11-2-2006

Preliminary Economic Impact Analysis for the Lincoln Arena Task Force

Eric Thompson
University of Nebraska - Lincoln, ethompson2@unl.edu

A Bureau of Business Research Report
From the University of Nebraska–Lincoln

Final Report

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November 2, 2006
Bureau of Business Research
Department of Economics
College of Business Administration
University of Nebraska–Lincoln
Dr. Eric C. Thompson, Director

I. Introduction

The entertainment industry is part of the growing service sector in the state and national economy. The industry both creates employment opportunities and contributes to the quality of life within communities. To fully grow the entertainment industry, however, a city requires appropriate venues to host entertainment events. In the City of Lincoln, Nebraska, there has been a recent proposal to develop a new arena facility for this growing City. The following report addresses some of the economic consequences of developing a new arena in Lincoln. In particular, the report estimates the potential economic impact of the proposed project, that is, the net increase in business receipts, employment and income the project can bring to Lincoln. Analysis is conducted both for the construction phase of the project as well as the annual impact when the proposed arena is in operation.

This preliminary study, however, does not address some of the other economic consequences of the proposed arena. First, the current study is not a fiscal analysis. There is no attempt to estimate the changes in revenues and expenses to the City of Lincoln due to the arena project. These issues are only discussed as they pertain to the economic impact. Second, the current study also is not a benefit-cost analysis. The study does not consider the economic consequences of the arena's contribution to the City's quality-of-life.

II. Net Economic Impact

Estimating net economic impact involves two steps. First, it is necessary to measure the gross increase in economic activity due to the project. Second, any decline in economic activity due to the project must be estimated and subtracted from the gross increase, yielding the net impact. Following this approach, this study measures both the gross gain and gross loss in economic activity in Lincoln due to the arena project, and then calculates the net gain, that is, the net economic impact

There are two types of gross increases in activity. The first is the construction impact. This is the jobs and income created during the construction phase of the project. The second impact is the annual impact once the venue is completed and in operation. This includes the jobs and income due to employment at the arena during events and the off-site spending of audiences attending arena events.

The gross loss in economic activity refers to any decline in economic activity elsewhere in Lincoln. For example, building and opening the proposed arena could spell the end of events at the Pershing Center, leading to a decline in economic activity. Another key loss ties into the funding for the proposed project. As will be explained later, some of the revenue earmarked for the project would have otherwise become general revenue for local government. At the same time, any general revenue increases (adding a city lodging tax) would retard existing activity among the taxed good or service by a modest amount, again retarding general revenue. The loss of this general revenue means slower growth in revenue available for other local government projects. These reductions in activity also must be considered part of the gross loss.

III. Gross Gain

A. Construction Period

The construction impact occurs as the arena, hotel, convention center, and parking is built, and as the site is purchased and provided with infrastructure. This economic impact will occur over a period of several years. We present impacts for the entire construction period.

The largest portion of the construction impact is from the direct employment, worker earnings, and total output from building the facilities. There is also an additional "multiplier" effect that occurs throughout the economy. This multiplier effect occurs as business working on the project purchase supplies and services from local firms such as building supplies and legal and accounting services. The multiplier effect also occurs as project workers spend their income on all of the normal items of household consumption such as housing, food, retail, and health care. Such expenses are naturally much larger for construction workers from Nebraska than workers who travel from out-of-state to work at the site.

The total estimated direct cost for the project is $330.7 million dollars. This figure includes $95.0 in private investment for a hotel and convention center. The project includes $150.0 million in spending on arena and garage. There is an additional $85.7 million in costs for land acquisition, road construction, and other expenses.

Table 1
Gross Economic Impact During Construction Period

			Total Impact	
	Spending	Business Receipts	Worker Income	FTE-Jobs
Private (Hotel & Convention)	$95,000,000	$124,393,380	$55,209,345	1,672
Public				
Buildings	$157,500,000	$209,703,975	$92,659,785	2,816
Road Network, Land Acquistion, Other	$78,200,000	$82,280,159	$33,267,187	1,014
Total	$330,700,000	$416,377,514	$181,136,317	5,501

The total gross economic impact during the construction period also includes the multiplier effect, using multipliers from the IMPLAN model.[1] The gross construction impact is $416.4 million in business receipts. This includes $181.1 million in employee compensation. This compensation is earned by 5,500 job-years. A job-year is a job created for a period of 1 year.

