





Just What Did You Do Last Summer?

An exploration into local and long-distance travel behavior in the Consumer Expenditures Survey before, during, and after the COVID-19 pandemic.

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Abstract

Households might travel away from home for various reasons, such as recreation or business. Travel, whether by car, plane, boat or train, brings with it the consumption of various goods. The goal of this study is to explore the role of both local and long-distance household travel behavior before, during, and after the COVID-19 pandemic. By using detailed consumption information from the Bureau of Labor Statistics Consumer Expenditures Survey (CEX), we seek to explore the mix of goods consumed by travelers as well as the level and frequency of their consumption. Furthermore, we aim to understand how travel changed during this period as well as how it has rebounded over time. By using both the Diary Survey and the Interview Survey data from the CEX, we will also examine the short- and long-term impacts of the pandemic as well as the changing landscape of travel expenditures in the United States.

What is the goal of our investigation?

- To determine a pre-pandemic baseline level of consumption for various goods and services that are associated with travel.
- To investigate if consumption of these goods and services increased or decreased during the COVID-19 pandemic.
- To determine if certain travel-related sectors of the economy experienced a post-pandemic rebound.
- To assess regional nuances in travel-related consumption post-pandemic.

What Constitutes Recreational Travel?

- Recreational travel encompasses the pursuit of leisure activities during an individual's free time (Tribe, 2011).
- Tourism involves a journey away from home for a period that is typically greater than than 24 hours (Graburn, 1983).
- Transportation, whether by plane, rail, or vehicle, is a fundamental component of recreational travel.
- Individuals engage in recreational travel for a variety of reasons, such as: adventure seeking, rest and relaxation, and exploring new cultures and landscapes.

Recreational Travel = Serious Business

- The process of travel "involves decision-making across an entire range of vacation contexts that is complex and affected by many situational and environmental factors" (Kah & Lee, 2015, p. 373).
- Between 2011 and 2016, the growth rate of global tourism surpassed world trade growth (Demir & Gozgor, 2018).
- In 2019, global travel and tourism accounted for \$8.9 trillion of world GDP (Madden, 2021).
- The 2020 pandemic wreaked havoc on worldwide tourism, upending the lives of business owners, hospitality workers, and travelers.

Lodging: CEX Variables of Interest

• Vacation clubs: UCC 680905

• Lodging on out-of-town trips: UCC 210210

• Alcoholic beverages purchased on trips: UCC 200900

Vacation Clubs: UCC 680905

Share of households with consumption

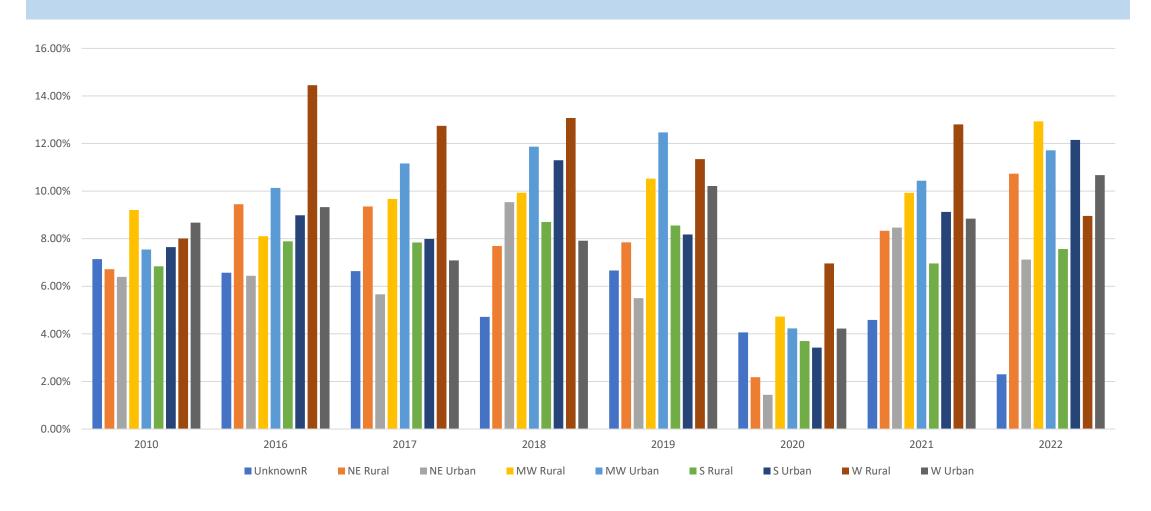
Area	<u>2010</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
UnknownR	0.00%	0.00%	0.41%	0.00%	0.00%	0.00%	0.00%	1.15%
NE Rural	0.00%	0.36%	0.39%	0.19%	0.20%	0.00%	0.46%	0.64%
NE Urban	0.44%	0.17%	0.71%	0.00%	0.00%	0.41%	0.23%	0.30%
MW Rural	0.10%	0.37%	0.13%	0.13%	0.00%	0.33%	0.31%	0.17%
MW Urban	0.00%	0.88%	0.70%	0.25%	0.00%	0.00%	0.24%	0.86%
S Rural	0.11%	0.27%	0.27%	0.14%	0.30%	0.09%	0.27%	0.00%
S Urban	0.00%	0.14%	0.00%	0.00%	0.20%	0.43%	0.18%	0.00%
W Rural	0.14%	1.00%	0.16%	0.82%	0.35%	0.92%	0.00%	0.00%
W Urban	0.33%	0.23%	0.24%	0.60%	0.13%	0.36%	0.34%	0.38%
Overall	0.16%	0.36%	0.30%	0.26%	0.17%	0.30%	0.25%	0.26%

