

# STADIUM ECONOMIC IMPACT REPORT: PHILADELPHIA PHILLIES

I<sup>FO</sup> Independent Fiscal Office | July 2024





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# INTRODUCTION

This report responds to a request made in November 2022 by Pennsylvania State Representatives Timothy Bonner (Mercer and Butler Counties) and Jim Gregory (Blair and Huntingdon Counties). The representatives requested that the Independent Fiscal Office (IFO) examine the economic impact from Major League Baseball (MLB) operations at PNC Park in Pittsburgh and Citizens Bank Park in Philadelphia. The Commonwealth provided partial funding to construct both stadiums. The request specified that the studies should include the direct and indirect economic impacts, downstream effects on local businesses and, if available, the impact that attendance fluctuations have on economic activity within the Commonwealth. The original request letter and the IFO's response can be found in the Appendix to this report. The teams had the opportunity to submit a response letter, which can also be found in the Appendix.

This report examines the economic footprint of the Philadelphia Phillies and Citizens Bank Park (CBP). The Phillies have called Philadelphia home since 1883. The team has won two World Series Championships, eight National League titles, eleven division titles and two wild card berths. Previously, the team hosted games in Recreation Park (1883-1886), the Baker Bowl (1887-1938), Shibe Park (1938-1970), and Veterans Stadium (1971-2003). Citizens Bank Park opened in 2004 and is part of the South Philadelphia Sports Complex. The complex also contains Lincoln Financial Field (Eagles, National Football League), the Wells Fargo Center (Flyers, National Hockey League and 76ers, National Basketball Association) and Xfinity Live! (a retail and entertainment venue). The stadium cost \$458 million to build, \$85 million (19%) of which was funded by the Commonwealth through a Redevelopment Assistance Capital Program (RACP) grant.<sup>1</sup>

The scope of this report is limited to the following topics:

- The general relationship between team spending, wins, fan attendance and the economic footprint
- The economic footprint of the Philadelphia Phillies' Major League Baseball operations
- State tax revenues generated from those operations

The analysis is a contribution or footprint study that quantifies the economic activity related to the Phillies' MLB operations using data from the 2022 and 2023 seasons. An economic footprint study is the broadest type of economic impact study, and includes all economic activity connected to a particular industry or firm. Final estimates will reflect three types of economic impacts: direct (spending by the team and fans), indirect (firms in the supply chain) and induced (spending of income by those employed by directly-affected firms).<sup>2</sup> Although the study considers operations in a specific geographic region, it does not attempt to quantify the impact on local government revenues. It also does not attempt to measure various positive externalities or spillovers attributable to the presence of a major league team such as civic pride and localized neighborhood development effects (e.g., more walkable space, improved pedestrian safety). Additional detail regarding the economic modeling used for this report can be found in the Appendix. The IFO would like to thank the Philadelphia Phillies and Visit Philadelphia for their assistance in the production of this report. Data from those organizations and other sources are cited in the footnotes and endnotes.

# PAYROLL, PERFORMANCE AND ATTENDANCE

Per the official request that motivates this report, the analysis considers the potential relationship between team payroll, win percentage, fan attendance and the team’s economic footprint. For this purpose, the report uses the 2013 to 2023 seasons.<sup>3</sup> This time frame ensures sufficient data points to reflect the competitiveness cycles that often occur in Major League Baseball. Professional sports teams may achieve peak performance for a span of several years due to factors such as team cohesion and synergy, timing of draft choices, salary management, free agent signings and favorable scheduling. Many of these factors could overlap and reinforce others during a particular season or over several seasons.

The table below displays nominal or current and real team payroll (2023 dollars), number of wins and win percentage, and two summary statistics. Note that there are significant impacts in 2020 and 2021 due to the Covid pandemic (red shade). Rows shaded in blue represent seasons in which the team qualified for the postseason.

| PHILADELPHIA PHILLIES SUMMARY METRICS |         |       |        |         |                 |                      |
|---------------------------------------|---------|-------|--------|---------|-----------------|----------------------|
|                                       | Payroll |       | Wins   |         | Payroll Per Win | Avg. Game Attendance |
|                                       | Current | Real  | Number | Percent |                 |                      |
| 2013                                  | \$164   | \$206 | 73     | 45%     | \$2.82          | 37.2                 |
| 2014                                  | \$175   | \$218 | 73     | 45%     | \$2.98          | 29.9                 |
| 2015                                  | \$142   | \$176 | 63     | 39%     | \$2.80          | 22.6                 |
| 2016                                  | \$104   | \$128 | 71     | 44%     | \$1.81          | 23.6                 |
| 2017                                  | \$104   | \$127 | 66     | 41%     | \$1.92          | 23.5                 |
| 2018                                  | \$104   | \$126 | 80     | 49%     | \$1.57          | 26.6                 |
| 2019                                  | \$160   | \$189 | 81     | 50%     | \$2.33          | 33.7                 |
| 2020                                  | \$74    | \$86  | 28     | 47%     | \$3.08          | --                   |
| 2021                                  | \$197   | \$222 | 82     | 51%     | \$2.71          | 18.7                 |
| 2022                                  | \$244   | \$255 | 87     | 54%     | \$2.93          | 28.1                 |
| 2023                                  | \$245   | \$245 | 90     | 56%     | \$2.73          | 37.7                 |

Note: Real payroll in 2023 dollars indexed to Philadelphia CPI-U. Average game attendance in thousands. Payroll in millions of dollars. The 2020 season had reduced games and payroll due to pandemic restrictions; 2020 and 2021 seasons had attendance restrictions. Payroll per win uses real payroll data.

Source: Attendance from BaseballReference.com. Payroll from Spotrac.com. Calculations by the IFO.

