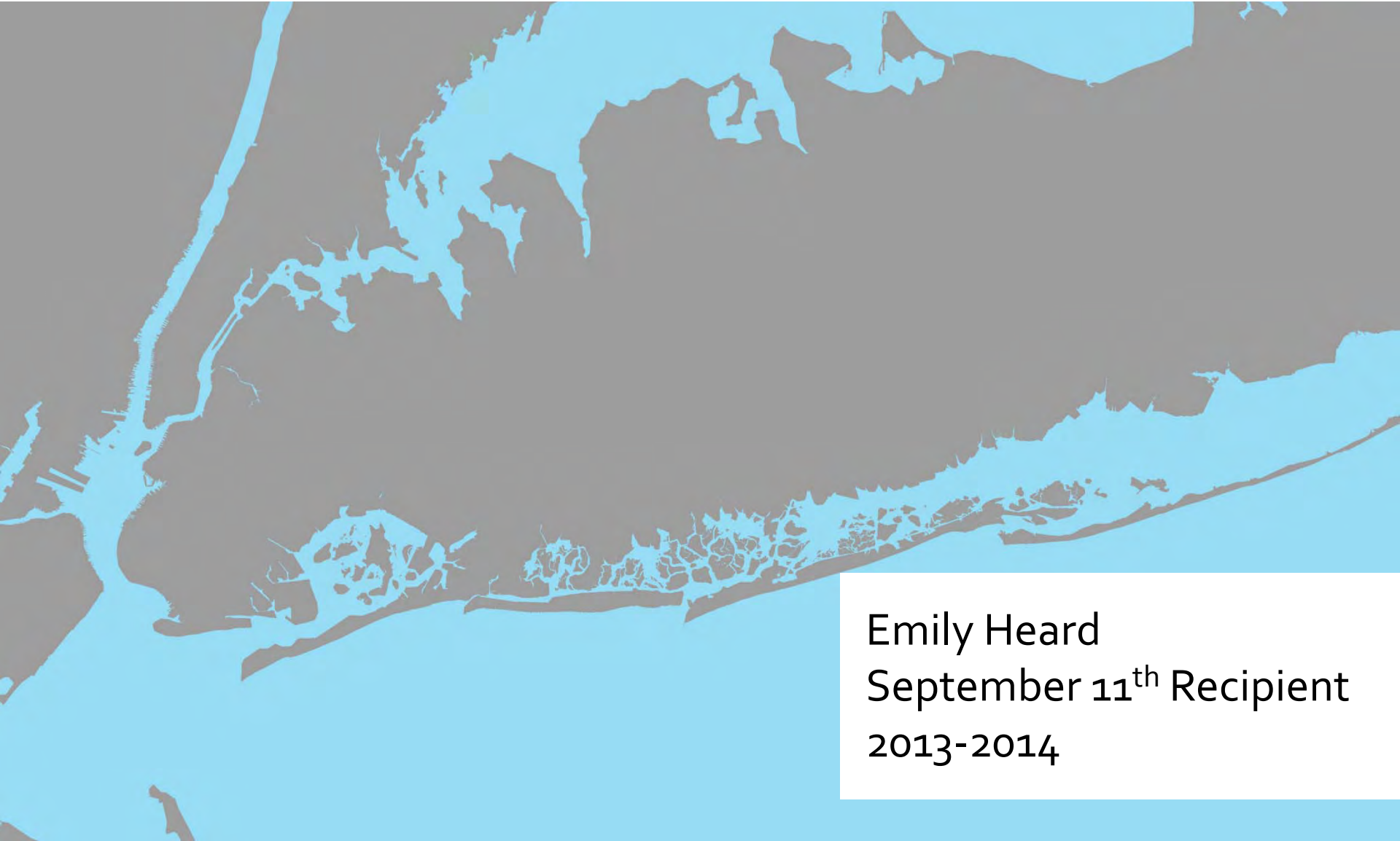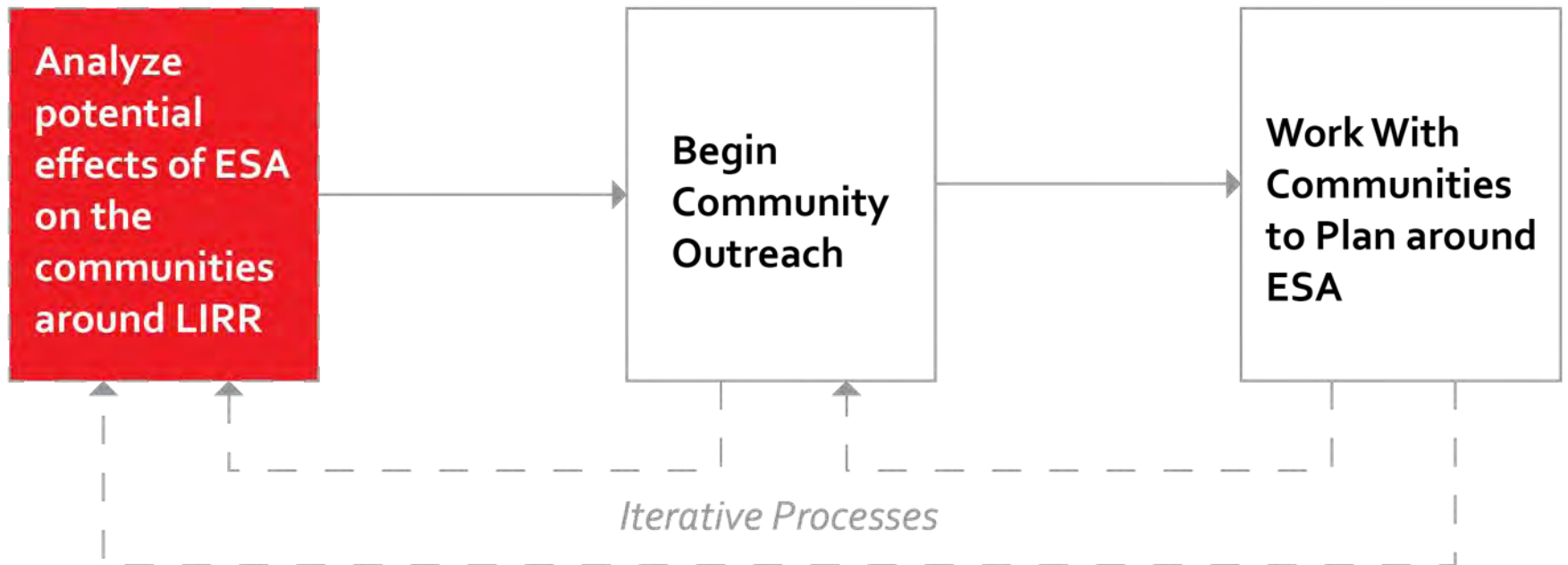# LAYING THE GROUNDWORK FOR COMMUNITY PLANNING:

Long Island Community Planning Initiative

Emily Heard
September 11th Recipient
2013-2014

SETTING THE TONE:

The First Step in a Much Bigger Project

CLARIFYING THE APPROACH:

Phases of Analysis

I	**II**	**III**	**IV**	**V**
Identify preliminary study stations based off published travel time and ridership effects	Identify and map variables of interest community planning around East Side Access such as current planning environment, current growth trends, etc.	Codify these variables into an index to be used as a tool to prioritize planning areas for initial outreach. Index also allows for easier re-evaluation based on feedback.	Create a station area level land suitability analysis to be used as a tool for beginning community outreach and discussion. Again, designed to be easily modified based on feedback.	Take tool results to the communities to start the discussion about planning around East Side Access, re-evaluate models based on community priorities, etc.

DEFINING THE PRELIMINARY FOCUS AREAS

Ridership Growth and Travel Time Changes

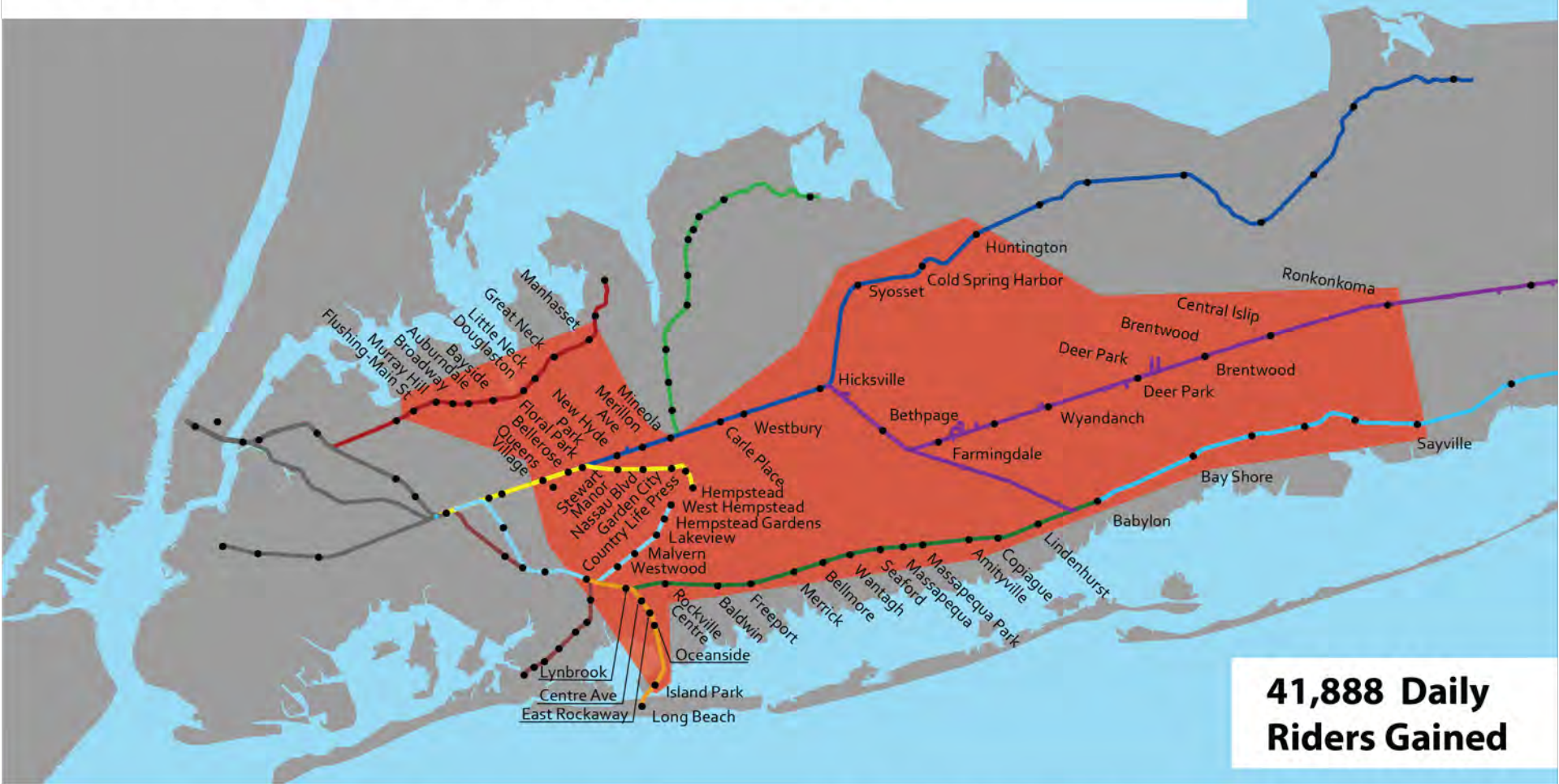| **I**	**II**	**III**	**IV**	**V**
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BAND OF HIGHEST PROJECTED RIDERSHIP GROWTH FROM EAST SIDE ACCESS

