

THE TEMPE VISITOR ECONOMY 2023

July 2023

Prepared for: Tempe Tourism Office



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INTRODUCTION

PROJECT BACKGROUND

The travel sector is an integral part of the Tempe economy. Visitors generate significant economic benefits to households, businesses, and government alike and represent a critical driver of the city's future. In 2023, visitor-supported employment reached 8,696 jobs in the city, including indirect and induced impacts.

By monitoring the visitor economy, policymakers can inform decisions regarding the funding and prioritization of the sector's development. They can also carefully monitor its successes and future needs. This is particularly true for Tempe as it builds upon its visitor economy.

METHODOLOGY AND DATA SOURCES

An IMPLAN input-output model was constructed for the Tempe economy. The model traces the flow of visitor-related expenditures through the city's economy and their effects on employment, wages, and taxes. IMPLAN also quantifies the indirect (supplier) and induced (income) impacts of tourism. Tourism Economics then cross-checked these findings with employment and wage data for each sector to ensure the findings are within reasonable ranges.

Visitors included those who stayed overnight or traveled more than 50 miles to the destination.

The primary source of the employment and wage data is the Regional Economic Information System (REIS), maintained by the Bureau of Economic Analysis.

This is more comprehensive than Bureau of Labor Statistics (ES202/QCEW) data because sole-proprietors do not require unemployment insurance and are not counted in the ES202 data.

By establishing a timeline of economic impacts, the industry can track its progress.

To quantify the economic significance of the visitor economy in Tempe, Tourism Economics has prepared a comprehensive model detailing the far-reaching impacts arising from visitor spending. The results of this study show the scope of the travel sector in terms of direct visitor spending, as well as the total economic impacts, jobs, and fiscal (tax) impacts in the broader economy.

The analysis draws on the following data sources:

- Bureau of Economic Analysis and Bureau of Labor Statistics: employment and wage data, by industry.
- STR: lodging performance data, including room demand, room rates, occupancy, and room revenue, for hotels.
- Datafy: mobile geolocation data
- Tax collections: Lodging and sales tax receipts.
- Tourism Economics: international travel data for overseas, Canadian, and Mexican travel to Tempe based on aviation, survey, and credit card information.

ECONOMIC IMPACTS

KEY FINDINGS



4.4 MILLION

Total Visitors to Tempe in 2023



\$1.4 BILLION

Total Economic Impact of Tourism in Tempe in 2023

VISITOR SPENDING

Visitor spending reached \$1.1 billion in 2023, growing \$70.0 million (6.9%) over the prior year.

TOTAL ECONOMIC IMPACT

The \$1.1 billion spent by visitors in Tempe in 2023 generated \$1.4 billion in total business sales, sustained 8,696 jobs and generated \$117 million in state and local tax revenues.



\$1.1B

Visitor Spending



\$1.4B

Total Economic Impact



8,696

Total Jobs Generated



\$117M

State & Local Taxes Generated





VISITS & VISITOR SPENDING

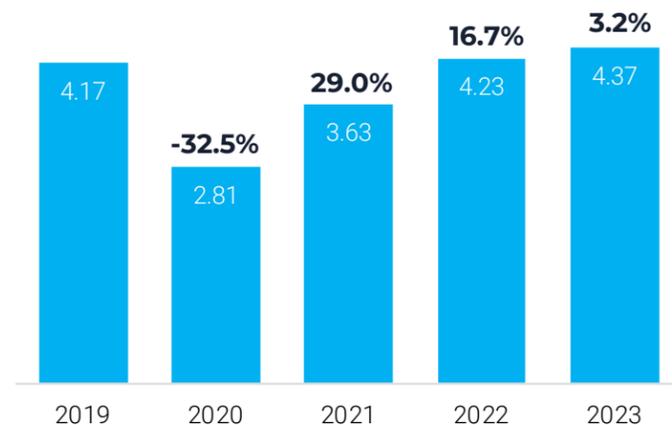
Price increases in key visitor spending categories, along with strong growth in day and international visits, drove Tempe spending to \$1.1 billion in 2023, an increase of 6.9%.

VISITOR VOLUME

Growth in 2023

Visitor volume increased 3.2% in 2023 welcoming 130,220 additional visitors.

Tempe visitor volume
Amounts in millions of visitors



Source: Tourism Economics

VISITOR SPENDING

Visitors to Tempe spent \$1.1 billion across a wide range of sectors in 2023.

Of the \$1.1 billion spent in Tempe in 2023, visitor spending on food and beverage reached \$273 million, 25% of visitor spending.

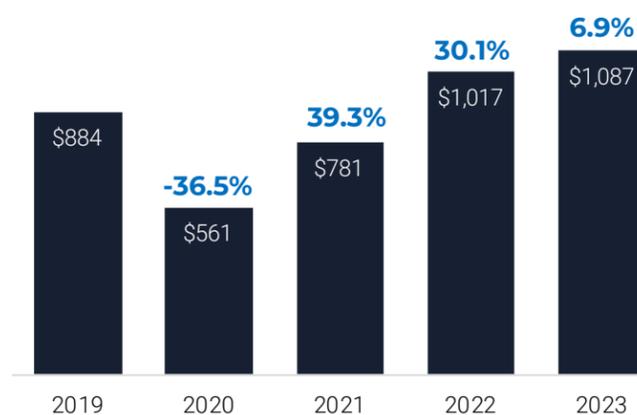
Spending on lodging, including second homes and short-term rentals, tallied \$271 million, or 25% of visitor spending.

Transportation spending captured 21% of visitor spending, \$224 million.

Visitors to Tempe spent \$187 million on retail, 17%.

Recreation and entertainment spending totaled \$131 million, 12% of visitor spending.

Tempe visitor spending
Amounts in \$ millions



Source: Tourism Economics

\$1.1 BILLION

Visitor Spending in 2023



Source: Tourism Economics

Note: Lodging spending includes dollars spent on short-term rentals and second homes.

