INFORMED DECISIONS™

Jennifer Robinson Associate Director

John C. Downen Senior Advisor

Andrea Thomas Brandley Research Associate

> Jennifer Leaver Senior Tourism Analyst

2030 Olympic and Paralympic Winter Games in Utah Estimated Economic and Fiscal Impact

The proposed 2030 Olympic Winter Games in Utah would make a significant economic impact.

May 2022



411 East South Temple Street Salt Lake City, Utah 84111 801-585-5618 gardner.utah.edu

Supplemental Information

The Kem C. Gardner Policy Institute will be releasing a social, demographic, and environmental supplement to this report in summer 2022. While many of these contributions are difficult to quantify, they are instructive to describe, even in summary form, because of their contribution to the larger economic context and success of the Games. The supplement will include contextual information about Utah demographics, and descriptive information about select social and environmental aspects of hosting the Games, including volunteerism, charitable giving, social capital, social inclusion, and environmental sustainability. This supplement will be available at www.gardner.utah.edu.



2030 Olympic and Paralympic Winter Games in Utah Estimated Economic and Fiscal Impact

Analysis in Brief

The hosting of another Olympic and Paralympic Winter Games in Utah in 2030 would make a significant economic impact to the state, generating jobs, income, and economic output. This additional impact would build upon the significant success of the 2002 Games, including the subsequent growth in the state's travel and tourism and sports and entertainment industries.

Annual Personal Income Impacts of 2030 Winter Olympics in Utah, 2024–2031

(Millions of Constant 2021 Dollars)



Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data using REMI Pl+ v2.5.0 $\,$

Key Findings

- Economic impact of 2030 Games Estimated to create a cumulative total economic impact of \$3.9 billion in output, 30,000 job-years of employment, and \$1.5 billion in personal income in Utah. While significant, this impact is less than the 2002 Games because the venues are already in place, requiring less new construction.
- Fiscal impact A 2030 Games is estimated to generate \$22.0 million in net state revenues and \$42 million in net local revenues
- Visitation increases Skier days, national park visits, accommodation sales, airport passengers, leisure and hospitality employment, and visitor spending all increased significantly when comparing the 15 years before and 15 years after the 2002 Games. These impacts range from a 45% increase in skier days to a 70% increase in taxable accommodation sales.
- New spending A 2030 Olympic Winter Games in Utah would include an estimated \$3.2 billion in direct expenditures from broadcast rights, visitors, federal security expenditures, and other sources. These expenditures are offset by out-of-state purchases, in-state revenue sources, and displacement of skier visits.

Economic Impacts of the 2030 Winter Olympics in Utah, 2024–2031

(Impacts are based on 2024-2031 economic activity; constant 2021 dollars)



Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data, using the REMI PI+ model v2.5.0

Table of Contents

Potential Economic and Fiscal Impacts of the 2030
Olympic Winter Games 3
Economic Impacts 3
Capital Investment 4
Fiscal Impacts
Appendix A: Economic and Fiscal Impact Methodology 5
Estimating Economic Impacts 5
Extimating Fiscal Impacts5
Appendix B: Impact of the 2002 Olympic Winter Games 6
Economic Impact Results6
Travel and Tourism Results6
Highlights of the Visitation Analysis7

Figures

Figure 1: Annual Output Impacts of 2030 Winter	
Olympics in Utah, 2024–2031	. 3
Figure 2: Annual Employment Impacts of 2030 Winter	
Olympics in Utah, 2024–2031	. 3
Figure 3: Annual Personal Income Impacts of 2030	
Winter Olympics in Utah, 2024–2031	. 3
Figure 4: Economic Impacts of the 2002 Olympic	
Winter Games in Utah	. 6

Tables

Table 1: Economic Impacts of the 2030 Winter Olympics
in Utah, 2024–2031 3
Table 2: Budgeted Capital Investments for 2030 Winter
Olympic Games4
Table 3: 2030 Winter Olympic Games Estimated State
and Local Fiscal Impacts, 2024–20314
Table 4: Travel and Tourism Performance Before and
After the 2002 Olympic Winter Games 6

Potential Economic and Fiscal Impacts of the 2030 Olympic Winter Games

Salt Lake City enjoys the advantage of looking back on the lessons learned from hosting the 2002 Olympic Winter Games when examining the potential economic impacts of hosting the games in 2030. The 2002 Games contributed to economic growth in Utah and left a lasting legacy that enriches the state and its residents.

