The Economic and Fiscal Impacts of the Long Island Rail Road Main Line Third Track

Prepared for the Long Island Index
by HR&A Advisors, Inc. and Parsons Brinckerhoff

April 10, 2014

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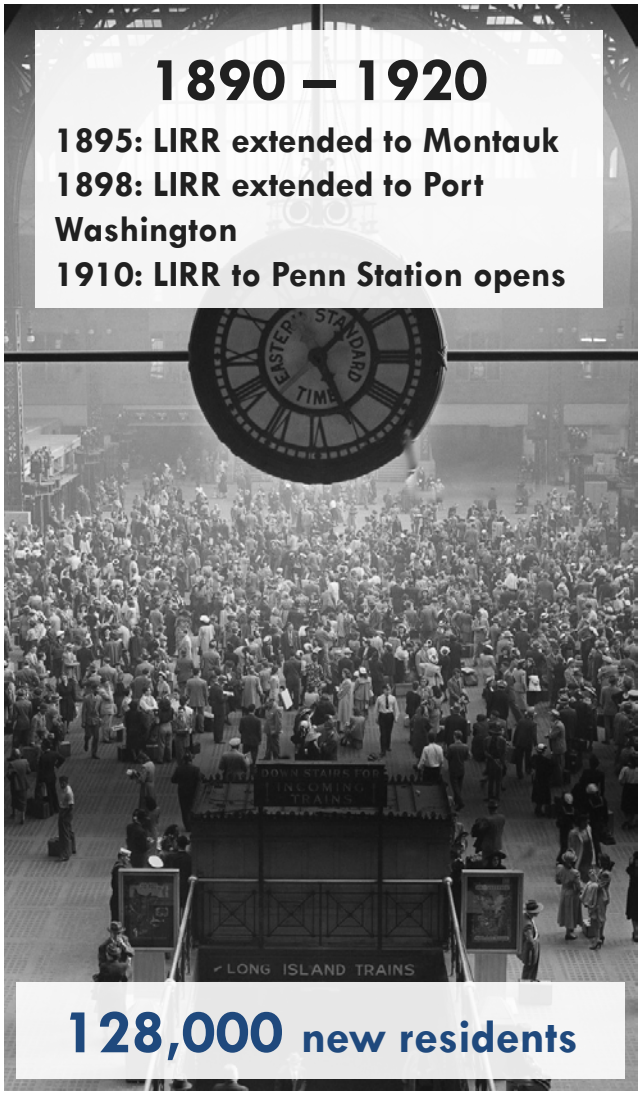
Transportation Investment and the Future of Long Island

The Long Island Index commissioned HR&A Advisors, Inc. and Parsons Brinkerhoff to study the economic and fiscal impacts of the Third Track project.

HR&A Advisors, Inc. ("HR&A") is a leading economic development consulting firm that specializes in conducting economic and fiscal impact studies on behalf of clients in the public and private sectors. HR&A has measured the economic and fiscal impacts of a diverse array of projects, places, and policies, including Access to the Region's Core (ARC), the extension of LIRR to Lower Manhattan, The High Line, Times Square, and the New York State Film Production Credit.

Parsons Brinkerhoff, Inc. ("PB") is a global planning and engineering firm with a leading practice in transportation forecasting, nationally and in the New York metropolitan region. PB developed the original 28-county regional Best Practices Model for the New York Metropolitan Transportation Council, and has performed all updates of the model, and has applied it for numerous travel forecasting studies in the region, including those for the Port Authority of New York and New Jersey and the Metropolitan Transportation Authority.

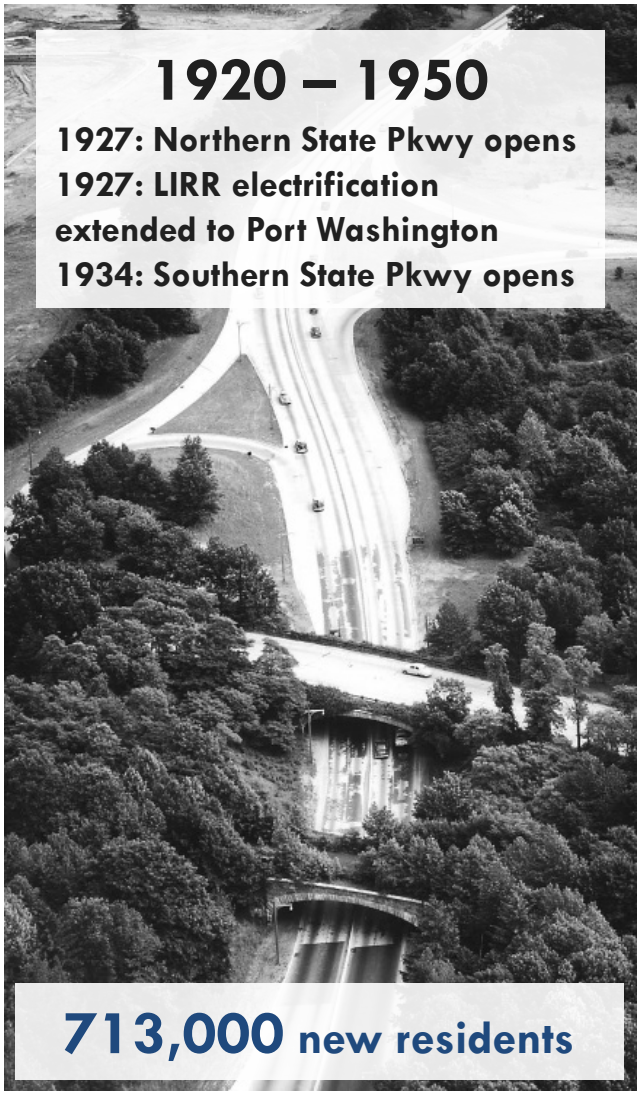
For much of the 20th century, investments in transportation infrastructure created the conditions for Long Island's rapid growth and development.



1890 – 1920

1895: LIRR extended to Montauk
1898: LIRR extended to Port Washington
1910: LIRR to Penn Station opens

128,000 new residents



1920 – 1950

1927: Northern State Pkwy opens
1927: LIRR electrification extended to Port Washington
1934: Southern State Pkwy opens

713,000 new residents

1950 – 1980

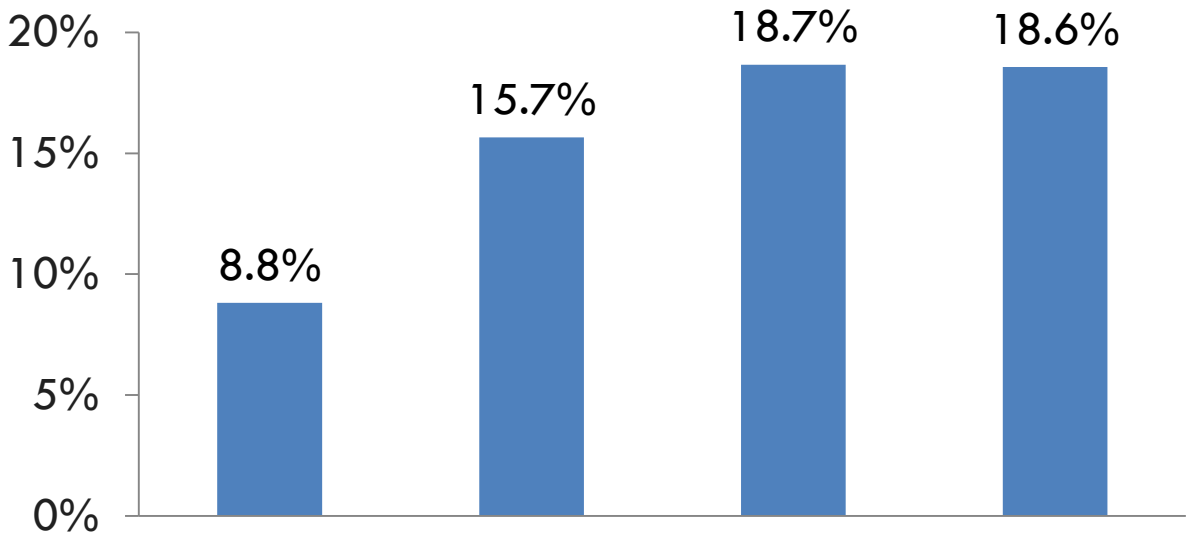
1950-1980: LIRR Babylon Branch grade crossing elimination
1970: LIRR electrification extended to Huntington
1958-1972: Long Is Expwy opens

1,650,000 new residents

Source: HR&A Advisors; US Census Bureau; *Historical Population of Long Island Communities 1790-1980*, Long Island Regional Planning Board, August 1982; Images from: untappedcities.com; vanderbiltcupraces.com; thehousinghour.com.

However, over the last three decades, growth on Long Island has slowed significantly.

