

**ECONOMIC IMPACTS AND TAX IMPACTS OF CONSTRUCTION OF
A SOCCER STADIUM AND THE EXPANSION OF MAJOR LEAGUE SOCCER TO CINCINNATI**

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I. Introduction and Summary

Public interest is growing rapidly for Major League Soccer (MLS). Over the two decades since MLS was launched in 1996, both the number of MLS teams and the number of games played have more than doubled, from 10 teams to 22 teams, and 160 games to 340 games. Attendance at MLS games has also increased. Over the most recent decade, average attendance at MLS games has grown by nearly 30 percent, from 16,770 in 2007 to 21,692 in 2016. For some MLS teams, average attendance at home games currently exceeds the nominal seating capacity of their stadiums, and temporary measures are required to meet the excess demand for seating. In recognition of this impressive and continuing growth in public interest, a plan to add four more MLS teams was announced on December 15, 2016. Two expansion teams will be announced in 2017 and two more expansion teams will be announced at a future date that has yet to be determined.

Futbol Club Cincinnati (FC Cincinnati) currently plays in the United Soccer League (USL), the second division league of the U.S. Soccer Federation. FC Cincinnati plays home games at the University of Cincinnati's Nippert Stadium. In its inaugural year, 2016, FC Cincinnati broke the all-time USL record for attendance on three separate occasions. That same year, FC Cincinnati broke the all-time attendance record for a USL playoff game and the all-time USL regular season attendance record. This additional evidence of remarkable public support highlights the fact that Cincinnati would be an attractive location for a new MLS team. Consistent with this view, the current owners of FC Cincinnati have submitted a bid to become one of the new MLS expansion teams.

In support of their bid for a new MLS franchise, the current owners of FC Cincinnati are considering three locations for the construction of a new stadium. All three options are in or near Cincinnati. Two of the potential locations are in Ohio and within Cincinnati city limits. One of these is in the Over-the-Rhine area, and the other is in the Oakley area. The third option is in Newport, Kentucky, in the planned Ovation development on the Ohio River.

The formal objective of this report is to measure the potential economic impact that would be generated for the Cincinnati area if the current owners of FC Cincinnati were to receive a new MLS franchise and a new stadium is constructed. For the purpose of this report, and in order to make use of essential data, the specific area of interest is identified as the Metropolitan Statistical Area (MSA) that includes the city of Cincinnati and Hamilton County as well as 14 additional counties in Ohio, Kentucky, and Indiana. In addition to traditional measures of economic impact, which are discussed in the body of the report, by virtue of a likely request for public funds in support of construction costs, additional estimates are provided for the effects that construction of a new stadium and continuing operations of a

¹ The authors acknowledge the essential research assistance provided by Amy Buser, PhD.

² Note that a blockage impact is larger than a corresponding visitor impact because it also includes the foregone

new MLS team are likely to have on tax revenues of the cities of Cincinnati and Newport, the counties of Hamilton and Campbell, and the states of Ohio and Kentucky.

This report employs standard methods to develop conservative estimates for the potential economic impacts. Highlights of the main findings are as follows:

- 1) The economic impacts of the construction of a new stadium would be limited in duration but substantial in magnitude. We estimate that during the three-year construction period, regional production and spending (output) would increase by \$560 million to \$597 million depending upon which potential location is chosen for the new stadium. The increase in production and spending would in turn generate additional wages, salaries, and self-employment income totaling between \$200 million and \$215 million, depending upon location. Employment sustained by construction activities will vary as construction activities ebb and flow, but as activity reaches its peak, between 2,200 and 2,600 full-time and part-time jobs would be generated in the Cincinnati region.
- 2) With respect to continuing operations of a new MLS team, the economic impacts would be smaller in scale, but the effects would continue indefinitely. We estimate that, no matter which location is chosen for the new stadium, the impact on output would be nearly \$25 million in the first year of operation for the new MLS team. We also estimate that the impact on output would grow to a level of \$26 million by the fifth year of MLS team operations. These increases in output will in turn create a net increase in wages, salaries, and self-employment income at a combined level of roughly \$11 million in the first year of operation and roughly \$12 million by the fifth year. (This impact includes \$6 million in player salaries played by the league.) Approximately 320 jobs would be generated for the region by the fifth year of operation.
- 3) A further benefit of team expansion would be the attraction of visitors from outside the region who would bring new spending into the Cincinnati area. These attendees will purchase game tickets, concessions, restaurant meals elsewhere in the region, and hotel rooms. The impact of this additional visitor spending on the regional economy would be substantial. Annual output would increase by \$45 million. Annual wages, salaries, and self-employment income would increase by \$14 million, and more than 500 new jobs would be added.
- 4) The construction of a new stadium and continuing operations for a new MLS team would also produce substantial additional tax revenues for local municipalities and counties, as well as the two states. If either of the two Ohio locations is chosen for a new MLS stadium, Cincinnati can expect to receive additional tax revenues totaling at least \$3.7 million during the three years of construction, which is assumed to include the first year of play. The annual incremental tax revenue is projected to decline once construction work is completed. However, it will remain at a level of at least \$0.8 million per year. For an assumed discount rate of 5 percent, the present value of the first 10 years of projected future tax revenues would amount to \$7.3 million to \$7.5 million. Corresponding projections of the increase in future tax revenues for Hamilton County are approximately \$0.8 million during the first three years, plus continuing amounts that would bring the present value of a 10-year projection of future tax revenues to at least \$1.9 million. If the Ovation location is chosen for the new MLS stadium, the corresponding tax increases for Cincinnati and Hamilton County will not be as large. We estimate that for Cincinnati, the first three years of construction and initial play would yield a gain of roughly \$0.9 million and the present value of the 10-year projection for increased tax revenues would be approximately \$1.3

million. For Hamilton County, the initial three-year tax gain would be \$0.4 million and the present value of the 10 year projection of increased tax revenues would be roughly \$1 million.

- 5) Detailed estimates are provided at the end of this report for an alternative case in which the assumed seating capacity for a new stadium is increased from 21,000 to 25,000. In this case, visitor impacts would increase proportionally. Construction and operating impacts would increase as well, but less than proportionally because of the existence of fixed costs. In this case, construction would increase total regional output between \$643 million and \$689 million. Household earnings would increase between \$230 million and \$249 million, and between 2,600 and 3,000 jobs would be created or sustained. Long-run operations would increase Cincinnati MSA output by \$30 million, earnings by \$14 million, and sustain nearly 400 jobs regardless of location.

II. General Measures of Economic Impact

The key focus of an economic impact assessment is the increase in **output** of the economy of a specific geographical area that results from specific economic activities. For this study, the geographical area is defined as the Cincinnati MSA, and the specific economic activities of interest are the construction of a new MLS stadium, the games and other events that will generate revenues, room nights for the hotels, and visitor spending elsewhere in the local economy. Output is measured by the value of goods and services produced in the MSA over a given period of time. The production of output generates earnings for business owners and workers. The economic impact assessment also estimates these earnings as well as the number of jobs that are created or sustained as a result of the construction and operating activities.

Construction spending and team-related spending is referred to as a **direct** impact. However, direct impacts are only part of the total impact. The suppliers of goods and services to the construction companies, team, and visitors will generate output and increase their own purchases of supplies to accommodate the increased activity, and the suppliers may also hire additional workers. These supplier activities are referred to as **indirect** impacts. In addition, business owners will earn profits and their employees will earn salaries, wages, and tips. These owners and workers will use their earnings to purchase household goods of all kinds. To the extent that these payments for purchases and wages and salaries are made to suppliers and employees within the Cincinnati MSA, the region's economic activity and output is increased further. The impact of this household spending is referred to as an **induced** impact. It is important to emphasize that the direct activities *cause* this additional spending, and it would never have occurred had the construction and team operations not generated economic activity in the first place. For this reason, the indirect and induced impacts are as much a part of the total economic impact as are the direct impacts. This is the point that makes economic impact analysis legitimate.

A crucial qualification to this argument is that in order to have an impact on the Cincinnati MSA economy, the direct spending must be **new** spending. It cannot displace spending that would have occurred otherwise. Most of the attendees of the soccer matches will be local residents who, like the visitors, will pay entry fees, purchase concessions, and may shop nearby. But most of the spending of these residents will come out of current budgets and will thus be in lieu of spending elsewhere in the region. Consequently, the related output is simply transferred from one part of the region and one activity to another. The spending at the stadium increases. However, spending at local movie theaters,

retail stores, and restaurants, and the related taxes are likely to decrease. Thus, to include this spending – and the related indirect and induced spending – would lead to a significant overstatement of economic impact and tax revenues. The same argument applies to the team’s expansion. Because expenditures are already being made, the relevant impact is not the total spending in the expanded budget, but rather the incremental spending relative to the downsized budget of the team continuing in the USL.

Consider, however, soccer fans who prefer MLS to USL matches and who currently travel to Columbus to attend Crew SC games. If these fans shift their allegiance to FC Cincinnati once it joins the MLS, this will retain local spending that would otherwise have left the region. This spending can be counted to the same degree as visitor spending because it represents the prevention of a drain on regional output that would occur if a local MLS team were not available. This is referred to as a **blockage** impact. Note that it is not merely the admission fees and other actual spending that constitute this impact, but also the travel expenses that are avoided and are thus available to be spent within the local area as well.²

Indirect and induced output, earnings, and employment impacts can be estimated by applying an economic impact model to the direct spending increase. Several generally-accepted models are available for this purpose; this analysis uses the Regional Input-Output Modeling System (RIMS II) developed by the United States Bureau of Economic Analysis. As is the case for the other impact models, RIMS II is based on a framework called an input-output table. For a given industry in a given geographic area, the input-output table shows the increase in purchases from other local firms by industry and the sales to other local firms by industry resulting from a one-dollar increase in the given industry’s output. Thus, the input-output table can be used to derive the impact on other local firms of an increase in production within a specific industry. The results of a RIMS II analysis, as is true of any economic impact study, represent only the order of magnitude of the actual impacts and cannot be regarded as precise.

These impacts are specific both to a given industry and to a given region. The array of suppliers benefiting from the spending of a soccer team or a construction company is generally the same regardless of where the spending occurs. But if the structure of the Cincinnati MSA economy is such that most purchases must be made from vendors outside the region, then most of the impact will leak from the local economy. Conversely, a broad economy with many local suppliers will keep more of the impact of the output increase circulating within the economy, and the indirect and induced impacts will be much greater. Thus, the values within the input-output table are unique to the Cincinnati MSA. RIMS II summarizes the information in the regional input-output table by calculating a set of unique impact factors (multipliers) for each of 369 detailed industries within the MSA. Because of their origin in the input-output table, the factors implicitly reflect the structure of the Cincinnati MSA economy and the presence or absence of local suppliers.

Employment estimates in an economic impact analysis must be interpreted particularly carefully. First, these are not all full-time jobs. Instead, a RIMS II analysis provides a mix of full-time jobs and part-time jobs (i.e., headcount) that is typical for the industry in question. While it is legitimate to refer to the direct jobs in a new activity as “created,” the same cannot be said for indirect and induced jobs. The implication of an estimated employment impact is that additional activity exists to increase the headcount to the specified extent, but the model cannot determine whether this need is filled by new hiring or by existing workers increasing their hours and/or effort. Therefore, it is more appropriate to

² Note that a blockage impact is larger than a corresponding visitor impact because it also includes the foregone travel costs between Cincinnati and Columbus, in this example. A visitor impact only includes the transportation spending incurred within the region.

refer to these jobs not as created but as sustained. Note, however, that even if no new workers are hired, the income of existing workers should increase. This would give rise to additional induced activity.

One modification of expenditures must be made before they are used in an economic impact model. Purchaser prices must be restated to reflect only the activity occurring within the region. The retail price of a good reflects not only the activity of the retailer, but also that of the manufacturer, the transportation company, and distributors. Most of these activities are likely to occur elsewhere and are not relevant to the local economy. Generally speaking, this change affects only prices of goods, not prices of services, which are usually produced and consumed in the same location. Further, even though construction costs do include the cost of materials, construction costs are not generally modified because materials are a relatively small share of the total. The factors for the construction industry implicitly reflect this convention.

This project has both a construction component and an operating component (including the impact of visitor spending). Construction has a finite term, and so do the indirect and induced impacts associated with that activity. When the construction ends, so do the associated impacts. In contrast, operations continue indefinitely and so do the indirect and induced impacts associated with those operations. This study presents impacts through 2023 based on the information provided by the client, but the impacts will continue far longer. It is assumed that the 2023 impacts are those of the long-run steady state. Because the construction and operating impacts are two different classes of impacts, they will be presented and discussed separately in the results below.

III. Assumptions Underlying the Economic Impact Calculations

Because the expenditures of the team and the origin and spending of visitors that underlie the economic impact analysis are planned and not yet observed, a number of assumptions must be made and information from other sources must be collected to obtain the parameters required for the estimates. Construction and five-year operating budgets were provided by FC Cincinnati. All impacts must be calculated in inflation-adjusted dollars, so the budget amounts are expressed in terms of projected 2020 prices, the first year of play for the prospective expansion team. Price adjustments are made using the Congressional Budget Office's projected values for the Consumer Price Index for All Urban Consumers (CPI-U).

As discussed above, if the MLS bid is unsuccessful, the FC Cincinnati owners are planning a significant downsizing of the team to make its scale more consistent with that of other teams in the USL. Thus, the net gain of the expanded team is not relative to the team as currently constituted, but to the smaller team. To reflect the non-expansion state, operating statements for the most recent two years and attendance totals were obtained from another USL team, and the revenues and expenses for the two years were averaged. FC Cincinnati provided estimates of the share of each revenue and expense category typically occurring within and outside of the region. While the only relevant revenues are those entering the region from the outside and those blocked from leaving, the only relevant expenditures are those made within the region. A purchase from a remote supplier causes the dollars spent on that purchase to increase output and income, and sustain employment in the supplier's location, not in Cincinnati.³ Further, in the same way that dollars spent by local residents are relocation of economic

³ The RIMS II files include factors for spectator sports; these factors could have been multiplied by the relevant revenues to generate impacts directly. Instead, the individual local expenditures were multiplied by the factors for

activities, not new activities, the expenditures made to provide services to local residents offset expenditures that would otherwise be made elsewhere within the region. Consequently, the local expenditures are multiplied by the percentage of attendees from outside the region plus the blockage to derive the totals to be entered into the impact model.

Each of the three locations involves somewhat different construction costs and needs. An existing football stadium occupies the planned Over-the-Rhine site. This will be relocated if the site is selected. Different amounts are required for site and infrastructure development, and the parking garage at the Ovation site is significantly more expensive because it will be built partially underground. The training/youth facility will be developed in a different location. However, it is assumed that this facility will be built in the same city as the stadium. Total construction costs were provided for the relocated stadium, parking garage, and training facility. It is likely that these costs include allowances for overhead and contingencies, neither of which are included in the impact analysis. These are omitted from the analysis because contingencies may or may not occur, and overhead includes primarily fixed costs, which certainly must be covered but which will be incurred whether or not this project occurs.⁴ Accordingly, 15 percent is deducted from each of these costs. Likewise, indirect costs are omitted from the stadium impact. The facilities would be developed over a three-year period which could begin as early as 2018. However, rather than speculate on the precise starting date for the construction, in the remainder of this report, we refer to the construction period as simply Year 1, Year 2, and Year 3. On the next page, Table 1 shows the total included costs and assumed phasing of the project in each of the three locations.

each relevant industry. This “bill-of-goods” approach generates more reliable results that are specific to the operations of FC Cincinnati.

⁴ The category including overhead, “general requirements,” also includes miscellaneous items such as equipment rental, insurance, permits, and job site security. While these items are specific to the job, they cannot be differentiated from fixed-cost items. Thus, including general requirements would definitely overstate the impact.