The potential impacts of a 2030 Games include economic outputs of \$3.9 billion, 30,002 job-years of employment, and \$1.5 billion in personal income.

Economic Impacts

The Salt Lake City-Utah Committee for the Games (OCOG) budget for a 2030 Games is \$1.7 billion (in 2030 dollars). Adding rights fees paid to the United States Olympic & Paralympic Committee, contingency and legacy amounts, non-OCOG expenditures, including federal security expenditures, and visitor spending, direct expenditures are expected to total almost \$3.2 billion. After adjusting for purchases from out-of-state companies, in-state revenue sources, and the displacement of regular skier visitation, net new direct expenditures in Utah total an estimated \$2.2 billion (\$1.8 billion in 2021 dollars).

Figure 1: Annual Output Impacts of 2030 Winter Olympics in Utah, 2024–2031

(Millions of Constant 2021 Dollars)



Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data using REMI PI+ v2.5.0 $\,$

Net-new direct expenditures spur additional economic activity in the region as they stimulate purchases from local suppliers, who in turn hire employees and make purchases from other local businesses. These rounds of activity produce indirect economic effects, and then direct and indirect employees spend

Figure 2: Annual Employment Impacts of 2030 Winter Olympics in Utah, 2024–2031



Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data using REMI PI+ v2.5.0 $\,$

Figure 3: Annual Personal Income Impacts of 2030 Winter Olympics in Utah, 2024–2031

(Millions of Constant 2021 Dollars)



Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data using REMI Pl+ v2.5.0 $\,$

Table 1: Economic Impacts of the 2030 Winter Olympics in Utah, 2024–2031

(Dollar amounts in millions of 2021 dollars)

Impact	2024	2025	2026	2027	2028	2029	2030	2031	Total
Employment	50	296	733	1,768	3,562	7,207	15,691	696	30,002
Personal Income	\$3.7	\$17.8	\$43.9	\$108.8	\$217.8	\$448.0	\$649.0	\$38.7	\$1,527.6
Output	\$6.9	\$41.3	\$103.1	\$249.6	\$498.7	\$1,050.6	\$1,786.5	\$135.5	\$3,872.1

Source: Kem C. Gardner Policy Institute analysis of Utah OCOG budget data, using the REMI PI+ model v2.5.0

a portion of their wages in the local economy, further generating "induced" effects. The total economic impact of an event is the sum of these net-new direct, indirect, and induced effects.

Between 2024 and 2031 the 2030 Games are estimated to create cumulative total economic impacts in Utah of \$3.9 billion in output (in 2021 dollars), 30,002 job-years of employment, and \$1.5 billion in personal income (see Table 1 and Figures 1–3).

Capital Investment

Because Utah hosted the 2002 Games and has maintained and continued to use the facilities since then, the future OCOG expects to spend much less on capital investment in preparation for the 2030 games. Capital investment for the 2002 Games equaled approximately \$478.4 million in 2021 dollars; the 2030 Games are expected to require \$23.1 million in capital investments.

The largest investments will be in improvements to the sliding track, a new equipment maintenance building, Nordic lift renovation/replacement, and a sports turf field for Nordic flats at the Utah Olympic Park, plus ski trails, parking and road improvements, and course lighting at Soldier Hollow (see Table 2).

Fiscal Impacts

Fiscal impacts derive from the additional income, employment, output and population generated by the increased economic activity associated with the preparations and hosting of the 2030 Games, as well as sales taxes on spending by visitors to the 2030 Games. Cumulative estimated state fiscal impacts from 2024 through 2031 amount to new state revenues of \$99.9 million (in 2021 dollars) and expenditures of \$78.0 million, for net state revenues of \$22.0 million. Estimated local fiscal impacts comprise \$62.2 million in new revenues and \$20.0 million in expenditures, for net local revenue of \$42.2 million (see Table 3).

