

VII

Economic & Fiscal Impact Analysis



SPORT

Demographic Analysis

An important component in assessing the potential success of an arena development project is the demographic and socioeconomic profile of the local market. The strength of a market in terms of its ability to support a sports and entertainment venue is measured in part by the size of the market area population and its spending characteristics. The following section summarizes a number of key demographic and socioeconomic characteristics of the Hartford region.

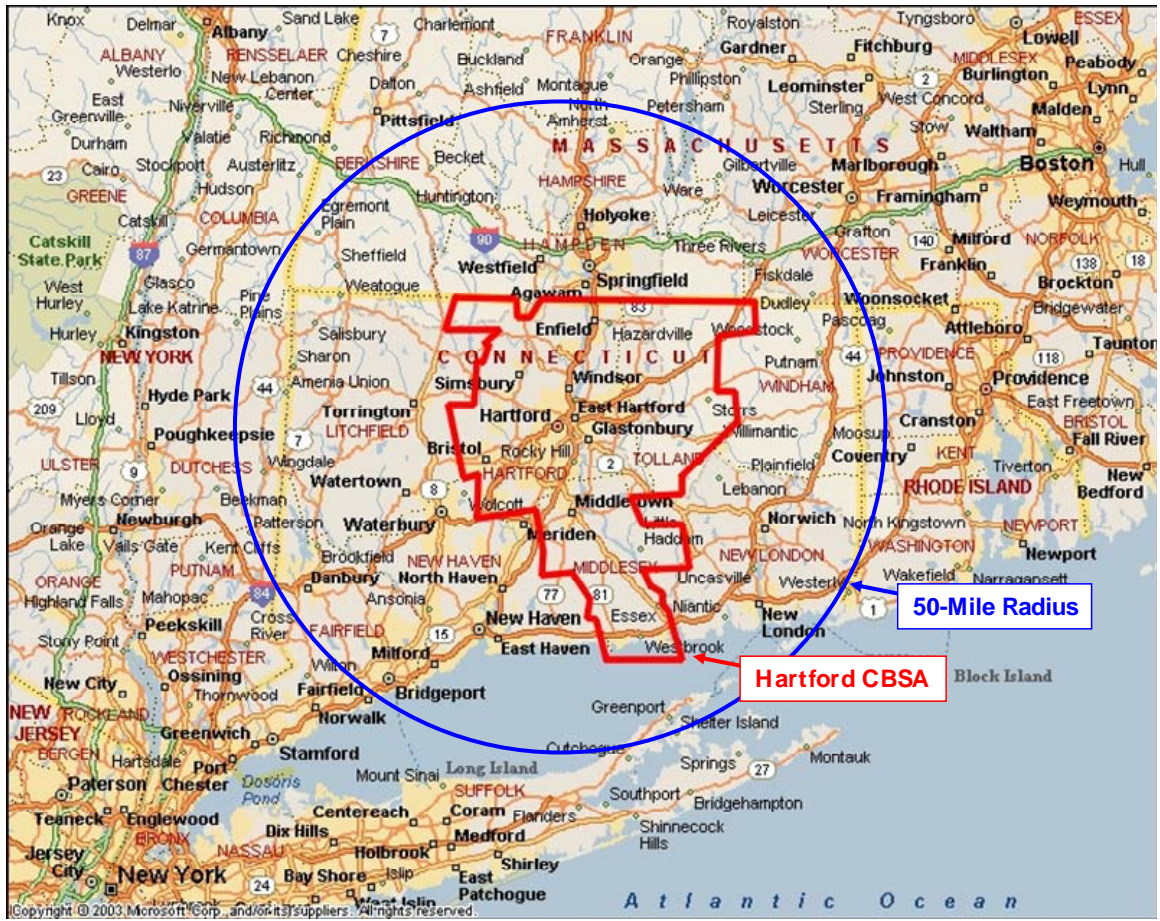
The analysis also presents comparisons of the Hartford market's demographics with those of other NHL markets currently hosting arenas built since 1995. The analysis excludes NHL markets that also host an NBA franchise, as these markets are generally not comparable to Hartford based on their significantly larger populations. The following table summarizes the markets included in the demographic comparisons.

Comparable Arena Markets

Arena	Location	Year Opened	Concert Capacity
<i>NHL Only</i>			
Glendale Arena	Glendale, AZ	2003	17,500
Xcel Energy Center	St. Paul, MN	2000	18,064
Nationwide Arena	Columbus, OH	2000	18,137
RBC Center	Raleigh, NC	1999	21,000
BankAtlantic Center	Sunrise, FL	1998	19,088
Bell Centre	Montreal, PQ	1996	21,631
Scotiabank Place	Ottawa, ON	1996	18,500
St. Pete Times Forum	Tampa, FL	1996	19,758
Gaylord Entertainment Center	Nashville, TN	1996	17,500
HSBC Arena	Buffalo, NY	1996	18,500
General Motors Place	Vancouver, BC	1995	19,193
Hartford Civic Center	Hartford, CT	1975	16,500
NHL Only Average (Excl. HCC)			19,000

For purposes of this analysis, the demographics of each market have been evaluated utilizing each market's Core Based Statistical Area (CBSA) and the 50-mile radius surrounding each market. The CBSA is defined as an area with a concentrated population core, along with an adjacent territory with social and economic ties to the core. The population within 50 miles of a facility is generally considered the primary market area from which the majority of venue patrons will be drawn.

The Hartford CBSA is comprised of Hartford, Middlesex and Tolland Counties. The following map illustrates the boundaries of the Hartford CBSA as well as the 50 mile radius surrounding Hartford.



The Hartford CBSA extends through central Connecticut from the Massachusetts border to the north to Long Island Sound to the south and includes cities such as Hartford, New Britain, Bristol and Middletown. The 50-mile radius surrounding Hartford approximately doubles the area included in the CBSA, extending beyond Danbury, Bidgeport, New London and Norwich to the South and into New York, Massachusetts and Rhode Island to the West, North and East.

Population

The level of population from which sports and entertainment facilities will draw attendees can impact the events and attendance attracted to the facilities. The following exhibit summarizes the key population statistics of the Hartford area.

