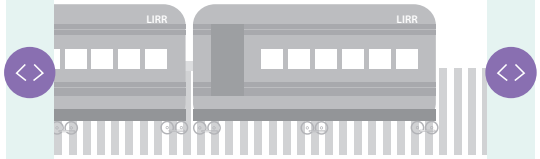
2013 Long Island Index Special Analysis

How the Long Island Rail Road Could Shape the Next Economy



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LONG ISLAND INDEX
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Table Of Contents

Executive Summary

Since it was first chartered in 1834, the Long Island Rail Road (LIRR) has been central to the growth and development of Long Island. The LIRR was the core of a rail-oriented transportation network that connected growing communities to jobs in both Manhattan and Long Island in the century between the Civil War and World War II. As a car-dominated culture pulled jobs and people farther from the railroad, the LIRR fell into disrepair in the 1940s and 1950s.

In the last 30 years, the LIRR network has been revived and improved with billions of dollars invested in new cars, upgraded systems and repairs to tracks, stations and rail yards. Long Island's economy and way of life would be impossible without the railroad, and many of its impacts are not widely recognized.

- One out of every four dollars of income earned by Long Island residents is brought home from jobs in New York City. In 2011, this constituted $26 billion in income -- 34% of all income earned by Nassau residents and 14% of income earned by Suffolk residents.
- 30% of employed Nassau residents and 11% of employed Suffolk residents commute to New York City for work, and a third of them take the LIRR.
- Auto traffic would congeal on highways as it would require 10 new traffic lanes to carry the daily equivalent of LIRR riders into Penn Station.

Yet the reach and capacity of the railroad has remained unchanged since it first connected to Manhattan's Penn Station in 1910. While the other commuter railroads in the New York region—Metro-North and New Jersey Transit—have greatly increased ridership in the last two decades with new services, LIRR ridership has hardly budged.

Now, for the first time in in more than a century, the LIRR is poised to provide new capacity on its network. With this new capacity, the railroad could lead a new era of economic growth for Long Island. By 2019, the East Side Access (ESA) project will give LIRR riders direct access to Grand Central Terminal and east Midtown Manhattan, the densest concentration of jobs in the country. Track capacity is also being expanded on the island itself. A second track from Farmingdale to Ronkonkoma could be completed by 2018 and expand service options and reliability on one of the fastest growing yet most overcrowded lines in the system. Beyond these two projects, a deferred and long-debated project—a third track on the LIRR Main Line—has the potential to greatly improve service and support job growth within Nassau and Suffolk.

East Side Access will bring both immediate and long-term benefits to everyone on Long Island, not just LIRR riders:

- Nassau and Suffolk residents would have improved access to 560,000 jobs in Manhattan, where the median wage is more than twice as high as on Long Island. These higher incomes will help support local businesses on the island.
- Thousands of commuters will save an average of 18 minutes and as many as 42 minutes a day taking the train to Grand Central instead of Penn Station.
- 400,000 homeowners in Nassau and Suffolk will see the value of their homes rise by an average of $7,300.
- With three tunnels into two terminals, rather than two tunnels into one location, service into Manhattan will be more reliable and less vulnerable to storms, terrorism or breakdowns.
- LIRR riders will be able to board Metro-North trains in the same terminal at Grand Central.
- The system will have the capacity to add more service at a later date.
- There will be more commuters with higher incomes that will support local businesses.
- Highway congestion and air pollution will be reduced.

Doubling the track capacity to Ronkonkoma will greatly improve service reliability and support needed housing and jobs in the heart of Long Island. Three transit-oriented development (TOD) projects, currently in the planning stages, would benefit from this improved service. A joint project by the towns of Brookhaven and Islip would create a new transit hub at Ronkonkoma, including improved connections to MacArthur Airport, which could create an estimated 11,000 jobs. Wyandanch Rising, an initiative by the Town of Babylon, would generate housing, employment and opportunity for Suffolk's poorest community. The full Double Track project also includes a new station at Republic Airport as part of a plan to create a transit-oriented mixed-use hub around the station.

These improvements will bring more income and wealth into Long Island and tie it more closely with the dynamic regional economy anchored by Manhattan's central business district. They will also unlock the potential for a much more robust and transit-oriented economy on Long Island.

To reach this potential, however, Long Island will need to take additional measures. Municipalities, supported by federal, state and regional actions, will need to adopt land use and economic development policies that will create jobs and housing around the transit network. These will need to include funding for sewers and other critical infrastructure. To capture the benefits created by the 2nd track to Ronkonkoma, the mixed-use projects planned for Ronkonkoma, Wyandanch and Republic will need to be implemented. East Side Access will make Long Island more attractive as a place to live, but to provide enough housing to accommodate both younger and older residents, downtowns and station areas will need to be zoned to create more rental housing and condominiums. The potential is there, as documented in the 2010 Long Island Index estimates that 90,000 additional homes could be built in a mix of townhouses, garden apartments and mid-rise apartment buildings in downtowns and around the LIRR stations.

In addition to new land use and infrastructure policies, the value of East Side Access and a second track to Ronkonkoma would be even greater with a third track on the LIRR Main Line. The increased capacity from East Side Access and the Double Track to Ronkonkoma will create new service and attract more riders to the railroad, making Long Island a more attractive place to live and do business. However, additional service and economic possibilities will be unlocked only if the LIRR's central artery has the capacity to handle larger volumes of trains and provide frequent two-way service. A third track would not only improve service reliability and frequency. It would also create a new dynamic that would facilitate intra-Island travel by rail. Two-way, peak period travel would support job growth on Long Island by allowing more workers to reach employers in Nassau and Suffolk. There would be more incentive to both live and work in Long Island's downtowns. Long Island's economy would have a flexibility that it currently lacks to respond to changes in employer and worker preferences, an advantage that is hard to quantify but important in a changing global economy. The Long Island Rail Road would similarly have the flexibility to shift service to wherever demand is greatest.

More specifically, the third track would accomplish the following:

- Service reliability, efficiency and flexibility would be greatly improved, with 50% more capacity on the Main Line to reroute trains, move trains more easily between yards and stations, and add service as needed.
- Employers will have access to many more potential workers, including a minimum of 350,000 for Mineola and 226,000 for Hicksville, for example, increasing the attractiveness of Long Island to prospective employers.
- Major economic development initiatives, including Wyandanch Rising, the Ronkonkoma-MacArthur Transit Hub and a Republic Airport Hub, would have an even greater chance of success.
- Travel within Long Island would be more transit-oriented, both on the LIRR and along bus routes feeding into it.
- Highway congestion and air pollution would be reduced to a greater degree.

Projects of this magnitude necessarily come with costs and challenges. The combined construction cost of the three projects is over $10 billion. East Side Access, with a cost of over $8 billion, represents the lion's share of the capital costs. Increased service will mean increased parking at some stations, and could mean longer delays at grade crossings. A third track on the Main Line would reconstruct six stations and possibly a number of rail crossings, and would require the use of small sections of privately owned properties.

For East Side Access, the challenge is to complete the remaining construction, which includes the most complicated part of the project, on schedule. Local communities and the LIRR will also need to plan for changes in parking needs and traffic patterns.

Funding to complete the second track to Ronkonkoma will need to be included in the next MTA capital plan. Economic development plans around stations in the corridor would ideally advance in parallel with construction of the track to maximize the economic return on investment.

As these two projects proceed, environmental and engineering studies for the third track on the Main Line should be completed to have a fully informed public discussion about its benefits and impacts. This dialogue should engage communities with professionally led workshops that would dispel any misinformation and identify ways that residents and businesses could capitalize on new service as well as minimize negative impacts.

But the calculus should not stop with these direct costs and benefits. History and research from regions around the country have demonstrated that investments in transit capacity can yield economic returns that are worth several times the initial investment. The real potential of an expanded, more reliable and more efficient Long Island Rail Road is to anchor a 21st century economy that is neither the rail-centric reality of a century ago nor the auto-dependent culture of today. Rather, it would be a Long Island with greater flexibility and choice—more job

choices, more housing choices and more choices on how to travel. Single-family, suburban neighborhoods would still be the norm, and most trips would still be made by car. But there would be more jobs and housing in downtowns clustered around train stations, and more options for taking a train or bus, not only to get into Manhattan but to get around to shopping centers, offices, hospitals, universities and parks. Long Island would regain an economic edge that it has lost in a world where both demographics and employer requirements are increasingly favoring places with more walkable, mixed-use centers that are served by a well-functioning transit system.

Achieving this potential will require far more than an improved Long Island Rail Road. Complementary land use regulations, development policies and investments in sewers and other infrastructure are needed. Long Island has already started down this road with a range of efforts ranging from new village master plans to the island-wide Regional Economic Development Council plan. Many high-priority economic development projects are directly related to the new LIRR investments. Others, such as Accelerate Long Island's strategy for research-oriented economic development, require new transit-oriented housing and services to attract the innovative brain power needed to be successful. All of these ambitious efforts will require substantial resources and sustained political will. A new Long Island Rail Road can be the physical armature that binds these efforts together.

Acknowledgements

This report was prepared by the staff of Regional Plan Association under the direction of Christopher Jones, Vice President for Research. Contributors included Richard Barone, Transportation Director, Jeffrey Zupan, Senior Fellow for Transportation, Juliette Michaelson, Vice President for Strategic Initiatives, Jackson Whitmore, Associate Planner, and Fiona Zhu, Senior Planner and GIS Manager.

I. An Opportunity to Reconnect Housing, Transportation and Jobs

Following a decade of stagnant growth, Long Island may be on the cusp of an economic revival. Whether compared to the nation, the greater New York region or its own past, the numbers for the Nassau-Suffolk region over the last 10 years paint an unflattering picture. Both employment growth and wages grew at a tepid pace even before the 2008 financial crisis pulled Long Island into decline. The number of young adults declined at a faster rate than elsewhere, leaving the Island with a growing challenge to meet its future workforce needs. The bursting of the housing bubble sent prices tumbling and foreclosures soaring. As one sign of the times, the Long Island Rail Road lost its long-time status as the nation's most heavily used commuter railroad, as Metro-North Railroad surpassed it in number of riders.

Yet these trends may be about to change. While recovery from the global financial crisis has been painfully slow, both the Long Island and United States economies have been growing since late 2009. The next era of global expansion will provide an opportunity for regions that are prepared to capitalize on it. The greater New York region has many of the attributes that are characteristic of places that are likely to succeed in the 21st century—a highly skilled and innovative workforce, a dense concentration of high-value services supported by robust transportation and communications infrastructure, high energy-efficiency, and both physical and cultural connections with international businesses, workers and consumers. Long Island, with 13% of the New York region's college-educated population and a cluster of leading research institutions and technology companies, is an essential part of this economy.

Long Island's business, civic and political leadership are also coalescing around strategies and investments that could further align Nassau and Suffolk with the global economy. The strategic plan spearheaded by the Long Island Regional Economic Development Council has united public and private stakeholders around targeted investments in key assets, including the Island's workforce, research capabilities, transportation infrastructure and downtowns. The council, a state-supported entity with broad membership and stakeholder involvement, could bring together several related efforts advancing similar objectives. These include Accelerate Long Island, a collaboration of major academic and research organizations devoted to advancing an innovation-based economy. Connect Long Island, a Suffolk County initiative, includes a roadmap of targeted growth areas linked by new transportation services to support high-wage, high-value economic development. Nassau County, under a federal Sustainable Communities grant, is supporting municipalities interested in advancing transit-supported development to advance both livability and economic competitiveness. The Long Island Regional Planning Council continues to promote its LI2035 strategy to achieve similar goals. These regional and county efforts build on a growing number of town and village initiatives to revitalize downtowns, create more workforce housing, and attract new businesses and jobs.

Underlying all of these efforts are three elements that create the armature for any regional economy—jobs, housing and transportation. The type and location of jobs and housing, and the transportation infrastructure that connects them, form an ecology that can either accelerate or erode prosperity, quality of life and a healthy environment. In previous years, the Long Island Index has documented the limits of the Island's postwar development patterns to support a 21st century economy. In the 1950s and 1960s, Nassau and Suffolk were perfectly in tune with a national economy built around inexpensive land and new highways to support successive waves of single-family homes and suburban office parks for a maturing baby boom generation. By 2000, America's first suburb had nearly run out of room for more suburban subdivisions or more cars and trucks on its highways, and both aging Baby Boomers and younger Millennials began looking for smaller homes and a less car-centric lifestyle.

THE POTENTIAL FOR CHANGE

Reorienting Long Island's configuration of jobs, housing and transportation does not require a radical transformation of land use patterns or Long Island's suburban lifestyle. In fact, nothing is likely to do more for preserving the character of existing neighborhoods than steering the next generation of growth to downtowns and near train stations. Creating more housing and jobs around these central locations will limit growth pressures in existing neighborhoods, on agricultural land and in environmentally sensitive areas. It would put fewer cars on the road compared to development on

open space. Most importantly, it would increase economic opportunities, incomes and tax revenues without putting additional burdens on existing residents.