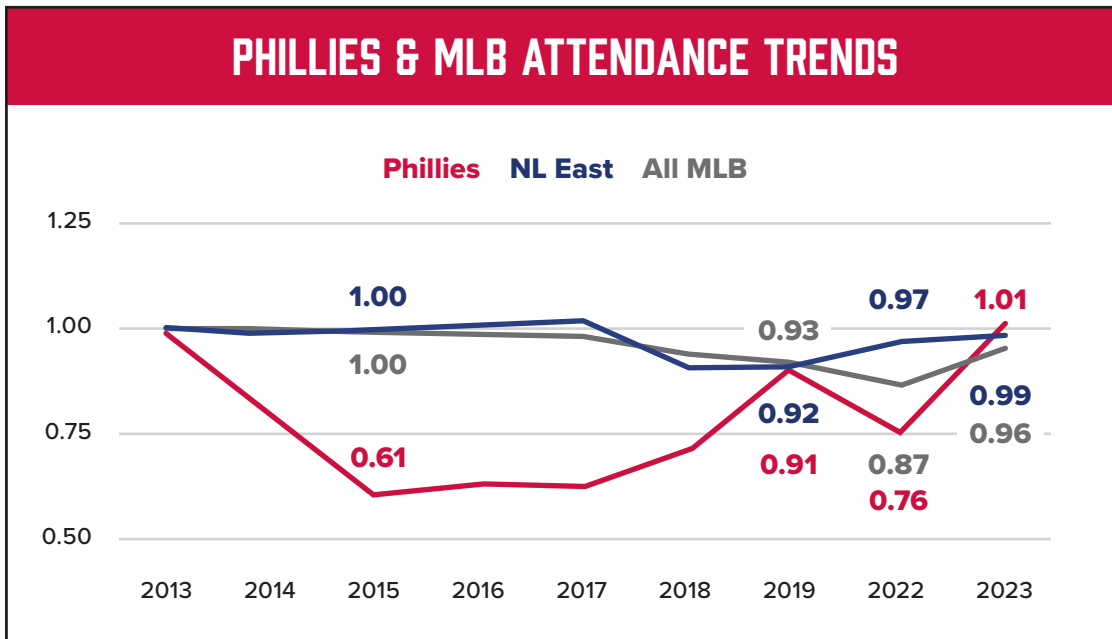


This report does not utilize statistical methods to analyze relationships between the metrics in the table due to the limited number of annual data points, circumstances beyond the team's control (i.e., scheduling and player health) and the inherent difficulty in controlling for the myriad factors that could drive the number of wins in a particular season. The data in the table are best used to examine broad, long-term trends over the prior decade. The data suggest that fan attendance is positively related to team success (i.e., win percentage), usually with a lag effect as a winning team builds excitement and drives attendance the next season. There is also a general positive relation between payroll and wins, but with diminishing returns. Using real payroll (in 2023 dollars), general data trends include:

- For the 2013 and 2014 seasons, average real payroll was \$212 million, with an average win percentage of 45% and average game attendance of 33,600. Average game attendance contracted after the team qualified for the playoffs in the 2011 season, but the seasons that followed recorded a win percentage below 50%.
- The 2015 season was a transition year as real payroll contracted by \$41 million and win percentage fell to 39%.
- For 2016 to 2018, real payroll contracted further to \$127 million, with an average win percentage of 45% and average game attendance of 24,600.
- For the 2019 season, real payroll increased to \$189 million, as the team won 50% of its games and attendance jumped to 33,700 per game (+26% versus 2018). Some of the attendance gain was likely spillover from the notable increase in wins in the 2018 season and the signing of All-Star Bryce Harper, from division rival Washington Nationals.
- Real payroll peaked in 2022 (\$255 million). After a slow start, the team won 54% of its games, and reached the World Series.
- Coming off the World Series appearance, per game attendance surged to 37,700 in 2023, the highest during this time period. The team won 56% of its games, and real payroll fell as the \$1 million increase in nominal payroll did not keep pace with inflation.

The final columns display two summary statistics: (1) real payroll cost per win and (2) average game attendance. The data suggest higher payroll generally correlates to more wins, but the marginal value of each incremental million in real payroll appears to diminish. For example, the approximate 80-win seasons in 2018 and 2019 had a combined real payroll cost per win of roughly \$2.0 million. By comparison, the 88-win seasons (average for 2022 and 2023) had a combined real average payroll cost per win of roughly \$2.8 million. For 2023, the higher payroll, win percentage and World Series appearance in the prior year translated into a notable uptick in average game attendance.<sup>4</sup>

It should be noted that these general observations do not take into account (and the IFO did not examine) two relevant factors: (1) player injuries (injured players are still guaranteed salaries), and (2) the development schedule of players, as players starting their MLB careers typically have lower salaries prior to arbitration and free agency opportunities due to the MLB's collective bargaining agreement with the players' union. These factors impact team performance and payroll as injuries occur and players' contracts are renewed, extended or expire.



To examine broader attendance trends (regular season only), the adjacent figure tracks Phillies' regular season attendance from 2013 to 2023, compared to MLB (gray line) and total attendance for the other four teams in the National League (NL) East division (blue line).<sup>5,6</sup> The figure indexes the change in attendance against a 2013 base year (index factor of 1.00). Relative to the base year:

- Excluding the Covid-impacted seasons of 2020 and 2021, Phillies' attendance reached a low point in 2015, the team's fourth straight season without a playoff berth and only 63 wins. By comparison, MLB and NL East attendance trends were relatively flat.
- Overall, MLB attendance has contracted since 2013 (-4%). The 2022 season was the lowest attendance year with an index factor of 0.87. NL East attendance reached its nadir in 2018 with a 9 percentage point drop relative to the base year.
- For 2023, the Phillies increased their regular season attendance index by 0.25 to 1.01, or 1% above their 2013 level, as the team won 90 games (most since 2011) and drew nearly 3.1 million in paid attendance (most since 2012) after a World Series appearance in 2022. This gain greatly exceeded positive trends for the MLB (+0.09 index factor) and the NL East (+0.02 index factor).

