

**Memorandum**

**To:** Ann Hulka  
**From:** Kathy Kazanas  
**Subject:** Atlantic Yards Economic Impact Analysis—Revised GPP Plan (8% Reduction)  
**Date:** December 14, 2006

It is my understanding that there have been several requests from public officials and the general public asking for the economic impact analysis that was performed by the ESDC policy division with respect to the revised GPP (Residential and Mixed-Use Plan) of the Atlantic Yards Land Use Improvement and Civic Project (the “Project”), reflecting the approximately 8 percent reduction in the scale of the original project plan as presented to the Board of Directors on December 8, 2006.. In response to those inquiries, I have set forth below a more complete description of the analysis that was performed and the basis for the conclusions set forth in the General Project Plan.

Based on the revised General Project Plan, please note the following:

**I. Project Description**

The Project, to be developed by Forest City Ratner Companies and its affiliate (“FCRC”) is comprised of the construction of an 18,000-seat arena for the New Jersey Nets basketball team and for other events, an improved LIRR train yard and subway improvements and one of two possible variations of mixed-use development: a residential mixed-use development (GPP Plan) and a commercial mixed-use development (Alternative Plan). Table 1 provides Plan detail for the Residential Mixed-Use version only.

**Table 1: Atlantic Yards Revised GPP Plan (Residential Mixed-Use) Description**

<b>Uses</b>	<b>Revised GPP Plan (Residential Mixed-Use)</b>
Residential	6,363,000 gsf (6,430 units)
Hotel (180 rooms)	165,000 gsf
Retail	247,000 gsf
Commercial	336,000 gsf
Arena	850,000 gsf
Parking (spaces)	3,670
Private Open Space	≤1 acre
Public Open Space	8 acres

Space allocations as shown in the Draft EIS. Of the total residential units in either plan, 4,500 will be rental units, 50% of which will be low and moderate income housing. The rest of the residential units will be market rate rental and condominiums.

## II. Summary of Impacts

### *Construction Impacts*

Table 2 presents the estimated one-time construction economic and fiscal impacts of the overall Project at full build-out. The overall Project construction period is assumed to be 2006-2016, during which construction will proceed in two phases.

**Table 2: One-Time Construction Impact: Economic and Fiscal Benefits\***

<b>Revised GPP Plan</b>		
	<b>NYC</b>	<b>NYS</b>
<b>Employment</b>		
Direct		12,568
Indirect & Induced		9,408
<b>Total</b>	19,229	21,976
<b>Personal Income</b> (billions 2006\$)		
Direct		0.590
Indirect & Induced		0.640
<b>Total</b>	0.903	1.231
<b>Tax Revenues</b> (millions 2006\$)	291.931	169.374

\*Dollar values are expressed as net present value in 2006\$ using a 3% real discount rate over the 10-year construction period. (Price index used is derived from the results of REMI projections.)

Construction employment is the total number of construction job years by full build-out, 2006-2016. (A job year is the total number of full-time equivalent workers who are full-time, part-time or contract workers working in one year on the project.)

NYS employment and personal income are inclusive of NYC.

The New York City tax revenue total from construction activity is inclusive of the MTA portion of tax revenues.

At full build-out in 2016, construction spending under the revised GPP Plan will generate employment impacts of an estimated 12,568 direct job years and total of 21,976 direct, indirect, and induced construction-related jobs in New York State. The New York State total includes 19,229 construction-related jobs in New York City.

Total personal income earned by direct, indirect, and induced construction-related wage earners is estimated to be \$903 million in New York City and \$1.2 billion in New York State (inclusive of New York City). Tax revenue collected by New York City as a result of construction-related activity and employment is estimated to be \$291.9 million and \$169.4 million for New York State.

### *Permanent Impacts*

Permanent economic and fiscal impacts will result from the operations of the arena and mixed-use development and the net new employment generated by such activity. Table 3 reports average annual net new employment over a 30-year period.

**Table 3: Permanent Economic and Fiscal Impact of Total Project at Full Build-Out (2016)**

<b>Revised GPP Plan</b>	<b>NYC</b>	<b>NYS</b>
<b>Employment</b>		
Direct	3,047	3,047
Indirect & Induced	1,491	2,018
<b>Total</b>	<b>4,538</b>	<b>5,065</b>
<b>Personal Income</b> (billion 2006\$)	6.268	8.217
<b>Tax Revenues</b> (million 2006\$)	360.406	575.959

\*Dollar values are expressed as net present value in 2006\$ using a 3% real discount rate over the 30 years.