Substantial potential exists for new housing and economic development around the transit network. In 2010, the Long Island Index identified 8,300 acres within a half mile of Long Island Rail Road stations and downtown centers that could support 90,000 units of housing of varying types and densities. In 2012, the Index published an Innovation Index that mapped the Island's economic assets, including recent increases in entrepreneurship, patents and investments in research and technology. This year's Index looks at how the transportation network could support a revitalized economy with sufficient workforce housing connected to centers of high-paying, innovative firms.

Specifically, this report looks at the potential of the Long Island Rail Road to spur a "post-postwar" economy, one that builds on the Island's past success and existing fabric, but that also makes full use of a transit system that few suburban regions in the world can match. In some ways, this future is a return to Long Island's past when streetcars and trolleys served mixed-use downtowns connected by the LIRR. More importantly, it looks to a future LIRR with new service to Manhattan, frequent service to job centers in Nassau and Suffolk, and stronger connections to bus and other transit services connecting the Island's north and south shores.

For the LIRR, change is already well underway. The MTA is investing $8.2 billion in the East Side Access (ESA) project to bring thousands of its customers directly to Grand Central Terminal and create greater reliability and new capacity for future service. ESA is the largest transportation project in the United States and represents the first LIRR expansion of service since Penn Station opened in 1910. The LIRR is also moving forward with adding a second track to the single track line connecting Farmingdale and Ronkonkoma, a project that is linked to the economic development strategies of the Regional Economic Development Council and Suffolk County. For now, the LIRR has postponed a controversial project, adding a third track to the LIRR Main Line between Floral Park and Hicksville that has implications for both ESA and a double-track to Ronkonkoma. Both individually and as an integrated set of improvements, these projects represent both challenges and opportunities for communities throughout Long Island. The implications extend far beyond LIRR riders or property owners affected by project construction. The analysis that follows attempts to take a comprehensive view of how these projects would affect residents of Nassau and Suffolk in both the near and distant future.

II. The Long Island Rail Road: Past and Future Catalyst for Economic Growth

In many ways, Long Island's transportation network is a remarkably robust system of rails and roads. With over 700 miles of track, 11 branch lines and 124 stations, the LIRR is the most extensive commuter rail network in the United States. Combined, Nassau and Suffolk have 11,500 miles of federal, state and local highways and roads, including some of the most heavily used expressways in the nation, such as the Long Island Expressway. Long Island's buses moved 37 million passengers in 2011, including 30.3 million on MTA Long Island Bus in Nassau prior to its 2012 change to NICE buses operated by the Veolia Company and 3.6 million on Suffolk County Transit.

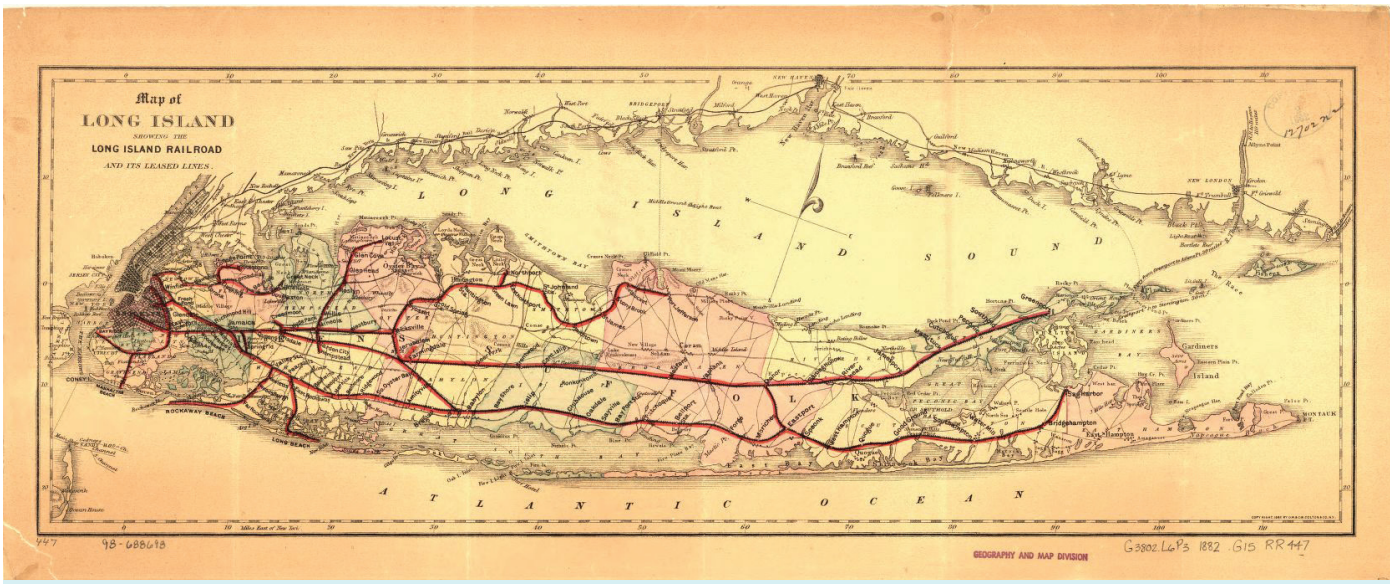
Over the last two centuries, this system has grown along with Long Island's population and economy. More importantly, it has to a great extent shaped this growth. From the early days of trains and trolleys to the building of eight-lane expressways, new housing, stores and offices have followed the paths of these transportation routes. Investments in these systems responded to growing demand, but also spurred new periods of economic expansion. The Long Island Rail Road has been an essential part of this story since operating its first trains early in the 19th century. Its role has varied, depending on the needs of the day, but its next chapter could signal a new path for America's oldest and largest suburban area.

THE FIRST CENTURY: LONG ISLAND GROWS WITH THE RAILROAD

Chartered in 1834, the Long Island Rail Road is the United States' oldest railroad that is still operating under its original name. Until World War II, Nassau and Suffolk developed around this system, as the LIRR handled increasing volumes of both passengers and freight.

At first, serving Long Island communities was less than an afterthought, as the railroad's original intent was to provide New Yorkers with a faster way to get to Boston. Just board the train in Brooklyn to catch a ferry in Greenport and you could get to Boston in a mere 11 hours! The quickest route was down the undeveloped center of the island, rather than connecting the villages that were mostly on the north and south shores. By the 1890s, however, the railroad had built or acquired several branches, creating a configuration that has hardly changed since. It served rapidly growing communities, brought produce from farms in Queens, Nassau and Suffolk to a city that was spilling over from Manhattan, and brought well-heeled New Yorkers to summer homes and hotels in resorts along the island's famed beachfront.

With industrialization and immigration, the population of the whole metropolitan region, including what is today Nassau and Suffolk, expanded rapidly in the 100 years



1882 Map of Long Island with Long Island Rail Road and Leased Lines

Source: G.W. & C.B. Colton & Co. published in 1882, Library of Congress Catalogue Number 98688698

between 1840 and the beginning of World War II. The dominant transportation technology of the age was the railroad, as the nation built a transcontinental rail system that both pulled disparate regions into a single economic market and virtually created new industries making everything from steel to clocks. The LIRR was part of this expansion. With tunneling under the East River in conjunction with the opening of Penn Station in 1910, the railroad fueled the growth of Midtown Manhattan's central business district as well as a number of commuter towns that grew up around the LIRR stations.

Before the rise of the automobile, these stations were connected to "streetcar villages" with an extensive network of trolleys. In the days when nearly everyone used mass transit, the LIRR provided the central arteries for a transportation system that existed largely in rails.

BEFORE LONG ISLAND HAD CARS...

By Robert MacKay, Director, Society for the Preservation of Long Island Antiquities

A century ago, there were more than 20 electric trolley lines spreading out across geographic Long Island. From Jamaica you could travel by light rail to Far Rockaway or to Freeport via Mineola. Another line serving the North Shore ran from Mineola through Roslyn to Port Washington. Crowds that may have numbered as much as 15,000 showed up in Huntington in 1909 for the inauguration of the Cross Island Trolley, whose rails stretched over 18 miles from Halesite to Amityville. Platforms with stations were built in communities along the route, giving impetus to new housing and business. New York State designated the route a state road and paved what we now know as Route 110. The rapid development of the combustion engine and competition from gas powered bus services brought the trolley era to a close by the late 1920s.

Map by Long Island Index and CUNY Mapping Service

POST-WORLD WAR II: AMERICA'S FIRST SUBURB GROWS AWAY FROM THE RAILROAD

The rise of the automobile brought a rapid decline in rail service across the nation, and Long Island was no exception. The combination of mass-produced cars, cheap gas and a massive national investment in highways and roads brought about a rapid decline in train passengers and service, frequent bankruptcies of private rail companies and the deterioration of tracks and trains.

The Long Island Rail Road experienced a similar decline through the mid-1960s, even as population in Nassau and western Suffolk swelled with newcomers from New York City filling new auto-dependent subdivisions. From 1950 to 1970, the population of Nassau and Suffolk nearly tripled from 949,000 to 2.6 million. However, the amount of land used to accommodate this population grew at a much more rapid pace, with much of Long Island's 500,000 acres of developed property being covered with houses, shopping malls, roads and other buildings and infrastructure during this period. As the number of cars on the road increased dramatically, the Long Island Rail Road fell into disrepair. The Pennsylvania Railroad, which had acquired the LIRR as a subsidiary of the corporation in 1900, owned the railroad until New York State took over the company in 1966.

Jobs followed people, and office parks and shopping malls sprang up along highway corridors, often miles from the nearest LIRR station. As a result, the largest job concentration on Long Island is not a downtown or even an exurban office center. Rather, it is the Route 110 corridor with its string of office, industrial and retail buildings. The full stretch includes nearly 125,000 jobs, nine million square feet of Class A office space, and 15.5 million square feet of industrial, retail, entertainment and service buildings.[1] The Melville zip code alone, which is not served directly by any LIRR station, has over 55,000 jobs. The only other zip codes with over 30,000 jobs are Hauppauge (38,000 and also without an LIRR station), Garden City (34,000) and Farmingdale (33,000 and on the southern end of the 110 corridor). A number of transit-centers exist, such as Mineola and Great Neck, but these are relatively small compared to both the highway corridors and other suburban parts of the New York region in Westchester, New Jersey and Connecticut.

In spite of this, the LIRR remained a vital part of Long Island's economy, with nearly 300,000 commuter trips each weekday and handling one of the largest number of passengers of any commuter rail system in the country. After New York State assumed ownership in 1966, the LIRR came under the umbrella of the newly formed Metropolitan Transportation Authority (MTA). Investments began to return the tracks, rolling stock, train yards and other systems to a state of good repair, particularly after the MTA initiated a series of five-year capital plans in 1981 funded by a combination of city, state and federal aid and MTA bonds, which were financed in part by new regional taxes and fees.

TABLE 1: Best Peak Period Travel Time and Average Speed to Penn Station by LIRR Branch Line, 1980 & 2012

Station (Branch)	Distance (mi) from CBD *	Best Travel Time (minutes)		Speed: Avg. miles per hour		1980 to 2012 —32 Years Change		
		1980	2012	1980	2012	Best time (min)	Best time (%)	Speed % change
Babylon	39	61	53	38	44	-8	-23%	15%
Ronkonkoma	50	81	66	37	46	-15	-1%	23%
Patchogue (Montauk)	55	87	83	38	40	-4	-13%	5%
Port Jefferson	59	110	96	32	37	-14	2%	15%
Huntington (Port Jefferson)	37	56	55	39	40	-1	2%	2%
Port Washington	20	46	35	26	34	-11	2%	31%
Long Beach	25	49	51	31	30	2	-6%	-4%
West Hempstead	23	49	50	28	28	1	2%	-2%
Oyster Bay	35	75	76	28	27	1	0%	-1%
Hempstead	22	51	48	26	27	-3	0%	6%
Far Rockaway	23	52	53	27	26	1	0%	-2%

Source: MTA Long Island Rail Road Schedules **CBD refers to the Manhattan Central Business District below 59th Street*

The biggest service improvements during this period included electrification of the Port Jefferson Branch to Huntington in 1970 and the Main Line as far as Ronkonkoma in 1987. This led to substantial increases in speed and service on these branches (see Table I). Average train speeds increased 23% on the Ronkonkoma branch and the best morning peak travel time from Ronkonkoma to Penn Station decreased from an hour and 21 minutes to an hour and six minutes between 1980 and 2012. Travel speeds on the Port Jefferson Branch increased by 15%. The only other branch lines with comparable increases in train speeds were Port Washington (31%) and Babylon (15%). Other branches experienced little or no change.

In Manhattan, the construction of the West Side Yard in the 1980s allowed for the service improvements, particularly Ronkonkoma electrification. The 1980s also saw fleet expansion with the purchase of the upgraded M-3 railcars and the construction of a modern fleet maintenance facility in Hillside, Queens. In the 1990s, Penn Station was improved with new escalators, customer amenities and air conditioning.

