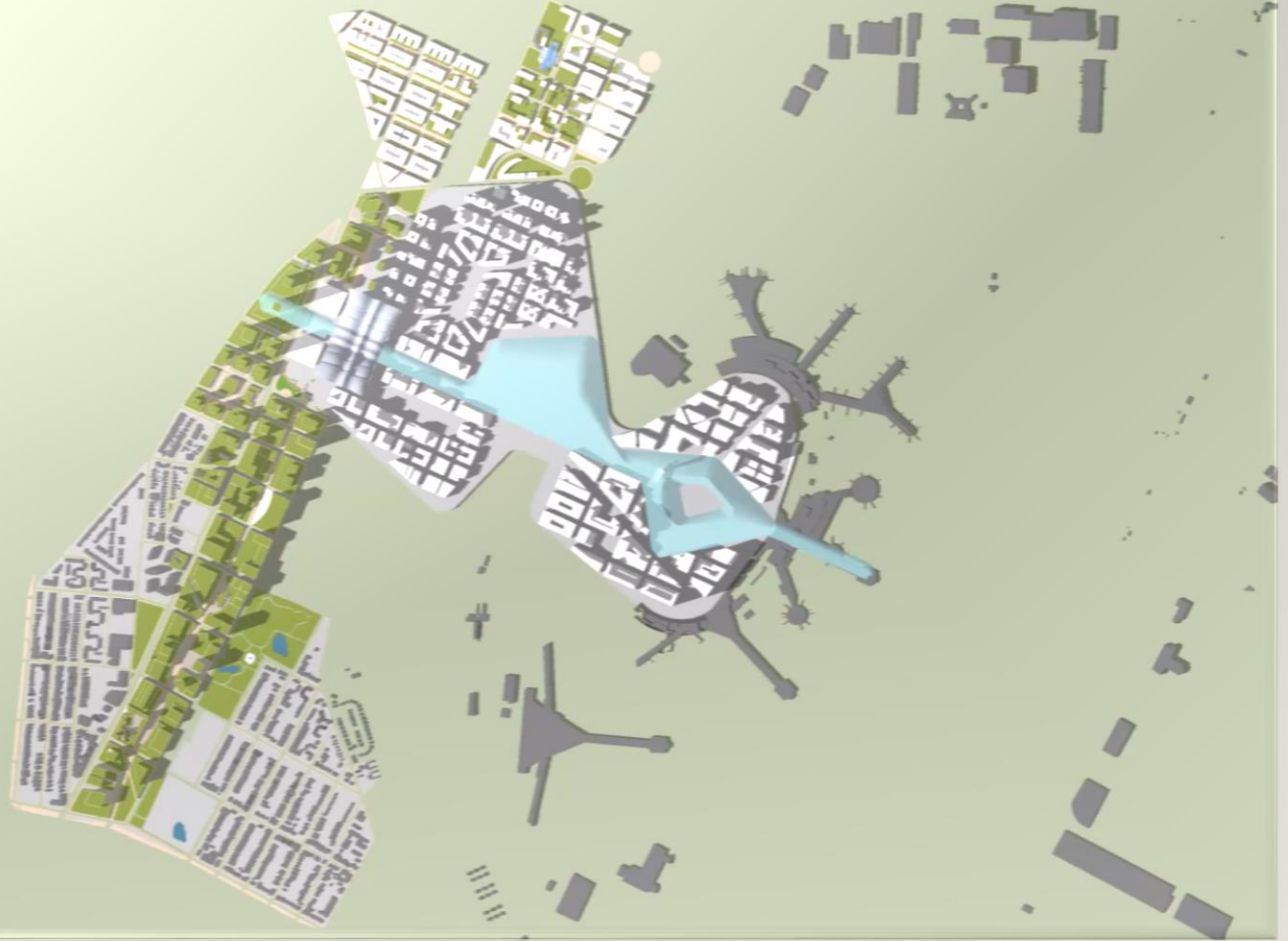


Edward H. McNamara Terminal Airport Tram




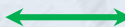
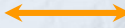
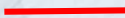


