

Economic Impacts on Hartford of Developing Downtown North: DoNO

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Contents



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Introduction

The Connecticut Center for Economic Analysis, School of Business, UConn has been commissioned by the City of Hartford Court of Common Council to examine the economic impacts of proposed Public-Private Partnership for developing 15 acres in Downtown North Hartford. This study has been guided by DoNO Hartford LLC's initial projections with total costs projections adjusted to those discussed publicly on September 18 with an original total of \$346.2M adjusted to \$350.7M to include \$5 million of investment in machinery and equipment by the Hooker Brewery and Pub, while excluding land costs of \$525,001. Land transfers are excluded because they do not generate new activity. All data on which the study relies are those drawn from the DoNo's Response to the City of Hartford's Request for Proposal as amended at the above public meeting.¹

The CCEA developed the analysis in three phases, one for each phase of the proposed development. The first phase includes construction and subsequent operation of the ballpark and parcel E of the proposal, containing 237 residential units and 63,400 SF of retail space. The second phrase adds development of parcels F and G as well as the public infrastructure. This phase includes another 228 residences, 216,000 SF of "A" quality office space, 46,000 SF of restaurant and manufacturing space occupied by the Hooker Brewery and Pub, and 24,000 SF of additional retail space. The third phase adds building 208 residential apartments and an incremental 8,000 SF of retail space. Because the development is on what is now surface parking, the housing and retail are all new, with no loss of existing residential or commercial property.

The Rock Cats and the Brewery and Pub are both committed to fuller use of the baseball park as a sports and cultural center than just baseball. Such additional activities will create additional economic benefits beyond those modeled in this analysis.

Approach

The initial REMI² simulation is based entirely on the proposed development, including mixeduse buildings, in close proximity or adjacent to the ballpark as well as the ballpark itself. The

² Depending on context REMI refers to both Regional Economic Models Inc. and the model it has developed. In this study CCEA utilizes version 1.6 of the model for Connecticut counties and four counties in Western Massachusetts. It is a simultaneous dynamic equilibrium model which allows migration to react to changes in relative income levels at the county level.



¹ DoNo Harford LLC, Response to the City of Hartford's Request for Proposal: Completing Hartford's Neighborhoods with Mixed-Use Development and Proposer Minor-League Baseball Facility, August 1, 2014.

projected construction costs shown in Table 1 provide the starting point for the analysis. Because the development is only at the concept stage, elements of the design and timing of construction may evolve; as a result these results presented here capture impacts that would emerge if the project goes ahead exactly as framed to date; if the project moves forward, any changes in design or timing might significantly change the projected economic outcomes.

Total costs (\$M)	350.70	
Ballpark (excludes land transfer costs of \$525,001	55.9	
Hooker Brewery and Pub (Includes \$5M M&E excluded in the town hall presentation)	15.00	
Relocation of roads	8.130	
Parcels B, D, & C	43.625	
Parcel E	69.071	
Parcel F	110.545280	
Parcel G (Including \$10M for Hooker Brewery and Pub construction)	58.447500	
Square feet per employee in Retail (No big box stores adjusted down from 1056)	800	
Square feet per employee in Commerce	766	

Table 1: Projected Cost of Construction (2014\$ millions)

Note \$5M in equipment for Hooker Brewery and Pub is included in the REMI simulation. The "parcels" referred to above are those in DoNo Hartford LLC's "Response to The City of Hartford's Request for Proposals for Public Private Partnership", August 1, 2014 with values amended at the Town Hall meeting.

Stimulus: Baseball Park and Neighborhood Improvements

Based on the above with the timing in DoNo's response, Table 2 captures the value and timing of the economic stimulus arising from construction from 2014 to 2020. Phase 1 includes the ballpark and Parcel E. Phases 1 & 2 adds development of Parcels F and G as well as public infrastructure. Phases 1, 2 & 3 aggregate development of all parcels as proposed, adding 208 housing units and a small amount of retail space (8,000 SF). Because nothing new is produced by payments for land the economic impacts exclude those cost of \$525,001.