41,888 Daily Riders Gained

LIRR Lines

━━ RONKONKOMA	━━ NEW YORK TERMINAL DISTRICT
━━ PORT JEFFERSON BRANCH	━━ LONG BEACH BRANCH
━━ BABYLON BRANCH	━━ FAR ROCKAWAY BR
━━ HEMPSTEAD BRANCH	━━ MONTAUK BRANCH
━━ OYSTER BAY BRANCH	━━ PORT WASHINGTON BR
	━━ WEST HEMPSTEAD BRANCH

Sources: The daily ridership numbers are taken directly from MTA's publicsed environmental impact statement for the East Side Access project. NYMTC provided base files for boundaries, stations, and rail line locations.
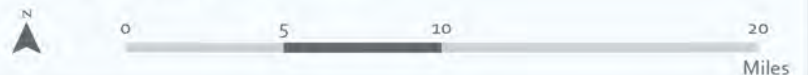
N

0   5   10   20

Miles

Station labels: Manhasset, Great Neck, Little Neck, Douglaston, Bayside, Auburndale, Broadway, Murray Hill, Flushing-Main St., New Hyde Park, Merillon Ave, Floral Park, Bellerose, Queens Village, Mineola, Stewart Manor, Nassau Blvd, Garden City, Country Life Press, Hempstead, West Hempstead, Hempstead Gardens, Lakeview, Malvern, Westwood, Carle Place, Westbury, Hicksville, Syosset, Cold Spring Harbor, Huntington, Ronkonkoma, Central Islip, Brentwood, Deer Park, Brentwood, Deer Park, Wyandanch, Bethpage, Farmingdale, Sayville, Bay Shore, Babylon, Lindenhurst, Copiague, Amityville, Massapequa Park, Massapequa, Seaford, Wantagh, Bellmore, Merrick, Freeport, Baldwin, Rockville Centre, Oceanside, Island Park, Long Beach, Lynbrook, Centre Ave, East Rockaway

STATIONS WITH ESTIMATED PEAK TRIP TIMES UNDER 60 MINUTES AFTER EAST SIDE ACCESS
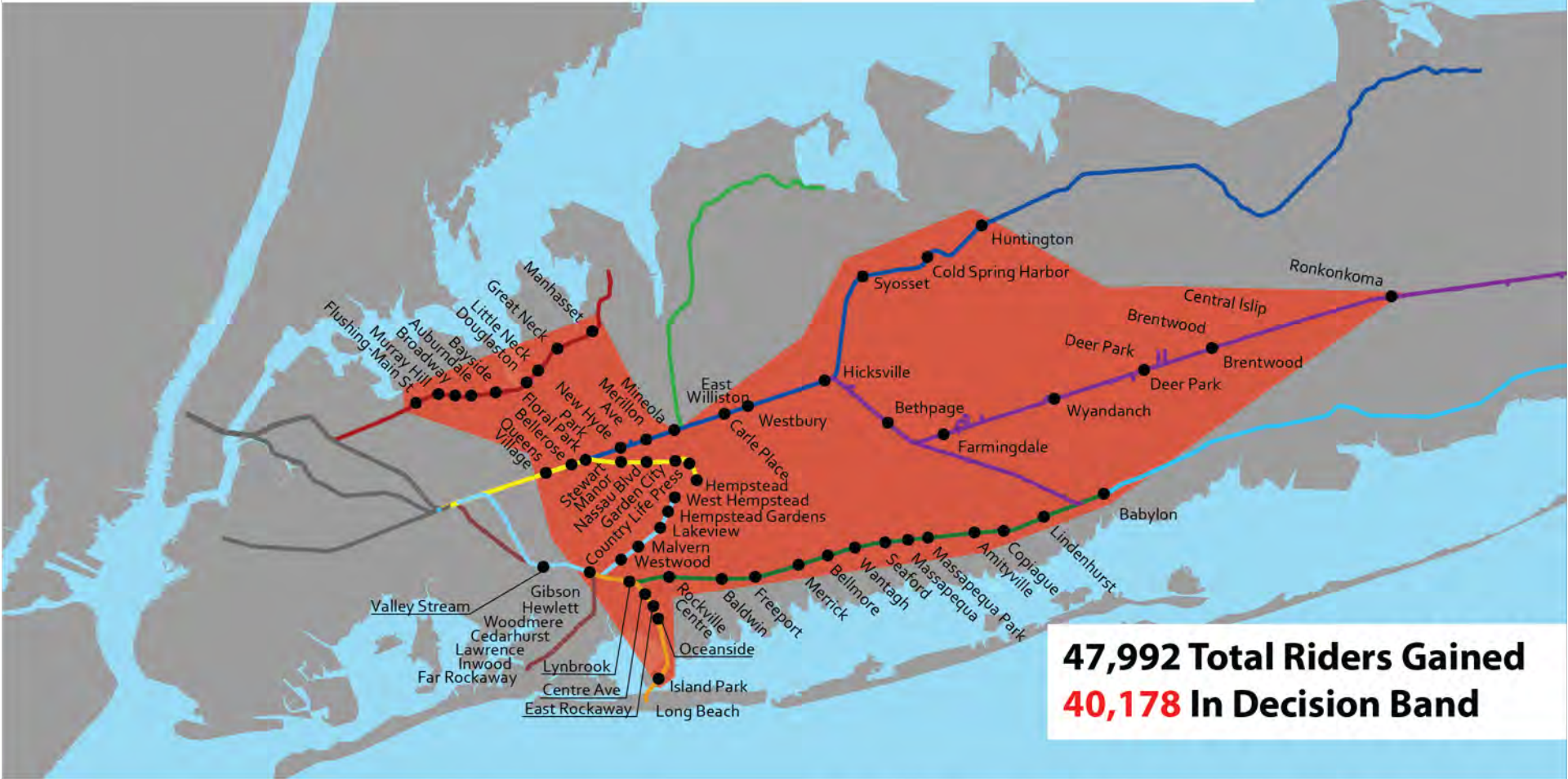
39,536 Riders Gained

LIRR Lines

- RONKONKOMA
- PORT JEFFERSON BRANCH
- BABYLON BRANCH
- HEMPSTEAD BRANCH
- OYSTER BAY BRANCH
- NEW YORK TERMINAL DISTRICT
- LONG BEACH BRANCH
- FAR ROCKAWAY BR
- MONTAUK BRANCH
- PORT WASHINGTON BR
- WEST HEMPSTEAD BRANCH

Sources: MTA.info provided current scheduled trip times to Penn Station. Google Maps provided the current subway times from Penn Station to Grand Central. Trip time reductions were based off from statements made by the MTA on MTA.info and elsewhere. NYMTC provided base files for boundaries, stations, and rail line locations.

0 5 10 20
Miles

Station labels on map: Glen Cove, Glen Street, Sea Cliff, Glen Head, Greenvale, Port Washington, Plandome, Manhasset, Great Neck, Little Neck, Douglaston, Bayside, Auburndale, Broadway, Murray Hill, Flushing-Main St, New Hyde Park, Merillon Ave, Mineola, Floral Park, Bellerose, Queens Village, Hollis, Roslyn, Albertson, East Williston, Westbury, Carle Place, Greenlawn, Huntington, Cold Spring Harbor, Syosset, Hicksville, Brentwood, Deer Park, Brentwood, Deer Park, Bethpage, Wyandanch, Farmingdale, Stewart Manor, Nassau Blvd, Garden City, Country Life Press, Hempstead, West Hempstead, Hempstead Gardens, Lakeview, Malvern, Westwood, St. Albans, Locust Manor, Laurelton, Rosedale, Valley Stream, Gibson, Hewlett, Woodmere, Cedarhurst, Lawrence, Inwood, Far Rockaway, Lynbrook, Centre Ave, East Rockaway, Oceanside, Island Park, Long Beach, Rockville Centre, Baldwin, Freeport, Merrick, Bellmore, Wantagh, Seaford, Massapequa, Massapequa Park, Amityville, Copiague, Lindenhurst, Babylon

N

PRELIMINARY DECISION BAND

47,992 Total Riders Gained
40,178 In Decision Band

LIRR Lines

RONKONKOMA	NEW YORK TERMINAL DISTRICT
PORT JEFFERSON BRANCH	LONG BEACH BRANCH
BABYLON BRANCH	FAR ROCKAWAY BR
HEMPSTEAD BRANCH	MONTAUK BRANCH
OYSTER BAY BRANCH	PORT WASHINGTON BR
	WEST HEMPSTEAD BRANCH

Sources: MTA.info provided current scheduled trip times to Penn Station. Google Maps provided the current subway times from Penn Station to Grand Central. Trip time reductions were based off from statements made by the MTA on MTA.info and elsewhere. ESA EIS provided ridership projections NYMTC provided base files for boundaries, stations, and rail line locations.