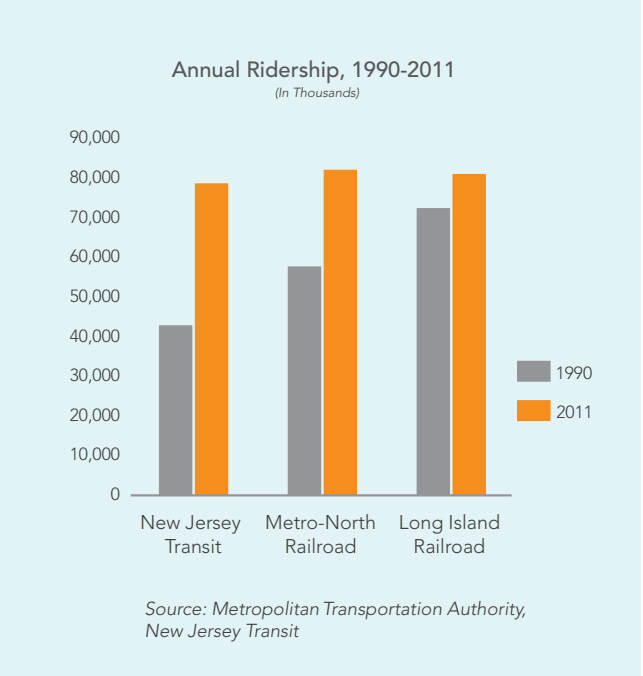
Ridership on the improved branches increased much more than the LIRR system as a whole, driven by both population increases in western and central Suffolk County and the improvements in service. However, increased ridership has led to substantial overcrowding on the Ronkonkoma branch and some of the worst on-time performance ratings in the system, according to a 2007 Customer Satisfaction Survey. In large measure, this is because the line has only a single track, making it difficult to add service or to keep trains on schedule if there is a backup or problem. Plans to build a second track on the line accompanied electrification, but the track was never constructed, largely for budgetary reasons.

THE LAST TWO DECADES: INCREASED TRANSIT CAPACITY AND GROWTH… BUT NOT ON LONG ISLAND

The economic downturn of 1989-1992 was one of the worst in Long Island's history. More jobs were lost than during any other post-World War II recession, including the recent downturn that started in 2008. Along with a Wall Street-led national recession that cost jobs and income for thousands of commuters, the Island's defense-oriented manufacturing base was decimated by the ending of the Cold War. Long Island's economy rebounded in the mid-1990s, fueled by the growth of smaller, technology-oriented firms, a boom in the financial markets that benefited both commuters to Manhattan and local firms, and an unprecedented real estate market that triggered growth in industries ranging from construction to home furnishings.

Again, the Long Island Rail Road was an important part of this story. Since the inception of the MTA's first capital program in 1982, the LIRR's main focus has been on bringing infrastructure and rolling stock into a state of good repair and maintaining it in that condition. Continued investments in new train cars, track maintenance and other improvements kept Long Island connected to a growing regional economy and maintained an important service that residents expect and rely upon. It is hard to imagine Long Island's economy growing without a functioning LIRR. Besides the impact on jobs and income, traffic congestion would be far worse if thousands of daily commuters took to their cars. It would require 10 new traffic lanes to carry the daily equivalent of LIRR riders into Penn Station. Safe, reliable train service also provides a stable base upon which system expansion can be layered.

The LIRR's investments, as vital as they have been, did not include any investments in system expansion until work began on the East Side Access (ESA) project in the 1990s, with construction beginning in 2001. In fact, the system has barely changed since it was built in the late-nineteenth century. In the last 20 years, both Metro-North Railroad (MNR) and New Jersey Transit (NJT) made major investments in new capacity that led to much larger increases in ridership. These investments included new connections on NJT that allowed thousands of passengers to ride directly to Midtown Manhattan instead of transferring at Hoboken to a train or ferry, and a third track on the Harlem Line of MNR that improved service and allowed for more frequent reverse commuting service while improving reliability in both directions.



Source: Metropolitan Transportation Authority, New Jersey Transit

From 1990-2011, ridership on the LIRR grew by 12%, while Metro-North ridership increased by 42% and New Jersey Transit's ridership nearly doubled, increasing by 84%. Twenty years ago, the LIRR had far and away the highest ridership of the three commuter railroads. Now all three are comparable, with MNR having recently surpassed LIRR, and NJ Transit poised to do the same. Capacity improvements alone do not account for the differences in ridership growth. Population growth was slightly higher in northern New Jersey and the Hudson Valley than it was on Long Island from 1990 to 2010. But the large differences can only be explained by changes in service.

Besides increased ridership, the capacity expansions that NJT and MNR undertook since the mid-1990s demonstrate how expanded transit service, combined with complementary land use and economic changes, can lead to greater wealth, increased economic activity and an improved quality of life. Each hold potential lessons for Long Island as it implements or considers similar changes.

CASE STUDY

NEW JERSEY TRANSIT MIDTOWN DIRECT: INCREASED HOME VALUES AND STATION AREA REVITALIZATION

In 1996, 2002 and 2003, New Jersey Transit significantly improved train service by providing direct service to Penn Station for thousands of passengers who could only get to Manhattan by transferring to a PATH train, bus or ferry in Hoboken. Known as Midtown Direct, new connections in Montclair, Kearny and Secaucus enabled riders on four branch lines to travel directly to Midtown Manhattan, shaving up to 40 minutes round trip.

The effects of these improvements rippled through communities in New Jersey, as well as the Manhattan business district. Ridership on NJT increased from 48,000 in 1996 to 79,000 in 2011, the fastest growth of any of the three commuter rail systems in the New York region. While much of this can be attributed to job growth in Manhattan, there is little doubt that vastly improved service brought more riders to NJT. Manhattan employers benefited because they had access to more workers, and in fact the large majority of new commuters from outside of New York City have come from New Jersey.

Residents in New Jersey benefitted greatly, and not just those residents who work in Manhattan. Anecdotally, it was well known among residents and real estate brokers that properties along these lines experienced increases in value as a result of the new service. Statistically, a study by Regional Plan Association estimated that home values increased by an average of $23,000 after accounting for other possible causes.[2]

Very few communities planned ahead for how to take advantage of the new service, but those that did reaped disproportionate rewards. The suburb of South Orange, NJ, a village of 17,000 that received direct service to Midtown in 1996 is an example of the potential that can be created when new transit service is combined with complementary land use and economic policies.

In the early 1990s, local civic groups and village officials began to take steps to bring new life back to a declining downtown. Their efforts were driven, in part, by the announcement of the long planned-for direct NJT link into New York City. Through the 1990's, the village took advantage of a number of opportunities to spur revitalization. In 1991, they received designation from Main Street New Jersey – a program of the New Jersey State Department of Community Affairs – which provides technical assistance and training to help revitalize historic downtowns. Building on the efforts of civic groups like Main Street South Orange, the village commissioned a study that made a number of recommendations to achieve compact, transit-supportive, mixed-use development within walking distance of transit.

South Orange train station with stores under track
Photo by Regional Plan Association.

South Orange adopted the redevelopment plan and a new zoning ordinance in 1996 – the same year that the Midtown Direct project was completed and launched. The results include a modernized rail station, a reconstructed plaza, a highly successful redeveloped commercial corridor, a new Performing Arts Center with 400 shared parking spaces and 200 new units of rental housing. Housing values reportedly doubled within a half mile of the station between 1993 and 2003.

Like Midtown Direct, East Side Access will substantially save travel time for thousands of commuters and increase home values near stations. Many communities will have the opportunity to realize even greater benefits, as South Orange did, by aligning zoning and downtown revitalization strategies with the introduction of new service.

CASE STUDY

HARLEM LINE THIRD TRACK: INCREASED REVERSE COMMUTATION WITH DOWNTOWN HOUSING AND JOBS IN WESTCHESTER

In 2004 Metro-North completed a third track to its Harlem Line between Mount Vernon and Eastchester to improve service frequency and eliminate the transfer for Bronx bound riders. The $56 million project upgraded an existing one-mile track north of Mount Vernon and constructed a new 2.5 mile track from Fleetwood to Crestwood. The Fleetwood and Crestwood stations were expanded through the addition of island platforms to serve trains on the third track. Four bridges were widened and only one publically-owned parcel had to be acquired. No private property takings were necessary because the existing right-of-way was large enough to accommodate the new third track and to stage construction.

The MNR third track was originally conceived in 1989, but planning, environmental reviews and approvals took more than a decade. From the outset, the project was met by strong resistance from the surrounding communities. The residents of Bronxville were especially vocal in their opposition to increased noise and vibration. An analysis of these impacts concluded that there were only marginal increases in noise and vibration. However, the MNR offered to erect noise barriers and vibration absorption mats to mitigate the effects of the additional traffic. The community opposed the noise barrier solution since they feared it would become blight-ridden with graffiti. Additionally, several property owners backing the Harlem line had illegally extended their backyards onto the right-of-way, some constructing sheds and other structures. These residents were upset that the railroad was forcing them to remove these structures in order

Metro-North Train Lines with location of Harlem Line Third Track Project Map by Regional Plan Association

to construct a retaining wall. They were also convinced that property values would decrease as a result of the project. While the third track was met with resistance from residents, it was supported by local business groups such as the Westchester Business Partnership and Montefiore Medical Group, which recognized the potential of the project to bring new workers and customers to local businesses.

The third track resulted in immediate service and operational benefits. It reduced the time between northbound trains from one every ninety minutes to one every thirty minutes. Metro North also saw a 30 percent increase in ridership along the line from Southern Westchester to the Bronx after third track went into service, a major factor in Metro-North's overall ridership increase, which has been driven largely by increases in reverse commutation and off-peak ridership. The largest increases came from passengers boarding in the Bronx, many headed for jobs in stores, offices, hospitals and homes throughout Westchester and Connecticut.

For communities along its route, the new service can either be just an added amenity or a tool for economic development, depending on how it fits into larger development and community improvement strategies. For most villages along

Main Street, White Plains.

the route, changes in development have been relatively minor. However, for the major hub in White Plains, the added service provided by the third track fit perfectly with a larger downtown revitalization strategy.

For years, downtown White Plains had deteriorated to a point where much of it appeared abandoned as companies fled to suburban office parks and residents moved farther into the suburbs. However, a plan to redevelop the downtown, beginning with a 1997 comprehensive plan and accelerating under a new mayor in 2000 has led to a dramatic transformation. Central to the plan was the intent to bring residents into the downtown to make White Plains, a small city of about 60,000 people, into a more pedestrian-friendly 24-hour place. A new condominium tower, City Center, opened in 2003, followed by other downtown development projects bringing hotels, restaurants, entertainment and cultural attractions. Office vacancies decreased to 7% in 2008 from 34% a decade earlier, and 1.7 million square feet of office space was upgraded between 1997 and 2006. Plans for a new project, White Plains Commons, would bring additional offices and stores along Main Street.

In short, downtown White Plains became a destination again, anchoring the economy of central Westchester at a time when jobs were deserting office parks elsewhere along the corridor of I-287 where the city is located. The added Metro-North service aided this transformation and allowed it to occur with less auto traffic than would otherwise have occurred. In 2007, White Plains had nearly as many reverse commuters (2,600) as those destined for work in Manhattan (3,460), and 23% of the total reverse commuters for the entire Metro North system.

For Long Island, this project and its potential impacts have some parallels with both the second track from Farmingdale to Ronkonkoma and a third track on the LIRR Main Line. Like the Harlem third track, these projects would bring immediate service improvements, in particularly greater reliability and reverse service during peak hours. Both would provide transit service that could support expanded job growth for communities that choose to pursue greater economic development.

A third track on the LIRR Main Line would be a bigger construction project than the Harlem line project, and unlike the Metro-North project would require some private property acquisition. However, the LIRR third track would have greater service benefits, affecting a larger number of branch lines and stations, which is discussed further in Chapter V.

