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CLARKONOMICS: THE IMPACT OF CAITLIN CLARK & HAWKEYE WOMEN'S BASKETBALL ON IOWA'S ECONOMY

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# **ABOUT THE AUTHOR**



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### ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Iowa's economy. CSI is at the forefront of important discussions concerning the future of free enterprise and aims to have an impact on the issues that matter most to Iowans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Iowans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the economy and individual opportunity.

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CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

# INTRODUCTION

University of Iowa's homegrown star, Caitlin Clark, began her college basketball career playing in empty arenas at the height of the COVID-19 pandemic. Now she competes in sold-out arenas wherever she goes—and for good reason. During her 4-year college career, Clark has broken countless records on the court and brought an unprecedented level of excitement to women's basketball. Meanwhile, Iowa has felt her impact inside and outside of the arena. The athlete's talent and celebrity has led to soaring attendance at games, and larger crowds generate more economic activity. This study is not the first to explore the economics of Clark's superstardom, but it takes a unique approach. Past reports and news coverage have highlighted the money behind Clark's brand deals, ticket sales, and media coverage, along with other anecdotes of economic impact. In contrast, this report takes a data-driven approach to quantifying the impact of Iowa women's basketball and Caitlin Clark's extraordinary college career on the economy of the state of Iowa.

# **KEY FINDINGS**

#### ESTIMATED TO HAVE CONTRIBUTED BETWEEN

## \$14.4 AND \$52.3 MILLION

TO IOWA'S ECONOMY.

ATTENDANCE AT ALL HAWKEYE WOMEN'S BASKETBALL GAMES



OUT-OF-STATE ATTENDANCE GREW TO **15%** OF ATTENDEES DURING HER SENIOR YEAR

"CAITLIN CLARK EFFECT" GENERATED AN ESTIMATED



Soaring attendance at Iowa women's basketball games during Caitlin Clark's career is estimated to have contributed between \$14.4 and \$52.3 million to Iowa's economy. That is enough to—

- Purchase between 1,418 and 5,176 acres of Iowa cropland.
- Pay tuition for between 1,306 and 4,767 students at the University of Iowa this year.
- Cover the costs of the University of Iowa's planned hospital and clinic emergency department expansion, or the recently opened University of Iowa Stanley Museum of Art.
- Buy every lowan a ticket to the state fair or buy every fairgoer 1 to 4 funnel cakes.

Attendance at all Hawkeye women's basketball games played within lowa was about **2.8 times greater her senior year** than before she joined the squad, **growing from about 125,000 to 350,000 attendees.** 

For Hawkeye women's basketball Big Ten regular season home games, out-of-state attendance grew from just over 10% of all attendees before Clark to **nearly 15% of all attendees** during her senior year—a nominal growth of over **38,000 out-of-state fans**.

Over the last three seasons, the increase in attendance attributable to the "Caitlin Clark effect" generated an estimated \$82.5 million in increased consumer spending. For comparison, that's nearly double the state revenue collected from the 2021 Iowa State Fair.

# THE CAITLIN CLARK EFFECT

On January 29, 2023, after a narrow home-game victory against the University of Nebraska, the *Hawkeyes Wire* described the so-called "Caitlin Clark effect" for the first time in print.<sup>1</sup> The Iowa women's basketball team had won the 2022 Big Ten tournament, and interest in the team was on the rise, an effect credited to Iowa's star player Caitlin Clark. Fast forward a year. In a February 15th article on its website, the NCAA described the effect: "Women's basketball has seen a rocketlike rise in popularity in recent years, and Iowa senior Caitlin Clark — now the NCAA women's all-time leading scorer — has provided a lot of the fuel."<sup>11</sup> Today, every basketball fan in the country knows about the Caitlin Clark effect. The phenomenon grew out of a remarkable college basketball career.