IDENTIFYING SECONDARY VARIABLES THAT WILL AFFECT DEVELOPMENT AROUND LIRR

I
Identify preliminary study stations based off published travel time and ridership effects

II
Identify and map variables of interest community planning around East Side Access such as current planning environment, current growth trends, etc.

III
Codify these variables into an index to be used as a tool to prioritize planning areas for initial outreach. Index also allows for easier re-evaluation based on feedback.

IV
Create a station area level land suitability analysis to be used as a tool for beginning community outreach and discussion. Again, designed to be easily modified based on feedback.

V
Take tool results to the communities to start the discussion about planning around East Side Access, re-evaluate models based on community priorities, etc.

CREATING A WAY TO THINK ABOUT THE ISSUES

Categorizing the Secondary Variables

INTEREST	MOMENTUM	CAPACITY	CONNECTIVITY
PLANS	PLANS	SEWERS	BUS ROUTES
	POPULATION	PARKING	SERVICE AREA
	EMPLOYMENT		FARE ZONES
	RIDERSHIP		

TAKING ADVANTAGE OF LOCAL INTEREST AND MOMENTUM: PLANS AND PROJECTS

Manhasset
Great Neck
Little Neck
Douglaston
Bayside
Auburndale
Broadway
Murray Hill
Flushing-Main St

New Hyde
Merillon Ave
Mineola
Floral Park
Bellerose
Queens Village

Huntington
Cold Spring Harbor
Syosset
Ronkonkoma
Central Islip
Brentwood
Deer Park
Brentwood
Deer Park

Hicksville
Westbury
Carle Place
Bethpage
Farmingdale
Wyandanch

Stewart Manor
Nassau Blvd
Garden City
Country Life Press
Hempstead
West Hempstead
Hempstead Gardens
Lakeview
Malvern
Westwood

Babylon
Copiague
Amityville
Lindenhurst
Massapequa Park
Massapequa
Seaford
Wantagh
Bellmore
Merrick
Freeport
Baldwin
Rockville Centre

Valley Stream

Lynbrook
Centre Ave
East Rockaway
Oceanside
Island Park

of Known TOD Projects

- 1
- 2
- 3
- 4 - 5
- 6

Nassau Infill Ranking

- Low Desire, High Readiness
- High Desire, Low Readiness
- High Desire, High Readiness

NY Rising

- NY Rising Projects that Include TOD
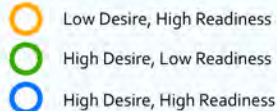
Sources: Sustainable Communities Provided Nassau Infill Redevelopment rankings. NY Rising provided NY Rising project information. TODs were located via several sources, including MTA, NYMTC, and local news and media. NYMTC provided base files for boundaries, stations, and rail line locations.

N

0   5   10   20
Miles

COMPARING PEAK TO OFFPEAK RIDERSHIP

% Offpeak Ridership

- Up to 10%
- 10 - 20%
- 20 - 30%
- 30 - 40%
- 40 - 50%
- 50 - 60%

% Peak Ridership

- Up to 40.7%
- 40.7 - 50%
- 50 - 60%
- 60 - 70%
- 70 - 80%
- 80% and Up
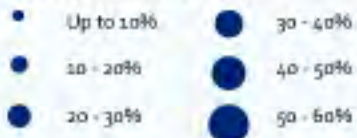
Sources: 2006 Station level ridership from 2012 LIRR Briefing Book.
NYMTC provided base files for boundaries, stations, and rail line locations.
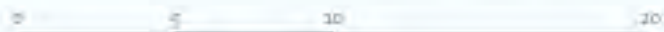
Miles