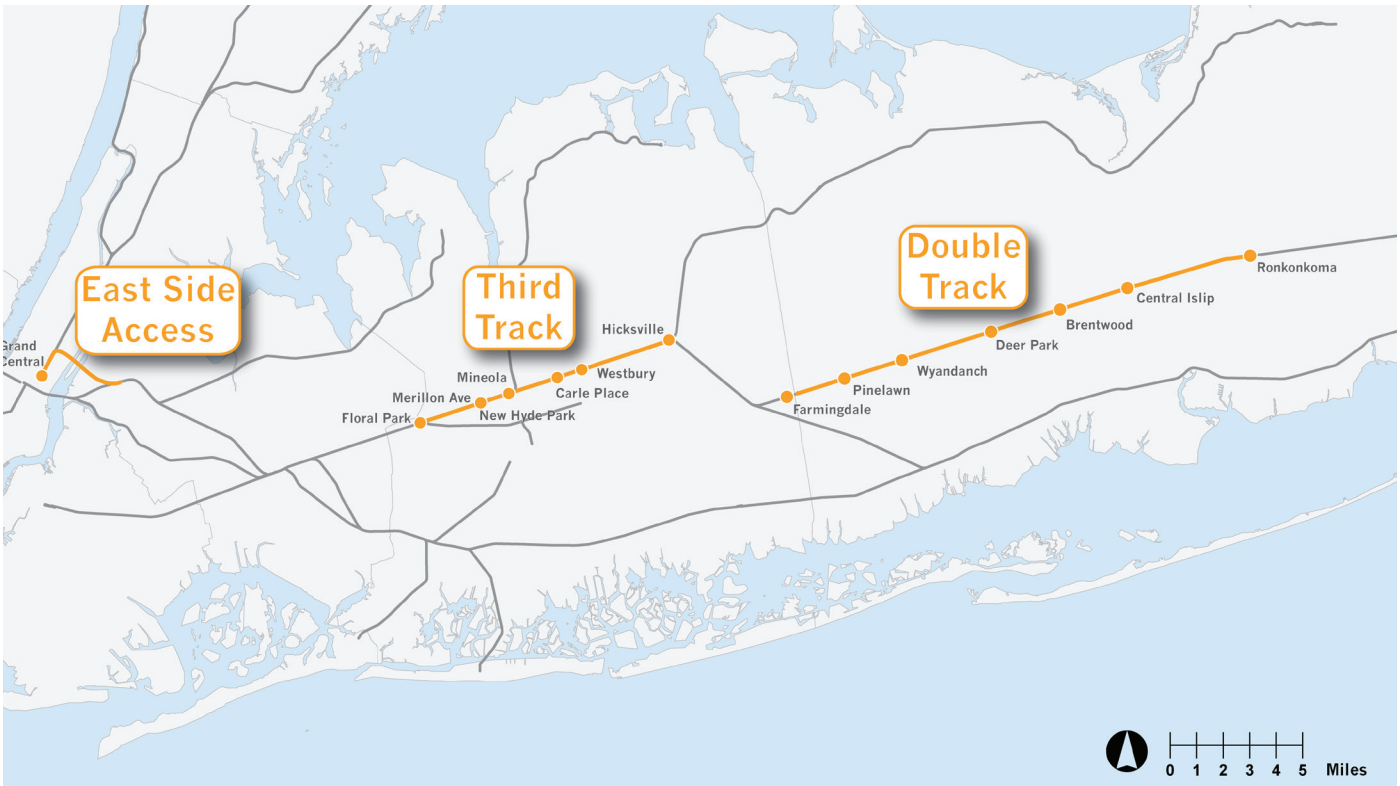
FUTURE PROSPECTS: THREE PROJECTS, MULTIPLE POSSIBLE OUTCOMES

Long Island has literally outgrown its transit system, and increasingly its highway network as well. Bringing jobs, housing and transportation back into alignment will require coordinated land use, economic development, and housing and transportation policies. For the transit system, this means addressing several priorities:

Service reliability and state-of-good repair: Like much of the region's aging infrastructure, Long Island's transit system requires both upkeep and modernization to maintain a quality service. The Long Island Rail Road is a 178 year-old system with tracks, signals, stations and some rolling stock that are decades old. Just keeping the trains running on time requires ongoing and expensive maintenance and system upgrades. Fortifying the system to withstand increasingly frequent and severe weather conditions, such as Hurricanes Irene and Sandy, will require substantial investment. Reliability also depends on having alternatives in case of accidents, weather, terrorism or breakdowns. The LIRR system currently relies on the East River tunnels to connect with Manhattan and has several stretches with insufficient track or rail yard capacity to re-route trains when there is a disruption or backup.

Intra-island travel and reverse commutation: The LIRR was designed to get large numbers of commuters in and out of Manhattan during the morning and evening rush hours. As a result, much of the system currently lacks the capacity to adequately serve destinations within Nassau and Suffolk, even those within proximity of its rail stations. And the LIRR alone cannot reach the numerous businesses, retail outlets and residential neighborhoods that have developed around north-south arterials like Route 110 or the Sagtikos Parkway. This prevents Long Island employers from accessing much of the labor force in New York City and prevents Long Island residents from using the LIRR to get to worksites, hospitals, schools, stores, relatives and friends within Nassau and Suffolk.

Intra-region and international connections: Increasingly, residents and businesses need to be connected not just to Manhattan, but to destinations throughout the Northeast and beyond. With its connections to Amtrak and New Jersey Transit, the LIRR is already connected to both inter-city rail and New Jersey destinations. However, it currently has no direct service to the region's largest job concentration in east Midtown or to Metro North railroad with its service to Westchester and Connecticut. Service to any location beyond Penn Station requires a transfer to a different



Three Capacity Expansion Projects: **East Side Access:** *Under Construction;* **Double Track to Ronkonkoma:** *First Phase Under Construction;* **Third Track:** *Deferred*
Map by Regional Plan Association

system. And while the LIRR serves JFK International Airport via a connection with the AirTrain in Jamaica, it is less well connected to airports on Long Island, such as MacArthur Airport in Islip.

The two funded LIRR expansion projects—East Side Access and a second track to Ronkonkoma (Double Track) —as well as the deferred third track on the Main Line (Third Track), would address these priorities in varying degrees. As described below, East Side Access expands capacity into Manhattan. Double Track and Third Track would increase capacity in both directions. These are separate projects that can be evaluated on their own merits. But since each will affect train volumes throughout the system, they also need to be evaluated in combination.

Ultimately, the projects need to be judged on how they affect Long Island's economy and quality of life. How will they affect incomes, job opportunities and quality of life, not just for LIRR riders but also for those who rarely have the need to use the service? Will they support complementary land use and economic development policies? Are the costs, both financial and impacts on property, noise and local congestion, worth the benefits? These questions will be examined for each individual project, as well as the system-wide changes they would create as a whole. To realize the full potential of these projects, municipalities, businesses and communities will have to adapt their zoning codes and development policies to take advantage of the increased opportunities. While many benefits will be immediate, the more far-reaching changes will depend on what other actions are taken by municipalities, businesses and citizens to capitalize on their potential.

III. East Side Access

Location of Existing 63rd Street Tunnel, new mid-day train storage yard in Sunnyside and new tunnels excavated for East Side Access. Penn Station Alignment shows route of LIRR into Penn Station, which will remain after East Side Access.

Map by Regional Plan Association

East Side Access is the first major expansion of the Long Island Rail Road since the Long Island Rail Road first crossed the East River to arrive at the original Penn Station built in 1910. Long limited to arriving in Manhattan on the west side since 1910, now commuters will have the choice of traveling directly to either Penn or Grand Central Terminal on Manhattan's east side. Scheduled for completion in 2019, East Side Access will create an alternate route under the East River and deliver riders to a new terminal below Grand Central Terminal, which is much closer to where many LIRR commuters work. All tunnel boring and excavation work for the new terminal have been completed. The terminal will have three levels connected by several banks of high-speed escalators and elevators to the new concourse, constructed on the site of the former Madison Yards at the lower level of Grand Central Terminal.

The East River crossing that will be used for East Side Access has been in place for decades. Work on the 63rd Street Tunnel was started in 1969, with the intent of constructing a two-level tunnel for LIRR and subways. The bi-level tunnel runs between Long Island City and Midtown Manhattan, passing below Roosevelt Island where a station was constructed for the subway. Work was suspended in the 1970s as a result of the financial crisis, but resumed in 1989. While the upper level was completed and is in use for subway service, the lower level laid dormant for almost another 18 years until work commenced under ESA in 2006.

Construction on the project passed a major milestone in June 2012, when all boring was completed at 63rd Street and at the Sunnyside Yards. However, the tunnels still need to be filled with track systems, ventilation, plumbing, com-

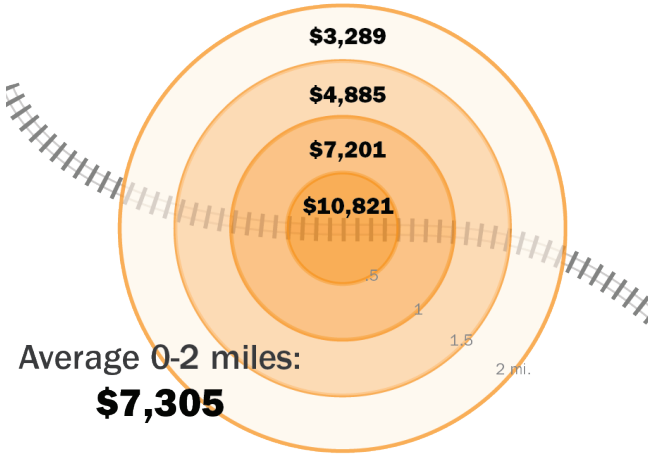
munications systems and other infrastructure. Similarly, while the new terminal has been excavated, it still needs to be lined with tracks and infrastructure. Perhaps the most complicated portion of the construction is the reconfiguration of tracks in a complex known as the Harold Interlocking in Sunnyside Yards in Queens. This complex is in active use by three train systems—the LIRR, Amtrak and New Jersey Transit. This presents significant logistics and coordination challenges and limits the times that the work can take place, making the remaining construction very challenging and time-consuming.

BENEFITS OF EAST SIDE ACCESS

East Side Access is a transformational project whose impacts will extend far beyond the most obvious beneficiaries, the LIRR riders destined for the east side of Manhattan. It creates new connections in the transportation network, provides a back-up for getting to Manhattan in case the LIRR's only existing tunnels go out of service, increases property values for hundreds of thousands of homeowners and provides some congestion relief for drivers during rush hour.

For all Long Island residents, East Side Access will provide better access to one of the largest concentrations of high-paying jobs in the world. The area immediately around Grand Central terminal has over 200,000 jobs and is home to several Fortune 500 companies. Plans to rezone the area, along with new transportation infrastructure from both East Side Access and the under construction Second Avenue Subway, is likely to expand the opportunities in this district. Including other jobs on the east side of Manhattan, 560,000 jobs will be closer to ESA's new terminal than to Penn Station today. Getting to many of these jobs will no longer require transferring to subways, buses or taxis, or fighting traffic and paying high Manhattan rates for parking. Earnings for workers in Manhattan as a whole, including commuters from Nassau and Suffolk, have been projected to increase by billions of dollars annually. Without East Side Access, it will be difficult for employers to access enough workers to support this growth.[3]

For jobs closest to Grand Central, commuters can save as much as 42 minutes a day, or 21 days per year, the equivalent of more than a month's worth of work or vacation time. While the time savings for most LIRR riders would be less than this, the majority would see substantial time savings. On average, those destined for Grand Central Terminal will save 18 minutes per day. Even those still destined for Penn Station would spend less time getting to and from the train platforms because fewer passengers will be squeezing into stairways and passageways at rush hour. And all riders would now have a choice of destinations for both business and personal travel into Manhattan.

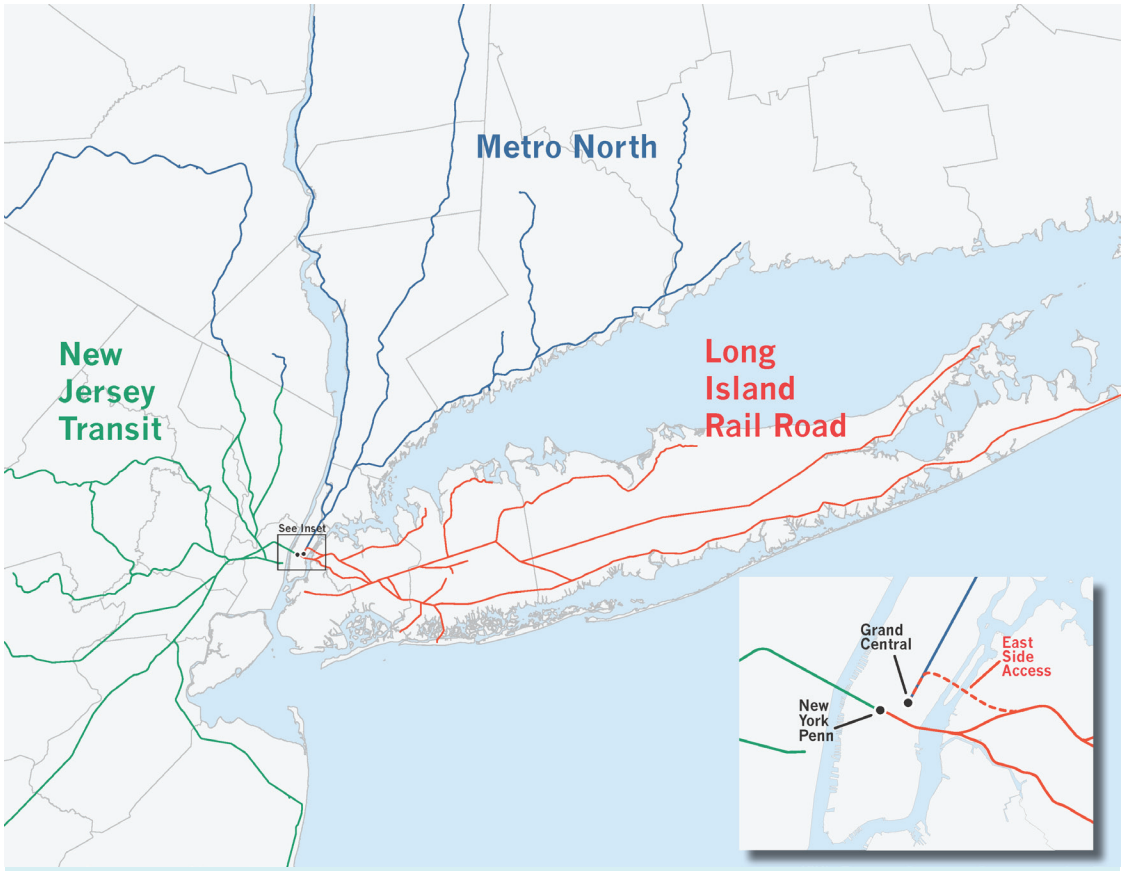


Change in Long Island home values in relation to distance to train stations
Chart by Regional Plan Association

Nearly 600,000 homeowners, including 400,000 in Nassau and Suffolk will see the value of their homes rise by an average of $7,300. Homes will be more valuable because the improved service will lead more people to want to live close to a station. Homes within two miles of LIRR stations should increase by this amount as far as Babylon, Huntington and Deer Park, with places in eastern Suffolk seeing increases dependent on their distance. Homes that are closer to a station would increase by a larger amount. Within a half mile of a station, for example, homes are likely to increase by an average of $11,000. These values could increase in the future if the LIRR uses the new capacity to add even more service, or if travel times are shortened even more by improving connections to streets and subways in Manhattan.[4]

Jobs in Nassau and Suffolk will increase faster with East Side Access. More residents are likely to commute to high-paying jobs in Manhattan, and they will spend their earnings back home in Nassau and Suffolk, supporting stores, restaurants, small businesses, health care, leisure activities and other job-creating businesses.