Table 1
Summary of Costs and Phasing for the Stadium, Garage, and Training/Youth Facility
 Dollar Amounts are Adjusted for Projected Inflation

	Year 1	Year 2	Year 3	Total
Over-the-Rhine				
Stadium	74,726,637	101,386,658	3,950,800	180,064,096
Training complex			21,250,000	21,250,000
Site prep	8,900,890			8,900,890
Infrastructure	17,801,780			17,801,780
Stadium relocation	7,565,757			7,565,757
Parking garage		41,765,959		41,765,959
OTR total	108,995,064	143,152,617	25,200,800	277,348,481
Oakley				
Stadium	74,726,637	101,386,658	3,950,800	180,064,096
Training complex			21,250,000	21,250,000
Site prep	10,681,068			10,681,068
Infrastructure	16,021,602			16,021,602
Parking garage		41,765,959		41,765,959
Oakley total	101,429,308	143,152,617	25,200,800	269,782,724
Ovation				
Stadium	74,726,637	101,386,658	3,950,800	180,064,096
Training complex			21,250,000	21,250,000
Infrastructure	8,900,890			8,900,890
Parking garage		66,129,434		66,129,434
Ovation total	83,627,527	167,516,093	25,200,800	276,344,420

If the team expands, its attendance should be consistent with that of other MLS teams. FC Cincinnati selected Sporting Kansas City SC as a benchmark because the population of the Kansas City MSA is close to that of the Cincinnati MSA. Sporting Kansas City's season attendance of 333,000 ranks 13th among 20 MLS teams. If FC Cincinnati downsizes, attendance should be equivalent to that of other USL teams. FC Cincinnati provided attendance for two other USL teams, the Pittsburgh Riverhounds and the Louisville City FC; projected attendance is 39,700 and 132,600, respectively. These are averaged to provide the long-run attendance of FC Cincinnati, 86,200.

As previously discussed, estimates of the economic benefits from continuing operations depend on a number of inputs including the percentage of participants that come from outside the region, the assumed blockage factors, and visitor spending by category. FC Cincinnati expects attendance from outside the region after expansion to be between 10 percent and 13 percent. For the purpose of this report, we adopt the conservative assumption of 10 percent. We also assume the blockage factor relevant would be 20 percent for FC Cincinnati. As we have previously observed, the blockage factor accounts for: a) local spending by residents who attend FC Cincinnati soccer matches rather than attend events elsewhere; b) foregone travel costs between Cincinnati and the prospective alternative destinations, and c) a relatively small amount of additional spending that might be diverted from savings by fans who are strongly attracted to the opportunity to see a local MLS team. Like the spending by visitors, any spending from savings generates new economic activity. However, this impact is assumed to be small. If the team were to downsize, attendance from outside the region and the blockage impact

are far less than if expansion occurs. FC Cincinnati expects nonlocal attendance to be only five percent of the total, and the non-expansion blockage factor is assumed to be eight percent.

The Cincinnati MSA includes five counties in Ohio, six in Kentucky, and three in Indiana. It is important for several reasons, including the tax analysis, to allocate impacts at a state level. Table 2 provides three different measures of the distribution of people and jobs across each state's part of the MSA: the percentage of population in the MSA counties in each state, the total resident employment in the state, and the total jobs within the state. The difference between the last two of these measures is that an Indiana resident working in Ohio would be counted in Indiana in the first measure and in Ohio in the second. The fact that the percentage of jobs in Indiana and Kentucky is lower than the share of resident employment in these states indicates that the Kentucky and Indiana counties of the MSA are net suppliers of labor to the Ohio counties. In other words, there is more commuting out of these counties for work than there is commuting in.

Table 2
Alternative Measures of the Contribution of
Ohio, Indiana, and Kentucky Counties to the Cincinnati MSA

	Ohio	Indiana	Kentucky
Total MSA population in each state	76.7%	2.9%	20.4%
Total employment of MSA residents	76.9%	3.0%	20.2%
Total MSA employment within the state	79.9%	1.6%	18.5%

Source: Population Estimates Program, U.S. Census Bureau; Local Area Unemployment Statistics and Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

Derivations for visitor impacts require estimates for total spending and for categories of spending so that the industry-specific RIMS II factors can be used to obtain indirect and induced impacts of each expenditure category. Cincinnati USA, the regional convention and visitors bureau, has total average spending but not spending by category. However, average spending by category and type of visitor (day or overnight) is provided for visitors to Columbus and Franklin County by a 2003 study commissioned by Experience Columbus from Longwoods International. These amounts are inflated to March 2017 dollars using item-specific CPI-U values. The resulting inflated day trip total is within \$10 of the current total spending provided by Cincinnati USA. The March 2017 dollars are further inflated to projected prices for the first year of expansion play using the Congressional Budget Office projections. It is assumed that 20 percent of visitors stay overnight. As will be discussed later, the sales tax estimation requires spending within Hamilton County by residents of other counties of the region. This spending is assumed to be one-half of the day-trip expenditure for all categories except recreation – which includes tickets to the soccer match. The average per-day per-person expenditure for day, overnight, and in-region visitors is shown in Table 3 on the next page.

Table 3
Average Daily Visitor Expenditure by Category
 Dollar Amounts are Adjusted for Inflation

Expenditure category	Overnight	Day trip	Day trip in region
Food and restaurants	\$ 71.88	\$ 78.49	\$ 39.24
Retail and other purchases	31.56	50.12	25.06
Automobile	21.25	36.72	18.36
Other transportation	4.82	0.98	0.00
Recreation	12.32	39.51	39.51
Lodging	86.83	0.00	0.00
Total	\$ 228.65	\$ 205.83	\$ 122.18

Source: Visitor Expenditure Survey for Columbus, Ohio. Longwoods International, 2003. Inflated to March 2017 dollars using commodity-specific values from the Consumer Price Index for All Urban Consumers, U.S. Bureau of Labor Statistics.

These values are applicable to visitors but not to visiting team members or staff. FC Cincinnati provided the budget parameters shown in Table 4.

Table 4
Visiting Team and Staff Budget Values

	No expansion	Expansion
Home games per season	16	17
Players per season	288	340
Staff per season	80	255
Team and staff per season	368	595
Nights per stay	1.5	2
Home games per season	16	17
Number of rooms per game	12	25
Food allowance per meal	\$23	\$45
Room nights per season	288	850
Room rate per night	\$120	\$175
Total food spending per season (3 meals over 2 days)	\$50,784	\$160,650
Total hotel spending per season	\$34,560	\$148,750

Source: FC Cincinnati. Room rate assumed.

As pointed out earlier, economic impact models provide only order-of-magnitude estimates of the true indirect and induced activity. Much of the impact analysis hinges on activity within the state (i.e., the third measure in Table 3). The model is not sensitive enough to provide reliable shares of the total MSA activity occurring in Indiana, so the analysis estimates MSA activity, activity in Ohio, and activity in the remainder of the MSA. As a practical matter this involves performing a RIMS II analysis on the total MSA, an analysis on the Ohio counties, and subtracting the two to obtain a single remainder. Although the direct operating activities occur in Ohio, some of the construction-related activities (e.g., engineering) could occur in Kentucky or Indiana, and by definition the indirect and induced activities occur throughout the MSA. This is reflected in the analysis by multiplying the total purchases of each supplier industry by that industry's percentage of total MSA employment in Ohio to obtain an assumed (probabilistic) portion of total purchases made in Ohio. That portion is entered into the Ohio impact analysis. Wages, however, are allocated based on the share of resident employment.

IV. One-Time Construction Impacts

The following tables summarize the economic impacts of construction at each of the three sites. The ongoing operating impacts are considered in the next section. Table 5 reports the output impacts of construction at the Over-the-Rhine site, allocating these between Ohio and the remainder of the MSA. The implication of these estimates is that if the stadium is constructed, total output in the Cincinnati MSA over the three-year construction period will increase by a total of \$576 million, including \$277 million in direct activity, \$118 million in the project's suppliers and those businesses' own suppliers, and \$181 million in businesses meeting the household needs of the direct and indirect employees. Of the \$576 million total output, approximately \$525.5 million will occur in the Ohio counties of the Cincinnati MSA and \$50.5 million will occur in the Kentucky and Indiana counties. Even though the stadium is built in Ohio, some direct activity, such as engineering and other support services, may occur in Kentucky, and some workers certainly live and spend their income across the river. Tables 6 and 7 present corresponding impacts for the Oakley and Ovation sites. Although the direct impacts on the Ohio counties of the Ovation site are substantially less than the impacts of the other two sites, the indirect and induced impacts are of roughly the same relative scale. This is because of the large percentage of economic activity and population – and consequently suppliers and workers – in the Ohio portion of the MSA.

Table 5
Output Impacts of Stadium Construction – Over-the-Rhine

Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	108,995,000	47,426,000	69,702,000	226,123,000
Ohio	107,515,000	45,218,000	54,638,000	207,371,000
Kentucky and Indiana	1,480,000	2,208,000	15,064,000	18,752,000
Year 2				
Cincinnati MSA	143,153,000	60,132,000	93,979,000	297,264,000
Ohio	139,737,000	57,194,000	73,325,000	270,256,000
Kentucky and Indiana	3,415,000	2,938,000	20,655,000	27,008,000
Year 3				
Cincinnati MSA	25,201,000	10,455,000	16,918,000	52,574,000
Ohio	24,635,000	10,000,000	13,197,000	47,832,000
Kentucky and Indiana	565,000	455,000	3,721,000	4,741,000
Total				
Cincinnati MSA	277,348,000	118,012,000	180,599,000	575,960,000
Ohio	271,887,000	112,411,000	141,160,000	525,459,000
Kentucky and Indiana	5,461,000	5,601,000	39,439,000	50,501,000

Note: Components may not sum to totals because of rounding.

Table 6
Output Impacts of Stadium Construction – Oakley
 Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	101,429,000	44,061,000	64,972,000	210,463,000
Ohio	99,949,000	41,992,000	50,894,000	192,835,000
Kentucky and Indiana	1,480,000	2,070,000	14,078,000	17,628,000
Year 2				
Cincinnati MSA	143,153,000	60,132,000	93,979,000	297,264,000
Ohio	139,737,000	57,194,000	73,325,000	270,256,000
Kentucky and Indiana	3,415,000	2,938,000	20,655,000	27,008,000
Year 3				
Cincinnati MSA	25,201,000	10,455,000	16,918,000	52,574,000
Ohio	24,635,000	10,000,000	13,197,000	47,832,000
Kentucky and Indiana	565,000	455,000	3,721,000	4,741,000
Total				
Cincinnati MSA	269,783,000	114,648,000	175,869,000	560,300,000
Ohio	264,322,000	109,185,000	137,416,000	510,923,000
Kentucky and Indiana	5,461,000	5,463,000	38,453,000	49,377,000

Note: Components may not sum to totals because of rounding.

Table 7
Output Impacts of Stadium Construction – Ovation
 Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	94,309,000	40,240,000	61,572,000	196,120,000
Ohio	8,863,000	31,908,000	48,937,000	89,708,000
Kentucky and Indiana	85,446,000	8,331,000	12,635,000	106,412,000
Year 2				
Cincinnati MSA	167,516,000	70,277,000	110,317,000	348,110,000
Ohio	15,357,000	55,483,000	87,534,000	158,374,000
Kentucky and Indiana	152,159,000	14,794,000	22,783,000	189,736,000
Year 3				
Cincinnati MSA	25,201,000	10,455,000	16,918,000	52,574,000
Ohio	3,385,000	8,345,000	13,377,000	25,107,000
Kentucky and Indiana	21,815,000	2,110,000	3,541,000	27,466,000
Total				
Cincinnati MSA	287,025,000	120,971,000	188,807,000	596,804,000
Ohio	27,605,000	95,737,000	149,848,000	273,190,000
Kentucky and Indiana	259,421,000	25,235,000	38,959,000	323,614,000

Note: Components may not sum to totals because of rounding.

Tables 8, 9, and 10 list the construction-related earnings – wages, salaries, and self-employment income – at each of the three sites. These are components of the output impacts rather than separate impacts.

Table 8
Earnings Impacts of Stadium Construction – Over-the-Rhine
 Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	46,060,000	12,115,000	21,147,000	79,322,000
Ohio	38,286,000	10,368,000	14,848,000	63,503,000
Kentucky and Indiana	7,773,000	1,747,000	6,298,000	15,819,000
Year 2				
Cincinnati MSA	62,886,000	15,551,000	28,512,000	106,949,000
Ohio	52,098,000	13,207,000	19,932,000	85,237,000
Kentucky and Indiana	10,788,000	2,344,000	8,580,000	21,712,000
Year 3				
Cincinnati MSA	11,377,000	2,739,000	5,133,000	19,249,000
Ohio	9,406,000	2,343,000	3,588,000	15,337,000
Kentucky and Indiana	1,971,000	396,000	1,544,000	3,912,000
Total				
Cincinnati MSA	120,323,000	30,406,000	54,791,000	205,520,000
Ohio	99,790,000	25,918,000	38,368,000	164,077,000
Kentucky and Indiana	20,533,000	4,487,000	16,423,000	41,443,000

Note: Components may not sum to totals because of rounding.

Table 9
Earnings Impacts of Stadium Construction – Oakley
 Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	42,947,000	11,279,000	19,712,000	73,938,000
Ohio	35,674,000	9,646,000	13,831,000	59,151,000
Kentucky and Indiana	7,274,000	1,633,000	5,880,000	14,787,000
Year 2				
Cincinnati MSA	62,886,000	15,551,000	28,512,000	106,949,000
Ohio	52,098,000	13,207,000	19,932,000	85,237,000
Kentucky and Indiana	10,788,000	2,344,000	8,580,000	21,712,000
Year 3				
Cincinnati MSA	11,377,000	2,739,000	5,133,000	19,249,000
Ohio	9,406,000	2,343,000	3,588,000	15,337,000
Kentucky and Indiana	1,971,000	396,000	1,544,000	3,912,000
Total				
Cincinnati MSA	117,211,000	29,569,000	53,356,000	200,136,000
Ohio	97,178,000	25,196,000	37,351,000	159,725,000
Kentucky and Indiana	20,033,000	4,373,000	16,005,000	40,411,000

Note: Components may not sum to totals because of rounding.

Table 10
Earnings Impacts of Stadium Construction – Ovation
 Dollar Amounts are Adjusted for Inflation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	41,026,000	10,359,000	18,681,000	70,066,000
Ohio	3,838,000	8,191,000	15,096,000	27,125,000
Kentucky and Indiana	37,189,000	2,167,000	3,569,000	42,925,000
Year 2				
Cincinnati MSA	73,969,000	18,104,000	33,469,000	125,543,000
Ohio	5,182,000	14,302,000	27,046,000	46,530,000
Kentucky and Indiana	68,787,000	3,802,000	6,423,000	79,013,000
Year 3				
Cincinnati MSA	11,377,000	2,739,000	5,133,000	19,249,000
Ohio	1,466,000	2,173,000	4,148,000	7,787,000
Kentucky and Indiana	9,911,000	567,000	985,000	11,463,000
Total				
Cincinnati MSA	126,373,000	31,203,000	57,283,000	214,858,000
Ohio	10,486,000	24,666,000	46,291,000	81,442,000
Kentucky and Indiana	115,887,000	6,536,000	10,977,000	133,401,000

Note: Components may not sum to totals because of rounding.

Tables 11, 12, and 13 present the employment impacts during the three-year construction period. The allocation of jobs is on the basis of the location of the job, not the residence of the employee. Note that the employment impacts are reported without rounding because some of them are small. It should be reemphasized, though, that these impacts, like all of the others, cannot be regarded as precise. Note too that the employment impacts, unlike the output and earnings impacts, are not summed. This is because jobs can last for more than a year, so summing the jobs across years would introduce double-counting. A construction worker who is on the job for the entire three-year length of the project is working one job, not three.

Table 11
Employment Impacts of Stadium Construction – Over-the-Rhine

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	823	230	564	1,618
Ohio	662	193	408	1,264
Kentucky and Indiana	161	37	156	354
Year 2				
Cincinnati MSA	1,127	295	761	2,183
Ohio	905	246	548	1,700
Kentucky and Indiana	222	49	213	484
Year 3				
Cincinnati MSA	203	53	137	393
Ohio	162	45	99	306
Kentucky and Indiana	40	9	38	87

Table 12
Employment Impacts of Stadium Construction – Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	767	215	526	1,508
Ohio	617	180	380	1,177
Kentucky and Indiana	151	35	146	331
Year 2				
Cincinnati MSA	1,127	295	761	2,183
Ohio	905	246	548	1,700
Kentucky and Indiana	222	49	213	484
Year 3				
Cincinnati MSA	203	53	137	393
Ohio	162	45	99	306
Kentucky and Indiana	40	9	38	87

Table 13
Employment Impacts of Stadium Construction – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	733	198	499	1,430
Ohio	61	156	402	619
Kentucky and Indiana	672	42	97	811
Year 2				
Cincinnati MSA	1,328	343	894	2,564
Ohio	83	270	720	1,073
Kentucky and Indiana	1,245	73	173	1,491
Year 3				
Cincinnati MSA	203	53	137	393
Ohio	23	42	110	176
Kentucky and Indiana	179	11	27	217

V. Ongoing MLS Team Operations and Visitor Impacts

A. Introduction

This section summarizes the impacts of operation of the MLS team and the visitor impacts that are a result of the operation of the team and its ability to draw attendees and their spending from outside the Cincinnati MSA. As discussed earlier, these impacts are fundamentally different from the construction impacts above. Those are temporary while these are permanent.