Detroit Metropolitan Airport

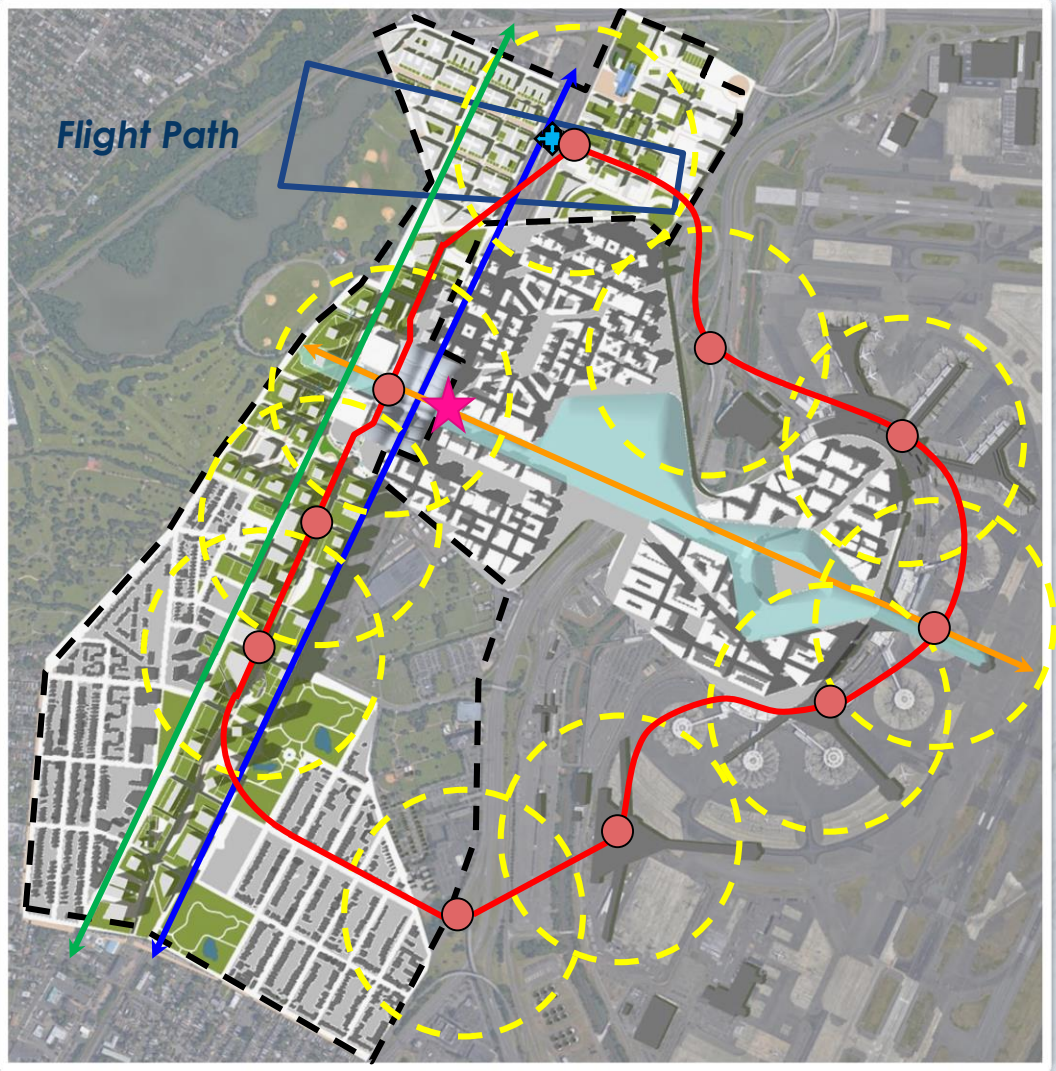


Our Vision



SITE PLAN

-  **Old Station**
-  **Multimodal Hub**
-  **Existing NJ Transit Line**
-  **BRT System**
-  **Cable Car**
Dayton st - EWR
-  **People Mover**
Connects Neighborhood to Terminals
-  **People Mover Stations**
-  **5 min walk**