The additional tunnels and terminal for LIRR trains into Manhattan will increase reliability and make service less vulnerable to disruptions due to storms, terrorism or breakdowns. Now, with only one terminal, all trains into Manhattan could be shut down with a single incident of damage or criminal attack at Penn Station, not to mention more ordinary delays because of train backups. Having a second option will allow the LIRR to keep service running into Manhattan, and re-route trains if there are backups into Penn Station. The number of tunnels under the East River



Commuter Railroad Lines in the New York Metropolitan Region
Map by Regional Plan Association

will also increase from two to three, and will be located at two different locations rather than one. This provides greater resilience to flooding from severe weather. Hurricane Sandy, for example, temporarily shut down one of the existing tunnels, contributing to the delays in getting the system back in operation.

LIRR riders will now be able to connect to Metro-North trains to Westchester, Connecticut and the Hudson Valley at Grand Central. This means that the LIRR will connect to every major train service connecting Long Island to the rest of the region, to cities from Boston to Washington in the northeast corridor, and to both Kennedy and Newark International Airports. This includes Amtrak and New Jersey Transit at Penn Station and subways on both the east and west sides of Manhattan. There is also the possibility for through services in the future, with trains running directly between Long Island and New Jersey, Connecticut and the Hudson Valley. This is theoretically possible today, but East Side Access creates more options for moving trains throughout the region, regardless of their owner or operating network.

PLANNING CHALLENGES PRESENTED BY EAST SIDE ACCESS

East Side Access has already cleared most of the hurdles to implementation. Following an extensive environmental review, the project received the largest federal funding grant of any transportation project in the United States. The new level of the 63rd Street tunnel has been excavated and work is proceeding on the passenger facility at Grand Central Terminal and the infrastructure connecting the terminal to the main LIRR station in Jamaica. However, some of the most difficult construction work remains and it will be a challenge to complete the project by its new scheduled completion date in 2019.

As described above, the new service will bring a number of benefits and opportunities, especially for communities in the immediate area of a LIRR station. However, the project also presents a number of challenges for these communities. If they are to fully benefit from East Side Access, these issues will need to be addressed. While they are solvable, many require significant planning and consensus building, and in some cases additional funding. The earlier planning begins, the easier it will be to reach an optimum outcome.

New multi-tiered parking structure built at Montclair State University to address increased demand
Photo by Clarke Caton Hintz

Station area parking could be more crowded due to increased ridership on the LIRR. This will be more of an issue at some stations than others, and there are a range of potential solutions, from shared parking to new parking facilities. Communities in New Jersey faced and solved similar challenges when service was dramatically increased in the 1990s and 2000s, and both the new service and parking solutions are largely considered a success.

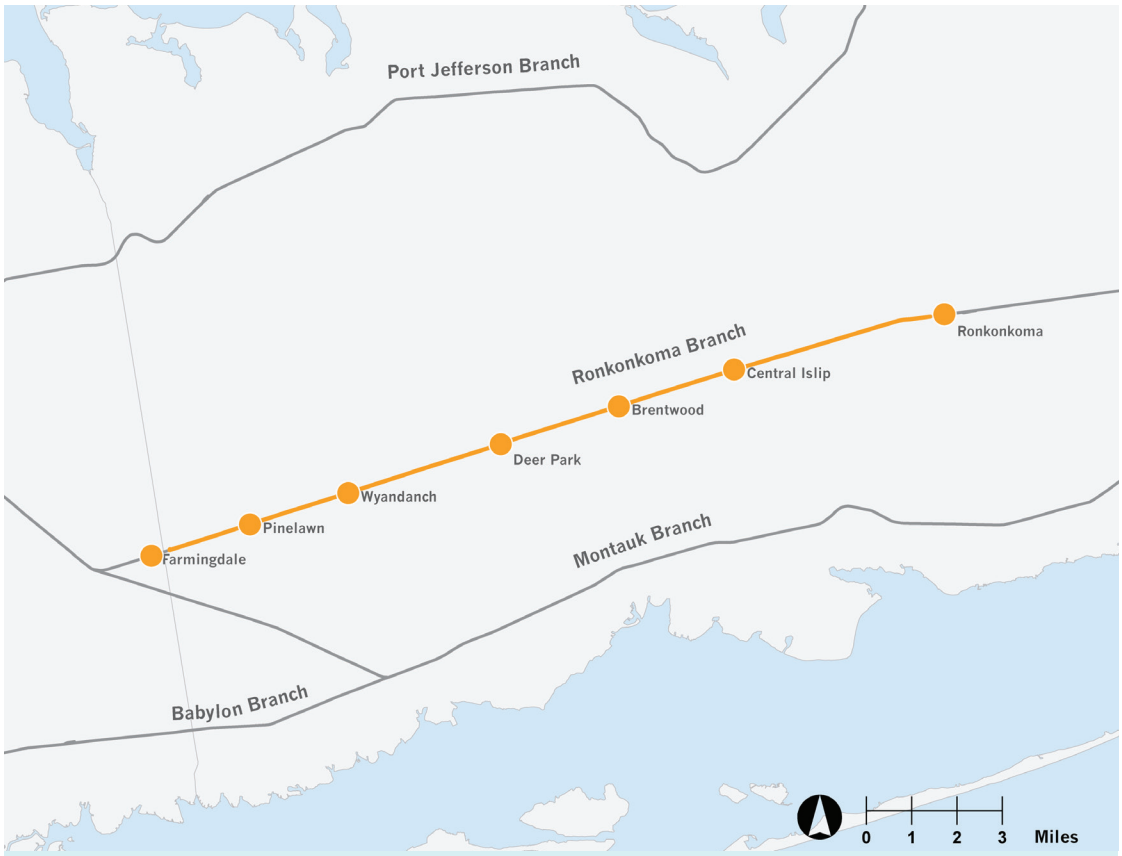
Station area traffic could increase. Just as there will be increased demand for parking at some stations, there could also be increased local traffic as more passengers drive to and from the station. This may be a particular issue where there are at-grade rail crossings (places where a street crosses the railroad tracks) that will have to allow more trains to pass. Traffic engineering solutions, such as turn lanes and adjusting traffic lights, may be able to address some areas and crossings, but a separation of the roadways from the LIRR tracks with either a bridge or an underpass may still be desirable at some crossings.

The increased service provided by East Side Access will create additional train congestion east of Jamaica. The LIRR is taking a number of actions to relieve this congestion, including capacity improvements at Jamaica, a new train yard and track improvements to facilitate the turning of train equipment. But the underlying problem—limited capacity on the LIRR Main Line between Floral Park and Hicksville—can only be fully addressed with an additional track to increase capacity.

Capacity constraints at Penn Station could limit future service expansions. Penn Station is the most heavily used train station in the United States with two commuter railroads—LIRR and New Jersey Transit—Amtrak and several subway lines receiving and disembarking passengers at the station. Use of Penn Station is only likely to grow in the future. New Jersey Transit ridership is growing rapidly and Amtrak is considering major service improvements. The MTA is considering a plan to direct some Metro North trains into Penn Station. East Side Access will divert a large share of LIRR's current ridership to Grand Central Terminal, but ridership to both terminals can be expected to grow over time if more auto drivers are attracted to the system, if jobs grow as expected in both the Hudson Yards near Penn Station and in east Midtown near Grand Central, and if new housing is developed near transit on Long Island. Limited capacity at Penn Station could eventually limit the ability of service to respond to demand for the LIRR and other users of the station. Plans exist to redevelop Moynihan Station and move Amtrak across Eighth Avenue to the new station. Amtrak has also put forward a more ambitious proposal to expand capacity as part of a comprehensive plan to improve service in the Northeast Corridor. However, funding is still needed to complete Moynihan Station, and larger scale plans like Amtrak's Gateway proposal require agreement among numerous entities in addition to billions of dollars in new financing.

Communities will need to consider how to realize the greatest economic benefits from the new service. One option is to simply allow current residents and businesses to benefit from higher home values and new customers. However, there may also be sufficient demand for new businesses and homes to support downtown revitalization, job creation and housing development. These have the potential for broadening the tax base to hold down property taxes, and creating new services and amenities for citizens. Communities will have the choice of whether or not to pursue these opportunities through new zoning and planning, and would ideally be initiated in advance of the new service. South Orange, N.J., and White Plains, N.Y., are two examples out of many for how communities can take advantage of new transit service to address blight, a low property tax base, and other longstanding problems.

IV. Double Track to Ronkonkoma



Double Track Project Area of Ronkonkoma Branch of LIRR Main Line
Map by Regional Plan Association

A second track on the Main Line between Farmingdale and Ronkonkoma would represent a major addition to the LIRR network. The Ronkonkoma Branch of the Main Line extends from Hicksville to Greenport on the east end of the North Fork. The branch is double-tracked from Hicksville to Farmingdale, including the Bethpage station area. The right-of-way then merges into a single track after it passes Republic Airport. From there, the line consists of an electrified single track line that extends almost 20 miles to Ronkonkoma, the busiest station in Nassau or Suffolk, before continuing another 45 miles on an un-electrified single track to Greenport. The electrified portion includes seven stations and some passing sidings to enable trains to operate in both directions.

As shown in Table 2, the current schedule for the electrified section provides 17 trains a day arriving in Penn Station originating from Ronkonkoma during the morning peak period (defined here as 6:00 AM-10:00 AM) and 13 trains departing Penn Station in the evening peak (4:00 PM-8:00 PM). The service in the reverse commute direction is limited to just five trains in the morning peak, with all but one arriving before 6:30 AM or after 9:30 AM, and three in the evening. Midday service is limited to eight trains eastbound and five westbound between 10:00 AM and 4:00 PM.

In addition to limiting reverse service, the single-track reduces the reliability of the branch line because it constrains the ability of the railroad to operate around disabled trains or other service disruptions such as medical or police emergencies or track obstructions.

TABLE 2: Frequency of Service on the Ronkonkoma Branch Today				
Direction	Daily	Peak Direction	Reverse Direction	Midday
Westbound (Peak direction during AM)	35	17	5	5
Eastbound (Peak direction during PM)	35	13	3	8

Note: Daily service totals include evening, overnight and early morning trains not included in the peak direction, reverse direction and midday columns.

