

The Economic Impacts of EMRCA

The Extreme Model Railroad and Contemporary Architecture Museum

Stephen Sheppard Center for Creative Community Development June 2017

I. Introduction

In 1986, the Western Gateway Heritage State Park opened in North Adams. One of five "urban heritage" state parks opened around the Commonwealth that mostly celebrated a post-industrial heritage in cities or settings that had seen better days but had an interesting history to celebrate and story to tell. The North Adams Heritage State Park (HSP) provided interpretive museums to tell the story of the Hoosac Tunnel and the coming of the railroad to western Massachusetts, as well as the stories of Mount Greylock and the original settlements and settlers who came to the area. Beyond these attractions the Park offered spaces for local retailers and restaurants, a small but pleasant plaza but few other amenities.

Whatever its contributions to local education and local identity, with poor access, limited parking and small museums, the park could not be said to have been a significant driver of the local economy nor an important destination for visitors to the area. Such a destination would only come 13 years later with the opening and critical acclaim afforded to MASS MoCA. Meanwhile, the Heritage State Park spent four decades getting older and losing most of its commercial tenants.

In late 2015, a proposal was put forward by the EMRCA Group for establishing an Extreme Model Railroad and Contemporary Architecture Museum, a commercial boutique distillery designated as the Mount Greylock Distillery, and a small museum to house an impressive collection of clocks and time pieces designated as the Museum of Time.

During the first half of 2016, the project proposal moved through what was designated as Phase 1 during which a Concept Development Plan was put together and served as the basis for further design work and negotiations for access to and acquisition of the Heritage State Park site by the EMRCA Group. In late 2016 and the first half of 2017, Phase 2.1 was undertaken to produce cost estimates and more detailed operating plans for the proposal, working towards completion of a Comprehensive Development Master Plan for the site. This Master Plan is then to be used in Phase 2.2 of the process as the basis for attracting investment and elaboration of concrete steps required for the project.

Part of the Comprehensive Development Master Plan is an evaluation of potential audience and likely economic impacts of the proposal. This report presents such an evaluation and a description of the analysis undertaken to obtain the evaluation.

The evaluation suggests that the proposal has very considerable promise for attracting a large audience and generating a very significant impact on the local economy. Indeed, the project now envisioned would present what is predicted to be the most important cultural destination in Berkshire County, further strengthening the reputation of western Massachusetts and helping to support the transformation of the local economy.

The analysis predicts that the project could generate over 2170 jobs for the local economy, adding as much as \$191 million per year to total output of goods and services in Berkshire County. After completion of construction, we predict a long-term addition of between 1400 and 2000 jobs, with the local economy producing between \$125 million and \$181 million more economic output. This would have a transformative impact on the region.

II. Expected Audience

In order to determine the economic impact of EMRCA and other components of the proposed redevelopment of the Heritage State Park (HSP), we need an estimate of the number of annual visitors who can be expected to visit EMRCA and other attractions. Making such estimates will always involve a certain amount of guesswork. For this study we seek guidance from several different sources:

- The experience of other cultural attractions locally, around the US and the world;
- Comparison with the number of visitors attracted to similar attractions;
- The relative attraction of history-themed attractions compared to other cultural attractions;
- Statistical analysis of survey data collected from a sample of individuals who have previously visited or inquired about visiting Berkshire County.

Experience of other cultural attractions

The Guggenheim Museum Bilbao is a contemporary and modern art museum that opened in 1997 in the declining industrial city of Bilbao, Spain. Conceived as both an important cultural institution and a spur for local economic development, it was hoped that the museum would serve to reverse the economic fortune of the city. While Bilbao had enjoyed growth for the first 30 years following World War II, its population stagnated around 1980. From 1980 to 1990, population dropped a staggering 14.1% (Berkshire County's population during the same period declined by 3.9%). From 1990 through 2000 Bilbao's population declined a further 4.8% but has almost stabilized in the period since (following the opening of the museum).

While Bilbao is itself larger than Berkshire County, it is not within a densely populated urban area. This can be easily seen in the maps in Figure 1, which compare the location of North Adams and Bilbao, with circles that indicate the area within 175 miles (which might be taken as representing a half-day travel by car or train).

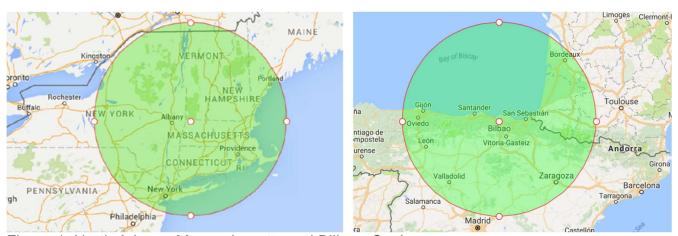


Figure 1: North Adams, Massachusetts and Bilbao, Spain

Within this distance from North Adams is a combined population of nearly 36 million. Within the same distance of Bilbao is a total population of about 9.1 million. Despite having a relatively modest population accessible to the city as a "day trip" the Guggenheim Museum Bilbao has been spectacularly successful, arresting the population decline and encouraging more

economic development to a degree now routinely referred to as the "Bilbao effect". In 2016, the 20th year since it opened, travelers continued to come to Bilbao and the museum recorded more than **1 million visitors**. This at least suggests that the EMRCA and other attractions being developed in or near HSP might approach this level of visitors.

Experience of similar attractions

A further indication of the level of potential audience might be obtained by considering the model railroad and model transportation museum in Hamburg, Germany called Miniatur Wunderland. Open at the very end of 2000, with initial installation completed in August of 2001, the attraction is extremely popular despite being located in relatively cramped quarters in the upper floors or a refurbished industrial building in the Speicherstadt district of Hamburg.



Figure 1 - Miniatur Wunderland in Hamburg

Miniatur Wunderland, shown in Figure 1¹, has attracted large numbers of visitors since completing installation of the exhibits. As of July of 2016, the exhibition had attracted 14,385,217 visitors from over 190 countries since opening. Marking from the completion of the installation, this amounts to about **959,000 visitors per year**.

While Hamburg itself is a large urban area with about 4.9 million residents in the metropolitan area, the location of Miniatur Wunderland itself is not particularly well served by roads or public transit, and the building where the models are

located is somewhat dark and constrained in accessibility (a single elevator or walk up several flights of stairs). In such conditions to attract nearly a million visitors per year on average is suggestive of the potential of a more attractively situated and diverse display such as envisioned for EMRCA and other HSP attractions.

Experience of local cultural attractions

The Advocacy Report that can be obtained from the web site of DataArts² (formerly the Cultural Data Project) permits us to obtain total numbers of visitors for all cultural attractions in any zip code area, county or state. Focusing on the North Adams and Williamstown zip codes, we discover that in fiscal year 2010 (the most recent data available for these areas) the total

¹ By Gulp - Von Gulp in die deutschsprachige Wikipedia geladen., CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=1452362

² http://www.culturaldata.org/advocacy

number of **visitors was 518,455**. Almost all of these would have come to MASS MoCA (in North Adams) or the Clark Art Institute or Williamstown Theatre Festival (in Williamstown). One intuitively plausible argument is that EMRCA and other HSP attractions should face little difficulty persuading a similar number of persons to visit the attractions (or persuading the visitors already coming to these two adjacent communities to extend their visit by a day) and so this might be taken as a lower bound on the number of likely visitors.

The largest audiences attracted to any existing Berkshire County cultural attraction are those who come to visit the Boston Symphony Orchestra's Tanglewood performing arts center. In 2016, Tanglewood attracted 356,000 visitors to performances that took place over a three month season. About 84% of these visitors were from outside of Berkshire County and so can be taken as bringing new economic activity to the region that would not otherwise take place.