VISITOR VOLUME & SPENDING TRENDS

Supported by higher prices in key visitor spending categories and strong growth in day and international visits, visitor spending increased 6.9% in 2023. Notably, spending on lodging saw a third consecutive year of double-digit growth climbing to \$271 million.

Visitor spending on recreation and entertainment grew 8.4% in 2023, contributing an additional \$10 million to Tempe’s visitor economy. Similarly, spending on food and beverage grew 7.3%, nearly \$19 million more than the previous year.

Tempe visitor spending and annual growth

Amounts in \$ millions, 2023 % change, and % recovered relative to 2019

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 Growth | % relative to 2019 |
|-------------------------------|----------------|----------------|----------------|------------------|------------------|-------------|--------------------|
| Total visitor spending | \$883.6 | \$560.7 | \$781.3 | \$1,016.7 | \$1,086.7 | 6.9% | 123.0% |
| Food & beverage | \$231.5 | \$151.7 | \$206.2 | \$254.4 | \$273.0 | 7.3% | 117.9% |
| Lodging* | \$186.6 | \$104.3 | \$157.7 | \$243.3 | \$271.2 | 11.5% | 145.3% |
| Transportation | \$177.8 | \$129.1 | \$172.1 | \$217.2 | \$224.4 | 3.3% | 126.2% |
| Retail | \$180.2 | \$107.5 | \$152.7 | \$180.9 | \$187.2 | 3.5% | 103.9% |
| Recreation & entertainment | \$107.4 | \$68.1 | \$92.6 | \$120.9 | \$131.0 | 8.4% | 122.0% |

Source: Tourism Economics

*Lodging includes second home and short-term rental spending.

Tempe visitor volume, by market and segment

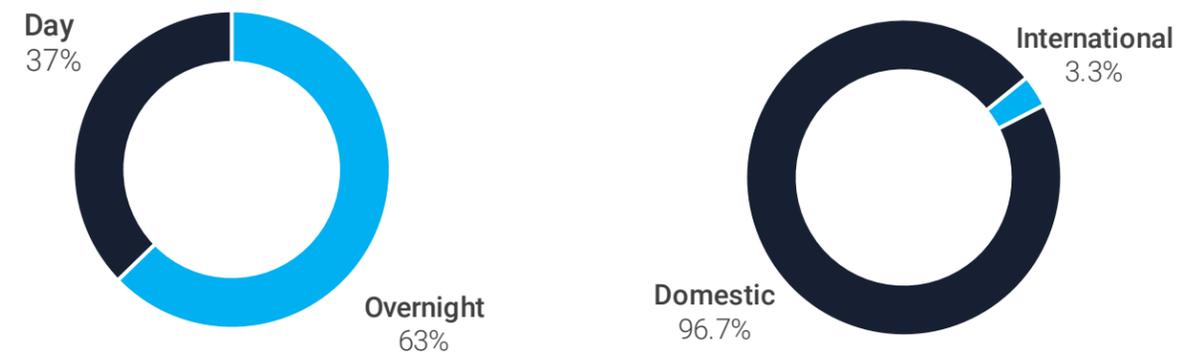
Amounts in millions of visitors, 2023 % change, and % recovered relative to 2019

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 Growth | % relative to 2019 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Total visitor volume | 4.17 | 2.81 | 3.63 | 4.23 | 4.37 | 3.2% | 104.8% |
| International | 0.18 | 0.06 | 0.05 | 0.11 | 0.14 | 24.8% | 81.2% |
| Domestic | 3.99 | 2.75 | 3.58 | 4.12 | 4.22 | 2.6% | 105.8% |
| Day | 1.59 | 1.15 | 1.37 | 1.54 | 1.63 | 5.6% | 102.1% |
| Overnight | 2.40 | 1.60 | 2.21 | 2.58 | 2.60 | 0.6% | 108.2% |

Source: Tourism Economics

Tempe visitor volume share, by market and segment

Percent of visitor volume by market and segment



Source: Tourism Economics

TOURISM ECONOMY TRENDS

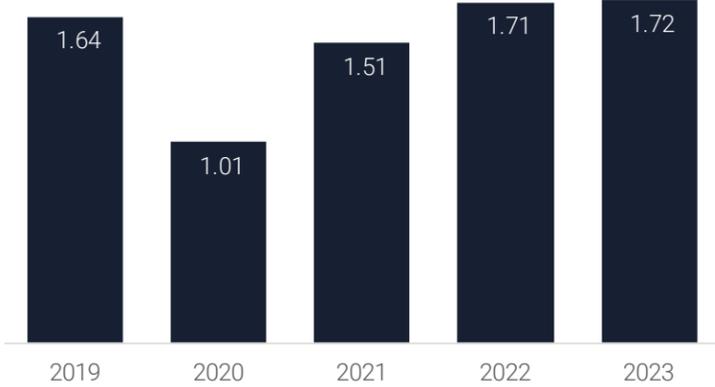
Hotel industry

After two consecutive years of double-digit growth, hotel room demand moderated in 2023, increasing 0.6% to reach 1.72 million room nights.

However, average daily rates (ADR) growth saw its second consecutive year of double-digit growth in 2023, rising 11.1% to reach \$150.