B. Annual Impact

The proposed arena would likely host around 100 event-days over the course of a year. These include family shows such as the circus, sporting events such as pro wrestling or college tournaments, rock and country concerts, some conventions, and meetings and seminars. Altogether, it is estimated that these events would draw nearly 600,000 in

[1] This report uses Type I economic multipliers for construction spending. Use of Type I multipliers accounts for the possibility that some arena works may reside outside of the Lincoln Metropolitan Area

attendance in a typical year just in the arena alone. This study considers the impact of such arena events and does not consider the impact from a new convention center.

The annual economic impact stems from the spending at the arena for operating the facility and hosting these events plus the off-site spending of persons attending shows in community restaurants, entertainment venues, retail stores, gasoline stations, and hotels. The main impact stems from visitors to Lincoln from outside areas that spend money at arena events both on-site and off-site. The spending of Lincoln residents on-site and off-site typically does not contribute to the economic impact of the arena. There is no impact because these residents in most cases would spend the money on other entertainment in Lincoln (movies, festivals, etc.) if not attending arena events. The one exception is Lincoln residents who otherwise would travel to Omaha or elsewhere to attend arena events if these were not held in Lincoln. Their spending in Lincoln would represent retained spending.

Table 2 below shows the level of expenditure by both out-of-town and retained visitors by category of spending. The first category is spending at the event. This does not include spending on tickets, which typically accrues to performers, but does include payments to use the facility, spending on food & beverages, novelties, as well as suite rental, premium seats, and advertising. Total expenditure for operating the center would be approximately $5 million per year, with 35 full-time employees. Table 2 shows the portion of this expenditure and employment that would be supported by either out-of-state visitors or retained spending.

The remaining expenditure categories in Table 2 are off-site spending such as restaurants, other entertainment venues, retail stores, gasoline stations, and hotels. In this study, we assume (based on a review of those in attendance at recent Pershing Center events) that 55 percent of those in attendance at the new arena would be out-of-town visitors and another 10 percent would be retained Lincoln residents. As for out-of-town visitors, the estimate of 116 event-days would yield 598,500 in attendance at arena events in a typical year. Recall that 55% of these, or 329,000, would be from out of town. Previous BBR research estimated that the average out-of-town visitor spends $52 per day, so total visitor spending would be $17.1 million. Retained visitors were assumed to spend $23 per day. The total retained spending would be $1.4 million. These two figures combine to yield a direct economic impact from off-site spending of $18.5 million per year. The total is $21.8 million when combined with on-site spending. This total is listed in Table 2, by category.

Table 2
Gross Annual Impact from On-Site Revenue and Off-Site Spending

		Total Impact		
	Spending	Business Receipts	Worker Income	FTE-Jobs
Arena	$3,224,325	$5,572,175	$2,950,204	100
Restaurants	$6,101,960	$10,176,953	$3,330,023	110
Entertainment	$2,808,011	$4,895,795	$1,634,619	63
Retail	$3,682,318	$1,984,784	$840,868	22
Service Stations	$2,282,650	$756,048	$299,326	7
Lodging	$3,671,016	$5,312,987	$1,988,692	52
Total	$21,770,279	$28,698,742	$11,043,732	354

The total gross economic impact also includes the multiplier effect. The gross annual economic impact in Lincoln from on-site or off-site revenue is $28.7 million in business receipts. This includes $11.0 million in employee compensation. This compensation is earned in 354 full-time equivalent (FTE) jobs in these industries.

C. Impact Scenarios

The level of attendance of the proposed arena is subject to some uncertainty. There is also uncertainty about the share of those in attendance who will come from outside of Lincoln. The figures presented above represent the baseline, or expected, scenario for the arena and the associated gross increase in economic activity. However, given the uncertainty discussed above, it is also useful to consider the economic impact under pessimistic and optimistic scenarios for the arena project.

