

The Economic Impact of Travel

Navajo Nation

2022

July 2023

PREPARED FOR
Navajo Tourism Department



Page intentionally blank

The Economic Impact of Travel in Navajo Nation

2022

Navajo Tourism Department

7/17/2023

PRIMARY RESEARCH CONDUCTED BY

Dean Runyan Associates
811 SW 11th Avenue Suite 920
Portland, Oregon 97205

Table of Contents

Summary.....	6
Arizona Travel Spending Inflation Adjusted.....	7
Direct Travel Impacts - Summary.....	8
Direct Travel Impacts Details (Spending).....	9
Direct Travel Impacts Details (Earnings, Employment, Taxes).....	10
Visitor Spending by Commodity.....	11
Visitor Spending by Accommodation.....	11
Direct Employment (Chart).....	12
Overnight Visitor Volume and Average Spending.....	13
Glossary (Economic Impacts).....	14
Methodology (Economic Impacts).....	15



Navajo Nation

2022

Navajo Nation / Summary

Direct Travel Impacts 2022p

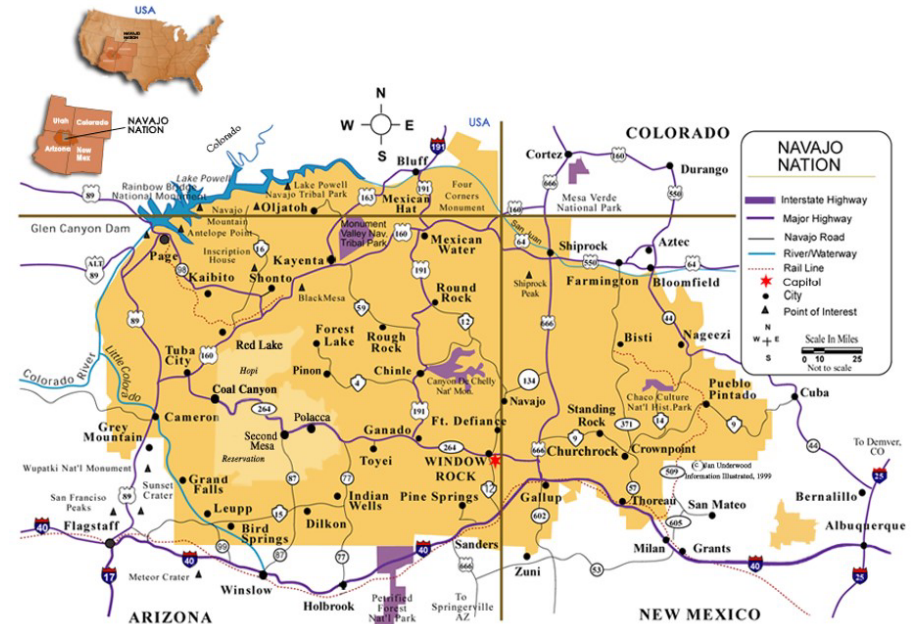
The Navajo Nation covers about 27,413 square miles located in portions of northeastern Arizona, northwestern New Mexico, and southeastern Utah. The economic impacts in this report are inclusive of the entire geography of the Nation.

In 2022, travel in Arizona underwent a substantial expansion, fueled by a surge in the number of returning visitors and the inflationary increase in prices for travel-related goods and services (page 7). While the Navajo Nation's recovery was initially slower than that of Arizona, experiencing only marginal growth in 2021, it bounced back and surpassed the levels of travel spending seen in 2019 during 2022.

- Direct travel spending in the Navajo Nation increased 53.5% from \$288.0 million in 2021 to \$442.0 million in 2022.
- Direct travel-generated employment grew by 670 jobs, a 48.9% increase over 2021.
- Tax receipts generated by travel spending increased to \$11.6 million, up 52.6% compared to 2021.
- Travel generated employment and tax receipts remain below 2019 levels of activity.