NARROWING THE PRIORITY AREAS

Codifying the Variables Into a GIS Model and Index for Future Use

| I	II	III	IV	V
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THE RYHME AND REASON BEHIND THE INDEX

A Flexible Tool to Apply Decision Values
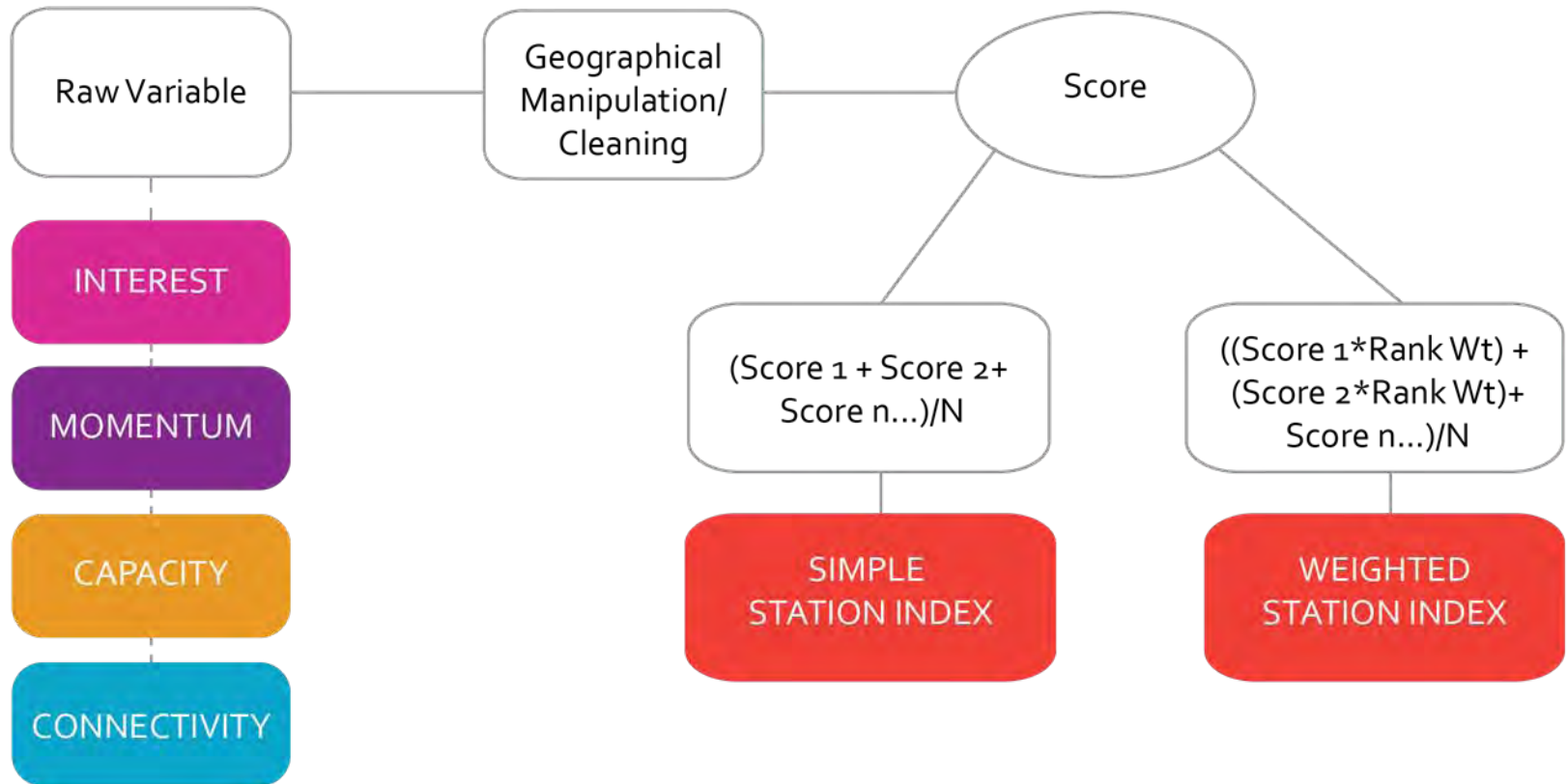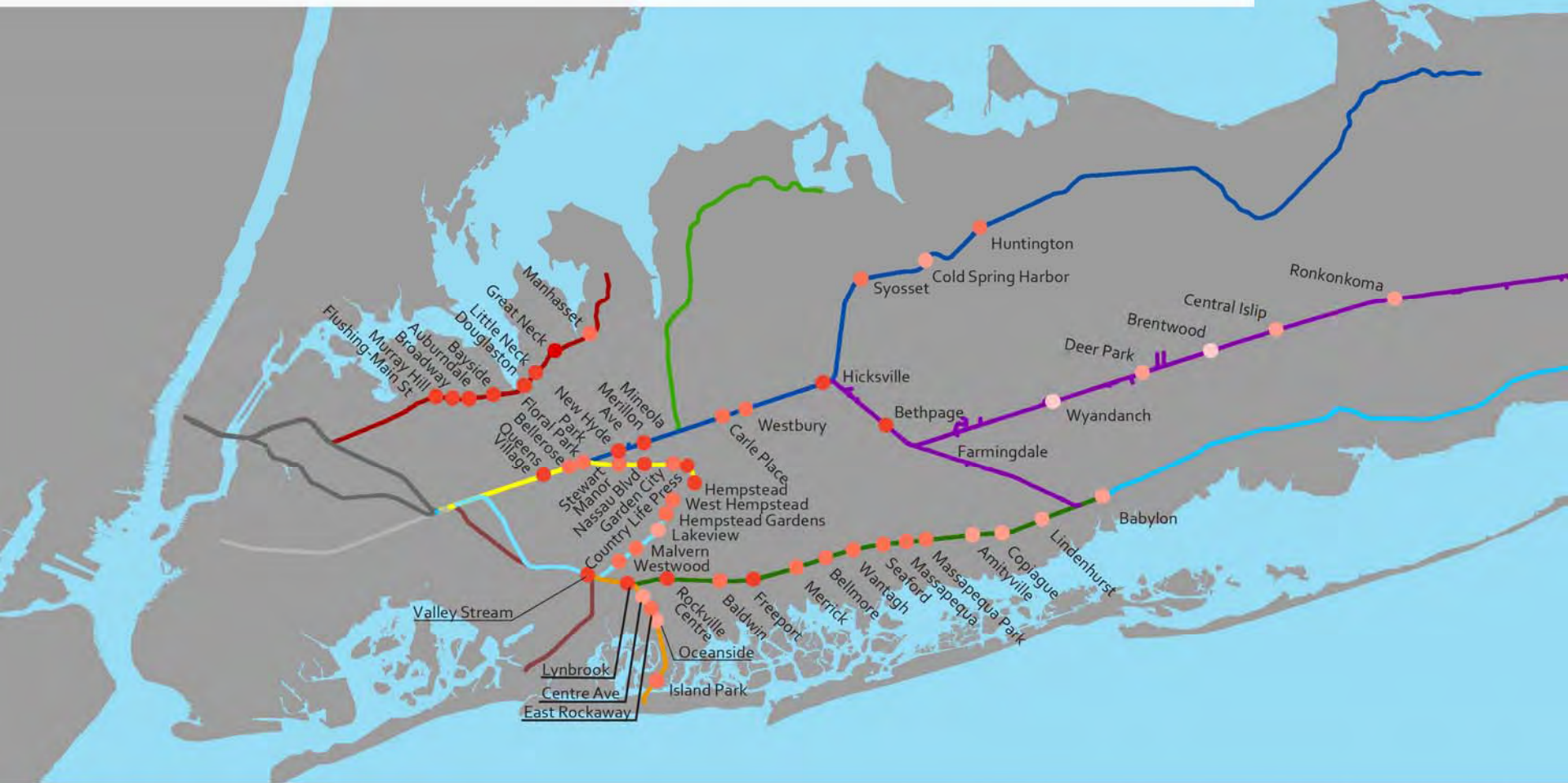
A METHOD TO RE-EVALUATE BASED ON FEEDBACK
: An Example With a Weighted Index
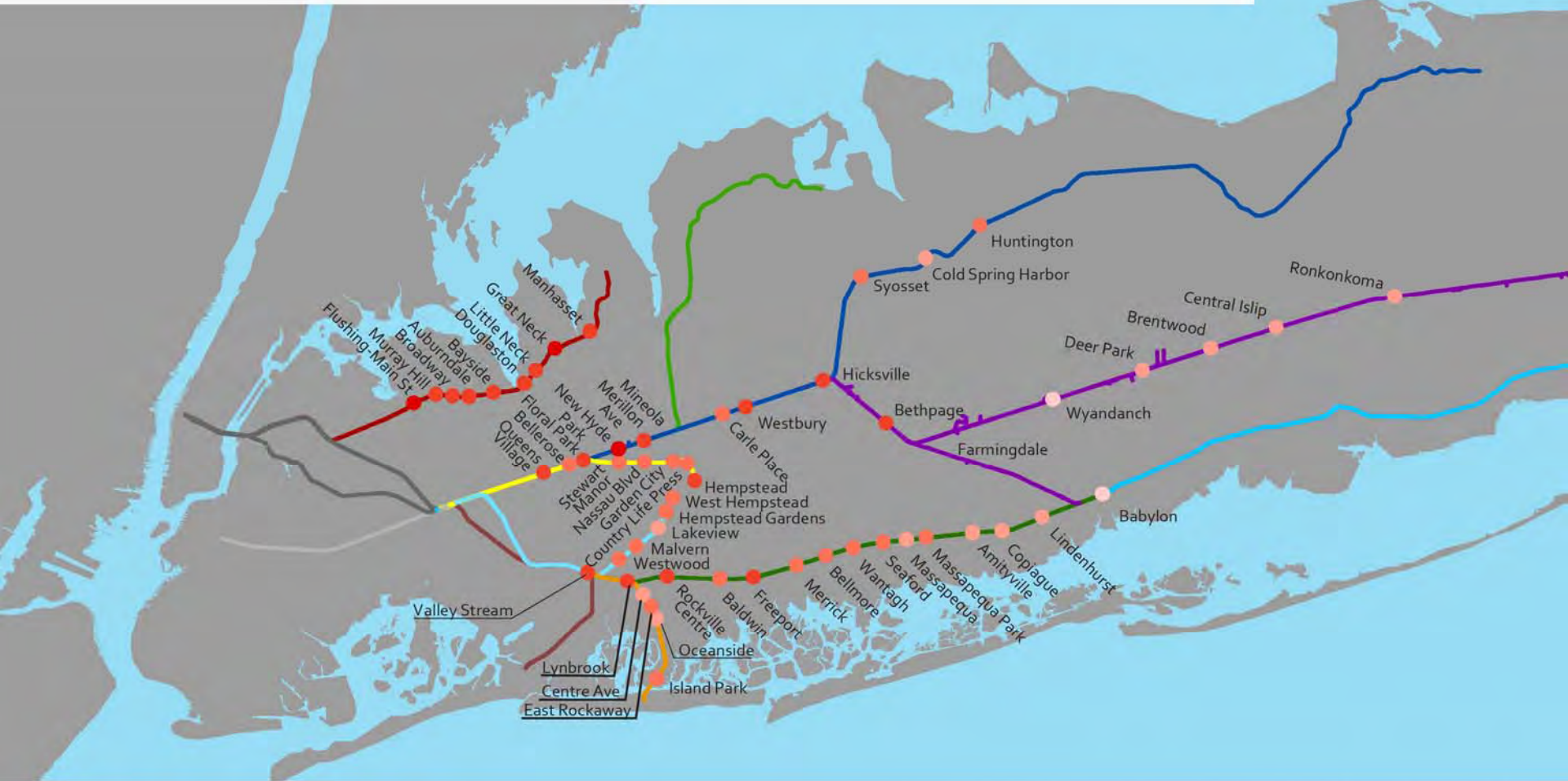
Complex_Index
- Up to 2.5
- 2.5 - 3
- 3 - 3.5
- 3.5 - 4
- 4 and Up

Sources: MTA, NYMTC, Nassau County , and Analyst for Index Data, NYMTC provided base data.

CREATING A TOOL TO TARGET THE CONVERSATION

Land Suitability Analysis to Highlight Developable Land

I

Identify preliminary study stations based off published travel time and ridership effects

II

Identify and map variables of interest community planning around East Side Access such as current planning environment, current growth trends, etc.

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IDENTIFYING VACANT PUBLIC PARCELS