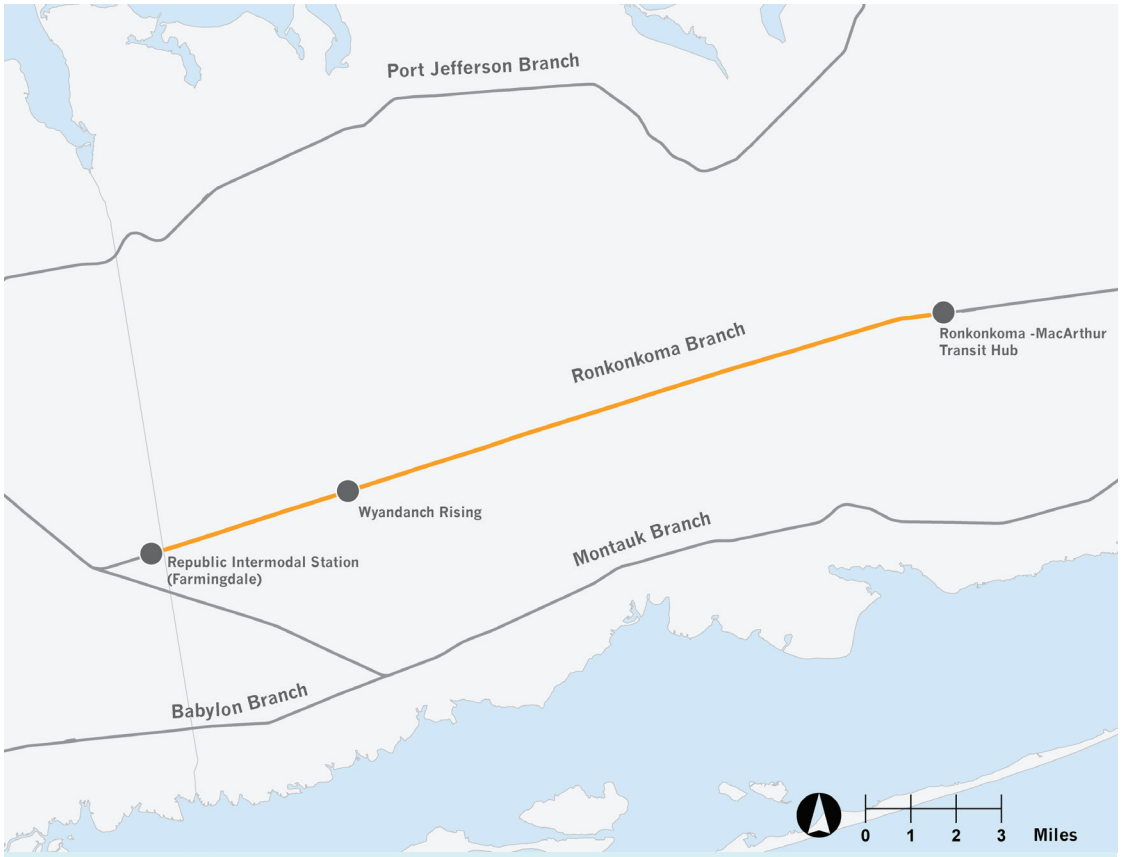
Source: MTA Long Island Rail Road Schedules

The MTA is planning to address these limitations by adding a second track from Farmingdale to Ronkonkoma, with an estimated cost of $405 million. The first operating segment, from Ronkonkoma to Central Islip, is included in the MTA's current five year capital plan and scheduled to be completed in 2015. The LIRR's current schedule estimates completion of all segments by 2018, assuming funding is available early in the 2015-2019 capital plan. Funding for other station work and a new station adjacent to Republic Airport is also included in the 2015-2019 request. The new station would be an intermodal facility adjacent to Route 110 as well as Republic Airport. Construction of this new facility is linked to progress on a mixed-use development plan in its vicinity by the Town of Babylon.

These capital improvements will double the capacity of the Ronkonkoma Branch, increasing its reliability and allowing the railroad to rn more frequent service throughout the day. However, increasing the number of trains in the reverse-peak direction to Ronkonkoma would require additional capacity on the Main Line that connects the Ronkonkoma branch to points west.

BENEFITS OF DOUBLE TRACK

Although the second track to Ronkonkoma covers only 20 miles on a branch line with seven stations, its importance is magnified by its strategic location. It connects Long Island's largest employment corridor along Route 110 with the largest commuter station in Suffolk County. Every day, 7,300 passengers board at Ronkonkoma with most making an approximately 80 minute trip to Penn Station. Both MacArthur and Republic airports are near the stations at either end



Selected Economic Development Projects Supported by Double Track
Map by Regional Plan Association

of the electrified line. The primary benefits of a second track relate to its ability to serve a commuter market that has grown substantially since electrified service was introduced, and its importance in unlocking the economic potential of western and central Suffolk County.

For commuters, Double Track will provide greatly increased service reliability and frequency. Ridership has grown substantially on the Ronkonkoma line, and it is now the most crowded line in the system and is ranked as one of the worst in terms of on-time performance. With a second track in place, there will be fewer service disruptions and delays due to backups or stalled trains. The LIRR will also be able to increase mid-day service, and will have greater flexibility in how to use the track for passenger service. Trains might also be able to run more efficiently, resulting in productivity gains or cost savings.

Intra-island travel will be improved along the Ronkonkoma Branch, including improved access to MacArthur Airport. With capacity for increased off-peak service in both directions, Double Track will permit residents and businesses along the corridor to use the LIRR more frequently for intra-island travel. This includes the potential to travel by rail to MacArthur Airport, although distance from the Ronkonkoma station to the airport will require a taxi or shuttle. Increased off-peak use of the LIRR would provide greater convenience to travelers, take more cars off the road and assist with plans to improve downtowns and station areas in the corridor.

For Long Island businesses and workers, a second track would support a number of high-priority economic development initiatives. Double Track is a high priority for Suffolk County, the Regional Economic Development Council and the Long Island Regional Planning Council. The increased service and reliability that the project would provide would substantially boost several key initiatives:

- *Ronkonkoma-MacArthur Transit Hub:* This collaboration between the towns of Brookhaven and Islip and Suffolk County would leverage the underutilized potential of MacArthur Airport and the area surrounding the Ronkonkoma LIRR station. The project could create a mixed-use, transit-oriented downtown, spur global business and tourism in the airport corridor, and create an estimated 11,000 direct and indirect jobs.
- *Wyandanch Rising:* This comprehensive initiative by the Town of Babylon is designed to generate employment, housing, beautification and opportunity in Suffolk's poorest community. It is centered on its LIRR station, and is intended to link residents to employment in the Route 110 corridor.
- *Farmingdale and Republic Airport:* As part of the Double Track project, the LIRR would potentially open a new station at Republic Airport. This would provide a hub on the Route 110 corridor that could link improved transit serving employers along the corridor. The project would also support efforts to implement proposed new transit-oriented development in Farmingdale, expanding both jobs and housing at another location along the Ronkonkoma line.

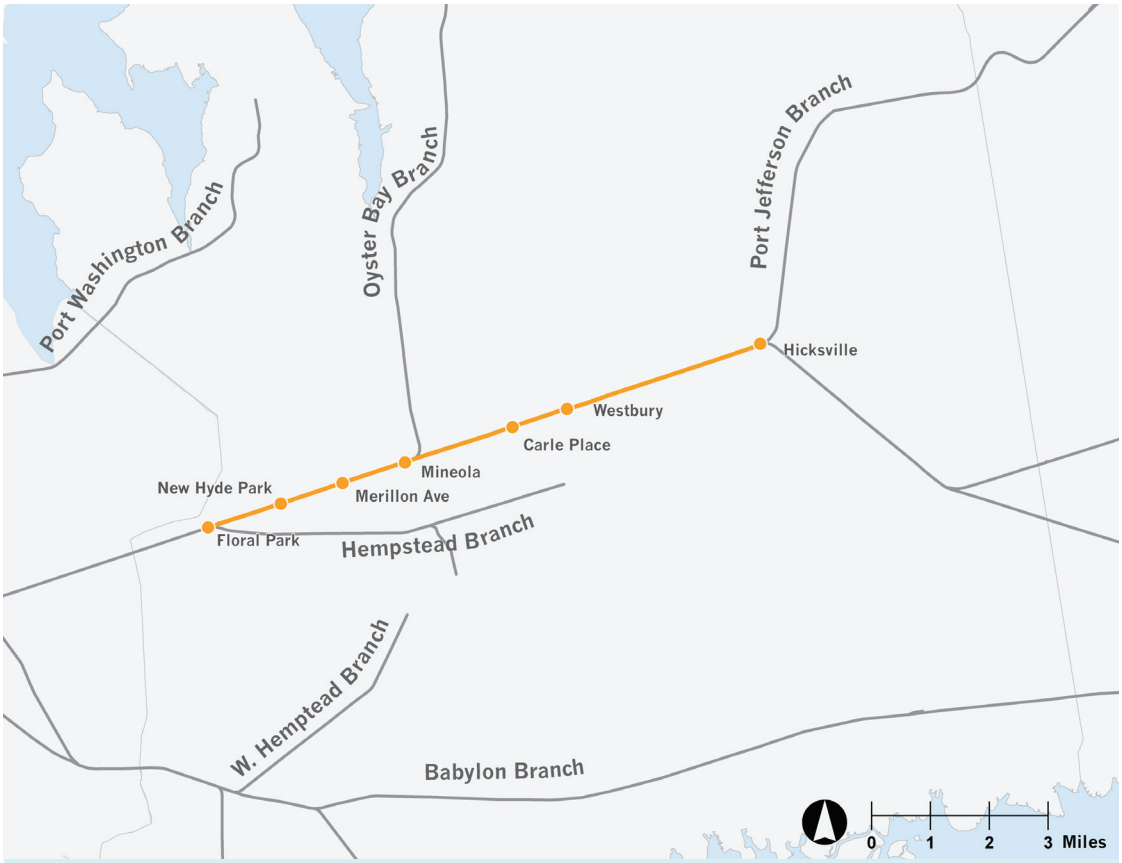
CHALLENGES TO MEETING THE OBJECTIVES OF THE DOUBLE TRACK PROJECT

Unlike East Side Access, Double Track is being implemented in conjunction with several economic development projects. Costs are modest compared to other expansion projects. Impacts on stations and local traffic should be minimal.

While political support for the project is strong, continued funding is not assured. The price tag for the project is relatively low compared to other expansion projects, and construction for the first phase of the project is underway. However, until the MTA and the New York State Capital Plan Review Board and legislature agree on the scope and funding for a 2015-2019 capital plan, completion of the project cannot be assumed.

The main challenge to meeting the economic development goals related to Double Track are the limits on capacity for reverse commute service. Because trains have to first travel along the Main Line in Nassau County before connecting to the Ronkonkoma Branch at Hicksville, eastbound service in the morning peak and westbound service in the evening peak is subject to the capacity limitations of the Main Line. Without a third track added to the Main Line, improvements in the reverse commutation on the Ronkonkoma Branch would be limited to the off-peak periods. Operating a shuttle train between Ronkonkoma and Hicksville during peak periods is a possibility for adding reverse service. Trains would travel back and forth between Hicksville and Ronkonkoma – enabling peak period service by customers commuting between those locations and points further east, but would require a transfer at Hicksville in both directions.

V. Main Line Third Track

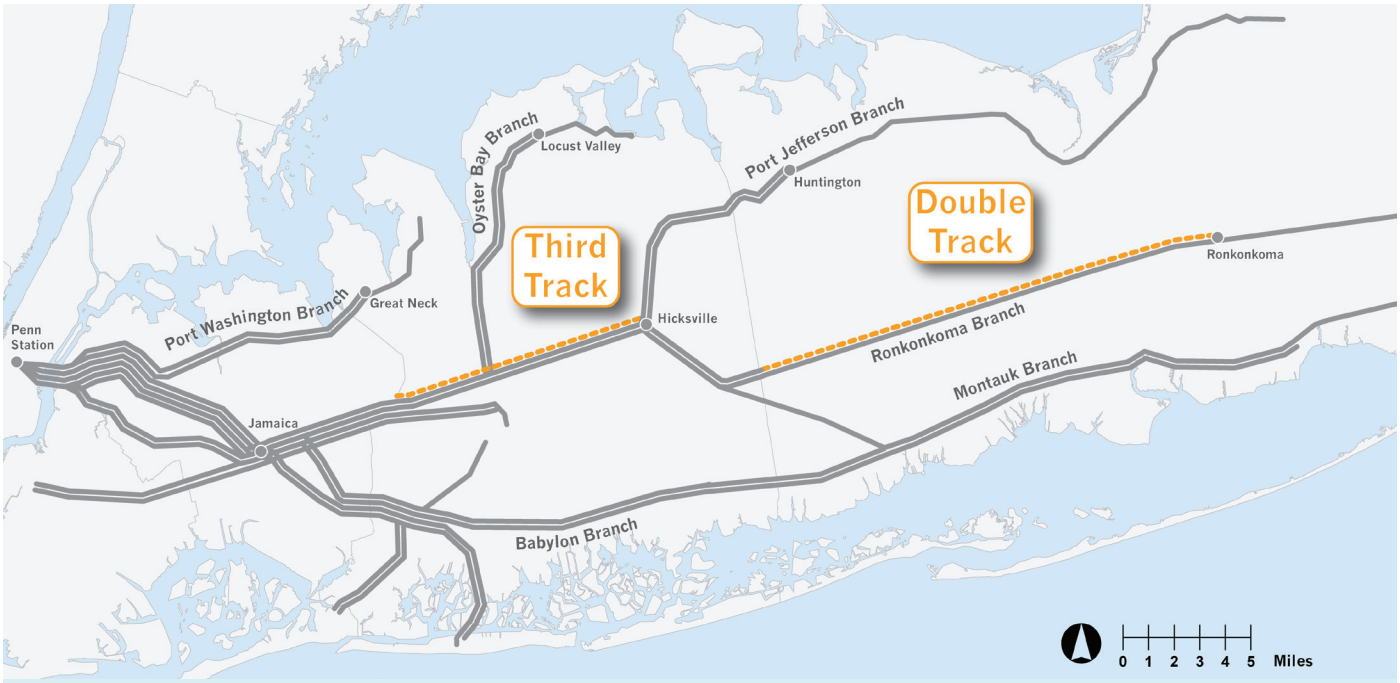


Main Line, Third Track Segment (9.8 miles in length)
Map by Regional Plan Association

As its name implies, the LIRR's Main Line is the central artery of the commuter rail system in Nassau and Suffolk. It receives trains from four different branches, and has remained a two-track line between New Hyde Park and Farmingdale since the 19th century, in spite of the growth of Long Island and ridership on the LIRR over the last century and a half. Constructing a third track would add substantially to the capacity of the entire system, but would be a major construction project that would affect communities and property owners along its path. Long planned but mired in controversy since its conception, the project was pulled from the last MTA capital plan and there are no immediate plans for its construction. However, the completion of both East Side Access and a second track to Ronkonkoma will add to the traffic on the Main Line, raising the stakes in the debate for whether, when and how to build it.