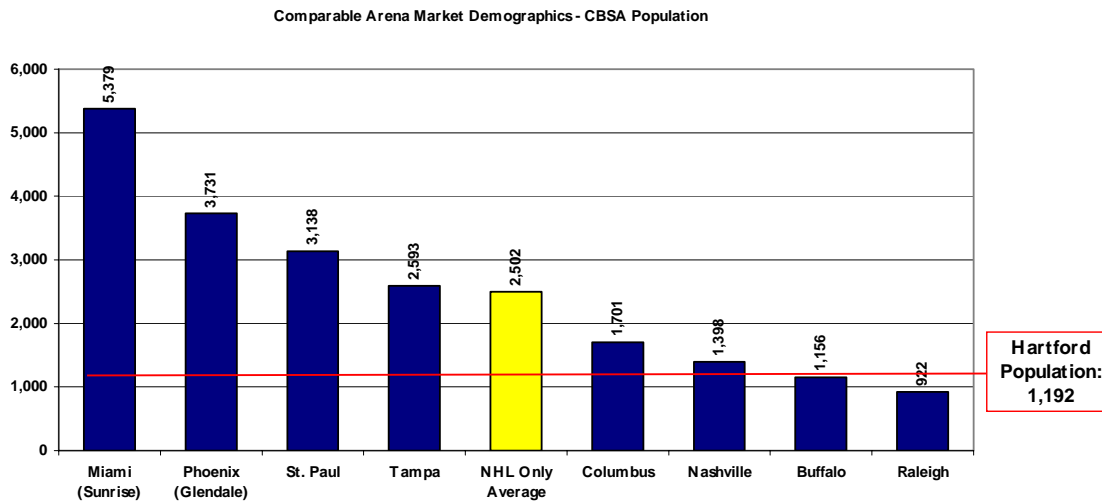
Hartford Population Statistics

	Hartford CBSA	U.S.
2005 Population	1,192,100	292,937,000
2010 Population	1,239,000	307,116,000
CAGR 2005 - 2010	0.8%	0.9%

Source: Claritas, Inc.

CAGR = Compound Annual Growth Rate

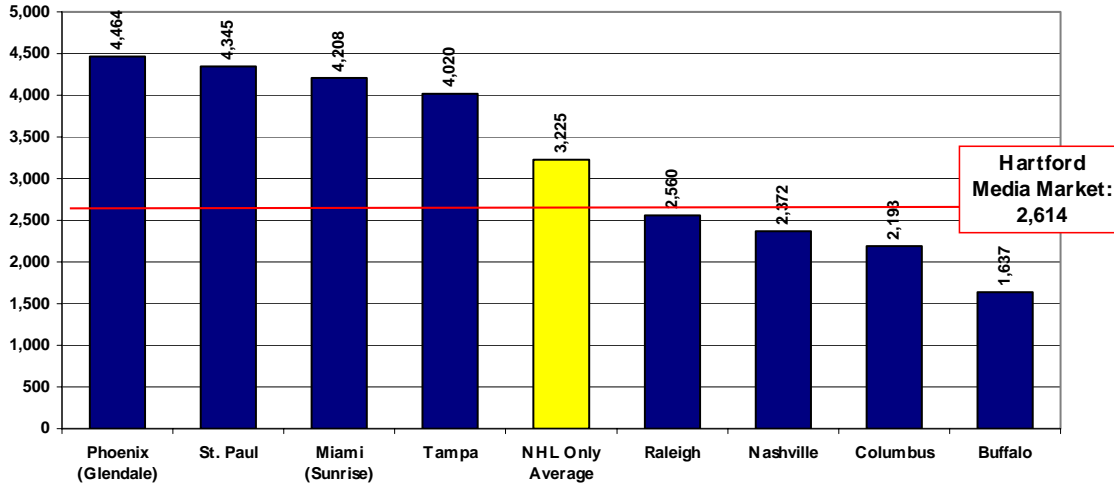
The Hartford CBSA had a population of approximately 1.2 million in 2005. The market's population is projected to grow by approximately 0.8 percent annually over the next five years, similar to the projected growth rate for the U.S. as a whole. The following chart compares Hartford's population with the populations of the comparable facility markets.



While the Hartford market's population is significantly lower than the average among markets hosting recently built NHL-only arenas, several markets with similar populations, including Columbus, Nashville, Buffalo and Raleigh have developed NHL arenas in recent years.

While the CBSA population analysis presented above provides a uniform comparison of the populations of each market, it is also important to consider the media market population of each market. This factor is particularly important to the NHL and other sports leagues. The following exhibit summarizes the media market population of the Hartford area compared to similar NHL markets.

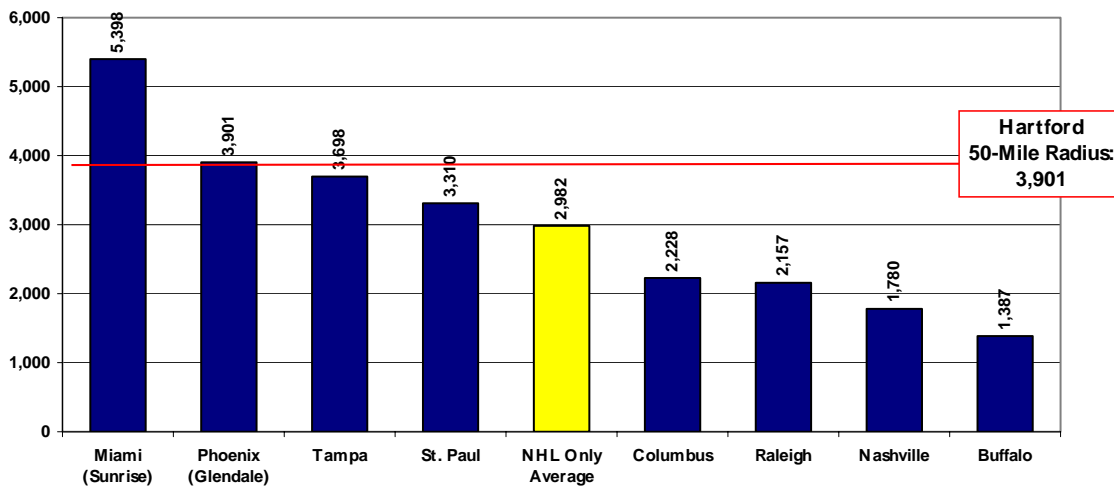
Comparable Arena Market Demographics - Media Market Population



As shown, the media market population for the Hartford area of approximately 2.6 million is significantly higher than the CBSA population. When compared to other existing NHL markets, the Hartford media market is somewhat below the average of the markets discussed herein, comparing closely to Raleigh, Nashville and Columbus.

As another comparison, it is helpful to consider the population within a specific radius of each market. In general, the population within 50 miles of a particular venue can be considered the primary market draw area from which the majority of facility patrons will be drawn. The following exhibit compares the estimated population within 50 miles of each comparable NHL facility discussed herein.

