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The Long-Term Costs and Benefits of the New York Sports and Convention Center

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SUMMARY

IN JULY 2004, IBO ESTIMATED the annual economic and fiscal impacts of the proposed New York Sports and Convention Center (NYSCC) on Manhattan's West Side (*West Side Stadium: Touchdown for the City?* and an accompanying technical paper *Estimating the Economic and Fiscal Impacts of the New York Sports and Convention Center*). The present paper updates our annual estimates and extends the analysis by examining the long-term fiscal costs and benefits of the NYSCC.

Our major findings are:

- As a long-term investment, the sports and convention center would generate a \$92.5 million fiscal surplus for the city, part of a combined \$210.0 million surplus for the city, state, and Metropolitan Transportation Authority (MTA) over the 31-year term of finance.
- If the NYSCC operated as a stadium only, the city would suffer a net fiscal loss of \$145.2 million over the financing term, and the combined city-state-MTA net loss would be \$244.3 million.
- To break even as a public investment (generate enough tax revenue to cover the city's and state's costs), the NYSCC would need to host about 14 conventions per year, less than two-thirds of IBO's baseline estimate of 24 conventions per year.
- Annual NYSCC operations and visitor spending would generate \$477.2 million in new industrial output and 3,465 jobs in New York City, accompanied by \$25.5 million in city tax revenues and \$51.9 million in total city-state-MTA revenues.
- During the four-year construction phase of the project, an average of \$488 million in new output and 2,880 jobs would be added annually to the city economy.

INTRODUCTION

One of the basic questions surrounding the proposed New York Sports and Convention Center is whether the fiscal benefits generated by the facility would be greater than the public costs—and if so, how much greater. To answer that question, in this report IBO undertakes a long-term analysis, taking account of the timing and growth of NYSCC-related tax revenues over the term of the project relative to the timing of the associated public costs. This analysis allows us to specify levels of NYSCC usage at which the facility would pay back the city's and state's \$300 million investments, and to estimate the fiscal surpluses or deficits that would accompany higher (IBO baseline) or lower levels of usage.

In addition, we have updated the annual estimates in our July paper and included an estimate of the economic and fiscal impacts of the construction phase of the project. The paper concludes with a discussion of NYSCC-related construction and operations impacts (including Super Bowls) not factored into the "basic package" of project costs and benefits.

ANNUAL IMPACTS: UPDATES AND EXTENSIONS

Economic Impacts. IBO's updated and revised projections of the annual economic and fiscal impacts of NYSCC operations are provided in the upper portion of the table on annual and long-term impacts of the sports and convention center. Our new baseline estimates of New York City employment (3,465), industrial output (\$477.2 million), and value added (\$279.4 million), are slightly lower than our July baseline estimates, while our earnings estimate (\$147.2 million) is marginally higher.¹

These changes reflect several adjustments in convention visitor spending² partially offset by upward revisions (based on new data for estimating attendance and outlays at convention events) in exhibitor spending.³ Also reducing the output estimate is a more conservative calculation of the amount of stadium revenues respent within New York City.⁴ The change in the *composition* of the output generated by NYSCC operations—less weighted towards individual spending on hotels and restaurants, more weighted towards organization spending on higher-wage business services—explains most of the increase in overall baseline earnings even as output, value added, and employment are reduced.⁵

Fiscal Impacts. IBO now estimates that NYSCC operations would annually generate \$25.5 million in city tax revenues. This is \$2.9 million less than IBO's July estimate. This stems

mostly from drops in estimated sales and hotel tax impacts corresponding to the reduced visitor spending just noted,⁶ but technical adjustments to IBO's personal income tax⁷ and property tax⁸ estimates are also a factor. IBO's new baseline state tax revenue impact estimate of \$25.2 million is actually \$0.3 million higher than our July estimate. This is mainly due to the inclusion of \$2.8 million in state tax revenues derived from secondary economic impacts outside of New York City from NYSCC operations. With this newly added factor, IBO's baseline estimate of the total annual city-state-MTA tax revenue gain (\$51.9 million) from NYSCC operations is \$2.5 million less than our July estimate.

