BAY AREA COUNCIL ECONOMIC INSTITUTE

The Economic Impacts of a New Baseball Stadium in Oakland

SUMMARY FINDINGS

We estimate that a new baseball stadium for the Athletics would generate $3.05 billion of economic impact for the residents and businesses of the City of Oakland over the first 10 years of operation. The analysis does not take into account the location of a new stadium within Oakland, and therefore focuses on the economics of the expenditures on and within the stadium itself. If a new stadium were to be located in the downtown area, there would be additional benefits in the form of increased spending at local businesses and the opportunity for adjacent development.

The impacts calculated below include direct spending by the franchise as well as the indirect benefit of wages that are re-circulated through the economy, and they are presented in constant value terms at the first year of stadium operation. We calculated the $3.05 billion impact using the following inputs:

1. Construction Spending - $768 million in economic impact

A large impact of a new stadium stems from its construction. Unlike other stadium projects around the country, a new Oakland stadium would be entirely privately funded, with no taxpayer contributions. With an estimated cost between $600 and $700 million, we use the

mid-point of $650 million to run our analysis. Other sports stadiums built around the country show that approximately 25% of total costs are "soft costs," referring to expenditures on planning and design. Because firms located outside of Oakland may perform many of these tasks, we do not include them as local economic impacts.

The remaining 75%, or $487.5 million, in stadium costs will go toward "hard costs," which are much more directly tied to Oakland through the labor needed to construct the stadium. We estimate that this spending will create approximately 2,000 construction jobs over the two-year construction period. The total economic impact is derived from $487.5 million in direct construction expenditures, and an additional $254.5 million in indirect multiplier effects that are created through inter-industry effects and from workers spending their wages within Oakland. To arrive at our $768 million impact, we split these total impacts over two years of construction and use a 2.3% interest rate to make them comparable to year one spending within a new stadium.

2. Day-of-Game Attendee Spending - $1.54 billion in economic impact

New ballparks around the country have reported a significant increase in day-of-game revenue through a combination of attendance increases and greater per patron spending. While these expenditures represent a financial benefit for the A's, they are also largely new dollars flowing into the Oakland economy from non-Oakland residents. An analysis of new ballparks dating back to 1999 shows that gate receipts grow by approximately 2x in the first year of operations of a new stadium while concession spending increases at an even higher rate.

To translate this spending into an economic impact, we take historical spending on tickets, concessions, merchandise, and suite rentals at the Coliseum as our starting point. Using the experience of other Major League Baseball teams in new stadiums, we can estimate spending patterns at a new Oakland stadium. We assume that 20% of the spending at a new stadium would have occurred regardless of the A's existence in Oakland. We exclude this portion from our calculations. Because day-of-game spending supports baseball activities, such as player salaries and team operations that are less likely to have a multiplicative effect, we apply a conservative 1.2 multiplier to reach our $1.54 billion estimate.

3. Ballpark Operations Spending - $742 million in economic impact

In a new stadium, the A's will make considerable local investments in non-baseball staff, contractors for stadium operations, and marketing of the team. Spending on these items was $43 million in 2015, and we expect these expenditures to grow to above $62 million annually in a new stadium. These dollars will pay the salaries of some local workers while other expenditures will be revenue to local businesses. We apply a conservative 1.2 multiplier on this spending to reflect that some of these expenditures occur across the region, but outside of Oakland. The annual spending numbers are then discounted back to the first year of operation at a 2.3% interest rate to arrive at the $742 million total impact.

I. INTRODUCTION

When the Oakland Athletics opened their 2017 regular season with a win over the Los Angeles Angels on April 3, the team and its fans celebrated the victory in the same stadium that witnessed Catfish Hunter's 1968 perfect game, World Series clinching wins in 1973 and 1974, and the team's historic 20th consecutive win in 2002. Since relocating to the East Bay from Kansas City in 1968, the A's have called the Oakland Coliseum home. It is the fifth oldest ballpark in Major League Baseball and the only multi-purpose stadium to serve as a home to both MLB and NFL franchises.

