



**ECONOMIC BENEFITS OF THE
Trans-Hudson Express TUNNEL**

OVERVIEW

NJ TRANSIT's Access to the Region's Core project addresses pressing regional transportation needs and has significant economic benefits to New Jersey and New York. NJ TRANSIT is running out of tunnel and station capacity into New York City. During peak hours the existing rail network cannot keep pace with the increasing number of riders from west of the Hudson River. All trans-Hudson vehicular crossings and the New York City street network are at capacity, resulting in routine delays of 30 minutes or more. The exclusive bus lane on Route 495 that feeds the Lincoln Tunnel and the Port Authority Bus Terminal is functioning nearly at its limit. While the PATH train to 33rd Street and the trans-Hudson ferries have some remaining capacity, they have limited capability to attract significant growth in ridership.

Total NJ TRANSIT Trains in Penn Station New York in the AM Period



The Northeast Corridor into Penn Station New York is a significant choke point in NJ TRANSIT's regional rail system. By 2001, Penn Station New York had reached practical capacity at 42,500 passengers during the morning peak period. In 1994, 88 trains arrived during the morning peak; ten years later, in 2004, the number of peak trains has more than doubled to 186. Passenger demand will double over the next 15-20 years. With capacity constrained today, the ability to absorb a major influx of new jobs is severely limited. More importantly, in the absence of a solution, future regional growth is stifled – not only in terms of economic benefits but also induced residential and commercial development in communities along enhanced rail lines west of the Hudson River in New Jersey and New York.

A joint study conducted by NJ TRANSIT, the Port Authority of NY & NJ, and the Metropolitan Transportation Authority examined ways to alleviate this constraint and looked at new opportunities for growth through increased rail accessibility. Recommendations were developed to substantially improve transportation network efficiency, thereby creating a boost to the economy that would not occur without major improvement. Construction of a new Trans-Hudson Express Tunnel (THE Tunnel) was the key solution proposed by the Access to the Region's Core (ARC) study. THE Tunnel is a transit-driven solution that affords very real economic benefits to New Jersey and New York, including key sub-regions within the two states. While the over-riding benefit is improved transportation, significant economic benefits – both long and short term – positively impact employment, gross regional product, personal income and regional tax revenues.



The solution is a new state-of-the-art two-track tunnel under the Hudson River. Supporting the tunnel would be a new rail station adjacent to Penn Station New York. Improvements in New Jersey will provide a one-seat ride to and from all NJ TRANSIT rail lines serving Midtown Manhattan from New Jersey, and Orange and Rockland counties in New York. These improvements include new track along the Northeast Corridor, and a Secaucus loop connecting the Bergen County and Main lines with the Northeast Corridor.

In a separate effort, a Draft Environmental Impact Statement (DEIS) for this project is progressing under the direction of NJ TRANSIT with planning assistance from the Port Authority of NY & NJ. This work will be completed in the summer of 2006.

THE Tunnel will:

- Immediately double commuter rail capacity
- Meet demand for NJ TRANSIT service for at least 20 years
- Provide more one-seat-ride opportunities for commuters from New Jersey and from Orange and Rockland counties in New York
- Create more incentive for switching to mass transit
- Improve service to existing rail lines in the NJ TRANSIT network
- Create opportunities for new service to new markets
- Support development in Manhattan and along rail lines in New Jersey
- Add flexibility to the rail system to respond to security concerns

BENEFITS FOR THE ENTIRE REGION

THE Tunnel is a transit investment proposed by New Jersey which will provide benefits throughout the region, in New York and New Jersey. This project fuels economic growth and wealth in the region as a whole – helping the economy of BOTH states. The most important benefit of the THE Tunnel is the enhancement of regional competitiveness. More businesses will relocate to and expand in the region. Overall quality of life – a key attractor of new business – will be improved. Lowered emissions will result in cleaner air. Shorter commuting time will result in both increased labor productivity and increased leisure time. Employers will have greater access to a larger and more qualified regional workforce while employees will have greater access to more affordable housing choices.