City of Tempe hotel room demand

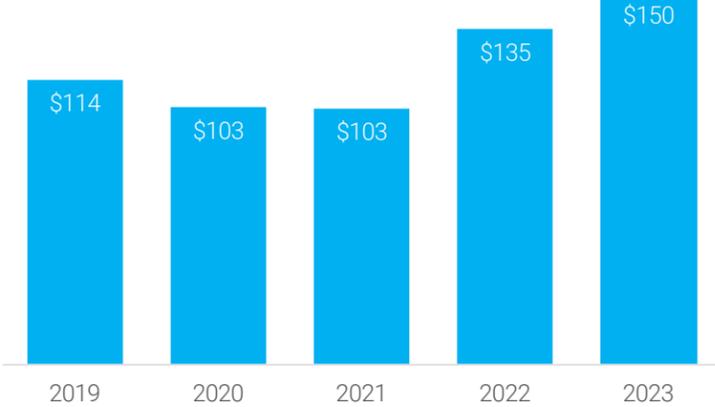
Millions of room nights



Source: STR

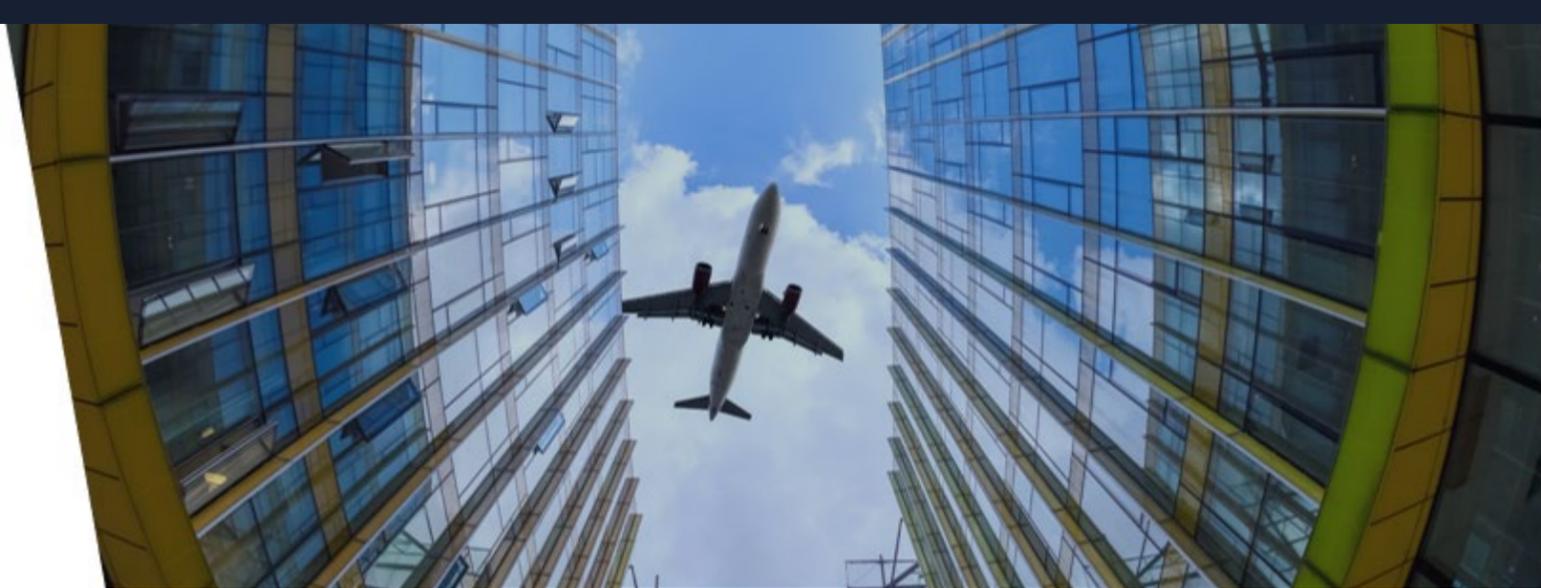
City of Tempe average daily rate (ADR)

Rate in \$



Source: STR





ECONOMIC IMPACT FRAMEWORK

ECONOMIC IMPACT METHODOLOGY

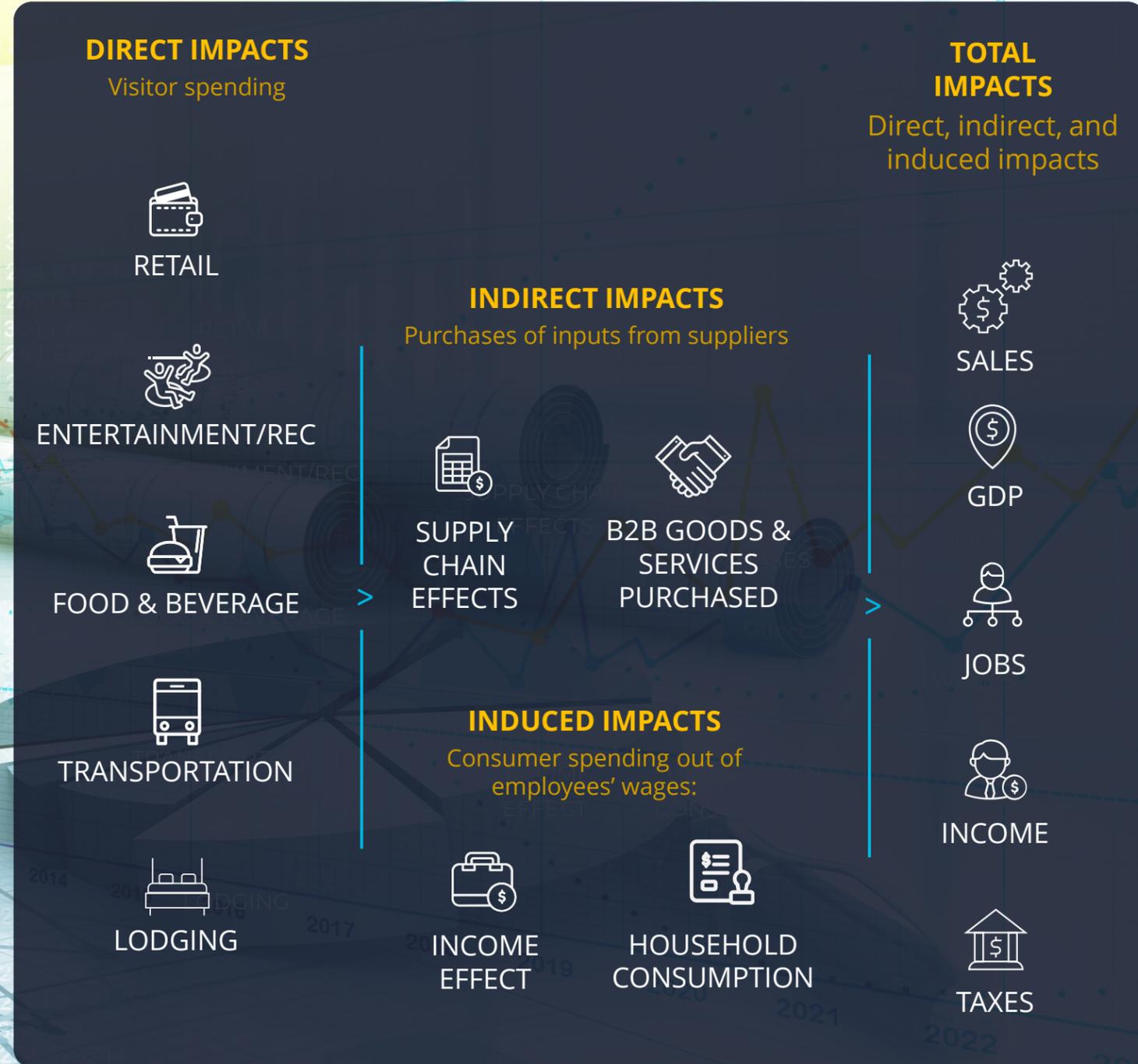
The analysis of the Tempe visitor economy begins with direct visitor spending and analyzes the downstream effects of this spending on the broader economy. To determine total economic impact, we input direct spending into a model of the Tempe economy, constructed using an IMPLAN input-output (I-O) model. The model traces the full extent of industry impacts as dollars flow through the local economy.