The A's have been one of only a few teams to not participate in MLB's recent stadium-building boom. Over the last 20 years, 17 Major League Baseball clubs have opened new stadiums, representing more than half of MLB ballparks in use today. These stadiums have been built for a variety of reasons: two have accommodated expansion or relocating teams, many have replaced older ballparks that lacked newer amenities, and all have improved the attendee and player experience.

While Major League Baseball franchises are private enterprises, they can serve a very public purpose. The stadiums that they play in are often viewed as a public amenity, which can increase civic pride, attract new residents and businesses to a city, and act as a tool for neighborhood revitalization. Like other businesses, baseball franchises also have an economic impact through the sales they make, the people they employ, and the money they spend to operate the team and stadium.

Within this memo, we will quantify the economic impact of the Athletics on the City of Oakland, with a focus on projecting the total economic impacts that a new stadium will bring to the city over 10 years. While we expect a new stadium to have a local economic impact for decades, we can reasonably model economic impacts over a 10-year period based on the experience of other MLB franchises with new ballparks.

We define economic impacts as the total economic output that occurs within the City of Oakland, with each dollar of spending having a multiplicative effect as it recycled locally. For example, a construction worker might spend wages within Oakland on groceries, healthcare, and education. These organizations use a portion of the construction worker's wages to pay their own employees—with some portion of the wages leaving Oakland on other expenses—and thus the original spending can be funneled through the economy multiple times.

To calculate the total economic impact of the Oakland Athletics and a new stadium, we quantify the following types of benefits:

1) **Construction spending** – In addition to direct spending on the costs to physically construct a new stadium, there are also indirect effects to the Oakland economy from local hiring (and the wages that stem from it) and local sourcing of some inputs.

2) **Day-of-game attendee spending** – Tickets, merchandise, parking, and concessions comprise spending by A's fans within the stadium. These receipts are then used by the Athletics to pay salaries of players and employees, creating a secondary benefit as those salaries are spent within the local economy.

3) **Facility operating spending** – The A's employ contractors to complete day-of-game parking, janitorial, security, and merchandising duties. The club also has a significant budget for marketing, publicity, and ticketing. Taken together, this spending by the A's has a direct economic impact as well as an indirect effect as these salaries are spent in the local economy.

II. CONSTRUCTION SPENDING

$768 million

Total Economic Impact (for two years of construction, measured at stadium open)

Regardless of where a new Oakland Athletics stadium is located, its construction within Oakland will be a boon to local construction contractors and providers of concrete, steel, and piping. Specifically, the A's are committed to hiring union contractors with a strong local hire component. While no definitive proposal for the stadium's location, size, and cost has been made, we can use the history of stadium construction in Major League Baseball over the last 20 years to inform and verify cost estimates.

Major League Baseball New Stadium Construction

City	Stadium	Year Opened	Capacity	Total Cost (in millions)	Cost in 2017 Dollars
Phoenix	Chase Field	1998	48,519	$364	$538
Seattle	Safeco Field	1999	47,943	$517	$751
San Francisco	AT&T Park	2000	41,915	$357	$498
Detroit	Comerica Park	2000	41,681	$326	$455
Houston	Minute Maid Park	2000	41,676	$329	$459
Milwaukee	Miller Park	2001	42,200	$400	$554
Pittsburgh	PNC Park	2001	38,362	$262	$363
Cincinnati	Great American Ballpark	2003	42,319	$291	$396
Philadelphia	Citizens Bank Park	2004	43,651	$458	$597
San Diego	Petco Park	2004	42,445	$453	$591
St. Louis	Busch Stadium	2006	43,975	$365	$434
Washington, DC	Nationals Park	2008	41,313	$701	$743
Minneapolis	Target Field	2010	39,504	$555	$590
Miami	Marlins Park	2012	36,742	$639	$617
Atlanta	SunTrust Park	2017	41,500	$672	$672

Analysis: Bay Area Council Economic Institute

Note: The cost in 2017 dollars is calculated using the Producer Price Index: Total Manufacturing from the Bureau of Labor Statistics

Sources : USA Today, Seattle Times, Forbes, Crain's Detroit Business, Houston Chronicle, Milwaukee Journal-Sentinel, Pittsburgh Post-Gazette, San Diego Union Tribune, Washington Post, Minneapolis Star-Tribune,

The chart on the previous page displays a list of 15 stadium projects completed around Major League Baseball since 1998. We have excluded the construction of Yankee Stadium and Citi Field, both in New York and opened in 2009, from this analysis, as they were by far the most expensive stadiums to construct in the league. We do not view New York as a comparable market to Oakland, nor will the costs of Yankee Stadium ($1.5 billion) and Citi Field ($900 million) be near the range that Athletics officials are exploring for their new ballpark.