1980-2010 Population Growth Rate

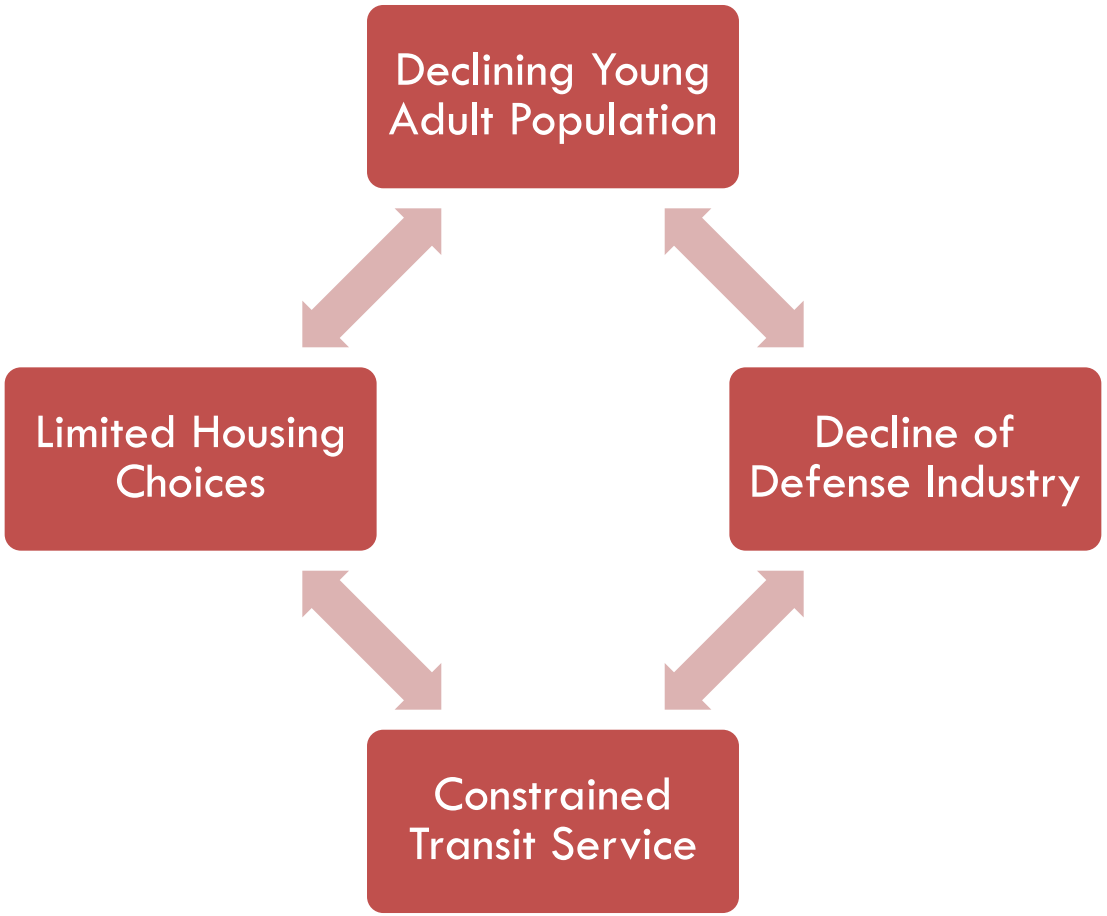


	Long Island	New York City	Hudson Valley	Northern New Jersey
2010 Population	2.84 M	8.19 M	2.29 M	6.95 M

- The Hudson Valley is comprised of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties.
- Northern New Jersey is comprised of Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren counties.

Source: HR&A Advisors; US Census Bureau; *Historical Population of Long Island Communities 1790-1980*, Long Island Regional Planning Board, August 1982; Image from wikimedia.com.

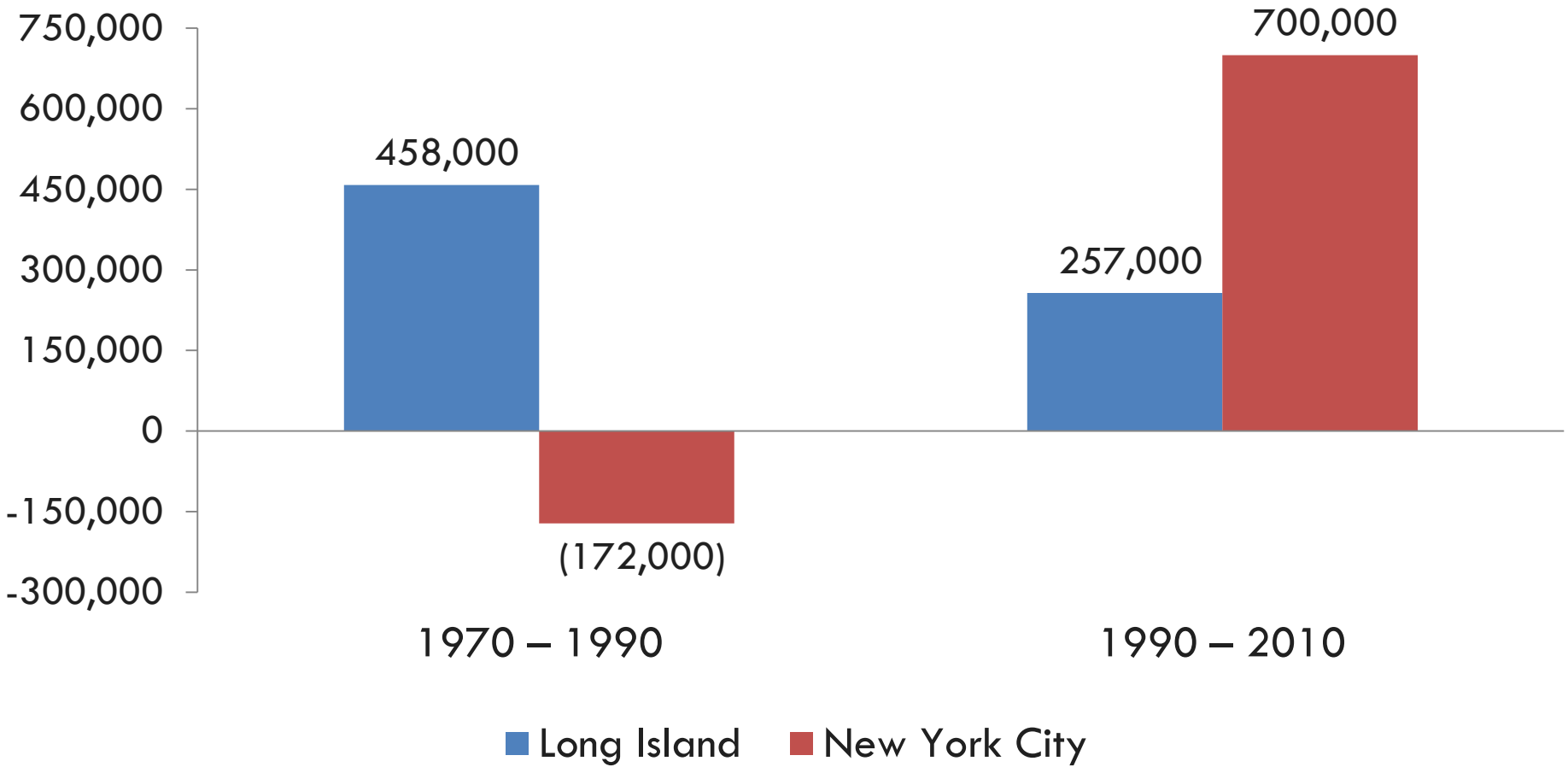
Long Island's stagnant growth derives from macroeconomic shifts and the maintenance of local policies that are out of step with national trends.



Long Island's economic underperformance is due to structural changes in the local economy, outmoded land-use policies that have limited housing choice, a decline in the supply of young workers, and constraints in Long Island's transportation network. These factors interact with and reinforce each other.

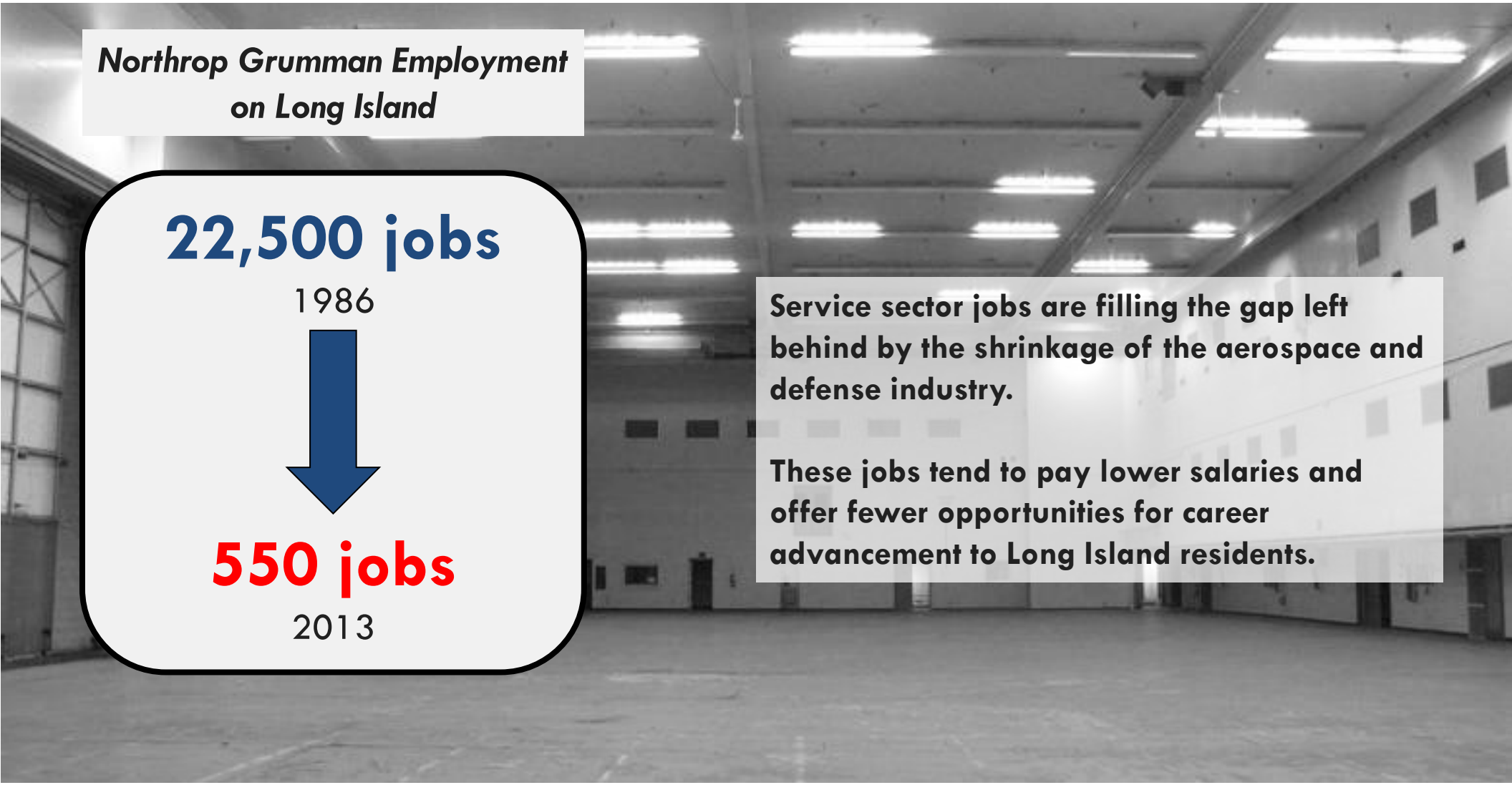
Over the last two decades, job growth on Long Island been sluggish, in stark contrast to the revival experienced by New York City.