Both state and local net revenue impacts are positive in every year except 2031, when expenditures exceed revenues. This arises because the economic activity generated by the 2030 Games declines by more than 90% from 2030 to 2031, whereas the population that the increased activity attracted to the state shrinks by only 23%–35%. In the Gardner Institute's fiscal model, it is the economic impacts—namely, employment, personal income and industry output—that generate tax revenues and the population impacts that generate expenditures. Therefore, between 2030 and 2031 revenues fall faster than expenditures.

Table 2: Budgeted Capital Investments for 2030 Winter Olympic Games (2021 dollars)

Item/Area	Estimated Cost
Utah Olympic Oval	\$1,200,000
Utah Olympic Park	\$15,575,000
Soldier Hollow	\$6,350,000
Total Permanent Construction Expenditures	\$23,125,000
Source: Utah OCOG	

Table 3: 2030 Winter Olympic Games Estimated State and Local Fiscal Impacts, 2024–2031

(Millions of constant 2021 dollars)

Impact	2024	2025	2026	2027	2028	2029	2030	2031	Total
Estimated State Fiscal Impacts									
Personal Income Tax Revenues	\$0.1	\$0.4	\$1.1	\$2.7	\$5.3	\$10.9	\$15.8	\$0.9	\$37.2
Corporate Income Tax Revenues	\$0.0	\$0.0	\$0.1	\$0.2	\$0.5	\$1.0	\$1.6	\$0.1	\$3.5
State Sales Tax Revenues	\$0.1	\$0.4	\$1.0	\$2.6	\$5.2	\$10.6	\$38.3	\$0.9	\$59.2
Total State Revenues	\$0.2	\$0.9	\$2.2	\$5.5	\$10.9	\$22.5	\$55.8	\$1.9	\$99.9
State Non-Education Expenditures	\$0.0	\$0.2	\$0.6	\$1.5	\$3.3	\$6.8	\$14.5	\$10.8	\$37.7
State Public Education Expenditures	\$0.0	\$0.1	\$0.4	\$0.9	\$2.0	\$4.2	\$9.0	\$6.9	\$23.5
State Higher-Education Expenditures	\$0.0	\$0.1	\$0.3	\$0.7	\$1.5	\$3.1	\$6.6	\$4.3	\$16.7
Total State Operating Expenditures	\$0.1	\$0.4	\$1.2	\$3.1	\$6.8	\$14.2	\$30.1	\$22.1	\$78.0
Net State Operating Revenue	\$0.1	\$0.5	\$1.0	\$2.4	\$4.1	\$8.4	\$25.7	(\$20.2)	\$22.0
Estimated Local Fiscal Impacts									
Local Sales Tax Revenues	\$0.0	\$0.1	\$0.2	\$0.5	\$0.9	\$1.9	\$21.2	\$0.2	\$25.0
Property Tax Revenues	\$0.1	\$0.4	\$1.0	\$2.5	\$5.0	\$10.2	\$17.0	\$0.9	\$37.2
Total Local Revenues	\$0.1	\$0.5	\$1.2	\$3.0	\$5.9	\$12.2	\$38.2	\$1.1	\$62.2
County Expenditures	\$0.0	\$0.1	\$0.2	\$0.5	\$1.0	\$2.1	\$4.4	\$3.3	\$11.4
Countywide Public Education Expenditures	\$0.0	\$0.0	\$0.1	\$0.3	\$0.7	\$1.5	\$3.3	\$2.5	\$8.6
Total Local Operating Expenditures	\$0.0	\$0.1	\$0.3	\$0.8	\$1.7	\$3.6	\$7.7	\$5.8	\$20.0
Net Local Operating Revenue	\$0.1	\$0.4	\$0.9	\$2.2	\$4.2	\$8.6	\$30.6	(\$4.7)	\$42.2

Source: Kem C. Gardner Policy Institute analysis using REMI PI+ model and Gardner Policy Institute fiscal model.

Appendix A: Economic and Fiscal Impact Methodology

The SLC-UTCG provided detailed budget data for both revenues and expenditures for a 2030 Games in Utah. Gardner Institute analysts worked with SLC-UTCG to determine the portion of revenues originating from out-of-state sources (80.2%), which expenditures would be made in Utah, and to assign those expenditures to industries. The Gardner Institute also developed an estimate of spending by visitors to the Olympics. Following the approach taken by the Utah Governor's Office of Management and Budget to analyze the 2002 Games, we used data on skier and snowboarder spending patterns, excluding spending on ski passes and lessons, and adjusted for the displacement of expected out-of-state skiers who would not come during the Games. This produced a total of \$403.5 million in visitor spending, less \$170.3 million in displaced spending (in 2021 dollars).