The data reflects a clear trend in rising stadium construction costs. Even when the numbers are inflated to comparable 2017 dollars, we show that six of the seven most recent stadium constructions have cost $590 million or more. As stadiums add more luxury amenities and other features to entice visitors, total costs have escalated.

These findings align with initial estimates for stadium size and construction costs for the new Oakland stadium. Team officials are targeting a stadium capacity in the neighborhood of 35,000 at a total cost between $600 and $700 million. Such a seating capacity would make the new Oakland stadium one of the most intimate ballparks in the league. Only Tropicana Field in St. Petersburg and Progressive Field in Cleveland would have similar capacities, but both of those stadiums have been remodeled to limit the amount of available seating. Athletics team officials are trying to create a more intimate feel in the new ballpark after years of playing at Oakland Coliseum, where the seating configuration required for football forced even the closest seats away from the infield diamond.

The construction of a new stadium will have significant economic impacts for Oakland's economy. In the same way that construction on transportation infrastructure, hospitals, or school buildings triggers positive impacts for local contractors, the building of a stadium will require workers to excavate, erect the steel structure, pour concrete, and fit pipes and wires.

We estimate that approximately 2,000 construction jobs will be created over the two-year building period, equating to roughly three jobs produced per million dollars spent. This estimate was created using average hiring and cost data from recent stadium/arena projects in Detroit, Sacramento, Atlanta, Los Angeles, San Francisco, and Minnesota. Beyond the direct effects of the initial spending on construction salaries and some locally generated inputs, indirect effects also occur through household spending effects (e.g., when workers use their salaries to make purchases within Oakland).

These economic impacts from construction spending can be calculated using industry-specific multiples provided by the U.S. Bureau of Economic Analysis. Using the Regional Input-Output Modeling System (RIMS II), which tracks a dollar's movement through a regional economy, allows us to estimate the full economic impact of spending within a certain industry. These models also take into account "leakage," which happens when spending occurs outside of the

region. We use the multiplier for the "Non-residential Structures" industry within Alameda County, which is 1.5222.[1]

To arrive at our total impact estimate, we first take the $650 million of direct spending (the mid-point for the team's construction cost estimate) and find the percentage of costs related to the physical construction in Oakland. "Soft costs"—or those related to design, planning, and engineering—may be contracted to firms that are not Oakland-based, so we exclude them to be conservative in our analysis. We use the example of Citizens Bank Ballpark in Philadelphia to estimate these soft costs in Oakland. Of the $458 million in ballpark costs in Philadelphia, $112 million were soft costs, or approximately 25% of total expenditures. More recently, UNLV economists estimated that soft costs for a new Las Vegas football stadium would make up 20% of construction costs.

We use the more conservative 25% figure for soft costs on a new Oakland baseball stadium, meaning that $487.5 million would be spent on "hard costs"—related to the physical construction itself. We apply the 1.5222 multiplier to this number to produce an economic impact of $742 million. To yield the $768 million of constant dollar economic impact, this impact is split evenly over two years—the estimated number of years necessary to construct a new stadium—and then adjusted by a 2.3% rate for each year in order for us to achieve comparability with the spending figures at year one of operation calculated below.

III. DAY-OF-GAME ATTENDEE SPENDING

$1.544 billion

Total Economic Impact at Stadium Open (for the first 10 years of stadium operation)

During the 2016 regular season, the A's drew just over 1.5 million visitors to the Oakland Coliseum, giving the club the second lowest total attendance mark in Major League Baseball. Despite last year's relatively low attendance, the A's do have a very large fan base. In the 1990 season, during which the club won 103 games and reached the World Series, annual attendance reached 2.9 million—the third highest figure in the MLB for that year.