Comparable Arena Market Demographics - 50-Mile Radius Population



While the Hartford area’s CBSA and media market population levels fell below the NHL only average, when the market is expanded to 50 miles, the Hartford market ranks third highest, behind only Miami and Phoenix. While this statistic indicates a relatively strong population from which the proposed new arena and NHL franchise could draw, it is important to understand that a variety of factors will impact the extent to which patrons from the outer edges of this radius will be drawn to the facility. For instance, high levels of traffic and related issues in and around the arena could negatively impact potential patrons’ propensity to attend events at the facility. However, a quality facility that provides a high quality fan experience may have a positive impact on attracting patrons from outside the immediate Hartford area. Overall, the population in and around Hartford falls within the range of markets hosting recently built NHL facilities.

Age

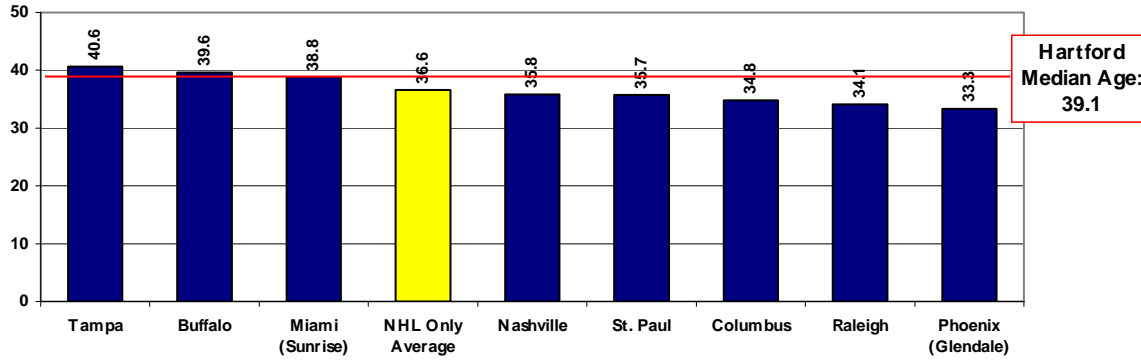
The age of a specific populace can impact the overall drawing power for the proposed development, particularly for spectator events held at the proposed ballpark and arena. In general, the 18 to 34 year old age group is regarded in the spectator events industry as one of the groups that is most likely to attend sporting and other spectator events. The 35 to 54 year old age group is also regarded as a relatively strong market for these events. This age group also exhibits higher spending patterns than other age groups. A lower than average population concentration within these groups will not necessarily adversely affect the number of events hosted in the given market, but could potentially affect the type of programming that can work to maximize event potential at spectator facilities in the market. The following table summarizes the age distribution and median age of the Hartford-area population.

	Hartford CBSA	U.S.
Age Distribution:		
Under 15	16.6%	20.7%
15 to 24	14.2%	14.2%
25 to 34	11.4%	13.6%
35 to 44	14.7%	15.3%
45 to 54	16.0%	14.1%
55 and over	27.1%	22.1%
Median Age	39.1	36.0

Source: Claritas

The Hartford market population is relatively old in comparison to the nation as a whole. Specifically, the median age of the Hartford market is approximately 3.1 years older than the national median and has a significantly larger proportion of its population aged 55 and over. The following chart compares the median age within each comparable arena market.

Comparable Arena Market Demographics - Median Age



As shown, the median age of the Hartford market is older than all but two of the comparable NHL markets discussed in this analysis.

Household Income

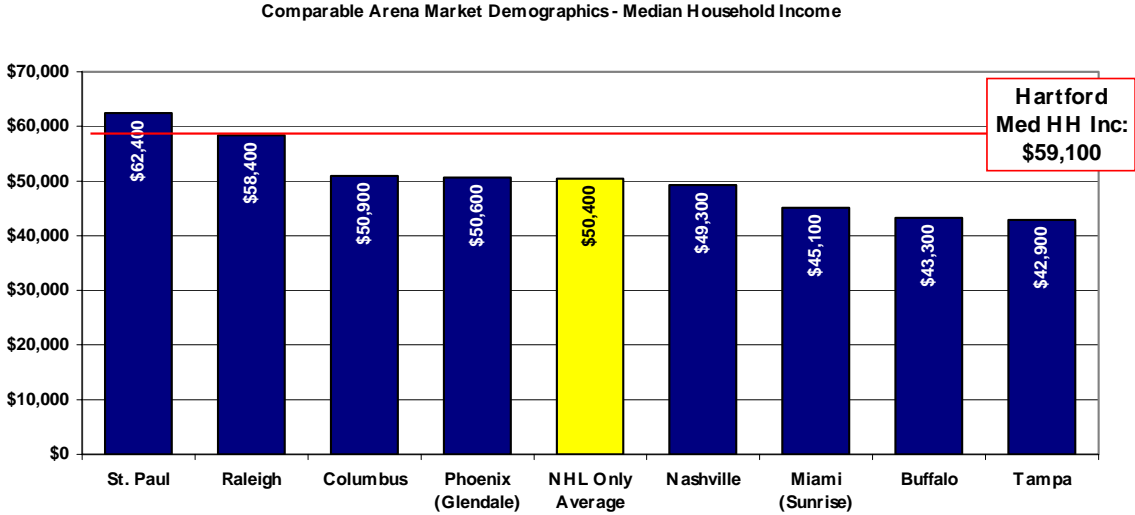
Household income is an important socioeconomic variable that can be indicative of the potential success of sports and entertainment venues. Household income can be used as a surrogate measure for the ability to purchase tickets, premium seating and other such items at sports facilities. The following table summarizes the key household income variables of the Hartford market area.

Hartford Household Income Statistics

	Hartford CBSA	U.S.
Household Income Distribution:		
Under \$25,000	19.4%	26.0%
\$25,000 to \$49,999	23.3%	27.7%
\$50,000 to \$74,999	19.4%	19.1%
\$75,000 to \$99,999	14.4%	11.6%
Over \$100,000	23.5%	15.7%
Median Household Income	\$59,100	\$46,500
Average Household Income	\$75,700	\$63,300

Source: Claritas

Household income levels in the Hartford market area are generally significantly higher than the national average, with higher proportions of households having annual incomes of \$100,000 or greater. The median and average household income of Hartford-area households are also higher than the national average. The following chart compares the median household income of the Hartford market with those of the comparable NHL markets.



Hartford’s median household income ranks well above the average of the NHL markets considered as part of this analysis, trailing only the Minneapolis/St. Paul market.

Corporate Inventory

Local corporations play a significant role in supporting the arenas by purchasing private suites, season tickets and advertising/sponsorship opportunities. The following table summarizes the corporate inventory of the Hartford CBSA, including all corporate headquarters with at least 25 employees and \$5.0 million in annual sales and corporate branches with at least 25 employees.