(Price index used is derived from the results of REMI projections.)

Permanent employment is the annual average over the 30-year period. NYS employment and personal income are inclusive of NYC.

The NYC tax revenue total is inclusive of the MTA portion of tax revenues.

Under the revised GPP Plan, an annual average of 3,047 net new direct jobs and 5,065 total jobs (direct, indirect and induced) will be created by Project activity in New York State. Of this total, 4,538 net new jobs will be located in New York City.

The total personal income of arena and mixed-use development wage earners under the revised GPP Plan is estimated to be \$6.3 billion for New York City residents and \$8.2 billion in New York State (inclusive of New York City). Tax revenues collected by New York City as a result of Project permanent activity and employment are estimated to be \$360.4 million and \$575.9 million by New York State

### **III. Summary of Assumptions and Methodology**

The economic and fiscal impact of the Atlantic Yards project was estimated using the REMI model (Regional Economic Models, Inc.) of the New York City region. The REMI model is widely regarded as one of the more sophisticated regional economic and demographic models used for economic impact analysis. It is a dynamic model that forecasts project impacts on a regional economy. The model takes into account the adjustments that a regional economy makes over time in response to the project. Such dynamic models are considered an improvement over input-output models such as RIMS II and Implan, which provide estimates of impact for a single year with no adjustments. These differences make a comparison of estimated impact results using the different models difficult.

REMI tax revenue estimates reported here reflect a broad set of state and local tax collections including personal income tax, corporate and business income tax, sales tax, property tax, and miscellaneous other taxes.

***Construction Impacts:***

The estimated hard and soft costs of construction for the arena, arena parking, urban room, residential components (including ground floor retail and community facility space), infrastructure (including the LIRR platform and transit connections), commercial office space, hotel, and masterplanning were provided by FCRC in the GPP Sources and Uses (November 21, 2006). The estimated total Project cost is \$3.966 billion (including \$386.1 million in land acquisition). Construction economic and fiscal impacts were estimated over the ten-year period of construction 2006-2016 (full build-out).

***Arena Operations and Mixed-Use Development Impacts:***

The analysis uses projected estimates of taxable ticket, concessions, and novelties sales at the arena. FCRC provided information on current Nets players' salaries, visiting team player salaries, basketball administration and Nets staff salaries, and arena workers' payroll. Estimated personal income tax and sales tax on consumption spending were added to the REMI estimated tax revenues. The model's estimates would not have captured the initial effects of the players' earnings and consumption spending. The following assumptions are used in estimating impacts from Nets and arena operations:

- The average annual salary for an NBA player is approximately \$4.5 million, based on information obtained from the NBA by FCRC. The analysis assumes that 30% of Nets players live in New York City and pay both City and State personal income tax. The other 70% live outside of New York City and pay New York State personal income tax only.
- A portion of the visiting team players' salaries is earned in Brooklyn and only New York State personal income tax is paid on such amount. All spending from income earned in New York City by visiting team players happens outside of the City and State.
- Both economic and fiscal benefits from arena operations are based on non-basketball event ticket revenues and surcharges, sale of novelties and concessions, sponsorship, and advertising. Sales tax revenues are based on both basketball and non-basketball event taxable items.
- Taxable consumption expenditures are assumed to be 40% of disposable income. Sales tax rate is 8.375% (both State and City Sales Tax is 4% and an additional 0.375% collected for the MTA).
- Direct jobs for mixed-use development were estimated at full build-out using the following assumptions:

**Table 5: Space Allocations by Use at Full Build-Out**

<b>Revised GPP Plan</b>	<b>GSF</b>	<b># Units</b>	<b>Occupancy</b>	<b>Direct Jobs</b>
Office (250gsf/job)	336,000		0.93	1,250
Hotel (0.75 units/job)	165,000	180	0.80	108
Arena	850,000			453
Retail (300 gsf/job)	247,000			823
Parking (spaces)		3,670		92
Residential (20 units/job)	6,363,000	6,430		322
	7,961,000			<b>3,047</b>

- Direct commercial office jobs were adjusted by 75% to account for New York City residency. Direct jobs in all other categories of direct employment were considered 100% New York City resident.
- This analysis does not include any economic or fiscal benefit generated by net new households that are related to this project