Construction Impacts. Plans for the construction of the NYSCC call for a \$1.4 billion investment over four years to build the facility (\$800 million provided by the Jets) and supporting infrastructure (\$300 million each by the city and state for the western rail yards platform and the stadium roof).9 IBO estimates that over the 2006-2009 construction period, these outlays would generate an annual average of \$488 million in industrial output in New York City (of which \$245 million would be value added) accompanied by 2,880 jobs with \$156 million in earnings. Three-quarters (about 2,130) of these jobs, with \$96 million in earnings, would go to New York City residents. As expected, the lion's shares of the jobs and earnings would accrue to the construction sector—some 2,080 jobs per year with \$113 million in earnings, of which about 1,480 jobs with \$66 million in earnings would likely be held by city residents. This economic activity would in turn generate an annual average of \$10.8 million in city tax revenues, \$12.5 million in state tax revenues (the latter including \$2.4 million from secondary construction impacts outside New York City), and \$0.4 million in MTA tax surcharge revenues.

Debt-Service Costs. According to the NYSCC General Project Plan, the city and state would make their respective contributions to the project by splitting the debt service and issuance costs for \$600 million in tax-exempt public sector bonds issued by a jointly controlled local development corporation (LDC). In testimony before the City Council on February 7th, Bloomberg Administration officials presented new information regarding their financing plan which changes the assumptions regarding the timing of debt-service payments. As of this writing, the plan is for 30-year bonds to be issued at the beginning of the construction period (IBO assumes issuance in July 2005, with a 1 percent cost of issuance folded into the principal). However, the first three years of interest due would be capitalized, so that debt-service payments would not begin until fiscal year 2009. Moreover, payments would be accelerated, reducing the effective term of the bonds to 21

Annual and Long-Term Impacts of the Proposed New York Sports and Convention Center

(Except employment, all amounts in millions expressed in fiscal 2005 dollars)

	IBO baseline				Stadium operations only				Break even ¹			
	City	State	MTA	Total	City	State	MTA	Total	City	State	MTA	Total
A. Annual Operating Impacts												
Annual event profile												
Stadium events ²				17				17				17
Expositions				20				0				11.9
Mega events ³				2				0				1.2
Plenaries				2				0				1.2
Annual economic impact												
Employment	3,465	3,791	-	-	1,177	1,299	-	-	2,574	2,820	-	-
Output	\$477.2	\$537.7	-	-	\$193.5	\$215.9	-	-	\$366.4	\$412.0	-	-
Value added ⁴	279.4	316.0	-	-	115.0	128.7	-	-	215.2	242.8	-	-
Earnings	147.2	161.1	-	-	60.5	65.5	-	-	113.3	123.7	-	-
Annual fiscal impact												
General sales tax	12.3	13.9	0.9	27.1	5.2	5.8	0.4	11.4	9.5	10.7	0.7	20.9
Real property tax ⁵	3.7	_	_	3.7	1.2	_	_	1.2	2.7	_	_	2.7
Personal income tax	2.0	6.8	-	8.7	0.7	3.0	-	3.7	1.5	5.3	-	6.8
Business income taxes	2.8	1.9	0.3	5.0	1.2	8.0	0.1	2.2	2.2	1.5	0.3	3.9
Hotel tax	3.4	-	-	3.4	*	-	-	0.0	2.1	-	-	2.1
All other taxes	1.3	2.7	0.1	4.0	0.5	1.1	*	1.6	1.0	2.1	*	3.0
TOTAL TAXES	\$25.5	\$25.2	\$1.2	\$51.9	\$8.8	\$10.7	\$0.5	\$20.1	\$19.0	\$19.6	\$1.0	\$39.5