Estimating Economic Impacts

This information was then used to develop inputs to the REMI PI+ model to estimate the in-state economic impacts of the Games. REMI PI+, developed by Regional Economic Models, Inc., is a dynamic, multiregional simulation model that forecasts economic, population and labor market activity for many years into the future. REMI provides year-by-year estimates of the regional effects of specific economic or policy changes. The model incorporates input-output relationships, general equilibrium effects, econometric relationships, and economic geography effects.

Estimating Fiscal Impacts

In the Gardner Institute fiscal model, revenues are driven by employment, personal income, and industry output results from the REMI PI+ economic model. Expenditures are driven by the population growth that REMI generates in response to the increased economic activity.

State revenue impacts consist of personal and corporate income taxes and sales and use taxes. Expenditures comprise state higher education, public education, and non-education spending. Local fiscal impacts consist of sales and property taxes, public education expenditures and county non-education expenditures. In addition, the Gardner Institute estimated the "direct" sales and use tax revenues from spending by visitors to the Games. This comprises state and local sales taxes, transient room taxes, motor vehicle taxes, and local restaurant taxes.

Personal income, sales and most property taxes were estimated from personal income impacts calculated by the REMI PI+ model. Corporate income taxes were estimated from annual output (sales) impacts by industry calculated by REMI. These were multiplied by multiyear average ratios of tax revenues to personal income or output. Commercial property taxes were estimated from total employment impacts multiplied by multiyear average ratios of tax revenues to employment.

Expenditures were calculated on a per-capita basis from the annual population impacts. Non-education expenditures are based on the total population impact and include all state and county budget operating expenditures except those for higher education and public education. Higher-education expenditures are based on the college-age population impacts, and public-education expenditures are based on the schoolage population impacts. Expenditure estimates are based on multiyear averages of per capita budgeted amounts.

Appendix B: Impact of the 2002 Olympic Winter Games

Economic Impact Results

The economic impacts of the 2002 Games include the regional economic impact (direct, indirect, and induced effects¹ of new money spent in the state), new infrastructure that serves residents and visitors after the 2002 Games, the surplus leftover from the 2002 Games that benefits the local economy, and travel and tourism impacts. Additionally, there are many intangible impacts, most noticeably, the positioning of Utah as a winter sports capital, business development, and increased visibility and awareness of Utah.

Regional economic impacts are changes in the size and structure of a region's economy when goods and services are purchased from businesses within the region using money generated from outside of the region. The Salt Lake Organizing Committee (SLOC) spent an estimated \$2.0 billion, in constant 2021 dollars, between 1996 and 2003 on the 2002 Games, including wages, venue construction and enhancements, broadcasting expenses and general operational purchases. Adding additional infrastructure investments financed outside of the SLOC budget, visitor spending during the 2002 Games, and federally funded security expenses to SLOC expenditures, direct expenditures totaled an estimated \$3.7 billion.

After adjusting for purchases from out-of-state companies, in-state revenue sources, and the displacement of regular skier visitation, net-new direct expenditures total an estimated \$2.7 billion. Net-new direct expenditures spur additional economic activity in the region as they stimulate purchases from local suppliers, who in turn hire employees and make purchases from other local businesses. These rounds of activity produce indirect economic effects and then direct and indirect employees spend a portion of their wages in the local economy, further generating "induced" effects. The total economic impact of an event is the sum of these net-new direct, indirect, and induced effects.

Table 4: Travel and Tourism Performance Before andAfter the 2002 Olympic Winter Games

Percent change in average tourism indicators, 1987–2001 vs. 2003–2017

	Difference
Skier days	+45%
National Park recreation visits	+34%
Taxable accommodation sales	+70%
SLC International Airport passengers	+30%
Leisure and hospitality employment	+53%
Visitor spending	+66%

Note: Employment was estimated for 1987–1989.