THE Tunnel would also support the redevelopment of the west side of Manhattan. Future benefits include the potential for commercial and residential development along enhanced rail lines in New Jersey, fully supporting the state’s Smart Growth initiatives, and along rail lines in Orange and Rockland counties. Since this project benefits everyone in the region, it enjoys support from both sides of the Hudson River.

There is an important regional symbiotic relationship between Manhattan and the suburbs – while jobs are concentrated in Manhattan, job-holders frequently live in the sub-regions. One in four Midtown workers come from the suburbs – nearly half of those crossing the Hudson River from New Jersey or Orange and Rockland counties in New York. Even without the new tunnel, employment in Manhattan, the region’s economic core, is expected to grow from 2.7 million to almost 3 million over the next two decades – with over half of this growth in Midtown alone. Employment in the full study area (described below) is estimated to grow from 9.6 million to almost 11 million by 2025. One half of all new jobs created in the region will be in New York City. Future economic growth depends on reliable and convenient transportation access between Manhattan and all parts of the region.

Funding for THE Tunnel will come from local sources and the federal government. THE Tunnel will add to a package of regional projects advanced by the two states to benefit the economy of the entire region.

“The ERA impact analysis examined benefits that occur over and above what would be expected to happen in the region if this project was not built.”

The project cost is currently estimated at \$6 billion in 2005 dollars to be spent over a nine-year construction period. Full benefits of the ARC proposal will accrue over a long period of time once THE Tunnel has opened. However, the benefits of some early improvements to be completed by 2010 will enhance current capacity so rail system capacity keeps up with growing ridership until the full project is completed. At the same time – and over the long term – benefits accrue to the suburbs by way of personal income and business tax growth and increases in housing stock.

ECONOMIC AND FISCAL BENEFITS

Economics Research Associates (ERA) was retained to evaluate the economic and fiscal benefits of the proposed ARC improvements on a study area comprised of seven sub-regions in New Jersey and New York (including New York City).

The ERA impact analysis examined benefits that occur over and above what would be expected to happen in the region if this project was not built. Key findings of ERA’s report – “Economic and Fiscal Impacts of the ARC Project” – have been updated and are presented here. The economic benefits of THE Tunnel are comprised of two pieces: one–time construction benefits over the construction period and on-going permanent benefits. These economic benefits include new jobs – resulting from both increased NJ TRANSIT operations and maintenance, as well as long term job growth above what would occur absent THE Tunnel – and increases in overall economic activity, measured by gross regional product (GRP) and real personal income that derive from these new jobs.

The economic benefits that are presented result from a thorough assessment of the region’s economy and use of a nationally-recognized regional econometric model to forecast future benefits. The information coming from the model was carefully reviewed to ensure it represents a fair picture of the fiscal and economic benefits deriving from THE Tunnel.

Benefits During The Construction Period

During the construction period of THE Tunnel, New York and New Jersey will share economic benefits as a result of the creation of approximately 5,700 construction-related jobs each year. These jobs will lead to increases in GRP and real personal income generated, as shown below.

CONSTRUCTION RELATED BENEFITS

	Average Annual Jobs	Average Annual [in 2006 million \$]:	
		Gross Regional Product	Real Personal Income
NEW JERSEY	2890	\$327.8	\$196.6
NEW YORK <i>NYC portion</i>	2786 <i>2351</i>	\$333.7 <i>\$275.9</i>	\$194.0 <i>\$144.9</i>
Total	5676/year	\$661.5/year	\$390.6/year