There are also differences in the share of spending that creates a regional impact. The construction impacts discussed above are based on the full cost of the stadium (less contingencies and fixed costs), but the operating impacts are calculated only on the 10 percent of attendees expected to come from outside of the Cincinnati MSA plus the assumed 20 percent blockage. Again, the money that locals spend on the game, concessions, parking, and other incidentals is money that they would likely have spent in

the region in any case – apart from the blockage. Hence, their purchases here are in lieu of purchases elsewhere, so the impact of their spending is merely relocated from elsewhere in the region. Consequently, there is no net gain to the regional economy from these expenditures, and no net gain in taxes. Output, earnings, employment related to spectator sports increase but decrease commensurately elsewhere.⁵ All impacts are thus only those supporting the net increase in economic activity arising from new spending entering the region.

B. Operations Impacts

The following tables summarize the economic impacts of the expansion team during the first four years of operations. There is likely to be little or no difference among the three alternative locations in revenues and costs or the attraction of attendees from outside the region, and thus no difference in the impact on the MSA as a whole. The allocation of impacts between the Ohio and non-Ohio counties will differ depending on whether the stadium is built in Ohio or Kentucky, though. Table 14 presents the net output impacts resulting from the operations of the expanded team in either of the two Ohio locations. These impacts include the relevant share of an annual contribution by the league to player salaries beginning at \$6 million and increasing over time. The net increase in total regional output is projected at an inflation-adjusted \$24.8 million in the first season, rising to \$26.2 million by the fourth season. Table 15 summarizes the earnings impacts. Employment impacts are in Table 16.

Table 14
Output Impacts of MLS Team Operations – Over-the-Rhine or Oakley
Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	10,979,000	5,423,000	8,434,000	24,836,000
Ohio	10,979,000	4,867,000	6,217,000	22,063,000
Kentucky and Indiana	0	556,000	2,217,000	2,773,000
Year 2				
Cincinnati MSA	11,251,000	5,485,000	8,524,000	25,260,000
Ohio	11,251,000	4,922,000	6,283,000	22,456,000
Kentucky and Indiana	0	563,000	2,241,000	2,804,000
Year 3				
Cincinnati MSA	11,530,000	5,553,000	8,641,000	25,725,000
Ohio	11,530,000	4,983,000	6,369,000	22,882,000
Kentucky and Indiana	0	570,000	2,272,000	2,842,000
Year 4				
Cincinnati MSA	11,820,000	5,625,000	8,762,000	26,207,000
Ohio	11,820,000	5,047,000	6,458,000	23,325,000
Kentucky and Indiana	0	578,000	2,304,000	2,882,000

Note: Components may not sum to totals because of rounding.

⁵ There could be small differences in impacts if the foregone activity is different with different impacts, but these differences are unknown without knowing what expenditures are being foregone. They could be either positive or negative, but are likely to be relatively small in any case.

Table 15
Earnings Impacts of MLS Team Operations – Over-the-Rhine or Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	6,529,000	2,296,000	2,542,000	11,367,000
Ohio	6,529,000	1,892,000	1,679,000	10,100,000
Kentucky and Indiana	0	404,000	863,000	1,267,000
Year 2				
Cincinnati MSA	6,690,000	2,321,000	2,569,000	11,581,000
Ohio	6,690,000	1,913,000	1,697,000	10,300,000
Kentucky and Indiana	0	408,000	873,000	1,281,000
Year 3				
Cincinnati MSA	6,857,000	2,350,000	2,605,000	11,812,000
Ohio	6,857,000	1,937,000	1,720,000	10,513,000
Kentucky and Indiana	0	414,000	885,000	1,298,000
Year 4				
Cincinnati MSA	7,029,000	2,381,000	2,641,000	12,051,000
Ohio	7,029,000	1,962,000	1,744,000	10,735,000
Kentucky and Indiana	0	419,000	897,000	1,316,000

Note: Components may not sum to totals because of rounding.

Table 16
Employment Impacts of MLS Team Operations – Over-the-Rhine or Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	167	62	72	301
Ohio	167	54	49	270
Kentucky and Indiana	0	8	23	31
Year 2				
Cincinnati MSA	172	63	73	307
Ohio	172	54	50	276
Kentucky and Indiana	0	8	23	31
Year 3				
Cincinnati MSA	176	63	74	313
Ohio	176	55	50	281
Kentucky and Indiana	0	8	24	32
Year 4				
Cincinnati MSA	180	64	75	319
Ohio	180	56	51	287
Kentucky and Indiana	0	9	24	32

Table 17 reveals output impacts for the team playing at the Ovation site. The direct impacts are the same as in Table 14, but shift from Ohio to Kentucky. As with the construction impacts, however, indirect and induced impacts are still predominantly in Ohio. The corresponding earnings and employment impacts are presented in Tables 18 and 19.

Table 17
Output Impacts of MLS Team Operations – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	10,979,000	5,423,000	8,434,000	24,836,000
Ohio	0	4,867,000	6,217,000	11,084,000
Kentucky and Indiana	10,979,000	556,000	2,217,000	13,752,000
Year 2				
Cincinnati MSA	11,251,000	5,485,000	8,524,000	25,260,000
Ohio	0	4,922,000	6,283,000	11,205,000
Kentucky and Indiana	11,251,000	563,000	2,241,000	14,055,000
Year 3				
Cincinnati MSA	11,530,000	5,553,000	8,641,000	25,725,000
Ohio	0	4,983,000	6,369,000	11,352,000
Kentucky and Indiana	11,530,000	570,000	2,272,000	14,373,000
Year 4				
Cincinnati MSA	11,820,000	5,625,000	8,762,000	26,207,000
Ohio	0	5,047,000	6,458,000	11,505,000
Kentucky and Indiana	11,820,000	578,000	2,304,000	14,702,000

Note: Components may not sum to totals because of rounding.

Table 18
Earnings Impacts of MLS Team Operations – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	6,529,000	2,296,000	2,555,000	11,380,000
Ohio	0	1,892,000	1,688,000	3,580,000
Kentucky and Indiana	6,529,000	404,000	867,000	7,800,000
Year 2				
Cincinnati MSA	6,690,000	2,321,000	2,582,000	11,594,000
Ohio	0	1,913,000	1,706,000	3,619,000
Kentucky and Indiana	6,690,000	408,000	877,000	7,975,000
Year 3				
Cincinnati MSA	6,857,000	2,350,000	2,618,000	11,825,000
Ohio	0	1,937,000	1,729,000	3,666,000
Kentucky and Indiana	6,857,000	414,000	889,000	8,159,000
Year 4				
Cincinnati MSA	7,029,000	2,381,000	2,654,000	12,065,000
Ohio	0	1,962,000	1,753,000	3,715,000
Kentucky and Indiana	7,029,000	419,000	901,000	8,350,000

Note: Components may not sum to totals because of rounding.

Table 19
Employment Impacts of MLS Team Operations – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	167	62	72	301
Ohio	0	52	30	82
Kentucky and Indiana	167	8	23	199
Year 2				
Cincinnati MSA	172	63	73	307
Ohio	0	54	50	104
Kentucky and Indiana	172	8	23	203
Year 3				
Cincinnati MSA	176	63	74	313
Ohio	0	55	50	105
Kentucky and Indiana	176	8	24	208
Year 4				
Cincinnati MSA	180	64	75	319
Ohio	0	56	51	107
Kentucky and Indiana	180	9	24	213

C. Visitor Impacts

The following tables present the impacts on the Cincinnati MSA of visitor spending. As is true of operating costs, visitor spending impacts on the overall Cincinnati MSA are likely to be similar regardless of which of the three locations is selected. There will be differences in the Ohio versus non-Ohio allocation and consequential impacts on local and state tax revenues, however, because a Kentucky location will shift a greater share of spending to Kentucky, with corresponding impacts on direct employment patterns. It is assumed that if the Over-the-Rhine location is selected, two-thirds of visitor spending will occur in Hamilton County and one-third in Campbell County. If the Oakley location is selected, three-quarters of spending will be in Hamilton County because that location is slightly less convenient to Kentucky. The Ovation location will shift two-thirds of total visitor spending to Campbell County, with one-third occurring in Hamilton County.

Table 20 shows output, earnings, and employment impacts of visitor spending in the Over-the-Rhine location. It is assumed that total attendance is initially at its steady state of 333,000 per season, so the inflation-adjusted impacts are the same for all years.⁶

⁶ The fact that inflation-adjusted impacts of team operations increase despite the steady game attendance could be due to discounts given in the early years to attract fans and/or increasing efficiency of personnel over time.

Table 20
Annual Visitor Impacts – Over-the-Rhine

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	18,936,000	8,036,000	10,434,000	37,406,000
Ohio	13,611,000	5,640,000	6,500,000	25,752,000
Kentucky and Indiana	5,325,000	2,396,000	3,934,000	11,655,000
Earnings*				
Cincinnati MSA	6,415,000	2,297,000	3,159,000	11,871,000
Ohio	4,345,000	1,441,000	1,764,000	7,551,000
Kentucky and Indiana	2,070,000	855,000	1,395,000	4,320,000
Employment				
Cincinnati MSA	303	55	90	449
Ohio	206	37	52	295
Kentucky and Indiana	96	19	38	154

*Inflation-adjusted Year 1 dollars

Note: Output and earnings components may not sum to totals because of rounding.

Tables 21 and 22 present corresponding information for Oakley and Ovation, respectively. Note in Table 21 the shift in the same total impact toward Ohio given the greater proportion of spending assumed to remain in Hamilton County and the shift to Kentucky (and Campbell County) documented in Table 22.

Table 21
Annual Visitor Impacts – Oakley

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	18,936,000	8,036,000	10,434,000	37,406,000
Ohio	14,943,000	6,225,000	7,085,000	28,253,000
Kentucky and Indiana	3,994,000	1,810,000	3,350,000	9,154,000
Earnings*				
Cincinnati MSA	6,415,000	2,297,000	3,159,000	11,871,000
Ohio	4,722,000	1,585,000	1,923,000	8,230,000
Kentucky and Indiana	1,693,000	711,000	1,236,000	3,641,000
Employment				
Cincinnati MSA	303	55	90	449
Ohio	225	40	57	322
Kentucky and Indiana	78	15	34	127

*Inflation-adjusted Year 1 dollars.

Note: Output and earnings components may not sum to totals because of rounding.

Table 22
Annual Visitor Impacts – Ovation

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	18,936,000	8,036,000	10,434,000	37,406,000
Ohio	5,325,000	2,342,000	2,339,000	10,006,000
Kentucky and Indiana	13,611,000	5,694,000	8,096,000	27,401,000
Earnings*				
Cincinnati MSA	6,415,000	2,297,000	3,159,000	11,871,000
Ohio	1,507,000	577,000	634,000	2,718,000
Kentucky and Indiana	4,908,000	1,720,000	2,525,000	9,153,000
Employment				
Cincinnati MSA	303	55	90	449
Ohio	75	14	19	107
Kentucky and Indiana	228	42	72	341

*Inflation-adjusted Year 1 dollars.

Note: Output and earnings components may not sum to totals because of rounding.

D. Combined Recurring Impacts

The operations and visitor impacts summarized above together represent the ongoing effects of FC Cincinnati's play as an MLS team. The following tables combine these impacts to show the total recurring impacts on regional output, earnings, and employment. Output impacts are in Table 23, earnings impacts are in Table 24, and employment impacts are in Table 25. Total output rises to \$63.6 million by 2023; wages, salaries, and self-employment earnings reach \$23.9 million; and 768 jobs are created or sustained. As stated earlier, the 2023 impacts are considered to be long-run steady-state impacts and continue indefinitely (in inflation-adjusted terms).

Table 23
Combined Recurring Operations and Visitor Output Impacts – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	29,915,000	13,459,000	18,868,000	62,242,000
Ohio	24,590,000	10,507,000	12,717,000	47,815,000
Kentucky and Indiana	5,325,000	2,952,000	6,151,000	14,428,000
Year 2				
Cincinnati MSA	30,187,000	13,521,000	18,958,000	62,666,000
Ohio	24,862,000	10,562,000	12,783,000	48,208,000
Kentucky and Indiana	5,325,000	2,959,000	6,175,000	14,459,000
Year 3				
Cincinnati MSA	30,466,000	13,589,000	19,075,000	63,131,000
Ohio	25,141,000	10,623,000	12,869,000	48,634,000
Kentucky and Indiana	5,325,000	2,966,000	6,206,000	14,497,000
Year 4				
Cincinnati MSA	30,756,000	13,661,000	19,196,000	63,613,000
Ohio	25,431,000	10,687,000	12,958,000	49,077,000
Kentucky and Indiana	5,325,000	2,974,000	6,238,000	14,537,000

Note: Components may not sum to totals because of rounding.

Table 24
Combined Recurring Operations and Visitor Earnings Impacts – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	12,944,000	4,593,000	5,701,000	23,238,000
Ohio	10,874,000	3,333,000	3,443,000	17,651,000
Kentucky and Indiana	2,070,000	1,259,000	2,258,000	5,587,000
Year 2				
Cincinnati MSA	13,105,000	4,618,000	5,728,000	23,452,000
Ohio	11,035,000	3,354,000	3,461,000	17,851,000
Kentucky and Indiana	2,070,000	1,263,000	2,268,000	5,601,000
Year 3				
Cincinnati MSA	13,272,000	4,647,000	5,764,000	23,683,000
Ohio	11,202,000	3,378,000	3,484,000	18,064,000
Kentucky and Indiana	2,070,000	1,269,000	2,280,000	5,618,000
Year 4				
Cincinnati MSA	13,444,000	4,678,000	5,800,000	23,922,000
Ohio	11,374,000	3,403,000	3,508,000	18,286,000
Kentucky and Indiana	2,070,000	1,274,000	2,292,000	5,636,000

Note: Components may not sum to totals because of rounding.

Table 25
Combined Recurring Operations and Visitor Employment Impacts – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	470	117	162	750
Ohio	374	90	101	565
Kentucky and Indiana	96	27	61	185
Year 2				
Cincinnati MSA	474	118	163	756
Ohio	378	91	102	570
Kentucky and Indiana	96	27	61	185
Year 3				
Cincinnati MSA	479	119	164	762
Ohio	382	92	102	576
Kentucky and Indiana	96	27	62	186
Year 4				
Cincinnati MSA	483	120	165	768
Ohio	387	92	103	582
Kentucky and Indiana	96	27	62	186

Tables 26, 27, and 28 report the combined impacts for the Oakley site; tables 29, 30, and 31 provide results for Ovation. Note that once again, total impacts are identical among the three sites. Only the geographic distribution of the impacts is different.

Table 26
Combined Recurring Operations and Visitor Output Impacts – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	29,915,000	13,459,000	18,868,000	62,242,000
Ohio	25,922,000	11,092,000	13,302,000	50,316,000
Kentucky and Indiana	3,994,000	2,366,000	5,567,000	11,927,000
Year 2				
Cincinnati MSA	30,187,000	13,521,000	18,958,000	62,666,000
Ohio	26,194,000	11,147,000	13,368,000	50,709,000
Kentucky and Indiana	3,994,000	2,373,000	5,591,000	11,958,000
Year 3				
Cincinnati MSA	30,466,000	13,589,000	19,075,000	63,131,000
Ohio	26,473,000	11,208,000	13,454,000	51,135,000
Kentucky and Indiana	3,994,000	2,380,000	5,622,000	11,996,000
Year 4				
Cincinnati MSA	30,756,000	13,661,000	19,196,000	63,613,000
Ohio	26,763,000	11,272,000	13,543,000	51,578,000
Kentucky and Indiana	3,994,000	2,388,000	5,654,000	12,036,000

Note: Components may not sum to totals because of rounding.