B. Long-Term Costs and Benefits ⁶												
Revenues												
Construction phase	35.8	45.0	1.6	82.4	35.8	45.0	1.6	82.4	35.8	45.0	1.6	82.4
Operations phase												
Stadium operations	125.3	153.2	7.5	285.9	125.3	153.2	7.5	285.9	125.3	153.2	7.5	285.9
Convention operations	237.7	206.3	10.3	454.3	0.0	0.0	0.0	0.0	145.2	125.8	6.3	277.2
Total Operations	363.0	359.4	17.8	740.2	125.3	153.2	7.5	285.9	270.5	278.9	13.8	563.2
Total revenues	398.8	404.4	19.4	822.6	161.1	198.1	9.1	368.4	306.3	323.9	15.4	645.6
Less: Debt-service costs	(306.3)	(306.3)	0.0	(612.6)	(306.3)	(306.3)	0.0	(612.6)	(306.3)	(306.3)	0.0	(612.6)
NET REVENUES	\$92.5	\$98.1	\$19.4	\$210.0	(\$145.2)	(\$108.2)	\$9.1	(\$244.3)	\$0.0	\$17.6	\$15.4	\$33.0

SOURCE: IBO.

NOTES: * = < \$0.05 million. ¹-Generates sufficient revenues over term of financing (fiscal years 2006-2036) to offset the costs of the public investments in the NYSCC. ²-Includes football and soccer games and stadium concerts. ³-Includes Final Four, arena concerts, and college bowl games. ⁴-Total industry output less intermediary inputs. Corresponds in aggregate to gross product. ⁵-Property tax impact when lagged real property assessment changes are fully phased in. ⁴-Net present value of total revenues generated and costs assumed over term of financing (fiscal years 2006-2036).

years (2009-2029). IBO assumes that the coupon or interest rate on these bonds would be 6.00 percent (slightly higher than the contemporaneous 5.75 percent rate expected for less risky city general obligation (GO) bonds of a similar term). Total annual payments due from the city for the initial issuance would be \$25.9 million in fiscal year 2009 and \$31.5 million per year for the following 20 years (fiscal years 2010-2029).¹⁰

LONG-TERM NET FISCAL BENEFITS

IBO estimates that in the first year of NYSCC operations, city fiscal year 2010, NYSCC-related debt-service costs would exceed the city's NYSCC-related tax revenues by \$5.3 million,

and the total city-state-MTA fiscal deficit would be \$8.0 million (see the table, on our Website "IBO Baseline Projection of NYSCC Fiscal Impacts Over Project Term of Financing" 11). However, in subsequent years the nominal value of the NYSCC's output and tax revenue impacts would increase through price inflation, while annual nominal debt-service costs would be fixed. Thus, given IBO's inflation assumptions, by 2016 NYSCC-related city revenues would just offset debt-service obligations, and by 2029—the last year of debt-service payments—the margin of NYSCC-related city revenues over costs would reach \$12 million. Thereafter the net city cash flow from the facility would be much larger, jumping to \$44.5 million in 2030 and reaching \$51.4 million

by 2036. The total city-state-MTA fiscal benefit would trace a similar growth path. By 2036 total (and net) NYSCC-related tax revenues would reach \$103.8 million.

But due to the time-value of money (the potential returns accruing to a dollar gained today make it worth more than a dollar gained next year), cash flow dollars will diminish in real (inflation-adjusted) value over the length of a project. Net present value (NPV) analysis is used to convert the cash flows projected over the life of the project into a number that accounts for the time-value of money.

Assumptions. For IBO's net present value analysis we equate the life of the project with the term of the bonds financing the city's contribution to it, that is, the "normal" term without interest capitalization and payment acceleration, which would be 31 years. This takes us through the four-year construction phase (2006-2009) plus an operations period of 27 years (that is, 2010 through 2036), a time span we believe to be close to the typical period over which modern stadiums depreciate and require extensive reconstruction or replacement. We have inflated NYSCC-related output and tax revenues by approximately 2.0 percent per year through 2013, by 2.1 percent to 2.4 percent from 2014-2020, and by about 2.5 percent thereafter.¹² In our relatively mild near-term output price growth projections we follow extant forecasts, but we then posit a transition to a somewhat higher inflation plateau for the longer term.¹³ We also adjust the entire series for the industry mix of the direct and secondary output generated by the NYSCC; that adds about 0.20 percentage points to 0.25 percentage points to the annual price growth rate.