These numbers are impressive, particularly when we consider that classical music (which constitutes the majority of Tanglewood programming) is a relatively niche audience. According the most recent Survey of Public Participation in the Arts³, the proportion of Americans who attend a classical music concert each year is about 8.8%. By contrast, 23.9% of Americans visit a historical site or historical-themed museum each year, suggesting that the audience for an EMRCA like experience is about 2.71 times the audience for Tanglewood. Setting aside the difference between the length of season (it is expected that EMRCA will be open year round) this would suggest a **potential audience for EMRCA of 966,864**. If 84% of these visitors came from outside of Berkshire County this would bring **812,165 non-local visitors per year**.

Analysis of survey data

All of these observations seem reasonable enough, but it would be comforting to have some analysis based on data from US audiences who have visited or contemplate visiting the Berkshire County region, and who are responding specifically to the concept of EMRCA and associated attractions.

To provide such analysis we organized and conducted a survey based on a mailing to the 1Berkshire (Berkshire Visitor's Bureau) mailing list. The e-mail went out in mid-November of 2016. The mailing included a description of the ideas that motivate EMRCA, although developments in the planning and design of the facility have progressed since that time so that it is now expected to be larger and housed in a more architecturally unique and attractive structure.

The survey produced 524 complete responses (some partial responses had to be discarded) from 292 zip code areas in the US and several countries outside of the US. Though somewhat modest in size, the spatial distribution of responses is broadly similar to both the distribution of visitors to MASS MoCA and to Tanglewood, which we take as indicative that the survey provides good representation of the group of individuals likely to travel to the region. The distribution of visitors is indicated in Figure 2 below.

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³ A decade of arts engagement: findings from the survey of public participation in the arts, 2002–2012, National Endowment for the Arts Office of Research and Analysis, NEA Research Report #58, January 2015.

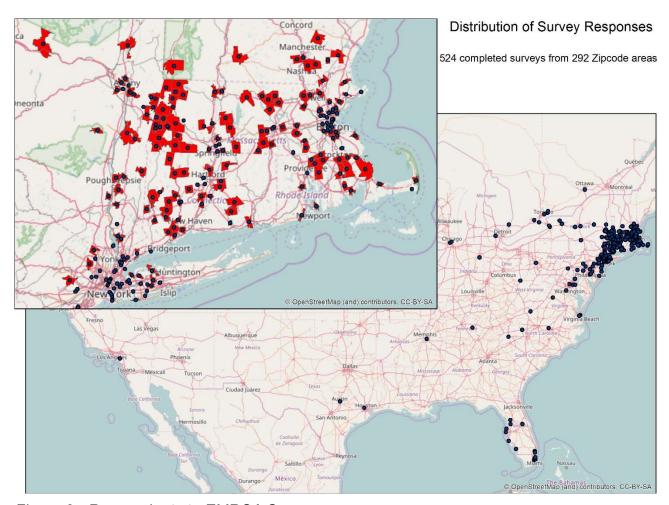


Figure 2 - Respondents to EMRCA Survey

Respondents were asked a variety of questions, including not only their level of interest in coming to visit EMRCA and the frequency of those visits, but also the timing of recent visits to the region and their expenditures on lodging, food, retail and other expenditures during those visits. These data were summarized and used to compute both the size of expected audience and the likely economic impact of those visitors when they do come to the area.

Of course, not all of the respondents could be expected to come every year. The year of most recent visit for respondents ranged from 2000 to 2016, with about 95% of respondents having come within the past 10 years. Not all respondents indicated firm interest in the planned content of the EMRCA. Approximately 67% of respondents indicated that they definitely would be interested in visiting and 84% indicated that they were definitely or possibly interested in visiting.

To estimate the size of the possible market, we considered the respondents from each zip code area as a representative sample of that area. We multiplied the share of respondents who said "Yes, definitely" or "Yes, possibly" times the 2010 population of each zip code area, and summed the result. We take this as an estimate of the potential number of visitors over a ten year interval, resulting in an estimate of **650,492 visitors per year**. If we focus only on those responses from outside of Berkshire County, this would provide a smaller number of **521,955 non-local visitors per year**.

We regard this survey approach as relatively cautious. There are many zip code areas containing substantial population from which we received no responses (either because the 1Berkshire mailing list contained no persons from those areas or the ones that are there did not respond to the survey). From these we have estimated zero visitors. Given the unique nature of the EMRCA design and other related attractions in the area, and the general similarity between estimates obtained through several lines of argument and analysis, we consider this a very achievable and sensible minimal estimate.

Combining these observations and analyses together, we have a range of estimates, summarized in Table 1. These range from 518 thousand to one million per year. As noted at the beginning of this section, estimating future audience levels will always involve a good amount of guesswork, but if we average these different observations we obtain what might be called a reasonable expected level of annual attendance of nearly 819 thousand per year. If, as is the case with MASS MoCA and Tanglewood, about 84% of these come from outside of Berkshire County, we would expect nearly 688 thousand non-local visitors each year.

Table 1 - Potential EMRCA Audience

| Source of information | Estimate |
|------------------------------|-----------------|
| Bilbao | 1,000,000 |
| Miniatur Wunderland | 959,000 |
| North Adams and Williamstown | 518,455 |
| Tanglewood | 966,864 |
| Survey | 650,492 |
| Average | 818,962 |
| Non-Local | 687,928 |

In summary, there are reasonable arguments for expecting the annual number of non-local visitors to EMRCA to be somewhere between a minimum of about 500,000 and perhaps as high as 900,000 (if total numbers of visitors were to be approximately 1 million). For our analysis of economic impact, we therefore consider two scenarios. A "cautious" scenario of 500,000 non-local visitors, and an "optimistic" scenario of 750,000 non-local visitors. We now turn to a presentation of these estimated impacts.

III. Local Economic Impacts of EMRCA

In this and the following sections we present estimates of the economic impact of the EMRCA and related HSP project proposals. In order to produce these estimates and to understand their interpretation, it is necessary to begin with an explanation of several key points.

- What sort of economic model is used to obtain the estimated impacts?
- What data are used to adapt that model to the context of EMRCA and the HSP proposals?
- Over what geographic area do the estimated impacts apply?
- For what time periods are the estimated impacts provided?

We address each of these questions before presenting the estimates themselves.

The economic model used for analysis of the local economy in Berkshire County and North Adams is called an "input-output" or inter-industry model. This approach is widely used for analysis of local and national economies. This approach divides the economy up into multiple sectors for groups of firms producing similar goods and services (ranging from "oil seed farming" to "museums" to "automotive repair and maintenance"). There are also sectors for households in various income groups, and for firms and households located outside the geographic region of interest. For our economic model of Berkshire County, there are over 500 different potential economic sectors, although not all of them have any employment or activity in the county at present.

For each of these sectors, the model tracks the patterns of sales and purchases between them. Purchases by food retailers from local bakers or local vegetable farmers. Sales by these retailers to local households, etc. These patterns of sales and purchases are tracked through surveys of business and consumer expenditures that are conducted regularly by the Bureau of Economic Analysis⁴ within the US Department of Commerce. The data are collected as part of information required for the US Income and Product Accounts that are used to calculate US national GDP and other important economic data required for government and policy makers to do their work.

The data are disaggregated to the state, county and local zip code level using a combination of actual measurements and approximations, and are made available by commercial firms or organize the data in consistent ways for use in local economic modeling. We obtain the data for the Berkshire County model from Implan⁵ (formerly known as the Minnesota Implan Group) who have data for the entire US and several foreign countries and whose data are widely used for economic analysis by state and local governments, local chambers of commerce, and researchers interested in understanding local economies.

The data are always available with a delay due to the time required to conduct the data surveys and process the information. The data we use for this analysis are the latest available and reflect the patterns of trade observed in the US economy during 2015. The estimates we present are always adjusted to the time period when the expenditures are expected to occur, and the value of the associated impacts reported for those same time periods adjusted for

⁴ https://www.bea.gov/industry/io annual.htm

⁵ http://www.implan.com/company/

expected changes in the price level due to inflation. Patterns of trade can be disrupted by significant changes in technology and other severe economic dislocations, but these input-output models have generally been found to be reasonably accurate over periods of 10-20 years.