Table 27
Combined Recurring Operations and Visitor Earnings Impacts – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	12,944,000	4,593,000	5,701,000	23,238,000
Ohio	11,251,000	3,477,000	3,602,000	18,330,000
Kentucky and Indiana	1,693,000	1,115,000	2,099,000	4,908,000
Year 2				
Cincinnati MSA	13,105,000	4,618,000	5,728,000	23,452,000
Ohio	11,412,000	3,498,000	3,620,000	18,530,000
Kentucky and Indiana	1,693,000	1,119,000	2,109,000	4,922,000
Year 3				
Cincinnati MSA	13,272,000	4,647,000	5,764,000	23,683,000
Ohio	11,579,000	3,522,000	3,643,000	18,743,000
Kentucky and Indiana	1,693,000	1,125,000	2,121,000	4,939,000
Year 4				
Cincinnati MSA	13,444,000	4,678,000	5,800,000	23,922,000
Ohio	11,751,000	3,547,000	3,667,000	18,965,000
Kentucky and Indiana	1,693,000	1,130,000	2,133,000	4,957,000

Note: Components may not sum to totals because of rounding.

Table 28
Combined Recurring Operations and Visitor Employment Impacts – Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	470	117	162	750
Ohio	393	94	106	592
Kentucky and Indiana	78	24	57	158
Year 2				
Cincinnati MSA	474	118	163	756
Ohio	397	94	106	597
Kentucky and Indiana	78	24	57	158
Year 3				
Cincinnati MSA	479	119	164	762
Ohio	401	95	107	603
Kentucky and Indiana	78	24	57	159
Year 4				
Cincinnati MSA	483	120	165	768
Ohio	405	96	108	609
Kentucky and Indiana	78	24	58	159

Table 29
Combined Recurring Operations and Visitor Output Impacts – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	29,915,000	13,459,000	18,868,000	62,242,000
Ohio	13,611,000	10,507,000	12,717,000	36,836,000
Kentucky and Indiana	16,304,000	2,952,000	6,151,000	25,407,000
Year 2				
Cincinnati MSA	30,187,000	13,521,000	18,958,000	62,666,000
Ohio	13,611,000	10,562,000	12,783,000	36,957,000
Kentucky and Indiana	16,576,000	2,959,000	6,175,000	25,710,000
Year 3				
Cincinnati MSA	30,466,000	13,589,000	19,075,000	63,131,000
Ohio	13,611,000	10,623,000	12,869,000	37,104,000
Kentucky and Indiana	16,855,000	2,966,000	6,206,000	26,028,000
Year 4				
Cincinnati MSA	30,756,000	13,661,000	19,196,000	63,613,000
Ohio	13,611,000	10,687,000	12,958,000	37,257,000
Kentucky and Indiana	17,145,000	2,974,000	6,238,000	26,357,000

Note: Components may not sum to totals because of rounding.

Table 30
Combined Recurring Operations and Visitor Earnings Impacts – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	12,944,000	4,593,000	5,701,000	23,238,000
Ohio	11,251,000	3,477,000	3,602,000	18,330,000
Kentucky and Indiana	1,693,000	1,115,000	2,099,000	4,908,000
Year 2				
Cincinnati MSA	13,105,000	4,618,000	5,728,000	23,452,000
Ohio	11,412,000	3,498,000	3,620,000	18,530,000
Kentucky and Indiana	1,693,000	1,119,000	2,109,000	4,922,000
Year 3				
Cincinnati MSA	13,272,000	4,647,000	5,764,000	23,683,000
Ohio	11,579,000	3,522,000	3,643,000	18,743,000
Kentucky and Indiana	1,693,000	1,125,000	2,121,000	4,939,000
Year 4				
Cincinnati MSA	13,444,000	4,678,000	5,800,000	23,922,000
Ohio	11,751,000	3,547,000	3,667,000	18,965,000
Kentucky and Indiana	1,693,000	1,130,000	2,133,000	4,957,000

Note: Components may not sum to totals because of rounding.

Table 31
Combined Recurring Operations and Visitor Employment Impacts – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	470	117	162	750
Ohio	206	89	82	377
Kentucky and Indiana	264	27	61	352
Year 2				
Cincinnati MSA	474	118	163	756
Ohio	206	91	102	399
Kentucky and Indiana	268	27	62	357
Year 3				
Cincinnati MSA	479	119	164	762
Ohio	206	92	102	400
Kentucky and Indiana	272	27	62	361
Year 4				
Cincinnati MSA	483	120	165	768
Ohio	206	92	103	402
Kentucky and Indiana	277	27	62	366

VI. State and Local Tax Impacts

A. Overview of Taxes and Tax Impact Estimation

As argued above, the indirect and induced impacts are a direct result of stadium construction, team operations, and visitor spending because they would not have occurred otherwise. By the same token, the project can take credit for the taxes that arise from these activities. Taxes in Ohio include state Commercial Activity Taxes (CAT) paid by businesses, state and local income and sales taxes paid by households, and local household property taxes. Taxes in Kentucky include state income, state sales, and state and local personal property taxes. Types of personal property that are subject to tax include machinery and equipment, inventories, personal vehicles, and watercraft. It is important to note that these tax impacts are a component of the economic impacts and therefore cannot be added to those impacts. It is also important to note that because any estimates from an economic impact model give only the order of magnitude of the true impact, these tax impacts are similarly order-of-magnitude estimates only. RIMS II does not provide tax impacts; these are estimated by a separate model developed by Regionomics and calibrated to the tax structures of Ohio and Kentucky. As discussed earlier, the use of the net impacts summarized above to derive taxes results in estimates of the gain to local and state governments net of relocation of local spending.

The estimates include taxes paid by the households of direct, indirect, and induced workers from the earnings derived from stadium construction, team operations, and visitor spending. Given information on the wages and salaries of the direct, indirect, and induced jobs; tax rates; and expenditure patterns, the taxes paid by households can be estimated. The estimation of the various categories of Ohio and Kentucky taxes is discussed in the following paragraphs.

B. Ohio Commercial Activity Taxes

The CAT can be estimated fairly directly from the RIMS II output estimates. This tax is conceptually straightforward: 0.26 percent of gross receipts from most goods and services that are sold in Ohio, whether the vendor is Ohio-based or not. However, because businesses earning Ohio income between \$15,000 and \$1 million pay only a minimum tax of \$150, the effective rate is less than 0.26 percent.

Because of this lower tax rate on the first \$1 million in revenues, simply multiplying these totals by 0.26 percent overestimates the tax revenue. The strategy is to obtain a bracketed estimate by using the 0.26 rate to get a ceiling and calculating a floor based on average tax rates by sector. The Ohio Department of Taxation provides 2012 total collections by industry sector and the business revenues on which these collections are based. This information is used to calculate a set of sector-specific tax rates, which vary from 0.156 percent for other services to 0.251 percent for utilities. These rates are multiplied by the sector-specific output estimates for the Ohio counties and the results summed. This sum represents a floor because it is based on average tax rates rather than the appropriate (but unobservable) marginal rates. The estimate of CAT liability is obtained by adding one-third of the floor to two-thirds of the ceiling.

This estimate is understated in two respects. First, as discussed earlier, output estimates from RIMS-II are reported in locally-relevant prices rather than sale prices. Producer prices are equal to sale prices for most services, but can be far less than sale prices for goods. A second understatement comes from the fact that the indirect and induced output estimates include only the goods and services produced within the Cincinnati MSA. However, the sales to local businesses and consumers by producers outside the region but doing business in the region are also subject to the CAT, so these purchases also result in CAT revenue not included in the estimate.

C. Ohio and Kentucky State and Ohio Local Employee Income Taxes

The estimation of Ohio and Kentucky income tax is complicated by the progressive state tax rate schedules – Ohio's more so than Kentucky's. To address this problem, state tax liability is calculated and a tax rate determined for each industry sector at the 2015 average wage for the sector within the Cincinnati MSA from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages. In practice, adjusted gross income (modified gross income in Kentucky) includes other sources of income as well, but it would be conceptually incorrect to include estimates of these – and other credits and deductions – in the estimation of tax rates because doing so would incorporate factors not relevant to the construction of the stadium, operations of the team, and spending of visitors. Analysis of the Internal Revenue Service's Statistics of Income reveals that households claim an average of 1.98 exemptions, so two exemptions are assumed in the calculation. Half of returns are assumed to take Ohio's joint filing credit. Tax liability is divided by average income to give an effective average tax rate for workers in each industry sector. This rate is multiplied by the sector's aggregate income (number of workers times average wage) and the products summed across sectors to yield annual state income tax revenue. In contrast to the CAT calculation, the average tax rate is appropriate here for the direct operations earnings because, unlike supplier businesses with many customers, it is likely that relevant wages and salaries will be the bulk of most households' income. The marginal rate is appropriate for all other income, however; this rate is available directly from the tax calculation.

Ohio municipalities tax wage, salary, and self-employment income earned within their borders. Although these taxes are levied at a flat rate, the complication here is that these rates vary significantly among jurisdictions. Generally, workers pay tax where they work regardless of where they live, although if the tax rate is higher in the municipality of residence than in the municipality of employment, the worker must pay the difference to the municipality where he/she lives. Townships are statutorily prohibited from charging income tax, so the relatively few workers both working and living outside municipalities pay no tax at all.

Municipal income tax revenues are estimated by applying the Cincinnati tax rate of 2.1 percent to direct earnings for Over-the-Rhine and Oakley. Indirect and induced taxes are calculated at a weighted average rate for the five Ohio counties of the MSA. This rate is derived by dividing the tax revenue earned by each of the 60 taxing municipalities in those counties by each municipality's tax rate as reported for 2014 by the Ohio Department of Taxation. These results (plus the one percent servicing fee charged the municipality by the state) are the total earnings on which taxes are earned. The tax revenues and the wages are each summed across municipalities; dividing total revenues by total wages produces the average municipal tax rate. This rate, 1.63 percent, is multiplied by indirect and induced earnings in the Ohio counties to derive indirect and induced municipal tax revenues.

Businesses are also liable for Ohio municipal taxes on their net income, but the economic impact model does not produce estimates of net income, only of output. The annual *Almanac of Business and Industrial Financial Ratios*⁷ provides a wide variety of industry-average ratios, including before-tax net income to revenue. Output is equivalent to revenue for all industries except those in wholesale and retail trade. In these industries, output includes only the value of economic activity completed in the region, not the value of manufacturing and transportation activities that occur elsewhere. Taxes are imposed on total revenue including these out-of-region activities, however. RIMS II includes a set of industry-specific distribution factors that provide the share of purchaser value attributable to each link in the distribution chain. Customarily, these values are used to convert sales into direct output values that can be entered in the model, but dividing the factor into output yields sales. Projected net income of team operations is provided in the budget, and the ratios for detailed industries are used to estimate net income for direct construction and visitor activities. The impact model allocates indirect and induced output among 21 broad industry sectors. The ratios for detailed industries are averaged to obtain the net income margin for the sector and converted from a percentage of sales to a percentage of output where necessary. These ratios multiplied by the Ohio counties' output estimates produce total net income in the five-county area. Analysis of Ohio Department of Taxation data reveals that 40.2 percent of the total income base in the five counties is earned in Cincinnati. Accordingly, the total estimated indirect and induced net income is multiplied by 40.2 percent and by the 2.1 percent tax rate to obtain an estimate of Cincinnati's indirect and induced tax revenue.

D. Ohio and Kentucky State and Ohio Local Employee Sales Taxes

Sales and use taxes in Ohio are charged both by the state (at 5.75 percent) and counties; county sales taxes constitute the bulk of most counties' general fund revenue. Hamilton County's rate is 1.25 percent. Kentucky sales and use taxes are charged only by the state, not by counties. The rate is six percent. In order to estimate sales and use taxes paid on purchases made from direct, indirect, and induced wages, it is necessary to estimate the share of household earnings that is spent on taxable consumption so that sales tax rates can be linked to income. Analysis of data from the Bureau of Labor

⁷ Leo Troy. *Almanac of Business and Industrial Financial Ratios*. Englewood Cliffs, NJ: Prentice Hall, 2015.

Statistics' Consumer Expenditure Survey reveals that Midwestern households on average in 2015 spent 24.28 percent of their income on taxable goods and services. A five-county average local sales tax rate is derived by dividing total tax revenues by total sales using an approach analogous to the derivation of the regional municipal tax rate. The result, 1.10 percent, times earnings times 24.28 percent yields an estimate of sales tax revenue.

In estimating the state sales tax revenue from visitor spending, it is important to recognize that the argument regarding the transfer of activity within the region and the lack of a net spending impact by most local residents now applies to all Ohio residents for Ohio sales taxes and all Kentucky residents for Kentucky sales taxes. A fan traveling to Cincinnati from Dayton to watch a game spends money in Hamilton County that would otherwise probably have been spent in the Dayton area. Although Cincinnati gains, Dayton loses an equal amount and the net impact on the Ohio economy is zero. The benefit arises from residents outside Ohio (including Kentucky) bringing their spending to Ohio. Lacking any information regarding the prospective origin of visitors, the total amount of Ohio sales tax revenue is multiplied by 40 percent to derive the tax impact.

E. Kentucky State and Ohio and Kentucky Local Employee Property Taxes

Property taxes are levied by local governments in both Ohio and Kentucky; the Kentucky state government also imposes property taxes. While Ohio charges taxes only on real estate, Kentucky charges taxes on a wide variety of personal goods as well, including machinery and equipment, inventories, and private vehicles and watercraft. In addition, Kentucky charges a six percent vehicle use tax.

All workers pay real estate taxes regardless of whether they own or rent their home; renters pay taxes implicitly as part of their rent. The strategy is again to devise a link from property value to income so that total wages can be used to estimate property taxes. The Census Bureau's American Housing Survey gives a median ratio of home value to income for owner-occupants of 2.0 in the Cincinnati MSA. A value-to-income ratio is not available for rented units, although property taxes are sustained on these dwellings too. The 2.0 ratio is also applied to rented dwellings, but this may understate the true ratio for renters because they may be renting in order to consume more housing than they can afford to buy. The net effect is that calculated property tax may be somewhat understated.

The estimation of Kentucky vehicle taxes is more difficult because no data are available providing the average value of household vehicles. If such data were available, the average could be divided by the average income to obtain a ratio that could then be applied to direct, indirect, and induced worker incomes. The result – as with the value of real estate as a percentage of income – would be the estimated value of the typical household's vehicle, which would in turn yield the tax that is sustained by the team-related impacts. Lacking this ratio, it is assumed that the value of the average household's vehicles is one-third the value of household income.

Property tax is a key source of income for local governments in Kentucky, so it is important to devise an approach to estimating this impact. This involves linking the value of taxed assets to the known value of direct, indirect, and induced output. The *Almanac of Business and Industrial Financial Ratios* includes ratios of inventory to revenue and plant and equipment to revenue. These are converted to sector-level output ratios using the approach to obtain local income tax described earlier. Local governments in Ohio tax the value of real estate but neither equipment nor inventory, so using the plant and equipment ratio to estimate business real estate taxes would introduce a serious overstatement of tax revenues.

Consequently, this element of tax revenues is ignored and local tax revenues are thus understated. Fortunately, however, property taxes are a far less consequential share of city and county budgets in Ohio than they are in Kentucky. Ohio property taxes primarily fund school districts.

F. Estimates of Incremental Tax Revenues for the City of Cincinnati

The following tables provide estimates of Cincinnati incremental tax revenues for each of the three sites. Also provided is a 10-year present value of the revenue stream assuming that the Year 4 revenues represent an inflation-adjusted steady state that continues indefinitely. A discount rate of five percent is assumed, but simulations suggest that the estimated present value is not especially sensitive to the choice of discount rate because of the front-loaded construction costs.

Table 32 provides revenues for the Over-the-Rhine site. Business income taxes are calculated by multiplying the estimated net income by the 2.1 percent city income tax rate. Direct income is taxed in full, but indirect and induced revenues are multiplied by the 40.2 percent share of income that is assumed to be earned in Cincinnati. Direct worker income taxes are based on total wages because workers are taxed where they work, but direct property taxes are based on a share of the total because even direct workers live throughout the region. The present value of the first 10 years of the net revenue increment totals \$7.5 million.