Jobs Added, 1970 – 2010



Source: US Bureau of Economic Analysis

Reduced defense spending at the end of the Cold War eliminated 60% of defense industry jobs on Long Island; service jobs have filled the gap.



Northrop Grumman Employment on Long Island

22,500 jobs

1986

550 jobs

2013

Service sector jobs are filling the gap left behind by the shrinkage of the aerospace and defense industry.

These jobs tend to pay lower salaries and offer fewer opportunities for career advancement to Long Island residents.

Source: "A New Vision for Long Island's Economy," *Long Island Regional Economic Development Council*, 2011; Wall Street Journal
Image: scoutingny.com

As a result of land use policies that favor construction of single-family homes, Long Island lacks multifamily housing options, particularly in LIRR station areas.

The region's lowest rental vacancy rate

7.1%
Northern NJ

5.9%
Hudson Valley

4.2%
Long Island

Rental vacancy rate, 2011

The region's lowest proportion of new multifamily units

41%
Northern NJ

32%
Hudson Valley

24%
Long Island

% of permits for multifamily housing, 2001-2011

Nationally, 29 million new multifamily units will be needed by 2030 to meet predicted demand, and 41% of existing single-family homes will struggle to find ready buyers. Long Island's undersupply of multifamily housing makes it especially vulnerable to these trends.

Source: "*Long Island's Rental Housing Crisis*," Regional Plan Association, 2013; Leinberger, Christopher, *The Option of Urbanism: Investing in a New American Dream*, 2009

The acute loss of productive young workers and their families is among the most concerning aspects of Long Island's slow growth.

Percentage Change in Population Aged 25-44 from 2000 to 2010

	Population aged 25-34	Population aged 35-44
New York City	↑ 2%	↓ 9%
Long Island	↓ 13%	↓ 18%

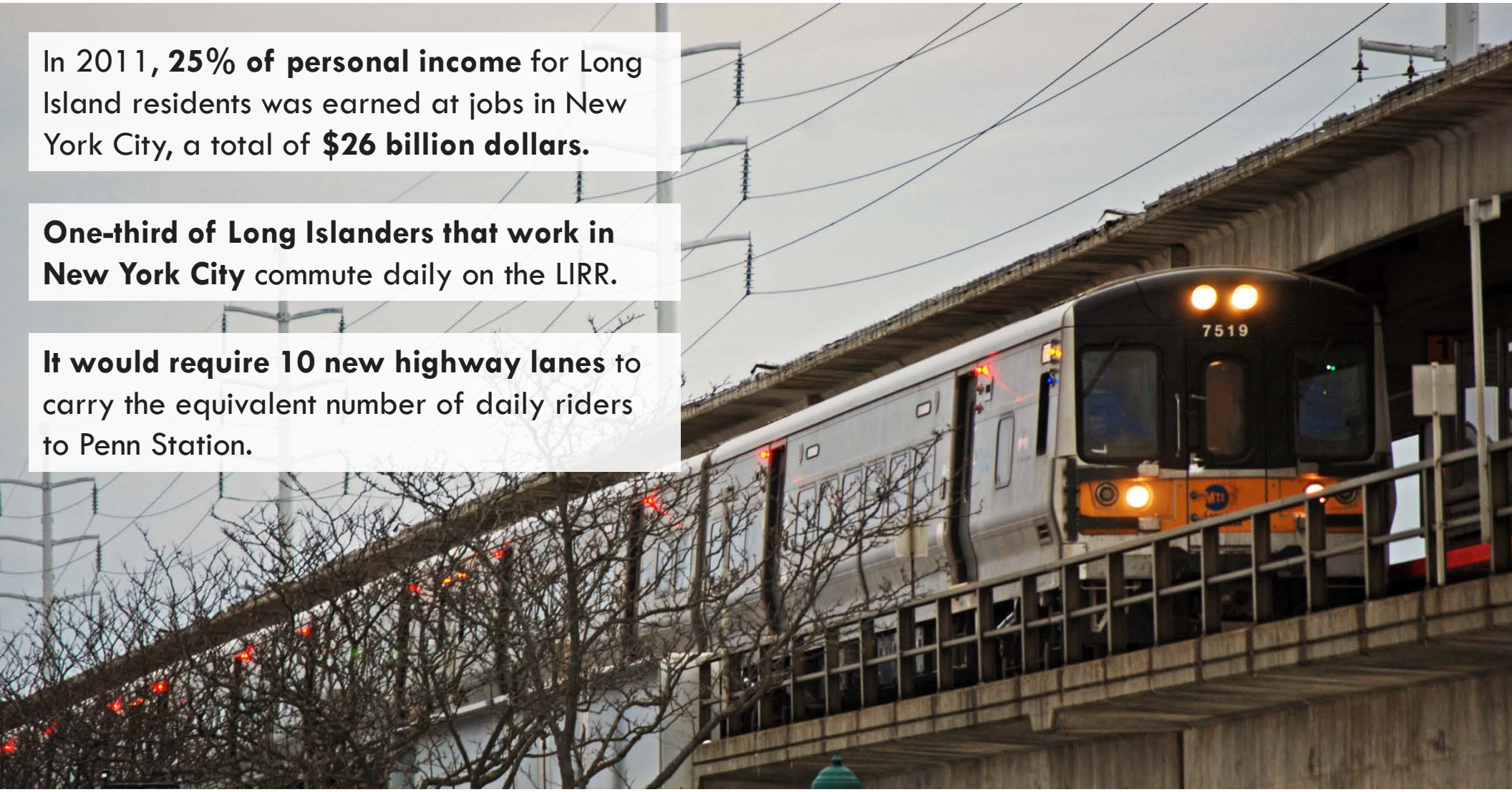
Source: US Census Bureau

Long Island's economy critically depends on continued investment in the LIRR.

In 2011, **25% of personal income** for Long Island residents was earned at jobs in New York City, a total of **$26 billion dollars.**

One-third of Long Islanders that work in New York City commute daily on the LIRR.

It would require 10 new highway lanes to carry the equivalent number of daily riders to Penn Station.



Source: *How the Long Island Rail Road Could Shape The Next Economy*, Regional Plan Association / Long Island Index, January 2013. Image: HBarrison, Flickr.

Deferred capacity investments on the Long Island Rail Road limit Long Island's growth.

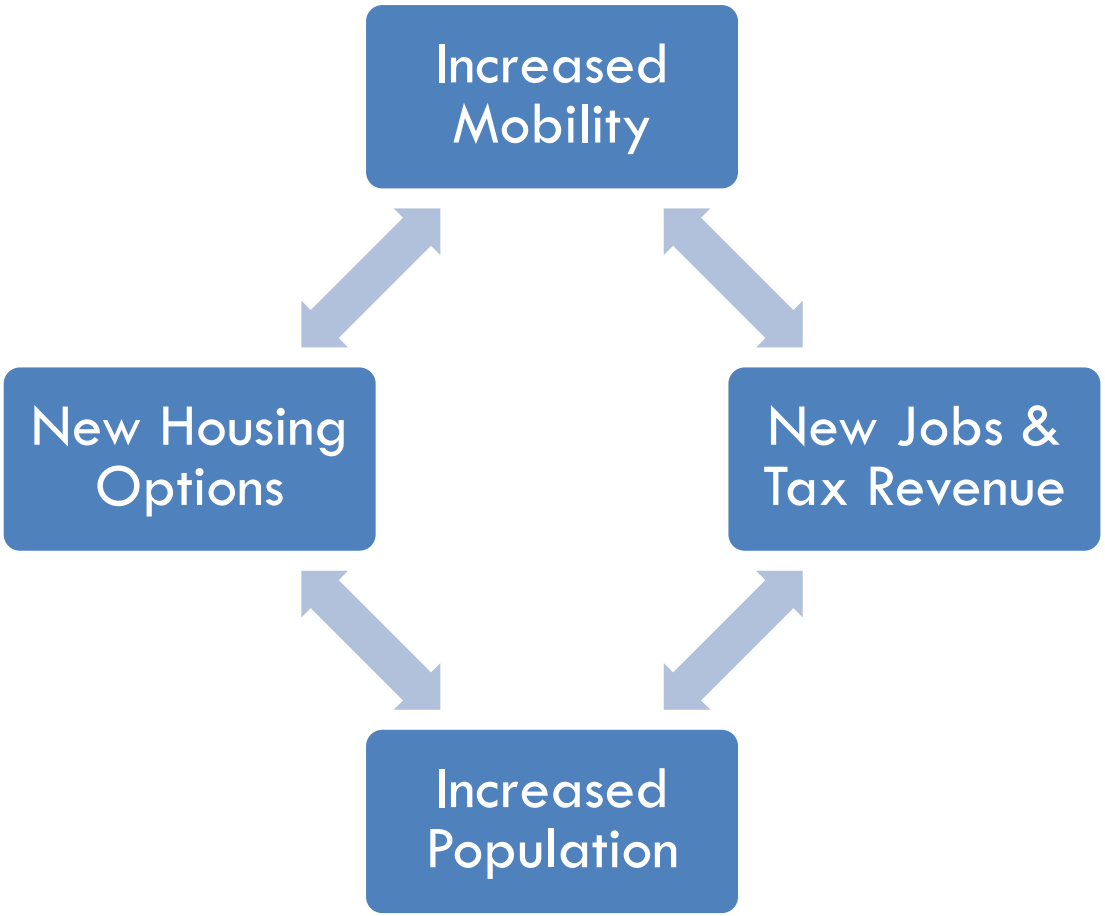
Due to constraints in track capacity…

- **City-bound peak-hour service on several branch lines is at maximum capacity.**
- **LIRR service is less reliable* than NJTransit or Metro-North due to limited operational flexibility.**
- **There are gaps of up to 70 minutes in daily reverse-commute service to many Long Island employment centers.**

The absence of reliable eastbound train service to Long Island during peak commute times greatly reduces the feasibility of reverse commuting to Long Island. The gap in service prevents many New York metro area workers who rely on transit from working on Long Island, even though their skills may be well-aligned with the needs of Long Island businesses.

