



Supporting Economic Growth and Opportunity:

The Economic Impact of Suburban Bus Service in Westchester and Nassau Counties

A report for the Tri-State Transportation Campaign

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appleseed 

NYU Wagner
rudin
center
for transportation policy & management

Introduction

Public transportation has long been recognized as playing a critically important role in the economic life of major cities in the U.S. and elsewhere. The density of development that characterizes many of the world's leading cities, and the economic benefits that density provides, would be impossible to achieve without public transit services. Transit systems expand the pool of workers to whom employers have access – and at the same time expand the range of job opportunities available to individual workers. By making it possible to concentrate large numbers of talented people in close proximity to each other, transit services also facilitate the “knowledge spillovers” that lead to increased productivity and higher rates of innovation.

At the same time, transit services make it easier for highly-specialized and high-quality businesses and institutions – including restaurants, specialty retailers, colleges and universities, hospitals and cultural institutions – to attract customers from a much wider market.

Much less attention has been paid, however, to the contributions that public transit systems make to the economic vitality of suburban communities. This report, prepared by Appleseed and the Rudin Center on Transportation Policy and Management for the Tri-State Transportation Campaign, focuses on the impact of local and regional bus service on the economies of two of downstate New York's suburban counties – Westchester and Nassau. We begin with a brief description of the counties' publicly-supported bus systems – the Bee Line in Westchester and NICE (Nassau Inter-County Express) in Nassau.

We then examine:

- The economic impact of these bus systems as major local enterprises in their own right – as employers and buyers of goods and services from other local companies;
- The role that the two systems play in enhancing the efficiency of local labor markets and enhancing residents' access to employment and to essential services; and
- The contribution that bus services can make to economic development in suburban areas.

We conclude with some brief comments about the importance of bus services to both counties.

Bus service in Westchester and Nassau Counties

As noted above, local and regional bus service is provided in Westchester County by the Bee Line and in Nassau County by NICE.

The Bee-Line

Westchester County bus service dates to the late 1970's, following creation of the Westchester County Department of Transportation (now Public Works and Transportation, DPW&T). To provide a unified identity among several private operators of the system, it was officially renamed the "Bee-Line" in 1987.¹

The 59 fixed-route bus and paratransit system serves a county with a land area of roughly 430 square miles and a population of 960,000. It serves both urban and suburban portions of the county, as well as parts of the Bronx, Manhattan, and Putnam County. The system is oriented around its main hubs in Mount Vernon, New Rochelle, White Plains, Yonkers and Valhalla, and serves as an important feeder to Metro-North rail stations and to subway stations in the Bronx. More than 65 percent of Westchester County residents live within walking distance of a Bee-Line route.²

The Bee-Line is owned by DPW&T and is operated under contract by two private operators-Yonkers-based Liberty Lines Transit, which operates 56 routes, and Peekskill-based P.T.L.A. Enterprise, which operates three routes in the northwest portion of the county. The system's fleet of 329 buses carried over 32 million passengers in 2012,³ making it the second largest bus system in New York State behind the MTA.⁴