An I-O model represents a profile of an economy by measuring the relationships among industries and consumers and quantifies three levels of impact:

- 1. Direct impacts:** Visitor spending creates direct economic value within a discrete group of sectors (such as recreation and transportation). This supports a relative proportion of spending, jobs, wages, and taxes within each sector.
- 2. Indirect impacts:** Each directly affected sector also purchases goods and services as inputs (e.g. food wholesalers, utilities) into production. These impacts are called indirect impacts or supply-chain effects.
- 3. Induced impacts:** Lastly, the induced impact is generated when employees whose wages are generated either directly or indirectly by visitor spending spend those wages in the local economy. This is called the induced impact or income effect.

The Tourism Economics model calculates these three levels of impact - direct, indirect and induced - for a broad set of indicators, including:

- Spending
- Wages
- Employment
- Federal Taxes
- State Taxes
- Local Taxes

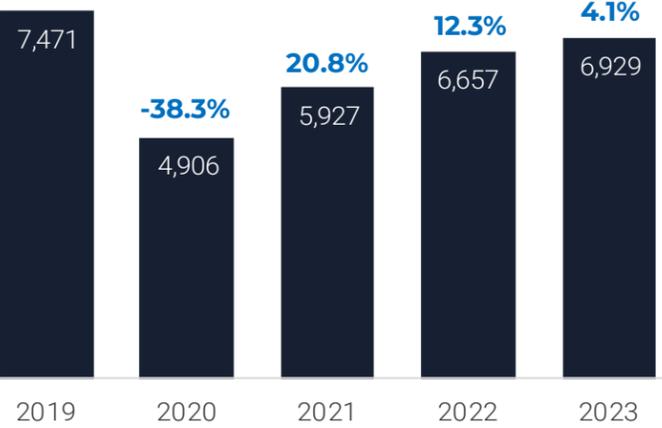


ECONOMIC IMPACT FINDINGS

DIRECT IMPACTS

Direct visitor-supported employment expanded 4.1% in 2023, adding 272 jobs to Tempe to reach 92.7% of pre-pandemic levels. Notably, visitor-supported employment in recreation and entertainment and lodging grew 6.4% and 6.3%, respectively.

Visitor-supported employment in Tempe
Amounts in number of jobs



Source: Tourism Economics





ECONOMIC IMPACT FINDINGS

BUSINESS SALES IMPACTS

Visitors contributed a direct impact of \$1.1 billion in 2023. This direct impact led to \$323 million in indirect and induced impacts. In total, visitors to Tempe generated over \$1.4 billion in business sales.

Summary economic impacts (2023)

Amounts in \$ millions

Outside of direct impacts, significant benefits accrued in sectors like finance, insurance, and real estate, and business services.



Source: Tourism Economics

Business sales impacts by industry (2023)