* Reliability measured by on-time performance using most recent indicators from MTA Long Island Rail Road, MTA Metro-North Railroad, and NJTransit.
Source: *How the Long Island Rail Road Could Shape The Next Economy*, Long Island Index / RPA, January 2013; HR&A Advisors. Image: Joe Shlabotnik, Flickr

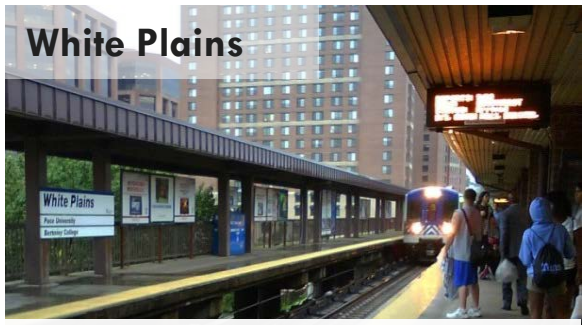
Third Track would position Long Island for sustained economic growth by making it a more attractive place to live and do business.



By increasing regional mobility, Third Track would revitalize Long Island's job market by attracting high-quality professional services and tech jobs, stem the outflow of young workers, generate new tax revenues, and encourage the provision of new transit-oriented housing that contributes to the revitalization of Long Island's station areas. These changes would position Long Island to succeed in the knowledge economy.

Investments in Metro-North capacity have enabled Westchester County employment centers to benefit from high levels of reverse peak service.

MNR constructed Harlem Line Third Track from 2002-2004



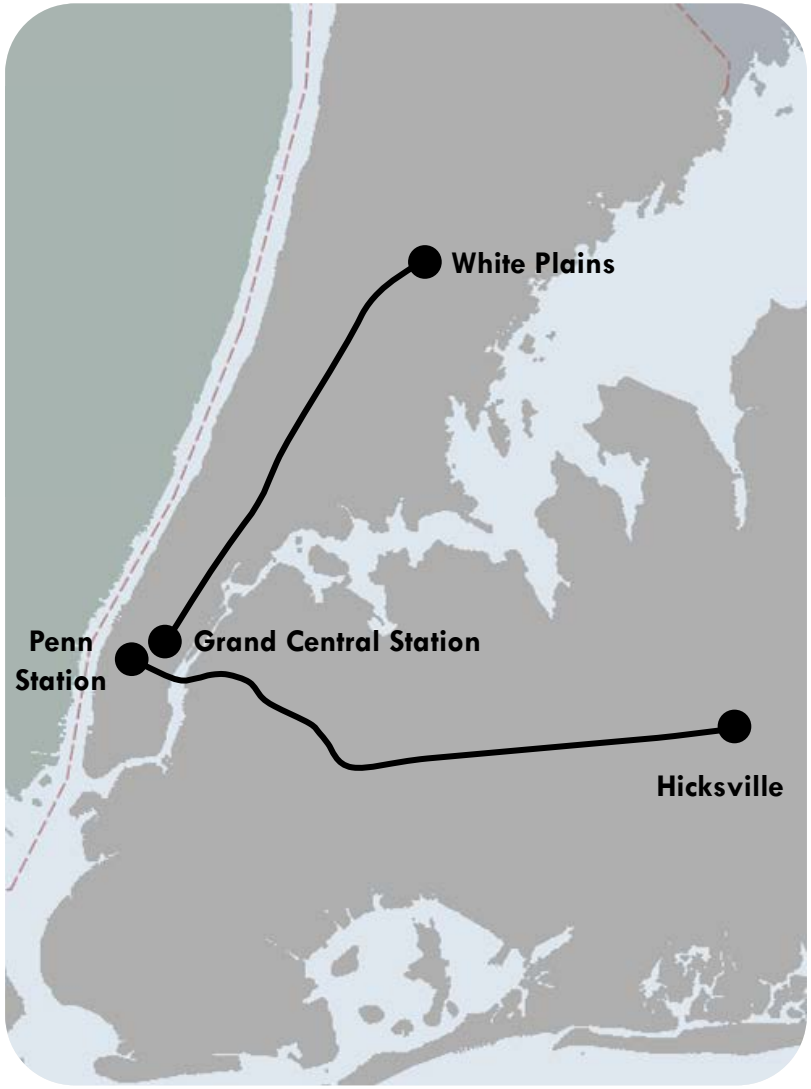
83,000 SF
of new development, 2000-2010

30 miles from Midtown

Total Northbound Service from Manhattan, 6-10 am:

18 trains

(7 trains between 7:00 am and 8:15 am)



LIRR has not invested in a comparable project

32,000 SF
of new development, 2000-2010

28 miles from Midtown

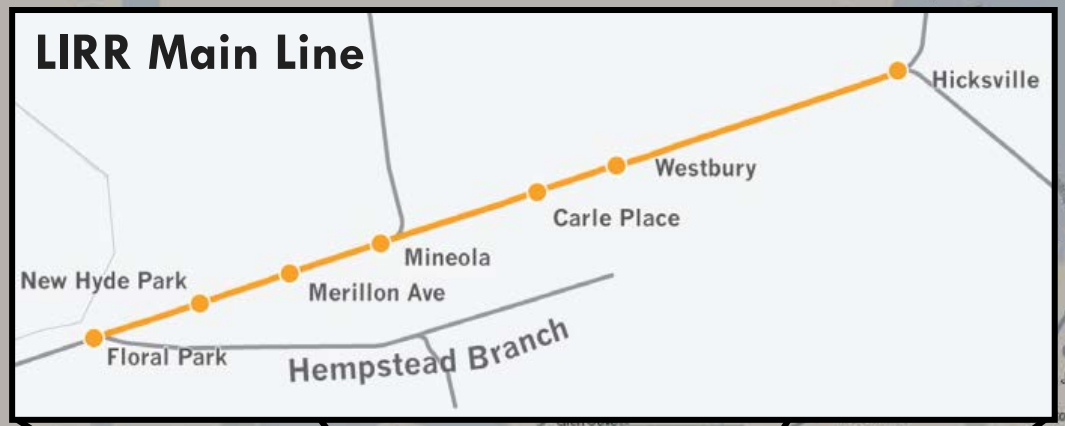
Total Eastbound Service from Manhattan, 6-10 am:

8 trains

(no service between 7:00 am and 8:15 am)

Source: CoStar; MTA Long Island Rail Road; MTA Metro-North Railroad; *How the Long Island Rail Road Could Shape The Next Economy*, Long Island Index / RPA, January 2013; HR&A Advisors. Images: Joe Shlabotnik, Flickr; iridetheharlemline.com.

The Third Track project would add an additional track to a 9.8 mile segment of the LIRR Main Line between Floral Park and Hicksville.



The Third Track would **improve reliability throughout the entire LIRR network.**

The Third Track would allow **significant levels of reverse peak and intra-Island service to Main Line stations.**

The Third Track increases capacity for the **Port Jefferson Branch, Montauk Branch, Ronkonkoma Branch, and Oyster Bay Branch.**

The Third Track achieves the full benefits of **East Side Access.**

Source: Metropolitan Transportation Authority; Regional Plan Association

Third Track would effectively expand and improve the Long Island workforce by providing a viable reverse-commute service.

- Poor transportation access to Long Island hinders the region's economic growth for several reasons:
  - Reduces labor catchment areas and the size of business markets
  - Increases logistics costs
  - Reduces employee productivity
- Expanding the size of the workforce available to Long Island firms results in a better match between the needs of these firms and workers' skills, driving greater productivity.

> "A larger effective labor market makes it easier for enterprises to find the skills they need, and for workers to find the jobs they want."
>
> Prud'homme & Lee, 1998

Source: "*Where the Jobs Are: Employer Access to Labor by Transit*," Tomer, Metropolitan Policy Program at Brookings, 2012; "*Size, Sprawl, Speed and the Efficiency of Cities*," Rémy Prud'homme & Chang-Woon Lee, Observatoire de l'Économie et des Institutions Locales, 1998.

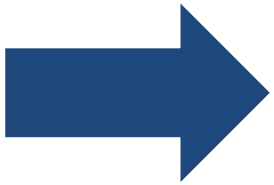
Third Track would also enhance the suitability of station areas for TOD, creating live/work nodes that meet the needs of new economy firms and workers.

- An expansive academic literature documents the productivity benefits generated by urban agglomeration, as **close proximity encourages knowledge spillovers and innovation that make firms and workers more productive.**

- Denser employment nodes are the locus of the knowledge economy, where increased interactions result in new ideas, products, and technologies that drive productivity gains and economic growth.

- Transit-oriented development opportunities catalyzed by Third Track would facilitate the creation of such employment nodes and match the living and working preferences of young workers that Long Island struggles to retain.

Doubling employment density



6%

Increase in productivity

***Ciccone and Hall*, 1996**

Source: "*Productivity and the Density of Economic Activity*," Ciccone and Hall, *The American Economic Review*, 1996.

The Economic and Fiscal Impacts of Third Track on Long Island

Parsons Brinckerhoff used the NYMTC Best Practices Model to measure the future performance of the regional transportation network with and without Third Track.