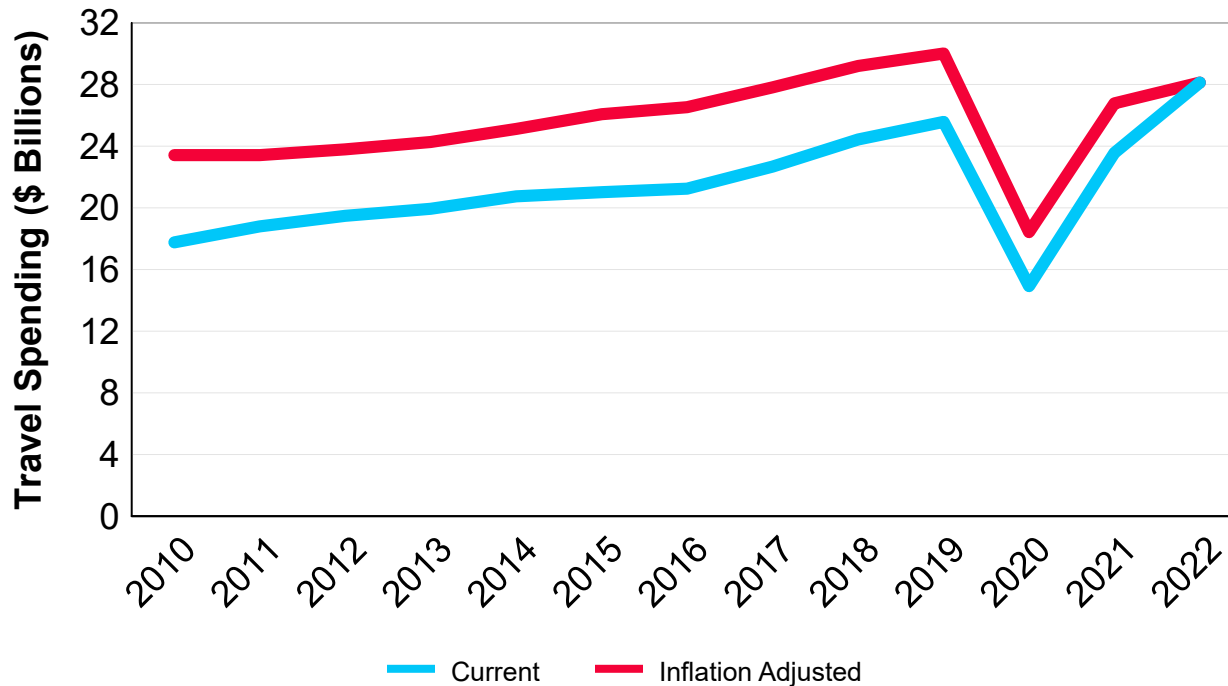
Arizona's travel industry **expanded 19.3% in 2022**, whereas the Navajo Nation's travel economy **increased 53.5%**.

Note: These estimates for the Navajo Nation are based on public data sources and are subject to revision if more data becomes available. All economic impacts in this report are direct effects only.



Arizona / Direct Spending

Current and Inflation-Adjusted Dollars



Direct travel spending in 2022 exceeded pre-pandemic levels by \$2.5 billion (9%). However, taking into account the reduced purchasing power of the dollar associated with recent inflation, the true quantity of goods and services purchased by travelers still lags 2019 levels by approximately 6.3%.

Sources: Bureau of Labor Statistics CPI, Dean Runyan Associates

How does inflation affect the travel industry?

Inflation is the rate of increase in prices of goods and services. An increase in the rate of inflation translates into reduced purchasing power for consumers. To track the quantity of goods and services that consumers purchase when they travel, we report the “Inflation Adjusted” travel spending in the chart to the left. This is also known as “real” spending, as it shows the quantity of goods and services that were purchased while keeping the purchasing power constant across time.

U.S. CPI (annual % chg.)

2021: 4.7%

2022: 8.0%

Target: 2% Annually



Arizona 2022 Selected Prices (% Chg.)