In selecting a 6.00 percent discount rate to obtain the NPV of the projected net revenues, IBO follows the convention for public investments of using the interest rate(s) on marketable securities (in this case, city general obligation bonds) of similar maturity to the debt the project is expected to issue—which in this case, despite the planned payment acceleration, would be considered 30 year debt. The Mayor's Office of Management and Budget currently assumes that city 30-year GO interest rates will rise to 6.00 percent during calendar year 2005, the period when the city's and state's NYSCC debt obligations are to be incurred.

Findings. With these terms, growth, and discount rate assumptions in place, the long-term costs and benefits of the NYSCC are shown in the bottom section of the table on annual and long-term impacts of the facility. IBO's baseline estimate yields a net present value fiscal surplus for the city of \$92.5 million, that is to say, \$398.8 million in city revenues

generated by NYSCC economic impacts through 2036 less \$306.3 million in debt-service costs for the city's investment. Construction-related economic impacts account for \$35.8 million in city revenues, while facility operations-related impacts generate \$363.0 million.

In the baseline estimate the state's long-term revenue gain (\$404.4 million) and surplus (\$98.1 million) are \$5.6 million greater than the city's; slightly smaller operations impacts (\$359.4 million) would be more than offset by larger construction impacts (\$45.0 million). Adding the NPV of the impact on MTA surcharge revenues¹⁴ (\$19.4 million), the total long-term city-state-MTA revenue gain from the NYSCC would be \$822.6 million, and the total fiscal surplus would be \$210.0 million.

Note that these findings incorporate estimated debt-service costs based on the Bloomberg Administration's latest description of its financing plan presented to the City Council on February 7th. The net fiscal impacts presented in this report differ slightly from the estimates given in IBO's testimony at the same hearing, which had been based on earlier descriptions of the financing plan.

BREAK-EVEN ANALYSIS

Present value analysis confirms the by now almost conventional wisdom that sports facilities are often poor public investments from a purely financial perspective. As can be seen in the second panel of the table, were the NYSCC to operate only as a stadium, the annual impact on New York City output and employment would be only a little more than a third of IBO's baseline projection. Over the life of the project operationsrelated city revenues would be only \$125.3 million, \$237.7 million less than in IBO's baseline. The total city revenue impact (including the \$35.8 million generated by facility construction) of \$161.1 million would fall \$145.2 million short of the city's investment costs, part of a combined city-state-MTA net loss of \$244.3 million over the life of the project. (These losses exclude, and would be reduced by, periodic Super Bowls. For the economic and fiscal impacts of hosting Super Bowls at the NYSCC, see below.)

Thus it is only with some level of convention activity that the NYSCC would pay off its public investment. Present value analysis allows us to pinpoint that level of NYSCC usage at which the project will, from the city's fiscal perspective, break even, that is, the level at which the present value of the stream of revenues associated with the NYSCC will reach the \$306.3 million present value cost of the city's investment.

Specifically, given \$35.8 million from NYSCC construction and \$125.3 million from stadium operations, we must find the amount of convention activity that would generate the needed additional \$145.2 million.

The third panel of the table shows that roughly 14 conventions (to be exact, an annual average of 11.9 expositions, 1.2 mega events, and 1.2 plenaries) would be required to generate the needed revenues. This is just under 60 percent of IBO's baseline projection of convention activities. Various other mixes of annual convention activities would equivalently allow the city to break even on its investment: for example, eight expositions, two mega events, and one plenary; or 13 expositions, two mega events, and no plenaries; or 14 expositions, one mega event, and one plenary.