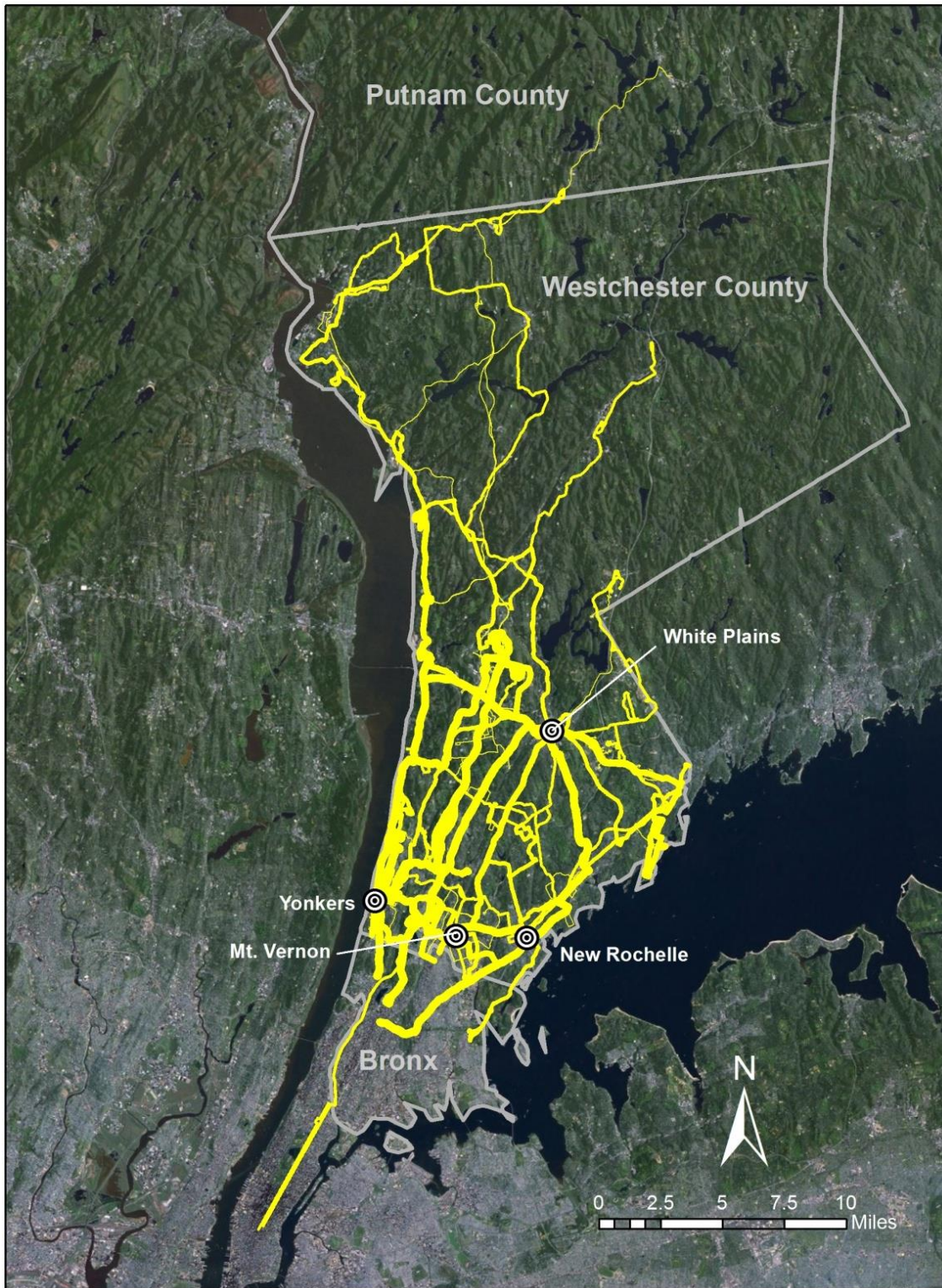
¹ Singh, Jeevanjot. *Variable Fares for Elderly & Handicapped Transit Riders: An Analysis of Westchester County*. Sept. 11th Memorial Program for Regional Transportation Planning.

² *Bee-Line Bus Timetables and Maps*. Westchester County Department of Public Works and Transportation, September 13, 2013. <http://transportation.westchestergov.com/timetables-and-maps>

³ *Request for Proposals for Professional Management, Operation, and Maintenance Services for the County of Westchester's Bee-Line Bus System*. Westchester County Dept of Public Works and Transportation, 23 Sept. 2013.

⁴ *Request for Proposals to Provide a Comprehensive Study of the County of Westchester's Bee-Line Vehicle Maintenance Program*. Westchester County Department of Public Works and Transportation, March 26, 2012.

Map 1. Bee-Line Routes and Ridership Volume.