	2014	2015	2016	2017	2018	2019	2020
Phase 1							
Professional, scientific & technical							
services	8.703	4.351	4.351				
Residential construction		16.840	24.058				
Non-residential construction		45.699	20.969				
Equipment							
Phases 1 and 2							
Professional, scientific & technical							
services	8.703	9.304	9.426	4.091	1.457	0.158	
Residential construction		16.840	24.058	7.507	19.563	3.260	
Non-residential construction		45.699	28.014	57.874	59.928	6.214	
Equipment					5.000		
Phase 1, 2 & 3							
Professional, scientific & technical							
services	8.703	9.304	9.426	4.091	5.709	2.284	2.126
Residential construction	0.000	16.840	24.058	7.507	19.563	21.349	14.069
Non-residential construction	0.000	45.699	28.014	57.874	59.928	7.880	1.296
Equipment					5.000		

Table 2: Projected Construction Stimulus (2014\$ millions)

DoNo Hartford LLC's "Response to The City of Hartford's Request for Proposals for Public Private Partnership", August 1, 2014 refers to several "parcels" of land which are cross referenced in this report. Aside from housing within the plan, upon the completion of development of the various parcels, employment will rise as businesses start up in line with completion of commercial and retail space, consistent with the developer's insistence on having businesses with committed leases prior to construction. Ballpark employment is assumed to rise over and above that in New Britain due to higher expected attendance and 16 corporate boxes. The ballpark employment is for the ball team, ticket takers, grounds keepers, other maintenance workers, and ushers. The analyses assume that concessions are leased out so that incremental employment is covered separately under retail or food and beverage services. Under the first phase all operating stimuli come through additional employment, noted in Table 3. These results are clearly subject to change depending on timing. For example, moving development of Parcel G ahead in the schedule so that the Hooker Brewery and Pub would start-up simultaneously with the ballpark would advance its employment impacts by 3 years and increase the expected NPV of the project.

Because distribution of commercial jobs with businesses occupying new office spaces is unknown at this time, total incremental employment has been determined by average square



footage per employee in commercial and boutique retail spaces and grocery stores. The analysis then distributes commercial employment relying on existing shares of key Hartford County commercial jobs as designated in REMI's base case.

	2014	2015	2016	2017	2018	2019	2020
Phase 1							
Performing arts and spectator sports (Ballpark)			80	80	80	80	80
Retail			80	80	80	80	80
Food and beverages services			80	80	80	80	80
Phases 1 & 2							
Retail			80	80	110	110	110
Commercial					282	289	289
Internet publishing and broadcasting					4	4	4
Telecommunications					4	4	4
Monetary authorities and intermediation					85	87	87
Securities, commodity contracts, investments					26	27	27
Insurance					47	48	48
Real estate					25	26	26
Professional, technical and scientific services					51	52	52
Management services					9	10	10
Ambulatory and health care services					35	36	36
Food and Drinking Place			80	80	80	130	130
Phases 1, 2 & 3							
Retail			80	80	110	120	120
Commercial					282	289	289
Internet publishing and broadcasting					4	4	4
Telecommunications					4	4	4
Monetary authorities and intermediation					85	87	87
Securities, commodity contracts, investments					26	27	27
Insurance					47	48	48
Real estate					25	26	26
Professional, technical and scientific services					51	52	52
Management services					9	10	10
Ambulatory and health care services					35	36	36
Food and Drinking Place			80	80	80	130	130

Table 3: Operating Stimulus (Direct Jobs)

In reality, actual employment shares may differ from the above. To the extent that occurs incremental employment may also vary from the levels used here because various industries require less space than others with ambulatory and health services having relatively high levels of floor space per job and telephoning call centers having quite low space per job.



Given the construction of a new neighborhood, employment in retail and commerce will emerge incrementally. Curtis Cameron, President and CEO of Hooker Brewery and Pub, has indicated that he will expand employment from that at his current site; assuming this expansion in employment will take time, the analysis treats that too as incremental. For the stadium, additional staff will be needed to serve both corporate boxes and the higher attendance projected to exceed 5,000 per game.