The Main Line between Sunnyside, Queens and Hicksville, traverses a distance of 22 miles and passes through Jamaica Station. The number of tracks on the Main Line varies from six to two. A 9.8-mile two-track segment between Floral Park and Hicksville is constrained since four branch lines merge and use the section. At Hicksville, the Port Jefferson, Ronkonkoma and Montauk Lines merge with the Main Line. A fourth line, the Oyster Bay branch, joins the Main Line at Mineola.

This imbalance of six tracks from four branch lines feeding into two results in a bottleneck that limits the amount of service even though the branch lines themselves have sufficient capacity for more frequent service. Today, the railroad is forced to use almost all of the Main Line's capacity to serve commuters in the peak-direction, meaning both tracks operate almost exclusively in the inbound direction



Number of Tracks on LIRR Train Lines
Map by Regional Plan Association

TABLE 3: Frequency of Service on the Main Line Today

Direction	Daily	Peak Direction	Reverse Direction	Midday
Westbound (Peak direction during AM)	101	47	13	18
Eastbound (Peak direction during PM)	106	41	12	27

Note: Daily service totals include evening, overnight and early morning trains not included in the peak direction, reverse direction and midday columns.

Source: MTA Long Island Rail Road Schedules

TABLE 4: Main Line Trains per Hour (TPH) for the AM and PM Peak Periods

Time Period	Peak TPH	Reverse TPH	Total TPH
6-7 am	9	1	10
7-8 am	12	3	15
8-9 am	20	5	25
9-10 am	7	3	10
4-5 pm	9	4	13
5-6 pm	16	3	19
6-7 pm	10	2	12
7-8 pm	5	4	9

Source: MTA Long Island Rail Road Schedules

during the AM period and then in the outbound direction during the PM commute. This handicaps the ability of the railroad to offer reverse-peak service. Plans to run even more inbound service to Manhattan once the new terminal at Grand Central is completed will only increase the pressure on the Main Line and further limit the ability to provide reverse service.

As shown in Table 3, the current schedule provides for 47 trains a day arriving in Penn Station originating from the Main Line and points further east during the morning peak period, and 41 trains departing Penn Station in the evening peak. The service in the reverse commute direction includes 13 trains in the morning peak and 12 in evening. Midday service is 27 trains eastbound and 18 westbound.

Table 4 lists the current scheduled peak-period capacity by hour for the Main Line. The most frequent service is between 8:00 AM-9:00 AM when the railroad runs 25 trains per hour. During this same period there are five reverse commuter trains, the most reverse service offered during the morning rush. This results in branch lines receiving only 1-2 eastbound trains in the peak hour. Using these numbers as a guide, along with an analysis of the rail network's physical and operating constraints, Regional Plan Association determined that the effective capacity of the existing Main Line is 12-13 trains per hour per track, or 25 trains combined. Thus, the two existing tracks use all of its capacity during the 8:00 AM to 9:00 AM peak hour, leaving no room for reverse service.

To alleviate this pressure on the Main Line, the LIRR has proposed to construct an additional track between Floral Park and Hicksville, commonly referred to as the Main Line Third Track project. The addition of a third track was assumed during the planning of the East Side Access project and was referenced in the 2001 Final Environmental Impact Statement (FEIS) as a necessary network improvement to support the future increase in service. However, in 2009 initial funding for the first phase of the $1.5 billion project was removed from the 2005-2009 Capital Plan because of funding constraints and local political opposition.

Since that time, the LIRR has reprogrammed $203 million of the funding originally allocated for the third track to finance several improvements to the Main Line that will enhance service and train efficiency. These include station renovations, modernizing the signal system at Hicksville and rebuilding the Ellison Avenue Bridge that crosses the tracks at Westbury. These actions will help relieve some of the increased congestion along the Main Line following the completion of East Side Access, but will not provide capacity for reverse commutation or intra-Island travel.

Both the MTA and LIRR leadership have stated that they are committed to building the Third Track over the long term, but there are neither immediate plans nor indications of when that would occur. The project would include the laying of almost 10 miles of new track and supporting infrastructure, the reconstruction of six out of the seven stations, widening rail bridges and adjacent property acquisition costs

BENEFITS OF A THIRD TRACK ON THE LIRR MAIN LINE

A Main Line Third track would allow the railroad to run two tracks exclusively in the peak direction and reserve the third for reverse service and other uses. This would effectively double, and in some cases more than double the number of trains able to run eastbound in the morning and westbound in the evening. It could also provide some limited increases in service in the peak direction going into Manhattan in the morning and out to Long Island in the evening. The additional track will also improve reliability by enabling the railroad to maintain service in the peak direction even if one track is out of commission. The added efficiency could also improve productivity or reduce operating costs by enabling the LIRR to cycle trains in and out of service more quickly.

Added capacity would greatly increase reliability and increase service options on the Main Line and the Port Jefferson, Ronkonkoma, Montauk and Oyster Bay branches that feed into it. Regional Plan Association estimates that the Third Track would be able to operate 14-15 trains per hour, providing capacity for two additional trains in the peak-direction and the remaining 12-13 trains in the reverse direction. In addition, the amount of reverse service offered could be adjusted if inbound peak demand was strong. The LIRR would also have greater ability keep service closer to normal if trains are backed up or if one track is taken out of service because of a disabled train, accident or weather.

Operational efficiencies could improve productivity or reduce costs. One of the least recognized benefits of Main Line Third Track, as well as the second track to Ronkonkoma, is how it would make the railroad more efficient. If trains could make two or more round-trips during the almost four-hour peak commutation period, train crews could also be used more efficiently, and maintenance costs could be lower.

Employers near stations served by the Main Line and its four branches would have access to a greatly expanded supply of potential workers, resulting in stronger job growth that would benefit job seekers, businesses and residents throughout Long Island. With the limited reverse service that currently exists, few people residing in New York City and most parts of Nassau would consider taking the train to get to jobs in Mineola, Hicksville, Farmingdale or other locations in eastern Nassau and Suffolk County. Yet many of these residents either do not own cars or would prefer taking transit to get to work. The Third Track would effectively give these residents access, and help Long Island businesses grow and hire more workers from locations throughout Nassau, Suffolk and New York City.

The stations shown in Table 5 are illustrative of the additional workers that could access stations along the Main Line, Port Jefferson, Ronkonkoma, Montauk or Oyster Bay branches with a commute of less than 60 minutes.[5] The number of additional workers declines the farther east that the LIRR station is located, from 350,000 for Mineola to 20,000 for Ronkonkoma. This is because the largest share of additional labor force is located in New York City, where population density is greater.

TABLE 5: Number of People in the Labor Force Within a 60-Minute Transit Commute From West of Selected LIRR Stations

Destination Station	Reverse Commute Labor Force
Mineola	350,463
Westbury	282,997
Hicksville	225,908
Farmingdale	174,974
Deer Park	78,170
Ronkonkoma	19,962

Analysis by Regional Plan Association

These are conservative estimates of additional workers that could access employers at these stations. It only includes workers from Queens and Brooklyn who would board an LIRR train in Jamaica or another outer borough station. With more frequent services, more workers would also be likely to commute from Penn Station or Grand Central Terminal, even though the travel time is longer than from Jamaica. In addition, many people commute more than 60 minutes to work, especially for higher paying jobs, so the size of the potential workforce that would have access with the Third Track could be considerably larger. In addition, if population grows near transit stations, both in New York City and in Nassau and Suffolk, then this potential workforce will only grow over time.

This additional workforce access, combined with other assets, has the potential to create thousands of additional jobs in a transit-oriented corridor extending from Mineola to Ronkonkoma. Just as Route 110 emerged as Long Island's central economic corridor in the second half of the 20th century, a chain of connected job centers along the Main Line and its branches could emerge as a new driver of the Long Island economy. This corridor would build on existing employment and transportation nodes, intersect with Route 110 and other north-south routes, and build on existing initiatives such as the Regional Economic Development Council strategy, Connect Long Island and Accelerate Long Island. The Third Track would not determine this outcome, but would enable transit-oriented centers to expand where they currently exist and emerge where they do not.

Several factors contribute to the potential of particular locations to become transit-oriented job centers—existing employment density, development potential, current and potential transit access, and street configuration. Other downtowns and transit stations could also support additional job growth with new capacity from the Third Track, but the stations highlighted above are the most likely locations. Table 6 summarizes some of the assets of these locations, and the descriptions that follow include observations from field visits and initiatives that are currently under way.

Main Line and Double Track Projects with Connecting Branch Lines
Map by Regional Plan Association

TABLE 6: Characteristics of Selected Station Area Affected by Main Line Third Track							
Station	Jobs in Primary Zip Code, 2010	Jobs per Sq. Mile in Primary Zip Code	2006 Daily LIRR Ridership	Additional Workforce Within a 60 Minute Commute	Home Value Increases within a Half Mile of LIRR Station	Acres of Unbuilt Land Within a Half Mile of LIRR Station	Potential Intermodal (bus, airport) Connections
Mineola	17,219	8,547	10,348	350,000	$11,000	108	High
Hicksville	25,017	3,743	16,215	226,000	$11,000	118	High
Farmingdale	33,214	3,106	4,625	175,000	$11,000	60	Medium
Wyandanch	1,891	445	3,517	125,000	$11,000	100	Medium
Ronkonkoma	18,893	1,453	17,278	20,000	$10,000	108	High

Analysis by Regional Plan Association

Mineola

Mineola, the county seat of Nassau County, currently has one of the most walkable concentrations of jobs on Long Island, and a 2005 village master plan and 2007 overlay district are resulting in mixed-use infill development that is enlivening the downtown and attracting new residents and employers. It is already a major transportation hub with the fifth busiest station in Nassau and Suffolk, frequent service to Penn Station, and five bus routes that connect to the train station. There are 108 acres of surface parking lots and vacant property within a half-mile of the station, providing some room for future development. Both East Side Access and the Third Track will add to this momentum by shortening travel times to East Midtown and increasing residential property values, giving local employers access to at least 350,000 workers.

Hicksville

Hicksville has some of greatest latent potential to develop as a walkable commercial or mixed-use center. The Hicksville station is a major hub with the second highest number of people using LIRR trains in Nassau and Suffolk and over 400 buses from 13 routes stopping at the station each day. About half of these buses operate along either Route 106 or 107 or both, and these routes could become even greater north-south bus feeders to and from the station. As the juncture of the Port Jefferson and Ronkonkoma branches, it has the most connections to other stations. The Third Track would improve service reliability for passengers at the station, and would make the area accessible to an additional 226,000 potential workers.

What the station area lacks in existing activity and street life, it makes up for with development opportunities. There are 118 acres of unbuilt land within a half mile of the station, mostly surface parking, and a number of underdeveloped properties. There are also some signs that new attention to the station and the surrounding community could lead to more investment and economic development. In the near-term, the MTA has plans to spend $106.6 million to rehabilitate the station and signal infrastructure and add a 3,000 ft. track connection.[6] Thought Box, an initiative of Accelerate Long Island, is seeking to develop offices, labs, housing and recreation for high-tech ventures. However, a much more comprehensive land use and development strategy would be needed to realize Hicksville's full potential.

Farmingdale-Republic

The Farmingdale station area is characterized by residential development on either side of the tracks and a thriving main street retail area. While space for redevelopment is more limited than in some other locations, a new village master plan and development proposals give more reality to capitalize on transit-oriented development opportunities. What gives this area greater momentum is the plan to construct a new station at Republic Airport as part of the Ronkonkoma Double Track project. This new station would be one mile to the east at Route 110. It is part of an ambitious proposal by the Town of Babylon and Suffolk County to create a Bus Rapid Transit service along Route 110 stretching from there south to the Amityville and Copiague rail stations on the LIRR's Babylon Branch, and to the north possibly as far as Huntington Station on the Port Jefferson Branch. The plan calls for substantial new development both at the new station, where two of the four quadrants formed by Route 110 and the railroad appear to have development potential, and along the entire 110 corridor.

The Third Track would provide much greater service reliability in both directions to both the existing and new stations. Employers at both locations, and potentially for locations along the 110 corridor as well, would have access to an additional 175,000 workers. It would also allow for business travel between Republic Airport and other locations.