As a freshman, Clark led the NCAA Division I in scoring, broke the Big Ten single-game record for points and 3-pointers, and was named Big Ten Freshman of the Year. As a sophomore, she once again led NCAA Division I women's basketball in scoring, including leading in free throws and triple-doubles, and she became the fastest Big Ten player to reach 1,000 points. She broke the women's single-game scoring record for Carver-Hawkeye arena, and she became the first woman to lead Division I points and assists per game in a single season. Her junior year brought more new accomplishments and honors. Today, every basketball fan in the country knows about the Caitlin Clark effect. The phenomenon grew out of a remarkable college basketball career.

This season she made history again and again. Iowa's superstar athlete became University of Iowa's and the Big Ten's all-time leader in scoring and assists and the player to achieve the most 3-pointers in a single season by any male or female NCAA Division I player, surpassing the previous record-holder from the 2007-2008 season—Steph Curry.<sup>III</sup> And on March 3, 2024, with immense anticipation and fanfare, the Iowa senior became the all-time leading scorer for NCAA Division I basketball—men's and women's. She won Big Ten player of the year three years in a row and the Naismith Player of the Year award. A more comprehensive list of her records and accomplishments can be found on ESPN.com.<sup>IV</sup>

Leading her team to back-to-back-to-back Big Ten titles in 2022, 2023, and 2024 and a spot in the NCAA tournament final last year, her talent and ability to awe crowds has led to record women's basketball ticket sales and attendance. After the team won the Big Ten tournament and earned second-place in the women's NCAA March Madness tournament in 2023, home game tickets for Clark's senior year sold out for the first time in Iowa women's basketball history. Tickets to the March 3, 2024 Iowa vs. Ohio State game saw ticket sales on the secondary market ranging from \$358 to \$6,489.<sup>v</sup> The New York Times reported that a visit from the Hawkeyes sent ticket sales soaring at away games, noting that Clark sold out the arena at every away game she played.<sup>vi</sup> The Big Ten women's basketball tournament sold out this season for the first time in the history of the event, and the first two NCAA tournament games scheduled for the Carver-Hawkeye arena in Iowa City sold out immediately. These ticket sales are a testament to the Caitlin Clark effect; they are also the starting point for measuring Clark's impact on Iowa's economy.

## GAME ATTENDANCE: THE ECONOMIC CATALYST

A quick internet search for "Caitlin Clark" will generate countless results from news outlets on economic and monetary outcomes of the Clark effect. A recent article on CNN.com with the headline "Caitlin Clark-onomics and the new era of profitability in college sport" calls Clark an "an economic powerhouse," highlighting brand NIL (name, image, likeness) deals, TV ratings, merchandise sales, and high ticket prices to watch the Iowa star play.vii The report and others like it cite the nominal value of Clark's NIL deals, the cost of tickets, and other anecdotal data; however, they fail to translate those numbers into an economic impact of Clark's success on Iowa's economy. Doing so first requires measuring the growth in the sport attributable to Clark.

Because the report aims to determine the economic impact on Iowa, it begins with the growth in attendance at games where Clark played in the state of Iowa.

Simply measuring the impact of Iowa women's basketball would not uncover the economic impact of Clark specifically. Instead, any useful study must first determine the portion of related economic activity attributable to the Caitlin Clark effect. This report does so by tracking changes in attendance. Because the report aims to determine the economic impact on Iowa, it begins with the growth in attendance at games where Clark played in the state of Iowa, whether at Carver-Hawkeye arena in Iowa City or elsewhere within the state.

The 2019-20 season was the last season before Clark took the court, but the effects of the pandemic make it an unsuitable baseline year. First, the NCAA cancelled the 2020 tournament due to the pandemic. Furthermore, the data suggest attendance may have fallen at the end of the regular season over early fears of the COVID-19 virus's arrival in the United States. Therefore, the study uses the 2018-19 season as the baseline for game attendance prior to Clark's collegiate career.