One Way to Begin the Development Conversation

# 15 AND 30 MINUTE BUS+WALKING SERVICE AREAS AROUND LIRR STATIONS
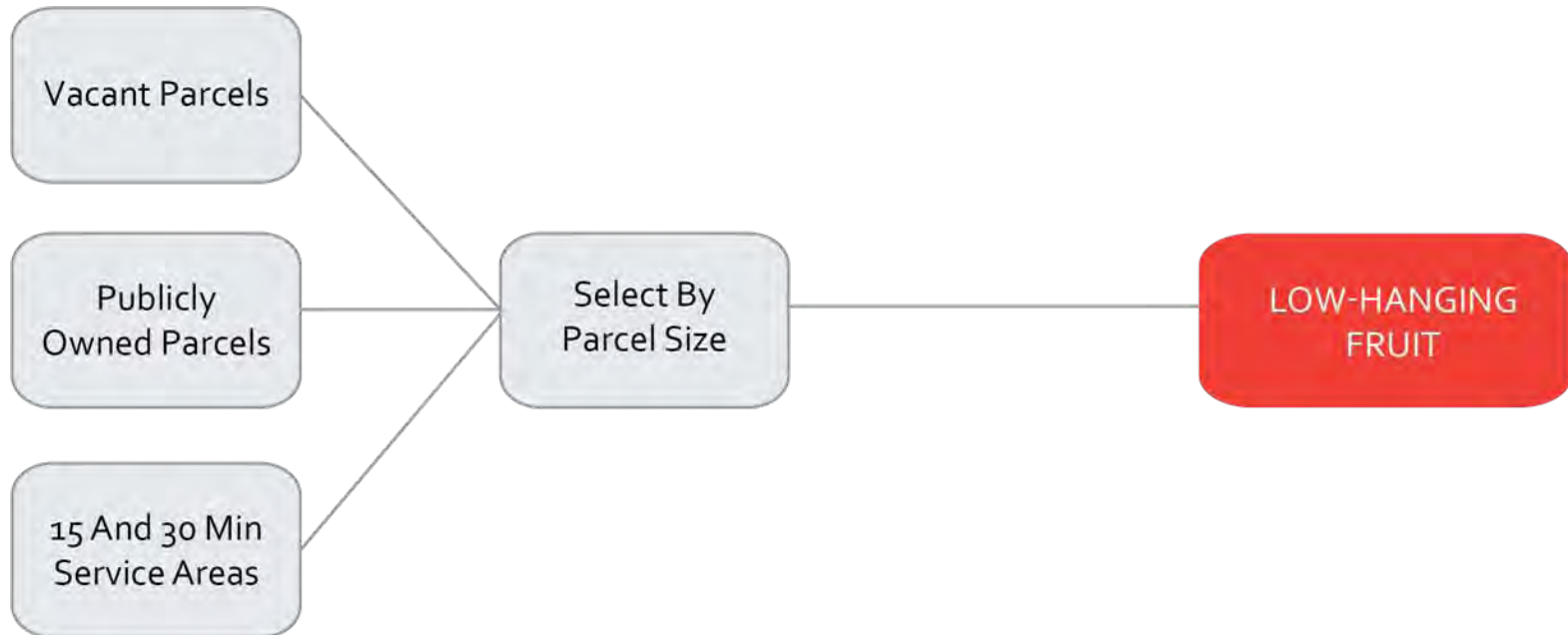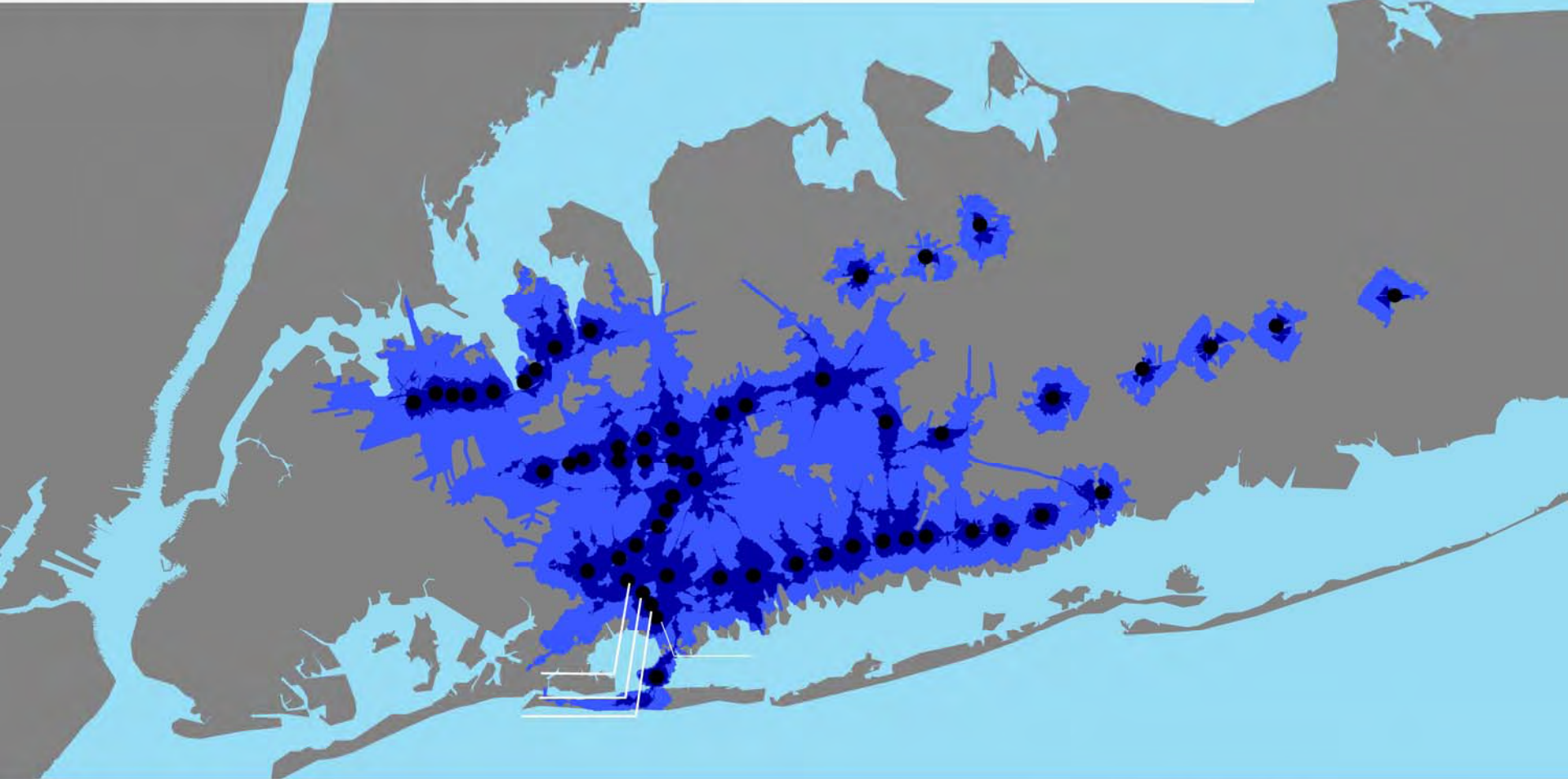
Sources: Network Design used MTA and NICE GTSF data for station and route locations. NYMTC provided routes for Suffolk County. Analyst heavily estimated for Suffolk Stations, and Analyst heavily estimated for all transfers. NYMTC provided base files for boundaries, stations, street network and rail line locations.

15 Min Bus and Pedestrian Network

30 Min Bus and Pedestrian Network

N

0   5   10   20

Miles

NARROWING IN ON MORE SUITABLE LAND FOR DEVELOPMENT ex. Mineola
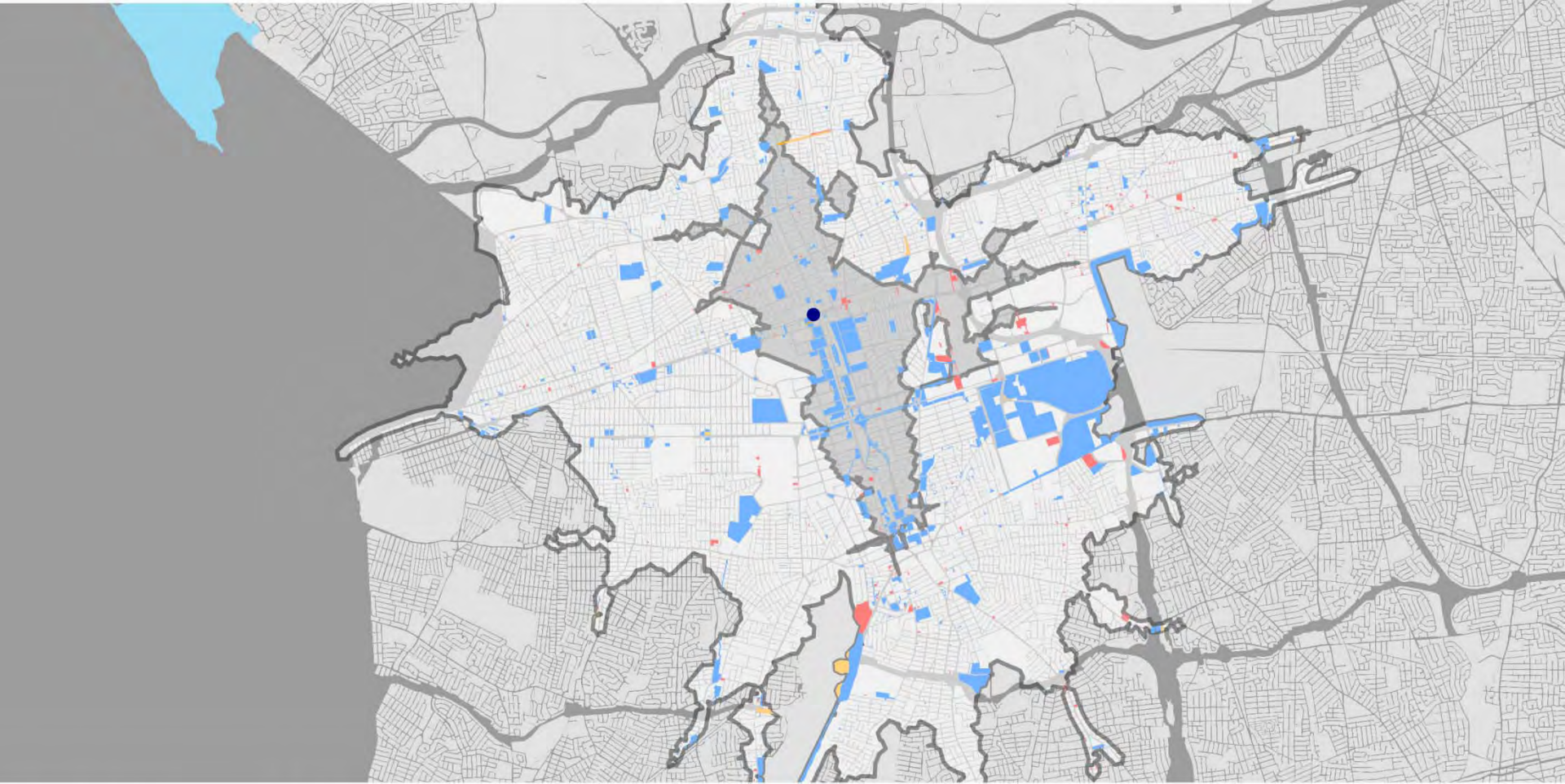
Vacant Land
- 30 Min
- 15 Min

Public Land
- 30 Min
- 15 Min

Vacant, Public, and Suitable Land
- 30 Min
- 15 Min

N

0   1.5   3   6

Miles

LAYING THE GROUNDWORK AND CREATING A TOOLBOX:

Long Island Community Planning Initiative

I	II	III	IV	V
Identify preliminary study stations based off published travel time and ridership effects	Identify and map variables of interest community planning around East Side Access such as current planning environment, current growth trends, etc.	Codify these variables into an index to be used as a tool to prioritize planning areas for initial outreach. Index also allows for easier re-evaluation based on feedback.	Create a station area level land suitability analysis to be used as a tool for beginning community outreach and discussion. Again, designed to be easily modified based on feedback.	Take tool results to the communities to start the discussion about planning around East Side Access, re-evaluate models based on community priorities, etc.