In particular, the optimistic scenario will consider the case where attendance at arena events is 20% higher than under the baseline scenario, and where 60% of those in attendance will come from outside of Lincoln. Both factors would naturally increase the gross economic impact from the operation of the arena. In the pessimistic scenario, attendance at arena events is 20% lower than under the baseline scenario, and only 50% of those in attendance will come from outside of Lincoln.

Tables 3 through 5 show the gross construction period (unchanged) and gross annual operating economic impact from on-site revenue and off-site spending under the alternative scenarios. The baseline scenario is naturally the same as in Tables 1 and 2 above.

Table 3
Gross Construction Period and Annual Operating Impacts Under Alternative Scenarios
Business Receipts

	Pessimistic	Baseline	Optimistic
Impact Type			
Gross Construciton Period	$416,377,514	$416,377,514	$416,377,514
Gross Annual Operating	$22,090,793	$28,698,742	$36,083,695

Table 4
Gross Construction Period and Annual Operating Impacts Under Alternative Scenarios
Worker Income

	Pessimistic	Baseline	Optimistic
Impact Type			
Gross Construciton Period	$181,136,317	$181,136,317	$181,136,317
Gross Annual Operating	$8,653,079	$11,043,732	$13,706,890

Table 5
Gross Construction Period and Annual Operating Impacts Under Alternative Scenarios
FTE-Jobs

	Pessimistic	Baseline	Optimistic
Impact Type			
Gross Construciton Period	5,501	5,501	5,501
Gross Annual Operating	278	354	437

IV. Gross Loss

A. Annual Operating Period

The gross loss in economic activity refers to any decline in economic activity elsewhere in Lincoln as a result of the project. There are two components. The first is losses in competing Lincoln businesses. The second is the more general losses in economic activity associated with local government revenue used to help fund the project.

The loss in competing local businesses refers to businesses or existing facilities in competition with the proposed arena. The most obvious example is the loss of activity at the existing local venue, the Pershing Center.[2]

Any new private investment will lead to competition with other businesses. When a new investment is paid for in part with local tax dollars, however, there is an additional potential economic impact. This is true whether the revenue source for the government portion of the investment is existing revenue earmarked for the project or new revenue raised by new tax sources.

The baseline scenario for government contributions to the project (i.e., the moderate government contribution scenario) assumes that a significant share of revenue for the construction project will come from project driven revenue and non-local funding sources. During the construction period, a significant amount of special "one-time" revenue is generated from private and state and federal government sources to support construction. Remaining construction costs will need to be paid through annual revenues to meet annual payments on the bonds sold in order to build the arena. In the moderate scenario, a significant portion of these will be paid through revenue generated by the arena, taxes paid by visitors (such as lodging taxes), or special taxes designed to capture incremental sales and property tax revenue generated by arena visitors in the area surrounding the proposed arena.

Any money not covered by these sources, however, will place an additional burden on general revenues, effectively reducing the revenue available for government spending on other projects. This reduced spending would be an economic loss. Similarly, taxes on visitors (such as lodging taxes) would tend to modestly reduce visits to Lincoln (outside of those associated with the arena). This reduced visitor spending also would be part of the economic loss.[3] Finally, any effort to earmark existing local government revenue to the project would provide more revenue for the project but also would reduce spending in local government.

[2] The economic gain estimates in the current study does not include any events diverted from the Devaney Center, so there is no need to consider losses at this facility.

[3] Any general tax increases on Lincoln residents would take disposable income out of consumers' hands, also creating an economic loss. However, this type of funding is not part of the baseline, moderate government contribution scenario.

Table 6 below shows the annual revenue requirements based on the baseline scenario, and the share of those revenues that can be paid by 1) revenue directly generated by the arena, 2) new taxes on visitors, and 3) incremental off-site revenue captured through TIF districts. The remaining revenue requirement would represent a decline in other government activity. There also would be a slight decline in activity among tourists industries facing a new tax. The total decline in activity is the bottom line in Table 6.