At these levels of activity, the state would accrue slightly more NYSCC stadium and convention-related revenues than the city, instead of (as in the baseline estimate) slightly less. As a result, when the city is breaking even, the state would still be running a small (\$17.6 million) fiscal surplus. This is due to the city's and state's differing degrees of dependency on NYSCC convention activity for project-related revenues.

CITY AND STATE RISK

As we have seen, in IBO's baseline estimate the state would gain \$9.2 million more than the city in NYSCC construction-related revenues, while getting \$3.6 million less operations-related revenues. However, the state's long-term fiscal benefit just from *stadium* operations would be \$27.9 million greater than the city's, while the state's gain from baseline *convention* operations would be \$31.4 million less than the city's.

This reflects marked differences in the city and state revenue impacts per event. In fiscal 2005 dollars, a stadium event would generate \$517,000 in city tax revenues and \$632,000 in state tax revenues (plus \$31,000 in MTA surcharge revenues). The average convention event would yield \$695,000 for the city and \$603,000 for the state (plus \$30,000 for the MTA). The higher state revenue impact from stadium events is mostly due to the additional sales and income taxes from secondary output and earnings generated outside New York City. The higher city revenue impact from conventions is largely accounted for by the city hotel tax.

From the above it follows that the success of the NYSCC as a convention center would be more critical to the return on the city's investment in the project than to the return on the state's investment. In the various city break-even scenarios, revenues

from convention operations would account for about 47 percent of total NYSCC-related city revenues while revenues from stadium operations would account for 41 percent and construction-related revenues almost 12 percent. Meanwhile, only 39 percent of total NYSCC-related state revenues would be generated by convention operations, compared to 47 percent generated by stadium operations and 14 percent by construction impacts.

The converse of the city's greater downside risk is its greater upside potential. To whatever extent the NYSCC attracts more convention activity than projected in IBO's baseline estimate, the city's marginal fiscal gain would be more than the state's. ¹⁶

ANCILLARY CONSTRUCTION COSTS

The findings relayed above are for the "basic package" of NYSCC construction and operations impacts. But a number of additional impacts during both phases of the project may have some bearing on the estimation of the long-term fiscal surplus and public risk margin for the facility. These include NYSCC-related construction not covered by the \$1.4 billion financing and periodic Super Bowls. Construction costs are considered in this section, hosting the Super Bowl in the next.

Additional Construction. West Side development plans include five NYSCC-related construction items that are outside the footprint of the NYSCC and are not covered by the \$1.4 billion budgeted by the city, state, and Jets for the facility and supporting infrastructure: a platform over the West Side Highway (\$55 million); a two-tier "game porch" north of the stadium (\$66 million); a pedestrian bridge over the highway at 33rd Street (included in the cost of the game porch); a second pedestrian bridge over the highway (and providing access to a ferry terminal) at 39th Street (\$18 million); and a pedestrian tunnel connecting the NYSCC, the expanded Javits center, and the extended 7 subway line (\$30 million). The highway platform may be (for now) set aside, as it would be built pursuant to hosting the 2012 Olympics and financed by the Olympics; there are no current plans for either the city or the Jets to construct the platform if the city's bid for the Olympics fails. Consequently at this point neither the costs nor the benefits attendant to construction of the highway platform should be charged to the NYSCC. That leaves \$114 million of ancillary construction costs for the game porch, two pedestrian bridges, and pedestrian tunnel.

Current plans call for the Jets to finance construction of the game porch and 33rd Street bridge out of savings from financing half of their main \$800 million stadium investment

through tax exempt local development corporation (LDC) "Jets Bonds" that will be backed by payments in lieu of taxes (PILOT) from the Jets to the LDC. (Note that the PILOT payments to the LDC do not supersede any of the tax revenues contributing to the city, state, and MTA fiscal surpluses estimated above.¹⁷) The Jets have also agreed to finance half (\$9 million) of the 39th Street bridge construction; that brings the total ancillary construction financing commitment by the team to \$75 million. At present, neither the Jets nor the city or state have budgeted financing for the pedestrian tunnel connecting the NYSCC to the Javits center and subway. Should the city and state evenly share the \$30 million cost of the tunnel construction, as well as the remaining \$9 million for the 39th Street bridge, they would each face additional debt-service costs of \$19.7 million over the life of the project.