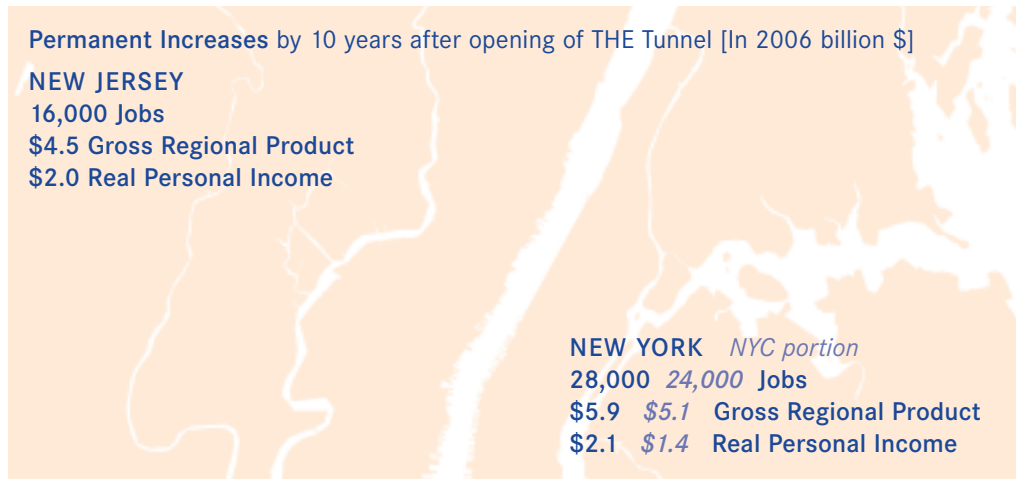
Over the nine years, ARC construction will generate real personal income within the bi-state region in excess of \$3.5 billion in 2006 dollars.

Benefits Beyond Construction

THE Tunnel will have important long-term positive benefits for the economies of both New York and New Jersey. This is partly attributable to efficiencies resulting from increased NJ TRANSIT operations and maintenance, but primarily due to increased regional competitiveness once the transportation constraints are reduced by THE Tunnel.

The charts that follow show the ongoing benefits including net new jobs, GRP, and real personal income, as well as details on new tax revenue generation for the states of New Jersey and New York (including New York City). The additional jobs, which would not occur if THE Tunnel is not built, lead to increases in the GRP and personal income. Although benefits are shown out to 10 years beyond the opening of the new tunnel, it is expected that these ongoing benefits will continue well beyond this timeframe.

The region as a whole gains 44,000 net new jobs – approximately 16,000 in New Jersey and 28,000 in New York – predominantly in the professional and business service areas. These jobs result from increased regional competitiveness as businesses relocate or expand in the region due to such factors as better quality of life, commuter access, transportation cost-savings, and lower regional housing cost. The regional GRP is projected to increase by \$10 billion in 2006 dollars. The total personal income benefit for the region is nearly \$4 billion in 2006 dollars.



Fiscal benefits are broadly divided into the categories of personal taxes paid by new residents or households, and business taxes paid by companies that relocate or expand in the region due to THE Tunnel improvements. Fiscal benefits are usually shown in nominal dollars, expressed as dollars in the years that they are collected, unadjusted for inflation.

ADDITIONAL TAXES GENERATED DUE TO THE TUNNEL [in nominal million \$]

		Total Taxes	=	Personal Taxes	+	Business Taxes	
NJ	2015	\$10.3		\$8.7		\$1.6	
	2025	\$96.7		\$87.0		\$9.7	
NY <i>NYC portion</i>	2015	\$31.6	\$12.6	\$19.3	\$4.6	\$12.3	\$8.0
	2025	\$384.0	\$171.5	\$236.6	\$62.4	\$147.3	\$109.1

“Benefits that would not otherwise have occurred without the THE Tunnel accrue to all sub-regions.”

The combined additional tax generation for the two-state region is projected at \$42 million in 2015, increasing to \$481 million by 10 years out.