NICE

For nearly 40 years, the Metropolitan Suburban Bus Authority (also known as Long Island Bus) provided bus service in Nassau County. However, due to a funding dispute with the MTA in 2011, the County contracted the system to a private operator, Chicago-based Veolia Transportation Services. On January 1st, 2012, the system was officially transferred to Veolia and renamed Nassau Inter-County Express (NICE).⁵

The 49 fixed-route bus and paratransit system serves a county of roughly 285 square miles and 1.35 million people. In addition to Nassau, the system serves eastern Queens and western Suffolk Counties, with major transit hubs situated in Hempstead, Hicksville, Mineola, and Jamaica, Queens. NICE is particularly important as a feeder to 47 Long Island Rail Road stations and five subway stations in Queens, which provide access to jobs in New York City. Approximately half of all NICE trips occur between the Hempstead, Hicksville, and Roosevelt Field stations and subway lines in Flushing and Jamaica.⁶ In 2012, 298 NICE buses carried nearly 30 million passengers, making it the third largest bus system in the state.⁷

Table 1: Bee-Line and NICE Operating Statistics, 2012

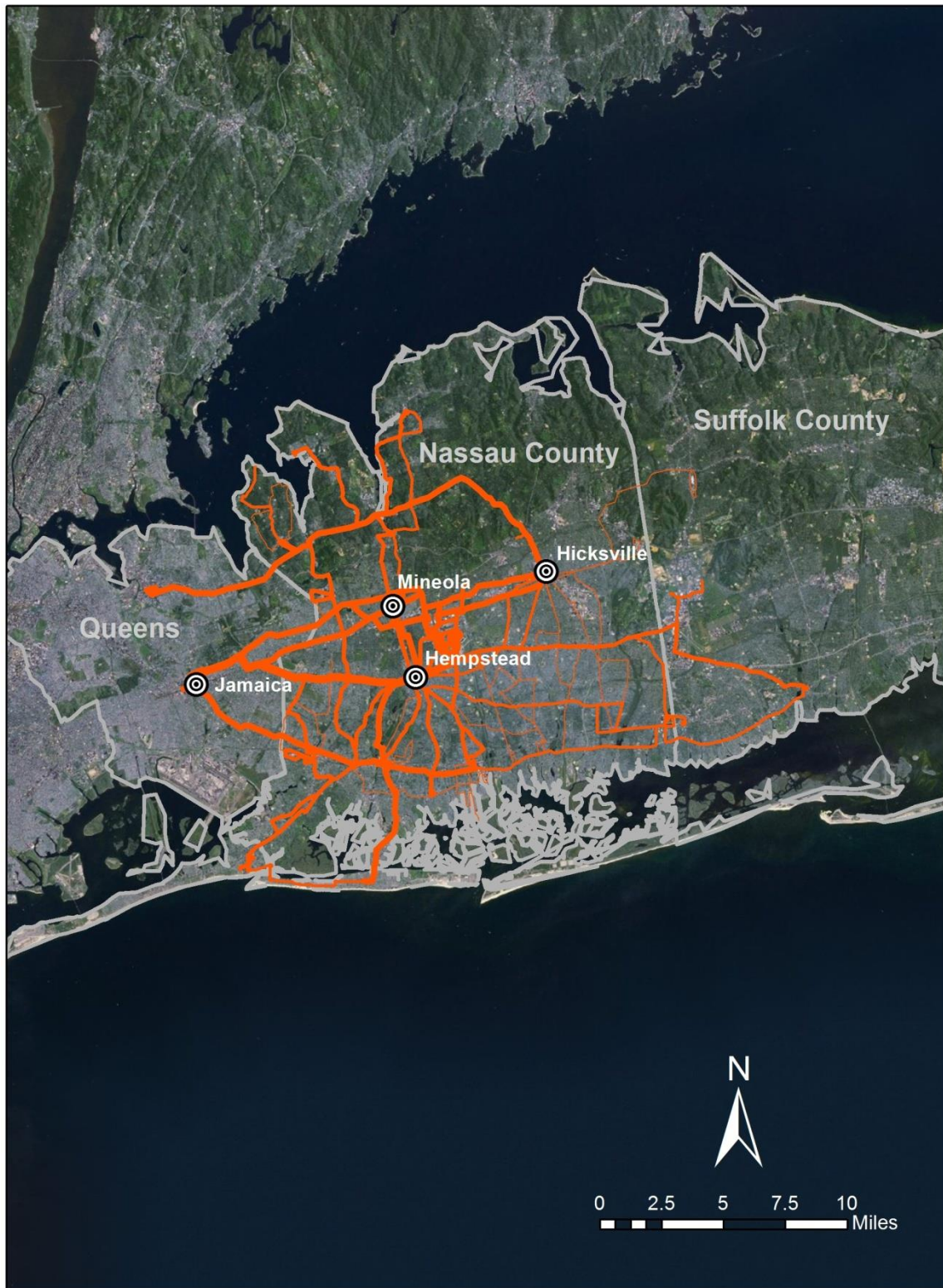
System	Base Fare	# Routes	Route Miles	# Stops	Ridership		Fleet	
					Average Weekday	Total Annual	Bus	Para-transit
<i>Bee-Line</i>	\$2.50	59	832	3,300	111,412	32,117,817	329	81
<i>NICE</i>	\$2.25	49	741	4,000	99,505	29,545,079	298	96