Attendance at Iowa Women's Basketball Games Held in Iowa					
	Pre-Clark Baseline	Clark Sophomore - Senior Years			
Season	2018-19	2021-22	2022-23	2023-24	
Total Season attendance for games held in Iowa	124,704	159,010	208,353	346,450	
Nominal Increase over 2018-19		34,306	83,649	221,746	
% Increase over 2018-19		27.51%	67.08%	177.82%	
Average per Game	6,563	7,951	10,966	16,498	
Nominal YoY Change		39,026	49,343	138,097	
% YoY Increase		32.53%	31.03%	66.28%	

Additionally, Clark began playing for Iowa in the 2020-21 season, but arenas remained empty during her freshman year due to COVID-19 restrictions. The study therefore assumes she began having a meaningful impact on game attendance starting in the 2021-22 season.

Attendance totaled nearly 125,000 live spectators over 19 pre-season, regular season, and tournament games played within the state of Iowa during the baseline year (2018-19). That number nearly tripled from the baseline year to Clark's senior year. The average attendance per game in Table 1 exceeds the Carver-Hawkeye arena maximum capacity of approximately 15,000 because the total includes an exhibition game played on October 15, 2023, in Kinnick Stadium with a record 55,600 attendees. While that extra game brings total games held in Iowa in 2023-24 to 20, one more than in the baseline year, the game occurred and attracted a large crowd due to Clark's immense popularity and the demand to watch her

Attendance at Iowa Women's Basketball Games Held in Iowa						
	Pre-Gustafson Baseline	Gustafson Freshman - Senior Years				
Season	2014-15	2015-16	2016-17	2017-18	2018-19	
Total Season Attendence for games held in Iowa	98,547	91,770	84,195	104,148	124,704	
Nominal Increase over 2018-19		-6,777	-14,352	5,601	26,157	
% Increase over 2018-19		-6.88%	-14.56%	5.68%	26.54%	
Average per Game	5,187	4,830	4,431	5,481	6,563	
Nominal YoY Change		-6,777	-7,575	19,953	20,556	
% YoY Increase		-6.88%	-8.25%	23.70%	19.74%	

### TABLE 2

Source: hawkeyesports.com

play going into a sold-out season. Attendance data shows attendance at Iowa women's basketball games increasing sharply during Clark's sophomore and junior years before shooting the moon this season. This can only be explained by the so-called "Clark effect."

Notably, attendance at Iowa women's basketball games grew during the time in which another standout athlete, Megan Gustafson, played for the school. The gifted player helped lead the team to the quarterfinals in the 2017 Women's National Invitation Tournament, and during her senior year (2018-19) she led the Hawkeyes to win the Big Ten tournament and to the elite eight in the NCAA March Madness tournament. The following table shows the change in attendance from the year before Gustafson began playing (2014-15) to her senior year (2018-19).

The data suggest that the presence of an unusually talented player and having a team in the running for winning major tournaments increases interest in the game and boosts attendance, as one would expect. Over Gustafson's college career, average attendance at games within Iowa rose by over 26%, from just under 5,187 to 6,563, or from a total of 98,500 attendees over 20 games to 124,700 attendees over 20 games. Notably, Gustafson's senior year is the baseline year from which this study measures the attendance increase attributable to Clark. Attendance growth from the Clark effect, however, has been exceptional. From where Gustafson left off, Iowa women's basketball has grown attendance by an additional 178% during Clark's tenure.

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## CLARK'S ECONOMIC IMPACT TO IOWA

The true and full economic impact of Caitlin Clark within the state of Iowa cannot be measured. For example, the star generated record TV viewership this season.<sup>viii</sup> None of the major broadcasters are based in Iowa, but some of the money she generated for them surely made its way back into Iowa's economy. How much? Where did it go? Or think of the scores of young women Clark has inspired to chase their own dreams. What impact has that had and will that have on the economy? How many young people chose to pursue basketball and stay out of trouble after watching Clark play? Such influence has economic implications. The thought experiments are endless. Furthermore, much of the anecdotal data the media has reported on has little or no direct measurable impact on the state's economy. For example, Clark has landed a reported \$3.1 million in NIL deals, but there's no publicly available data on whether any of that money has reentered Iowa's economy. This report therefore necessarily limits its scope to direct consumer spending and its effect on gross state product (state GDP).