Table 32
Present Value of Cincinnati Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	127,127	173,994	30,338	0	0	0
Worker income	1,016,966	1,373,923	247,617	0	0	0
Worker property	95,331	127,958	23,024	0	0	0
Total	1,239,424	1,675,875	300,980	0	0	0
Operations						
Business income	0	0	21,294	21,736	22,204	22,690
Worker income	0	0	163,091	166,813	170,704	174,741
Worker property	0	0	14,773	15,074	15,326	15,659
Total	0	0	199,158	203,623	208,234	213,089
Visitor						
Business income	0	0	33,303	33,303	33,303	33,303
Worker income	0	0	118,324	118,324	118,324	118,324
Worker property	0	0	11,335	11,335	11,335	11,335
Direct lodging	0	0	49,305	49,305	49,305	49,305
Direct admissions	0	0	330,009	339,602	349,519	360,034
Total	0	0	542,277	551,870	561,787	572,302
Total Cincinnati municipal taxes	1,239,424	1,675,875	1,042,415	755,493	770,021	785,392
10-year present value	7,490,077					

On the next page, Table 33 identifies the total revenue increment for Oakley. Despite the assumed higher share of spending in Ohio present value is only \$7.3 million, which is less than for Over-the-Rhine because of the lower construction costs.

Table 33
Present Value of Cincinnati Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	118,680	173,994	30,338	0	0	0
Worker income	947,414	1,373,923	77,209	0	0	0
Worker property	88,797	127,958	23,024	0	0	0
Total	1,154,891	1,675,875	130,571	0	0	0
Operations						
Business income	0	0	21,294	21,736	22,204	22,690
Worker income	0	0	163,091	166,813	170,704	174,741
Worker property	0	0	14,773	15,074	15,394	15,727
Total	0	0	199,158	203,623	208,303	213,158
Visitor						
Business income	0	0	23,532	23,532	23,532	23,532
Worker income	0	0	128,793	128,793	128,793	128,793
Worker property	0	0	12,355	12,355	12,355	12,355
Direct lodging	0	0	55,469	55,469	55,469	55,469
Direct admissions	0	0	330,009	339,602	349,519	360,034
Total	0	0	550,158	559,751	569,668	580,184
Total Cincinnati municipal taxes	1,154,891	1,675,875	879,888	763,374	777,971	793,341
10-year present value	7,308,854					

On the next page, Table 34 provides estimates for Ovation. The lack of direct income revenues causes annual revenues to be far less than for the two Ohio sites. But even here, Cincinnati benefits from the property taxes of direct and indirect workers and incomes of support businesses and their workers located in Cincinnati. Note that admissions taxes are a deduction from revenues. This is because of the loss of admissions taxes at Nippert Stadium without an offsetting gain at a new stadium.

Table 34
Present Value of Cincinnati Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	55,127	102,532	16,207	0	0	0
Worker income	168,854	265,527	54,741	0	0	0
Worker property	40,721	69,851	9,475	0	0	0
Total	264,702	437,911	80,424	0	0	0
Operations						
Business income	0	0	6,308	6,379	6,465	6,555
Worker income	0	0	25,987	26,314	26,711	27,128
Worker property	0	0	10,466	11,516	11,707	13,581
Total	0	0	42,761	44,210	44,884	47,264
Visitor						
Business income	0	0	8,958	8,958	8,958	8,958
Worker income	0	0	41,875	41,875	41,875	41,875
Worker property	0	0	4,080	4,080	4,080	4,080
Direct lodging	0	0	24,653	24,653	24,653	24,653
Direct admissions	0	0	-23,204	-23,204	-23,204	-23,204
Total	0	0	56,361	56,361	56,361	56,361
Total Cincinnati municipal taxes	264,702	437,911	179,546	100,571	101,245	103,625
10-year present value	1,317,986					

G. Estimates of Incremental Tax Revenues for Hamilton County

Tables 35, 36, and 37 present tax revenues for Hamilton County. The primary driver of the differences here are sales and lodging taxes – higher for the Oakley site and much lower for the Ovation site.

Table 35
Present Value of Hamilton County Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	158,051	212,145	38,173	0	0	0
Worker property	48,483	65,077	11,710	0	0	0
Total	206,534	277,221	49,883	0	0	0
Operations						
Worker sales	0	0	24,584	25,083	25,614	26,166
Worker property	0	0	7,541	7,694	7,857	8,027
Total	0	0	32,125	32,777	33,471	34,192
Visitor						
Worker sales	0	0	18,793	18,793	18,793	18,793
Worker property	0	0	5,765	5,765	5,765	5,765
Direct sales	0	0	105,131	105,131	105,131	105,131
Direct lodging	0	0	80,121	80,121	80,121	80,121
Total	0	0	209,810	209,810	209,810	209,810
Total Hamilton County taxes	206,534	277,221	291,818	242,588	243,282	244,003
10-year present value	1,918,146					

Table 36
Present Value of Hamilton County Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	147,219	212,145	38,173	0	0	0
Worker property	45,160	65,077	11,710	0	0	0
Total	192,380	277,221	49,883	0	0	0
Operations						
Worker sales	0	0	24,584	25,083	25,614	26,166
Worker property	0	0	7,541	7,694	7,857	8,027
Total	0	0	32,125	32,777	33,471	34,192
Visitor						
Worker sales	0	0	20,484	20,484	20,484	20,484
Worker property	0	0	6,284	6,284	6,284	6,284
Direct sales	0	0	118,272	118,272	118,272	118,272
Direct lodging	0	0	90,137	90,137	90,137	90,137
Total	0	0	235,177	235,177	235,177	235,177
Total Hamilton County taxes	192,380	277,221	317,185	267,954	268,648	269,369
10-year present value	2,053,372					

Table 37
Present Value of Hamilton County Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	67,512	115,808	19,380	0	0	0
Worker property	19,928	43,332	6,996	0	0	0
Total	87,440	159,140	26,376	0	0	0
Operations						
Worker sales	0	0	20,792	21,197	21,632	22,084
Worker property	0	0	6,894	7,685	7,848	8,017
Total	0	0	27,687	28,882	29,480	30,101
Visitor						
Worker sales	0	0	6,765	6,765	6,765	6,765
Worker property	0	0	2,075	2,075	2,075	2,075
Direct sales	0	0	52,565	52,565	52,565	52,565
Direct lodging	0	0	40,061	40,061	40,061	40,061
Total	0	0	101,466	101,466	101,466	101,466
Total Hamilton County taxes	87,440	159,140	155,529	130,348	130,946	131,567
10-year present value	1,018,118					

H. Estimates of Incremental Tax Revenues for the State of Ohio

Revenues earned by the State of Ohio through commercial activity, income, and sales taxes for the three sites are provided in Tables 38, 39, and 40. The key drivers of differences here are the loss of commercial activity and visitor sales taxes if the stadium is built in Kentucky rather than in Ohio.

Table 38
Present Value of State of Ohio Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	449,596	589,828	104,415	0	0	0
Worker income	2,036,420	2,734,978	491,797	0	0	0
Worker sales	727,035	975,865	175,595	0	0	0
Total	3,213,050	4,300,671	771,808	0	0	0
Operations						
Commercial activity	0	0	37,714	38,375	39,099	39,851
Worker income	0	0	200,354	203,860	207,674	211,644
Worker sales	0	0	113,086	115,381	117,824	120,363
Total	0	0	351,154	357,616	364,597	371,858
Visitors						
Commercial activity	0	0	53,404	53,404	48,126	53,404
Worker income	0	0	203,566	203,566	203,566	203,566
Worker sales	0	0	86,449	86,449	86,449	86,449
Direct visitor sales	0	0	193,441	193,441	193,441	193,441
Total	0	0	536,860	536,860	531,582	536,860
Total Ohio state taxes	3,213,050	4,300,671	1,659,821	894,475	896,179	908,717
10-year present value	12,915,368					

Table 39
Present Value of State of Ohio Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	418,229	589,828	104,931	0	0	0
Worker income	1,896,804	2,734,978	491,797	0	0	0
Worker sales	677,209	975,865	175,595	0	0	0
Total	2,992,242	4,300,671	772,324	0	0	0
Operations						
Commercial activity	0	0	37,714	38,375	39,099	39,851
Worker income	0	0	200,354	203,860	207,674	211,644
Worker sales	0	0	113,086	115,381	117,824	120,363
Total	0	0	351,154	357,616	364,597	371,858
Visitors						
Commercial activity	0	0	58,796	58,796	58,796	58,796
Worker income	0	0	221,500	221,500	221,500	221,500
Worker sales	0	0	94,229	94,229	94,229	94,229
Direct visitor sales	0	0	217,621	217,621	217,621	217,621
Total	0	0	592,145	592,145	592,145	592,145
Total Ohio state taxes	2,992,242	4,300,671	1,715,623	949,761	956,742	964,003
10-year present value	13,033,758					

Table 40
Present Value of State of Ohio Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	95,423	191,518	32,428	0	0	0
Worker income	841,147	1,440,885	242,037	0	0	0
Worker sales	310,555	532,718	89,148	0	0	0
Total	1,247,125	2,165,120	363,613	0	0	0
Operations						
Commercial activity	0	0	20,621	20,858	21,147	21,447
Worker income	0	0	104,738	105,877	107,255	108,700
Worker sales	0	0	95,645	97,508	99,506	101,584
Total	0	0	221,003	224,243	227,907	231,731
Visitors						
Commercial activity	0	0	21,569	21,569	21,569	21,569
Worker income	0	0	71,736	71,736	71,736	71,736
Worker sales	0	0	6,765	6,765	6,765	6,765
Direct visitor sales	0	0	52,565	52,565	52,565	52,565
Total	0	0	152,635	152,635	152,635	152,635
Total Ohio state taxes	1,247,125	2,165,120	737,251	376,878	380,542	384,366
10-year present value	5,700,523					

I. Estimates of Incremental Tax Revenues for the City of Newport

Taxes at all three levels of Kentucky government are focused on asset taxes, with additional income, sales, and vehicle use taxes at the state level. In general, Kentucky state taxes are far higher than those in Ohio but those at the municipal and county levels are far lower. The tax increment for Newport is modest not only because of the low tax rates but also because Newport's population of only 15,000 means that it captures a much smaller share of taxes on regional indirect and induced activity than does Cincinnati with a population of nearly 300,000. The presence of the stadium at the Ovation site and the related direct revenues does create a relatively large net benefit, however.

Table 41
Present Value of City of Newport Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	689	1,055	169	0	0	0
Worker real estate	3,096	4,249	766	0	0	0
Worker vehicles	516	708	128	0	0	0
Total	4,301	6,012	1,063	0	0	0
Operations						
Business property	0	0	109	110	111	0
Worker real estate	0	0	249	251	255	258
Worker vehicles	0	0	41	42	42	43
Total	0	0	399	403	409	301
Visitor						
Business property	0	0	564	564	564	677
Worker real estate	0	0	845	845	845	845
Worker vehicles	0	0	141	141	141	141
Total	0	0	1,551	1,551	1,551	1,664
Total Newport municipal taxes	4,301	6,012	3,012	1,954	1,959	1,965
10-year present value	21,960					

Table 42
Present Value of City of Newport Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	645	1,055	169	0	0	0
Worker real estate	3,096	4,249	766	0	0	0
Worker vehicles	516	708	128	0	0	0
Total	4,257	6,012	1,063	0	0	0
Operations						
Business property	0	0	109	110	110	113
Worker real estate	0	0	249	251	255	258
Worker vehicles	0	0	41	42	42	43
Total	0	0	399	403	407	414
Visitor						
Business property	0	0	439	439	439	439
Worker real estate	0	0	845	845	845	845
Worker vehicles	0	0	141	141	141	141
Total	0	0	1,425	1,425	1,425	1,425
Total Newport municipal taxes	4,257	6,012	2,887	1,829	1,833	1,840
10-year present value	21,182					

Table 43
Present Value of City of Newport Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	4,096	7,382	1,052	0	0	0
Worker real estate	8,401	15,463	2,243	0	0	0
Worker vehicles	1,607	2,577	374	0	0	0
Total	14,103	25,422	3,670	0	0	0
Operations						
Business property	0	0	612	626	640	655
Worker real estate	0	0	1,526	1,561	1,597	1,634
Worker vehicles	0	0	254	260	266	272
Total	0	0	2,393	2,447	2,503	2,562
Visitor						
Business property	0	0	1,311	1,311	1,311	1,311
Worker real estate	0	0	1,791	1,791	1,791	1,791
Worker vehicles	0	0	299	299	299	299
Total	0	0	3,401	3,401	3,401	3,401
Total Newport municipal taxes	14,103	25,422	9,463	5,848	5,904	5,962
10-year present value	74,328					

J. Estimates of Incremental Tax Revenues for Campbell County

Revenue increments for Campbell County are shown in Tables 44, 45, and 46. Taxes are charged in the same categories as at the municipal level. Again, the decrease in spending from the Oakley location reduces the impact relative to the more convenient Over-the-Rhine location, but the location of the stadium in Newport provides a present value tax increment of approximately \$1 million.

Table 44
Present Value of Campbell County Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	10,863	16,629	2,671	0	0	0
Worker real estate	41,685	57,214	10,309	0	0	0
Worker vehicles	6,948	9,536	1,718	0	0	0
Total	59,496	83,379	14,698	0	0	0
Operations						
Business property	0	0	1,711	1,730	1,755	1,780
Worker real estate	0	0	3,349	3,386	3,432	3,479
Worker vehicles	0	0	558	564	572	580
Total	0	0	5,618	5,681	5,759	5,839
Visitor						
Business property	0	0	8,896	8,896	8,896	8,896
Worker real estate	0	0	11,384	11,384	11,384	11,384
Worker vehicles	0	0	1,897	1,897	1,897	1,897
Total	0	0	22,177	22,177	22,177	22,177
Total Newport municipal taxes	59,496	83,379	42,494	27,858	27,936	28,016
10-year present value	308,845					

Table 45
Present Value of Campbell County Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	10,167	16,629	2,671	0	0	0
Worker real estate	38,967	57,214	10,309	0	0	0
Worker vehicles	6,494	9,536	1,718	0	0	0
Total	55,628	83,379	14,698	0	0	0
Operations						
Business property	0	0	1,711	1,730	1,755	1,780
Worker real estate	0	0	3,349	3,386	3,432	3,479
Worker vehicles	0	0	558	564	572	580
Total	0	0	5,618	5,681	5,759	5,839
Visitor						
Business property	0	0	6,922	6,922	6,922	6,922
Worker real estate	0	0	9,594	9,594	9,594	9,594
Worker vehicles	0	0	1,599	1,599	1,599	1,599
Total	0	0	18,114	18,114	18,114	18,114
Total Newport municipal taxes	55,628	83,379	38,431	23,795	23,873	23,953
10-year present value	281,341					

Table 46
Present Value of Campbell County Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	64,567	116,371	16,591	0	0	0
Worker real estate	113,115	208,211	30,206	0	0	0
Worker vehicles	18,853	34,702	5,034	0	0	0
Total	196,534	359,284	51,831	0	0	0
Operations						
Business property	0	0	9,653	9,869	10,096	10,331
Worker real estate	0	0	20,553	21,017	21,501	22,002
Worker vehicles	0	0	3,426	3,503	3,583	3,667
Total	0	0	33,632	34,389	35,180	36,001
Visitor						
Business property	0	0	20,664	20,664	20,664	20,664
Worker real estate	0	0	24,120	24,120	24,120	24,120
Worker vehicles	0	0	4,020	4,020	4,020	4,020
Total	0	0	48,804	48,804	48,804	48,804
Total Newport municipal taxes	196,534	359,284	134,267	83,192	83,984	84,804
10-year present value	1,050,966					

K. Estimates of Incremental Tax Revenues for the State of Kentucky

Tables 47, 48, and 49 present the impacts on Kentucky taxes of stadium construction and operation. The assumed smaller share of visitor spending in Kentucky if the stadium is built at the Oakley site does have an impact, but the stadium's construction at Ovation creates an impact three times as great as its construction in Ohio: \$24 million in the 10-year present value of tax revenues.