⁵ Nassau County, New York Title VI of the Civil Rights Act of 1964 - Submission to the Federal Transit Administration In Fulfillment of Reporting Requirements Outlined in FTA Circular 4702.1B. Nassau County, March 2013.

⁶ NICE Bus to Implement Service Changes. Labor Press, February 28, 2012.

⁷ 2012 Public Transportation Fact Book. American Public Transportation Association, September 2012.

Map 2. NICE Routes and Ridership Volume.



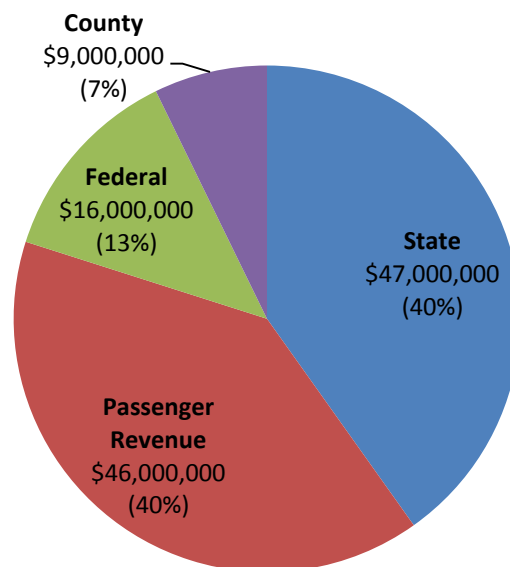
A major local enterprise

In addition to providing an important public service, the Bee Line and NICE are in themselves significant local enterprises. In 2012, Bee Line revenues totaled \$118 million. As shown below in Figure 1, Westchester County's contribution accounted for only 7 percent of the total; passenger fares and New York State and federal funds accounted for more than 90 percent. As of 2012, Bee Line operators employed approximately 790 full- and part-time workers.

(In addition to the \$9 million that Westchester County contributes directly to Bee Line operations, the County incurs a variety of other Bee Line-related costs as well – for example, salaries, wages, benefits and other costs associated with DPW&T staff involved in planning, contracting for and overseeing the operation of bus services. Taking into account these and other related costs, we estimate that in 2013 the County's commitment to bus service exceeds \$30 million.)