Hartford CBSA Corporate Inventory

<u>Annual Sales (in millions)</u>	<u>Number of Headquarters</u>	<u>Subtotal</u>
\$2,000.0 or more	7	7
\$1,500.0 - \$1,999.9	0	7
\$1,000.0 - \$1,499.9	4	11
\$750.0 - \$999.9	6	17
\$500.0 - \$749.9	2	19
\$250.0 - \$499.9	12	31
\$100.0 - \$249.9	37	68
\$50.0 - \$99.9	66	134
\$25.0 - \$49.9	131	265
\$10.0 - \$24.9	314	579
\$5.0 - \$9.9	341	920

Total Headquarters 920

Corporate Branches 694

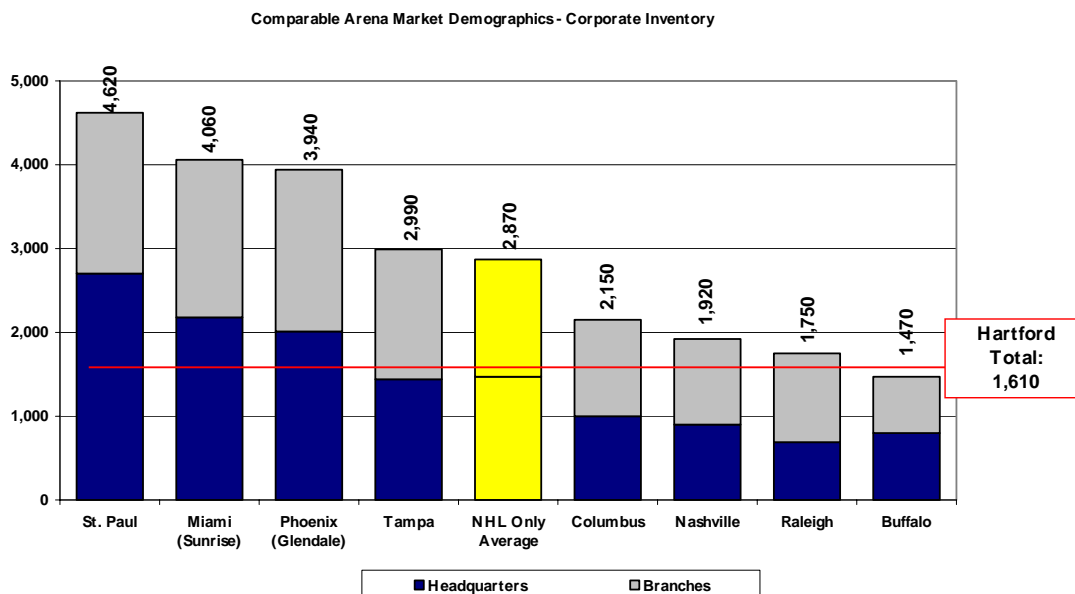
Total 1,614

Note: Includes only corporate headquarters and branches with at least 25 employees.

Source: Dun & Bradstreet.

As shown, the Hartford CBSA has a total of approximately 920 corporate headquarters with at least 25 employees and \$5.0 million in annual sales. The Hartford market is also home to approximately 690 corporate branches with 25 or more employees, resulting in a total corporate inventory of approximately 1,610.

The following chart compares the inventory of corporate headquarters and branches with at least 25 employees in each comparable arena market. It should be noted that the corporate headquarter inventories in the chart include only organizations with at least \$5.0 million in annual sales.



Compared to other NHL markets, the Hartford corporate inventory ranks well below the average inventory of similar markets, ranking second lowest among the markets discussed in this analysis. This factor could have a significant impact on the ability of an NHL franchise to generate sufficient revenues from corporate sponsorship, premium seating and other such areas.

While the corporate inventory of the Hartford market is relatively small compared to other markets with newer NHL facilities, it is also important to consider the strength of companies located in the Hartford area. The Hartford market is home to three companies in the Fortune 100, while several other companies in the Fortune 100 have major operating centers in and around Hartford. Of the comparable NHL markets discussed herein, only Minneapolis and Nashville are currently headquarters to companies in the Fortune 100, with five headquarters and two headquarters, respectively. The strength of the corporate base and potential support for the proposed facility and NHL franchise in Hartford will play an important role in the potential success of the arena and team.

Demographic Summary

Within this section, the Hartford market has been compared to several markets hosting large, recently built arenas on the basis of a number of key demographic variables. The following is a summary of the key findings of the demographic analysis.

- The Hartford market's CBSA and media market population is within the range of markets hosting NHL arenas built since 1995.
- Hartford's corporate inventory within the range of the smaller market hosting NHL-only facilities, but ranks well below the comparable market average. However, the Hartford market has a relatively strong corporate presence, with three companies in the Fortune 100 headquartered in the Hartford area.
- The median age of Hartford-area residents is more than three years older than the national average, with a relatively high proportion of the population aged 55 or older.
- Hartford's median household income is among the highest of any comparable arena market.
- The presence of an older, wealthier population in the Hartford area could make it a strong market for club seats and other upscale amenities.

The Hartford market's population, income levels and other demographic characteristics are generally comparable to those of many markets hosting recently built NHL arenas. However, it is important to note that the current economic structure of the NHL places an increased emphasis on corporate support in terms of sponsorships, naming rights, premium seating and other support.

Given the relatively small number of corporate headquarters and branches in the Hartford market, an NHL franchise may struggle to generate sufficient revenues from the corporate sector. Despite a relatively small corporate inventory, local corporations have demonstrated an ability to generate support for various projects, including the Travelers Championship (formerly the Greater Hartford Open) PGA event. For an NHL franchise to succeed in Hartford, it will be critical to generate similar corporate support so that general ticket prices can be held at prices that enable the general populace to attend games.

Economic Impact Analysis

The economic and fiscal benefits generated by public assembly facilities are often among the primary determinants regarding the decision to construct a new facility. The purpose of this section is to provide estimates of the historical economic impacts related to the operations of the Hartford Civic Center and to estimate the incremental impacts that could result from the operations of a new arena.

Key Operating Assumptions

As a part of CSL's work with the Connecticut Development Authority (CDA) in 2006, estimates of the event demand and financial results of a new arena were developed. The previous analysis included two potential operating scenarios for the new arena. Both scenarios assumed that the University of Connecticut would continue to hold the majority of their home basketball games at the new facility. In addition, in one scenario it was assumed that an AHL franchise would serve as a primary tenant, while in the second scenario it was assumed that an NHL franchise would be brought to Hartford and would use the new arena as its home facility. The event assumptions for both scenarios have been updated based on the most current information available and are presented below.

New Arena – AHL Tenant

The following table summarizes the assumptions underlying the estimates related to the potential financial performance of a new arena in Hartford, assuming the presence of an AHL tenant hockey franchise.