WHAT'S NEXT?

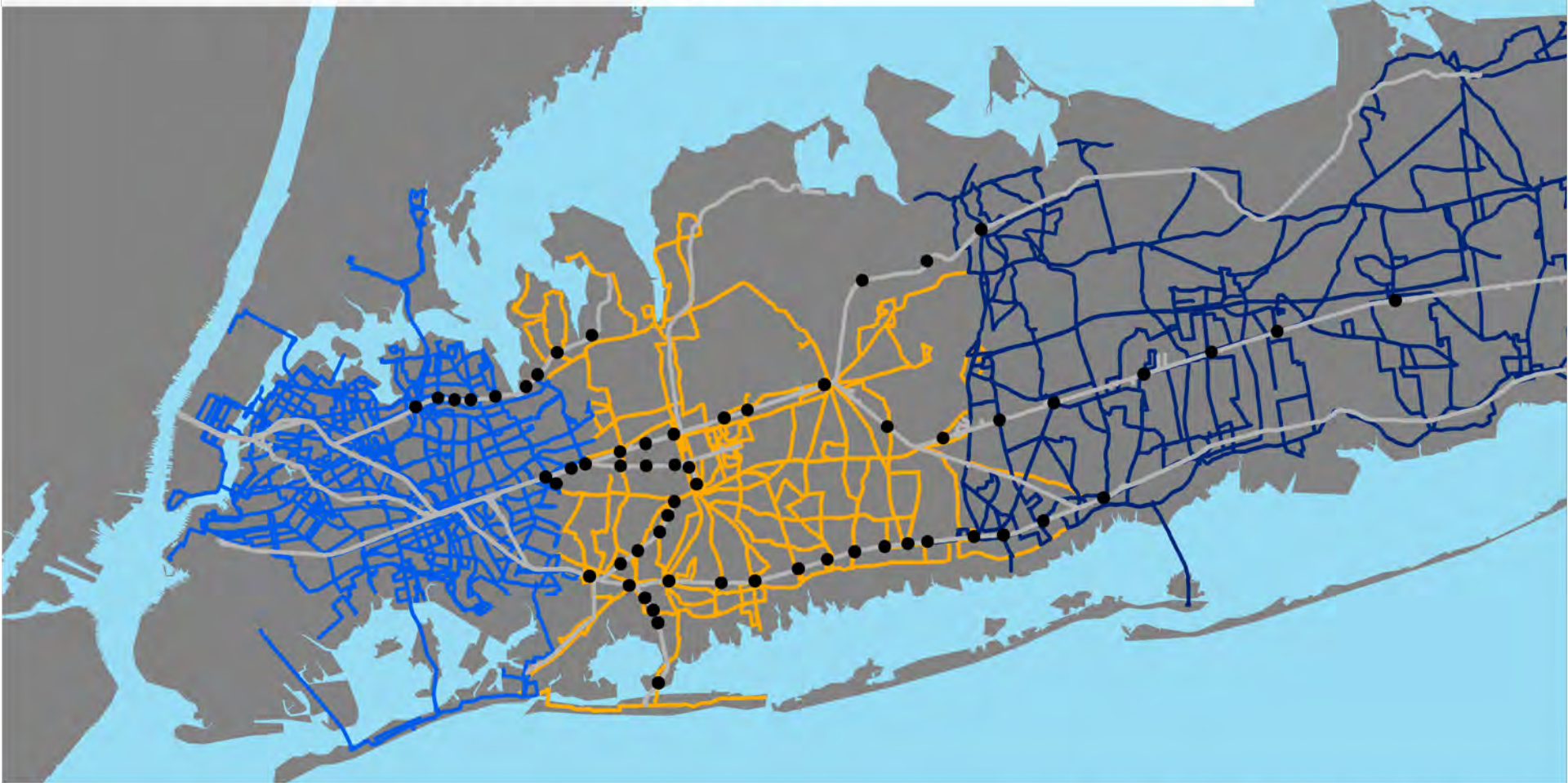Long Island Community Planning Initiative

THANK YOU/QUESTIONS?

EMILY HEARD
emilygheard@gmail.com

THE INTERCONNECTEDNESS OF STATION AREAS: Bus Routes on Long Island
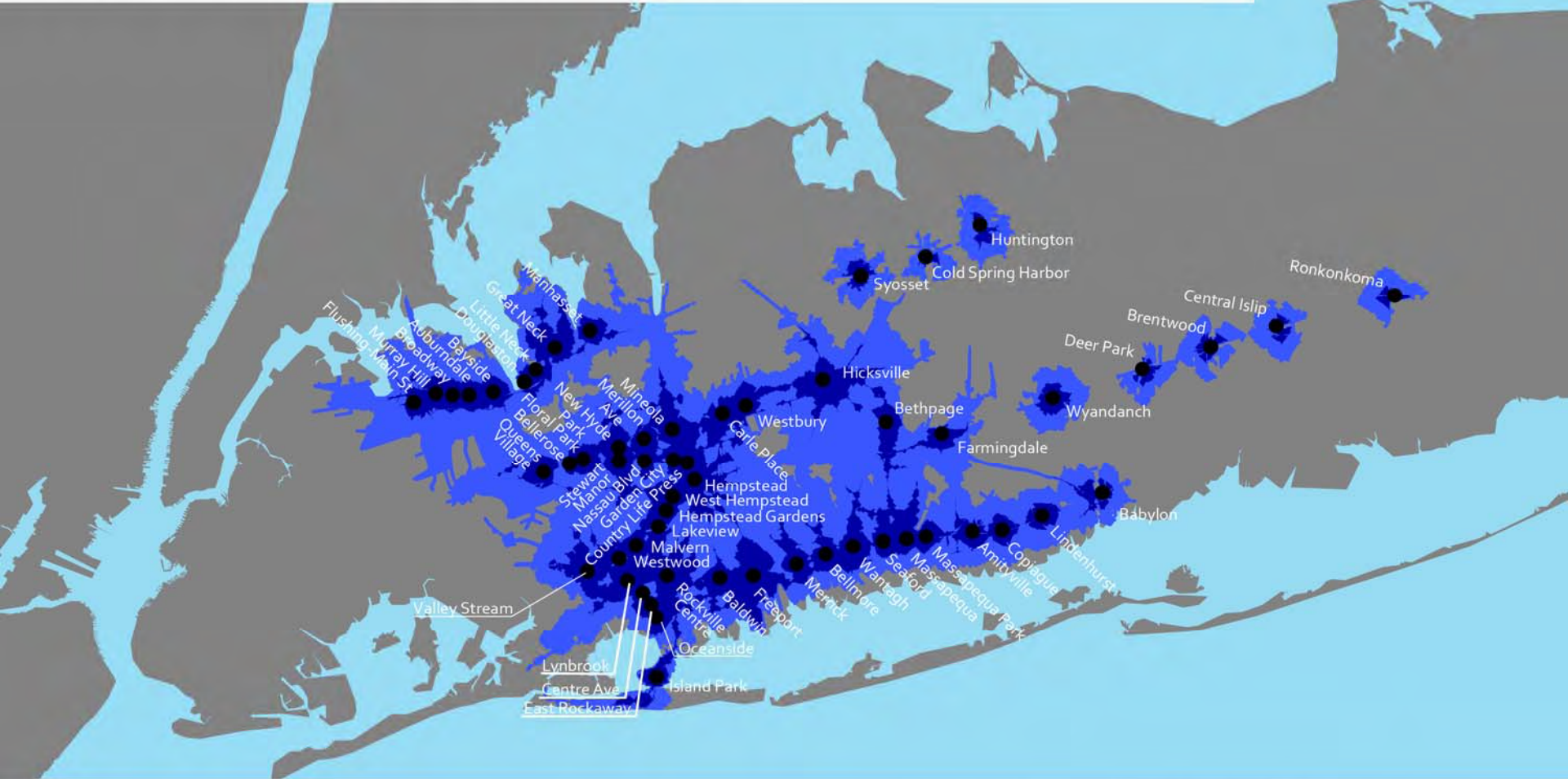

Legend:
- LIRR Lines
- NYCT Bus Routes in Queens
- Suffolk County Transit
- NICE Bus

Sources: NYMTC provided base files for boundaries, stations, bus and rail line locations.

0   5   10   20
Miles

15 AND 30 MINUTE BUS+WALKING SERVICE AREAS AROUND LIRR STATIONS

Legend:
- 15 Min Bus and Pedestrian Network
- 30 Min Bus and Pedestrian Network

Sources: Network Design used MTA and NICE GTSF data for station and route locations. NYMTC provided routes for Suffolk County. Analyst heavily estimated for Suffolk Stations, and Analyst heavily estimated for all transfers. NYMTC provided base files for boundaries, stations, street network and rail line locations.
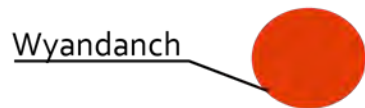
Station labels: Manhasset, Great Neck, Little Neck, Douglaston, Bayside, Auburndale, Broadway, Murray Hill, Flushing-Main St, Huntington, Cold Spring Harbor, Syosset, Ronkonkoma, Central Islip, Brentwood, Deer Park, New Hyde Park, Floral Park, Bellerose, Queens Village, Merillon Ave, Mineola, Hicksville, Bethpage, Westbury, Carle Place, Farmingdale, Wyandanch, Stewart Manor, Nassau Blvd, Garden City, Country Life Press, Hempstead, West Hempstead, Hempstead Gardens, Lakeview, Malvern, Westwood, Valley Stream, Rockville Centre, Baldwin, Freeport, Merrick, Bellmore, Wantagh, Seaford, Massapequa, Massapequa Park, Amityville, Copiague, Lindenhurst, Babylon, Lynbrook, Centre Ave, East Rockaway, Oceanside, Island Park