- The New York Best Practices Model (NYBPM) includes representation of virtually all existing public and private transportation services in the 28-county New York metropolitan region, as well as all future planned major highway and transit improvements. It is used to estimate user demand and performance of these regional transportation systems for baseline and alternative planning scenarios, while accounting for regionally adopted forecasts of population, employment and other key measures of regional demographic and economic change. The model accounts for other future improvements to the LIRR network, including East Side Access and the Ronkonkoma Double Track.

- Based on the higher level of service enabled by Third Track, PB quantified the following transportation outputs, which were translated into economic impacts by HR&A:

    - Time savings accruing to existing passengers

    - Increases in ridership

    - Improvements in the accessibility of workers to Long Island employers

PB constructed three scenarios using the BPM: A current scenario (2010), a 2035 scenario without Third Track, and a 2035 scenario with Third Track.

2010 Service

- Based on NYMTC 2010 Build Scenario

2035 No-Build Scenario

- Based on NYMTC 2035 Build Scenario
- Includes East Side Access, Ronkonkoma Double Track, Second Avenue Subway, and the 7 Train Extension

2035 Third Track Scenario

- Based on NYMTC 2035 Build Scenario
- Includes East Side Access, Ronkonkoma Double Track, Second Avenue Subway, and the 7 Train Extension
- **Includes 17 additional AM trains enabled by Third Track**

Source: Parsons Brinckerhoff

Third Track would significantly increase eastbound (reverse-commute) train frequencies at Main Line stations during the peak period of 6-10 AM.

Station	Average Minutes Between Trains (No Build)	Average Minutes Between Trains (Third Track)
Hicksville	22	**9**
Mineola	20	**11**
Westbury	60	**16**
Bethpage	60	**19**
Farmingdale	60	**19**
Huntington	40	**19**
Cold Spring Harbor	48	**21**
Ronkonkoma	48	**21**
Syosset	48	**21**
Brentwood	60	**23**
Deer Park	60	**23**
New Hyde Park	60	**23**
Merillon Avenue	80	**25**
Carle Place	80	**25**

Note: Frequencies are based on future service modifications developed by the Regional Plan Association in conjunction with PB and HR&A. This schedule builds upon LIRR's Operations Plan Version 3.0. While "gate-down" time at grade crossings on the Main Line will increase due to East Side Access, the projected increase in LIRR service from Third Track will have a smaller incremental increase in "gate-down" time than would be implied by the number of new trains because some reverse peak trains will traverse grade crossings where the gates are already down for peak period trains. Source: Parsons Brinckerhoff; RPA

HR&A used the REMI Policy Insight Model to estimate the impacts of Third Track on all aspects of the Long Island economy between 2020 and 2050.

- Developed by **R**egional **E**conomic **M**odels, **I**nc., the Policy Insight Model is frequently employed by Federal, State, and local governments, economic development and transportation authorities, and private clients to measure the impacts of regional economic changes. Clients include the New York City Economic Development Corporation (NYCEDC), Empire State Development Corporation (ESDC), New York State Energy Research and Development Authority (NYSERDA), and the departments of transportation of 10 states.

- As a dynamic econometric model, the Policy Insight Model is particularly adept at modeling the long-term impacts of infrastructure investments that fundamentally alter underlying economic relationships between economic output, factors of production, prices, and demographic factors.

- HR&A considered only the net new economic and fiscal impacts of the construction and operation of Third Track, meaning **but for** the existence of Third Track, these impacts would not have occurred on Long Island.

By applying transportation outputs from the BPM to the REMI Policy Insight Model, HR&A estimated economic benefits owing to Third Track.

HR&A reports key economic and fiscal impacts owing to the Third Track project.

Economic Impacts

- New jobs
- Increased personal income
- Increased Gross Regional Product (GRP)
- Increase in population

Fiscal Impacts

- Increase in county sales tax revenue
- Increase in county property tax revenue

Third Track would generate both one-time construction impacts and ongoing impacts from operation.

ONE-TIME IMPACT:
Construction Period of 2020-2024

Construction

Spending on new infrastructure

ONGOING IMPACT:
Operational Period (Benefits Measured 2025-2050)

Improved Access to Workforce

Enhanced productivity from better matches between employers and workers

Benefits of Denser Employment Nodes

Economic gains from close proximity between firms

Ridership Benefits from Better Service

Time savings due to more frequent and reliable service and new visitor spending

The economic impacts of Third Track's construction would accrue from 2020 to 2024.

ONE-TIME IMPACT:
Construction Period of 2020-2024

Construction

ONGOING IMPACT:
Operational Period (Benefits Measured 2025-2050)

Improved Access to Workforce

Benefits of Denser Employment Nodes

Ridership Benefits from Better Service

The construction of Third Track would represent a $1.2 Billion investment in the Long Island economy over a five-year period.

ONE-TIME IMPACT

Construction	Spending on new infrastructure

Element	Total
Station Improvements and Re-Configuration	$100 Million
New Track, Power, and Signals (Miles)	$900 Million
Subtotal	$1 Billion
Contingency	$200 Million
Total	**$1.2 Billion**

- **100% of the above construction costs** are estimated to be spent in Long Island.
- **Rolling stock purchases, land acquisition costs,** and **new rail yard construction** are **excluded** from the above estimate.

Note: All dollar amounts are in 2013 dollars. Source: Long Island Rail Road

One-Time Construction Impacts: Constructing Third Track would produce gains for construction workers and contractors hit hard by the Great Recession.

Economic Impacts During Construction (2020-2024)*

2,250
Average Annual Jobs (2020-2024)

$910 Million
Cumulative Personal Income

$910 Million
Cumulative GRP

Note: The construction timeframe is estimated. Depending on the LIRR's capital program cycle and construction schedule the timeframe could be longer. All dollar amounts are in 2013 dollars. Outputs reflect total growth over period 2020-2024.
Source: HR&A Advisors; REMI

The economic impacts of Third Track's operations would begin to accrue in 2025 when the track is assumed to be operational.

ONE-TIME IMPACT:
Construction Period of 2020-2024

Construction

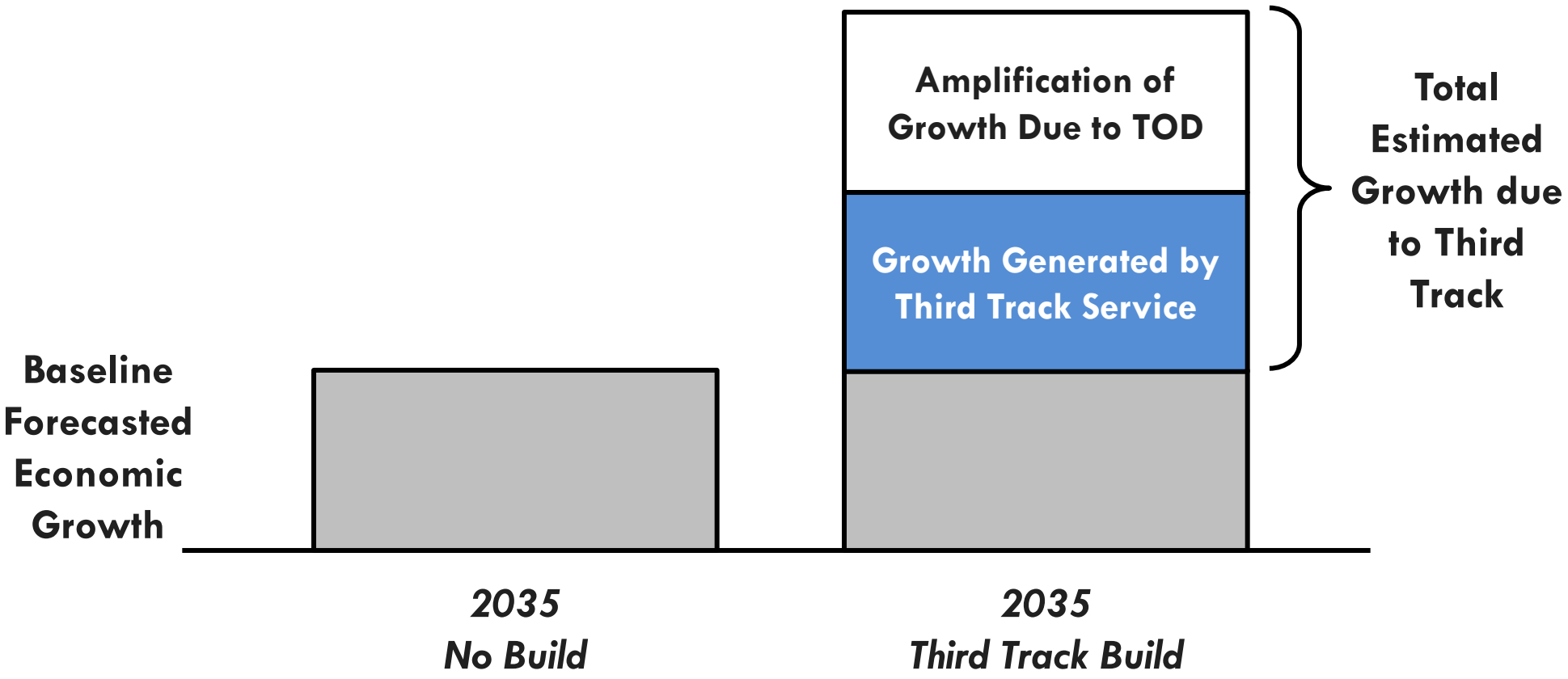
ONGOING IMPACT:
Operational Period (Benefits Measured 2025-2050)