Summary of Key Operating Assumptions - New Arena - AHL Tenant

Event Type	Annual Events	Ave Pd Attendance	No-Show/Comp Factor	Actual Attendance	Direct Event Revenue	Per Capita Spending			
						Tickets	Concessions	Catering	Merchandise
Tenant Hockey (AHL)	43	4,800	5%	4,560	2,500	\$15.00	\$6.00	\$25.00	\$1.50
Tenant Football	7	6,000	5%	5,700	30,000	\$15.00	\$6.00	\$25.00	\$1.50
Tenant Lacrosse	8	10,000	5%	9,500	30,000	\$22.00	\$6.00	\$25.00	\$1.50
UCONN Basketball	21	15,000	10%	13,500	30,000	\$15.00	\$5.00	\$25.00	\$1.50
Concerts	12	10,000	-10%	11,000	25,000	\$40.00	\$7.00	\$25.00	\$7.00
Family Shows	30	3,500	-20%	4,200	15,000	\$20.00	\$2.00	\$25.00	\$4.00
Other Sports	12	9,000	10%	8,100	10,000	\$15.00	\$3.50	\$25.00	\$2.50
Flat Floor	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other Events	20	5,000	0%	5,000	5,000	\$1.00	\$2.00	\$0.00	\$0.00

Premium Seating

Suites:	
Quantity	50
Tickets per suite	16
Sold	45
Average Price	\$70,000

Club Seats:

Quantity	1,000
Sold	850
Average Price	\$1,750

Corporate Revenue

Annual Naming Rights	\$750,000
Annual Advertising	\$1,250,000

Under this scenario, it is assumed that the revenue allocations for the new arena would be similar to the current operations of the HCC. It is assumed that the arena would receive rent and/or reimbursement for event expenses from each tenant, and would retain all revenue and merchandise commissions, non-event specific advertising revenue, premium seating revenue and other such revenue streams. The following table summarizes the estimated financial operations for a new arena in Hartford with an AHL tenant, based on the assumptions noted above.

**Estimated Financial Operating Results
New Arena - AHL Tenant**

	New Arena AHL Tenant
Revenues	
Direct Event Revenues	\$2,208,000
CT Ticket Surcharge	1,667,000
Premium Seating	4,638,000
Naming Rights	750,000
Food & Beverage	2,636,000
Merchandise	321,000
Sponsorship & Signage	1,250,000
Other	600,000
Total revenues	\$14,070,000
Expenses	
Facility	\$4,500,000
General & administrative	6,500,000
Management Fee	1,000,000
Total expenses	\$12,000,000
Operating Income (Loss)	\$2,070,000

As shown, a new arena with an AHL tenant is estimated to generate approximately \$14.1 million in annual revenues, while incurring approximately \$12.0 million in annual operating expenses. This level of operations would result in net annual operating income of approximately \$2.1 million, before debt service or capital reserve funding.

New Arena – NHL Tenant

In the second operating scenario, it is assumed that the new arena will serve as the home of an NHL franchise, in addition to UCONN basketball and other tenants and other events. While the new arena with an AHL tenant is assumed to operate in a manner similar to the existing HCC, the operations of an NHL arena typically differ significantly. While each case is subject to negotiations, in most cases, the NHL franchise is responsible for the operations of the arena, retaining all NHL and non-NHL event revenue as well as revenue from naming rights, advertising and other non-event specific revenue streams.

For purposes of this analysis, it is assumed that the NHL franchise would operate the proposed new arena and would retain all arena revenues. It is also assumed that the NHL franchise would be responsible for all arena operating expenses. The following is a summary of the key operating assumptions utilized in developing the financial projections for a new arena with an NHL franchise.

Summary of Key Operating Assumptions - New Arena with NHL Tenant

Event Type	Annual Events	Ave Pd Attendance	No-Show/Comp Factor	Actual Attendance	Direct Event Revenue	Per Capita Spending			
						Tickets	Concessions	Catering	Merchandise
Tenant Hockey (NHL)	45	15,000	5%	14,250	n/a	\$55.00	\$10.00	\$40.00	\$4.00
Tenant Football	7	6,000	5%	5,700	30,000	\$15.00	\$6.00	\$25.00	\$1.50
Tenant Lacrosse	8	10,000	5%	9,500	30,000	\$22.00	\$6.00	\$25.00	\$1.50
UCONN Basketball	21	15,000	10%	13,500	30,000	\$15.00	\$5.00	\$25.00	\$1.50
Concerts	12	10,000	-10%	11,000	25,000	\$40.00	\$7.00	\$25.00	\$7.00
Family Shows	30	3,500	-20%	4,200	15,000	\$20.00	\$2.00	\$25.00	\$4.00
Other Sports	12	9,000	10%	8,100	10,000	\$15.00	\$3.50	\$25.00	\$2.50
Flat Floor	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other Events	20	5,000	0%	5,000	5,000	\$1.00	\$2.00	\$0.00	\$0.00

Premium Seating

Suites:	
Quantity	80
Tickets per suite	16
Sold	75
Average Price	\$125,000

Club Seats:	
Quantity	2,500
Sold	2,000
Average Price	\$4,000

Corporate Revenue

Annual Naming Rights	\$3,000,000
Annual Advertising	\$5,000,000

The assumptions related to non-NHL events, including other tenant events, are assumed to remain the same whether the arena is home to an AHL or NHL franchise. However, estimates related to premium seating, naming rights, advertising and hockey event assumptions have been adjusted to reflect the presence of an NHL franchise.

In addition to the arena-related assumptions presented above, estimates were also developed related to the potential team-related revenues and expenses that could result from NHL franchise operations. These assumptions were based on operating results of existing NHL franchises. The following table summarizes the estimated financial operations of an NHL franchise and arena in Hartford.