Table 47
Present Value of State of Kentucky Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	53,298	83,861	13,633	0	0	0
Business property	23,132	34,245	5,686	0	0	0
Worker real estate	38,598	52,977	9,545	0	0	0
Worker vehicles	340,105	466,805	84,110	0	0	0
Worker income	889,908	1,222,049	220,125	0	0	0
Worker sales	230,416	316,253	56,983	0	0	0
Total	1,575,457	2,176,190	390,082	0	0	0
Operations						
Business income	0	0	8,391	8,489	8,609	8,734
Business property	0	0	3,576	3,616	3,666	3,718
Worker real estate	0	0	2,900	2,935	2,977	3,021
Worker vehicles	0	0	25,557	25,860	26,233	26,620
Worker income	0	0	69,274	70,046	70,996	71,983
Worker sales	0	0	18,513	18,718	18,970	19,233
Total	0	0	128,210	129,664	131,452	133,309
Visitors						
Business income	0	0	32,734	32,734	32,734	32,734
Business property	0	0	17,979	17,979	17,979	17,979
Worker real estate	0	0	10,541	10,541	10,541	10,541
Worker vehicles	0	0	92,883	92,883	92,883	92,883
Worker income	0	0	189,935	189,935	189,935	189,935
Worker sales	0	0	62,927	62,927	62,927	62,927
Direct visitor sales	0	0	140,457	140,457	140,457	140,457
Total	0	0	547,455	547,455	547,455	547,455
Total Kentucky state taxes	1,575,457	2,176,190	1,065,747	677,119	678,907	680,764
10-year present value	7,793,273					

Table 48
Present Value of State of Kentucky Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	50,110	83,861	13,633	0	0	0
Business property	21,650	34,245	5,686	0	0	0
Worker real estate	38,598	52,977	9,545	0	0	0
Worker vehicles	340,105	466,805	84,110	0	0	0
Worker income	831,875	1,222,049	220,125	0	0	0
Worker sales	215,389	316,253	56,983	0	0	0
Total	1,497,727	2,176,190	390,082	0	0	0
Operations						
Business income	0	0	8,391	8,489	8,609	8,734
Business property	0	0	3,576	3,616	3,666	3,718
Worker real estate	0	0	2,900	2,935	2,977	3,021
Worker vehicles	0	0	25,557	25,860	26,233	26,620
Worker income	0	0	69,274	70,046	70,996	70,996
Worker sales	0	0	18,513	18,718	18,970	18,970
Total	0	0	128,210	129,664	131,452	132,060
Visitors						
Business income	0	0	25,698	25,698	25,698	25,698
Business property	0	0	14,008	14,008	14,008	14,008
Worker real estate	0	0	10,541	10,541	10,541	10,541
Worker vehicles	0	0	92,883	92,883	92,883	92,883
Worker income	0	0	161,916	161,916	161,916	161,916
Worker sales	0	0	53,029	53,029	53,029	53,029
Direct visitor sales	0	0	105,342	105,342	105,342	105,342
Total	0	0	463,419	463,419	463,419	463,419
Total Kentucky state taxes	1,497,727	2,176,190	981,711	593,083	594,871	595,479
10-year present value	7,222,360					

Table 49
Present Value of State of Kentucky Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	165,659	303,767	43,527	0	0	0
Business property	116,495	209,433	30,012	0	0	0
Worker real estate	104,738	192,791	27,969	0	0	0
Worker vehicles	922,895	1,698,774	246,450	0	0	0
Worker income	2,468,697	4,545,830	659,069	0	0	0
Worker sales	625,246	1,150,891	166,966	0	0	0
Total	4,403,730	8,101,487	1,173,994	0	0	0
Operations						
Business income	0	0	36,935	37,740	38,588	39,466
Business property	0	0	22,175	22,676	23,200	23,743
Worker real estate	0	0	18,831	19,259	19,708	20,172
Worker vehicles	0	0	165,925	169,703	173,654	177,748
Worker income	0	0	376,622	385,004	393,788	402,890
Worker sales	0	0	113,610	116,169	118,846	121,619
Total	0	0	734,099	750,553	767,784	785,638
Visitors						
Business income	0	0	77,052	77,052	77,052	77,052
Business property	0	0	42,651	42,651	42,651	42,651
Worker real estate	0	0	22,334	22,334	22,334	22,334
Worker vehicles	0	0	196,792	196,792	196,792	196,792
Worker income	0	0	422,156	422,156	422,156	422,156
Worker sales	0	0	133,323	133,323	133,323	133,323
Direct visitor sales	0	0	280,913	280,913	280,913	280,913
Total	0	0	1,175,221	1,175,221	1,175,221	1,175,221
Total Kentucky state taxes	4,403,730	8,101,487	3,083,313	1,925,774	1,943,005	1,960,859
10-year present value	23,964,272					

VII. Alternate Estimates of Impacts

As previously indicated earlier, the initial estimates provided in this report are based on a 21,000-seat stadium and a total annual attendance of 333,000, which is comparable to Sporting Kansas City SC. However, there is a possibility that the Cincinnati market could accommodate a larger 25,000-seat stadium. This would put FC Cincinnati in the same category as Orlando City FC. Orlando's metropolitan population is within 20,000 of that of Cincinnati, but its soccer team enjoyed the second-highest attendance in the MLS in 2016. Assuming that the same proportion of attendees comes from outside the region, visitor-related impacts would increase proportionally. Construction and operating impacts would increase as well, but less than proportionally because some costs are fixed.

The following tables replicate comparable tables in the main report and provide impacts of the construction and operation of a 25,000-seat stadium. In order to allow easy comparison with the tables above, the restatement of Table 1 is designated as Table 1A and so forth. Most, but not all, tables require restatement. As a result there are occasional gaps in the table numbering.

Table 1A
Summary Costs and Phasing for the Stadium, Garage, and Training/Youth Facility
 Inflation-adjusted Year 1 dollars

	Year 1	Year 2	Year 1	Total
Over-the-Rhine				
Stadium	88,500,528	118,832,174	4,642,000	211,974,702
Training complex			21,250,000	21,250,000
Site prep	8,900,890			8,900,890
Infrastructure	17,801,780			17,801,780
Stadium relocation	7,565,757			7,565,757
Parking garage		49,721,379		49,721,379
OTR total	122,768,955	168,553,553	25,892,000	317,214,508
Oakley				
Stadium	88,500,528	118,832,174	4,642,000	211,974,702
Training complex			21,250,000	21,250,000
Site prep	10,681,068			10,681,068
Infrastructure	16,021,602			16,021,602
Parking garage		49,721,379		49,721,379
Oakley total	115,203,198	168,553,553	25,892,000	309,648,751
Ovation				
Stadium	88,500,528	118,832,174	4,642,000	211,974,702
Training complex			21,250,000	21,250,000
Infrastructure	8,900,890			8,900,890
Parking garage		78,725,517		78,725,517
Ovation total	97,401,418	197,557,691	25,892,000	320,851,109

Table 5A
Output Impacts of Stadium Construction – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	122,769,000	53,143,000	78,947,000	254,860,000
Ohio	121,030,000	50,702,000	61,869,000	233,600,000
Kentucky and Indiana	1,739,000	2,442,000	17,078,000	21,259,000
Year 2				
Cincinnati MSA	168,554,000	70,650,000	110,784,000	349,987,000
Ohio	164,659,000	67,265,000	86,474,000	318,398,000
Kentucky and Indiana	3,894,000	3,385,000	24,309,000	31,589,000
Year 3				
Cincinnati MSA	25,892,000	10,736,000	17,385,000	54,012,000
Ohio	25,228,000	10,243,000	13,530,000	49,000,000
Kentucky and Indiana	664,000	493,000	3,855,000	5,012,000
Total				
Cincinnati MSA	317,215,000	134,529,000	207,116,000	658,859,000
Ohio	310,916,000	128,210,000	161,873,000	600,999,000
Kentucky and Indiana	6,298,000	6,320,000	45,243,000	57,861,000

Note: Components may not sum to totals because of rounding.

Table 6A
Output Impacts of Stadium Construction – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	115,203,000	49,779,000	74,217,000	239,200,000
Ohio	113,464,000	47,476,000	58,125,000	219,065,000
Kentucky and Indiana	1,739,000	2,303,000	16,092,000	20,135,000
Year 2				
Cincinnati MSA	168,554,000	70,650,000	110,784,000	349,987,000
Ohio	164,659,000	67,265,000	86,474,000	318,398,000
Kentucky and Indiana	3,894,000	3,385,000	24,309,000	31,589,000
Year 3				
Cincinnati MSA	25,892,000	10,736,000	17,385,000	54,012,000
Ohio	25,228,000	10,243,000	13,530,000	49,000,000
Kentucky and Indiana	664,000	493,000	3,855,000	5,012,000
Total				
Cincinnati MSA	309,649,000	131,165,000	202,386,000	643,199,000
Ohio	303,351,000	124,984,000	158,129,000	586,463,000
Kentucky and Indiana	6,298,000	6,181,000	44,257,000	56,736,000

Note: Components may not sum to totals because of rounding.

Table 7A
Output Impacts of Stadium Construction – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	108,082,000	45,957,000	70,817,000	224,857,000
Ohio	10,413,000	36,461,000	56,269,000	103,143,000
Kentucky and Indiana	97,669,000	9,496,000	14,548,000	121,714,000
Year 2				
Cincinnati MSA	197,558,000	82,727,000	130,234,000	410,519,000
Ohio	17,367,000	65,289,000	103,384,000	186,040,000
Kentucky and Indiana	180,191,000	17,438,000	26,850,000	224,479,000
Year 3				
Cincinnati MSA	25,892,000	10,736,000	17,385,000	54,012,000
Ohio	3,978,000	8,589,000	13,709,000	26,276,000
Kentucky and Indiana	21,914,000	2,147,000	3,675,000	27,737,000
Total				
Cincinnati MSA	331,532,000	139,420,000	218,436,000	689,388,000
Ohio	31,757,000	110,338,000	173,363,000	315,458,000
Kentucky and Indiana	299,775,000	29,082,000	45,073,000	373,930,000

Note: Components may not sum to totals because of rounding.

Table 8A
Earnings Impacts of Stadium Construction – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	52,286,000	13,604,000	23,952,000	89,841,000
Ohio	43,446,000	11,646,000	16,814,000	71,907,000
Kentucky and Indiana	8,839,000	1,958,000	7,138,000	17,935,000
Year 2				
Cincinnati MSA	74,199,000	18,264,000	33,610,000	126,073,000
Ohio	61,488,000	15,528,000	23,506,000	100,523,000
Kentucky and Indiana	12,711,000	2,736,000	10,104,000	25,550,000
Year 3				
Cincinnati MSA	11,677,000	2,829,000	5,274,000	19,780,000
Ohio	9,632,000	2,412,000	3,679,000	15,723,000
Kentucky and Indiana	2,045,000	417,000	1,595,000	4,057,000
Total				
Cincinnati MSA	138,161,000	34,697,000	62,836,000	235,694,000
Ohio	114,567,000	29,587,000	43,999,000	188,153,000
Kentucky and Indiana	23,594,000	5,110,000	18,837,000	47,541,000

Note: Components may not sum to totals because of rounding.

Table 9A
Earnings Impacts of Stadium Construction – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	49,174,000	12,767,000	22,517,000	84,458,000
Ohio	40,834,000	10,924,000	15,797,000	67,555,000
Kentucky and Indiana	8,340,000	1,844,000	6,719,000	16,903,000
Year 2				
Cincinnati MSA	74,199,000	18,264,000	33,610,000	126,073,000
Ohio	61,488,000	15,528,000	23,506,000	100,523,000
Kentucky and Indiana	12,711,000	2,736,000	10,104,000	25,550,000
Year 3				
Cincinnati MSA	11,677,000	2,829,000	5,274,000	19,780,000
Ohio	9,632,000	2,412,000	3,679,000	15,723,000
Kentucky and Indiana	2,045,000	417,000	1,595,000	4,057,000
Total				
Cincinnati MSA	135,049,000	33,860,000	61,401,000	230,310,000
Ohio	111,954,000	28,864,000	42,982,000	183,801,000
Kentucky and Indiana	23,095,000	4,996,000	18,419,000	46,510,000

Note: Components may not sum to totals because of rounding.

Table 10A
Earnings Impacts of Stadium Construction – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	47,253,000	11,847,000	21,486,000	80,586,000
Ohio	4,509,000	9,371,000	17,363,000	31,243,000
Kentucky and Indiana	42,743,000	2,476,000	4,105,000	49,325,000
Year 2				
Cincinnati MSA	87,393,000	21,304,000	39,512,000	148,209,000
Ohio	5,907,000	16,828,000	31,930,000	54,665,000
Kentucky and Indiana	81,485,000	4,476,000	7,583,000	93,544,000
Year 3				
Cincinnati MSA	11,677,000	2,829,000	5,274,000	19,780,000
Ohio	1,722,000	2,246,000	4,262,000	8,230,000
Kentucky and Indiana	9,954,000	583,000	1,012,000	11,549,000
Total				
Cincinnati MSA	146,322,000	35,980,000	66,272,000	248,574,000
Ohio	12,139,000	28,444,000	53,555,000	94,138,000
Kentucky and Indiana	134,183,000	7,536,000	12,700,000	154,418,000

Note: Components may not sum to totals because of rounding.

Table 11A
Employment Impacts of Stadium Construction – Over-the-Rhine

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	935	259	639	1,833
Ohio	751	217	463	1,431
Kentucky and Indiana	183	42	177	401
Year 2				
Cincinnati MSA	1,329	347	898	2,574
Ohio	1,068	289	647	2,004
Kentucky and Indiana	261	57	251	569
Year 3				
Cincinnati MSA	208	55	141	403
Ohio	166	46	101	313
Kentucky and Indiana	42	9	40	90

Table 12A
Employment Impacts of Stadium Construction – Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	878	244	601	1,723
Ohio	706	204	434	1,345
Kentucky and Indiana	172	39	166	378
Year 2				
Cincinnati MSA	1,329	347	898	2,574
Ohio	1,068	289	647	2,004
Kentucky and Indiana	261	57	251	569
Year 3				
Cincinnati MSA	208	55	141	403
Ohio	166	46	101	313
Kentucky and Indiana	42	9	40	90

Table 13A
Employment Impacts of Stadium Construction – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	845	227	573	1,645
Ohio	72	179	462	713
Kentucky and Indiana	773	48	111	932
Year 2				
Cincinnati MSA	1,569	403	1,055	3,028
Ohio	94	318	850	1,262
Kentucky and Indiana	1,475	86	205	1,766
Year 3				
Cincinnati MSA	208	55	141	403
Ohio	28	44	113	185
Kentucky and Indiana	180	12	27	219

Table 14A
Output Impacts of MLS Team Operations – Over-the-Rhine or Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	13,054,000	6,240,000	9,191,000	28,485,000
Ohio	13,054,000	5,588,000	6,781,000	25,424,000
Kentucky and Indiana	0	652,000	2,409,000	3,061,000
Year 2				
Cincinnati MSA	13,377,000	6,312,000	9,284,000	28,974,000
Ohio	13,377,000	5,652,000	6,851,000	25,880,000
Kentucky and Indiana	0	660,000	2,434,000	3,094,000
Year 3				
Cincinnati MSA	13,710,000	6,392,000	9,409,000	29,511,000
Ohio	13,710,000	5,723,000	6,942,000	26,376,000
Kentucky and Indiana	0	669,000	2,467,000	3,136,000
Year 4				
Cincinnati MSA	14,055,000	6,476,000	9,538,000	30,069,000
Ohio	14,055,000	5,799,000	7,038,000	26,891,000
Kentucky and Indiana	0	678,000	2,501,000	3,179,000

Note: Components may not sum to totals because of rounding.

Table 15A
Earnings Impacts of MLS Team Operations – Over-the-Rhine or Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	7,763,000	2,655,000	2,784,000	13,202,000
Ohio	7,763,000	2,186,000	1,841,000	11,790,000
Kentucky and Indiana	0	469,000	943,000	1,412,000
Year 2				
Cincinnati MSA	7,955,000	2,685,000	2,813,000	13,453,000
Ohio	7,955,000	2,210,000	1,860,000	12,025,000
Kentucky and Indiana	0	475,000	953,000	1,428,000
Year 3				
Cincinnati MSA	8,153,000	2,719,000	2,850,000	13,722,000
Ohio	8,153,000	2,238,000	1,885,000	12,276,000
Kentucky and Indiana	0	481,000	966,000	1,447,000
Year 4				
Cincinnati MSA	8,358,000	2,755,000	2,890,000	14,003,000
Ohio	8,358,000	2,268,000	1,910,000	12,536,000
Kentucky and Indiana	0	487,000	979,000	1,467,000

Note: Components may not sum to totals because of rounding.