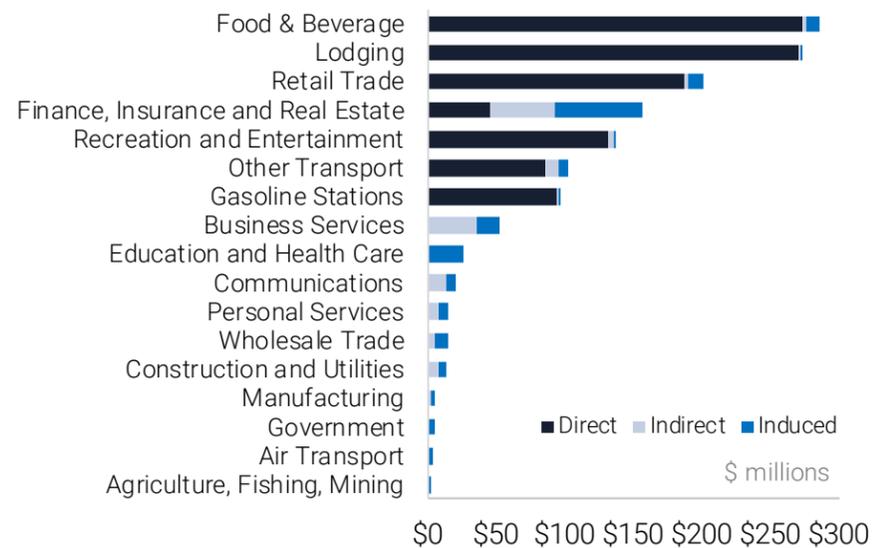
Amounts in \$ millions

| | Direct Business Sales | Indirect Business Sales | Induced Business Sales | Total Business Sales |
|------------------------------------|-----------------------|-------------------------|------------------------|----------------------|
| Total, all industries | \$ 1,086.7 | \$ 145.7 | \$ 176.7 | \$ 1,409.1 |
| Food & Beverage | \$273.0 | \$3.7 | \$8.7 | \$285.4 |
| Lodging | \$271.2 | \$0.1 | \$0.1 | \$271.4 |
| Retail Trade | \$187.2 | \$2.6 | \$11.2 | \$201.0 |
| Finance, Insurance and Real Estate | \$44.9 | \$47.9 | \$63.1 | \$155.9 |
| Recreation and Entertainment | \$131.0 | \$4.7 | \$2.0 | \$137.7 |
| Other Transport | \$85.3 | \$10.4 | \$7.2 | \$102.9 |
| Gasoline Stations | \$94.2 | \$0.7 | \$2.2 | \$97.1 |
| Business Services | | \$35.5 | \$17.1 | \$52.5 |
| Education and Health Care | | \$1.0 | \$25.0 | \$26.1 |
| Communications | | \$12.8 | \$7.7 | \$20.5 |
| Personal Services | | \$7.8 | \$7.8 | \$15.5 |
| Wholesale Trade | | \$5.4 | \$9.9 | \$15.2 |
| Construction and Utilities | | \$7.9 | \$5.1 | \$13.0 |
| Manufacturing | | \$2.8 | \$2.2 | \$5.1 |
| Government | | \$0.4 | \$4.2 | \$4.5 |
| Air Transport | | \$1.1 | \$2.5 | \$3.6 |
| Agriculture, Fishing, Mining | | \$0.9 | \$0.7 | \$1.6 |

Source: Tourism Economics

Business sales impacts by industry (2023)

Amounts in \$ millions



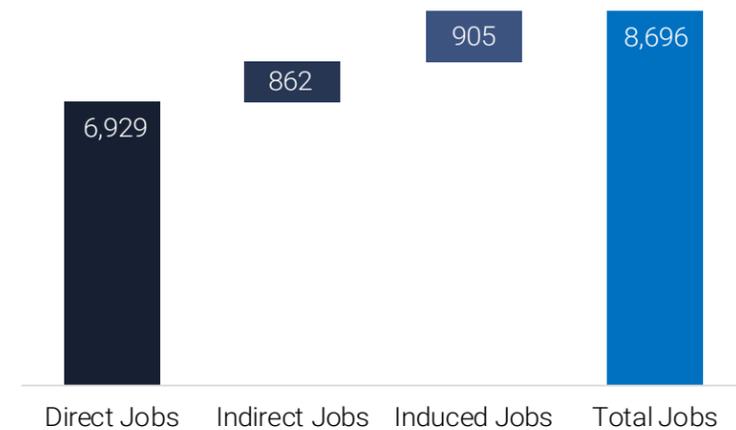
Source: Tourism Economics

EMPLOYMENT IMPACTS

Visitor activity sustained 6,929 direct jobs in 2023, with an additional 1,767 jobs supported by the indirect and induced impacts of visitor activity. The total jobs impact reached 8,696, approximately one of every 16 jobs in Tempe.

Summary employment impacts (2023)

Amounts in number of jobs



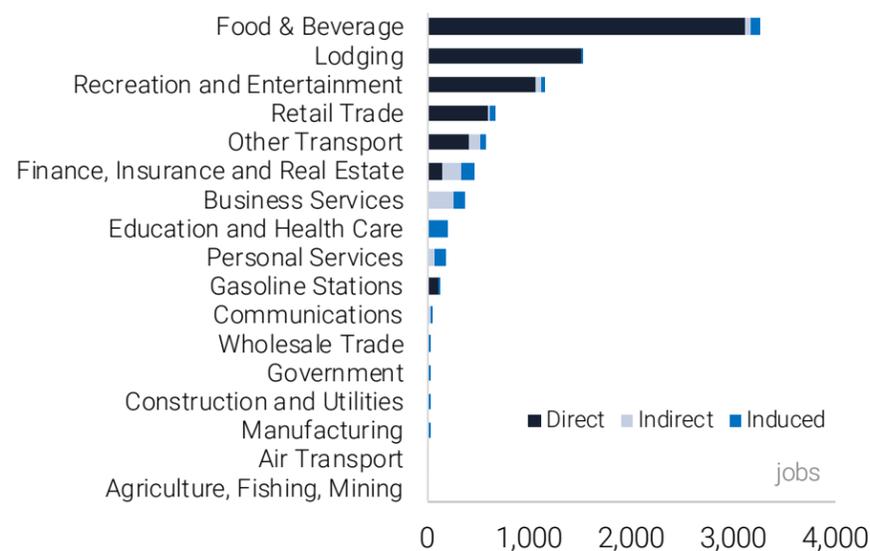
Source: Tourism Economics

Employment impacts by industry (2023)

Amounts in number of jobs

Visitor spending supported the largest number of jobs in the food and beverage industry (3,256), followed by lodging with 1,513 jobs.

Spending by businesses directly impacted by visitor spending supported 258 jobs in the business services industry—in areas like accounting, advertising and building services.