Scale: 0, 5, 10, 20 Miles

APPENDIX

PARTIALLY SEWERED

Central Islip
Manhasset

SEWERS IN CONSTRUCTION

Wyandanch

NO SEWERS

Ronkonkoma
Brentwood
Deer Park
Huntington
Cold Spring Harbor

SEWERED

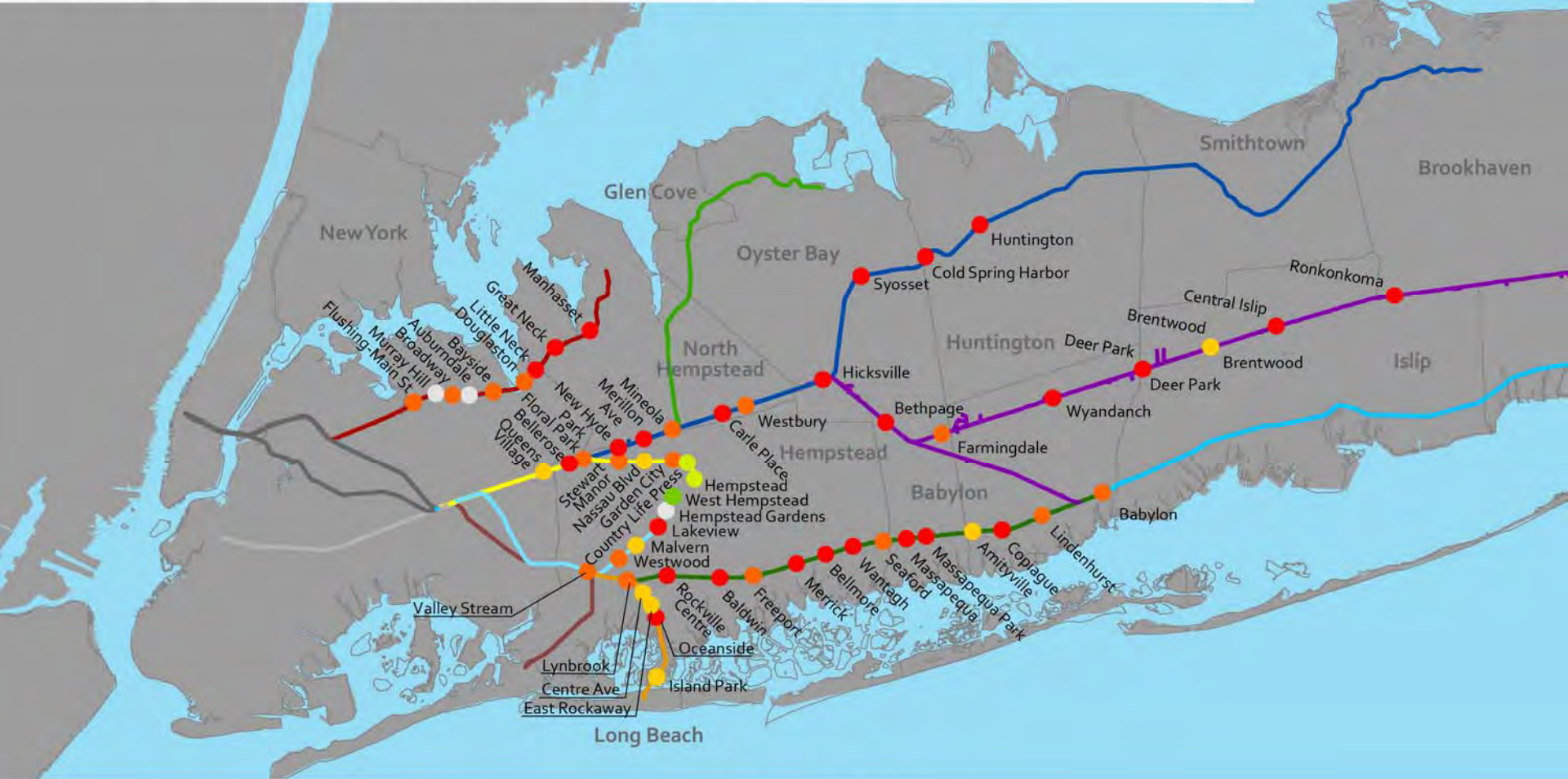ALL OTHER STATIONS

Source: LI Index Interactive Map, Suffolk County.

MINIMIZING INFRASTRUCTURE CONCERNS:
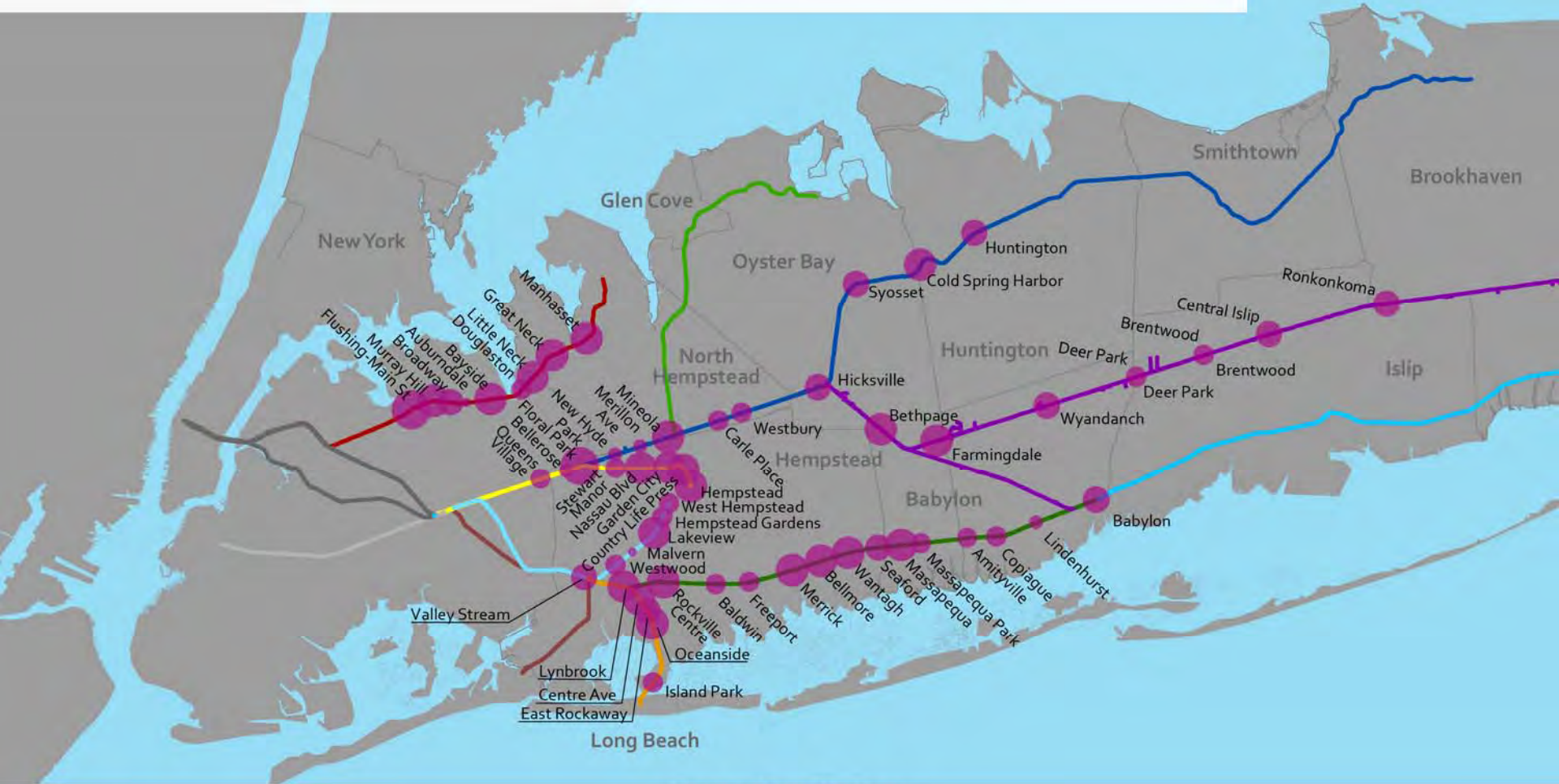## Current Parking Capacity and Utilization

LIRR Lines

— RONKONKOMA
— PORT JEFFERSON BRANCH
— BABYLON BRANCH
— HEMPSTEAD BRANCH
— OYSTER BAY BRANCH

— NEW YORK TERMINAL DISTRICT
— LONG BEACH BRANCH
— FAR ROCKAWAY BR
— MONTAUK BRANCH
— WEST HEMPSTEAD BRANCH

% Parking Utilized
- No Parking
- Up to 25%
- 25 - 50%
- 50 - 75%
- 75 - 90%
- 90 - 100%

Sources: Parking capacity and utilization is from LIRR 2012 Briefing Book.
NYMTC provided base files for boundaries, stations, and rail line locations.
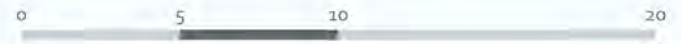
ALREADY EXCEEDING RIDERSHIP PROJECTIONS

LIRR Lines

—— RONKONKOMA	—— NEW YORK TERMINAL DISTRICT
—— PORT JEFFERSON BRANCH	—— LONG BEACH BRANCH
—— BABYLON BRANCH	—— FAR ROCKAWAY BR
—— HEMPSTEAD BRANCH	—— MONTAUK BRANCH
—— OYSTER BAY BRANCH	—— PORT WASHINGTON BR
	—— WEST HEMPSTEAD BRANCH

Percent of East Side Access Ridership Already Achieved

- · Up to 25%
- • 25 - 50%
- • 50 - 75%
- ● 75 - 100%
- ● 100 - 200%
- ● 200% and up

Sources: 2006 Station level ridership numbers are from 2011 LIRR Briefing Book. Projection station level numbers are from the ESA EIS (1999.) NYMTC provided base files for boundaries, stations, and rail line locations.