To analyze the impact of EMRCA and associated projects, we identify the economic sectors which are expected to experience changes in "final demand" as a result of the project. This means we identify expected expenditures to construct the buildings and assemble the exhibits, then expected expenditures to staff and operate each project, and finally the expected

expenditures by visitors who come from outside of the "local area" because of the project.

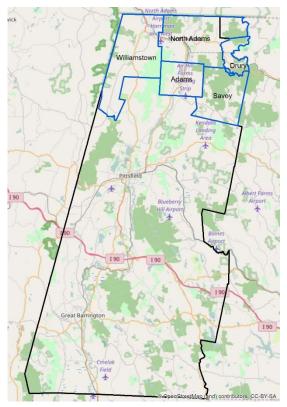


Figure 3 - Berkshire County and Northern Berkshire

We focus on these "non-local" visitors out of caution to avoid overstating the economic impact of the project. A family who comes from, say Stockbridge to spend the day in North Adams visiting EMRCA will surely generate some net addition to the North Adams economy so why not count it? The answer is that such a family might otherwise have spent the day visiting the Norman Rockwell Museum in Stockbridge, but now will not do so. As a result the "boost" to North Adams is offset by the "loss" to Stockbridge so there is no net gain to Berkshire County.

The distinction between local and non-local is important for another reason related to analysis of the model. When a project takes place, it purchases some of its inputs (whether for construction or for operations) from local businesses. These local businesses then in turn expand, purchasing some inputs locally hiring workers who spend some of their labor income locally. This "recycling" of local expenditures in the local economy is the source of what is called the "indirect and induced impacts" or the

"multiplier effect" that enhances the impact of a project. When the businesses purchase their inputs from outside the local area (reducing the indirect impacts) or the employees spend their incomes outside of the area (reducing the induced impacts), the multiplier effect is diminished.

There may be circumstances when we do want to count gains to the North Adams area as real gains even if they come at the expense of some other area within Berkshire County. We may similarly want to regard North Adams businesses who purchase inputs from firms in Pittsfield or elsewhere in the county as a "loss" to the indirect impacts because of spending outside the local area. For this reason we define and undertake analysis for a North Adams region consisting of the North Adams zip code and all zip code areas in Berkshire County that are adjacent to it. Both of the regions we analyze are shown in Figure 3. Berkshire County is outlined in black, and the cluster of blue zip codes near the top comprise the North Adams region that we consider. In the final analysis the impacts estimated for the two regions is similar, reflecting the fact that most of the economic impacts are felt locally, and most of the visitors are expected to come from outside of Berkshire County.

In order to estimate impacts, we have to assign expenditures as changes to final demand in particular economic sectors and assign these changes in final demand to particular time periods. We obtained estimates of total construction costs, costs of assembling the installation, and operating cost for staff and other requirements once EMRCA is open. From the current EMRCA plans we obtained total construction costs which we divide equally over two years from mid-2018 through early 2020. Installation costs we assume will all take place in the last year of the construction and are evaluated as of 2020.

For projects such as EMRCA and associated HSP projects that have yet to break ground, the timing of the construction and opening, along with the final costs of construction and operation, should most properly be understood as estimates. Current EMRCA plans call for construction of the Mt. Greylock Distillery and the Museum of Time within the existing footprint of HSP to take place simultaneously with the construction of EMRCA itself. In this and the following section we consider a less aggressive schedule that anticipates construction of HSP beginning in 2021 and opening the following year, in 2022. Table 2 identifies the costs expected for different components of the project and the times when I have evaluated them. The impacts are separately evaluated below, so if a more compressed time schedule is anticipated the amounts can be added together.

Table 2 - Costs and Timing for Project Events

| Event | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------------------------|--------------|--------------|--------------|---------------|-------------|---------------|
| EMRCA Construction | \$14,230,471 | \$14,230,471 | | | | |
| EMRCA Streets, Access and Parking | \$4,343,443 | | | | | |
| EMRCA Installation | | \$12,646,642 | | | | |
| EMRCA Operation ⁶ | | | \$5,384,241 | \rightarrow | | |
| Visitors ⁷ | | | \$86,490,000 | \rightarrow | | |
| Museum of Time Construction | | | | \$7,500,000 | | |
| Distillery Construction | | | | \$7,378,027 | | |
| Museum of Time Operation | | | | | \$2,275,000 | \rightarrow |
| Distillery Operation | | | | | \$6,675,407 | \rightarrow |

The estimated expenditures for visitors are based on two sources. The basic expenditures per person on lodging, food, and other expenses are obtained from the survey discussed in the previous section for those cases where the respondent provided a date of most recent visit, the size of the group and the amounts spent per day during that visit. The reported expenditures were adjusted using the CPI (consumer price index) to account for changes in the prices from when the visit took place until 2020. This information was augmented using data from surveys of Tanglewood audiences conducted in March and April of 2017 concerning the division of "other expenditures" between travel costs, local retail, and other services. Finally, the Tanglewood data were used to estimate an average length of stay for visitors.

The resulting expenditures per non-local visitor are presented in Table 3 below. These figures are then multiplied by 500,000 (for the "cautious" scenario) or 750,000 (for the "optimistic" scenario) to obtain visitor expenditures used in obtaining the estimated economic impacts.

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⁶ Operation expenditures and Visitor expenditures are multiplied by 1.5 to evaluate the 750,000 visitor scenario

⁷ The symbol \rightarrow indicates that the expenditure given to the left is expected to be repeated each year

Table 3 - Expenditures per Visitor from Survey

| Item | Amount |
|--|----------|
| Hotels and motels | \$68.57 |
| Full-service restaurants | \$52.89 |
| Child care and other services | \$3.88 |
| Retail - Gasoline stores | \$14.12 |
| Retail – Food, beverage and other stores | \$33.52 |
| Total | \$172.98 |

Analysis of economic impacts of EMRCA on Berkshire County indicates that EMRCA alone is likely to be very significant for the region's economy. Table 4 below presents an evaluation. In the second column, headed 2018-19, the estimated impacts of the first year of construction (EMRCA building and construction of new street access and parking) are presented. The third column presents the impacts of completion of construction and installation of the EMRCA exhibition. The fourth and fifth columns present, respectively, the estimated impacts of combined expenditures from non-local visitors and from EMRCA operations at the cautious and optimistic scenarios.

Table 4 - EMRCA Impacts on Berkshire County

| | 2018-19 | 2019-20 | Total 2020 forward | Total 2020 forward |
|-------------------------|--------------|--------------|--------------------|--------------------|
| Employment | | | 500k visitors | 750k visitors |
| Direct | 129 | 254 | 1,024 | 1,535 |
| Indirect+Induced | 73 | 138 | 315 | 472 |
| Total | 202 | 391 | 1,339 | 2,007 |
| Labor Income | | | | |
| Direct | \$6,764,434 | \$12,647,907 | \$29,565,787 | \$44,256,101 |
| Indirect+Induced | \$3,336,185 | \$6,100,167 | \$13,711,608 | \$20,522,499 |
| Total | \$10,100,620 | \$18,748,074 | \$43,277,394 | \$64,778,600 |
| Average Worker Earnings | \$49,923 | \$47,915 | \$32,324 | \$32,273 |
| Total Economic Output | | | | |
| Direct | \$18,573,914 | \$26,877,112 | \$73,240,611 | \$109,699,421 |
| Indirect+Induced | \$9,299,683 | \$17,609,674 | \$39,728,078 | \$59,458,562 |
| Total | \$27,873,597 | \$44,486,786 | \$112,968,689 | \$169,157,983 |

There are several important points to note from the analysis summarized in Table 4. The impact of EMRCA alone on local employment is significant. The table presents three broad metrics of economic impact: total employment, total labor income (with associated average earnings for the jobs created), and total economic output for the region. Within each metric group, a figure is presented for the "direct" impacts, which represents the impact generated by expenditure or investment in the relevant sector itself. Then the "indirect+induced" impacts are presented, which capture the multiplier effects that occur as businesses purchase inputs from local suppliers and workers spend their incomes at local businesses. Finally, the "total" impacts are presented, which sum these two measures of economic impact together.