Source: Analysis prepared by the Kem C. Gardner Policy Institute based on Ski Utah, National Park Service, Utah State Tax Commission, Salt Lake City International Airport, U.S. Travel Association, and Utah Department of Workforce Services

All told, between 1996 and 2003, the 2002 Games created total economic impacts in Utah equivalent to approximately \$6.5 billion in economic output, the value of every transaction in the economy supported by the 2002 Games, 45,700 job-years of employment, and \$3.2 billion in personal income.

Travel and Tourism Results

The Kem C. Gardner Policy Institute evaluated visitation data before, during, and after the 2002 Games. The analysis confirms the positive post-Olympics trajectory of the Utah travel and tourism industry. Possible explanations for these increases include the increased exposure from the Olympics, global/ national economic conditions, non-Olympic marketing efforts, tourism infrastructure investment, and other factors.

Table 2 provides a summary of travel and tourism performance indicators before and after the 2002 Games.

Figure 4: Economic Impacts of the 2002 Olympic Winter Games in Utah

Impacts are based on 1996-2003 economic activity; constant 2021 dollars



Note: Economic Impacts have been updated from the previous report completed by the Gardner Institute in 2018. Source: Kem C. Gardner Policy Institute

Highlights of the visitation analysis include the following:

Skier days – Utah experienced a 45% increase in the average number of annual skier days in the 15 years after the 2002 Games compared to the 15 years before the Games. We also observe a clear displacement effect as the nearly three-week Olympic events (including Olympic and Paralympic Games) "crowds out" visitors who would otherwise visit the state. We estimate skier visit displacement effects in 2002 at Utah ski resorts of 5% to 9% fewer visits. This displacement could be mitigated in 2030 with planning, advanced marketing, and packaging of skiing with Olympic visits.

National Park visits – Utah's national parks experienced a 34% increase in the average number of annual recreation visits in the 15 years after the 2002 Games compared to the 15 years before the Games. Visitation to Utah's national parks during the first quarter of 2002 was 30% higher than during the first quarter of 2001. In fact, visitation at Utah's five national parks remained, on average, higher than the year prior and the year after the 2002 Games through the spring of 2002. Likewise, all Utah visitor centers reported increased visitation in February 2002 compared to February 2001.

Accommodation sales – Utah experienced a real 70% increase in the average annual taxable accommodation sales in the 15 years after the 2002 Games compared to the 15 years before the Games. Taxable accommodation sales during the first quarter of 2002 were 21% higher than the same time period during the prior year, and 30% higher than the first quarter of the following year. In February 2002, lodging room rates across northern Utah were over 50% higher compared to February 2001 and lodging occupancies were between 10 to 30% higher as well.² **Airport passengers** – The Salt Lake City International Airport experienced a 30% increase in its average annual (enplaned and deplaned) passengers in the 15 years after the 2002 Games compared to the 15 years before the Games. However, in the first quarter of 2002, total passenger numbers were down 6% compared to the first quarter of 2001.³

Leisure and hospitality employment – Utah's average annual private leisure and hospitality employment base was 53% higher in the 15 years after the 2002 Games compared to the 15 years before the Games; the average annual base for all other private-sector jobs was 42% higher over the same time period. In the first quarter of 2002, Utah Department of Workforce Services reported an average of 6,926 more direct private leisure and hospitality jobs, a 7% increase over the first quarter of 2001, 5% higher than the first quarter of 2003. Specifically, private arts, entertainment, and recreation jobs were up nearly 25% during the first quarter of 2002 compared to the previous year, while accommodation and restaurant jobs were up 4%.

Visitor spending – Consumer Visa card spending from February 1–24, 2002 was up 31% from the same time frame during the previous year.⁴ Average annual taxable leisure and hospitality sales were up a real 66% in the 15 years after the 2002 Games compared to the 15 years before the Games; all other average annual taxable sales (non-leisure and hospitality) were up 43% in comparison. Total taxable leisure and hospitality sales in 2002 were 4% higher than both 2001 and 2003; all other 2002 taxable sales (non-leisure and hospitality) were 3% lower than 2001 and 2% higher than 2003.