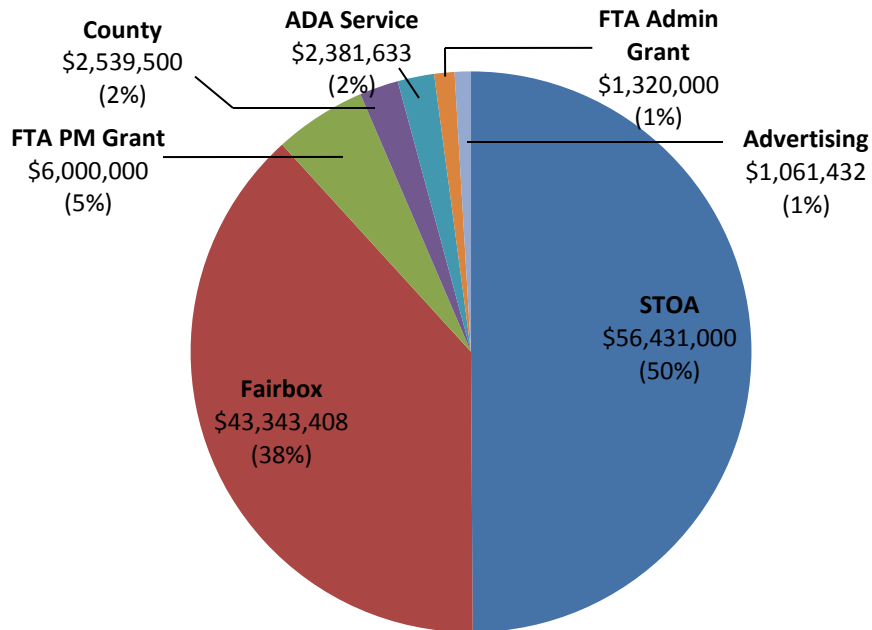
NICE revenues in 2012 totaled approximately \$113.3 million, of which (as Figure 2 shows) Nassau County's contributions accounted for only 2.3 percent. Veolia employed about 1,000 people (both full-time and part-time) in the operation of the NICE system.

Figure 1: Bee-Line Revenues by Source, 2012



Source: *The New NY Bridge, "Westchester County Transit Funding," 2012.*

Figure 2. NICE Revenues by Source, 2012



Source: Veolia Transportation, “2013 Annual Plan, Budget, & 5 Year Capital Plan,” 2013.

The economic impact of the Bee Line and NICE as enterprises is not, however, limited to the number of people they employ directly. Both of these enterprises also generate jobs and income through their purchases of goods and services from a wide variety of local vendors and contractors, and through the money their employees spend locally on housing, food, utilities, etc.

Using the IMPLAN input-output modeling system – a modeling tool commonly used in economic impact analyses – we can measure these indirect (or “multiplier”) effects of Bee Line and NICE operating expenditures. We estimate that in 2012:

- Bee Line spending on wages, salaries, benefits, goods and services indirectly added \$73.9 million to Westchester County’s overall economic output, and supported approximately 470 full-time-equivalent (FTE) jobs with other Westchester employers, with earnings totaling \$28.6 million; and

NICE spending on wages, salaries, benefits, goods and services indirectly added \$74.5 million to Nassau County’s overall economic output, indirectly supporting approximately 490 full-time-equivalent (FTE) jobs with other employers in Nassau County, with earnings totaling \$27.4 million; and

Taking into account both direct and indirect effects, we estimate that in 2012:

- Bee Line operations directly and indirectly accounted for approximately 1,260 jobs and \$208 million in economic output in Westchester County – about \$23 in economic activity for every dollar the County spends directly on bus operations; and
- NICE operations accounted for approximately 1,490 jobs and \$191.5 million in economic output in Nassau County – more than \$73 in economic activity for every dollar directly contributed by the County toward the cost of bus operations.

Enhancing labor market efficiency

Data on users of suburban bus services highlight the role these services play in the local labor market. In an on-board survey of Bee Line riders conducted in 2013, 72 percent said that travel to or from work was the primary purpose of their trip. This reflected a continuing increase in work-related trips as a share of all Bee Line bus trips, from 61 percent in 2003, 63 percent in 2007 and 67 percent in 2010.⁸ In total, work-related trips comprised approximately 80,000 out of 111,000 daily Bee-Line bus trips in 2013.