Hotel & STVR Room Rates: 20%

Gasoline Prices: 37%

Air Fares: 40%

Navajo Nation / Direct Travel Impacts

Summary Table

	2016	2017	2018	2019	2020	2021	2022	Annual % Chg.		CAGR %
								2021-22	2019-22	2016-22
Spending (\$Millions)										
Total (Current \$)	400.8	411.7	413.1	422.1	166.4	288.0	442.0	53.5%	4.7%	1.6%
Other	22.4	25.6	28.0	28.2	15.0	28.9	35.6	23.3%	26.1%	8.0%
Visitor	378.4	386.1	385.2	393.9	151.4	259.1	406.5	56.8%	3.2%	1.2%
Non-transportation	352.1	357.1	353.9	362.4	139.7	232.7	361.4	55.3%	-0.3%	0.4%
Transportation	26.3	29.0	31.3	31.5	11.7	26.5	45.1	70.2%	43.3%	9.4%
Earnings (\$Millions)										
Earnings (Current \$)	83.6	85.4	85.3	87.8	39.3	59.6	89.1	49.6%	1.5%	1.1%
Employment										
Employment	2,790	2,670	2,570	2,580	1,310	1,610	2,280	41.4%	-11.6%	-3.3%
Tax Revenue (\$Millions)										
Total (Current \$)	11.7	11.9	12.3	13.4	6.2	7.6	11.6	52.6%	-13.6%	-0.1%

Note: Details may not add to totals due to rounding. Percent change calculated on unrounded figures. Employment figures represent an annual average employment level and are rounded to the nearest 10. Tax receipts are for the Navajo Nation only and include sales tax (including taxes on junk food, alcohol, tobacco products in addition to other purchases), motor fuel excise tax, and lodging taxes.

For more information, see glossary on page 14.



Navajo Nation / Direct Travel Impacts

Detailed Table

	2016	2017	2018	2019	2020	2021	2022	Annual % Chg.		CAGR %
								2021-22	2019-22	2016-22
Direct Travel Spending (\$Million)										
Destination Spending	378.4	386.1	385.2	393.9	151.4	259.1	406.5	56.8%	3.2%	1.2%
Other Travel*	22.4	25.6	28.0	28.2	15.0	28.9	35.6	23.3%	26.1%	8.0%
TOTAL	400.8	411.7	413.1	422.1	166.4	288.0	442.0	53.5%	4.7%	1.7%
Visitor Spending by Type of Traveler Accommodation (\$Million)										
Hotel, Motel, STVR	89.3	92.6	87.6	93.1	60.3	17.9	73.0	308.2%	-21.6%	-3.3%
Private Home	36.5	38.4	39.2	40.2	28.3	44.4	50.7	14.3%	26.1%	5.6%
Campground	1.6	1.5	1.4	1.6	0.3	0.7	1.6	141.0%	1.0%	-0.1%
Seasonal Home	18.3	18.5	19.1	19.5	19.6	20.5	22.1	7.7%	13.2%	3.2%
Day Travel	232.7	235.2	237.9	239.5	43.0	175.7	259.1	47.4%	8.2%	1.8%
TOTAL	378.4	386.1	385.2	393.9	151.4	259.1	406.5	56.8%	3.2%	1.4%
Visitor Spending by Commodity Purchased (\$Million)										
Accommodations	25.7	26.4	25.0	26.1	13.9	6.3	21.8	245.0%	-16.5%	-2.7%
Food Service	69.8	72.6	74.0	77.7	38.2	60.3	86.1	42.9%	10.9%	3.6%
Food Stores	20.2	20.2	20.1	20.6	9.9	17.9	24.4	36.3%	18.4%	3.2%
Local Tran. & Gas	26.3	29.0	31.3	31.5	11.7	26.5	45.1	70.2%	43.3%	9.4%
Arts, Ent., Rec. & Gaming	195.8	196.8	194.7	196.8	55.8	122.3	187.0	52.9%	-5.0%	-0.8%
Retail Sales	40.7	41.1	40.1	41.3	21.9	25.9	42.1	62.9%	2.1%	0.6%
TOTAL	378.4	386.1	385.2	393.9	151.4	259.1	406.5	56.8%	3.2%	1.4%

Note: Details may not add to totals due to rounding. Percent change calculated on unrounded figures.

For more information, see glossary on page 14.