New basketball game attendees attributable to Clark brought increased economic activity to the state. Based on estimates provided by Think Iowa City and the Iowa City Area Sports Commission, the typical visitor spends an average of \$227.50 into Iowa economy when attending a game if they require lodging, or \$133.75 if they do not.<sup>ix</sup> In addition to lodging, expenditures include transportation, food and beverage, retail, and recreation. During the 2018-19 season, an estimated 10.3% of game attendees came from out of state based on data provided by Think Iowa City.<sup>x</sup> During the current season, that number increased to 14.8%, growing out-of-state attendance from approximately 13,000 to 51,000. This study includes relatively small impacts from increased student spending, as the university limits student tickets. In addition, it presumes typical spending from non-student attendees far exceeds typical spending by student game-goers. Together, this data provides a reliable estimate of direct consumer spending by new attendees who otherwise would not have engaged in the same spending related to attendance at Iowa women's basketball games.

Direct Consumer Spending Attributable to Caitlin Clark						
Season	2021-22	2022-23	2023-24	Total		
Resident Spending	\$15,465,142	\$21,201,823	\$24,716,005	\$61,382,970		
Non-Resident Spending	\$5,353,599	\$7,014,894	\$8,734,507	\$21,103,000		
Total	\$20,818,741	\$28,216,717	\$33,450,512	\$82,485,969		

The total of \$82.5 million in direct consumer spending over three years has secondary positive economic effects throughout Iowa's economy with impacts concentrated in Iowa City, and to a lesser extent, the other cities in which games were hosted. As a reference point, this amount of spending eclipses state fair revenue collected by the Iowa State Fair Authority of just \$47.5 million in 2021, the last year for which data is available.<sup>xi</sup> Far more spending came from residents, but the greatest impact per dollar spent came from non-residents who bring new dollars into Iowa's economy when they come for a game. That the share of attendees coming from out of state went up as Clark rose to prominence significantly increases the economic impact of the Caitlin Clark effect on the state of Iowa. Consumer spending by Iowa residents also generates value in the economy, but the magnitude can vary significantly depending on how much of that money is truly new spending and how much they would have spent into the Iowa economy anyways.

To determine the impact this spending had on state GDP, CSI ran two separate economic forecast scenarios using REMI (Regional Economic Modeling, Inc.). In each scenario, CSI used the nominal dollar inputs in Table 3 under the policy variable "tourism spending," separating the inputs between "resident spending" and "non-resident" spending. The forecast for scenario 1 in Table 5 uses REMI's "new consumption reallocation" variable to assume all resident spending related to game attendance is simply a reallocation of money game attendees would have spent on something else within Iowa had they not attended the game. This reallocation variable buffers the economic impact of resident spending in the model for scenario 1. Scenario 2 assumes the opposite—that all resident spending is new spending. The truth probably lies somewhere in the middle.

### TABLE 4

Clark's Impact on Iowa's GDP					
2021-22	2022-23	2023-24	Total		
\$3.1 million	\$4.8 million	\$6.5 million	\$14.4 million	Scenario 1	
\$12.3 million	\$18 million	\$22 million	\$52.3 million	Scenario 2	

CSI's economic modeling shows that Iowa's economy saw a boost to the state's GDP of between \$14.4 million and \$52.3 million as a direct result of the Caitlin Clark effect. To put those numbers in perspective, this is enough to purchase between 1,418 and 5,176 acres of Iowa cropland.<sup>xii</sup> It could cover the costs of the University of Iowa's planned hospital and clinic emergency department expansion, or the recently opened University of Iowa Stanley Museum of Art.<sup>xiii</sup> It could cover tuition for between 1,306 and 4,767 students at the University of Iowa this year.<sup>xiv</sup> Assuming an impact directly in the middle of the range (\$33.3 million), the value of Clark's impact on the state economy is enough to buy every Iowan tickets to the state fair at current prices with \$1.6 million leftover for funnel cakes buy every 2023 fairgoer between 1 and 4 funnel cakes.<sup>xv</sup> Needless to say, it is a remarkable contribution to Iowa's economy for a hoops player from West Des Moines.

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