Attendance levels have a direct impact on the size of the team's economic footprint, and the data reveal a positive relation between win percentage and attendance. The section that follows estimates the 2023 economic footprint attributable to MLB operations at Citizens Bank Park and how it could fluctuate with attendance.





## 2023 ECONOMIC FOOTPRINT

To quantify the economic footprint and the corresponding state taxes generated by the Phillies' MLB operations, the IFO requested data from the team and stakeholders to estimate spending related to Phillies' games at Citizens Bank Park. The analysis separates final spending into two major categories: (1) Team Operations and (2) Fan Spending. This section describes and estimates the types of spending included in those categories and then assesses how team operations and fan spending reverberated through the local and state economies to generate the overall economic footprint for the Phillies 2023 season.

### Team Operations

At the request of the IFO, the Phillies provided data for staff payroll and operations expenditures for the 2023 season.<sup>7</sup> Team operations expenditures only include in-state activity, and do not include expenditures related to international operations or the spring training site in Clearwater, Florida.

The Phillies employ approximately 1,500 full- and part-time staff in the Commonwealth. Full-time employees include coaches, trainers, front office and other administrative staff. Part-time staff include seasonal workers. Other team operations expenditures include contractors procured for security, maintenance and other day-to-day operations, marketing and advertising, supplies, utilities and travel costs. Team operations expenditures also include capital expenditures made for permanent improvements to the facility.

Miscellaneous data notes for team operations expenditures are as follows:

- The analysis assumes that 10% of the \$245 million (\$24.5 million) in 2023 team player payroll remains and is spent in state, while the residual is saved or flows to players who reside out-of-state most of the year. For state personal income tax (PIT) purposes, 52% of total player payroll is taxed, which represents games played in the Commonwealth. The Phillies played 85 games in-state in 2023 (81 in Philadelphia, three in Pittsburgh and one in Williamsport).
- The analysis includes estimated state PIT collected on visiting player payroll based on the number of games played in Philadelphia. This amount is included in the team's economic footprint (PIT impact only).
- Because some coaches and certain staff reside out-of-state, the analysis applies a 10% cutback to total non-player staff salaries.

## **Fan Spending**

Baseball fans make various purchases inside and outside the stadium for tickets, food, parking, hotels, apparel and other entertainment. To construct visitor spending profiles, the IFO used data supplied by the Phillies and Visit Philadelphia, the city's official tourism office.<sup>8,9</sup> Visit Philadelphia provided detail on average spending for day trips and overnight trips and spending by type of purchase (e.g., hotel, restaurant) for visitors to Philadelphia. The Phillies provided point-of-origin data for attendees who purchase tickets. Those data allowed the analysis to estimate the number and share of visitors from out-of-state and those from in-state, both inside and outside the Philadelphia metro region.

The point-of-origin data are a key factor used to estimate total visitor expenditures. For the 2022 season, the data show the following point-of-origin shares for fans who attended a Phillies home game:

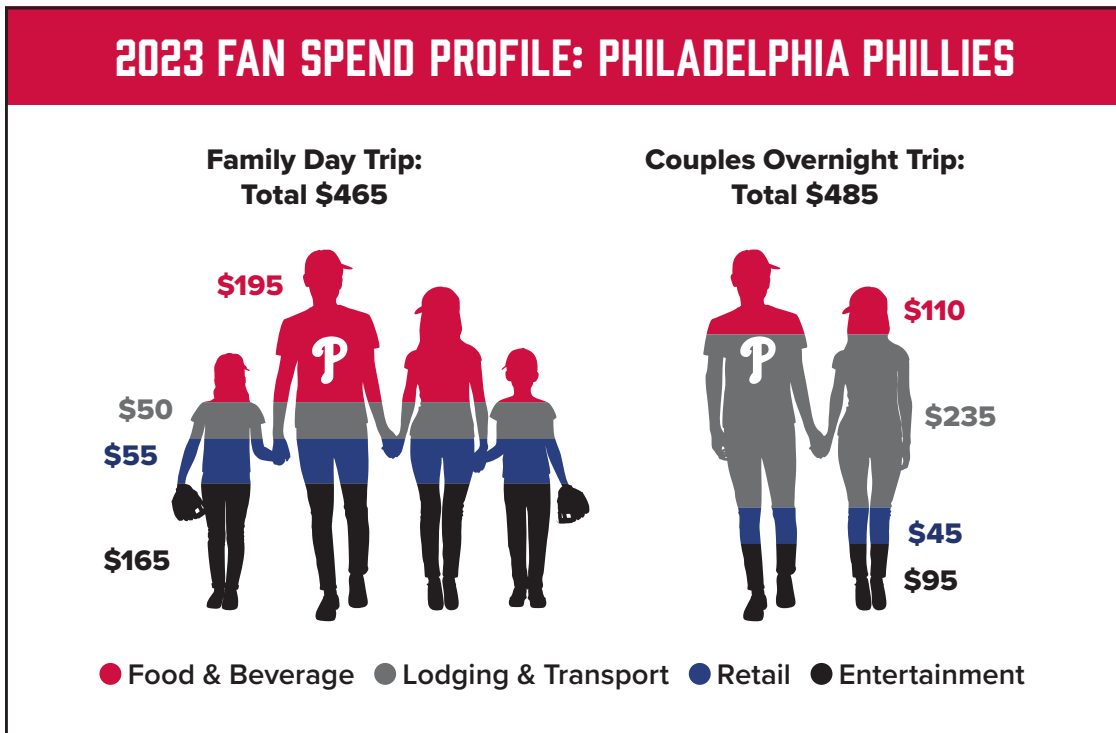
- 57% from Pennsylvania
- 26% from New Jersey or Delaware
- 11% from outside the Tri-State area
- 6% unknown but assumed local (walk-up purchases)

The IFO estimates that the average overnight visitor who attends a Phillies game stays approximately two nights per trip. This average includes fans whose main reason for travel is a Phillies game, and casual fans who attend games because they happen to be visiting the region (e.g., family or college visit, conferences).