Improved Access to Workforce

Benefits of Denser Employment Nodes

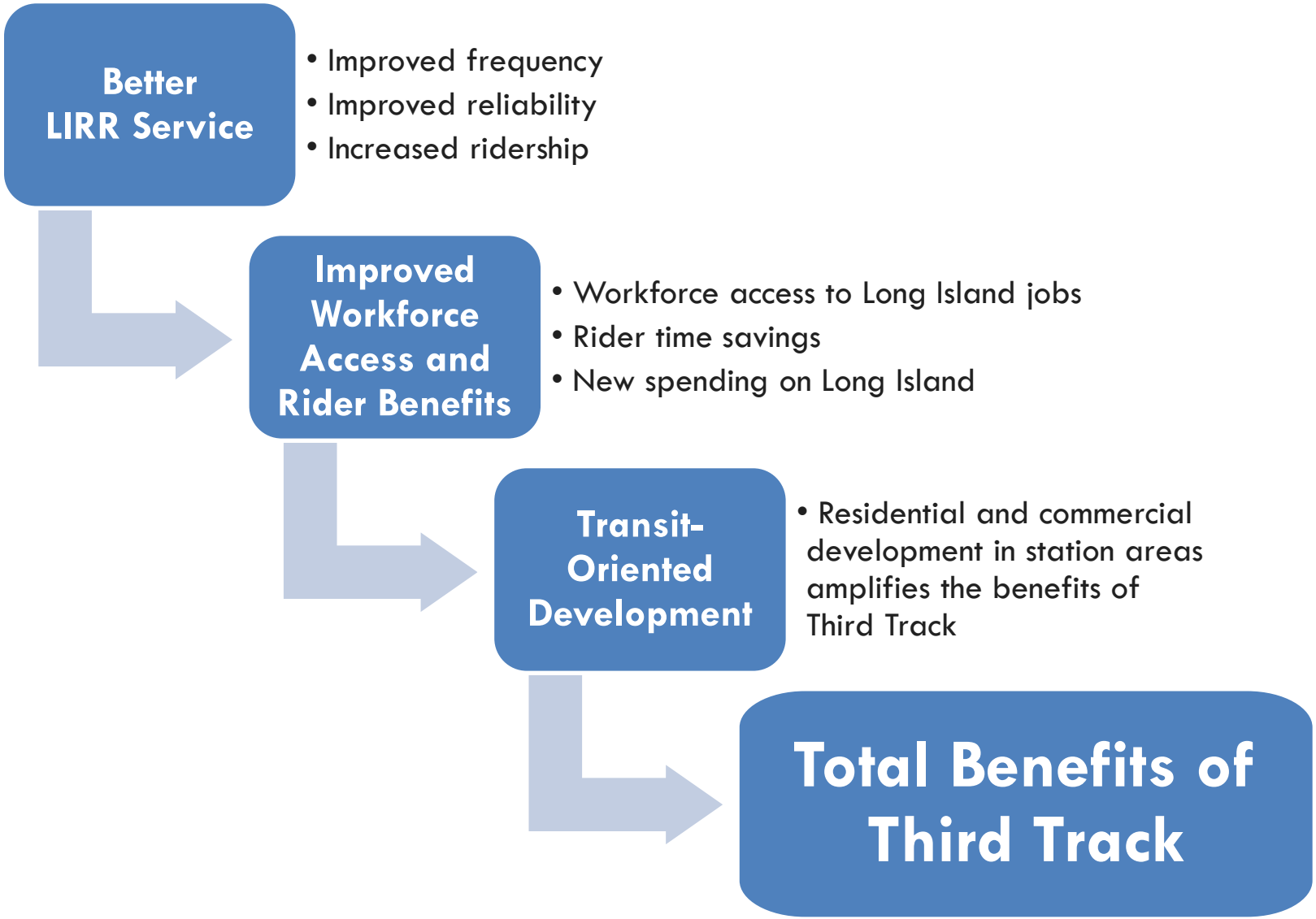
Ridership Benefits from Better Service

In estimating the ongoing economic impact of Third Track, HR&A included the amplifying effect of transit-oriented development policies.



The analysis assumed six station areas in Nassau County and four station areas in Suffolk County could accommodate TOD, facilitating additional economic growth by locating more residents and workers precisely where they can most benefit from increased service.

Total ongoing benefits of Third Track for Long Island derive from improved workforce access, better LIRR service, and the amplifying effect of TOD.



Third Track would effectively increase the workforce available to Long Island businesses by making reverse commuting viable.

ONGOING IMPACT

Improved Access to Workforce	Enhanced productivity from better matches between employers and workers

- Higher eastbound service frequencies will **make employment on Long Island a viable option for non-Long Island residents** who would not currently consider working on Long Island.

- PB's transportation model estimates that Long Island firms would **achieve a significant improvement on their current access to labor,** as measured by an index taking into account accessibility by all modes. This improvement is translated into productivity gains by the REMI Policy Insight Model.

- **Greater productivity strengthens Long Island's economy and expands its capacity for future growth,** resulting in significant long term increases in job creation, gross regional product, and population.

Illustrative Example of How Improved Access to Workforce Positions Long Island for Further Economic Growth

Oracle, a software firm, has offices near to Mineola's LIRR station. They need talented Java developers.

Oracle adds a job posting to a website for regional technology jobs.

Phil is a Java developer enjoying the car-free life in Manhattan. His skills would be perfect for Oracle.

Phil is intrigued by Oracle's job posting. But he only considers transit-friendly jobs.

Phil checks the LIRR Schedule.

With Third Track, Phil would have a fast and flexible commute on the LIRR to Mineola.

Without Third Track, the gaps in LIRR morning service dissuade Phil from applying to Oracle.

Phil applies for the job; Oracle hires him. He develops a great product, which spurs further hiring.

Some of the new workers hired commute from NYC on the LIRR, others already live on Long Island, and still others relocate to Long Island.

The additional local spending by these workers and their contributions to Oracle **create Long Island jobs.**

The increased density of employment on Long Island encouraged by TOD would enhance the productivity of Long Island firms.

ONGOING IMPACT

Benefits of Denser Employment Nodes	Economic gains from close proximity between firms

- **Implementing Third Track would encourage employment growth on Long Island by making it a more attractive place to do business.** HR&A estimates that employment density on Long Island would increase by 2.6% if TOD policies encouraged this growth to occur in station areas.

- Based on the findings of a literature review, this increase in density is translated into a significant Long Island-wide multi-factor productivity gain for the local economy.

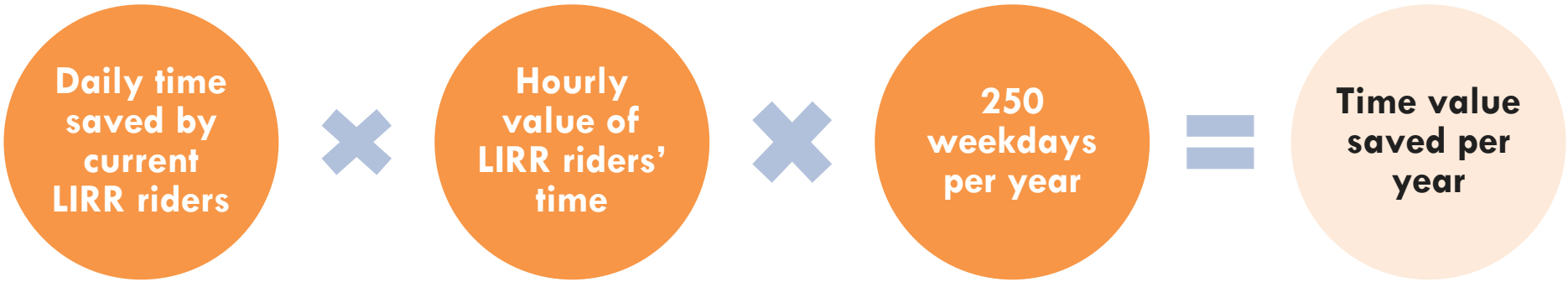
- **As with the increase in labor access, greater productivity results in significant long term increases in job creation,** economic output, and population.

Travel time savings and increased ridership stimulate Long Island's economy by improving quality of life, reducing business costs, and promoting spending.

ONGOING IMPACT

Ridership Benefits from Better Service	Time savings due to more frequent and reliable service

- The value of commuter time savings for Long Island-bound workers is represented in the REMI Policy Insight Model as a cost savings to Long Island businesses. The value of time savings for passengers originating in Long Island is represented as non-pecuniary amenity that enhances Long Island's quality of life.



The availability of more frequent reverse commuter trains will attract more tourist dollars to Long Island.