Lodging on Out-of-town Trips: UCC 210210

Share of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	7.14%	6.57%	6.64%	4.72%	6.67%	4.07%	4.59%	2.30%
NE Rural	6.72%	9.45%	9.36%	7.69%	7.85%	2.18%	8.33%	10.73%
NE Urban	6.39%	6.44%	5.66%	9.53%	5.50%	1.44%	8.47%	7.12%
MW Rural	9.21%	8.10%	9.67%	9.93%	10.53%	4.73%	9.92%	12.93%
MW Urban	7.55%	10.13%	11.16%	11.87%	12.46%	4.23%	10.44%	11.71%
S Rural	6.84%	7.89%	7.84%	8.70%	8.55%	3.70%	6.96%	7.57%
S Urban	7.65%	8.99%	7.99%	11.30%	8.18%	3.43%	9.12%	12.15%
W Rural	8.01%	14.45%	12.74%	13.07%	11.35%	6.96%	12.80%	8.96%
W Urban	8.68%	9.33%	7.09%	7.91%	10.21%	4.22%	8.84%	10.67%
Overall	7.61%	8.96%	8.60%	9.53%	9.18%	3.94%	8.98%	9.93%

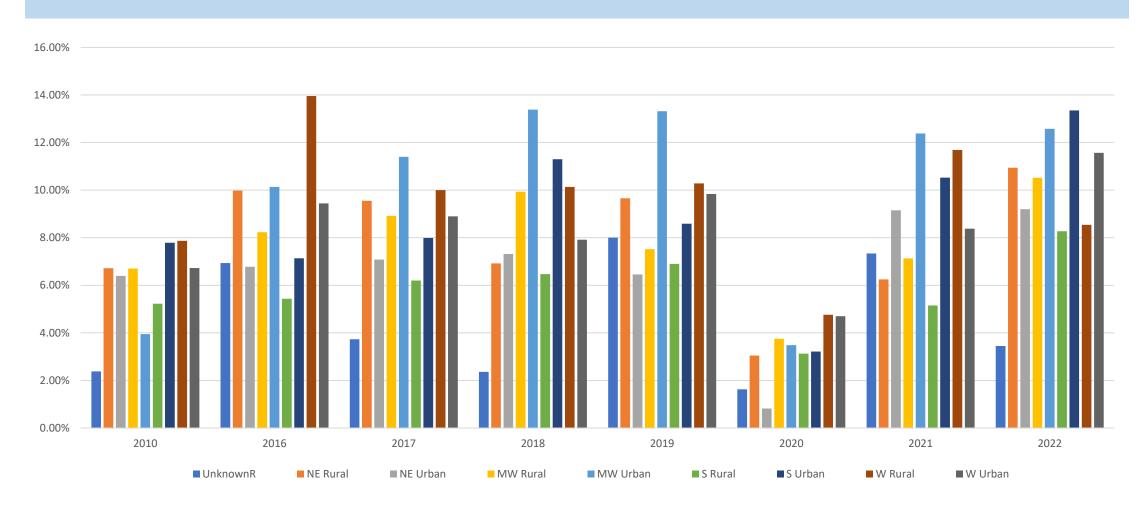
Lodging on Out-of-town Trips: UCC 210210 Share of households with consumption