Applying this percentage to the average daily number of system-wide trips, we estimate that in 2013 an average of about 40,000 people each day use Bee Line buses to travel to and from work⁹ – an increase of 47 percent since 2003. Bus trips to or from work are generally concentrated around major hubs such as Getty Square in Yonkers, downtown White Plains and the County campus in Valhalla (which includes Westchester Medical Center and other County facilities), major commercial corridors such as Central Avenue, or at major connections to rail transit, such as Metro North stations and subway stations in the Bronx.

The importance of the Bee Line in providing a portion of the local workforce with access to jobs is highlighted by data from the 2010 rider survey. The survey found that 62 percent of all bus passengers did not own or otherwise have access to a car. Other reasons for using the Bee Line that were cited by survey respondents in 2010 included traveling to school, shopping and recreation.

A survey conducted by NICE in February 2013 found an even higher percentage of riders – 84 percent – using bus service primarily to get to work. This implies an average of nearly 84,000 daily trips – or 42,000 people each day – using NICE to get to and from work, including some

⁸ *The Bee-Line System On-Board Survey-2010: Final Report*. Westchester County Department of Public Works and Transportation, April 2011.

⁹ Individual workers make Bee-Line trips twice a day to get to and from work. Hence, the number of individual workers using the Bee-Line on a given day in 2013 is: $(111,412 * 72\%) / 2 \sim 40,000$.

riders commuting within the County, Nassau residents commuting to jobs outside the County, and residents of other counties commuting into Nassau.¹⁰

Based on data from DPW&T's 2010 rider survey, we estimate that in 2010 the median income of Bee Line riders was approximately \$25,000. Based on a survey of NICE riders conducted in 2012¹¹, we estimate that the median income of NICE riders is currently somewhat lower – about \$20,000.

Combining these income figures with the data cited earlier on the percentage of all riders who use the Bee Line and NICE to get to work, we can infer that the “typical” users of bus services in Westchester and Nassau counties are working-age adults who are regularly employed in low- to moderate-wage jobs, and who rely on buses to get to work.

Based on these data, we can also estimate that riders who use the Bee Line to get to work have an aggregate income of approximately \$1 billion, while those who commute via NICE have an aggregate income of about \$840 million.

Bus service contributes in several ways to efficient functioning of the suburban labor market.

- Bus service gives workers access to a wider range of job opportunities, including jobs that offer higher wages and better opportunities for advancement than those that are available in their own neighborhoods.
- In particular, bus service allows these workers to access a wider range of job opportunities without having to incur the cost of car ownership.
- For some workers, access to a larger number and broader range of job openings can also translate into fewer and shorter spells of unemployment.
- Bus service gives employers access to a larger and more diverse labor pool.

The impact of bus service on suburban labor markets – and in particular, its impact on riders' earnings – is not easy to quantify. The following example can nevertheless illustrate the magnitude of this impact. To be conservative, we assume that:

- For 75 percent of all those who use the Bee Line to get to work, the availability of bus service has no impact on either employment or earnings;
- For 20 percent of all those who use the Bee Line to get to work, access to a wider range of job opportunities allows them to earn wages that are on average 10 percent higher than they could have earned in the absence of bus service; and
- At any given time, 5 percent of those who get to work via the Bee Line would in its absence be unemployed.

¹⁰ Nassau County, New York Title VI of the Civil Rights Act of 1964 - Submission to the Federal Transit Administration In Fulfillment of Reporting Requirements Outlined in FTA Circular 4702.1B. Nassau County, March 2013.

¹¹ Nassau County, New York Title VI of the Civil Rights Act of 1964 - Submission to the Federal Transit Administration In Fulfillment of Reporting Requirements Outlined in FTA Circular 4702.1B. Nassau County, March 2013.

Based on these assumptions, we can estimate that the earnings of those who use the Bee Line to get to work are in the aggregate about \$69 million higher than they would be if bus service were not available. Applying these same assumptions to Nassau County, we can estimate that the aggregate annual income of those who commute via NICE is \$58 million higher than it would be without NICE's services.

Finally, we note that in both counties, educational institutions – especially Westchester Community College and Nassau Community College – are among the leading generators of non-work bus trips. By providing residents with access to education, bus service supports the continuing development of the local workforce in both counties.