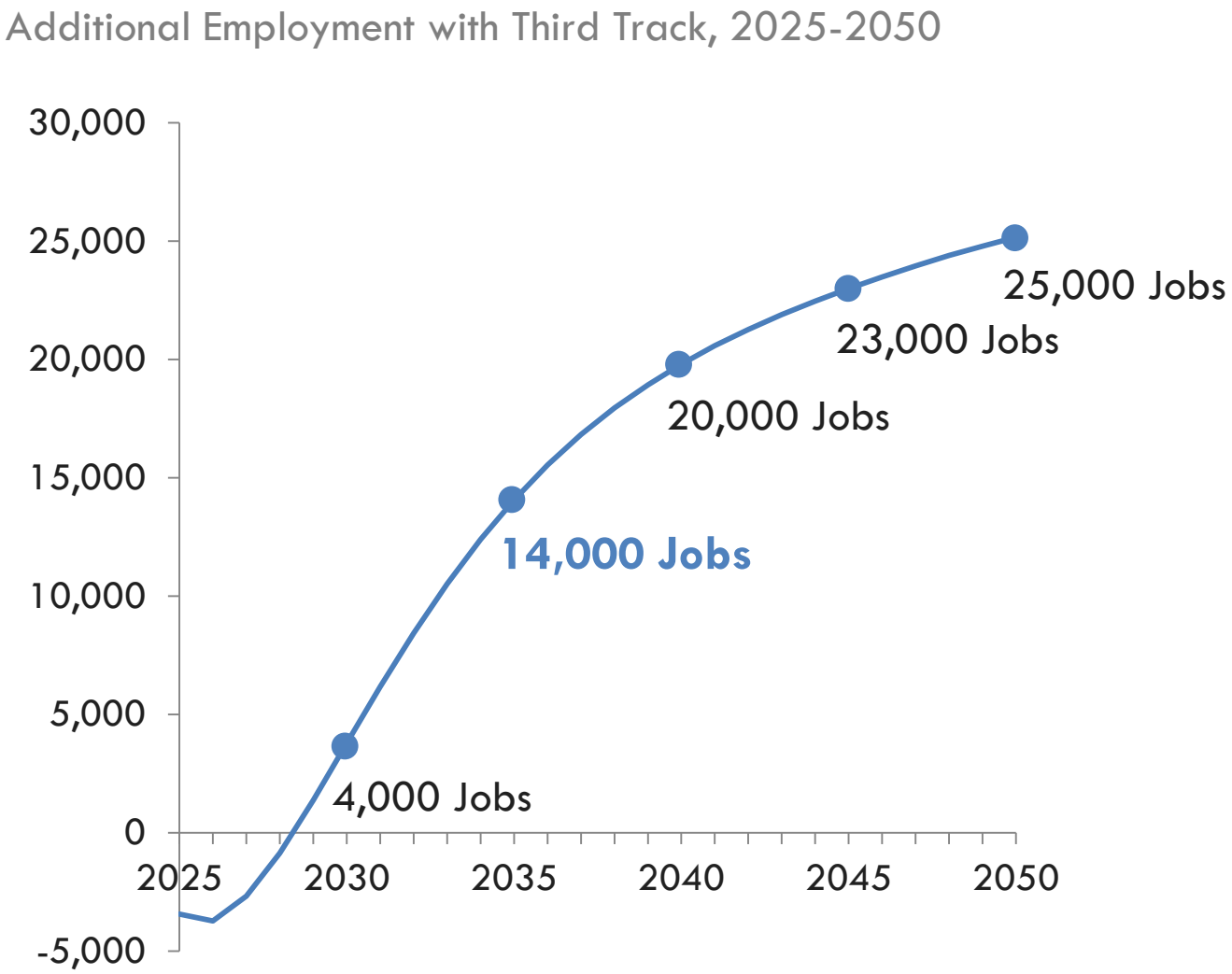
ONGOING IMPACT

Ridership Benefits from Better Service	New visitor spending on Long Island

- New visitor spending on Long Island owing to an increase in the number of Long Island-bound leisure riders is represented in the REMI Policy Insight Model through an increase in the nonresident visitor spending pattern.

Employment impacts: Third Track would create a significant amount of new jobs in the Long Island economy.

14,000
Jobs created by 2035,
10 years after Third Track completion



Source: HR&A Advisors; REMI

Sectoral employment impacts: Third Track would create jobs throughout the Long Island economy.

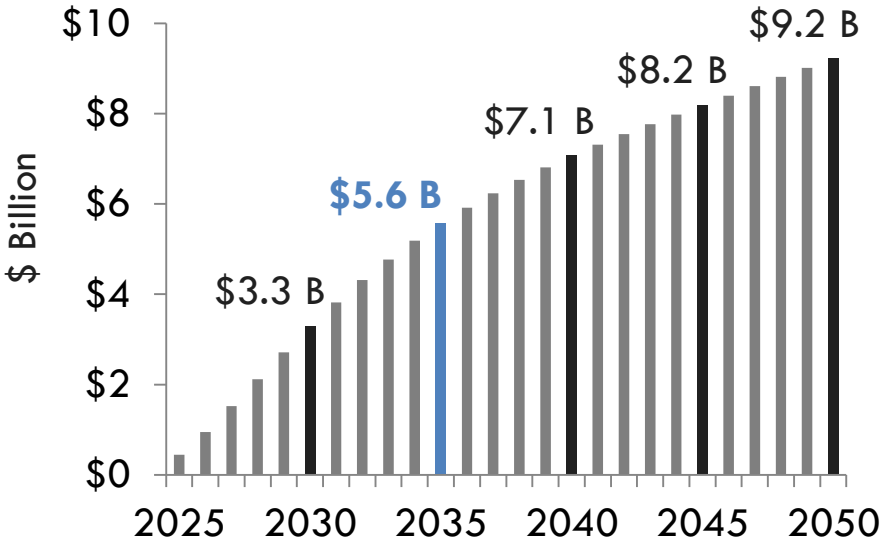
The 14,000 jobs that Third Track would create by the year 2035 would present employment opportunities for workers with diverse skills and educational backgrounds. These net new jobs would accelerate Long Island's economic revitalization.

Selected Sectors	Jobs Created by 2035
Professional and Business Services and Information	4,400
Education, Health Services, and Government	2,900
Real Estate and Financial Activities	2,700
Trade, Transportation, and Utilities	1,600
Leisure and Hospitality	1,200
Other Services	800
Construction and Manufacturing	400

*Jobs include both full and part time jobs.
Source: HR&A Advisors; REMI

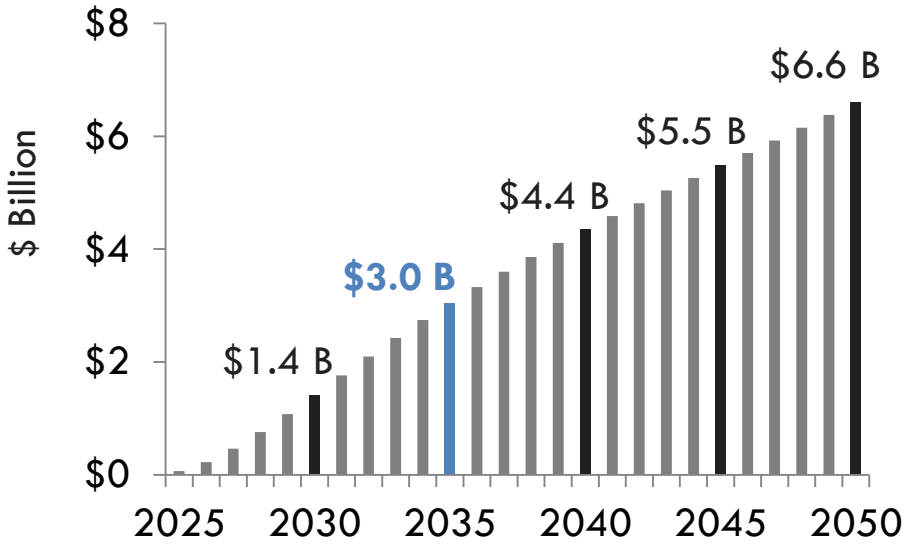
GRP and personal income impacts: Third Track would significantly boost the economy of Long Island for decades to come.

Additional GRP with Third Track, 2025-2050



$5.6 Billion
GRP in 2035, 10 years after Third Track completion

Additional Personal Income with Third Track, 2025-2050

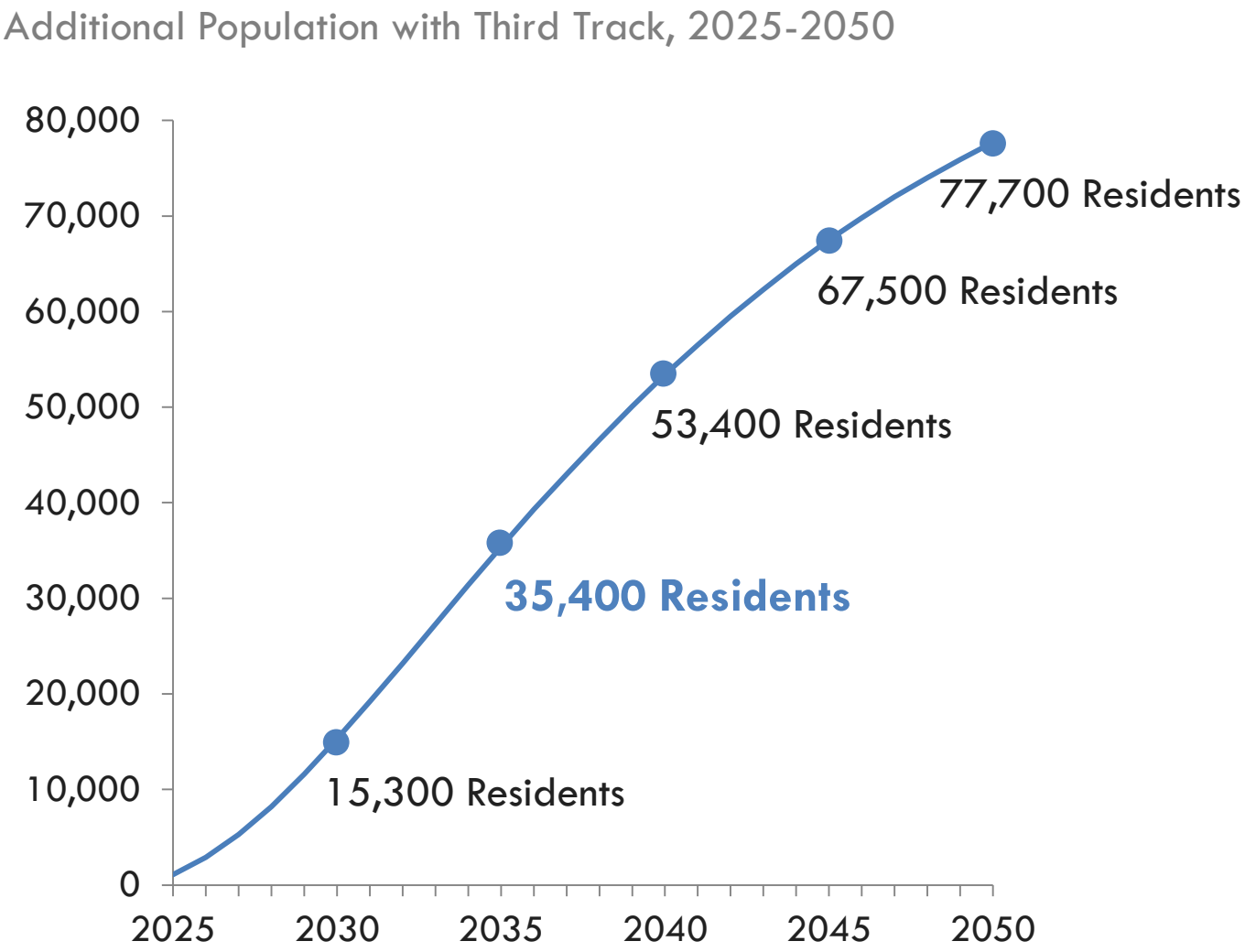


$3.0 Billion
personal income in 2035, 10 years after Third Track completion

Note: All dollar amounts are in 2013 dollars. Source: HR&A Advisors; REMI

Population impacts: The economic growth and improved quality of life catalyzed by Third Track would attract new residents to Long Island.