Endnotes

4. ibid

^{1.} In the case of this analysis, direct effects are visitor and SLOC spending at Utah businesses. Indirect effects are the value of inputs these local businesses purchase from other local businesses, and induced effects are the impacts associated with the expenditure of wages derived from direct and indirect effects (i.e. household purchases of goods and services). Total economic impacts are presented in terms of employment, earnings, state GDP, and economic output.

^{2.} Research Evaluation of the Salt Lake City 2002 Winter Olympics presentation by Jon Kemp of the Utah Division of Travel Development

^{3.} ibid



Partners in the Community

The following individuals and entities help support the research mission of the Kem C. Gardner Policy Institute.

Legacy Partners

The Gardner Company Intermountain Healthcare Clark and Christine Ivory Foundation KSL and Deseret News Larry H. & Gail Miller Family Foundation Mountain America Credit Union Salt Lake City Corporation Salt Lake City Corporation Salt Lake County University of Utah Health Utah Governor's Office of Economic Opportunity WCF Insurance Zions Bank

Executive Partners

Mark and Karen Bouchard The Boyer Company Clyde Companies Salt Lake Chamber

Sustaining Partners

Dominion Energy Staker Parson Materials and Construction

Kem C. Gardner Policy Institute Advisory Board

Conveners

Michael O. Leavitt Mitt Romney

Board

Scott Anderson, Co-Chair Gail Miller, Co-Chair Doug Anderson Deborah Bayle Cynthia A. Berg Roger Boyer Wilford Clyde Sophia M. DiCaro

Lisa Eccles Spencer P. Eccles Christian Gardner Kem C. Gardner Kimberly Gardner Natalie Gochnour Brandy Grace Rachel Hayes Clark Ivory Mike S. Leavitt Derek Miller Ann Millner

Cameron Diehl

Sterling Nielsen Jason Perry Ray Pickup Gary B. Porter Taylor Randall Jill Remington Love Brad Rencher Josh Romney Charles W. Sorenson James Lee Sorenson Vicki Varela

Ex Officio (invited)

Governor Spencer Cox Speaker Brad Wilson Senate President Stuart Adams Representative Brian King Senator Karen Mayne Mayor Jenny Wilson Mayor Erin Mendenhall

Kem C. Gardner Policy Institute Staff and Advisors

Leadership Team

Staff

Natalie Gochnour, Associate Dean and Director Jennifer Robinson, Associate Director Mallory Bateman, Director of Demographic Research Phil Dean, Chief Economist and Public Finance Senior Research Fellow Shelley Kruger, Accounting and Finance Manager Colleen Larson, Administrative Manager Dianne Meppen, Director of Survey Research Nicholas Thiriot, Communications Director

James A. Wood, Ivory-Boyer Senior Fellow

Samantha Ball, Senior Research Associate

Andrea Thomas Brandley, Research Associate

Michael T. Hogue, Senior Research Statistician

Kara Ann Byrne, Senior Research Associate

Mike Christensen, Scholar-in-Residence

Mike Hollingshaus, Senior Demographer

Thomas Holst, Senior Energy Analyst

Jennifer Leaver, Senior Tourism Analyst

Levi Pace, Senior Research Economist Shannon Simonsen, Research Coordinator

Dejan Eskic, Senior Research Fellow

Emily Harris, Senior Demographer

Eric Albers, Research Associate

Max Becker, Research Associate

Joshua Spolsdoff, Senior Research Economist Paul Springer, Senior Graphic Designer Laura Summers, Senior Health Care Analyst

Faculty Advisors

Matt Burbank, College of Social and Behavioral Science Adam Meirowitz, David Eccles School of Business Elena Patel, David Eccles School of Business Nathan Seegert, David Eccles School of Business

Senior Advisors

Jonathan Ball, Office of the Legislative Fiscal Analyst Silvia Castro, Suazo Business Center Gary Cornia, Marriott School of Business Wes Curtis, Community-at-Large John C. Downen, Community-at-Large Theresa Foxley, EDCUtah Dan Griffiths, Tanner LLC Emma Houston, University of Utah Beth Jarosz, Population Reference Bureau Darin Mellott, CBRE Pamela S. Perlich, University of Utah Chris Redgrave, Community-at-Large Wesley Smith, Western Governors University Juliette Tennert, Utah System of Higher Education

INFORMED DECISIONS™