Construction and operating stimuli were combined into a single stimulus for REMI simulations run out to 2050. While the construction stimulus ends in 2020, the operating one continues out to 2050 relative to the current base case, which is the absence of the this development. Phase 1 projects quite modest results as development of only the ballpark and Parcel E are included. Phase 2 adds significant mixed use buildings to the development, including housing, retail, and office space. The final phase focuses on 208 units of additional housing with a minor addition to retail (8,000 SF).

Impacts

Impact results are reported simultaneously for each of the scenarios for Hartford County and Connecticut by economic indicator – jobs, personal income and personal disposable income, RGDP and population shifts by political jurisdiction. The potential for special events is discussed separately.

Jobs

REMI estimates annual job impacts as noted in Chart 1A. Job creation is highest during the most intensive phases of construction followed by operations at 1,106 in Hartford County in Phases 1 and 2. Of the direct jobs over which they have some control the developer expects to hire 35% of the employment force with the municipal boundaries of Hartford. Should similar hiring practices be followed for non-ball players, annual job impacts within the municipality of Hartford are expected peak at 592 jobs during construction and remain above 380 jobs.

While wages on some of the part-time jobs in arts and entertainment and food service will be below Hartford County average annual pay of \$62,095 in 2013³, wages for over 300 hours of work per family member employed during the baseball season would be a significant supplement to incomes of relatively low income families.

²⁰¹³http://data.bls.gov/pdq/SurveyOutputServlet;jsessionid=9E816A8E375368FEB0DE6C26CCD94DB3.tc_instance 5



³ Bureau of Labour Statistics, for

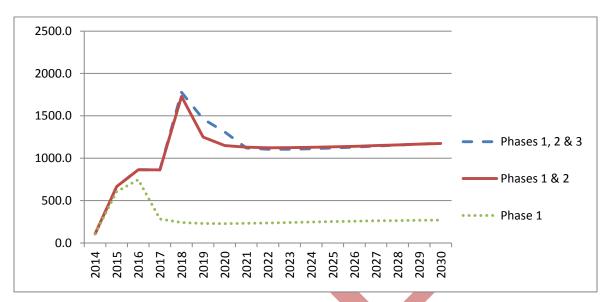


Chart 1A: Job Impacts Hartford County 2014-2030 (Jobs)

Chart 1B shows statewide job creation. During phases 2 and 3 they peak in the range 1,968 - 2,022 and are sustained at or above 1,271. Using this as the base for the 35% hiring of Hartford resident implies a peak of 676 jobs for residents and sustained employment of 439 jobs. Initiatives to give residents preference in hiring and development of appropriate job funnels (training programs) could easily bring these numbers up dramatically.

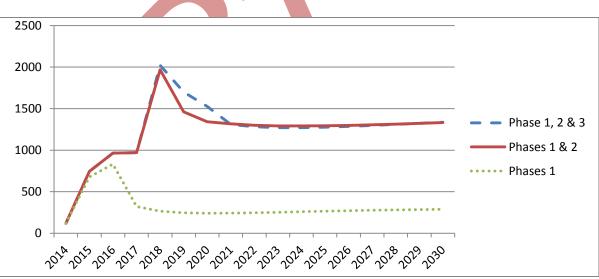


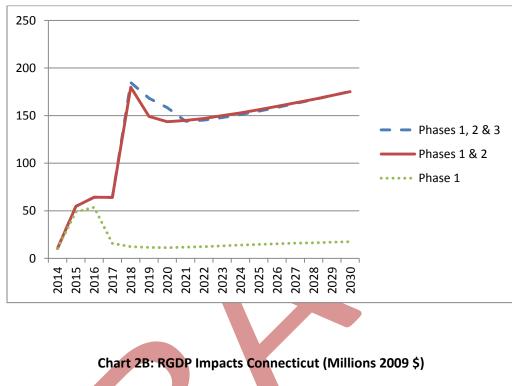
Chart 1B: Job Impacts Connecticut 2014-2030 (Jobs)