SUB-REGIONAL ECONOMIC BENEFITS

ERA looked at economic benefits on select sub-regions in New Jersey and New York. These benefits also fall in the categories of employment, GRP, and real personal income. The ERA economic analysis examined the impact of THE Tunnel on seven distinct sub-regions within the states of New York and New Jersey, both during construction and over the long term. In addition to New York City, these sub-regions are:

NEW YORK sub-regions:

- Orange and Rockland Counties, NY
 - Westchester County, NY
(which also includes Fairfield County, CT, due to commuting patterns)
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NEW JERSEY sub-regions:

- Bergen, Essex, Hudson, and Passaic Counties
 - Morris, Sussex, Hunterdon, and Warren Counties
 - Somerset, Middlesex, and Union Counties
 - Monmouth and Ocean Counties
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Benefits that would not otherwise have occurred without THE Tunnel accrue to all sub-regions. The counties closest to Manhattan obviously benefit the most from the ARC improvements. As a general rule, those areas which benefit the most in terms of commute time savings also experience the greatest economic benefit.

Sub-Regional Benefits During The Construction Period

The chart below shows the average annual economic benefits generated by THE Tunnel on the sub-regions during the project construction period.

As the areas closest to the core, the New Jersey counties of Bergen, Essex, Hudson and Passaic account for 74 percent of the total jobs created in New Jersey, 71 percent of the created GRP, and 60 percent of the generated personal income in New Jersey. In the same time frame, New Jersey counties Middlesex, Somerset and Union come next in benefiting from jobs and GRP generated by THE Tunnel, followed by the sub-region composed of New York's Westchester County and Connecticut's Fairfield County. The same two sub-regions show roughly the same real personal income benefit.