**Estimated Financial Operating Results
NHL Arena and Franchise**

Revenues

Arena Related

Direct Event Income (Non-NHL Events)	\$2,100,000
CT Ticket Surcharge	3,521,000
Premium seating	17,375,000
Naming rights	3,000,000
Food and beverage	5,393,000
Advertising	5,000,000
Merchandise	604,000
Other	600,000
Total Arena Revenues	\$37,593,000

Team Related

NHL Gate Receipts	\$37,125,000
Other Team Operating Revenue	31,000,000
Total Team Revenues	\$68,125,000

Total Team and Arena Revenues	\$105,718,000
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Expenses

Arena Related

Facility	\$5,500,000
General & administrative	9,500,000
Management Fee	1,250,000
Total Arena Expenses	\$16,250,000

Team Related

Player Compensation	\$44,000,000
Other Team Operations	41,200,000
Total Team Expenses	\$85,200,000

Total Team and Arena Expenses	\$101,450,000
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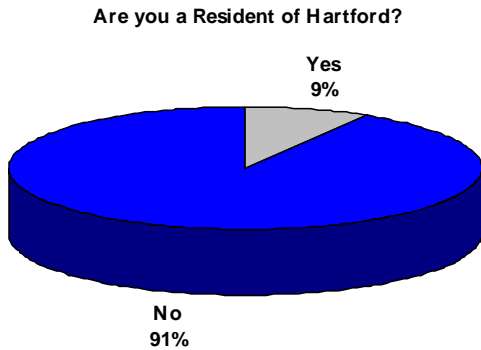
Operating Income (Loss)	\$4,268,000
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As shown, combined NHL franchise and arena operations are estimated to generate approximately \$105.7 million in total revenues and \$101.5 million in total annual operating expenses, resulting in approximately \$4.3 million of net operating income.

Survey Results

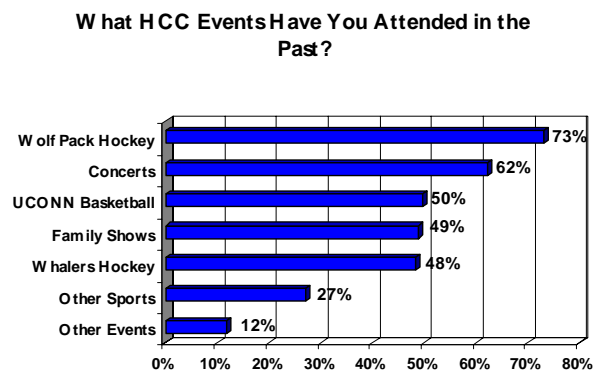
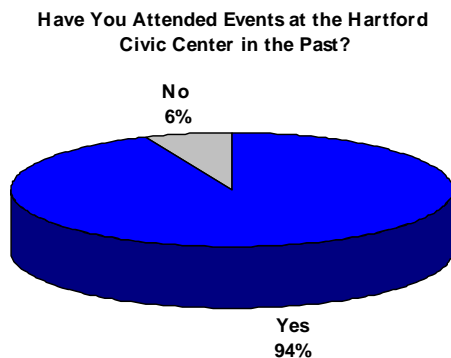
While the financial operations of the arena presented above have been based on the information developed as part of CSL's previous engagement with the CDA, the related economic impact estimates have been refined through a survey process as part of the current analysis. Specifically, over 500 one-on-one interviews were completed with patrons of the HCC at events taking place during March 2007, including Wolf Pack games as well as an ice skating exhibition. The intent of this process was to gather additional information on patron spending before and after arena events.

As an initial set of questions, patrons were first asked if they were residents of Hartford and, if not, if they were staying in a hotel during their visit to Hartford. As shown below, less than 10 percent of HCC patrons are actually residents of the City of Hartford. Of those respondents who are visiting Hartford to attend the event, approximately one percent are staying overnight at a hotel. On average, those respondents staying in a hotel indicate an average stay of two nights.



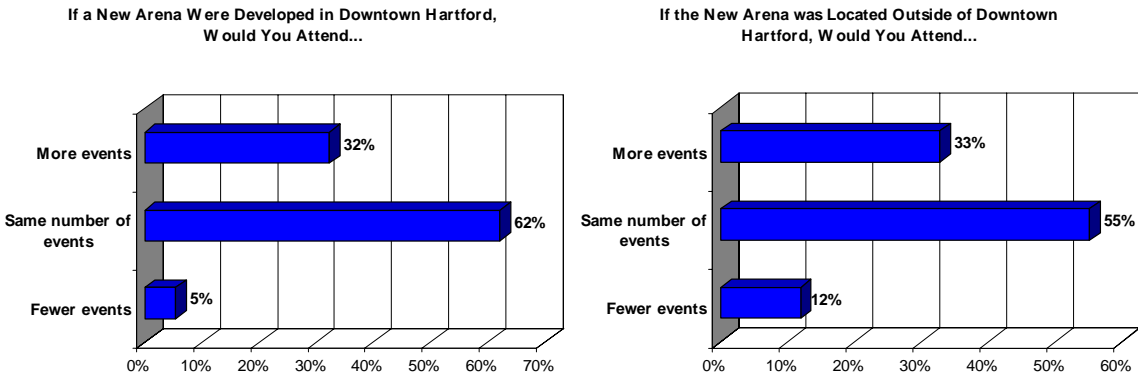
Note: Only respondents who are not residents of Hartford were asked this question

Respondents were then asked if they have attended events at the Hartford Civic Center in the past and, if so, which events they have attended.



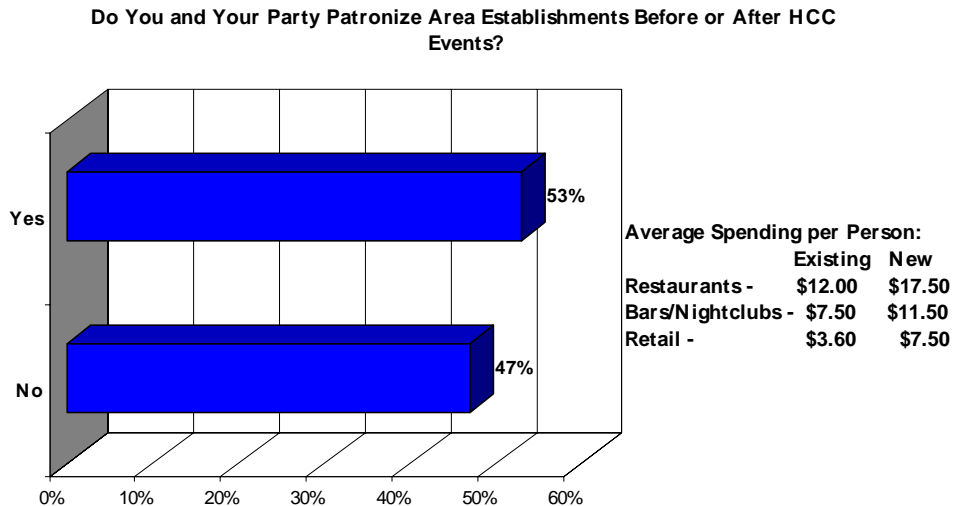
Approximately 95 percent of the survey respondents have attended events at the HCC in the past. Of these participants, approximately 73 percent have attended Wolf Pack events, while 62 percent have attended concerts at the HCC. In addition, approximately 50 percent had attended a UCONN basketball event, 49 percent had attended a family show in the past, and 48 percent had attended a Whalers hockey game at the HCC.