Navajo Nation / Direct Travel Impacts

Detailed Table

	2016	2017	2018	2019	2020	2021	2022	Annual % Chg.	CAGR %	
								2021-22	2019-22	2016-22
Industry Earnings Generated by Travel Spending (\$Million)										
Accom. & Food Serv.	23.9	24.8	24.7	25.8	13.1	16.9	27.2	60.8%	5.4%	2.1%
Arts, Ent. & Rec.	48.7	49.0	48.4	49.0	17.0	32.6	48.5	49.0%	-1.0%	-0.1%
Retail & Other Travel**	10.9	11.6	12.1	13.0	9.2	10.1	13.4	32.8%	3.3%	3.5%
TOTAL	83.6	85.4	85.3	87.8	39.3	59.6	89.1	49.6%	1.5%	1.1%
Industry Employment Generated by Travel Spending (Jobs)										
Accom. & Food Serv.	1,140	1,080	1,030	1,020	520	610	950	57.4%	-7.0%	-3.0%
Arts, Ent. & Rec.	1,140	1,100	1,040	1,030	440	620	850	36.2%	-17.8%	-4.9%
Retail & Other Travel**	510	500	510	520	350	390	480	24.6%	-8.1%	-0.9%
TOTAL	2,790	2,670	2,570	2,580	1,310	1,610	2,280	41.6%	-11.6%	-3.3%
Tax Receipts Generated by Travel Spending (\$Million)										
Tax Receipts	11.7	11.9	12.3	13.4	6.2	7.6	11.6	52.6%	-13.6%	-0.1%
TOTAL	11.7	11.9	12.3	13.4	6.2	7.6	11.6	52.6%	-13.6%	-0.1%

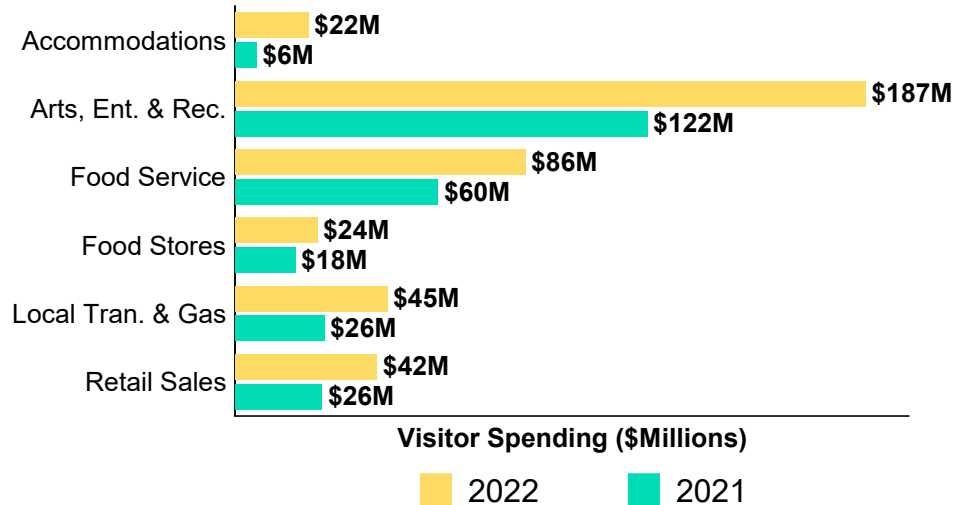
Note: Details may not add to totals due to rounding. Percent change calculated on unrounded figures. Other travel includes travel arrangement, convention services, and a portion of ground transportation to other destinations. Retail earnings and employment include gasoline stations. Tax receipts are for the Navajo Nation only and include sales tax (including the taxes on junk food, alcohol, tobacco products in addition to other purchases), motor fuel excise tax, and lodging taxes.

For more information, see glossary on page 14.