DISTRICTS

★ Activity Nodes in each district

→ District 1 - The Southern Ramble

→ District 2 - Frelinghuysen Center

→ District 3 - Parkside Heights

→ District 4 - Weequahic Junction

Overall Program Characteristics

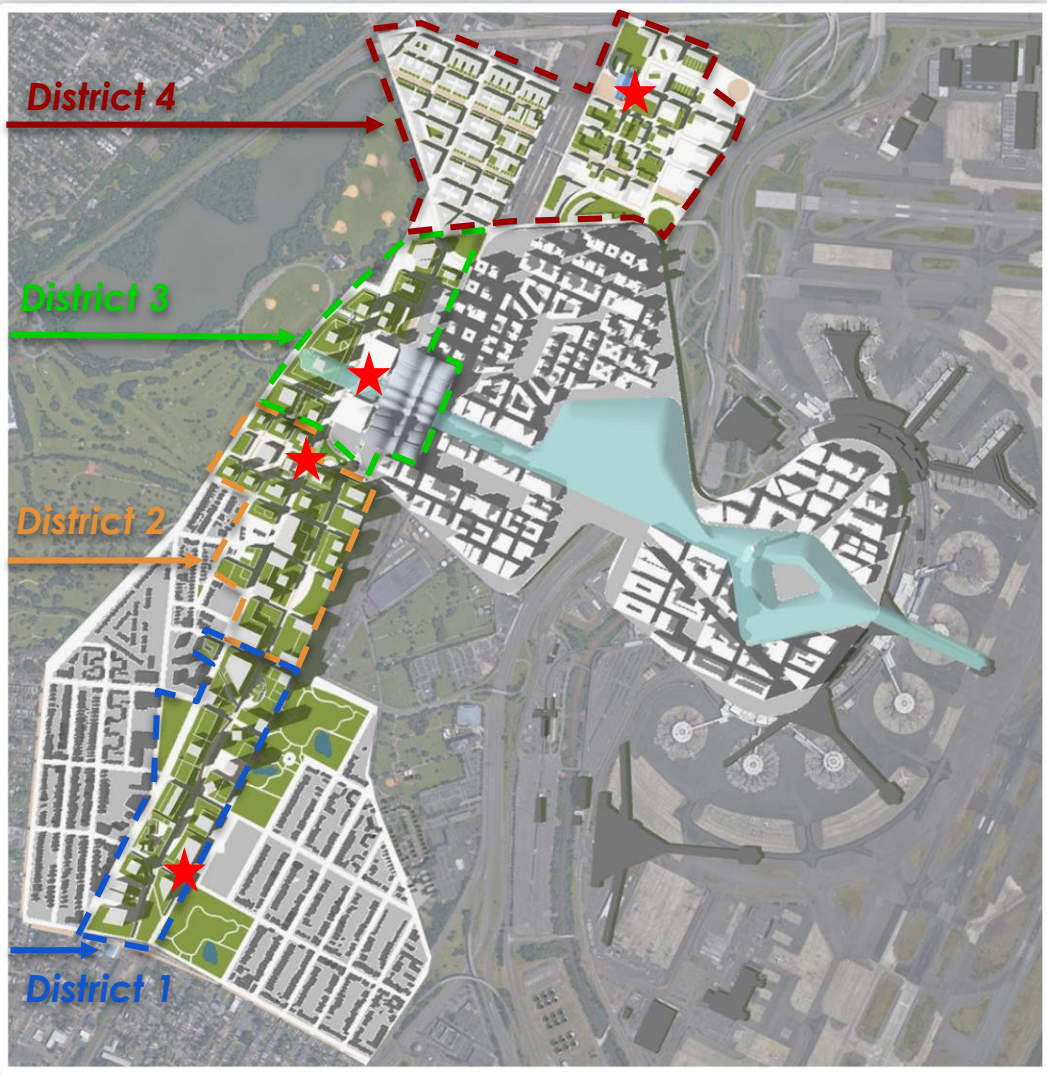
Total Site Area : 1,054 Ac