Attendance across Major League Baseball is highly dependent on team performance and the expectations for team performance. This dynamic plays out in the chart below, which shows 10-year attendance data for the Athletics. The team's paid attendance has hovered near 1.5 million for much of the decade, with the notable exceptions of the 2013 and 2014 seasons, both of which followed 90-plus-win seasons.

[1] The 1.5222 multiplier is extracted from the Bureau of Economic Analysis RIMS Model. It is a Type II multiplier, which is used when a high proportion of the employment generated by an investment will be locally sourced. We believe this to be the case for stadium construction in Oakland, as the A's are likely to prioritize local contracting.

The A's also generate visitor expenditures through food concessions, merchandise, parking, and stadium suite rentals. We aggregate these as part of our analysis.

Oakland Athletics Annual Attendance

	Paid Attendance	Turnstile Attendance	Wins
2007	1,921,834	1,458,475	76
2008	1,575,893	1,300,319	75
2009	1,407,921	1,051,881	75
2010	1,418,391	1,068,928	81
2011	1,476,781	1,052,307	74
2012	1,590,395	1,372,228	94
2013	1,809,302	1,513,396	96
2014	2,003,621	1,685,119	88
2015	1,768,312	1,340,030	67
2016	1,521,506	1,094,041	69
AVG	**1,649,396**	**1,293,672**	**79.5**

Data Source: Oakland Athletics
Analysis: Bay Area Council Economic Institute

Rather than focusing only on the first year of a new stadium (which will likely have very high economic impact), we instead model 10 years of new stadium operation. In order to model 10 years of future visitor expenditures in a new Oakland stadium, we make a number of informed assumptions:

- We assume that construction on a new ballpark will begin early in the 2020 decade and likely will take two years to complete.
- To estimate annual attendance in a new Oakland ballpark, we use historical attendance from MLB teams that have built new stadiums as a proxy. Using attendance data from 1988 to 2016, we analyze 12 teams that constructed new stadiums after 1998. The New York franchises were dropped for their lack of applicability and Washington, DC and Arizona were also dropped as those stadiums housed new or relocated teams. On average, these teams grew annual attendance by 35% in the first year of a new stadium compared to the previous year, and they grew attendance by 40% in the 10 years following a new stadium compared to the previous 10 years.
- Using these estimates and the assumption that attendance will grow slightly in the two years before a new stadium is opened (which would match the experience of other MLB franchises), we estimate first-year paid attendance at a new stadium at 2.55 million. Because attendance can fluctuate over time, we estimate annual average attendance of just under 2.4 million over the following nine years.
- We assume that turnstile attendance is 83% of paid attendance, slightly higher than the A's annual average since 2001 (79.24%). The 83% number is in line with percentages for new ballparks constructed by Major League Baseball franchises.

- Using the total gate receipts (per capita ticket price multiplied by paid attendance), we can then use MLB data collected by the Oakland Athletics to estimate a change in gate receipts in the first year of a new stadium. **Using the same new ballparks that we have analyzed previously, it was found that median gate and suite receipts rose by 1.98x in the first year of a new stadium compared to the average of the five previous years.** We apply this increase to find total gate receipts in the ballpark's first year. In the nine years beyond ballpark opening, we assume a conservative 2.5% increase in ticket price each year.
- Similar calculations are applied to food concessions and merchandise sales. We assume per capita spending on each remains constant at their five-year historical average for the seasons leading up to ballpark opening. **MLB data on new ballparks analyzed by the Athletics also shows a 2.20x median increase in total concession spending in year one of a new ballpark compared to the previous five years.**
- **Given that a ballpark site has yet to be determined, we exclude the economic impacts of parking, which are necessarily site-specific.**
- Premium seating purchases are a small portion of A's in-game expenditures in the Oakland Coliseum. We expect this to change in a new stadium as the team looks to create more premium experiences. **Using data from other new ballparks in similar markets, we are able to estimate spending in a new Oakland ballpark.**

A key feature of economic impact analyses is recognizing the true incremental benefit of an investment. Prominent economists often cite the "substitution effect" when analyzing the impact of professional sports teams. In applying the substitution effect, these economists believe that baseball-related spending crowds out other entertainment-related spending because most consumers have just a single entertainment budget—a portion of which is spent on baseball. Without a baseball team in a region, baseball-related spending gets reallocated to movie theaters, restaurants, and other leisure activities.