The team contracts with vendors for the sale of food, beverages and merchandise inside the stadium. The analysis assumes that most of this spending is retained by vendors (60%) and the residual (40%) flows to the team.<sup>10</sup> The economic analysis deducts the team share from gross fan spending to avoid double counting (i.e., spent once by fans, then again by the team). Based on data for in- and out-of-stadium spending, the average fan spent \$116 (day trip) and \$244 (overnight stay) per trip.<sup>11</sup> These data imply that for a typical family of four on a day trip, average total spending was approximately \$465, while a typical couple that stays overnight spent \$485. (See figure.)



## 2023 FAN SPEND PROFILE: PHILADELPHIA PHILLIES



Source: Visit Philadelphia with adjustments by the IFO.

Per the request that motivates this report, the analysis examines the gross or overall economic contribution of the Phillies' MLB operations to the local and state economies. Given that objective, it does not attempt to quantify any reduction due to spending that is shifted from purchases of other goods and services, or the impact attributable to "casual" fans. Economic impact studies (as opposed to contribution or footprint studies) will typically assume that a share of local spending was shifted from other goods and services and estimate the economic impact net of those amounts. Some studies might also reduce spending for those who happen to be in the city and attend games due to circumstances (e.g., attending a conference), but would not have attended otherwise. To remove those impacts, an analysis might only include spending pulled into the state due to out-of-state visitors. For the Phillies, the data show that those visitors comprised 37% of total attendance, and they generally spend more at each game, not only on lodging, but also food and merchandise.

### Economic Footprint Estimate

Based on the data and assumptions noted above, team operations and fan spending were modeled and input separately into the IMPLAN input-output model to derive the economic contribution or footprint for the Phillies 2023 season. (See Appendix for further detail.) The results were as follows:

- **Net Direct Spending** is \$525 million. This includes (1) net fan spending inside and outside the stadium (reduced for the portion of spending at vendors that flows to the team or league) and (2) team operations spending. As noted, most player payroll (90%) is excluded, and a 10% cutback is applied to staff payroll for managers and other staff who likely do not reside in the state full-time.

- **Total Spending** is \$970 million. This figure includes net direct spending, plus the indirect and induced effects that result from the direct spending. Indirect effects are in-state firms that are in the supply chain for goods and services purchased by fans or the team. Induced effects represent the impact as employees spend their earnings. Both effects are reduced for leakage due to spending that flows outside the state economy, is remitted as taxes or is saved.<sup>12</sup> The spending multiplier of 1.85 implies that a \$1 change in demand due to net fan or (certain) team spending produces a final \$1.85 spending impact once indirect and induced effects are included.
- **Labor Income** is \$427 million and includes all wages and salaries, self-employment income, health and pension benefits and payroll taxes. (To remove health and pension benefits and employer-paid payroll taxes, the figure could be reduced by 14%.) Similar to spending, this figure includes employee compensation for staff directly employed by the Phillies, and employees supported by the indirect and induced impacts.
- The number of **Full-Time Equivalent Jobs** supported is 5,450. Most jobs supported were in the food service (1,270 jobs) and lodging and transportation (1,020 jobs) industries. Other industries with significant impacts include commercial sports events (i.e., operations staff) and construction.
- Total **State Taxes** are \$45 million. The largest impact is for sales and use tax (\$22 million). Sales and use tax includes all food and beverage spending at in- or out-of-stadium locations, and all lodging. Personal income tax generates \$16 million as roughly one-half (52%) of player salaries are subject to tax, in addition to an estimated \$1.4 million in tax from visiting teams. The figure does not include local Philadelphia County taxes such as sales (2%), income (3.75%) or hotel tax (8.5%). Other taxes include gasoline, tobacco, liquor and corporate net income.

| <b>2023 PHILLIES ECONOMIC FOOTPRINT</b> |              |                              |             |
|---|--------------|------------------------------|-------------|
| <b>Net Direct Spending<sup>1</sup></b>  | <b>\$525</b> | <b>State Taxes Generated</b> | <b>\$45</b> |
| <b>Total Spending<sup>2</sup></b>       | <b>\$970</b> | Personal Income              | \$16        |
| Spending Multiplier                     | 1.85         | Sales & Use                  | \$22        |
|   |              | Other Taxes                  | \$7         |
| <b>Labor Income</b>                     | <b>\$427</b> |                              |             |
| <b>FTE Jobs Supported</b>               | <b>5,450</b> |                              |             |

Note: Dollars in millions.

1 Net Direct Spending includes (1) team operations and (2) fan spending. Team operations include MLB and staff payroll, operations, capital projects and other spending previously described in the report. Fan spending is for both inside and outside the stadium.

2 This figure double counts sales as they move through the supply chain (i.e., business-to-business transactions). If the double counting is removed, the amount is referred to as value added (or gross state product) and is \$586 million.



