Impact of COVID-19 on Travel, Tourism, Outdoor Recreation Varied Widely Across States and Demographic Groups
An Analysis Using Publicly-Available Quarterly Workforce Indicators (QWI) Data

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Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau. All tables and figures use data that is publicly available.
Background on this analysis

• LEHD researchers received an external request for more information on the impacts of the COVID-19 pandemic on travel, tourism, and outdoor recreation employment with a quick deadline.

• QWI was determined to be an ideal data product for this analysis:
  • Quarterly frequency allows a fairly close analysis of the pandemic timeline
  • QWI allows for simultaneous stratification by industry, geography, and demographics
  • Readily available tabulations allowed for rapid turnaround

• At the time of the initial request, QWI data were only available through 2020q2. This analysis has since been updated to include the latest available data (2021q1).
How Do We Define Travel, Tourism, and Outdoor Recreation?

• QWI allows for analysis at the three-digit NAICS level; we aggregated these industries to make a custom definition for travel, tourism, and outdoor recreation.

• Our analysis ultimately included the following industries:
  • 481: Air transportation
  • 487: Scenic and sightseeing transportation
  • 711: Performing Arts, Spectator Sports, and Related Industries
  • 712: Museums, Historical Sites, and Similar Institutions
  • 713: Amusement, Gambling, and Recreation Industries
  • 721: Accommodation
  • 722*: Food Services and Drinking Places

• Food services and drinking (722) employment was allocated based on the percentage of other travel and tourism employment in the overall economy (excluding 722).

• This definition compares closely to BEA satellite accounts definitions.
How are Employment and Earnings Reported?

What does it mean to be employed in a quarter?

• The UI records underlying QWI just include total earnings in each quarter for each worker at each covered job, but we often want to observe a stock of employment

• QWI infers “beginning of quarter” employment based on positive earnings on either side of a quarterly boundary (e.g., positive earnings in both 2020q1 and 2020q2 implies employment on April 1, 2020)

• Average earnings are earnings over the entire quarter for individuals who were employed at the beginning of the quarter

• These employment and earnings concepts are readily accessible in the QWI Explorer
Outline of Results

• Baseline Employment Characteristics
• Aggregate Impacts and Geographic Trends
• Demographic Trends
• Conclusion
Baseline Employment Characteristics in Travel, Tourism, and Outdoor Recreation
Who Works in Travel, Tourism, and Outdoor Recreation: Employment by State
Who Works in Travel, Tourism, and Outdoor Recreation: Employment by Sex and Age

Source: U.S. Census Bureau, Quarterly Workforce Indicators for 2019q2. Overall employment of each group includes all employment in states for which QWI employment data are available.
Who Works in Travel, Tourism, and Outdoor Recreation: Employment by Race and Ethnicity

Source: U.S. Census Bureau, Quarterly Workforce Indicators for 2019q2. Overall employment of each group includes all employment in states for which QWI employment data are available.
Aggregate Impacts and Geographic Trends
Travel, Tourism, and Outdoor Recreation Employment Declined Rapidly and Had Not Recovered As Of 2021q1

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Total employment excludes states for which QWI employment and earnings data are unavailable.
Early Declines in Travel, Tourism, and Outdoor Recreation Employment were Concentrated in the Northeast

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Transparent states are those for which QWI employment data are unavailable.
In Subsequent Quarters, the Decline in Employment Spread Across the Country

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Transparent states are those for which QWI employment data are unavailable.
Average Earnings in Travel, Tourism, and Outdoor Recreation Recovered Rapidly

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Average earnings are a weighted average of industries for all states in which average earnings data are available.
Some tourism-heavy states saw large average earnings declines in 2020q2, but by late 2020, average earnings were modestly higher in most states.

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Transparent states are those for which QWI average earnings data are unavailable.
Demographic Trends
Employment and Average Earnings Changes by Sex

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Includes employment and earnings data by group for all states for which such data are available.
Employment and Average Earnings Changes by Age Group

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Includes employment and earnings data by group for all states for which such data are available.
Employment and Average Earnings Changes by Ethnicity

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Includes employment and earnings data by group for all states for which such data are available.
Employment Changes by Race

Source: U.S. Census Bureau, Quarterly Workforce Indicators. Includes employment and earnings data by group for all states for which such data are available.
Conclusion

• Earnings and employment in Travel, Tourism, and Outdoor Recreation both declined substantially at the onset of the pandemic, but average earnings have fully rebounded.

• Early geographic patterns followed the spread of the pandemic, but effects have become more widespread over time.

• Women, young people, and racial and ethnic minority groups in these industries have continued to be disproportionately impacted by the pandemic.

• Ongoing LEHD research: How best can we track cohorts of impacted workers over time, in particular as they change industries?
Thank You!

• Additional Resources:
  • QWI Explorer: https://qwiexplorer.ces.census.gov/

• Contact Me:
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