We agree with this assessment in part. Because our analysis focuses only on impacts within the City of Oakland, we would argue that a significant portion of A's day-of-game spending would not otherwise occur within the city. Instead, it would happen in places across the Bay Area, like Danville or San Ramon (two cities where a large share of A's ticket purchasers reside). Indeed, the A's currently draw a healthy percentage of fans from outside Oakland.

To estimate the share of day-of-game spending that is incremental to the Oakland economy, we first must make an assumption for the percentage of this spending that would have occurred within Oakland in absence of a baseball franchise. We rely on a 2006 analysis from the Anderson Economic Group that estimated the economic impact of the Detroit Tigers. This analysis uses a substitution effect of 25%, meaning that one quarter of all baseball-related spending would have occurred even if the baseball franchise did not exist. We believe that a lower 20% substitution effect is applicable to Oakland, as it is in line with the fan base's current regional distribution.

To find the economic impact from the Athletics that is truly incremental to Oakland, we scale down our previously calculated day-of-game spending metrics by 20%. To find the indirect economic impact, which is the additive economic benefit through inter-industry and household spending effects, we again apply the Regional Input-Output Modeling System from the U.S. Bureau of Economic Analysis. Whereas the 1.5222 multiplier for construction spending reflected a high proportion of local hiring, the multiplier for spending related to spectator sports is a much lower 1.2048.[2]

Assuming that day-of-game expenditures are used to support baseball operations, the lower multiplier is logical given that much of the money spent during a baseball game does not get filtered widely across the economy. Instead, baseball players and management may save much of their money or spend it elsewhere. Lastly, we discount the annual impacts over 10 years back to the first year of operation to arrive at $1.544 billion of total economic activity.

IV. FACILITY OPERATING SPENDING

$742 million

Total Economic Impact at Stadium Open (for the first 10 years of stadium operation)

The last portion of the economic impact encompasses spending made by the Athletics to operate the stadium and the administration of the team. In 2015, the A's made the following stadium-related expenditures:

- Stadium Operations (including parking, janitorial, maintenance, and security): $11,169,000
- Marketing, Publicity, & Ticket Operations: $6,977,000
- General & Administrative: $25,115,000

While these spending categories are the products of other expenditures (corporate sponsorships, revenue provided by MLB, and local TV and cable contracts), they represent direct effects to the local economy. Using the data analyzed by the Athletics from franchises that have opened a new stadium dating back to 1999, we can estimate how these expenses may shift in a new Oakland stadium.

In the first year of operation for a new stadium, data from other teams shows the following median increases over the prior five years: Stadium Operations - 2.10x; Marketing, Publicity, &

[2] The 1.2048 multiplier is extracted from the Bureau of Economic Analysis RIMS Model. It is a Type I multiplier, which is more conservative than the Type II multiplier used for construction spending. Because we believe that a significant portion of the day-of-game spending will not be recycled back into the local economy, we have chosen this more conservative approach. It is also much more conservative than multipliers used in recent economic analyses completed by the Detroit Tigers (1.6 multiplier) and the Milwaukee Brewers (2.2 multiplier).

Ticket Operations - 1.26x; General & Administrative - 1.20x. These increases result in more than $62 million of annual operating expenses, as depicted in the chart below.