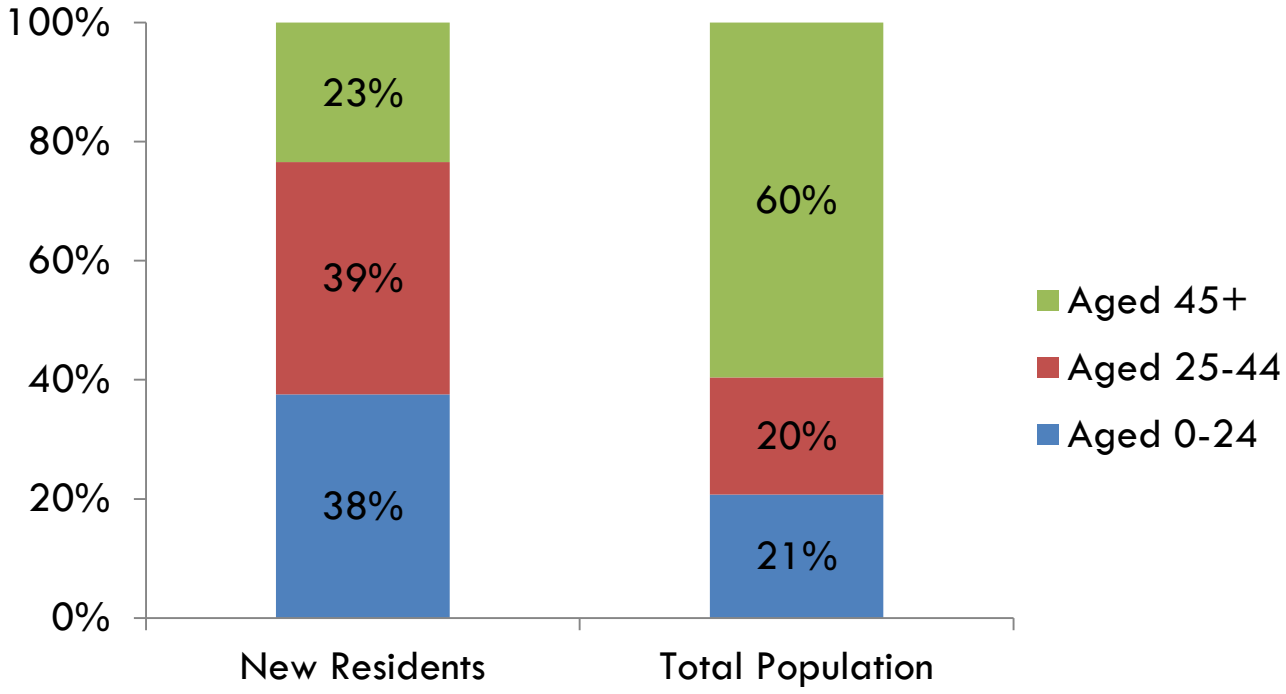
35,400
New residents by 2035,
10 years after Third Track completion



Source: HR&A Advisors; REMI

Age cohorts: Third Track would help revitalize Long Island by helping to stem the outflow of young workers and their families.

Age Cohorts of Long Island Population in 2035:
Residents Attracted By Third Track vs. Total Population



Of the 35,400 new residents present on Long Island by 2035, 39% would be in the 25-44 year old age cohort, compared to only 20% of Long Island's total forecasted 2035 population.

Source: HR&A Advisors; REMI

Without policies that facilitate transit-oriented development in station areas, the total economic benefits of Third Track are reduced by nearly half.

Third Track with TOD		*Third Track Without TOD*	
14,000	**jobs created by 2035**	7,300	jobs created by 2035
$5.6 B	**GRP in 2035**	$2.9 B	GRP in 2035
$3.0 B	**income in 2035**	$1.6 B	income in 2035
35,400	**new residents by 2035**	18,600	new residents by 2035

Note: All dollar amounts are in 2013 dollars. Source: HR&A Advisors; REMI

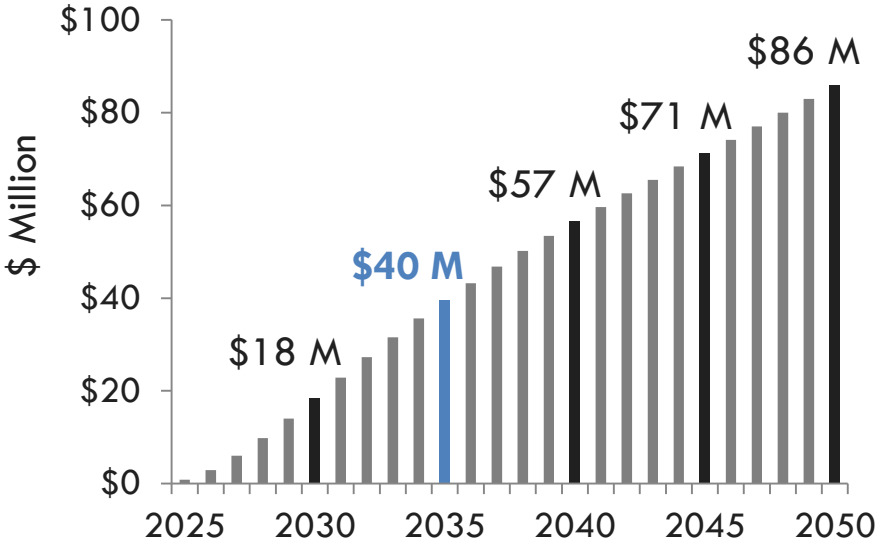
HR&A estimated fiscal impacts based upon the employment and population impacts generated by the REMI Policy Insight Model.

- Sales tax revenues to Long Island were estimated based on the historical ratio between personal income and sales tax revenues to Nassau and Suffolk Counties.
  - In 2011, this ratio was $1.30 of sales tax revenue for every $100 of personal income.
  - This ratio is applied to the REMI Policy Insight model's estimate of new personal income generated to measure incremental tax revenues owing to Third Track.

- Property tax revenues were estimated based on the value of the spaces needed to house new residents and workers.
  - Based on the number of new households and jobs projected by the economic analysis, HR&A estimated the total number of residential units and commercial square footage that would need to be developed in Nassau and Suffolk Counties.
  - HR&A estimated the market value of this new property based on recent residential and commercial transaction data.
  - Finally, HR&A assumed this new property would be taxed at the current millage rates, based on full market value, for Nassau and Suffolk Counties.

Fiscal impacts: Third Track would generate substantial additional local tax revenues for Long Island.

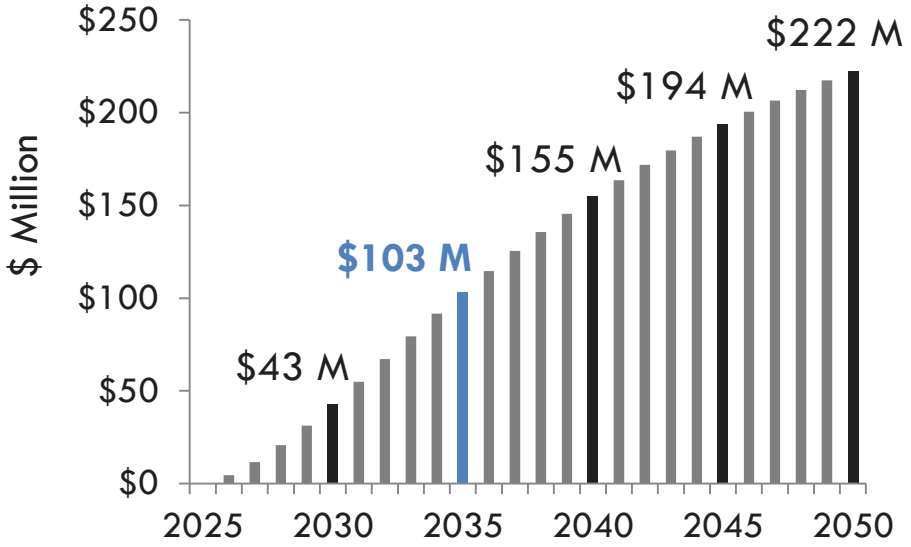
Additional Sales Tax Revenue with Third Track, 2025-2050



$40 million

annual sales tax revenue in 2035, 10 years after Third Track completion

Additional Property Tax Revenue with Third Track, 2025-2050



$103 million

Annual property tax revenue in 2035, 10 years after Third Track completion

Note: All dollar amounts are in 2013 dollars. Property tax revenue includes all county, town, village, school district, and special district taxes.
Source: HR&A Advisors; REMI; New York State Department of Taxation and Finance

In sum, Third Track is an essential investment in the future of Long Island that will generate substantial economic and fiscal benefits for Long Island.

Economic Impacts

14,000 jobs created by 2035

$5.6 B GRP in 2035

$3.0 B income in 2035

35,400 new residents by 2035

Fiscal Impacts

$40 million additional annual sales tax revenue in 2035

$103 million additional annual property tax revenue in 2035

Note: All dollar amounts are in 2013 dollars. Source: HR&A Advisors; REMI; New York State Department of Taxation and Finance

Long Term Benefits: Third Track would generate a significant payoff for Long Island.

An initial capital investment of: **$1.1 Billion**

produces benefits of:

$7.7 Billion GRP + 4,000 Jobs by 2030

$36.3 Billion GRP + 20,000 Jobs by 2040

$67.9 Billion GRP + 25,000 Jobs by 2050

Note: The investment and GRP figures presented are the net present values (NPVs) of the stream of investment payments and GRP generated. The NPV calculations assume a 3% discount rate. All dollar amounts are in 2013 dollars.
Source: HR&A Advisors; REMI