After these initial questions, the survey focused primarily on spending before and after an event as well as the impact of various new arena locations on potential spending and attendance at the new arena. Respondents were first asked to indicate the likelihood of attending events at a new arena in downtown Hartford or a new arena located outside of downtown Hartford.



As shown, location appears to have a slight impact on HCC patrons' propensity to attend events, with approximately 95 percent of patrons indicating they would attend the same number or more events at a new downtown arena, compared to approximately 88 percent if the arena was located outside of the downtown area.

Survey participants were then asked to indicate if they currently patronize area restaurants, bars, nightclubs or retail establishment before or after HCC events. Respondents were also asked to estimate their spending at each type of establishment while attending HCC events as well as their spending outside a new downtown arena and a new arena located outside of downtown.



As shown, approximately 53 percent of all survey participants currently patronize area establishments while attending events at the HCC. Based on the survey results, it is estimated that spending outside the HCC at restaurants, bars and retail establishments totals approximately \$23.10 per person, while these patrons indicated spending outside a new arena would total approximately \$36.50 per person.

Economic and Fiscal Impact Analysis - Methodology

Economic impacts are typically conveyed through measures of direct spending, total output, personal earnings and total employment. Each of these measures of economic impact is further described below:

- *Direct Spending* – represents spending generated by the arena and arena patrons, including in-facility expenditures on tickets, rent, concessions, novelties and parking; out-of-facility spending on hotels, restaurants, retail, transportation and entertainment; and spending related to the facility, including advertising, sponsorships, premium seating and other similar sources of spending.
- *Total Output* – represents the total direct, indirect and induced spending effects generated by the arena.
- *Personal Earnings* – represent the wages and salaries earned by employees or businesses involved with the operations of a public assembly facility.
- *Employment* – represents and estimate of the total full- and part-time jobs that are supported by the direct, indirect and induced spending related to the arena.

Direct Spending

The construction phase of an arena represents a significant one-time impact on a local economy. This impact is determined by the volume and nature of the construction expenditures as well as the region in which they take place. Direct spending on construction typically consists primarily of a large number of purchases of materials and labor. Since these large purchases tend to take place in a relatively short time frame, a distinct and visible impact on the community is typically generated during the construction phase.

The operations of arenas and their tenants can also impact the local economy in a variety of ways. Direct spending is generated during events on tickets, concessions, merchandise and parking as well as before and after events throughout the local hotels, restaurants, retail and other establishments. In addition, the operations of a public assembly facility can generate facility-related spending in areas such as advertising, premium seating, naming rights and sponsorships.

It is important to note that, in the scenario with an NHL tenant, direct spending has been adjusted downward to reflect the fact that a significant portion of the spending will be allocated to player payroll. Due to the unique nature of professional sports salaries, a significant portion of this spending is assumed to take place outside the local economy.

Direct spending represents the beginning of the calculation of economic impacts within the economy, or what is termed the initial change in final demand. For purposes of this analysis, impacts are represented as total economic activity and net new economic activity. Total economic activity represents gross spending associated with the construction and operations of the arena regardless of the origin of spending and whether or not the spending would have taken place in another form within the local economy (i.e. displaced spending).

Multiplier Effects

Economic impacts are further increased through the re-spending of the direct spending. The total impact is estimated by applying an economic multiplier to initial direct spending to account for the total economic impact. The total output multiplier is used to estimate the aggregate total spending that takes place, beginning with the direct spending and continuing through each successive round of re-spending. Successive rounds of re-spending are generally discussed in terms of their indirect and induced effects on the area economy.

Indirect Effects – consist of the re-spending of the initial or direct expenditures. These indirect impacts extend further as the dollars constituting the direct expenditures continue to exchange hands. This process, in principle, could continue indefinitely. However, recipients of these expenditures may spend all or a part of it on goods and services outside the market area, put part of these earnings into savings, or pay taxes. This spending halts the process of subsequent expenditure flows and does not generate additional spending or impact within the community after a period of time. This progression is termed leakage and reduces the overall economic impact.

Induced Effects – consist of the positive changes in spending, employment, earnings and tax collections generated by personal income associated with the operations of the facility and franchises. Specifically, as the economic impact process continues, wages and salaries are earned, increased employment and population are generated, and spending occurs in virtually all business, household and government sectors. This represents the induced spending impacts generated by direct expenditures.

The appropriate multipliers to be used are dependent upon certain regional characteristics and also the nature of the expenditure. An area that is capable of producing a wide range of goods and services within its border will have higher multipliers, a positive correlation existing between the self sufficiency of an area's economy and the higher probability of re-spending occurring within the region. If a high proportion of the expenditures must be imported from another geographical region, lower multipliers will result.

The multiplier estimates used in this analysis are based on the IMPLAN System, which is currently used by hundreds of universities and government entities throughout the country. IMPLAN is a microcomputer program that performs regional input-output analysis based on 528 industrial sectors.

Economic and Fiscal Impact Analysis – Operations

Based on the key operating assumptions and results of the fan intercept surveys discussed above, estimates of the economic and fiscal impacts related to the development of a new arena have been prepared. The following table presents the estimated gross annual economic impacts of the new arena under both operating scenarios, compared to the estimated impacts of the HCC going forward, as developed in CSL's previous engagement with the CDA.

**Estimated Economic and Fiscal Impacts
Annual Arena Operations**

	On-Going HCC	New Arena		Incremental Impacts	
		AHL	NHL (2)	AHL	NHL (2)
Direct Spending	\$42,049,000	\$75,483,000	\$124,599,000	\$33,434,000	\$82,550,000
Total Output	\$70,569,000	\$126,939,000	\$209,770,000	\$56,370,000	\$139,201,000
Earnings	\$32,523,000	\$57,770,000	\$97,445,000	\$25,247,000	\$64,922,000
Jobs (1)	1,400	2,500	4,300	1,100	2,900
Tax Revenues					
State Sales	\$2,931,000	\$5,175,000	\$8,876,000	\$2,244,000	\$5,945,000
State Lodging	\$88,000	\$116,000	\$148,000	\$28,000	\$60,000
State Personal Income	\$1,110,000	\$1,972,000	\$3,326,000	\$862,000	\$2,216,000
State Business	\$242,000	\$435,000	\$719,000	\$193,000	\$477,000
Total State Taxes	\$4,371,000	\$7,698,000	\$13,069,000	\$3,327,000	\$8,698,000

(1) Includes full- and part-time jobs. This equates to approximately 1,000 FTEs for the existing HCC, 1,800 FTEs for an AHL arena and 3,100 FTEs for an NHL arena.

(2) Direct spending has been adjusted downward to reflect the assumption that a significant portion of the spending related to an NHL franchise is allocated to player payroll, and that only a portion of player spending will actually impact the local economy.