Projected Oakland A's Stadium Operating Expenses

	Stadium Operations	Marketing & Ticketing	Administrative	TOTAL
A's 2015 Reported Spending	11,169,000	6,977,000	25,115,000	$ 43,261,000
New Stadium Increase	2.10	1.26	1.20	1.44
Adjusted Annual Total	23,454,900	8,791,020	30,138,000	$ 62,383,920

Data Source: Oakland Athletics

Analysis: Bay Area Council Economic Institute

We take this annual $62 million spending in the first year of new stadium operation and expect it to grow by the rate of inflation over the initial 10 years (we assume a 2.0% inflation rate). Much like in the previous spending categories of construction and day-of-game spending, these expenditures will also have a multiplier effect on the Oakland economy. In the case of non-player-related operating expenses for the A's, we apply a multiplier of 1.2048 from the Bureau of Economic Analysis RIMS Model.

The 1.2048 multiplier used is for the "Spectator Sports" sector and represents a very conservative economic multiple that assumes the majority of salaries paid to operations staff and contractors will be spent outside of Oakland. Lastly, we take the "Total Economic Impact" column below and discount the impacts back to the first year of operation to arrive at $742 million of total economic activity.

Estimated Growth in New A's Stadium Expenses

Year	Calculated Operating Expenses	Expenses w/ Inflation @ 2%	Total Economic Impact	Constant Value Economic Impact
Yr. 1	62,383,920	62,383,920	$ 75,160,147	$ 75,160,147
Yr. 2	62,383,920	63,631,598	$ 76,663,350	$ 74,939,736
Yr. 3	62,383,920	64,904,230	$ 78,196,617	$ 74,719,971
Yr. 4	62,383,920	66,202,315	$ 79,760,549	$ 74,500,851
Yr. 5	62,383,920	67,526,361	$ 81,355,760	$ 74,282,373
Yr. 6	62,383,920	68,876,889	$ 82,982,875	$ 74,064,537
Yr. 7	62,383,920	70,254,426	$ 84,642,533	$ 73,847,339
Yr. 8	62,383,920	71,659,515	$ 86,335,383	$ 73,630,777
Yr. 9	62,383,920	73,092,705	$ 88,062,091	$ 73,414,851
Yr. 10	62,383,920	74,554,559	$ 89,823,333	$ 73,199,559
TOTAL ECONOMIC IMPACT				**$ 741,760,141**

Analysis: Bay Area Council Economic Institute

Note: Total economic impacts are calculated by multiplying inflated expenses by 1.2048.

V. CALCULATING THE CONSTANT VALUE OF ALL ECONOMIC IMPACTS

We have now calculated economic impacts across three separate spending categories—construction, day-of-game, and ballpark operations. Because we have chosen to calculate total economic impacts over 10 years of new stadium operation, we adjusted each annual number by a discount rate in order to find an aggregate effect over the 10-year period (plus the two years of construction prior to the stadium opening). We use an interest rate of 2.3% (equivalent to the current 10-year U.S. Treasury rate) to calculate a total economic impact of a new stadium at $3.05 billion over 10 years of operation.

Aggregate Economic Impacts of a New Oakland Stadium

	Construction Year 1	Construction Year 2	Year 1	Year 2	Year 3	Year 4
Construction Economic Impact	371,036,250	371,036,250	0	0	0	0
Day-of-Game Economic Impact	0	0	162,883,490	159,453,406	162,409,883	165,455,054
Ballpark Operations Economic Impact	0	0	75,160,147	76,663,350	78,196,617	79,760,549
Total Economic Impact	371,036,250	371,036,250	238,043,636	236,116,756	240,606,499	245,215,603
Present Value at Year 1	388,300,196	379,570,084	238,043,636	230,808,168	229,909,061	229,045,202

	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Construction Economic Impact	0	0	0	0	0	0
Day-of-Game Economic Impact	168,591,580	171,822,201	175,149,742	178,577,109	182,107,296	185,743,390
Ballpark Operations Economic Impact	81,355,760	82,982,875	84,642,533	86,335,383	88,062,091	89,823,333
Total Economic Impact	249,947,340	254,805,077	259,792,275	264,912,492	270,169,387	275,566,722
Present Value at Year 1	228,215,945	227,420,656	226,658,719	225,929,532	225,232,506	224,567,067

TOTAL PRESENT VALUE ECONOMIC IMPACT	**3,053,700,771**

VI. NON-QUANTIFIABLE COMMUNITY IMPACTS

The preceding analysis has quantified the economic impacts of a new baseball stadium in Oakland. We have only included spending that we can reasonably estimate. Depending on its location, a new stadium might also catalyze new housing and commercial developments, attract new residents and businesses, and bring increased tax revenues to local government. These items are more difficult to quantify given the early stages of the stadium discussion.