RGDP

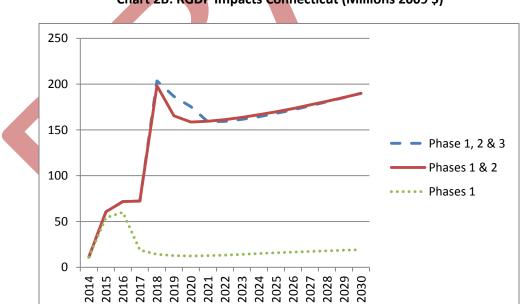
Charts 2A and 2B show the impact of the development on the state gross product (RGDP) in millions of 2009 dollars. A notable difference between these and the job charts is that inclusion of higher paid commercial jobs in phase 2 has a larger RGDP impact than do the lower paying



jobs at the ballparks and the part time food and services operations. Stated in 2014 dollars, these impacts would be about 12% higher. Because many of these workers are expected to live and reside in the area they should boost current levels of household income.









Contrasting Chart 2A and 2B illustrates the rest of the state captures some enhancement to RGDP but they are minor compared to those accruing within Hartford County and to the City of Hartford.

Personal Income, Personal Disposable Income, and Income Taxes

Both governments and Connecticut citizens will benefit from higher personal incomes. This advantage is demonstrated by improved personal income (PI) and personal disposable income (PDI; income left after payment of taxes). PDI is an important measure because it reflects how much additional demand for goods and services will flow into the economy. In Phase 3, disposable income appears to rise over time at a faster pace than RGDP because PI is measured in current dollars whereas RGDP is in constant 2009 dollars. Hartford County PI Impacts peak during construction at \$114M and then fall back to \$92M before recovering to \$118M in 2028 and then continuing to rise.

Total household income in the state also benefits as the analysis shows that total impact statewide in Phase 3 construction peaks at \$162M, then falls back to \$138M, before recovering above the construction peak in 2026 at \$163M.

Netting out personal income taxes yields PDI shown in Charts 3A and 3B with the additional personal income taxes appearing in Charts 4A and 4B. PDI follows expected patterns but rises more steeply relative to RGDP after the post construction dip because it is in current rather than real dollars. About a quarter of the PDI impact of this project accrues to the rest of the state rather than in Hartford County and the City of Hartford, which argues for some state support.



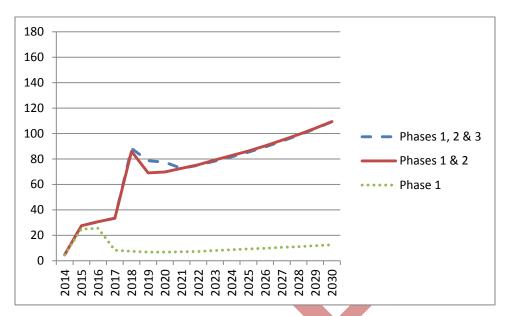
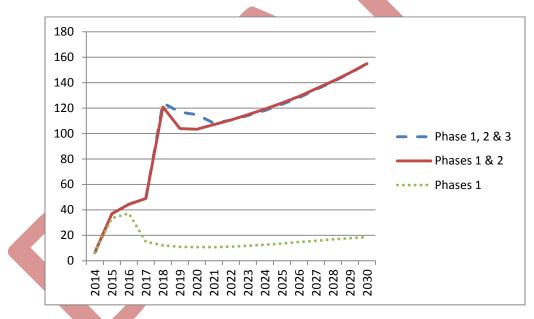


Chart 3A: Personal Disposable Income Impacts Hartford 2014-2030 (Millions of Current \$)

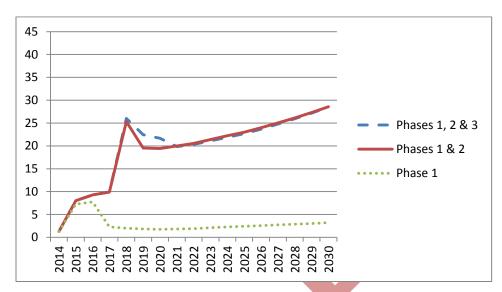




Charts 4A to 4B illustrate that personal income taxes, which accrue to the State, rise during construction and then ebb to lower levels before underlying inflation drives them higher. In the later years nearly a third of those taxes come from outside the Hartford County, reflecting both the residency of earners and the progressive nature of income taxes. Again, initiatives that the City of Hartford takes to capture a larger share of employment the development generates would necessarily shift these numbers.