Wyandanch

Wyandanch is less likely than the other stations mentioned here to become an employment hub, but it merits mention since it is an example of a community revitalization effort that could benefit substantially from the Third Track. Wyandanch Rising, the community revitalization effort of the Town of Babylon is capitalizing on the hamlet's LIRR station and proximity to the Route 110 corridor. The Double Track to Ronkonkoma will make train service more reliable and connect to the new station at Republic. But the Third Track is needed to significantly increase peak period train frequency at the station, particularly in the reverse peak direction. It will also bring the full benefits of East Side Access to Wyandanch, significantly increasing home values in this impoverished community.

Ronkonkoma-MacArthur

Ronkonkoma is already the site of a joint effort by the towns of Brookhaven and Islip and Suffolk County to create a transit-oriented, mixed use downtown where there is currently a sea of parking lots, and connect the center to MacArthur Airport. It is easy to see why this is such an attractive strategy. This station has the highest use among all stations in Nassau and Suffolk. There are over 40 acres of surface parking and a parking garage, providing approximately 5,800 parking spaces, the largest surface commuting parking area on Long Island. Within a half-mile radius of the station are 108 acres of unbuilt land.

The proximity to MacArthur Airport is another source of both airport-related business development and potential LIRR ridership, which would be aided not only by the third track but by the second track construction underway on the Ronkonkoma Branch. The long travel times from New York City – the rail time from Jamaica to Ronkonkoma averages a little over one hour – is likely to hamper its ability to attract reverse commuters. However, if mixed-use development occurs around the stations to the west, then both Third Track and Double Track will provide the capacity to serve a growing number of potential workers in Nassau and western Suffolk, as well as business travel along the corridor.

CHALLENGES TO IMPLEMENTING THE THIRD TRACK

Few projects have generated as much local opposition as the Third Track. Both citizens groups and public officials in the communities along the Main Line have advocated against the project. The primary reasons include opposition to property takings that would be needed to construct the project, other construction impacts, and increased noise and traffic, especially for at-grade crossings. Each of these deserves careful consideration and needs to be weighed, along with the project costs, against the benefits that the project provides. Previous assumptions about the costs and construction of the Third Track, which are several years old, should be reassessed with updated engineering and environmental studies.

The Third Track is an unfunded project with many competing demands for limited capital dollars. With a previously estimated price tag of $1.5 billion and considerable engineering and environmental analysis still needed, it would likely be financed and constructed over more than one five-year capital plan. As of yet, there is no identified funding for the project. A future 2015-2019 Capital Program is expected, and environmental review for this project is anticipated to re-start in the 2015-2019 time period.

Construction will require reconstruction of six stations and acquisition of some private property. Six Main Line stations from Floral Park to Hicksville have insufficient space between their existing platforms to accommodate a third track. These stations will need to be widened, and in most cases completely rebuilt, to fit the additional track. The only exception is the Hicksville station, which already has three tracks and two island platforms. There are also six rail bridges that will likely need to be widened to accommodate the Third Track.

The rebuilt stations would presumably retain their earlier side platform configuration. However, at Mineola there is an opportunity to build upon its existing status as a major transit hub and job center by constructing two island platforms—similar to Hicksville's configuration. This would allow more express trains to stop at the station and make it possible to transfer from Oyster Bay trains to city-bound trains on the same platform. It would provide even more frequent service at Mineola.

Construction of the third track will require the use of property in some locations along the right of way. From a review of available maps, documents and information available to Regional Plan Association, it appears that most affected properties are either commercial or industrial properties, many of them publically-owned. Acquisitions or takings of whole properties would be rare. In most cases, only small portions of properties would be needed, and much of this property would be returned to the owner after construction is completed. A more definitive engineering study would need to be completed and made public to confirm this assessment and address the concerns of communities along the path of the project.

Traffic delays are likely to increase at seven at-grade crossings. It is difficult to determine how long these delays will be but average waiting times estimated for two crossings as a result of ESA are well under a minute. As with East Side

Access, it may be possible to alleviate additional congestion with turning lanes and other traffic engineering solutions. It may still be desirable to eliminate some or all of these crossings, but these should only be done after extensive community consultation.

While there may be some increase in noise as result of additional train traffic, these are likely to be marginal.

The LIRR has been a part of the island's physical environment for over 175 years, driving the development of bedroom communities in both Nassau and Suffolk Counties. The Main Line is one of the oldest sections of the railroad and the land around it was developed after its construction. As a result, generations of Long Islanders have grown up with trains operating through their towns and, in some cases right past their backyards. Adding another track to the Main Line will increase the frequency of service, which could result in noise, vibration, and/or visual impacts. However, considering that these lines already exist and see heavy usage, the impacts would most likely be minimal.

VI. Realizing the Potential of a Different Long Island Rail Road

Implementation of the three Long Island Rail Road projects analyzed in this report—East Side Access, a second track on the Ronkonkoma line and a third track on the Main Line—would transform Long Island's transit network. The physical LIRR system has remained essentially unchanged since it first crossed the East River and connected the Island to Manhattan over a century ago. Its track configuration in Nassau and Suffolk is even older, having been largely completed in the years following the Civil War.

Clearly, Long Island has changed dramatically since the LIRR was built. In 1850, only 57,000 people lived in today's Nassau and Suffolk counties. By 1910, when the LIRR connected to Penn Station, its population was still only 180,000. By 2010, the two counties were home to 2.8 million people. During that time, the LIRR became the most heavily used commuter rail in the United States. It fell into disrepair after World War II, was revived and upgraded over the last 30 years, and is now poised to provide new capacity and services for an economy that will unfold in the remainder of the 21st century.

The path that this future economy will take is far from certain. The international economy is still emerging from the deep global financial crisis, and Long Island's economy will need to adjust to new trade patterns, new competitors and new technologies. With this uncertainty, however, are several changes that can be assumed with a fair degree of confidence. There is and will continue to be more demand for smaller homes in downtowns and near transit from both younger and older generations, including rentals, townhouses and condominiums. Most high-value, innovative companies will want to locate where they access the largest number and greatest diversity of talented workers. Storms like Hurricanes Irene and Sandy, and other extreme weather, are likely to become increasingly frequent as global temperatures and sea levels rise.

By the end of this decade, East Side Access and Double Track to Ronkonkoma will better position Long Island to respond to these changes, strengthen Long Island's connection to the New York region's economic engine in the Manhattan Central Business District, and improve service and reliability on trains along LIRR's most crowded line. Specific benefits from these two projects, assuming funding for completion is provided in the next MTA capital plan, would include the following:

- Nassau and Suffolk residents would have improved access to 560,000 high-paying jobs in Manhattan
- Thousands of commuters will save an average of 18 minutes and as much as 42 minutes per day now spent traveling to work
- 400,000 homeowners will see the value of their homes rise by an average of $7,300
- With three tunnels into two terminals, rather than two tunnels into one location, service into Manhattan will be more reliable and less vulnerable to storms, terrorism or breakdowns
- Service on the Ronkonkoma line, LIRR's most crowded and least reliable, will have greater dependability and frequency.
- LIRR riders can board Metro-North trains in the same terminal at Grand Central
- The system will have the capacity to add more service at later date
- There will likely be more commuters with higher incomes that will support local businesses

In short, Long Island will be more attractive to people who work in Manhattan, which will have spillover benefits for homeowners, even if they never set foot on a train. It will also stimulate population-related jobs in industries like retail and health care. It will help improve quality of life for everyone by making modest reductions in auto congestion and air pollution.

These benefits, however, would still leave Long Island short of its full potential. Municipalities, supported by federal, state and regional actions, will need to adopt land use and economic development policies that will create jobs and housing around the transit network. In addition to new land use and development policies, additional service and economic possibilities will be unlocked only if the LIRR's central artery has the capacity to handle larger volumes of trains and provide frequent two-way service. A third track would not only improve service reliability and frequency. It would also create a new dynamic that would facilitate intra-Island travel by rail. Two-way, peak period travel would support job growth on Long Island by allowing more workers to reach employers in Nassau and Suffolk. There would be more incentive to both live and work in Long Island's downtowns.

Long Island's economy would have a flexibility that it currently lacks to respond to changes in employer and worker preferences, an advantage that is hard to quantify but important in a changing global economy. The Long Island Rail Road would similarly have the flexibility to shift service to wherever demand is greatest.

The long-term benefits, however, would be substantial, and would include the following:

- Service reliability and flexibility would be greatly improved, with 50% more capacity on the Main Line to reroute trains or add service as needed.
- LIRR operations could be more efficient, resulting in productivity gains or cost savings.
- Employers will have access to many more potential workers, at least 350,000 in Mineola and 226,000 in Hicksville, for example, increasing the attractiveness of Long Island to prospective employers.
- Major economic development initiatives, such as Wyandanch Rising or the Ronkonkoma transit village project, would have a much greater chance of success.
- Travel within Long Island would be more transit-oriented, both on the LIRR and along bus routes feeding into it.
- Housing, transportation and property taxes would be more affordable, making it possible for more young adults and seniors to stay on Long Island.
- Highway congestion and air pollution would be reduced to a greater degree than in the first scenario.

Building a third track will involve community impacts that will need to be discussed and addressed. Six stations would need to be reconstructed and six rail bridges widened. Seven at-grade crossings would likely need either traffic engineering or a bridge or an underpass to grade separate the roadway traffic. Some small sections of private property will likely need to be acquired, the largest share consisting of commercial or industrial property.

The combined value from all three LIRR expansion projects would ripple through the economy in a number of ways—construction jobs as the projects are built, higher home values and commercial property values from improved access to employment centers and workers, jobs and wages from increased expenditures by the Long Island Rail Road, and improved business retention and attraction created by greater regional mobility.

Estimating how much the economy could grow as a result is a complicated process that depends on a number of assumptions. In particular, the economic return will depend in large measure on how much job and population growth is permitted and encouraged around the transit system. However, experience in other regions indicates that the payoff could be quite large. A study for the MTA in the 1990s, for example, found that every dollar invested in expansion would bring two dollars in business and personal income over twenty years.[7] In the Minneapolis/St. Paul region, a business-led alliance commissioned Cambridge Systematics to estimate the return on a proposed $4.4 billion investment to add three light-rail lines and expand bus rapid transit (BRT) in the region's transit system. The direct benefits ranged from $6.6 to $10.1 billion over a 15-year period for a scenario that assumed no additional growth around the transit network to $9.1 billion to $13.9 billion for one that assumed more transit-oriented development. In both cases, the return is likely to be much greater since jobs and income will continue to grow past the 15-year period, and because it used conservative assumptions about land use changes and energy costs.[8]

On Long Island, the Regional Economic Development Council has estimated that 44 proposed projects could yield as many as 65,000 new or retained jobs. A large share of these jobs comes from transit-supported projects in Ronkonkoma, Hempstead and elsewhere, and nearly all would benefit from expanded transit service. These estimates are supported by the experience of White Plains, South Orange and other localities around the region that have linked development to new transit service.

Success will require collaboration among the MTA, local officials, county leaders, state agencies and local businesses and residents. Proactive planning will be required, ideally years in advance of project completion, to maximize the benefits and minimize any negative impacts.

A first step would require communities and the MTA to work collaboratively, preferably with assistance from the state as was and is being done in New Jersey, to assess impacts, solutions and opportunities created by the new service. These should start with, but not be limited to, how construction and new service will affect parking and traffic. It is also an opportune time to examine zoning and land use policies to see if they will maximize benefits to the community, and develop a vision for what the community can be like in a more transit-oriented Long Island.

Much collaboration and planning is already taking place, but much more will be needed. Most immediately, Long Island needs a full and honest debate over which path to take.

Footnotes

1. *Connect Long Island: A Regional Transportation and Development Plan*, Town of Babylon, October 2011, p. 9.

2. *The ARC Effect: How better transit boosts home values and local economies*, Regional Plan Association, July 2010

3. On August 27, 2012, the New York City Department of City Planning issued a draft scope of work for an environmental impact statement for a proposed rezoning for 78 blocks of East Midtown (http://www.nyc.gov/html/dcp/html/east_midtown). If approved, the action would increase the density allowed in certain areas of the district and provide incentives for the redevelopment of older office buildings.

4. The findings and methods for estimating the increase in home values resulting from East Side Access are described in *Rail Rewards: How LIRR's Grand Central Connection Will Boost Home Values* by Regional Plan Association, published January 2013. Of the 587,000 homes that would see the full increase, nearly 200,000 are in Queens and the remainder is in Nassau and Suffolk.

5. The number of additional workers was computed by calculating the average time that it would take traveling from a person's home, including walking, subway or bus time to an LIRR station, to a train station along the Main Line. The number of workers that are within 60 minutes would decline the farther the employer is from the train station. However, many commuters travel more than 60 minutes to work, especially for higher paying jobs.

6. http://www.antonnews.com/hicksvilleillustratednews/52-hicksvillenews/23104-all-aboard-lirr-revamping-hicksville-train-station-.html

7. *Lasting Economic Benefits if Public Transit Investment*, Metropolitan Transportation Authority, December 1996

8. R*egional Transit System Return on Investment*, ITASCA Project, November 12, 2012

Advisory Committee

Working Together in New Ways for Long Island's Future

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