One other key point of local impact is in the A's interaction with the community. Civic pride in the team is a function of its success on the field and its involvement with the community off the field. The A's franchise has historically been a large supporter of youth baseball and softball programs, local education programs, and numerous non-profits. The team is sharpening its engagement focus on Oakland as it is set to become the city's only professional sports team. Future local involvement will focus on Oakland Pride and include programs in the arts, music, and community beautification.

The A's most visible current programs are in education; three of which are described below:

- Mathletics is the A's longest-running program, with over 200,000 students in grades first through eighth participating since 2003. The A's distribute Mathletics workbooks in schools, which utilize baseball statistics and rules to teach students math concepts.
- The Home Run Readers program helps students set reading goals and rewards them for achieving those goals with an opportunity for schools to receive player visits and for students to attend a game.
- The Green Stampede Homework Club allows students from across Oakland to come to the Coliseum to receive homework help from tutors on select game dates. After the students have finished their homework, they are able to watch that night's game.

Outside of the classroom, the A's partner with PG&E each season to refurbish two local Little League or high school baseball or softball fields. To date, the A's have improved 17 fields across the region. In 2017, Greenman Field in Oakland and Tennyson High School in Hayward will receive improvements.

The A's also make a key community impact by supporting local non-profit groups. Through auctions and other donation programs, the A's collect approximately $600,000 per year, funds that are then matched so that the team can make approximately $1.2 million in donations annually. The A's have been recent supporters of the Alameda County Food Bank, Boys and Girls Clubs, and Oakland Promise, in addition to numerous other smaller organizations.

VII. COMPARING BASEBALL STADIUM ECONOMIC IMPACTS

To better understand if our model adequately captures the economic impact of the Athletics on Oakland's economy, we can look at comparable studies for validation. Other analyses have shown an annual economic impact between $167 million and $327 million for baseball franchises. While these studies have incorporated slightly different economic multipliers and varying methodologies, our projected impact of $238 million in year one of a new stadium does fall within this range.

We have also run our model on the 2016 Athletics season at the Oakland Coliseum as another means of comparison. Using our day-of-game spending and ballpark operations models, we

arrive at an impact of approximately $125 million for the 2016 season. Taking our two analyses together, we calculate that the first season in a new stadium will result in a 90% increase in economic impact for the City of Oakland, as compared to the 2016 season.

Annual Economic Impacts for Baseball Franchises

City	Oakland	Oakland	Milwaukee	Baltimore	St. Louis	Atlanta
Team	Athletics	Athletics	Brewers	Orioles	Cardinals	Braves
Analysis Year	2022	2016	2004	2006	2006	2017
Economic Impact (in millions)	$238.04	$125.23	$327.27	$166.93	$320.00	$200.00

About the Economic Institute

Since 1990, the Bay Area Council Economic Institute has been the leading think tank focused on the economic and policy issues facing the San Francisco/Silicon Valley Bay Area, one of the most dynamic regions in the United States and the world's leading center for technology and innovation. A valued forum for stakeholder engagement and a respected source of information and fact-based analysis, the Institute is a trusted partner and adviser to both business leaders and government officials.

Through its economic and policy research and its many partnerships, the Institute addresses major factors impacting the competitiveness, economic development and quality of life of the region and the state, including infrastructure, globalization, science and technology, and health policy. It is guided by a Board of Trustees drawn from influential leaders in the corporate, academic, non-profit, and government sectors. The Institute is housed at and supported by the Bay Area Council, a public policy organization that includes hundreds of the region's largest employers and is committed to keeping the Bay Area the world's most competitive economy and best place to live. The Institute also supports and manages the Bay Area Science and Innovation Consortium (BASIC), a partnership of Northern California's leading scientific research laboratories and thinkers.

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