Table 6
Revenue Requirements and Gross Loss in Economic Activity

Construction Cost	$223,200,000
One-Time Contributions	-15,750,000
Remaining Cost	$207,450,000
Annual Cost	$15,500,000
Earned Income[1]	$3,250,000
Taxes on Visitors[2]	$1,982,115
Tax Incr. Finance	$1,863,000
Remaining Requirement	$8,404,885
Loss in Industry[3]	$500,000
Total Annual Loss	$8,904,885

1. Arena Parking, cell tower revenues, naming rights, club premiums, suite premiums, retail rent, ticket fee.
2. City tax on lodging and auto rental; incremental county lodging tax.
3. Loss in hotel and auto rental activity due to new tax.

Table 7 shows the gross loss in terms of our set of economic impact measures. Standard ratios of spending to employment (worker compensation) for government, lodging, and auto rental are applied to the estimated gross loss in employment (worker compensation) The gross loss of activity at the existing Pershing Center also is included in Table 7. The loss at the Pershing Center is based on the assumption that half of the current 260,000 annual visitors to the Pershing Center are from outside of Lincoln, and 10% represent retained visitors.

Table 7
Gross Loss in Economic Activity

		Total Impact	
Gross Loss	Receipts	Labor Income	FTE Jobs
Remaining Revenue	$8,404,885	$3,052,764	80
Loss in Lodging and Auto Rental	$500,000	$270,864	14
Loss at Pershing Center	$14,478,938	$5,989,704	195
Total Gross Loss	$23,383,823	$9,313,332	289

Table 8 shows the gross economic loss under three alternative scenarios: low government involvement, the moderate involvement (i.e., baseline), and high government involvement scenarios.

Table 8
Gross Loss in Economic Activity Under Alternative Scenarios

		Total Impact	
Measure	Receipts	Labor Income	FTE Jobs
Low Government Involvement	$20,784,323	$8,391,474	267
Moderate Government Involvement	$23,383,823	$9,313,332	289
High Government Involvement	$27,595,938	$10,753,970	320

V. Summary - Net Economic Impact

The net economic impact estimate is the difference between the gross economic impact (gain) and the gross economic loss. Table 9 shows how the net economic impact was calculated for the baseline scenarios for gross economic impact (moderate attendance), and gross economic loss (moderate government involvement). There is a large positive economic impact during the construction period. Economic gains outweigh losses in the years after the arena opens when tourists are coming to Lincoln but bond debts are being paid. There is a positive net economic impact each year that the arena is completed and in operation.

Table 9
Net Annual and Construction Period Impact

		Total Impact	
	Receipts	Labor Income	FTE Jobs
Baseline Gross Impact	$28,698,742	$11,043,732	354
Baseline Net Loss	$23,383,823	$9,313,332	289
Net Annual Economic Impact	$5,314,919	$1,730,400	64
Construction Period Impact	$416,377,514	$181,136,317	5,501

While the construction impact estimate is fixed, the annual impact varies depending with the scenario for attendance and government involvement in funding. Table 10 is a matrix showing the net impact on business receipts under all possible scenario combinations. The impact is positive under baseline scenarios, and most other combinations of scenarios, but would turn negative under two pessimistic attendance scenarios.

Table 10
Net Economic Impact
Business Receipts

		Total Impact	
	Pessimistic	Baseline	Optimistic
Low Government Involvement	$1,306,470	$7,914,419	$15,299,372
Moderate Government Involvement	-$1,293,030	$5,314,919	$12,699,872
High Government Involvement	-$5,505,145	$1,102,804	$8,487,757

Tables 11 and 12 show the same scenario combinations for the impact in terms of worker income and employment.

Table 11
Net Economic Impact
Labor Income

	Total Impact		
	Pessimistic	Baseline	Optimistic
Low Government Involvement	$261,605	$2,652,258	$5,315,416
Moderate Government Involvement	-$660,253	$1,730,400	$4,393,558
High Government Involvement	-$2,100,891	$289,763	$2,952,920

Table 12
Net Economic Impact
FTE Jobs

	Total Impact		
	Pessimistic	Baseline	Optimistic
Low Government Involvement	11	87	170
Moderate Government Involvement	-11	64	148
High Government Involvement	-42	33	117