Source: Tourism Economics



Employment impacts by industry (2023)

Amounts in number of jobs

| | Direct Jobs | Indirect Jobs | Induced Jobs | Total Jobs |
|------------------------------------|--------------|---------------|--------------|--------------|
| Total, all industries | 6,929 | 862 | 905 | 8,696 |
| Food & Beverage | 3,108 | 55 | 92 | 3,256 |
| Lodging | 1,511 | 0 | 1 | 1,513 |
| Recreation and Entertainment | 1,051 | 69 | 23 | 1,143 |
| Retail Trade | 590 | 19 | 59 | 668 |
| Other Transport | 411 | 111 | 57 | 579 |
| Finance, Insurance and Real Estate | 147 | 183 | 139 | 470 |
| Business Services | | 258 | 115 | 374 |
| Education and Health Care | | 10 | 194 | 204 |
| Personal Services | | 61 | 130 | 191 |
| Gasoline Stations | 110 | 4 | 13 | 127 |
| Communications | | 28 | 16 | 44 |
| Wholesale Trade | | 16 | 26 | 41 |
| Government | | 22 | 14 | 36 |
| Construction and Utilities | | 11 | 9 | 21 |
| Manufacturing | | 8 | 6 | 14 |
| Air Transport | | 3 | 6 | 9 |
| Agriculture, Fishing, Mining | | 3 | 4 | 7 |

Source: Tourism Economics

LABOR INCOME IMPACTS

Visitor activity generated \$286 million in direct labor income and a total of \$390 million when including indirect and induced impacts.

Summary labor income impacts (2023)

Amounts in \$ millions

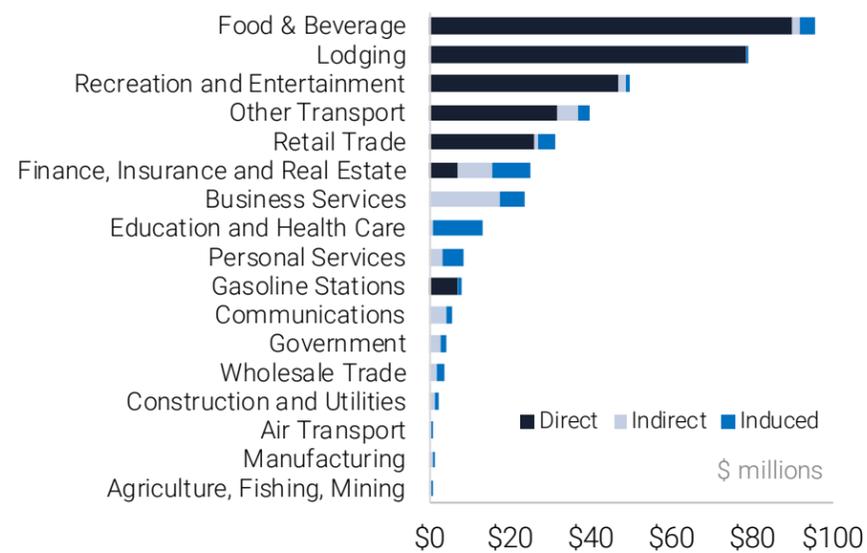


Source: Tourism Economics

Labor income impacts by industry (2023)

Amounts in \$ millions

There are seven industries in which visitor activity supported \$20 million or more in personal income. These range from the obvious—food & beverage and lodging, to the less obvious—business services and finance, insurance, and real estate.



Source: Tourism Economics



Labor income impacts by industry (2023)

Amounts in \$ millions

| | Direct Labor Income | Indirect Labor Income | Induced Labor Income | Total Labor Income |
|------------------------------------|---------------------|-----------------------|----------------------|--------------------|
| Total, all industries | \$ 285.6 | \$ 51.0 | \$ 53.0 | \$ 389.6 |
| Food & Beverage | \$89.6 | \$2.0 | \$3.9 | \$95.4 |
| Lodging | \$78.3 | \$0.0 | \$0.1 | \$78.3 |
| Recreation and Entertainment | \$46.6 | \$2.1 | \$0.9 | \$49.5 |
| Other Transport | \$31.5 | \$5.3 | \$2.6 | \$39.4 |
| Retail Trade | \$25.9 | \$0.9 | \$4.1 | \$30.9 |
| Finance, Insurance and Real Estate | \$7.1 | \$8.5 | \$9.5 | \$25.1 |
| Business Services | | \$17.3 | \$6.3 | \$23.6 |
| Education and Health Care | | \$0.6 | \$12.4 | \$13.0 |
| Personal Services | | \$3.2 | \$5.2 | \$8.3 |
| Gasoline Stations | \$6.7 | \$0.2 | \$0.7 | \$7.7 |
| Communications | | \$4.1 | \$1.6 | \$5.7 |
| Government | | \$2.5 | \$1.5 | \$4.0 |
| Wholesale Trade | | \$1.7 | \$2.1 | \$3.8 |
| Construction and Utilities | | \$1.4 | \$1.0 | \$2.4 |
| Air Transport | | \$0.3 | \$0.7 | \$1.0 |
| Manufacturing | | \$0.6 | \$0.4 | \$1.0 |
| Agriculture, Fishing, Mining | | \$0.2 | \$0.2 | \$0.4 |

Source: Tourism Economics

ECONOMIC IMPACT FINDINGS

FISCAL (TAX) IMPACTS

Visitor spending, visitor-supported jobs, and business sales generated \$191.7 million in government revenues.

State and local taxes alone tallied \$116.7 million in 2023.