Those costs would be somewhat mitigated, however, by the revenue impacts of the additional construction. IBO estimates that construction of the game porch, pedestrian bridges, and pedestrian tunnel would add an average of \$40 million output and about 225 jobs per year to the local economic impact of the NYSCC during the 2006-2009 construction phase, and increase the city's long-term revenue gain from the development by about \$3.2 million, part of a combined additional city-state-MTA revenue gain of \$7.3 million.

Subtracting these additional revenues from the additional debt service would leave net reductions of \$16.5 million in the present value city fiscal surplus and of \$32.2 million in the combined city-state-MTA surplus.

Note that from the public's perspective, NYSCC construction cost overruns paid for by the Jets would have the same impact as the ancillary construction discussed above: they would represent additional dollars of output in the regional economy—additional expenditures on labor and capital inputs—generating additional tax dollars and larger fiscal surpluses for the city, state, and MTA.

THE SUPER BOWL

Considerable disagreement and imprecision beset estimates of the impact of a Super Bowl on a host city's economy: impact estimates for recent and prospective Super Bowls range from zero to \$400 million. In comparison with a regular football game, stadium ticket and concessions revenue is much higher, and a high share of revenue comes from overnight visitors, who also generate substantial spending away from the stadium (hotels, restaurants, retail etc.). On the other hand, as reflected in the fact that the host team receives only 5 percent of Super

Bowl stadium revenue, the "leakage" from that revenue (the outflow to non-local producers and households) is considerable, or in other words the secondary impacts of stadium revenue in the local economy (the multipliers) are relatively weak.

With adjustments for these factors, IBO estimates that a Super Bowl at the NYSCC would generate about \$154 million of industry output in New York City, yielding around \$9.4 million in city tax revenues and just over twice that (\$19.3 million) in total city-state-MTA revenues. ¹⁹ Supposing that four Super Bowls are hosted (at eight year intervals) between the opening of the stadium and 2036, in present value dollars approximately \$20.2 million would be added to the city net fiscal benefit, \$20.3 million to the state net fiscal benefit, and \$1.0 million to the MTA fiscal benefit.

CONCLUSION

At the outset we noted that one of the critical questions asked of the proposed New York Sports and Convention Center is whether the fiscal benefits generated by the facility would equal or exceed the public costs. Were the facility to operate only as a football stadium the answer to that question would be no; without convention activity—or even with a small amount of convention activity—the NYSCC would fall short as a long-term public investment. But the amount of new convention activity needed for the city's and state's investments to break even is less than two-thirds the amount of such activity anticipated by IBO. At the level of usage projected by IBO, tax revenues generated by the NYSCC would be sufficient to cover the city's and state's anticipated costs and provide total public-sector surpluses totaling over \$200 million over the project's term of financing.

Written by David Belkin and Rachelle Celebrezze

END NOTES

- ¹ All dollar amounts in this paper, except where noted, are expressed in fiscal year 2005 dollars.
- ² Major adjustments to IBO's July baseline visitor attendance estimate include reestimation of per exposition attendance, revisions to the estimated durations of attendance at convention events, and correction of a spreadsheet formula error. Along with a few other technical changes, the adjustments reduce baseline visitor spending by \$44 million. With secondary impacts, the adjustment to city output is a decline of \$67 million.

IBO's July estimate of per exposition visitor attendance was 4,389. Our new baseline estimate is 6,250. This is a weighted average for the 18 tradeshows and two consumer shows that comprise the 20 expositions in IBO's baseline, multiplied by HVS Convention, Sports & Entertainment Consulting's attendance estimates of 5,500 per tradeshow and 13,000 per consumer show.