Navajo Nation / Direct Spending

Visitor Spending by Commodity Purchased

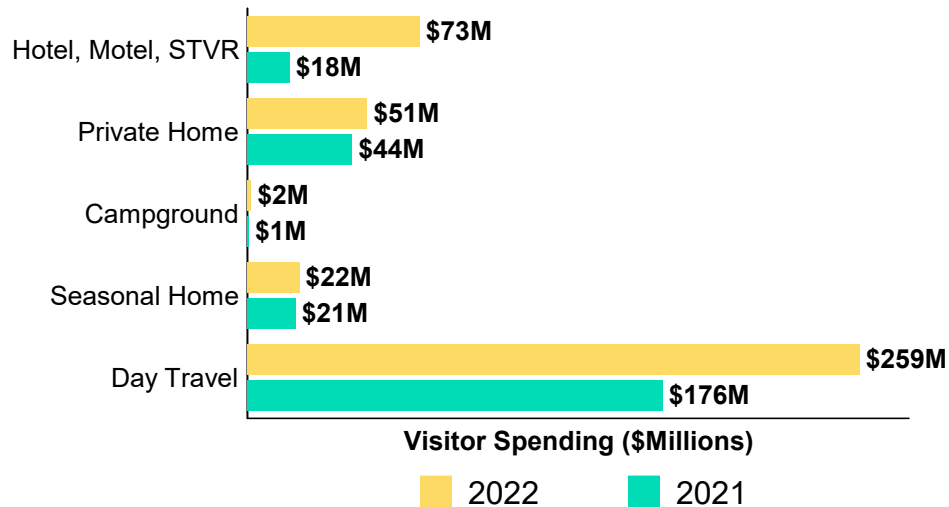


Spending on Arts, Ent. & Rec. which includes casino gaming was \$187 million in 2022, a **53% increase** compared to 2021. In 2021 casinos remained closed or operated under capacity restrictions due to COVID-19.

Sources: Navajo Tax Commission, Dean Runyan Associates, Omnitrak Group, Census Bureau

Note: Figures rounded to the nearest million.

Visitor Spending by Accommodation Type



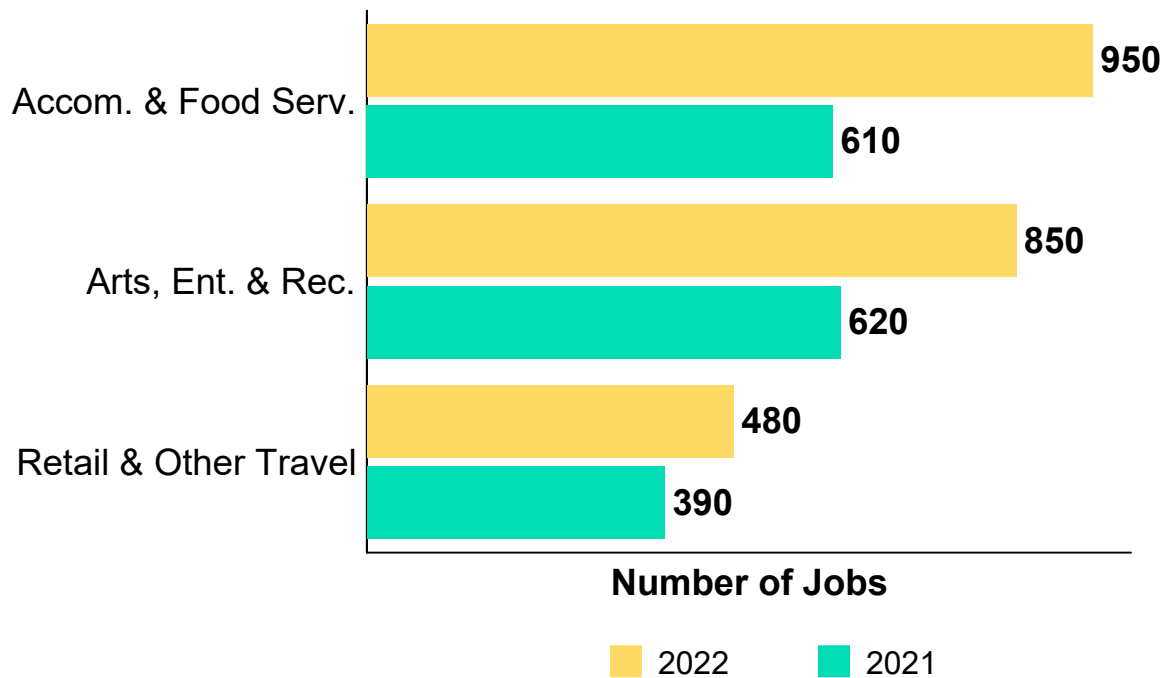
Visitors who come for the day spent \$259 million in 2022, an **increase of 47%** compared to 2021.

Sources: Navajo Tax Commission, Dean Runyan Associates, Omnitrak Group, STR LLC., Census Bureau

Note: Figures rounded to the nearest million.