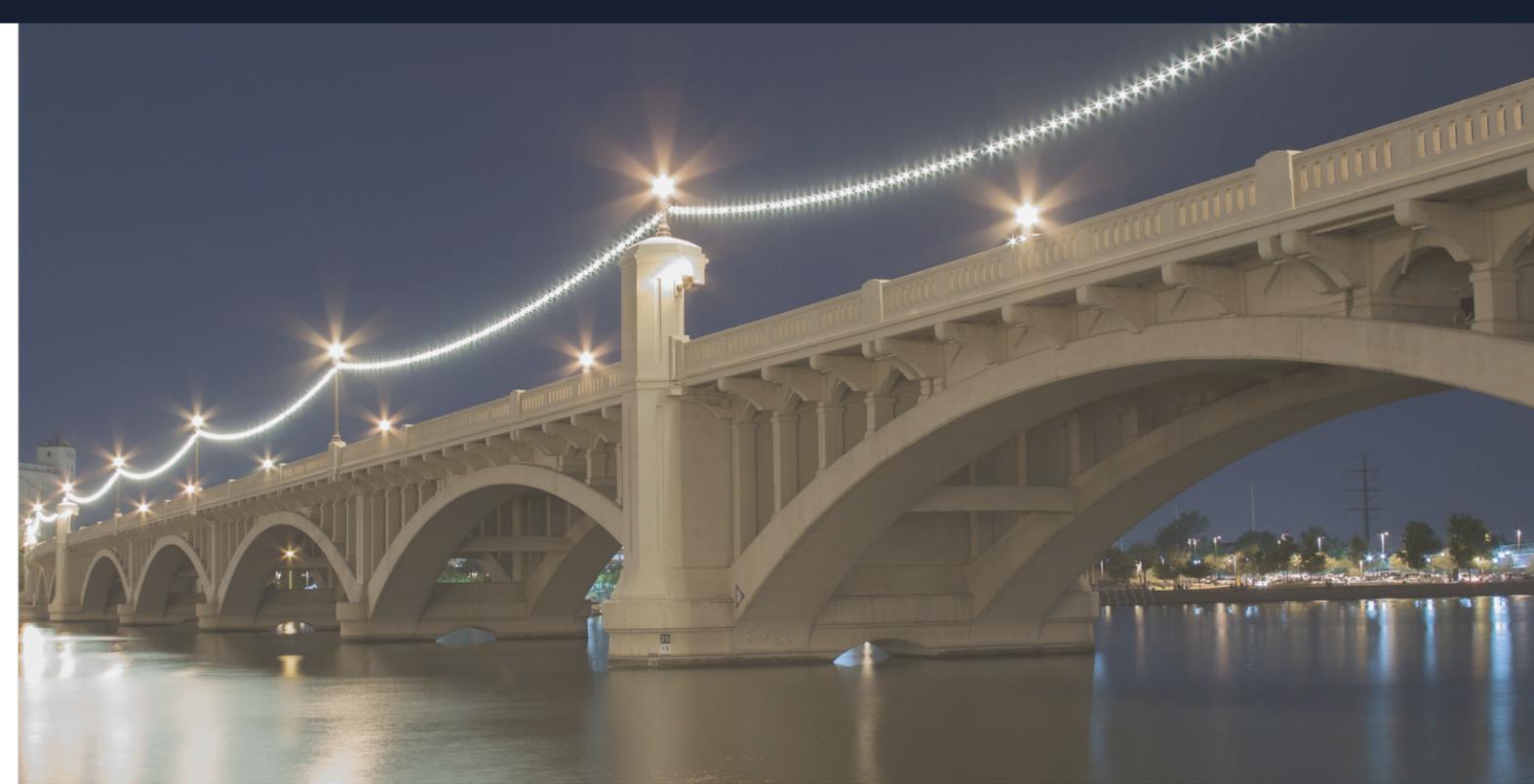
Each household in Tempe would need to be taxed an additional \$1,505 to replace the visitor-generated taxes received by state and local governments in 2023.

Fiscal (tax) impacts

Amounts in \$ millions

| | Total |
|------------------------------|----------------|
| Total Tax Revenues | \$191.7 |
| Federal Taxes | \$75.0 |
| Personal Income | \$36.0 |
| Corporate | \$6.2 |
| Indirect Business | \$6.5 |
| Social Insurance | \$26.4 |
| State and Local Taxes | \$116.7 |
| Sales | \$48.1 |
| Lodging | \$26.7 |
| Personal Income | \$6.4 |
| Corporate | \$0.9 |
| Excise and Fees | \$4.6 |
| Property | \$29.9 |

Source: Tourism Economics



Of the \$116.7 million in state and local governmental revenues supported by visitor activity, the state government received \$59.2 million in 2023. The majority of state revenues are from sales taxes.

Local tax revenues from visitor activity supported \$57.5 million in local governmental revenues from property, sales, excise and fees, and bed taxes.

Fiscal (tax) impacts

Amounts in \$ millions

| | State | Local |
|---------------------------|---------------|---------------|
| Total Tax Revenues | \$59.2 | \$57.5 |
| Sales | \$31.8 | \$16.2 |
| Lodging | \$14.0 | \$12.7 |
| Personal Income | \$6.4 | |
| Corporate | \$0.9 | |
| Excise and Fees | \$1.7 | \$2.9 |
| Property | \$4.3 | \$25.6 |

Source: Tourism Economics

ECONOMIC IMPACTS IN CONTEXT

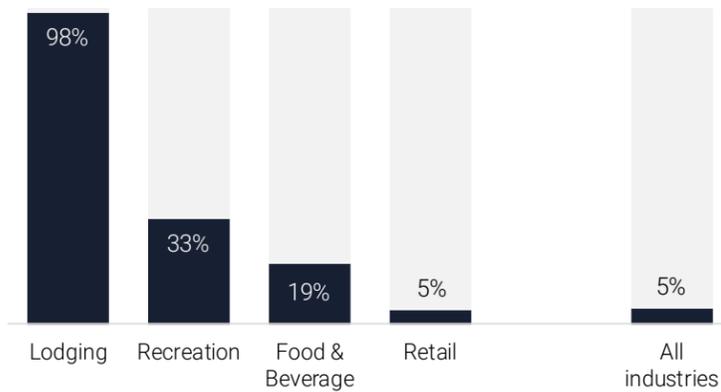
DIRECT IMPACTS

Visitor-supported employment is a significant part of several industries in Tempe—nearly all of lodging employment, 33% of recreation employment, and 19% of food and beverage jobs, are supported by visitor spending.

Overall, direct tourism jobs accounted for 5% of all jobs in Tempe in 2023.