Even in the first year of construction, the project would add over 200 jobs to the local economy. The average labor income provided by these jobs would be just under \$50 thousand, about

\$1000 per year above the average for all occupations in the county. In the second year, with continued construction of the museum and installation of the exhibits, employment impact rises to 391, exceeding the estimated impact of MASS MoCA, the other significant cultural destination in North Adams and one of the major destinations in the region.

It is with the opening and expected flow of visitors to the area that the most significant impacts would be observed. Even with 500,000 visitors per year, the combined impact of EMRCA operations and the visitors would create 1,339 jobs in the region. While a higher proportion of these jobs would be in the services required for visitors so that the labor income per worker is reduced, the average wage would still be above \$32 thousand per year (\$16 per hour) and would be expected to provide welcome (and important) employment opportunities to local residents.

Turning attention to a higher level of visitors, when EMRCA attracts 750,000 per year then the increased scale of operations plus the increased services provided to the visitors themselves would generate over 2000 jobs and add more than \$169 million to the total economic output of Berkshire County. This would make EMRCA, by a considerable margin, one of the most important economic forces in the region and **the** most important cultural destination.

Taking the North Adams region discussed above as the "local area" Table 5 presents the estimated impacts restricting attention to these five zip code areas.

2018-19 2019-20 Total 2020 forward Total 2020 forward **Employment** 500k visitors 750k visitors Direct 129 254 1.022 1.532 48 94 226 340 Indirect+Induced Total 178 348 1,248 1,872 Labor Income Direct \$6,764,435 \$12,647,908 \$29,464,569 \$44,196,854 Indirect+Induced \$2.179.641 \$4.191.830 \$9.904.772 \$14.857.158 Total \$8,944,076 \$16,839,738 \$39,369,341 \$59,054,012 Average Worker Earnings \$48,410 \$50,325 \$31,548 \$31,548 **Total Economic Output** Direct \$18,573,914 \$26,877,113 \$73,036,503 \$109,554,755 Indirect+Induced \$29,425,530 \$6,035,613 \$12,072,472 \$44,138,295 Total \$24,609,527 \$38,949,585 \$102,462,033 \$153,693,050

Table 5 - Impacts of EMRCA on North Adams Region

As expected, the amounts provided in Table 5 are similar to, but generally slightly less than, the comparable figures provided in Table 4. This reflects the fact that the North Adams region would be expected to capture most of the impacts of the EMRCA project, but that being a smaller region the multiplier effects (indirect+induced) in particular are smaller because some of the local purchases are made in other parts of the county. Nevertheless it must be observed that 93% of the increased jobs and 91% of the increase in total output from the project would be realized in the North Adams region, providing an important boost for its local economy.

Again, we note that the jobs created during the construction phase of the project tend to be more highly compensated, generating labor income of just over or nearly \$50 thousand per year on average. The explosion of jobs that comes with the commencement of operations and the visitors flowing into the community, while welcome are not as highly compensated. These jobs, however, compare favorably to many of those currently available in the region.

It is worth noting that this analysis is based on EMRCA alone, and does not include the two other main components of the proposed purchase and reuse of the Heritage State Park site (The Massachusetts Museum of Time and the Mt. Greylock Distillery). Evaluation of those additional projects is discussed in the next section.

IV. Local Economic Impacts of the Mt. Greylock Distillery and Museum of Time

Using the increased expenditures for construction costs and operating costs identified and presented in the final four rows of Table 2 above, we can estimate the impacts on employment, labor income, and total economic output that could be expected to result from completing the remaining HSP projects: the Mt. Greylock Distillery and the Museum of Time.

The visitor survey suggested that for many respondents the distillery and some other museums would be an important factor in making a visit to EMRCA (6.07 score for the distillery, 5.84 for the other museum, with 10="Yes, certain to go to the attraction"). Despite this, we have not attempted to forecast a separate increment of visitors to be added along with the distillery and museum. Instead, it seems best to regard the presence of these two attractions as increasing the probability of achieving 750,000 visitors per year, and we let the two visitor scenarios evaluated encompass the likely range of audience for the combined attractions proposed for the HSP site.

Table 6 below presents the economic impacts on the wider Berkshire County economy of these additional HSP projects. There is a considerable incremental addition of jobs, labor income and total economic output during the construction period. Even after construction is complete, the distillery and Museum of Time are expected to provide an ongoing 56 jobs generating annual labor income of more than \$48 thousand per year, adding \$12 million to local economic output.

Table 6 - Impacts of Distillery and Museum of Time on Berkshire County

| | Construction 2020-21 | Operations 2022 forward |
|-------------------------|----------------------|-------------------------|
| Employment | | |
| Direct | 111 | 33 |
| Indirect+Induced | 55 | 22 |
| Total | 165 | 56 |
| Labor Income | | |
| Direct | \$5,934,956 | \$1,657,682 |
| Indirect+Induced | \$2,549,926 | \$1,033,367 |
| Total | \$8,484,882 | \$2,691,050 |
| Average Worker Earnings | \$51,278 | \$48,359 |
| Total Economic Output | | |
| Direct | \$14,878,026 | \$8,950,407 |
| Indirect+Induced | \$7,131,283 | \$3,083,567 |
| Total | \$22,009,310 | \$12,033,974 |

Table 7 presents the impacts for the North Adams region that are expected as a result of the construction and operation of the Mt. Greylock Distillery and the Museum of Time on the grounds of the former Heritage State Park.

After the 149 jobs created during the construction phase are completed, the additional HSP projects would still generate 55 ongoing jobs with labor income exceeding \$48 thousand per job on average. For these HSP projects, an even larger share of the impact is naturally realized within the local North Adams region, with the smaller region's job totals being 98% of those

expected for the county as a whole, and the increment to total economic output being 96% of what we would expect when considering all of Berkshire County.

Table 7 - Impact of Distillery and Museum of Time on North Adams Region

| | Construction 2020-21 | Operations 2022 forward |
|-------------------------|----------------------|-------------------------|
| Employment | | |
| Direct | 111 | 35 |
| Indirect+Induced | 37 | 19 |
| Total | 149 | 55 |
| Labor Income | | |
| Direct | \$5,934,957 | \$1,813,210 |
| Indirect+Induced | \$1,716,863 | \$822,880 |
| Total | \$7,651,820 | \$2,636,090 |
| Average Worker Earnings | \$51,502 | \$48,237 |
| Total Economic Output | | |
| Direct | \$14,878,027 | \$8,950,407 |
| Indirect+Induced | \$4,827,661 | \$2,594,725 |
| Total | \$19,705,688 | \$11,545,132 |

For comparison, it is worth noting that while the steady-state impacts of these two HSP projects seems modest (particularly in comparison with the larger impacts expected from EMRCA) the impacts for these projects is of the similar magnitude to the impact estimated for MASS MoCA before its expanded performing arts and festival events of the Wilco Solid Sound and Freshgrass festivals, and its expanded exhibition space opened in 2017. These projects contribute in an important way to the overall redevelopment plan proposed by the EMRCA group for Heritage State Park.

In order to develop an appreciation of the overall impact of the three components of the project: EMRCA, the Mt. Greylock Distillery, and the Museum of Time, it is helpful to combine these impacts and graph them over time. Using the dynamic structure presented in Table 2 above, Figures 4 and 5 below present this information for total employment impacts and changes in total economic output.

These two figures show clearly how transformative the EMRCA project for redevelopment of Heritage State Park can be. Starting small, the employment impact rises to a level between 1500 and 2200 jobs in 2021. Following completion of all construction, the employment impacts are expected to remain important, stabilizing at between nearly 1400 to more than 2060 jobs for the region. For a small region such as Berkshire County such an impact would be clearly felt, and the increase in total economic output of between \$125 and \$181 million could be expected to bring a noticeable "Bilbao effect" to western Massachusetts.