New data from the International Association of Convention and Visitor Bureaus (IACVB, September 2004) has prompted revisions to the

estimated durations of attendance at convention events, including increasing the estimated length of stay exposition overnight visitors from 3.0 days to 3.6 days; conversely, the calculated days of attendance for regional day visitors has been lowered from three to two.

³ Based on the newest International Association of Convention and Visitors Bureaus data, IBO has significantly revised our estimates of associations' and exhibitors' daily operational expenditures. In our July 2004 analysis, we estimated association expenditures at the equivalent of \$149,000 per association per day. This was multiplied by an average of 4.19 days per event. Our updated estimate of association expenditures for both expositions and plenary sessions is approximately \$166,000 per association per day for 4.32 days. According to the most recent IACVB study, the growth in association spending can primarily be attributed to increased fees for exhibition space, services hired, and equipment rental. IBO's estimation of exhibitors' expenditures has also greatly increased based on the IACVB data. The July 2004 report estimated average exhibitor spending at \$304 per day over 3.77 days. IBO now projects average daily expenditures per exhibitor to total \$1,975, with an average event length of 3.66 days. It appears that much of the exhibitor spending increase can be attributed to higher staff living expenses. The exhibitor and association spending adjustments have added nearly \$30 million to IBO's estimate of total NYSCC-related output. ⁴ Specifically, earnings and output multipliers are adjusted such that effectively only about 13 cents out of every dollar paid out of stadium revenues to households (that is, paid out as compensation to Jets team personnel) are spent on goods and services produced by the New York City economy. This reduces the secondary output impact of stadium operations by nearly \$10 million. ⁵ In IBO's revised estimates the largest NYSCC impacts (ranked by industry employment; employment numbers are rounded) are in eating and drinking places (1,315 jobs with \$27.2 million earnings, including 1,080 jobs with \$19.5 million earnings for city residents); hotels and amusements (935 jobs with \$54.9 million earnings, including 770 jobs with \$25.5 million earnings for residents); business services (280 jobs with \$18.9 million earnings, including 230 jobs with \$13.6 million earnings for residents); transportation (230 jobs, \$13.7 million earnings, including 160 jobs, \$8.2 million earnings for residents); and retail trade (almost 230 jobs, \$7.4 million earnings, including 190 jobs and \$5.0 million earnings for residents). Hotels and amusements employment is 162 less than estimated in July, eating and drinking employment is 140 less, and business services employment is 90 more.

⁶ The sales and hotel tax estimates have been reduced by a combined \$2.1 million.

A \$0.9 million reduction in IBO's personal income tax estimate reflects the incorporation of several refinements in our calculation of the base for this tax, particularly with regard to the derivation of taxable income. IBO's July personal income tax impact estimate already reflected the earnings/output share noted above and differentiated resident and nonresident (hence not city taxable) earnings in all the sectors with job impacts from the NYSCC. Now, in addition, IBO has estimated the taxable share of new employee earnings sector by sector, and given the relatively low income brackets into which the bulk of the new jobs held by residents would fall (particularly jobs in the eating and drinking, hotel, and retail trade sectors), this exercise has yielded a lower taxable personal income base. We estimate that overall about 62 percent of new resident (employee and owner) net earnings from NYSCC operations would be taxable—considerably lower than the approximately 81 percent that obtains for all city taxpayers; but the latter ratio is boosted by the large contributions to total city adjusted gross income of high-income taxpayers in notably the financial and business services sectors, which would not be greatly impacted by the NYSCC. We have also revised upward our estimate of the share of new business net income earned by city residents, but this adjustment does not fully offset the downward revision in taxable resident employee earnings.