Direct tourism employment intensity

Amounts in % of total industry employment



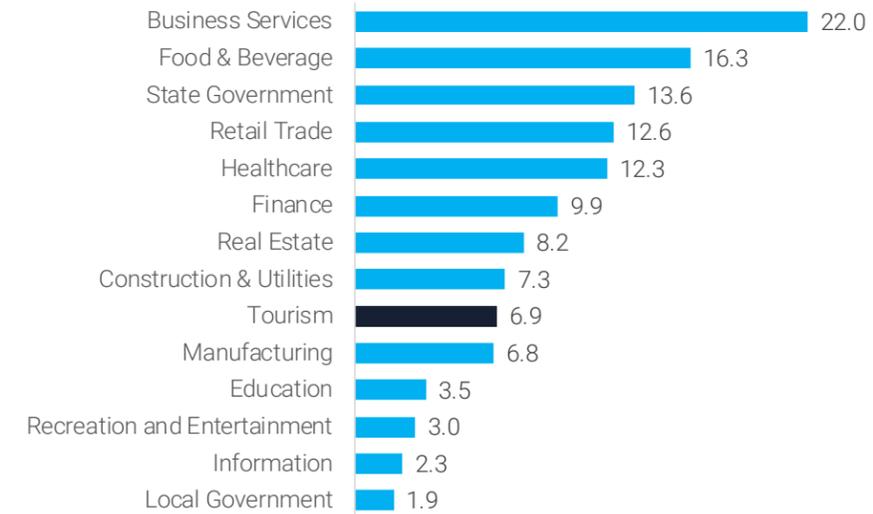
Source: BLS, BEA, Tourism Economics

TOURISM EMPLOYMENT RANKING

Total direct employment from tourism in 2023 amounted to 6,929 jobs and ranked as the 9th largest employer in the city, representing 1-in-20 jobs.

Employment in the City of Tempe, by major industry

Amounts in thousands of jobs, 2023 estimates



Source: BEA, BLS, U.S. Census, Tourism Economics

ECONOMIC IMPACTS IN CONTEXT



\$1.1B VISITOR SPENDING

The \$1.1 billion in visitor spending means that nearly \$3.0 million was spent every day by visitors to Tempe.



\$390M LABOR INCOME

The \$390 million in total income generated by tourism is the equivalent of \$5,025 for every household in Tempe.



8,696 TOTAL JOBS

The number of jobs sustained by tourism (8,696) supports 6.2% of all jobs in Tempe.



\$117M STATE & LOCAL TAXES

The \$117 million in state and local taxes generated by tourism would cover the average salaries of 2,029 public school teachers in Tempe.

APPENDIX B: DEFINITIONS

Glossary – Spending Definitions

| Term | Description |
|--------------------------|---|
| Lodging | Includes visitor spending in the accommodation sub-sector. This includes food and other services provided by hotels, rentals and similar establishments. |
| Food and beverage | Includes all visitor spending on food & beverages, including at restaurants, bars, grocery stores and other food providers. |
| Recreation | Includes visitor spending within the arts, entertainment and recreation sub-sector. |
| Shopping | Includes visitor spending in all retail sub-sectors within the local economy. |
| Local transport | Includes visitor spending on local transport services such as taxis, limos, trains, rental cars, buses, and the local share of air transportation spending. |
| Service stations | Visitor spending on gasoline. |
| Second homes | Where applicable, spending associated with the upkeep of seasonal second homes for recreational use as defined by the Census Bureau. |

Glossary – Economic Impact Definitions

| Term | Description |
|--------------------------|---|
| Direct Impact | Impacts (business sales, jobs, income, and taxes) created directly from spending by visitors to a destination within a discreet group of tourism-related sectors (e.g. recreation, transportation, lodging). |
| Indirect Impact | Impacts created from purchase of goods and services used as inputs (e.g. food wholesalers, utilities, business services) into production by the directly affected tourism-related sectors (i.e. economic effects stemming from business-to-business purchases in the supply chain). |
| Induced Impact | Impacts created from spending in the local economy by employees whose wages are generated either directly or indirectly by visitor spending. |
| Employment | Employment is measured by the Bureau of Economic Analysis (BEA) and Bureau of Labor Statistics (BLS) definitions, and captures full-time and part-time jobs, which includes salary and wage employees and proprietors. |
| Labor Income | Income (wages, salaries, proprietor income and benefits) supported by visitor spending. |
| Value Added (GDP) | The economic enhancement a company gives its products or services before offering them to customers. |
| Local Taxes | City and County taxes generated by visitor spending. This includes any local sales, income, bed, usage fees, licenses and other revenues streams of local governmental authorities – from transportation to sanitation to general government. |
| State Taxes | State tax revenues generated by visitor spending. This will include sales, income, corporate, usage fees and other assessments of state governments. |

ABOUT TOURISM ECONOMICS

Tourism Economics is an Oxford Economics company with a singular objective: combine an understanding of the travel sector with proven economic tools to answer the most important questions facing our clients. More than 500 companies, associations, and destination work with Tourism Economics every year as a research partner. We bring decades of experience to every engagement to help our clients make better marketing, investment, and policy decisions. Our team of highly-specialized economists deliver:

- Global travel data-sets with the broadest set of country, city, and state coverage available
- Travel forecasts that are directly linked to the economic and demographic outlook for origins and destinations
- Economic impact analysis that highlights the value of visitors, events, developments, and industry segments
- Policy analysis that informs critical funding, taxation, and travel facilitation decisions
- Market assessments that define market allocation and investment decisions

Tourism Economics operates out of regional headquarters in Philadelphia and Oxford, with offices in Belfast, London, Frankfurt, Ontario, and Sydney.

Oxford Economics is one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities. Our best-of-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact. Headquartered in Oxford, England, with regional centers in London, New York, and Singapore, Oxford Economics has offices across the globe in Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC, we employ over 600 full-time staff, including 350+ professional economists, industry experts and business editors—one of the largest teams of macroeconomists and thought leadership specialists.

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