Navajo Nation / Direct Employment

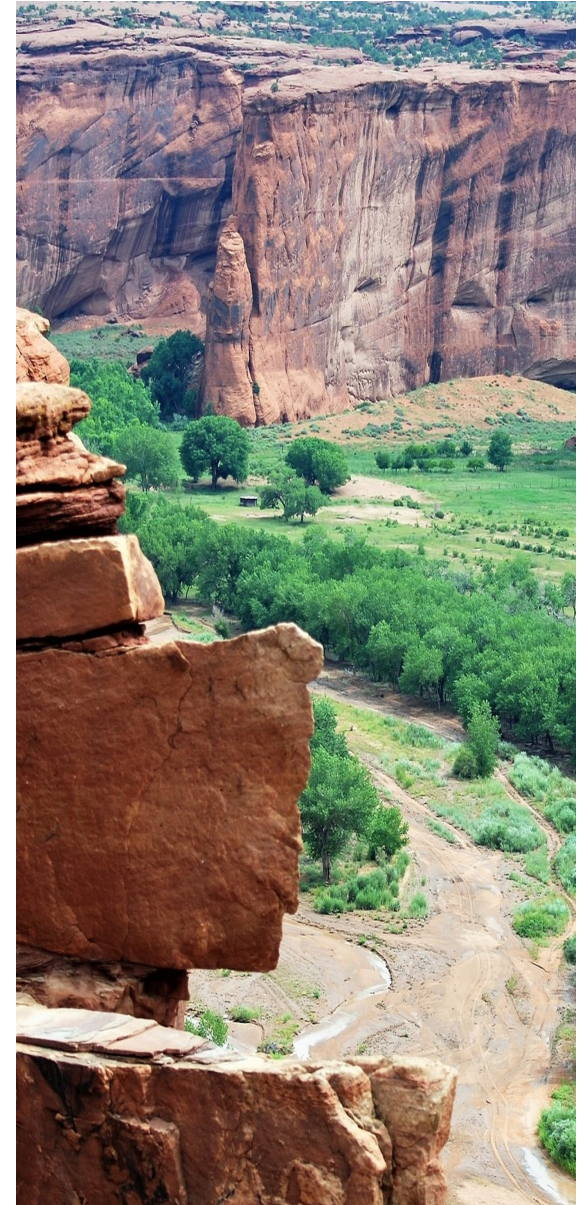
Travel Industry Employment



Note: Retail includes gasoline station employment. "Other Travel" includes travel arrangement services, convention/trade shows, and a portion of ground transportation. Figures represent an annual average employment level and are rounded to the nearest 10.


Accommodations & Food Service industry employment **increased 57.4%** between 2021 and 2022. Overall, the travel industry **gained 670 jobs, an increase of 41.6%** compared to 2021.

Sources: Dean Runyan Associates, Bureau of Labor Statistics, Bureau of Economic Analysis



Navajo Nation / Overnight Visitor Details

Overnight Visitor Volume and Average Expenditure



17%
Hotel, Motel, STVR
share of overnight
person-trips

DRA estimates overnight visitor volumes by cross-referencing visitor surveys and lodging data. Because of this, visitor volumes estimated using other methodologies that rely solely on visitor surveys will not align with what DRA's estimates.

Visitor Spending is a more reliable metric to assess changes in the travel industry because it is more closely tied to fiscal data and lessens the variability that is a common result of using visitor surveys. Day travel volume

Average Expenditure for Overnight Visitors, 2022p

	Person		Party		Party Size	Length of Stay
	Day	Trip	Day	Trip		
Hotel, Motel, STVR	\$240	\$647	\$677	\$1,827	2.8	2.7
Private Home	\$42	\$128	\$102	\$309	2.4	3.0
Other Overnight	\$53	\$156	\$141	\$418	2.7	3.0
All Overnight	\$75	\$223	\$191	\$566	2.5	3.0

Overnight Visitor Volume, 2020-2022p

	Person-Trips			Party-Trips		
	2020	2021	2022	2020	2021	2022
Hotel, Motel, STVR	129,100	27,100	112,800	44,100	9,600	40,000
Private Home	270,100	394,900	396,900	99,000	163,100	163,900
Other Overnight	117,700	151,000	152,000	49,300	56,200	56,600
All Overnight	516,900	573,000	661,600	192,300	228,900	260,500

	Person-Nights			Party-Nights		
	2020	2021	2022	2020	2021	2022
Hotel, Motel, STVR	311,200	73,100	304,200	106,200	25,900	107,800
Private Home	945,200	1,196,400	1,202,400	346,400	494,100	496,600
Other Overnight	393,900	443,000	449,900	164,900	164,900	167,700
All Overnight	1,650,300	1,712,500	1,956,500	617,500	684,900	772,100

Note: Private Home represents visitors staying with friends or family. (Glossary on page 14)

*STVR: stands for short term vacation rental.