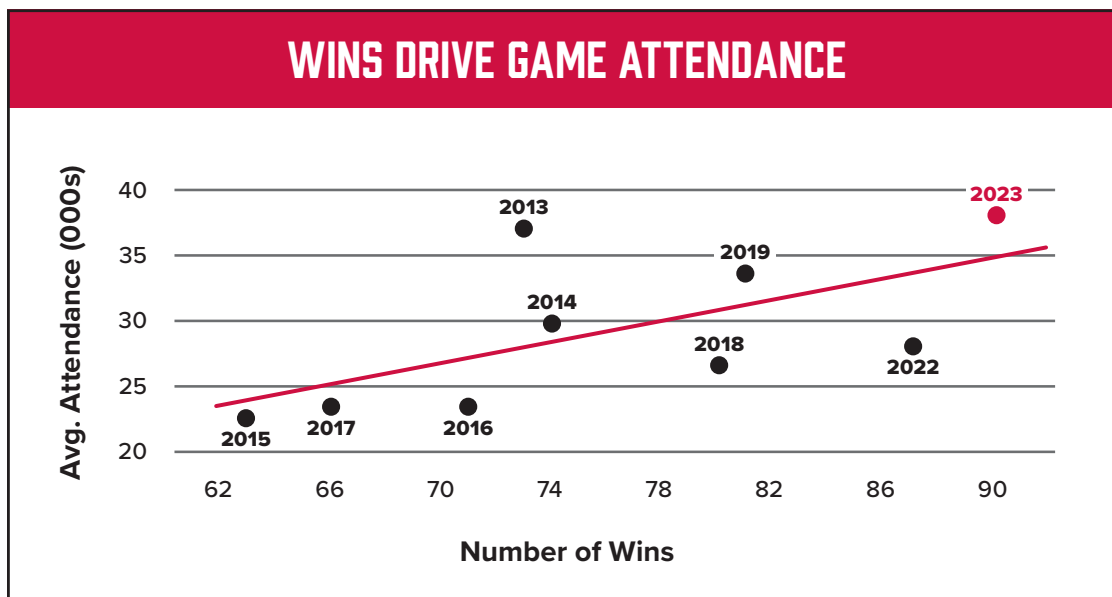


## GAME ATTENDANCE AND THE ECONOMIC FOOTPRINT

In response to the legislative request that motivates this report, the IFO noted that the report would “attempt to analyze the relationship between historical game attendance and the economic impacts.” To fulfill that obligation, this section estimates how consecutive winning seasons and playoff appearances motivated higher game attendance and an expansion of the economic footprint. The estimation is for illustrative purposes only and focuses on the potential impact due to higher fan attendance and the commensurate increase in fan spending.

The figure (next page) plots the Phillies’ wins and fan attendance (as measured by tickets purchased) for the 2013 to 2023 seasons. The 2020 and 2021 seasons are excluded due to the impact from the Covid pandemic. The trendline shows a positive relationship between the number of wins (horizontal axis) and average game attendance for the season (vertical axis). For 2023, total wins (90) and average game attendance (37,700) reached their highest points of the prior decade. In addition to a high win percentage, the Phillies’ 2023 season followed a World Series appearance in 2022, leading to high residual fan excitement and engagement. For the estimation, the analysis looks at changes relative to the 2019 season to project the increase in fan expenditures associated with the team making back-to-back playoff runs deep into the postseason. The 2019 season is used for comparison purposes because it is the most recent pre-Covid season with a non-losing record (81 wins) and is located relatively close to the historical trendline. Attendance had ramped up dramatically from 23,500 per game in 2017 (66 wins) to 33,700 per game in 2019, a clear indicator of higher fan engagement. For the 2020 (truncated) and 2021 (82 wins) seasons, average attendance was

impacted by the Covid pandemic. For 2022, the Phillies won 87 games and hosted 8 playoff games (3 World Series games). In 2023, the team won 90 games and hosted 8 playoff games. The estimation includes the impact from (1) higher regular season attendance and fan spending and (2) the contribution from the 8 playoff games to quantify the impact from a highly successful season relative to a more “typical” season with a 0.500 record.



Source: BaseballReference.com.

The following assumptions were made to estimate the 2023 incremental fan spending from consecutive winning seasons and playoff appearances:

- The share of paid attendance that attends games (turnstile attendance) increased by 4 percentage points from the 2019 to 2023 seasons.
- Across all types of purchases, average fan spending increased by 10% to reflect higher fan engagement, and price increases that may result from higher demand (e.g., accommodations).
- The mix of fans did not change. The same shares reside locally and non-locally, both within state and out-of-state.<sup>13</sup>
- All playoff games have full capacity attendance and based on tourism industry data, per capita fan spending increases by 61% (includes higher ticket prices).
- The estimate disregards any increase in team spending related to the regular season. For the Phillies, MLB payroll increased by \$86 million (nominal) from 2019 to 2023. As noted, most of those monies likely flowed out of state or were saved.
- The estimate also excludes operational expenditures made by the Phillies for postseason games that could total several million dollars per game. The table only includes additional fan spending.



Based on these assumptions, the successful playoff seasons led to an overall increase in fan spending of \$169 million for the season: \$82 million inside the stadium (includes ticket sales and vendor sales remitted to the team) and \$87 million outside the stadium.<sup>14</sup> The largest change is attributable to food and beverage spending (+\$62 million inside and outside the stadium) followed by lodging (+\$31 million).

The \$169 million includes all monies that would flow to the team for ticket sales and the team’s share of in-stadium vendor sales. If the assumptions are accurate, it represents the maximum possible gain in new direct spending that could impact the state and local economies if (1) the team spent all new revenues received and (2) spent all of those revenues in state, and not on player payroll, which most likely flowed out-of-state or were saved. Because it is not clear how the team would spend additional revenues, the analysis did not attempt to estimate the overall economic impact (i.e., the multiplier impact) from the higher spending or the state tax revenues it might generate. If the same spending patterns held from the prior subsection, then a spending multiplier of roughly 1.85 would apply to the increase in fan spending.

| <b>PHILLIES HIGHER ATTENDANCE<br/>BENEFIT ESTIMATE</b> |              |
|--|--------------|
| <b><u>Increase in Fan Spending</u><sup>1</sup></b>     | <b>\$169</b> |
| Outside the Stadium                                    | \$87         |
| Inside the Stadium                                     | \$82         |

Note: Dollars in millions.