Developed Area : 330 Ac

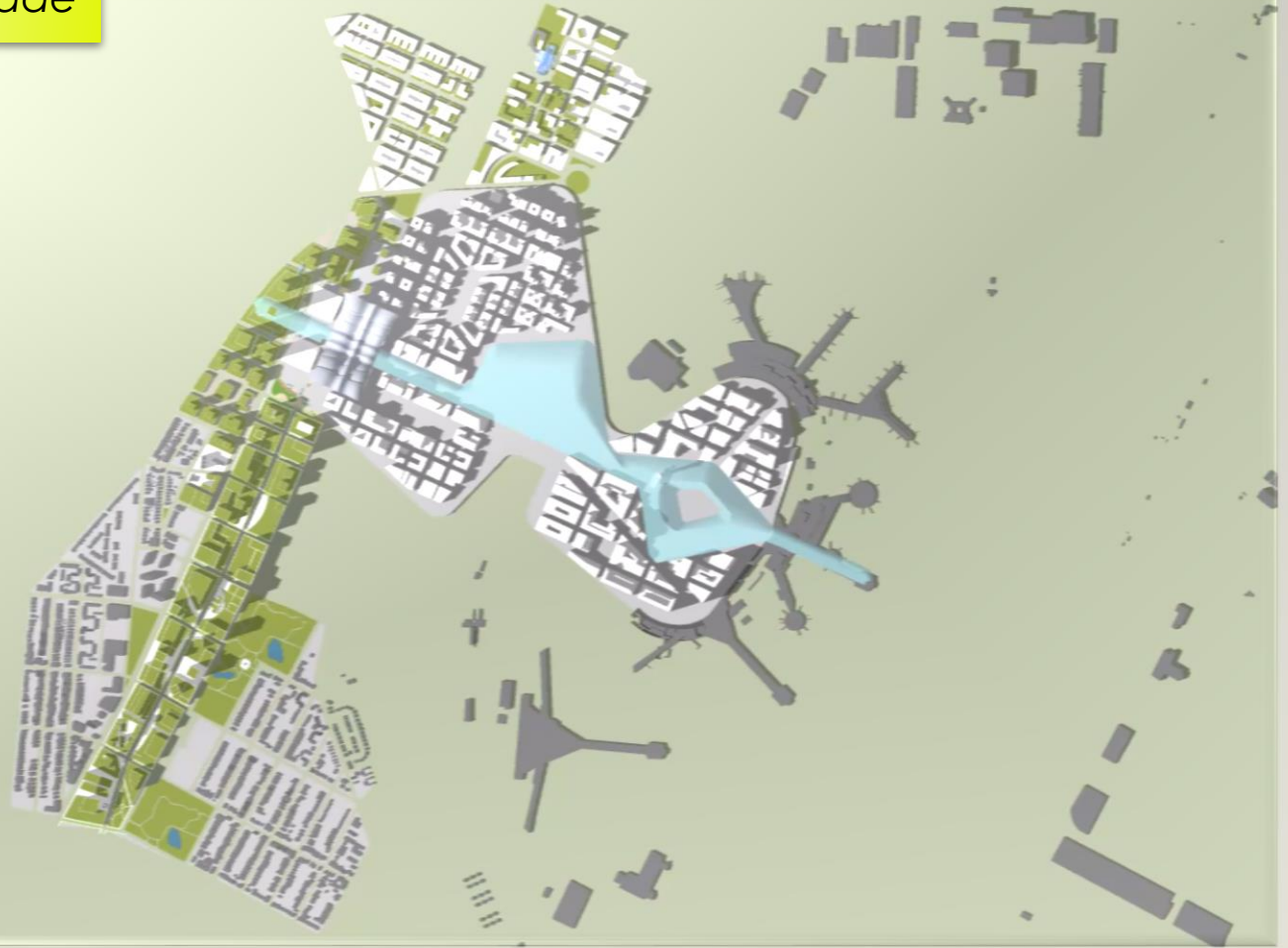
Built-up Area: 45 MSF

Green Space and

Open Space : 16 MSF



Shared Street Promenade



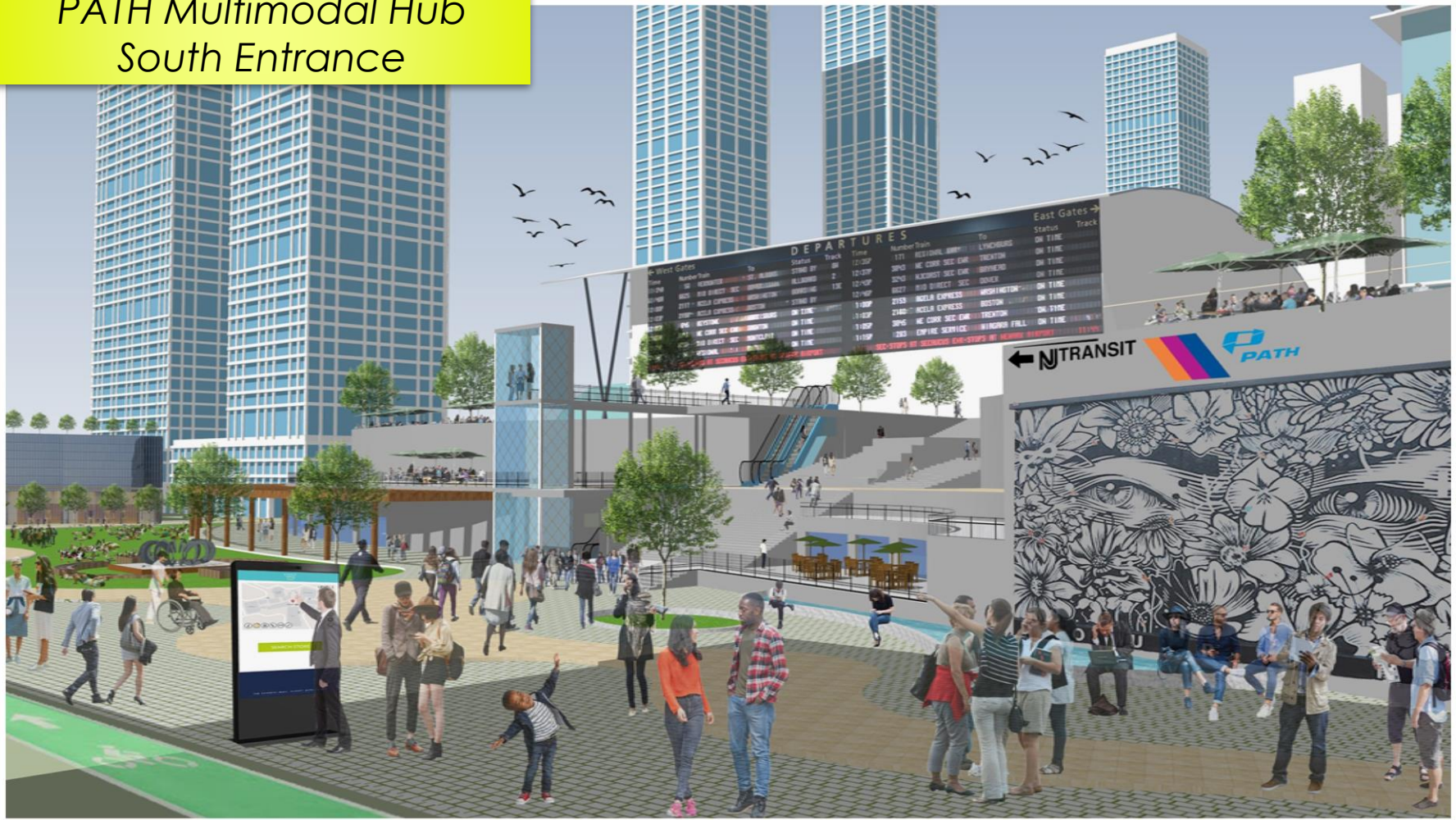
Ambler Avenue Shared Promenade



PATH Multimodal Hub Frelinghuysen Entrance



PATH Multimodal Hub South Entrance



NEXT STEPS

DAYTON-AEROTROPOLIS

2018 to 2020

- ✓ Establishment of CBA/New Zoning
- ✓ Designate Redev/Rehab area
- ✓ Plan phase 1 developments
- ✓ Develop PUDs with Developers/Cities
- ✓ Establish aerotropolis working group with stakeholders