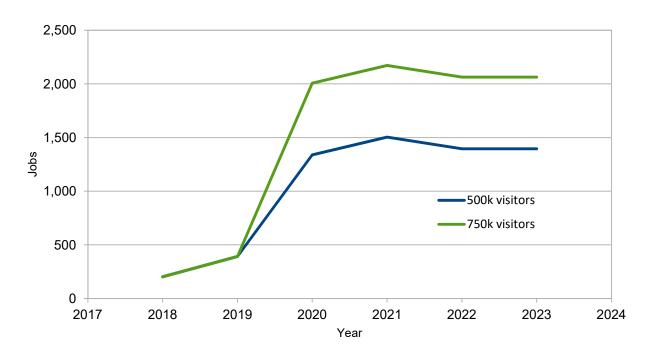


Figure 4 - Combined impact on Berkshire County Employment

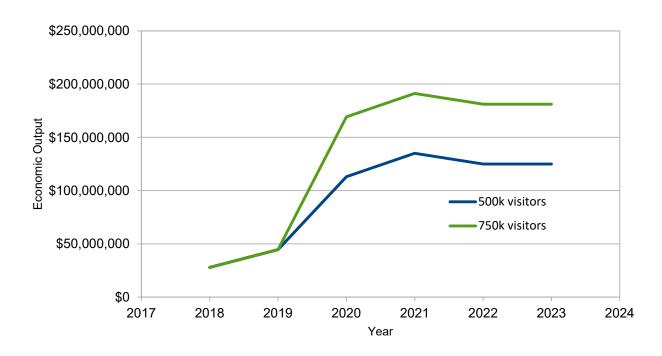


Figure 5 - Combined Impact on Total Output in Berkshire County

In addition to the impacts on employment, labor income, and total economic output the EMRCA and additional HSP projects will have impacts on total revenues collected by local, state and federal governments. These range from income taxes on individuals and firms to excise taxes

on distilled spirits produced at the planned Mt. Greylock distillery, and many other sources of revenues.

As with the other economic impacts, the revenues accrue at different times and in different amounts from various components of the projects. Table 8 below provides estimated impacts on tax revenues in the scenario with 500,000 visitors. Table 9 provides the same calculations with the higher number of 750,000 visitors.

Table 8 - Tax Revenue Impacts with 500,000 Visitors

| | EMRCA | EMRCA | 500K | EMRCA | Dist/MoT | Dist/MoT |
|-------------------|-------------|-------------|--------------|-------------|-------------|-------------|
| | Const | Const | Visitors | Operation | Const | Operation |
| | 2018 | 2019 | 2020 | 2020 | 2021 | 2022 |
| State and Local | | | | | | |
| On business | \$538,509 | \$989,839 | \$9,215,898 | \$239,999 | \$433,238 | \$2,169,800 |
| On households | \$325,382 | \$598,446 | \$1,227,344 | \$145,300 | \$272,064 | \$85,596 |
| State/Local Total | \$863,891 | \$1,588,285 | \$10,443,242 | \$385,299 | \$705,302 | \$2,255,396 |
| Federal | | | | | | |
| On business | \$1,208,314 | \$2,278,576 | \$5,911,139 | \$564,962 | \$1,039,954 | \$550,228 |
| On households | \$1,056,875 | \$1,943,815 | \$3,986,543 | \$471,949 | \$883,691 | \$278,026 |
| Federal Total | \$2,265,189 | \$4,222,391 | \$9,897,682 | \$1,036,911 | \$1,923,645 | \$828,254 |
| Total Tax | \$3,129,080 | \$5,810,676 | \$20,340,924 | \$1,422,210 | \$2,628,947 | \$3,083,650 |

Table 9 - Tax Revenue Impacts with 750,000 Visitors

| | EMRCA Const | EMRCA Const | 750K Visitors | EMRCA Operation | Dist/MoT Const | Dist/MoT Operation |
|-------------------|------------------|------------------|---------------------|--------------------|-------------------|-----------------------|
| State and Lead | 2018 | 2019 | 2020 | 2020 | 2021 | 2022 |
| State and Local | # 500 500 | # 000 000 | * 40.000.040 | * 050.000 | # 400 000 | #0.400.000 |
| On business | \$538,509 | \$989,839 | \$13,823,846 | \$352,800 | \$433,238 | \$2,169,800 |
| On households | \$325,382 | \$598,446 | \$1,841,016 | \$213,592 | \$272,064 | \$85,596 |
| State/Local Total | \$863,891 | \$1,588,285 | \$15,664,862 | \$566,392 | \$705,302 | \$2,255,396 |
| Federal | | | | | | |
| On business | \$1,208,314 | \$2,278,576 | \$8,866,709 | \$830,499 | \$1,039,954 | \$550,228 |
| On households | \$1,056,875 | \$1,943,815 | \$5,979,814 | \$693,768 | \$883,691 | \$278,026 |
| Federal Total | \$2,265,189 | \$4,222,391 | \$14,846,523 | \$1,524,267 | \$1,923,645 | \$828,254 |
| Total Tax | \$3,129,080 | \$5,810,676 | \$30,511,385 | \$2,090,659 | \$2,628,947 | \$3,083,650 |

Because the different components of the project overlap, it can be difficult to visualize the flow of tax revenues over time. Figures 6 and 7 below take the data from Tables 8 and 9, respectively, and plot the revenue flows over time. Even with the cautious projection of 500,000 visitors per year, government revenues would be expected to increase by about \$25 million per annum, with the collections approximately divided equally between the federal government and state and local governments. With the increased level of economic impact that comes with 750,000 visitors, total additional tax collections would rise to about \$35 million per year attributable to EMRCA and the other HSP projects.

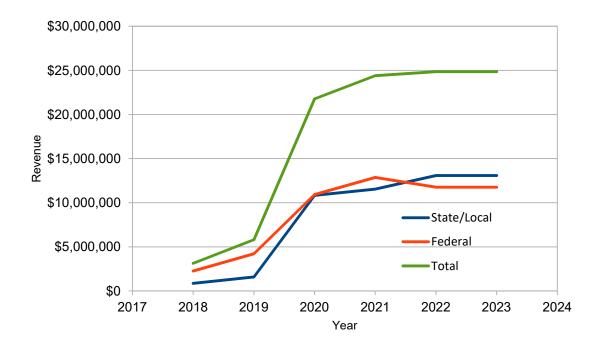


Figure 6 - Tax Revenue Flows with 500,000 Visitors

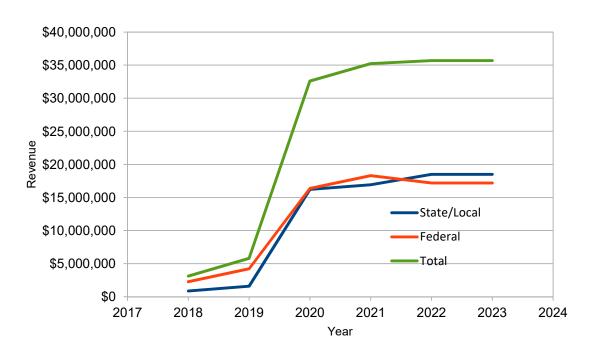


Figure 7 - Tax Revenue Flows with 750,000 Visitors

V. Conclusion

The analysis presented above indicates that the economic impacts of the EMRCA museum, the Mt. Greylock Distillery, and the Museum of Time proposed by the EMRCA Group as the basis for redevelopment of the Heritage State Park site are very significant.

Analysis of potential visitors to the site after development suggests an expected number of non-local visitors of approximately 688 thousand per year after the project is completed, with scenarios of 500,000 and 750,000 visitors being evaluated to completely capture the range of possible impacts.