1 Spending inside the stadium includes ticket purchases, concessions and merchandise. Outside the stadium spending includes food & beverage, lodging, retail, transportation and other entertainment. Figures are not adjusted for vendor share agreements.

## NON-MLB IMPACTS AND EVENTS

In addition to MLB games, Citizens Bank Park hosts other events and the Phillies engage in various non-MLB activities. These events and activities were not included in the economic footprint analysis and would expand the economic impact related to the park or team.

### Concerts at Citizens Bank Park

In 2023, Citizens Bank Park hosted three concerts that each sold between 40,000 and 45,000 tickets while the Phillies played away games.

- June 15, 2023: Dead and Company (est. 41,500 attendance)
- September 18 and 19, 2023: Pink (combined est. 90,000 attendance)

The park will host five concerts in 2024 on May 11 (Morgan Wallen), July 23 (Def Leppard and the Steve Miller Band), August 9 (Green Day), and August 21 and 23 (Bruce Springsteen & the E Street Band).

## Minor League Baseball

The Phillies have two minor league teams that reside in the Commonwealth.

- The Fightin Phils, the Phillies' Class AA affiliate, reside in Reading, Pennsylvania (Berks County). In 2023, the team drew nearly 385,000 fans (5,900 per game), 16,500 more than the 2022 season.
- The IronPigs, the Phillies' Class AAA affiliate, reside in Allentown, Pennsylvania (Lehigh County). In 2023, the team drew over 567,000 fans (7,990 per game), the most in Minor League Baseball.

The teams each support a roster of 28 active players (as well as any players from the major league roster on rehabilitation assignments), a coaching staff, full front office, business staff and support staff for game day operations. The economic impact from these affiliates was not included in the analysis.

## Externalities and Spillovers

Research generally finds positive externalities or spillover effects for cities that host professional sports teams. These impacts are tangible, but very difficult to quantify, and most studies do not attempt to do so. Some examples of positive spillover effects include:

- Civic pride, especially when a team appears in the postseason
- Raised profile of local higher education institutions, healthcare facilities and businesses
- Local infrastructure upgrades, such as riverfronts and walking paths
- Enhanced investment near the stadium and higher real estate values
- Increased attractiveness of metro area to young professionals

The Phillies are one of four professional sports teams located in the South Philadelphia Sports Complex, as the Flyers (National Hockey League), 76ers (National Basketball Association) and Eagles (National Football League) also have stadiums or arenas located on the complex. Temple University, which competes in the Division I Football Bowl Subdivision (highest division), also plays home football games at Lincoln Financial Field (home of the Eagles). The clustered location of these stadiums provides local businesses such as restaurants, bars and hotels with a relatively consistent customer base throughout the year. For the latest completed seasons, the teams attracted over 5.4 million fans to the complex based on paid attendance figures (Phillies: 3.05 million; Eagles: 699,000; Flyers: 756,000; 76ers: 822,000; and Temple football: 94,000).

# ENDNOTES

- 1 See South Philadelphia Sports Complex Special Services District, [Sports Complex Venues](#) and Pennsylvania Office of the Budget, [Redevelopment Assistance Capital Program](#).
- 2 Alternative approaches could take into consideration (1) whether the team would have remained in Philadelphia without state funding, (2) the amount of net new spending due to the presence of the team (i.e., how much is substitution spending by fans located in a geographic area that would be spent regardless), and (3) alternative uses of the state funds used for park construction.
- 3 To generate a sufficient historical time series, the analysis went back one decade from the 2023 season. If that year was a non-playoff year and the number of total wins was within +/-10 wins of 81 wins (a .500 season), then the year was used. If those two criteria did not hold, then the analysis moved back a year until they did. This convention controls for an outlier base or start year (good or bad).
- 4 Major League Baseball also introduced new rules for the 2023 season that were intended to increase the pace of play and offensive output. These changes may have contributed to increased ticket demand for all teams.
- 5 The figure does not include the 2020 or 2021 seasons due to pandemic-related restrictions on attendance.
- 6 Major League Baseball is split between two leagues (National and American), each with three geographically based divisions (East, Central and West). These divisions focus on regional rivalries, but also (generally) similar metropolitan markets to enhance fan engagement and competitiveness. The Phillies reside in the National League East Division which includes Atlanta (Braves), Washington DC (Nationals), New York City (Mets) and Miami (Marlins).
- 7 Details on team operations spending are proprietary, and the amounts and types of spending are not itemized in this report.
- 8 To reflect the difference between purchased tickets (paid attendance) and turnstile attendance (actual attendance), the IFO applied a cutback to the number of tickets purchased to compute total fan spending both inside and outside of the stadium. Paid attendance data are from [BaseballReference.com](#).
- 9 Visit Philadelphia supplied data for 2021 and the IFO adjusted those data for higher post-pandemic and sports fan spending patterns, higher accommodation service rates near Citizens Bank Park and the impact of higher fan engagement related to recent team performance.
- 10 This split is an assumption made by the analysis and is not based on data provided by the team.



- 11 Data are for regular season games only. Postseason/playoff games have higher rates of spending, turnstile attendance and overnight stays.
- 12 It is noted that this figure double counts sales as they move through the supply chain (i.e., business-to-business transactions). If the double counting is removed, the amount is referred to as value added (or gross state product) and is \$586 million.
- 13 The mix of local versus non-local fans can have a material effect on the economic impact. Fans from outside the region typically spend more on average, and the spending mix is different (e.g., lodging costs).
- 14 It should be noted that revenues generated inside the stadium may not remain with the team. The MLB has a revenue sharing agreement in which certain local revenues are pooled and shared among all 30 teams, with some teams gaining and others losing revenues. Similarly, for playoff games, a portion of ticket revenues are pooled and disbursed to all playoff teams, with larger shares provided to teams that advanced further in the playoffs. Teams distribute the revenues they receive as full or partial shares to players, coaches and staff. Distributions may not be used to offset operations costs from playoff games. Due to this approach, the share of the \$82 million in incremental revenues generated inside the stadium and distributed to other teams would likely increase compared to inframarginal revenues.