As shown, the HCC is estimated to generate approximately \$42.0 million in direct spending going forward, which would result in approximately \$70.6 million in total output, \$32.5 million in earnings and would support approximately 1,400 jobs. In addition, this spending is estimated to generate approximately \$2.9 million in annual state sales taxes, \$88,000 in state lodging tax revenue, \$1.1 million in personal income taxes and \$242,000 in state business taxes.

The operations of a new arena with an AHL tenant are estimated to generate approximately \$75.5 million in direct spending, \$126.9 million in total output and \$57.8 million in total earnings, supporting approximately 2,500 total jobs. Similarly, this spending is estimated to generate approximately \$5.2 million in state sales tax revenue, \$116,000 in lodging tax revenue, \$2.0 million in personal income taxes and \$435,000 in business taxes.

Due to the higher attendance, ticket prices and associated spending related to an NHL franchise, a new arena with an NHL tenant is estimated to generate significantly higher overall spending and related economic and fiscal impacts than either the existing HCC or a new arena with an AHL tenant. Specifically, it is estimated that the operations of the new arena and NHL franchise could generate approximately \$124.6 million in direct spending, which would result in approximately \$209.8 million in total output, \$97.4 million in earnings and would support approximately 4,300 jobs. This spending is also estimated to generate approximately \$8.9 million in state sales taxes, \$148,000 in state lodging tax, \$3.3 million in personal income taxes and \$719,000 in state business taxes.

Economic and Fiscal Impact Analysis – Construction

In addition to the ongoing operations of the new arena, spending during the construction period will also generate significant economic and fiscal benefits for the Hartford area. The amount of economic impacts taking place during the construction period will depend on the project cost for the arena, which could vary greatly depending on capacity, square footage, level of finish and amenities and other such factors.

In order to provide a preliminary estimate of the range of project costs that could be associated with the development of a new arena in Hartford, the following table presents construction costs of several comparable minor league and NHL arenas. The costs presented in the table have been adjusted to 2007 dollars using an annual inflation factor of 7.5 percent. In addition, the project costs for each arena have been adjusted to reflect the estimated cost if the arena were constructed in Hartford based on the relative construction cost indices of each respective market.

Comparable Arena Construction Costs

Facility	Location	Year Opened	Project Cost (1)
<i>Minor League</i>			
Qwest Center (2)	Omaha, NE	2003	\$462.9
Wells Fargo Arena (2)	Des Moines, IA	2004	315.1
Sprint Center	Kansas City, MO	2007	304.1
Veterans Memorial Coliseum	Jacksonville, FL	2003	226.1
Bi-Lo Center	Greenville, SC	1998	175.7
Ford Center	Oklahoma City, OK	2002	163.1
Minor League Average			\$274.5
<i>NHL-Only</i>			
BankAtlantic Center	Sunrise, FL	1998	\$508.6
RBC Center	Raleigh, NC	1999	436.8
Gaylord Entertainment Center	Nashville, TN	1996	424.9
St. Pete Times Forum	Tampa, FL	1996	411.6
Glendale Arena	Glendale, AZ	2003	334.1
Nationwide Arena	Columbus, OH	2000	309.0
HSBC Arena	Buffalo, NY	1996	293.3
New Penguins Arena	Pittsburgh, PA	2010	290.0
Xcel Energy Center	St. Paul, MN	2000	272.3
NHL Only Average			\$364.5
Average - All Arenas			\$328.5

- (1) Adjusted to 2007 dollars assuming an annual inflation rate of 7.5 percent for construction costs, and adjusted to represent the estimated cost if the facility were built in Hartford based on the relative building cost indices for each market.
- (2) Includes an arena and convention center.

As shown, the average project cost of the arenas included in the analysis was approximately \$328.5 million in 2007 dollars, adjusted to reflect the building cost indices of the respective markets. Adjusted project costs range from a low of \$163.1 million for the Ford Center in Oklahoma City to a high of \$508.6 million at the BankAtlantic Center in Sunrise, Florida.

Based on factors such as the costs of comparable arenas built in other markets, the relatively high building cost index of the Hartford market and the rapid inflation of construction costs throughout the country, it is estimated that a new, NHL-ready facility in Hartford could range from approximately \$300.0 million to \$400.0 million, while an AHL facility is estimated to cost between \$250.0 million and \$300.0 million. The actual project cost and resulting economic impacts could vary greatly depending on the final project design. The following table summarizes the range of economic impacts estimated to be generated during the construction period. The impacts represent the estimated gross economic impact related to arena construction.

**Estimated Economic and Fiscal Impacts
Construction - One-Time Impacts**

	AHL Arena	NHL Arena
Project Cost	\$250,000,000	\$400,000,000
Adjusted Local Spending	\$187,500,000	\$300,000,000
Total Output	\$338,277,000	\$541,243,000
Earnings	\$166,378,000	\$266,204,000
Jobs (1)	3,200	5,100

(1) Includes full- and part-time jobs. A factor of approximately 80 percent can be applied to this number to determine FTEs.

As shown, it is estimated that approximately \$187.5 million to \$300.0 million would be spent locally for arena construction. This spending is estimated to generate approximately \$338.3 million to \$541.2 million in total output and between \$166.4 million and \$266.2 million in earnings, supporting approximately 3,200 to 5,100 jobs during the construction period.

Non-Quantifiable Benefits

In addition to the economic effects of money spent on arena construction and at arena events, the Hartford market could receive additional benefits from the development of a new arena through the development of restaurants, bars, hotels and other establishments in the area surrounding the new arena. Several communities have found that the development of entertainment facilities can spur new business growth and revitalize the immediate area in which the arena is developed.

The effects of attracting patrons to a concentrated area will impact numerous industries and enhance economic activity throughout the market area. It is possible that the development of a new arena in Hartford could attract various commercial and retail developments to vacant or under-utilized parcels in the downtown area. Such developments could include office, hotel, restaurant, retail and related developments that could benefit directly from the operations of the proposed arena. Indirect impacts can benefit support industries including transportation, wholesale, manufacturing, warehousing and other such industries. However, it should be noted that the development of a new arena could have an adverse impact on businesses located near the HCC should the Center cease operations.

In addition to the quantified benefits generated from the construction and on-going operations of the proposed arena, there are other benefits that cannot be quantitatively measured. Potential qualitative benefits for the local and regional market area could include:

- Enhanced growth and ancillary private sector development spurred by the operations of an arena;
- Diversified entertainment alternatives for families in the local area;
- New advertising opportunities for local businesses;
- Enhanced community pride, self-image, exposure and reputation; and
- Other such benefits.