0   5   10   20
Miles

THE GREATEST CHANGE 10YRS AFTER ESA, 2010-2035: Employment Growth Projections and Concentrations
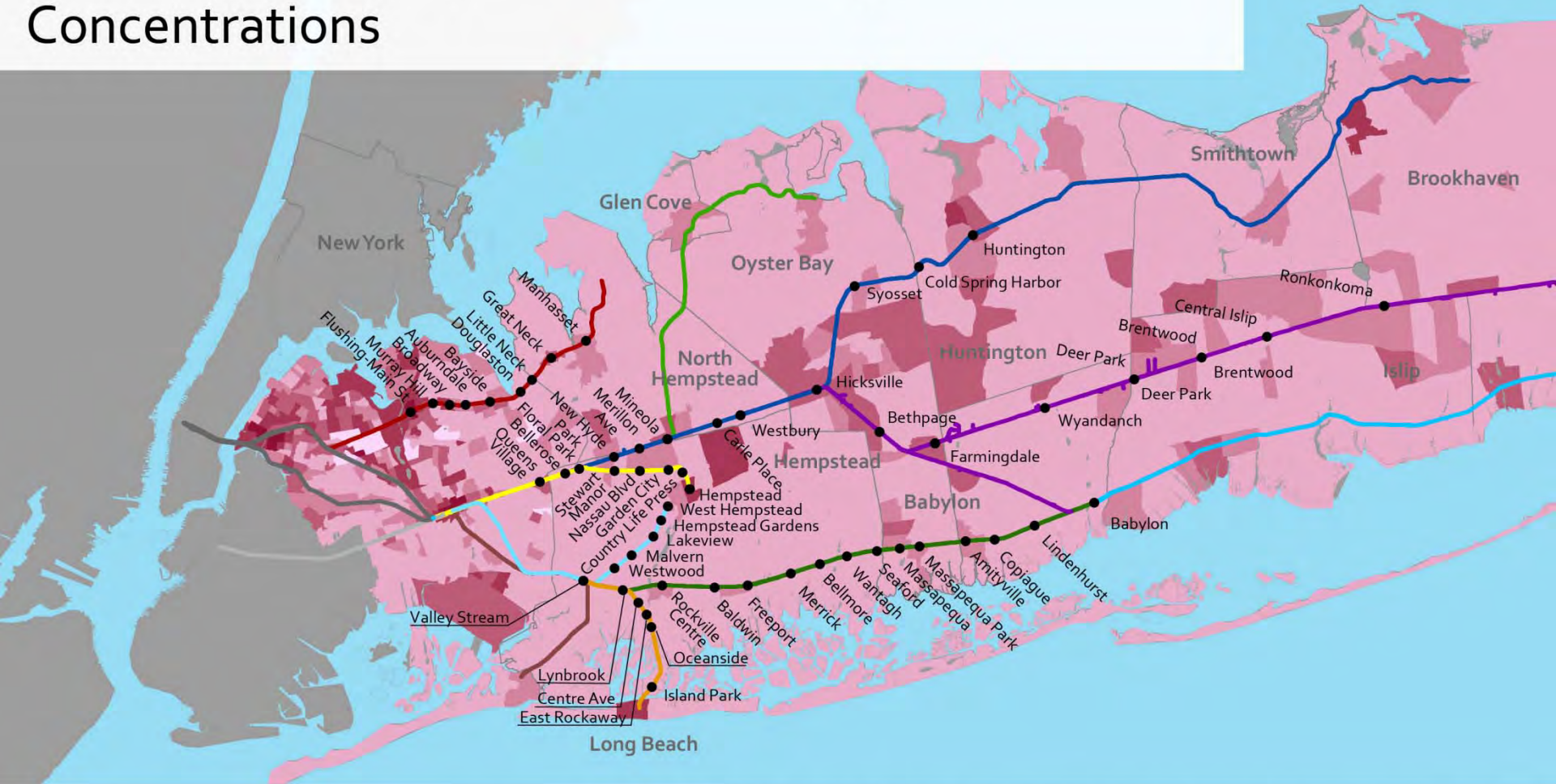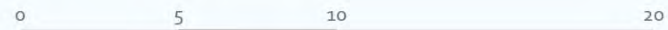
LIRR Lines
- RONKONKOMA
- PORT JEFFERSON BRANCH
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- LONG BEACH BRANCH
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- MONTAUK BRANCH
- PORT WASHINGTON BR
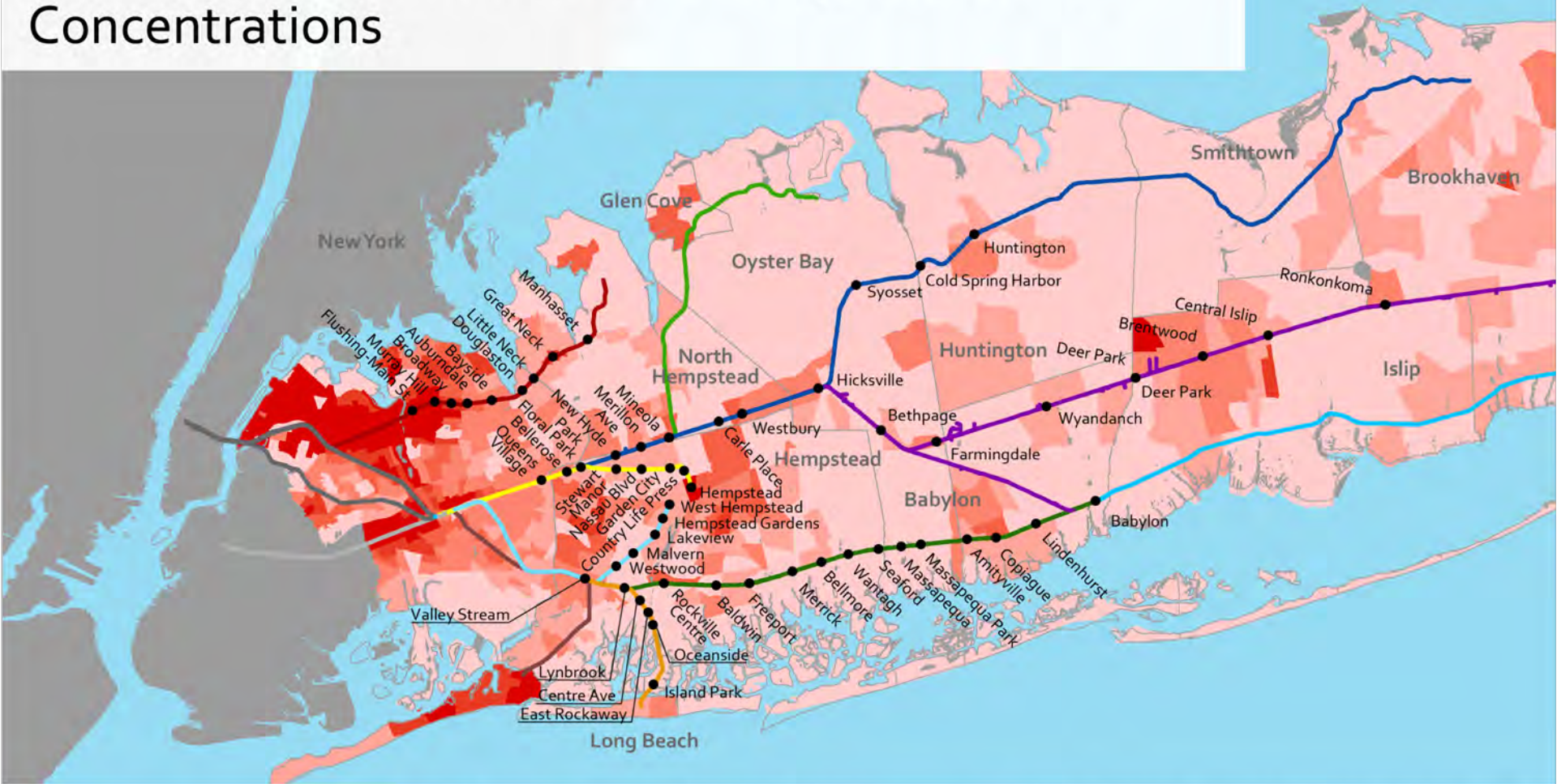- WEST HEMPSTEAD BRANCH

Projected Employment Gains 10 yrs After ESA
- -12352 – 0
- 0 – 500
- 500 – 1000
- 1000 – 2000
- 2000 – 5000
- 5000 – 22537

Sources: NYMTC Provided the most recent employment projections (updated in 2013 and TAZ geography. NYMTC provided base files for boundaries, stations, and rail line locations.

0   5   10   20
Miles

THE GREATEST CHANGE 10YRS AFTER ESA, 2010-2035: Population Growth Projections and Concentrations

LIRR Lines

- RONKONKOMA
- PORT JEFFERSON BRANCH
- BABYLON BRANCH
- HEMPSTEAD BRANCH
- OYSTER BAY BRANCH

- NEW YORK TERMINAL DISTRICT
- LONG BEACH BRANCH
- FAR ROCKAWAY BR
- MONTAUK BRANCH
- WEST HEMPSTEAD BRANCH

Projected Population Gains 10 yrs After ESA

- Up to 500
- 501-1000
- 1001-2000
- 2001 - 3000
- 3001 - 5000
- 5001 - 43160

Sources: NYMTC Provided the most recent population projections (updated in 2013 and TAZ geography. NYMTC provided base files for boundaries, stations, and rail line locations.

0   5   10   20
Miles