⁸ A \$0.5 million increase in the property tax estimate is the result of more completely capturing the lagged impacts of changes in economic activity on property assessments. It takes up to seven years for an economic impact to change real estate values and (in some classes of property) for the change in values to then work its way through the formulaic adjustments to assessed value that generate changes in actual property tax collections. Thus the property tax impact of the first (city fiscal) year of NYSCC operations, 2010, would not be entirely realized in all property tax classes until 2017. It is the fully realized property tax collections impact that we use in our annual fiscal impact estimates. Note that the property tax impact is derived entirely from *offsite* economic activity generated by the NYSCC: the facility itself, being constructed on public land, would be taxexempt.

debt-service numbers are expressed in current or nominal dollars rather than fiscal year 2005 dollars. Whereas the annual dollar impact numbers grow year by year in nominal terms but are fixed in real (inflation-adjusted terms), the annual debt service cost from 2010-2029 is virtually fixed in nominal terms but declines year by year in real (inflation-adjusted) terms. Hence the annual impact, but not the annual debt service, can be expressed as a constant dollar amount.

11 As the table shows, in 2010 NYSCC-related city tax revenues would be comprised of \$23.7 million in operations-related revenues and \$2.5 million in construction-related revenues. The latter are lagged property tax impacts from the already completed 2006-2009 construction phase. The former includes no property taxes at all; property tax impacts from 2010 NYSCC operations would not start to phase in until 2012.

¹² The 2.5 percent to 3.0 percent inflation rates used in other West Side development project analyses probably represent consumer price index (CPI) growth. However, since IBO's tax revenue impact estimates are largely generated off of changes in output and its components, we expect that gross product inflation, and not consumption basket inflation, should drive nominal tax revenue growth. Historically and conventionally, implicit gross product price deflator growth runs about 0.3 percentage points below CPI growth.
¹³ The Congressional Budget Office's most recent (September 2004) Budget and Economic Outlook Update forecasts annual gross domestic product deflator growth of under 1.8 percent for 2009-2014. Economy.com likewise now (November 2004) projects both national and local output deflator growth of only 1.8 percent for 2007-2013.

¹⁴ In all of the impact analyses of the NYSCC, the MTA fiscal benefit consists of the transportation district surcharge revenues impact only. The MTA will also receive a payment from the Jets for leasing the airspace above the rail yards to the project LDC.

¹⁵ As one would expect, the tax revenue impacts per event would be much larger for mega events (\$2.45 million city taxes, \$2.07 million state taxes) and plenaries (\$2.02 million city taxes, \$1.68 million state taxes) than for expositions (\$387,000 city taxes, \$347,000 state taxes).

¹⁶ Thus for example if the NYSCC obtained the 38 expositions, two mega events, and three plenaries per year projected by the Jets, the city's long-term revenue gain as estimated by IBO would be \$112.2 million higher than in IBO's baseline estimate while the state's long-term gain would be \$98.7 million higher. The total city (\$204.7 million)-state (\$196.7 million)-MTA (\$24.3 million) fiscal surplus as calculated by IBO would be \$425.7 million.

¹⁷ The PILOTS, "which will not exceed real estate taxes that would otherwise be payable but for public ownership" (Empire State Development Corporation, "New York Sports and Convention Center General Project Plan"), are not included in any measures of the public fiscal surplus, as any PILOT revenues in excess of what is needed to fund the Jets Bonds are intended to apply "toward operating and maintenance costs, and capital renewal and replacement costs, of the NYSCC" (ibid.).

¹⁸ See *Sports Business News*, "The questionable economic benefits of hosting a Super Bowl," n.d., at http://www.sportsbusinessnews.com/ index.asp?story_id=29633.

¹⁹ IBO's estimate retains the Jets' assumption that a Super Bowl and related activities would draw 115,400 to New York City (including 75,000 actually attending the game), with 90 percent of these constituting overnight visitors. By way of comparison, the Jets themselves estimate a Super Bowl impact (restated in fiscal 2005 dollars) of \$225 million on city output, yielding \$13.6 million in city tax revenues and a total of \$28.2 million in state and local revenues.

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⁹ Not included in this basic package are ancillary construction costs, discussed below

¹⁰ Note that unlike the economic and fiscal impact figures given above, the annual