2020 to 2022

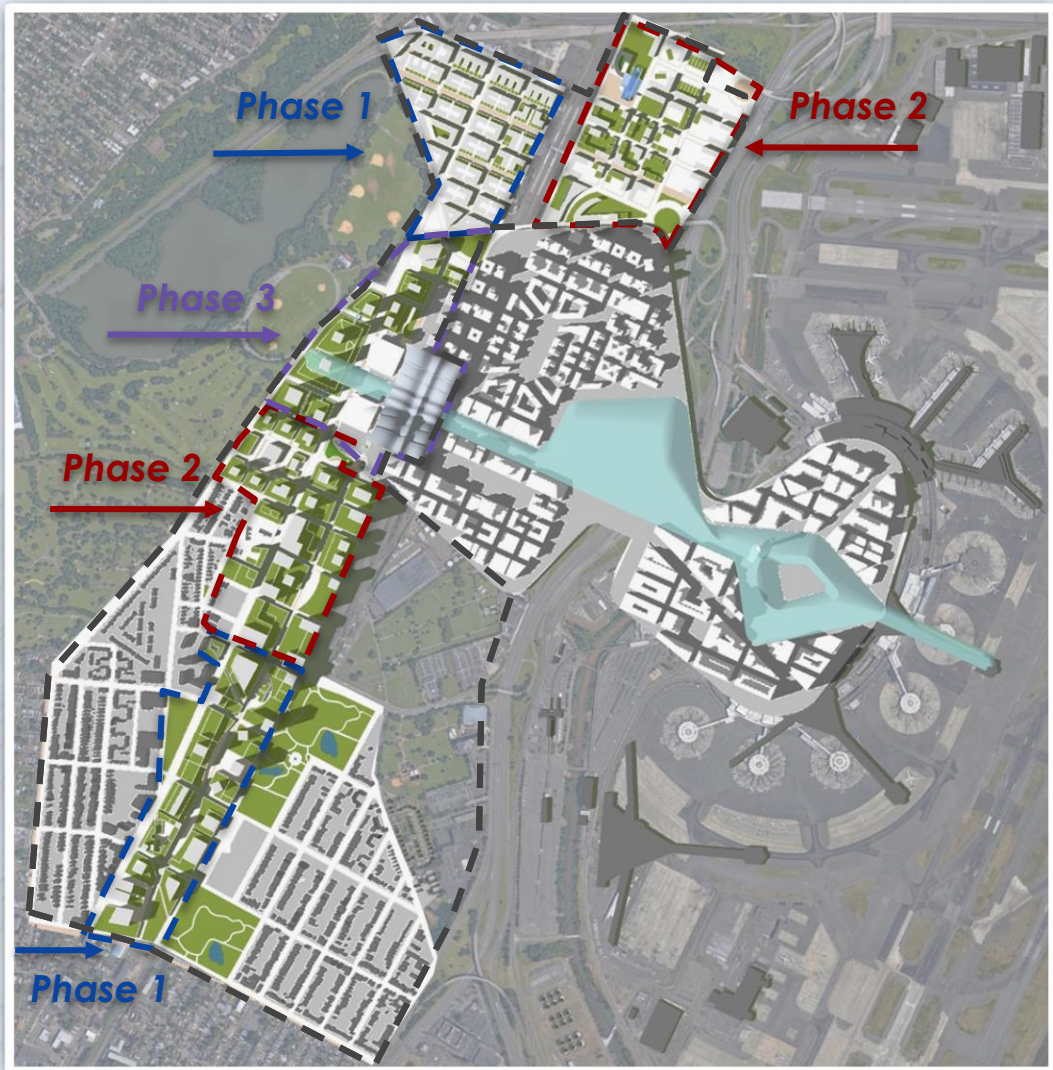
- ✓ After city approval, construct phase 1
- ✓ Begin Street and Promenade Redesigns
- ✓ Construct the BRT/Implement AV/HOV/Bus lane

2022 to 2024

- ✓ Construct phase 2
- ✓ Finish new street grid and streetscapes
- ✓ Construction of PATH Station begins in district 3