Evaluating a somewhat longer development schedule than currently proposed by the EMRCA Group, we find that under the cautious scenario of 500 thousand visitors, total employment impacts for Berkshire County will rise from a few hundred in the first year of construction to more than 1500 jobs, then after completion of construction will stabilize at just under 1400 jobs, with an addition of \$125 million per year to the local economy. Under a more optimistic but not unlikely scenario of 750 thousand visitors per year, the impact at maximum would add 2,173 jobs to the Berkshire economy before stabilizing at 2,063 jobs, adding over \$181 million to local production of goods and services and making the site one of the most significant drivers of the local economy.

If a more aggressive schedule is followed, the final stable impact would be the same, although the peak employment would be greater and of shorter duration.

The estimated impacts would be expected in a variety of distinct sectors of the economy, and the impacts for the industrial sectors that are expected to experience the largest impacts are detailed in Appendix section VI below. These tables show impacts for the entire Berkshire County economy, but the impacts for the North Adams region are very similar and average around 90 to 95 percent of the impacts estimated for the entire county.

The sectors that will experience an increase of more than \$5 million in total output are full service restaurants, hotels and motels, museums and historical sites, distilleries, retail including food and beverage stores, and real estate. These sectors also experience an increase of at least 35 full time jobs except for distilleries. In addition the provision of child day care and other services experiences a significant increase in employment.

In summary, the EMRCA Group proposal is expected to have a significant, even transformative impact on the economy of western Massachusetts.

VI. Appendix – Economic Impacts by Sector

This Appendix presents a breakdown of the post-construction impacts of the proposed EMRCA projects by sector. Table 10 presents the impacts on total employment and Table 11 presents the impacts on total economic output. Both tables are sorted in order of decreasing total employment impact to facilitate comparison.

The first column of each table provides a brief description of the economic sector. The second column provides the impact of the EMRCA museum operations alone. The third column presents the impacts of the distillery and the Museum of Time operations combined together. The fourth column presents the impacts of visitors based on 750,000 visitors per year. The fifth column presents the sum of all impacts combined.

Those interested in the sectors of the economy likely to experience the greatest impact from the proposed project can identify those sectors by scanning down through these tables. All sectors with a total impact of at least one half of a full time job are included.

Table 10 - Impacts on Employment by Sector in Berkshire County

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|---|-------|-------------------|----------|---------|
| Total | 145.0 | 55.6 | 1,862.2 | 2,062.9 |
| Full-service restaurants | 2.4 | 0.9 | 840.4 | 843.7 |
| Hotels and motels, including casino hotels | 0.3 | 0.1 | 432.5 | 432.8 |
| Retail - Food and beverage stores | 1.2 | 0.5 | 124.9 | 126.6 |
| Museums, historical sites, zoos, and parks | 94.3 | 27.5 | 0.5 | 122.3 |
| Child day care services | 0.3 | 0.1 | 64.3 | 64.8 |
| Real estate | 6.9 | 2.3 | 28.0 | 37.2 |
| All other food and drinking places | 8.0 | 0.3 | 19.0 | 20.2 |
| Hospitals | 1.8 | 0.7 | 15.6 | 18.1 |
| Retail - Gasoline stores | 0.2 | 0.1 | 16.0 | 16.3 |
| Limited-service restaurants | 1.4 | 0.6 | 13.7 | 15.7 |
| Services to buildings | 1.4 | 0.6 | 13.3 | 15.3 |
| Retail - General merchandise stores | 1.0 | 0.4 | 9.6 | 10.9 |
| Maintenance and repair const of nonresidential | 0.9 | 0.5 | 8.8 | 10.2 |
| Individual and family services | 1.0 | 0.4 | 8.2 | 9.6 |
| Accounting, tax preparation, bookkeeping, and payroll | 0.9 | 0.5 | 8.2 | 9.5 |
| Wholesale trade | 0.6 | 1.1 | 7.2 | 8.9 |
| Offices of physicians | 0.9 | 0.3 | 7.6 | 8.9 |
| Monetary authorities and depository credit intermediation | 0.8 | 0.5 | 7.3 | 8.6 |
| Landscape and horticultural services | 0.8 | 0.4 | 7.4 | 8.5 |
| Automotive repair and maintenance, except car washes | 0.7 | 0.3 | 6.8 | 7.9 |
| Retail - Clothing and clothing accessories stores | 0.6 | 0.3 | 6.7 | 7.6 |
| Home health care services | 0.7 | 0.3 | 6.3 | 7.3 |
| Other educational services | 1.9 | 0.6 | 4.8 | 7.3 |
| Postal service | 0.6 | 0.2 | 6.4 | 7.3 |
| Personal care services | 0.7 | 0.3 | 6.2 | 7.2 |
| Retail - Nonstore retailers | 0.6 | 0.2 | 5.9 | 6.8 |
| Retail - Miscellaneous store retailers | 0.5 | 0.2 | 5.9 | 6.6 |
| Junior colleges, colleges, universities, and professional schools | 0.6 | 0.3 | 5.6 | 6.5 |
| Insurance carriers | 1.1 | 0.4 | 5.0 | 6.5 |
| Nursing and community care facilities | 0.6 | 0.3 | 5.5 | 6.4 |
| Other financial investment activities | 0.7 | 0.3 | 5.5 | 6.4 |
| Independent artists, writers, and performers | 0.5 | 0.2 | 5.3 | 6.0 |
| Distilleries | 0.0 | 5.9 | 0.0 | 5.9 |

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|--|-------|-------------------|----------|-------|
| Employment services | 0.7 | 0.3 | 4.6 | 5.6 |
| Management of companies and enterprises | 0.1 | 0.4 | 5.1 | 5.6 |
| Retail - Building material and garden equipment and supplies | 0.4 | 0.2 | 4.8 | 5.4 |
| Private households | 0.5 | 0.2 | 4.6 | 5.3 |
| Other personal services | 0.5 | 0.2 | 4.6 | 5.3 |
| Legal services | 0.5 | 0.2 | 4.3 | 5.0 |
| Insurance agencies, brokerages, and related activities | 8.0 | 0.4 | 3.4 | 4.6 |
| Offices of other health practitioners | 0.4 | 0.2 | 3.8 | 4.4 |
| Transit and ground passenger transportation | 0.4 | 0.1 | 3.8 | 4.3 |
| Newspaper publishers | 0.4 | 0.2 | 3.7 | 4.3 |
| Retail - Health and personal care stores | 0.3 | 0.1 | 3.7 | 4.2 |
| Retail - Motor vehicle and parts dealers | 0.4 | 0.2 | 3.5 | 4.1 |
| Printing | 0.4 | 0.2 | 3.2 | 3.7 |
| Offices of dentists | 0.4 | 0.1 | 3.2 | 3.7 |
| Outpatient care centers | 0.4 | 0.1 | 3.1 | 3.6 |
| Office administrative services | 0.5 | 0.2 | 2.9 | 3.6 |
| Retail - Sporting goods, hobby, musical instrument and books | 0.3 | 0.1 | 3.2 | 3.6 |
| Advertising, public relations, and related services | 0.3 | 0.2 | 3.1 | 3.6 |
| Elementary and secondary schools | 0.4 | 0.1 | 3.1 | 3.6 |
| Labor and civic organizations | 0.4 | 0.1 | 3.0 | 3.5 |
| Religious organizations | 0.3 | 0.1 | 3.0 | 3.5 |
| Other amusement and recreation industries | 0.2 | 0.1 | 3.0 | 3.4 |
| Waste management and remediation services | 0.2 | 0.1 | 3.0 | 3.3 |
| Management consulting services | 0.5 | 0.2 | 2.5 | 3.2 |
| Personal and household goods repair and maintenance | 0.2 | 0.1 | 2.6 | 3.0 |
| Residential mental retardation, mental health, substance abuse facilities | 0.3 | 0.1 | 2.4 | 2.8 |
| Marketing research and all other professional, scientific, and tech services | 0.2 | 0.1 | 2.4 | 2.8 |
| Gambling industries (except casino hotels) | 0.3 | 0.1 | 2.3 | 2.7 |
| Dry-cleaning and laundry services | 0.1 | 0.0 | 2.5 | 2.7 |
| Architectural, engineering, and related services | 0.2 | 0.1 | 2.3 | 2.6 |
| Retail - Furniture and home furnishings stores | 0.2 | 0.1 | 2.1 | 2.4 |
| Couriers and messengers | 8.0 | 0.3 | 1.3 | 2.3 |
| Maintenance and repair construction of residential structures | 0.3 | 0.1 | 1.9 | 2.2 |
| Wired telecommunications carriers | 0.2 | 0.1 | 1.9 | 2.1 |
| Fitness and recreational sports centers | 0.2 | 0.1 | 1.9 | 2.1 |
| Business support services | 0.2 | 0.1 | 1.8 | 2.0 |
| Grantmaking, giving, and social advocacy organizations | 0.2 | 0.1 | 1.6 | 1.9 |
| Truck transportation | 0.1 | 0.2 | 1.5 | 1.9 |