Table 16A
Employment Impacts of MLS Team Operations – Over-the-Rhine or Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	199	71	78	348
Ohio	199	62	53	314
Kentucky and Indiana	0	9	25	34
Year 2				
Cincinnati MSA	204	72	79	355
Ohio	204	62	54	320
Kentucky and Indiana	0	9	25	34
Year 3				
Cincinnati MSA	209	73	80	362
Ohio	209	63	55	327
Kentucky and Indiana	0	10	26	35
Year 4				
Cincinnati MSA	214	74	81	369
Ohio	214	64	56	334
Kentucky and Indiana	0	10	26	36

Table 17A
Output Impacts of MLS Team Operations – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	13,054,000	6,240,000	9,191,000	28,485,000
Ohio	0	5,588,000	6,781,000	12,370,000
Kentucky and Indiana	13,054,000	652,000	2,409,000	16,116,000
Year 2				
Cincinnati MSA	13,377,000	6,312,000	9,284,000	28,974,000
Ohio	0	5,652,000	6,851,000	12,503,000
Kentucky and Indiana	13,377,000	660,000	2,434,000	16,472,000
Year 3				
Cincinnati MSA	13,710,000	6,392,000	9,409,000	29,511,000
Ohio	0	5,723,000	6,942,000	12,666,000
Kentucky and Indiana	13,710,000	669,000	2,467,000	16,846,000
Year 4				
Cincinnati MSA	14,055,000	6,476,000	9,538,000	30,069,000
Ohio	0	5,799,000	7,038,000	12,836,000
Kentucky and Indiana	14,055,000	678,000	2,501,000	17,233,000

Note: Components may not sum to totals because of rounding.

Table 18A
Earnings Impacts of MLS Team Operations – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	7,763,000	2,655,000	2,784,000	13,202,000
Ohio	0	2,186,000	1,841,000	4,027,000
Kentucky and Indiana	7,763,000	469,000	943,000	9,176,000
Year 2				
Cincinnati MSA	7,955,000	2,685,000	2,813,000	13,453,000
Ohio	0	2,210,000	1,860,000	4,070,000
Kentucky and Indiana	7,955,000	475,000	953,000	9,383,000
Year 3				
Cincinnati MSA	8,153,000	2,719,000	2,850,000	13,722,000
Ohio	0	2,238,000	1,885,000	4,123,000
Kentucky and Indiana	8,153,000	481,000	966,000	9,600,000
Year 4				
Cincinnati MSA	8,358,000	2,755,000	2,890,000	14,003,000
Ohio	0	2,268,000	1,910,000	4,178,000
Kentucky and Indiana	8,358,000	487,000	979,000	9,824,000

Note: Components may not sum to totals because of rounding.

Table 19A
Employment Impacts of MLS Team Operations – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	199	71	78	348
Ohio	0	59	34	93
Kentucky and Indiana	199	9	25	233
Year 2				
Cincinnati MSA	204	72	79	355
Ohio	0	62	54	116
Kentucky and Indiana	204	10	25	239
Year 3				
Cincinnati MSA	209	73	80	362
Ohio	0	63	55	118
Kentucky and Indiana	209	10	26	244
Year 4				
Cincinnati MSA	214	74	81	369
Ohio	0	64	56	119
Kentucky and Indiana	214	10	26	250

Table 20A
Annual Visitor Impacts – Over-the-Rhine

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	22,944,000	9,737,000	12,651,000	45,332,000
Ohio	16,500,000	6,836,000	7,885,000	31,221,000
Kentucky and Indiana	6,445,000	2,900,000	4,766,000	14,111,000
Earnings*				
Cincinnati MSA	7,780,000	2,783,000	3,831,000	14,393,000
Ohio	5,273,000	1,747,000	2,140,000	9,160,000
Kentucky and Indiana	2,507,000	1,036,000	1,690,000	5,233,000
Employment				
Cincinnati MSA	367	67	110	544
Ohio	250	44	63	358
Kentucky and Indiana	117	23	47	186

*Inflation-adjusted Year 1 dollars.

Note: Output and earnings components may not sum to totals because of rounding.

Table 21A
Annual Visitor Impacts – Oakley

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	22,944,000	9,737,000	12,651,000	45,332,000
Ohio	18,111,000	7,545,000	8,593,000	34,249,000
Kentucky and Indiana	4,833,000	2,191,000	4,058,000	11,083,000
Earnings*				
Cincinnati MSA	7,780,000	2,783,000	3,831,000	14,393,000
Ohio	5,729,000	1,921,000	2,332,000	9,983,000
Kentucky and Indiana	2,051,000	861,000	1,498,000	4,411,000
Employment				
Cincinnati MSA	367	67	110	544
Ohio	273	49	69	390
Kentucky and Indiana	94	19	41	154

*Inflation-adjusted Year 1 dollars.

Note: Output and earnings components may not sum to totals because of rounding.

Table 22A
Annual Visitor Impacts – Ovation

	Direct	Indirect	Induced	Total
Output*				
Cincinnati MSA	22,944,000	9,737,000	12,651,000	45,332,000
Ohio	6,445,000	2,835,000	2,831,000	12,111,000
Kentucky and Indiana	16,500,000	6,901,000	9,820,000	33,221,000
Earnings*				
Cincinnati MSA	7,780,000	2,783,000	3,831,000	14,393,000
Ohio	1,825,000	698,000	768,000	3,291,000
Kentucky and Indiana	5,955,000	2,085,000	3,063,000	11,103,000
Employment				
Cincinnati MSA	367	67	110	544
Ohio	90	17	23	130
Kentucky and Indiana	277	50	87	414

*Inflation-adjusted Year 1 dollars.

Note: Output and earnings components may not sum to totals because of rounding.

Table 23A
Combined Recurring Operations and Visitor Output Impacts – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	35,998,000	15,977,000	21,842,000	73,817,000
Ohio	29,554,000	12,424,000	14,666,000	56,645,000
Kentucky and Indiana	6,445,000	3,552,000	7,175,000	17,172,000
Year 2				
Cincinnati MSA	36,321,000	16,049,000	21,935,000	74,306,000
Ohio	29,877,000	12,488,000	14,736,000	57,101,000
Kentucky and Indiana	6,445,000	3,560,000	7,200,000	17,205,000
Year 3				
Cincinnati MSA	36,654,000	16,129,000	22,060,000	74,843,000
Ohio	30,210,000	12,559,000	14,827,000	57,597,000
Kentucky and Indiana	6,445,000	3,569,000	7,233,000	17,247,000
Year 4				
Cincinnati MSA	36,999,000	16,213,000	22,189,000	75,401,000
Ohio	30,555,000	12,635,000	14,923,000	58,112,000
Kentucky and Indiana	6,445,000	3,578,000	7,267,000	17,290,000

Note: Components may not sum to totals because of rounding.

Table 24A
Combined Recurring Operations and Visitor Earnings Impacts – Over-the-Rhine
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	15,543,000	5,438,000	6,615,000	27,595,000
Ohio	13,036,000	3,933,000	3,981,000	20,950,000
Kentucky and Indiana	2,507,000	1,505,000	2,633,000	6,645,000
Year 2				
Cincinnati MSA	15,735,000	5,468,000	6,644,000	27,846,000
Ohio	13,228,000	3,957,000	4,000,000	21,185,000
Kentucky and Indiana	2,507,000	1,511,000	2,643,000	6,661,000
Year 3				
Cincinnati MSA	15,933,000	5,502,000	6,681,000	28,115,000
Ohio	13,426,000	3,985,000	4,025,000	21,436,000
Kentucky and Indiana	2,507,000	1,517,000	2,656,000	6,680,000
Year 4				
Cincinnati MSA	16,138,000	5,538,000	6,721,000	28,396,000
Ohio	13,631,000	4,015,000	4,050,000	21,696,000
Kentucky and Indiana	2,507,000	1,523,000	2,669,000	6,700,000

Note: Components may not sum to totals because of rounding.

Table 25A
Combined Recurring Operations and Visitor Employment Impacts – Over-the-Rhine

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	566	138	188	892
Ohio	450	106	117	672
Kentucky and Indiana	117	32	72	221
Year 2				
Cincinnati MSA	571	139	189	899
Ohio	455	107	117	678
Kentucky and Indiana	117	32	72	221
Year 3				
Cincinnati MSA	576	140	190	906
Ohio	460	107	118	685
Kentucky and Indiana	117	33	72	221
Year 4				
Cincinnati MSA	581	141	191	913
Ohio	465	108	119	692
Kentucky and Indiana	117	33	73	222

Table 26A
Combined Recurring Operations and Visitor Output Impacts – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	35,998,000	15,977,000	21,842,000	73,817,000
Ohio	31,165,000	13,133,000	15,374,000	59,673,000
Kentucky and Indiana	4,833,000	2,843,000	6,467,000	14,144,000
Year 2				
Cincinnati MSA	36,321,000	16,049,000	21,935,000	74,306,000
Ohio	31,488,000	13,197,000	15,444,000	60,129,000
Kentucky and Indiana	4,833,000	2,851,000	6,492,000	14,177,000
Year 3				
Cincinnati MSA	36,654,000	16,129,000	22,060,000	74,843,000
Ohio	31,821,000	13,268,000	15,535,000	60,625,000
Kentucky and Indiana	4,833,000	2,860,000	6,525,000	14,219,000
Year 4				
Cincinnati MSA	36,999,000	16,213,000	22,189,000	75,401,000
Ohio	32,166,000	13,344,000	15,631,000	61,140,000
Kentucky and Indiana	4,833,000	2,869,000	6,559,000	14,262,000

Note: Components may not sum to totals because of rounding.

Table 27A
Combined Recurring Operations and Visitor Earnings Impacts – Oakley
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	15,543,000	5,438,000	6,615,000	27,595,000
Ohio	13,492,000	4,107,000	4,173,000	21,773,000
Kentucky and Indiana	2,051,000	1,330,000	2,441,000	5,823,000
Year 2				
Cincinnati MSA	15,735,000	5,468,000	6,644,000	27,846,000
Ohio	13,684,000	4,131,000	4,192,000	22,008,000
Kentucky and Indiana	2,051,000	1,336,000	2,451,000	5,839,000
Year 3				
Cincinnati MSA	15,933,000	5,502,000	6,681,000	28,115,000
Ohio	13,882,000	4,159,000	4,217,000	22,259,000
Kentucky and Indiana	2,051,000	1,342,000	2,464,000	5,858,000
Year 4				
Cincinnati MSA	16,138,000	5,538,000	6,721,000	28,396,000
Ohio	14,087,000	4,189,000	4,242,000	22,519,000
Kentucky and Indiana	2,051,000	1,348,000	2,477,000	5,878,000

Note: Components may not sum to totals because of rounding.

Table 28A
Combined Recurring Operations and Visitor Employment Impacts – Oakley

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	566	138	188	892
Ohio	472	110	122	704
Kentucky and Indiana	94	28	66	188
Year 2				
Cincinnati MSA	571	139	189	899
Ohio	477	111	123	711
Kentucky and Indiana	94	28	66	188
Year 3				
Cincinnati MSA	576	140	190	906
Ohio	482	112	123	717
Kentucky and Indiana	94	28	66	189
Year 4				
Cincinnati MSA	581	141	191	913
Ohio	487	112	124	724
Kentucky and Indiana	94	29	67	189

Table 29A
Combined Recurring Operations and Visitor Output Impacts – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	35,998,000	15,977,000	21,842,000	73,817,000
Ohio	16,500,000	12,424,000	14,666,000	43,591,000
Kentucky and Indiana	19,499,000	3,552,000	7,175,000	30,227,000
Year 2				
Cincinnati MSA	36,321,000	16,049,000	21,935,000	74,306,000
Ohio	16,500,000	12,488,000	14,736,000	43,724,000
Kentucky and Indiana	19,822,000	3,560,000	7,200,000	30,583,000
Year 3				
Cincinnati MSA	36,654,000	16,129,000	22,060,000	74,843,000
Ohio	16,500,000	12,559,000	14,827,000	43,887,000
Kentucky and Indiana	20,155,000	3,569,000	7,233,000	30,957,000
Year 4				
Cincinnati MSA	36,999,000	16,213,000	22,189,000	75,401,000
Ohio	16,500,000	12,635,000	14,923,000	44,057,000
Kentucky and Indiana	20,500,000	3,578,000	7,267,000	31,344,000

Note: Components may not sum to totals because of rounding.

Table 30A
Combined Recurring Operations and Visitor Earnings Impacts – Ovation
 Inflation-adjusted Year 1 dollars

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	15,543,000	5,438,000	6,615,000	27,595,000
Ohio	5,273,000	3,933,000	3,981,000	13,187,000
Kentucky and Indiana	10,270,000	1,505,000	2,633,000	14,409,000
Year 2				
Cincinnati MSA	15,735,000	5,468,000	6,644,000	27,846,000
Ohio	5,273,000	3,957,000	4,000,000	13,230,000
Kentucky and Indiana	10,462,000	1,511,000	2,643,000	14,616,000
Year 3				
Cincinnati MSA	15,933,000	5,502,000	6,681,000	28,115,000
Ohio	5,273,000	3,985,000	4,025,000	13,283,000
Kentucky and Indiana	10,660,000	1,517,000	2,656,000	14,833,000
Year 4				
Cincinnati MSA	16,138,000	5,538,000	6,721,000	28,396,000
Ohio	5,273,000	4,015,000	4,050,000	13,338,000
Kentucky and Indiana	10,865,000	1,523,000	2,669,000	15,057,000

Note: Components may not sum to totals because of rounding.

Table 31A
Combined Recurring Operations and Visitor Employment Impacts – Ovation

	Direct	Indirect	Induced	Total
Year 1				
Cincinnati MSA	566	138	188	892
Ohio	250	103	97	451
Kentucky and Indiana	316	32	72	420
Year 2				
Cincinnati MSA	571	139	189	899
Ohio	250	107	117	474
Kentucky and Indiana	321	32	72	425
Year 3				
Cincinnati MSA	576	140	190	906
Ohio	250	107	118	476
Kentucky and Indiana	326	33	72	430
Year 4				
Cincinnati MSA	581	141	191	913
Ohio	250	108	119	477
Kentucky and Indiana	331	33	73	436

Table 32A
Present Value of Cincinnati Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	143,537	204,666	31,457	0	0	0
Worker income	1,152,724	1,620,905	253,712	0	0	0
Worker property	107,946	150,905	23,604	0	0	0
Total	1,404,207	1,976,476	308,772	0	0	0
Operations						
Business income	0	0	24,861	25,381	25,931	26,501
Worker income	0	0	192,786	197,185	201,784	206,555
Worker property	0	0	17,297	17,650	17,958	18,349
Total	0	0	234,945	240,216	245,672	251,404
Visitor						
Business income	0	0	40,457	40,457	40,457	40,457
Worker income	0	0	143,553	143,553	143,553	143,553
Worker property	0	0	13,751	13,751	13,751	13,751
Direct lodging	0	0	58,127	58,127	58,127	58,127
Direct admissions	0	0	397,288	408,707	420,514	433,032
Total	0	0	653,176	664,595	676,402	688,920
Total Cincinnati municipal taxes	1,404,207	1,976,476	1,196,893	904,812	922,074	940,324
10-year present value	8,820,664					

Table 33A
Present Value of Cincinnati Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	135,089	204,666	31,457	0	0	0
Worker income	1,083,172	1,620,905	83,303	0	0	0
Worker property	101,413	150,905	23,604	0	0	0
Total	1,319,674	1,976,476	138,364	0	0	0
Operations						
Business income	0	0	24,861	25,381	25,931	26,501
Worker income	0	0	192,786	197,185	201,784	206,555
Worker property	0	0	17,297	17,650	18,026	18,417
Total	0	0	234,945	240,216	245,741	251,472
Visitor						
Business income	0	0	28,597	28,597	28,597	28,597
Worker income	0	0	156,228	156,228	156,228	156,228
Worker property	0	0	14,986	14,986	14,986	14,986
Direct lodging	0	0	65,393	65,393	65,393	65,393
Direct admissions	0	0	397,288	408,707	420,514	433,032
Total	0	0	662,491	673,911	685,717	698,236
Total Cincinnati municipal taxes	1,319,674	1,976,476	1,035,800	914,127	931,458	949,708
10-year present value	8,647,850					