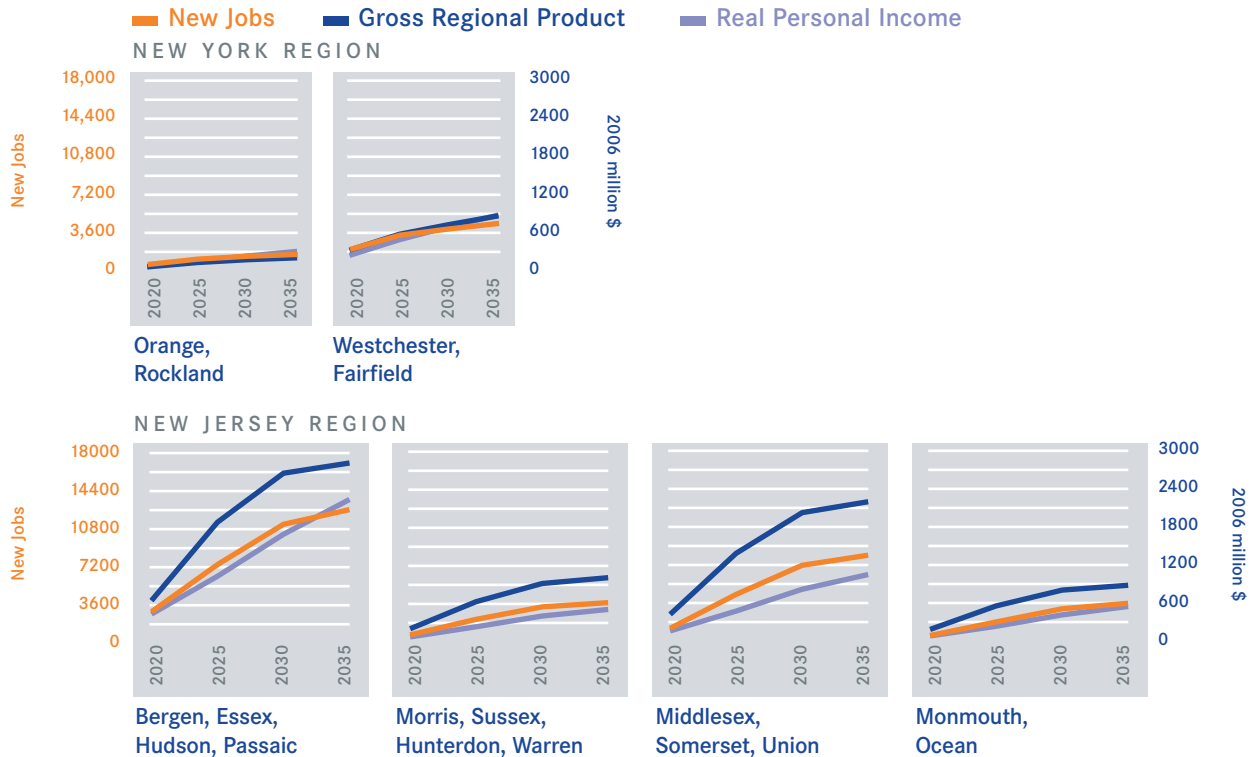
SUB-REGIONAL CONSTRUCTION RELATED BENEFITS OVER THE CONSTRUCTION PERIOD

Average Annual Jobs Created	Average Annual [in 2006 million \$]:		
	Gross Regional Product	Real Personal Income	
Orange, Rockland	117	\$12.7	\$11.0
Westchester, Fairfield	317	\$45.0	\$38.1
Bergen, Essex, Hudson, Passaic	2138	\$231.5	\$118.2
Morris, Sussex, Hunterdon, Warren	200	\$25.7	\$24.1
Middlesex, Somerset, Union	397	\$53.0	\$37.6
Monmouth, Ocean	154	\$17.6	\$16.6

Longer-Term Benefits for Sub-Regions

After ten years of operation, THE Tunnel will generate long-term economic benefits in each of the sub-regions, primarily due to decreased commuting times through more one-seat rides and improved service, and increased quality of life. While most tunnel-induced jobs over the long term are projected to be in New York City, the economic benefits – such as real personal income – accrue more toward areas where the job holders will live. Taken collectively, these benefits result from a regional economy that is more efficient and more competitive.

SUB-REGIONAL LONGER-TERM BENEFITS



In New Jersey, 47 percent of the new jobs created state-wide would be in Bergen/Essex/Hudson/Passaic counties, and 28 percent in Middlesex/Somerset/Union counties. In New York State, the Westchester sub-region accounts for the largest number of jobs over the long term.

By the end of the 10-year period, the economic benefits for GRP and real personal income mirror those for long-term jobs, attributable again to geographic proximity. Bergen/Essex/Hudson/Passaic counties are highest – they account for an increase of \$2 billion per year in GRP and \$1 billion in real personal income due to the ARC improvements. In New York, after New York City, Westchester is highest at \$577 million per year in GRP and \$491 million per year in real personal income.

REAL ESTATE AND DEVELOPMENT BENEFITS IN WEST OF HUDSON COMMUNITIES

The rail system west of the Hudson River serving New Jersey and Rockland and Orange counties in New York encompasses 10 different rail services along 954 route-miles. NJ Transit is advancing plans to expand this system with additional services. This, combined with the fact that New Jersey residents will fill many of the 16,000 new jobs expected to be created over the long term in New Jersey and a portion of those to be created in New York, means THE Tunnel will have significant implications for land use, transportation planning, and real estate values.

Opportunities exist along rail lines in New Jersey, as well as in Orange and Rockland counties in New York, to locate residential and commercial development – including retail. Cities like Newark, Elizabeth, Paterson and Hackensack, and numerous other communities along these lines can take advantage of the increased rail service possible because of the capacity THE Tunnel provides to the core of the rail system.

In New Jersey, where there is a major emphasis on Smart Growth policies and programs to encourage development of new railroad systems, state, county and local governments are poised to work together with the private sector to bring redevelopment to mature already-developed areas as well as targeted new development in urban and older suburban areas.

CONCLUSION

THE Tunnel and supporting improvements address the growing capacity crisis of NJ TRANSIT. As a bonus to the transit solution, THE Tunnel drives economic competitiveness of the entire service area. With THE Tunnel the region will experience hundreds of millions of dollars of growth in economic activity, tens of thousands of new jobs, and personal income over and above growth expected under the baseline scenario of no tunnel. With THE Tunnel in place, regional competitiveness is enhanced as businesses relocate to and expand in the region, and more workers and households locate in the region. In addition to supporting development on the west side of Manhattan, the potential exists for even more induced commercial and residential development along enhanced rail lines in New Jersey, as well as Orange and Rockland counties in New York.

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