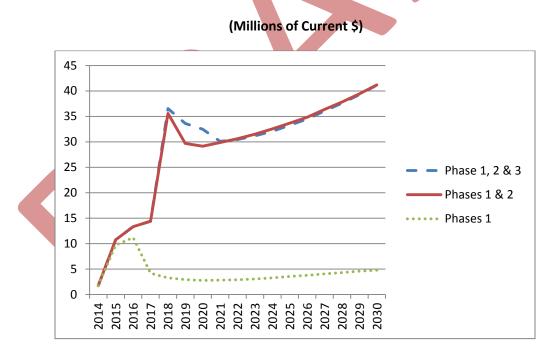


Chart 4A: Personal Income Tax Increases Attributable to the Project from Hartford County 2014-2030



(Millions of Current \$)

Chart 4A: Personal Income Tax Revenues from the Project from Connecticut Counties 2014-2030



The net present value of additional personal income tax revenue raised within Hartford County from all three phases of the project's impacts, discounted at 5% annually to 2050, is \$456M. Inclusive of income taxes raised in the rest of the state the NPV of income taxes raised to 2050



is \$663M. Prior to the close of 2034, NPV of incremental personal income taxes generated from all counties in the state is \$388M.

State and Local Government RGDP Impacts

Because government budgets are balanced within REMI, enhanced fiscal capacities of state and municipal jurisdictions are captured through improved RGDP for each level of government illustrated in Charts 5 and 6. The vast majority of the annual impacts on government RGDP come from the construction, ballpark operations, and the surrounding retail and commercial operations rather than from special events. RGDP impacts are divided roughly evenly while local governments capture a slightly greater share of impacts from special events.

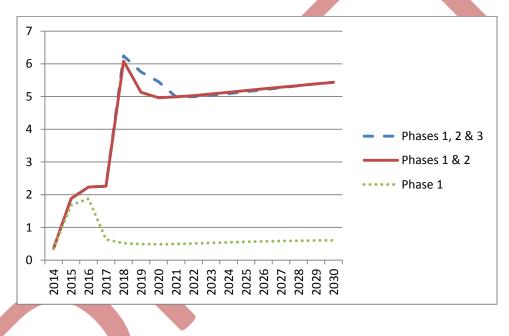


Chart 5: RGDP Impacts on Hartford County Governments 2016-2030 (Millions of 2009\$)

This chart illustrates that the model projects little impact from Phase 1 after construction on the RGDP in Hartford County. Commercial operations in Phase 2 drive these govrnment impacts which still remain below \$6 million annually in all but the peak construction year.

Chart 6 differs markedly from its predecessor as it projects the impact of the development on the costs of state services; it is not Harford County centric. Nevertheless the impacts are only slightly higher during operations.



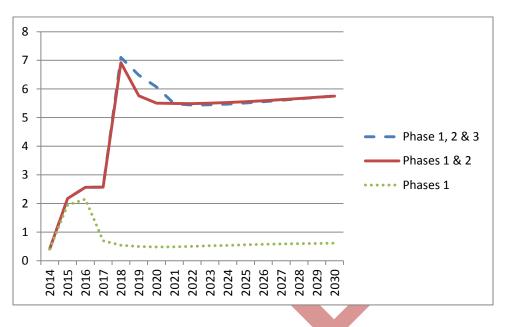


Chart 6: RGDP Impacts on the State Government 2014-2030 (Millions of 2009\$)

Discounted at 5% and in 2009 dollars to 2034, the NPV of these incremental RGDP are summarized in Table 4. Current discount rates are actually lower, which if sustained would translate into higher NPVs of the impacts. But as discount rates (rates of inflation) have historically been higher, the analysis uses a conservative standard.