# APPENDIX

## Methodology

The economic contribution or footprint analysis uses a standard “total spend” approach based on the direct spending (including capital spending) made by fans and the Phillies organization related to MLB games played at Citizens Bank Park. Because it focuses on spending, the analysis does not (1) track the amount or origin of total revenues received by the team or (2) include any profits retained by owners. Once the amount and type of direct spending have been determined, the IMPLAN input-output economic model uses published data from the U.S. Bureau of Economic Analysis to determine industry supply chain relationships, and economic multipliers to derive the final or ultimate economic impact on output or spending, income and employment.

The analysis uses what is known as the multi-regional input-output (MRIO) approach where the direct spending occurs in Philadelphia County, but the economic impacts that flow to the rest of the state are also tracked and included. IMPLAN defines the MRIO approach as follows: “Multi-Regional Input-Output Analysis (MRIO) analyses utilize interregional commodity trade and commuting flows to quantify the demand changes across Regions stemming from a change in production and/or income in another Region. It measures the economic interdependence of Regions.” The results shown in this report are the sum of the two defined regions: Philadelphia County and Rest-of-the-State.

To model the impact of the spending, the analysis uses the Industry Impact Analysis method within the IMPLAN model. This method is similar to a “bill of goods” approach used by some footprint and impact studies that have access to specific input purchase patterns of the final spend industry that is impacted (for this analysis, spectator sports). The input purchase data that are unique to the team allows the analysis to achieve a higher level of accuracy. For team expenditures and fan spending inside Citizens Bank Park, data were provided by the Phillies organization. Visit Philadelphia provided average spending data for visitors to Philadelphia with certain technical adjustments made by the IFO. For in-state spending by visiting teams on meals, lodging and travel, the analysis includes travel expenditures reported by the Phillies and assumes that serves as an approximation of those amounts.

All economic impact computations shown in this report used the IMPLAN input-output model. The exception is state taxes generated. Those computations were made by the IFO based on IMPLAN output data (e.g., sales tax), payroll data supplied by the team (personal income tax) and other publicly-available data (opposing team salaries subject to Pennsylvania personal income tax).

## **About the IFO**

The Independent Fiscal Office (IFO), created by [Act 120 of 2010](#), is a non-partisan legislative service agency for the Pennsylvania General Assembly separate from both the executive and legislative branches. The office provides revenue projections along with objective analysis of fiscal, economic and budgetary issues to assist Commonwealth residents and the General Assembly in their evaluation of policy decisions. The IFO may also undertake special studies at the request of members of the General Assembly.

Additional reports and releases are available on the office website.

## **Acknowledgements**

The following staff members contributed to this report: Matt Knittel, Mathieu Taylor, and Robyn Toth.

The IFO would like to thank the Philadelphia Phillies and Visit Philadelphia for their assistance in providing data for this report.

Report design was provided by [The Pavone Group](#).

## **Confidentiality & Copyright Information**

Certain data used in this report are confidential and proprietary. Therefore, the IFO is unable to disclose further data detail and assumptions used in the analysis.

Use of photos contained in this report is restricted due to copyright agreements.

## **Media Inquiries**

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**JIM GREGORY, MEMBER**

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TUESDAYS AND THURSDAYS:  
9 A.M.-4:30 P.M.



**House of Representatives**

Commonwealth of Pennsylvania  
Harrisburg

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November 3, 2022

Independent Fiscal Office

Attn: Matthew Knittel, Director

2<sup>nd</sup> Floor Rachel Carson State Office Building

400 Market Street

Harrisburg, PA 17105

Dear Dr. Matthew Knittel,

Between 2002 and 2006, the Commonwealth contributed \$320 Million in capital funding for the construction of new facilities for four sports teams in Philadelphia and Pittsburgh. The money was financed by general obligation debt of the Commonwealth and was authorized under Chapter 5 of the Capital Facilities Debt Enabling Act (Act 1 of 1999).

At the time, existing facilities used by the Pittsburgh Steelers, Pittsburgh Pirates, Philadelphia Eagles, and Philadelphia Phillies were reaching the end of their useful life. This created a concern about the possible economic impact the departure of a team could have on the Commonwealth's economy.

Anyone who has attended events at the stadiums knows intuitively the economic impact extends well beyond the field of play. In addition to the construction jobs that were created when facilities like PNC Park and Citizens Bank Park were built, these facilities support stadium personnel, concert and show support crews, hospitality employees, maintenance staff, and direct suppliers of the teams and facilities. The downstream economic impacts can be just as important, as the crowds attracted to events support local businesses.

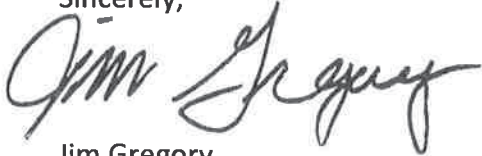
As these facilities enter their second decade of use, we believe there is value in conducting a study on the economic impact of PNC Park and Citizens Bank Park. To that end, we are requesting an analysis on the direct and indirect economic impacts of these facilities, including the jobs, investment and spending that result from these two facilities being located in the Commonwealth. We would like the analysis to include the downstream economic impact on



the local businesses that serve the event attendees that patronize the nearby restaurants, hotels and other businesses in the hospitality industry. If there is any available data, we would like to know the relationship the fluctuations in attendance at professional sporting events has on the economic impact.