Supporting economic development

The role of bus service in sustaining the economic vitality of suburban communities can perhaps be seen most clearly in the case of major economic development projects. In Westchester County, the Bee Line's ability to extend and expand bus service on routes that serve several major new developments has been vital to their success.

- The introduction of bus service to a major new retail complex in Yonkers, opened in 1999, was seen by City officials and prospective retail tenants as essential to the viability of the project. Major retailers at the site – located in an area just off the New York State Thruway that had not been previously served by the Bee Line – include Stew Leonard's, Costco and Home Depot.
- Frequent bus service has also contributed to the success of Empire City Casino at Yonkers Raceway. Opened in 2006, Empire City quickly grew to become one of the largest casinos in the Northeast, with about 8.0 million visitors in 2012, an average of nearly 22,000 per day. To date about \$350 million has been invested in Empire City, including a \$50 million expansion completed in 2013. As of December 2012 the Casino employed more than 1,100 people, 80 percent of whom worked full-time, with the earnings of full-time employees averaging more than \$41,600.

Bus service has been essential to the Casino's ability to recruit workers – many of whom commute by bus from other neighborhoods in Yonkers, from other communities in southern Westchester and from the Bronx. It is essential as well to bringing patrons to the casino – especially as their numbers have increased. Between 2006 and 2012, ridership on the two principal bus routes serving Empire City rose by 49 percent – an increase of about 1.55 million annual riders, or about 4,250 additional riders per day.

Empire City also illustrates the mutually supporting nature of economic development projects served by public transit; as-yet unpublished survey data collected by the Westchester Department of Public Works and Transportation indicate that in May 2013,

passengers headed to or from the Casino accounted for 7 percent of all Bee Line bus trips.

- Ridge Hill – a \$700 million, 81-acre mixed use development on a ridge overlooking the New York State Thruway that opened in 2011 – is the largest private development project in the history of the City of Yonkers. Retail tenants now include Apple, Whole Foods, REI, Victoria's Secret and many others. The complex also includes restaurants, a movie theater, condominiums and a medical clinic. At full build-out, the project is expected to include 1.3 million square feet of space.

Since Ridge Hill opened, the Bee Line has expanded bus service to the site. Between 2011 and 2012, total annual ridership on the principal route serving Ridge Hill more than doubled, to more than 301,000.

While there have been no comparable bus-related developments in Nassau County in recent years, service standards published by NICE in 2013 highlight the potential for extension of bus service to support major job-generating projects. Expanded bus service could, for example, be an important component of the planned redevelopment of the Nassau Veterans Memorial Coliseum site.

Conclusion

The Bee Line and NICE are significant contributors to the economic vitality of Westchester and Nassau Counties.

- Directly and through their spending on payroll, goods and services, they account for more than 2,700 jobs and nearly \$400 million annually in economic output – about 35 times the amount the two counties spend directly on bus operations.
- Each day, more than 80,000 people use the Bee Line or NICE to get to work – many of them people who in the absence of bus service would find it difficult or impossible to reach their jobs. By widening the range of job opportunities to which these workers have access, we estimate that the Bee Line and NICE together could be adding more than \$100 million dollars each year to their riders' aggregate incomes.
- Thousands of others use these services each day to get to school, to access medical care or other services, or for shopping.
- As at Empire City Casino and Ridge Hill, extension or expansion of bus service can also play an important supporting role in the development of major new centers of employment and economic activity.

These findings strongly suggest that supporting local and regional bus service is a good investment for Westchester and Nassau counties. Westchester's consistent support for bus service has paid off especially well – not only in terms of its ongoing, day-to-day benefits but also in its contribution to new developments that have created thousands of new jobs.

Nassau County, in contrast, has in recent years reduced its support for bus service. While the decision to reduce spending on bus service is understandable in terms of the County's continuing financial problems, it may prove to be short-sighted, if in the long run it reduces residents' access to jobs and constrains the County's ability to deploy new or expanded services in response to new opportunities for economic development.

For both Westchester and Nassau, bus service is good business.