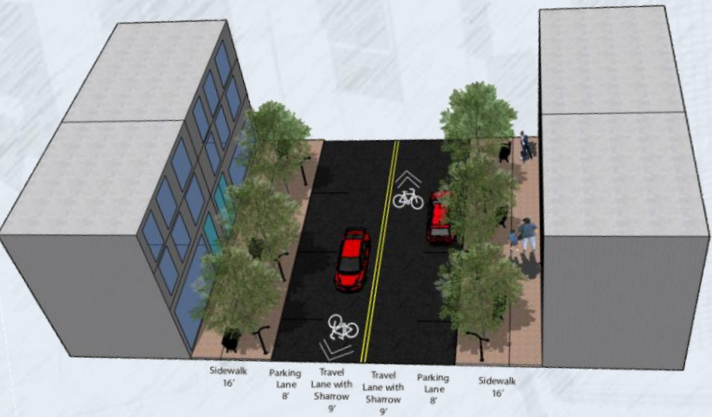
2025 to 2030

- ✓ Phase in construction of podium platform as development proposals come in
- ✓ Gradually build out all of Newark aerotropolis
- ✓ Complete PATH Station
- ✓ Complete construction of phase 3, highest intensity development



WEEQUAHIC

- ✓ Mixed Use along Commercial Corridors
- ✓ Mid to High Rise along the Park
- ✓ Safety through Bridge Underpass Plazas
- ✓ Connectivity through Pedestrian Bridge
- ✓ Street Improvements



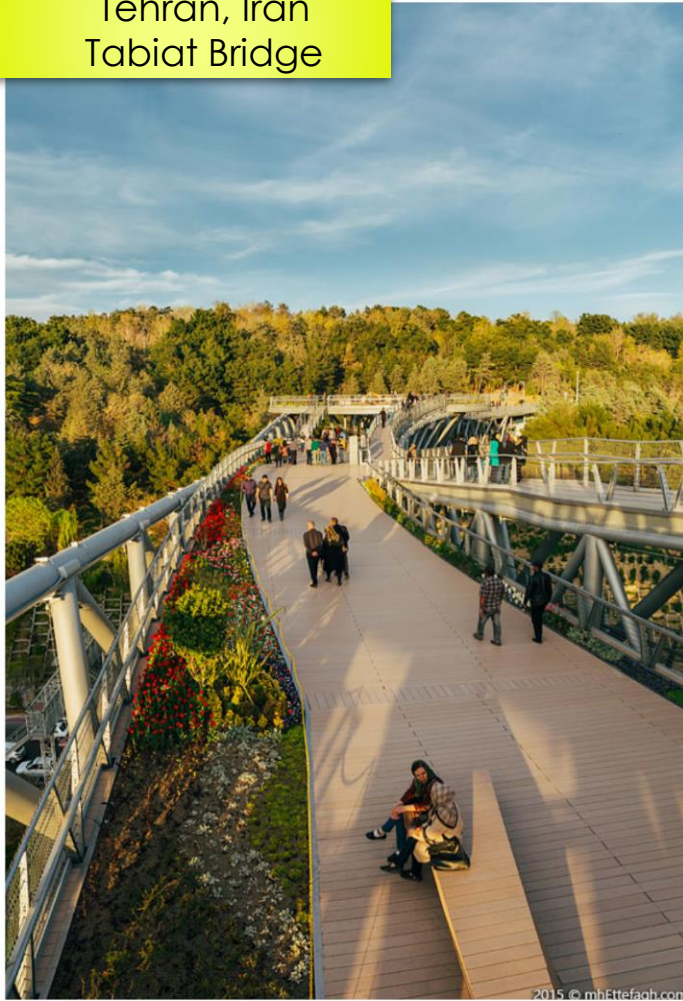
Lyons Ave
Complete Street



Gibson Square
Bridge Underpass



Tehran, Iran
Tabiat Bridge



Weequahic
Pedestrian Bridge



NEXT STEPS

WEEQUAHIC

- ✓ *Begin Rezoning Commercial Streets*
- ✓ *Work with EDC and South Ward SID to Increase Commercial Activity*
- ✓ *Develop Park Network*
- ✓ *Collaborate with Port Authority on CBA*
- ✓ *Apply for Funding*



thank you!



“Studio contributed to shaping the future of Newark – helping us to work together for the common good”

*- Yvonne Moore
Dayton Neighborhood
25 April 2018*



RUTGERS

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of Planning and Public Policy