Table 34A
Present Value of Cincinnati Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	63,581	120,110	17,327	0	0	0
Worker income	196,016	308,848	60,837	0	0	0
Worker property	46,902	82,063	10,076	0	0	0
Total	306,499	511,021	88,239	0	0	0
Operations						
Business income	0	0	7,042	7,121	7,216	7,316
Worker income	0	0	29,762	30,126	30,571	31,040
Worker property	0	0	12,314	13,486	13,714	15,811
Total	0	0	49,118	50,732	51,501	54,167
Visitor						
Business income	0	0	10,875	10,875	10,875	10,875
Worker income	0	0	50,700	50,700	50,700	50,700
Worker property	0	0	4,940	4,940	4,940	4,940
Direct lodging	0	0	29,063	29,063	29,063	29,063
Direct admissions	0	0	-23,204	-23,204	-23,204	-23,204
Total	0	0	72,374	72,374	72,374	72,374
Total Cincinnati municipal taxes	306,499	511,021	209,731	123,106	123,875	126,541
10-year present value	1,564,187					

Table 35A
Present Value of Hamilton County Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	178,967	250,189	39,133	0	0	0
Worker property	54,899	76,747	12,004	0	0	0
Total	233,867	326,937	51,137	0	0	0
Operations						
Worker sales	0	0	28,769	29,354	29,978	30,625
Worker property	0	0	8,825	9,005	9,196	9,395
Total	0	0	37,594	38,359	39,173	40,020
Visitor						
Worker sales	0	0	22,798	22,798	22,798	22,798
Worker property	0	0	6,993	6,993	6,993	6,993
Direct sales	0	0	130,938	130,938	130,938	130,938
Direct lodging	0	0	94,456	94,456	94,456	94,456
Total	0	0	255,185	255,185	255,185	255,185
Total Hamilton County taxes	233,867	326,937	343,916	293,544	294,359	295,205
10-year present value	2,289,908					

Table 36A
Present Value of Hamilton County Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	168,136	250,189	39,133	0	0	0
Worker property	51,577	76,747	12,004	0	0	0
Total	219,712	326,937	51,137	0	0	0
Operations						
Worker sales	0	0	28,769	29,354	29,978	30,625
Worker property	0	0	8,825	9,005	9,196	9,395
Total	0	0	37,594	38,359	39,173	40,020
Visitor						
Worker sales	0	0	24,845	24,845	24,845	24,845
Worker property	0	0	7,621	7,621	7,621	7,621
Direct sales	0	0	147,305	147,305	147,305	147,305
Direct lodging	0	0	106,263	106,263	106,263	106,263
Total	0	0	286,035	286,035	286,035	286,035
Total Hamilton County taxes	219,712	326,937	374,766	324,394	325,208	326,055
10-year present value	2,457,280					

Table 37A
Present Value of Hamilton County Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Worker sales	77,760	136,054	20,485	0	0	0
Worker property	22,953	50,942	7,345	0	0	0
Total	100,714	186,996	27,830	0	0	0
Operations						
Worker sales	0	0	24,260	24,734	25,243	25,772
Worker property	0	0	8,098	8,995	9,187	9,385
Total	0	0	32,359	33,729	34,429	35,157
Visitor						
Worker sales	0	0	8,190	8,190	8,190	8,190
Worker property	0	0	2,512	2,512	2,512	2,512
Direct sales	0	0	65,469	65,469	65,469	65,469
Direct lodging	0	0	47,228	47,228	47,228	47,228
Total	0	0	123,399	123,399	123,399	123,399
Total Hamilton County taxes	100,714	186,996	183,588	157,129	157,829	158,556
10-year present value	1,214,916					

Table 38A
Present Value of State of Ohio Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	506,540	694,767	107,125	0	0	0
Worker income	2,305,925	3,225,397	504,110	0	0	0
Worker sales	823,249	1,150,872	180,012	0	0	0
Total	3,635,715	5,071,036	791,247	0	0	0
Operations						
Commercial activity	0	0	43,391	44,154	44,991	45,861
Worker income	0	0	231,436	235,514	239,955	244,579
Worker sales	0	0	132,336	135,029	137,897	140,877
Total	0	0	407,162	414,697	422,843	431,317
Visitors						
Commercial activity	0	0	64,742	64,742	56,590	64,742
Worker income	0	0	246,997	246,997	246,997	246,997
Worker sales	0	0	104,870	104,870	104,870	104,870
Direct visitor sales	0	0	240,925	240,925	240,925	240,925
Total	0	0	657,535	657,535	649,383	657,535
Total Ohio state taxes	3,635,715	5,071,036	1,855,943	1,072,231	1,072,226	1,088,852
10-year present value	15,081,309					

Table 39A
Present Value of State of Ohio Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	475,173	694,767	107,676	0	0	0
Worker income	2,166,310	3,225,397	504,110	0	0	0
Worker sales	773,424	1,150,872	180,012	0	0	0
Total	3,414,906	5,071,036	791,798	0	0	0
Operations						
Commercial activity	0	0	43,391	44,154	44,991	45,861
Worker income	0	0	231,436	235,514	239,955	244,579
Worker sales	0	0	132,336	135,029	137,897	140,877
Total	0	0	407,162	414,697	422,843	431,317
Visitors						
Commercial activity	0	0	71,270	71,270	71,270	71,270
Worker income	0	0	268,713	268,713	268,713	268,713
Worker sales	0	0	114,289	114,289	114,289	114,289
Direct visitor sales	0	0	271,041	271,041	271,041	271,041
Total	0	0	725,313	725,313	725,313	725,313
Total Ohio state taxes	3,414,906	5,071,036	1,924,273	1,140,010	1,148,156	1,156,631
10-year present value	15,275,219					

Table 40A
Present Value of State of Ohio Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Commercial activity	109,969	223,535	34,883	0	0	0
Worker income	968,921	1,692,197	256,196	0	0	0
Worker sales	357,698	625,850	94,229	0	0	0
Total	1,436,588	2,541,581	385,309	0	0	0
Operations						
Commercial activity	0	0	23,066	23,326	23,646	23,979
Worker income	0	0	117,744	119,008	120,552	122,176
Worker sales	0	0	111,596	113,776	116,116	118,549
Total	0	0	252,406	256,110	260,314	264,704
Visitors						
Commercial activity	0	0	26,112	26,112	26,112	26,112
Worker income	0	0	86,866	86,866	86,866	86,866
Worker sales	0	0	8,190	8,190	8,190	8,190
Direct visitor sales	0	0	65,469	65,469	65,469	65,469
Total	0	0	186,637	186,637	186,637	186,637
Total Ohio state taxes	1,436,588	2,541,581	824,352	442,747	446,951	451,341
10-year present value	6,631,087					

Table 41A
Present Value of City of Newport Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	780	1,235	177	0	0	0
Worker real estate	3,510	5,000	794	0	0	0
Worker vehicles	585	833	132	0	0	0
Total	4,875	7,069	1,103	0	0	0
Operations						
Business property	0	0	120	121	123	0
Worker real estate	0	0	276	279	283	287
Worker vehicles	0	0	46	47	47	48
Total	0	0	442	447	453	335
Visitor						
Business property	0	0	682	682	682	807
Worker real estate	0	0	1,024	1,024	1,024	1,024
Worker vehicles	0	0	171	171	171	171
Total	0	0	1,877	1,877	1,877	2,002
Total Newport municipal taxes	4,875	7,069	3,423	2,324	2,330	2,337
10-year present value	25,676					

Table 42A
Present Value of City of Newport Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	736	1,235	177	0	0	0
Worker real estate	3,510	5,000	794	0	0	0
Worker vehicles	585	833	132	0	0	0
Total	4,831	7,069	1,103	0	0	0
Operations						
Business property	0	0	120	121	121	124
Worker real estate	0	0	276	279	283	287
Worker vehicles	0	0	46	47	47	48
Total	0	0	442	447	451	459
Visitor						
Business property	0	0	531	531	531	531
Worker real estate	0	0	1,024	1,024	1,024	1,024
Worker vehicles	0	0	171	171	171	171
Total	0	0	1,726	1,726	1,726	1,726
Total Newport municipal taxes	4,831	7,069	3,271	2,173	2,177	2,185
10-year present value	24,745					

Table 43A
Present Value of City of Newport Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	4,684	8,735	1,060	0	0	0
Worker real estate	9,653	18,307	2,260	0	0	0
Worker vehicles	1,800	3,051	377	0	0	0
Total	16,137	30,093	3,697	0	0	0
Operations						
Business property	0	0	719	735	752	769
Worker real estate	0	0	1,796	1,836	1,879	1,923
Worker vehicles	0	0	299	306	313	320
Total	0	0	2,814	2,877	2,944	3,013
Visitor						
Business property	0	0	1,587	1,587	1,587	1,587
Worker real estate	0	0	2,173	2,173	2,173	2,173
Worker vehicles	0	0	362	362	362	362
Total	0	0	4,122	4,122	4,122	4,122
Total Newport municipal taxes	16,137	30,093	10,633	7,000	7,066	7,135
10-year present value	87,347					

Table 44A
Present Value of Campbell County Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	12,298	19,474	2,786	0	0	0
Worker real estate	47,261	67,328	10,690	0	0	0
Worker vehicles	7,877	11,221	1,782	0	0	0
Total	67,436	98,024	15,258	0	0	0
Operations						
Business property	0	0	1,887	1,907	1,934	1,961
Worker real estate	0	0	3,722	3,762	3,812	3,865
Worker vehicles	0	0	620	627	635	644
Total	0	0	6,229	6,297	6,382	6,470
Visitor						
Business property	0	0	10,759	10,759	10,759	10,759
Worker real estate	0	0	13,791	13,791	13,791	13,791
Worker vehicles	0	0	2,298	2,298	2,298	2,298
Total	0	0	26,848	26,848	26,848	26,848
Total Newport municipal taxes	67,436	98,024	48,335	33,145	33,230	33,318
10-year present value	361,217					

Table 45A
Present Value of Campbell County Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	11,602	19,474	2,786	0	0	0
Worker real estate	44,542	67,328	10,690	0	0	0
Worker vehicles	7,424	11,221	1,782	0	0	0
Total	63,568	98,024	15,258	0	0	0
Operations						
Business property	0	0	1,887	1,907	1,934	1,961
Worker real estate	0	0	3,722	3,762	3,812	3,865
Worker vehicles	0	0	620	627	635	644
Total	0	0	6,229	6,297	6,382	6,470
Visitor						
Business property	0	0	8,372	8,372	8,372	8,372
Worker real estate	0	0	11,623	11,623	11,623	11,623
Worker vehicles	0	0	1,937	1,937	1,937	1,937
Total	0	0	21,932	21,932	21,932	21,932
Total Newport municipal taxes	63,568	98,024	43,419	28,229	28,314	28,402
10-year present value	328,713					

Table 46A
Present Value of Campbell County Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business property	73,839	137,704	16,706	0	0	0
Worker real estate	129,979	246,503	30,434	0	0	0
Worker vehicles	21,663	41,084	5,072	0	0	0
Total	225,481	425,291	52,212	0	0	0
Operations						
Business property	0	0	11,331	11,585	11,852	12,129
Worker real estate	0	0	24,179	24,725	25,297	25,889
Worker vehicles	0	0	4,030	4,121	4,216	4,315
Total	0	0	39,540	40,432	41,365	42,333
Visitor						
Business property	0	0	25,027	25,027	25,027	25,027
Worker real estate	0	0	29,257	29,257	29,257	29,257
Worker vehicles	0	0	4,876	4,876	4,876	4,876
Total	0	0	59,160	59,160	59,160	59,160
Total Newport municipal taxes	225,481	425,291	150,912	99,592	100,525	101,493
10-year present value	1,235,846					

Table 47A
Present Value of State of Kentucky Tax Increment – Over-the-Rhine

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	60,518	98,081	14,392	0	0	0
Business property	26,186	40,131	5,932	0	0	0
Worker real estate	43,761	62,342	9,898	0	0	0
Worker vehicles	385,595	549,323	87,219	0	0	0
Worker income	1,008,964	1,438,068	228,257	0	0	0
Worker sales	261,234	372,158	59,089	0	0	0
Total	1,786,259	2,560,102	404,786	0	0	0
Operations						
Business income	0	0	9,272	9,378	9,509	9,645
Business property	0	0	3,938	3,981	4,035	4,092
Worker real estate	0	0	3,246	3,283	3,329	3,378
Worker vehicles	0	0	28,599	28,927	29,337	29,763
Worker income	0	0	77,010	77,847	78,892	79,980
Worker sales	0	0	20,574	20,796	21,073	21,362
Total	0	0	142,639	144,211	146,177	148,219
Visitors						
Business income	0	0	39,709	39,709	39,709	39,709
Business property	0	0	21,727	21,727	21,727	21,727
Worker real estate	0	0	12,769	12,769	12,769	12,769
Worker vehicles	0	0	112,515	112,515	112,515	112,515
Worker income	0	0	230,289	230,289	230,289	230,289
Worker sales	0	0	76,227	76,227	76,227	76,227
Direct visitor sales	0	0	170,951	170,951	170,951	170,951
Total	0	0	664,187	664,187	664,187	664,187
Total Kentucky state taxes	1,786,259	2,560,102	1,211,613	808,398	810,364	812,407
10-year present value	9,125,829					

Table 48A
Present Value of State of Kentucky Tax Increment – Oakley

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	57,330	98,081	14,392	0	0	0
Business property	24,704	40,131	5,932	0	0	0
Worker real estate	43,761	62,342	9,898	0	0	0
Worker vehicles	385,595	549,323	87,219	0	0	0
Worker income	950,931	1,438,068	228,257	0	0	0
Worker sales	246,208	372,158	59,089	0	0	0
Total	1,708,528	2,560,102	404,786	0	0	0
Operations						
Business income	0	0	9,272	9,378	9,509	9,645
Business property	0	0	3,938	3,981	4,035	4,092
Worker real estate	0	0	3,246	3,283	3,329	3,378
Worker vehicles	0	0	28,599	28,927	29,337	29,763
Worker income	0	0	77,010	77,847	78,892	78,892
Worker sales	0	0	20,574	20,796	21,073	21,073
Total	0	0	142,639	144,211	146,177	146,843
Visitors						
Business income	0	0	31,174	31,174	31,174	31,174
Business property	0	0	16,931	16,931	16,931	16,931
Worker real estate	0	0	12,769	12,769	12,769	12,769
Worker vehicles	0	0	112,515	112,515	112,515	112,515
Worker income	0	0	196,332	196,332	196,332	196,332
Worker sales	0	0	64,245	64,245	64,245	64,245
Direct visitor sales	0	0	128,213	128,213	128,213	128,213
Total	0	0	562,179	562,179	562,179	562,179
Total Kentucky state taxes	1,708,528	2,560,102	1,109,605	706,390	708,356	709,022
10-year present value	8,449,127					

Table 49A
Present Value of State of Kentucky Tax Increment – Ovation

	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4
Construction						
Business income	189,710	358,776	44,286	0	0	0
Business property	133,246	247,795	30,258	0	0	0
Worker real estate	120,353	228,247	28,180	0	0	0
Worker vehicles	1,060,485	2,011,194	248,311	0	0	0
Worker income	2,836,734	5,381,994	663,900	0	0	0
Worker sales	718,461	1,362,551	168,227	0	0	0
Total	5,058,989	9,590,557	1,183,162	0	0	0
Operations						
Business income	0	0	43,214	44,159	45,155	46,187
Business property	0	0	26,053	26,643	27,261	27,901
Worker real estate	0	0	22,188	22,694	23,223	23,771
Worker vehicles	0	0	195,505	199,964	204,626	209,457
Worker income	0	0	442,466	452,348	462,704	473,435
Worker sales	0	0	133,650	136,671	139,829	143,102
Total	0	0	863,075	882,478	902,798	923,853
Visitors						
Business income	0	0	93,572	93,572	93,572	93,572
Business property	0	0	51,629	51,629	51,629	51,629
Worker real estate	0	0	27,090	27,090	27,090	27,090
Worker vehicles	0	0	238,705	238,705	238,705	238,705
Worker income	0	0	512,597	512,597	512,597	512,597
Worker sales	0	0	161,718	161,718	161,718	161,718
Direct visitor sales	0	0	341,901	341,901	341,901	341,901
Total	0	0	1,427,212	1,427,212	1,427,212	1,427,212
Total Kentucky state taxes	5,058,989	9,590,557	3,473,449	2,309,690	2,330,010	2,351,065
10-year present value	28,218,730					