	NPV of RGDP Impacts
Local Governments	
In Hartford County	
Phases 1, 2 & 3	58.57
Phases 1 & 2	57.67
Phase 1	9.56
Among all Local Governments	
Phases 1, 2 & 3	66.26
Phases 1 & 2	65.20
Phase 1	11.03
From Hartford County to State Government	
Phases 1, 2 & 3	60.13
Phases 1 & 2	59.21
Phase 1	9.49
From all Counties to the State Government	
Phases 1, 2 & 3	63.90
Phases 1 & 2	62.91
Phase 1	10.20

Table 4: NPV of Incremental Government Activities 2014-2034 (Millions \$)



Population

The additional economic activity attracts migration into Hartford or at least stems emigration. The core point is that population is higher with the development than without it because the development attracts population that would not otherwise have moved into Hartford.

By 2021, with phase 3, the analysis projects Hartford County's population rising by 845. By 2025, upon completion, Hartford County population impacts from this development rise to 1093.

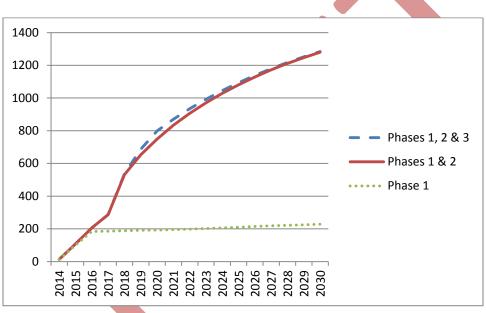


Chart 7: Population Impacts Hartford County 2014-2030

Given the 673 housing units and apartments to be built in the project, it is then possible that over time these units would be insufficient to accommodate the population attracted to Hartford. This result confirms that over time the assumption of the housing being incremental to what would occur without the project is justified.

Special Event Impacts

It is also highly likely that the baseball facility will be used for special events including amateur championships and large musical events such as rock concerts and jazz festivals. While the levels and frequency at which these will occur is unknown at this time. It is clear that seating could be expanded by using some of the playing surface so that significantly larger crowds could be accommodated than those attending ballgames. The gate alone from a sellout crowd with average ticket prices approaching \$80 would be in the millions for a single event.



That potential has been taken by adding annual arts and entertainment of \$5M to the Phase 3 estimate. The results are reported as incremental to that phase rather than the base case. In that way, readers may interpret the results as multiples of every \$5M in arts and entertainment added to annual operations from 2016 onward. For example \$10M in such activities would double the incremental impacts.

Average annual incremental results above those for Phases 1, 2 & 3 in Hartford County from adding \$5M worth of events annually from 2016 to 2050 are 135 additional jobs, \$6.3M incremental PI, \$5.0M in PDI and another 71 in population. RDGP generated by local governments in Hartford County rise by \$220,000.

Parallel numbers for the state indicate increments relative to those of Phases 1, 2 & 3 of 143 in additional jobs, \$9.1M in PI, \$7.4M in PDI and 102 more in population. RDGP generated by local governments in Connecticut rises by \$168,000. Because these estimates are based on ticket sales alone without considering concession and parking revenues, they are conservative.

Conclusions

The proposed Downtown North development has the potential to create a new neighborhood, focused around the ballpark, used both for Rock Cats games and other activities. When fully developed, the projected benefits for Hartford flowing from this project are considerable:

- Peak annual jobs during construction of 1,806 in 2018 without special events; adding other events could generate significant additional employment;
- Sustained additional employment in excess of 1,078 in Hartford County after construction without additional events;
- Additional personal income in Hartford County of \$100M to \$150M, reaching the higher number depending on the value of special events making use of the facility;
- Additional consumer power from additions to personal disposable income in Hartford County of \$70M to \$104M in 2021 and rising thereafter.