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|---|-------|-------------------|----------|-------|
| Environmental and other technical consulting services | 0.3 | 0.1 | 1.5 | 1.8 |
| Community food, housing, and other relief services, including rehab | 0.2 | 0.1 | 1.6 | 1.8 |
| Performing arts companies | 0.1 | 0.0 | 1.7 | 1.8 |
| Periodical publishers | 0.2 | 0.1 | 1.6 | 1.8 |
| Retail - Electronics and appliance stores | 0.1 | 0.1 | 1.6 | 1.7 |
| Specialized design services | 0.1 | 0.1 | 1.6 | 1.7 |
| Funds, trusts, and other financial vehicles | 0.2 | 0.1 | 1.5 | 1.7 |
| Travel arrangement and reservation services | 0.1 | 0.0 | 1.4 | 1.6 |
| Promoters of performing arts and sports and agents for public figures | 0.1 | 0.1 | 1.4 | 1.5 |
| Other ambulatory health care services | 0.1 | 0.1 | 1.3 | 1.5 |
| Internet publishing and broadcasting and web search portals | 0.1 | 0.1 | 1.3 | 1.5 |
| Radio and television broadcasting | 0.1 | 0.1 | 1.2 | 1.4 |
| Commercial Sports Except Racing | 0.1 | 0.1 | 1.2 | 1.3 |
| Securities and commodity contracts intermediation and brokerage | 0.1 | 0.1 | 1.1 | 1.3 |
| Veterinary services | 0.1 | 0.0 | 1.0 | 1.2 |
| Other local government enterprises | 0.1 | 0.1 | 0.9 | 1.1 |
| Commercial and industrial machinery and equipment repair and maintenance | 0.1 | 0.0 | 0.9 | 1.0 |
| Investigation and security services | 0.1 | 0.0 | 8.0 | 1.0 |
| Scenic and sightseeing transportation and support activities for transportation | 0.4 | 0.1 | 0.4 | 0.9 |
| Electric power transmission and distribution | 0.1 | 0.0 | 8.0 | 0.9 |
| General and consumer goods rental except video tapes and discs | 0.1 | 0.0 | 0.7 | 0.8 |
| Amusement parks and arcades | 0.0 | 0.0 | 0.7 | 0.8 |
| Lessors of nonfinancial intangible assets | 0.0 | 0.0 | 0.7 | 0.7 |
| Photographic services | 0.1 | 0.0 | 0.6 | 0.7 |
| Motion picture and video industries | 0.1 | 0.0 | 0.6 | 0.7 |
| Nondepository credit intermediation and related activities | 0.0 | 0.0 | 0.6 | 0.7 |
| Warehousing and storage | 0.1 | 0.0 | 0.6 | 0.7 |
| Air transportation | 0.1 | 0.0 | 0.6 | 0.7 |
| Natural gas distribution | 0.0 | 0.1 | 0.6 | 0.7 |
| Bowling centers | 0.1 | 0.0 | 0.5 | 0.6 |
| Other computer related services, including facilities management | 0.1 | 0.0 | 0.5 | 0.6 |
| Computer systems design services | 0.0 | 0.0 | 0.5 | 0.6 |
| Electric power generation - Fossil fuel | 0.0 | 0.0 | 0.5 | 0.5 |
| Data processing, hosting, and related services | 0.0 | 0.0 | 0.5 | 0.5 |
| Death care services | 0.0 | 0.0 | 0.4 | 0.5 |

Table 11 - Impacts on Economic Output by Sector in Berkshire County

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|---|--------------|-------------------|---------------|---------------|
| Total | \$14,460,401 | \$12,033,974 | \$154,697,583 | \$181,191,957 |
| Full-service restaurants | \$115,792 | \$45,396 | \$40,648,052 | \$40,809,241 |
| Hotels and motels, including casino hotels | \$31,005 | \$10,426 | \$51,554,058 | \$51,595,489 |
| Retail - Food and beverage stores | \$70,274 | \$27,816 | \$7,551,300 | \$7,649,390 |
| Museums, historical sites, zoos, and parks | \$7,919,875 | \$2,276,946 | \$43,128 | \$10,239,949 |
| Child day care services | \$15,784 | \$6,353 | \$3,046,101 | \$3,068,238 |
| Real estate | \$1,098,669 | \$369,904 | \$4,459,313 | \$5,927,886 |
| All other food and drinking places | \$36,503 | \$14,949 | \$825,825 | \$877,277 |
| Hospitals | \$295,832 | \$116,647 | \$2,545,884 | \$2,958,363 |
| Retail - Gasoline stores | \$13,272 | \$5,382 | \$1,006,906 | \$1,025,560 |
| Limited-service restaurants | \$128,720 | \$52,314 | \$1,241,873 | \$1,422,907 |
| Services to buildings | \$42,563 | \$19,904 | \$409,650 | \$472,117 |
| Retail - General merchandise stores | \$59,555 | \$23,381 | \$582,754 | \$665,690 |
| Maintenance and repair const of nonresidential | \$141,751 | \$74,870 | \$1,362,753 | \$1,579,375 |
| Individual and family services | \$30,916 | \$12,098 | \$266,346 | \$309,359 |
| Accounting, tax preparation, bookkeeping, and payroll | \$64,184 | \$35,658 | \$613,086 | \$712,928 |
| Wholesale trade | \$130,518 | \$238,815 | \$1,485,862 | \$1,855,194 |
| Offices of physicians | \$138,358 | \$54,454 | \$1,191,241 | \$1,384,053 |
| Monetary authorities and depository credit intermediation | \$192,062 | \$114,032 | \$1,734,058 | \$2,040,151 |
| Landscape and horticultural services | \$40,836 | \$18,911 | \$387,233 | \$446,980 |
| Automotive repair and maintenance, except car washes | \$60,391 | \$28,746 | \$593,652 | \$682,789 |
| Retail - Clothing and clothing accessories stores | \$43,619 | \$17,615 | \$470,485 | \$531,719 |
| Home health care services | \$30,032 | \$11,993 | \$258,912 | \$300,937 |
| Other educational services | \$81,410 | \$26,810 | \$206,439 | \$314,660 |
| Postal service | \$68,265 | \$24,664 | \$698,778 | \$791,708 |
| Personal care services | \$24,291 | \$9,614 | \$209,162 | \$243,067 |
| Retail - Nonstore retailers | \$78,449 | \$31,383 | \$753,228 | \$863,060 |
| Retail - Miscellaneous store retailers | \$17,683 | \$7,181 | \$203,984 | \$228,848 |
| Junior colleges, colleges, universities, and professional schools | \$80,727 | \$32,865 | \$710,028 | \$823,620 |
| Insurance carriers | \$466,828 | \$187,028 | \$2,111,715 | \$2,765,570 |
| Nursing and community care facilities | \$47,286 | \$18,659 | \$406,872 | \$472,817 |
| Other financial investment activities | \$86,369 | \$37,287 | \$723,109 | \$846,765 |
| Independent artists, writers, and performers | \$15,879 | \$7,079 | \$179,745 | \$202,702 |
| Distilleries | \$2 | \$6,675,624 | \$77 | \$6,675,703 |
| Employment services | \$43,453 | \$19,983 | \$277,769 | \$341,205 |
| Management of companies and enterprises | \$17,819 | \$76,619 | \$940,487 | \$1,034,925 |