Other Overnight includes camping and seasonal home stays.

Glossary

Term	Definition
2nd Home	Homes under private ownership for personal use as a seasonal property where a lodging tax is not collected. Only includes spending during trip.
Day Travel	Greater than 50 miles traveled non-routine to the destination.
Destination Spending	Interchangeable with Visitor Spending. Direct spending made by visitors in a destination.
State Taxes	State taxes generated by travel spending.
Local Taxes	City and county taxes generated by travel spending.
Direct Employment	Employment generated by direct spending; includes full time, part time, seasonal, and proprietors.
Direct Earnings	Total after-tax net income for travel. It includes wages and salary disbursements, proprietor income, and other earned income or benefits.
Other Spending	Spending by residents on travel arrangement services, or spending for convention activity.
Visitor Spending	Direct spending made by visitors in a destination.
Hotel, Motel, STVR	Accommodation types that house transient lodging activity.
Direct Spending	Expenditures made by consumers, combination of Visitor Spending and Other Spending.
Private Home	Personal residences used to host visiting friends and family overnight.
NAICS	North American Industry Classification System.
Person Trips	Individual trips to the destination for all age groups.
Vacation Home Rental	Accommodation types that house transient lodging activity.
Other Overnight	Combination of other overnight visitors who stay in campgrounds or second homes.
STVR	Short-Term Vacation Rental, private and semi-private lodging rented by owners or property management companies (e.g., Airbnb, VRBO).
Seasonal Home	Homes under private ownership for personal use as a seasonal property where a lodging tax is not collected. Only includes spending during trip.

Methodology

Travel Impacts Methodology

The direct travel impacts reported in this analysis were estimated using DRA's Regional Travel Impact Model (RTIM). First developed in 1985, this model estimates direct impacts at a local level without relying on annual survey research. The "bottom up" approach of the RTIM involves modeling of private and public data at the county level, ensuring that the final findings correspond closely with the various travel indicators available for each respective county. Results are then aggregated to regions and the state or disaggregated to the city level based on relevant indicators at these geographic levels. The result is a detailed profile of taxes, employment, wages, and spending that can be tracked consistently over time.

The economic impact associated with day visitors and overnight visitors is a primary breakout included in this report. Lodging tax data and survey data on visitor expenditures inform estimates of total spending associated with overnight visitors who stay in commercial lodging in the studied region. DRA maintains its own expenditure distribution database for each state we work in, with input from multiple major survey providers. Inventory of campgrounds are collected for commercial and public sites, and occupancy is modeled based on a representative subset of sites. Sales attributable to travelers staying in their second homes are calculated from inventories from the US Census and public information on average utilization rates. Visitation of friends and relatives (VFR) is generally stable across time and geography, the primary driver for a destination being the local resident population. Estimates of visitor spending related to day travel can be driven by several factors, including proximity to nearby populous areas, opportunities for recreation and shopping, and inventory of lodging options compared to surrounding areas. Baseline estimates for day visitation are calculated as a factor of overnight visitation, the factor being derived from regional results of national visitor profile data.

Spending on travel-related activities translates into jobs, earnings, and taxes. Calculation of these direct impacts relies on public data on jobs, wages, and business receipts by industry for each geographical area. State and local taxes on travel-related business also factor into triangulating direct travel impacts.

Findings in this report have been compared to various public and private data sources to ensure that the economic impacts estimates are as accurate as possible. Key private data sources used for purposes of this analysis include STR, KeyData, AirDNA, and OmniTrak. Public data sources include the US Census, Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), Energy Information Administration (EIA), Bureau of Transportation Statistics (BTS), Arizona Department of Revenue, and Northern Arizona University.