I appreciate your consideration of this request, and I am available to discuss any further details or aspects of this request that may be needed.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Gregory". The signature is fluid and cursive, with the first name "Jim" being more prominent and the last name "Gregory" following in a similar style.

Jim Gregory  
State Representative  
80<sup>th</sup> Legislative District

CC: Allegheny County Controller, VisitPittsburgh, Philadelphia Authority for Industrial Development, Sports & Exhibition Authority of Pittsburgh & Allegheny County



## INDEPENDENT FISCAL OFFICE

December 9, 2022

The Honorable James Gregory  
Pennsylvania House of Representatives  
P.O. House Box 202080  
Harrisburg, PA 17120

The Honorable Timothy Bonner  
Pennsylvania House of Representatives  
P.O. House Box 202017  
Harrisburg, PA 17120

Dear Representatives Gregory and Bonner:

Thank you for your letter from November 3, 2022, that requests the Independent Fiscal Office (IFO) to conduct a study on the economic impact from PNC Park and Citizens Bank Park that would include the jobs, investment and spending that result from those two facilities being located in the Commonwealth. At this juncture, we believe that the proposed study is feasible, and we will begin to reach out to stakeholders for relevant data. For that purpose, we plan to include a copy of the request letter from your offices to the IFO.

Per discussions with you and legislative staff, the study will be an economic impact or economic footprint study. It will attempt to quantify any economic activity related to baseball games that take place at the stadiums. The economic impact would include three types of effects:

- **Direct effects** Spending from those attending games (e.g., tickets, concessions, programs, shirts) and any secondary spending related to games, such as parking, dining at local restaurants and overnight accommodations.
- **Indirect effects** Impact on businesses in the supply chain that provide inputs to firms that sell goods and services to final consumers who attend games at the stadiums.
- **Induced effects** Impact from spending by those employed by firms or owners that directly or indirectly supply goods and services to final consumers who attend games at the stadiums. This would include income and spending by athletes.

If possible, the study will attempt to quantify total spending, employment, income and state General Fund tax revenues generated from the three types of effects. The study will also attempt to analyze the relationship between historical game attendance and economic impacts. For example, when sports teams have winning records, attendance will increase, which enhances any economic impact, and may enhance the impact in a non-linear fashion (e.g., regular and new attendees may spend more (on average) on concessions and team merchandise when teams have strong records). Finally, the study will include team payroll data to assess whether there is a general relationship between payroll and team performance.

Because the request is for an economic impact or economic footprint study, the report will not attempt to quantify spending that would have occurred without the stadiums. For example, much of the spending by state residents would have occurred regardless of the teams and stadiums, but would be spent in-state on other goods and services. Spending that would not otherwise occur would generally be attributable to non-

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December 9, 2022

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residents who travel into the state or residents who would have traveled out of state to attend baseball games.

Over the next month, we will begin to reach out to government agencies, firms, owners and others to request the data necessary to perform this analysis. The level of detail included in the report will largely depend on the data received, and the timeline will depend on the timeliness of responses to these data requests. It is our intention to transmit the report to your offices in late Spring. We will plan to contact you if that timeline requires adjustment.

Per the policy of the office, we will post the report to the IFO website three days after transmittal to your offices. During that three-day interval, we are available to meet with you to discuss the results and address any questions that you may have. If you have any further questions or concerns about the proposed study, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Matthew J. Knittel". The signature is written in a cursive style with a large initial "M".

Matthew Knittel

Director, Independent Fiscal Office



June 20, 2024

Independent Fiscal Office  
Attn: Matthew Knittel, Director  
2<sup>nd</sup> Floor Rachel Carson State Office Building  
400 Market Street  
Harrisburg, PA 17105

Re: Stadium Economic Impact Report: Philadelphia Phillies

We appreciate the time and effort spent by the Independent Fiscal Office preparing its economic impact report on the Philadelphia Phillies and Citizens Bank Park. Since opening Citizens Bank Park in 2004, The Phillies has invested billions of dollars to bring a championship-caliber team and ballpark experience to the best fans in baseball. We are proud of the impact these investments continue to have on our region and the Commonwealth as a whole.

While we do not necessarily agree with every assumption and conclusion in the IFO's report, we are nonetheless pleased to see the IFO conclude that Phillies baseball at Citizens Bank Park has an enormous impact on our local and state economies, including nearly \$1 billion in total spending in 2023 alone. In fact, we believe the IFO's report may undervalue this impact due to several conservative assumptions in its analysis. Moreover, as noted in its report, the IFO limited its analysis to the economic impact generated by the Philadelphia Phillies' 2023 Major League Baseball season. We believe it is important to also highlight other key aspects of The Phillies' economic impact, such as:

- In the last ten years, The Phillies has invested over \$178 million in projects to maintain and improve Citizens Bank Park, including a new state-of-the-art Phanavision scoreboard in 2023 and the immersive and interactive kids' baseball experience known as "The Yard" in 2017.
- In the last ten years, The Phillies and Phillies Charities have collectively contributed over \$38 million to charitable organizations, a majority of which are based in Pennsylvania.
- In addition to Major League Baseball games, Citizens Bank Park hosts major concerts and other large-scale events, which collectively generate millions of dollars in economic impact for the region and Commonwealth.
- Citizens Bank Park and the other venues in the South Philadelphia Sports Complex have had a significant impact on real estate development in and around South Philadelphia. Since 2004, the area has added numerous bars, restaurants, hotels, and a casino. In addition, The Phillies and Comcast Spectacor are planning a large-scale, mixed-use development in the Sports Complex that will generate significant economic impact by bringing new residents, workers, and visitors to the region.

We appreciate the IFO's work on this project and look forward to continuing to invest in our team, ballpark, and community in the years to come.

Sincerely,

The Phillies