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|--|-----------|-------------------|-----------|-----------|
| Retail - Building material and garden equipment and supplies | \$41,593 | \$16,875 | \$469,445 | \$527,913 |
| Private households | \$7,622 | \$3,051 | \$65,676 | \$76,349 |
| Other personal services | \$16,469 | \$6,919 | \$162,058 | \$185,446 |
| Legal services | \$61,530 | \$26,555 | \$540,495 | \$628,580 |
| Insurance agencies, brokerages, and related activities | \$135,802 | \$78,814 | \$608,441 | \$823,057 |
| Offices of other health practitioners | \$39,351 | \$15,758 | \$338,956 | \$394,064 |
| Transit and ground passenger transportation | \$21,274 | \$8,918 | \$229,586 | \$259,778 |
| Newspaper publishers | \$40,495 | \$23,940 | \$402,194 | \$466,629 |
| Retail - Health and personal care stores | \$27,173 | \$11,067 | \$299,699 | \$337,939 |
| Retail - Motor vehicle and parts dealers | \$38,125 | \$18,671 | \$336,385 | \$393,181 |
| Printing | \$63,250 | \$36,183 | \$572,031 | \$671,464 |
| Offices of dentists | \$48,558 | \$19,640 | \$417,985 | \$486,183 |
| Outpatient care centers | \$52,241 | \$20,816 | \$449,832 | \$522,889 |
| Office administrative services | \$47,300 | \$17,094 | \$277,883 | \$342,277 |
| Retail - Sporting goods, hobby, musical instrument and books | \$14,292 | \$5,792 | \$154,222 | \$174,306 |
| Advertising, public relations, and related services | \$46,305 | \$28,000 | \$460,613 | \$534,918 |
| Elementary and secondary schools | \$22,534 | \$9,088 | \$194,445 | \$226,067 |
| Labor and civic organizations | \$22,406 | \$9,090 | \$193,862 | \$225,358 |
| Religious organizations | \$54,554 | \$21,800 | \$469,617 | \$545,970 |
| Other amusement and recreation industries | \$15,579 | \$6,550 | \$190,443 | \$212,572 |
| Waste management and remediation services | \$42,359 | \$25,048 | \$706,983 | \$774,390 |
| Management consulting services | \$43,840 | \$16,186 | \$219,777 | \$279,803 |
| Personal and household goods repair and maintenance | \$19,852 | \$10,196 | \$217,062 | \$247,110 |
| Residential mental retardation, mental health, substance abuse facilities | \$11,892 | \$4,709 | \$102,399 | \$119,001 |
| Marketing research and all other professional, scientific, and tech services | \$12,434 | \$6,256 | \$133,411 | \$152,100 |
| Gambling industries (except casino hotels) | \$38,226 | \$15,202 | \$328,880 | \$382,308 |
| Dry-cleaning and laundry services | \$7,581 | \$3,045 | \$173,875 | \$184,500 |
| Architectural, engineering, and related services | \$36,472 | \$16,242 | \$404,580 | \$457,294 |
| Retail - Furniture and home furnishings stores | \$16,126 | \$6,530 | \$181,922 | \$204,578 |
| Couriers and messengers | \$51,364 | \$18,179 | \$82,549 | \$152,091 |
| Maintenance and repair construction of residential structures | \$41,930 | \$16,251 | \$312,340 | \$370,521 |
| Wired telecommunications carriers | \$79,987 | \$33,267 | \$717,593 | \$830,848 |
| Fitness and recreational sports centers | \$6,182 | \$2,569 | \$74,777 | \$83,528 |
| Business support services | \$5,853 | \$2,827 | \$65,721 | \$74,401 |
| Grantmaking, giving, and social advocacy organizations | \$24,178 | \$9,460 | \$208,282 | \$241,921 |
| Truck transportation | \$24,451 | \$38,205 | \$255,336 | \$317,992 |
| Environmental and other technical consulting services | \$17,792 | \$6,875 | \$96,027 | \$120,694 |
| Community food, housing, and other relief services, including rehab | \$15,601 | \$6,101 | \$134,375 | \$156,076 |

| Sector | EMRCA | Distillery/Museum | Visitors | Total |
|---|-----------|-------------------|-------------|-------------|
| Performing arts companies | \$13,318 | \$5,729 | \$209,014 | \$228,062 |
| Periodical publishers | \$40,140 | \$22,641 | \$411,259 | \$474,040 |
| Retail - Electronics and appliance stores | \$5,841 | \$2,415 | \$72,511 | \$80,767 |
| Specialized design services | \$7,543 | \$3,871 | \$100,255 | \$111,668 |
| Funds, trusts, and other financial vehicles | \$50,216 | \$20,292 | \$418,012 | \$488,520 |
| Travel arrangement and reservation services | \$18,003 | \$7,602 | \$234,556 | \$260,160 |
| Promoters of performing arts and sports and agents for public figures | \$13,085 | \$5,752 | \$151,344 | \$170,180 |
| Other ambulatory health care services | \$13,975 | \$5,572 | \$120,378 | \$139,925 |
| Internet publishing and broadcasting and web search portals | \$59,265 | \$33,134 | \$590,931 | \$683,330 |
| Radio and television broadcasting | \$21,145 | \$12,583 | \$209,582 | \$243,309 |
| Commercial Sports Except Racing | \$6,438 | \$3,137 | \$63,191 | \$72,767 |
| Securities and commodity contracts intermediation and brokerage | \$10,346 | \$5,087 | \$104,478 | \$119,910 |
| Veterinary services | \$13,019 | \$5,217 | \$112,113 | \$130,349 |
| Other local government enterprises | \$18,669 | \$8,128 | \$134,435 | \$161,231 |
| Commercial and industrial machinery and equipment repair and maintenance | \$8,911 | \$6,022 | \$119,511 | \$134,443 |
| Investigation and security services | \$3,991 | \$1,523 | \$28,010 | \$33,524 |
| Scenic and sightseeing transportation and support activities for transportation | \$60,194 | \$19,837 | \$63,512 | \$143,544 |
| Electric power transmission and distribution | \$100,426 | \$46,084 | \$1,176,548 | \$1,323,058 |
| General and consumer goods rental except video tapes and discs | \$9,433 | \$4,734 | \$81,109 | \$95,276 |
| Amusement parks and arcades | \$2,691 | \$1,091 | \$45,959 | \$49,741 |
| Lessors of nonfinancial intangible assets | \$17,497 | \$10,797 | \$603,261 | \$631,556 |
| Photographic services | \$3,919 | \$1,718 | \$35,695 | \$41,332 |
| Motion picture and video industries | \$9,413 | \$4,383 | \$93,436 | \$107,232 |
| Nondepository credit intermediation and related activities | \$12,268 | \$10,152 | \$154,982 | \$177,402 |
| Warehousing and storage | \$5,308 | \$2,687 | \$48,523 | \$56,518 |
| Air transportation | \$25,727 | \$13,318 | \$235,148 | \$274,194 |
| Natural gas distribution | \$36,583 | \$50,846 | \$432,085 | \$519,513 |
| Bowling centers | \$2,623 | \$1,056 | \$22,601 | \$26,280 |
| Other computer related services, including facilities management | \$6,878 | \$3,109 | \$53,562 | \$63,549 |
| Computer systems design services | \$4,618 | \$2,287 | \$51,098 | \$58,002 |
| Electric power generation - Fossil fuel | \$61,561 | \$28,250 | \$721,221 | \$811,032 |
| Data processing, hosting, and related services | \$8,853 | \$5,217 | \$104,281 | \$118,351 |
| Death care services | \$4,842 | \$1,919 | \$41,657 | \$48,419 |