Alcoholic Beverages Purchased on Trips: UCC 200900 Percentage of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	2.38%	6.93%	3.73%	2.36%	8.00%	1.63%	7.34%	3.45%
NE Rural	6.72%	9.98%	9.55%	6.92%	9.66%	3.05%	6.25%	10.94%
NE Urban	6.39%	6.78%	7.08%	7.32%	6.46%	0.82%	9.15%	9.20%
MW Rural	6.71%	8.23%	8.92%	9.93%	7.52%	3.75%	7.13%	10.52%
MW Urban	3.95%	10.13%	11.40%	13.38%	13.31%	3.48%	12.38%	12.57%
S Rural	5.23%	5.43%	6.20%	6.47%	6.90%	3.13%	5.15%	8.27%
S Urban	7.79%	7.13%	7.99%	11.30%	8.59%	3.21%	10.53%	13.35%
W Rural	7.87%	13.95%	10.00%	10.13%	10.28%	4.76%	11.69%	8.54%
W Urban	6.72%	9.44%	8.89%	7.91%	9.84%	4.70%	8.38%	11.56%
Overall	6.26%	8.25%	8.13%	8.45%	8.62%	3.41%	8.30%	10.28%

Alcoholic Beverages Purchased on Trips: UCC 200900 Percentage of households with consumption



Key Takeaways: Lodging Variables

- The percentage of households with vacation club consumption remained steady in 2020, 2021, and 2022.
- Lodging on out-of-town trips rebounded quickly in 2021. Is this a case of pent-up demand?
- The percentage of households that purchased alcohol on out-of-town trips has, as of 2022, exceeded pre-pandemic levels. In five different regions, the 2022 percentage of households with alcohol consumption exceeded 10%.

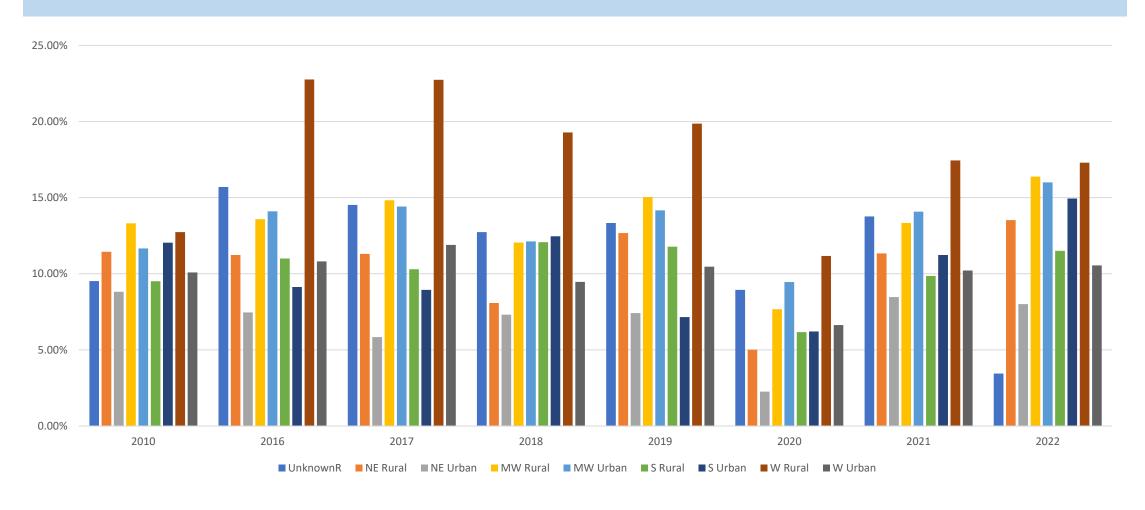
Transportation: CEX Variables of Interest

- Gasoline on out-of-town trips: UCC 470113
- Rental of other vehicles on out-of-town trips: UCC 620919
- Intercity train fares: UCC 530510
- Ship fares: UCC 530901
- Airline fares: UCC 530110

Gas on out-of-town trips: UCC 470113 Percentage of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	9.52%	15.69%	14.52%	12.74%	13.33%	8.94%	13.76%	3.45%
NE Rural	11.44%	11.23%	11.31%	8.08%	12.68%	5.01%	11.34%	13.52%
NE Urban	8.82%	7.46%	5.84%	7.32%	7.42%	2.26%	8.47%	8.01%
MW Rural	13.31%	13.59%	14.82%	12.05%	15.04%	7.67%	13.33%	16.38%
MW Urban	11.66%	14.10%	14.42%	12.12%	14.16%	9.45%	14.08%	16.00%
S Rural	9.51%	11.00%	10.29%	12.08%	11.78%	6.17%	9.86%	11.50%
S Urban	12.04%	9.13%	8.95%	12.46%	7.16%	6.21%	11.23%	14.94%
W Rural	12.73%	22.76%	22.74%	19.28%	19.86%	11.17%	17.44%	17.29%
W Urban	10.09%	10.81%	11.90%	9.47%	10.47%	6.63%	10.22%	10.55%
Overall	10.89%	12.32%	12.36%	11.80%	12.39%	6.83%	11.74%	13.08%

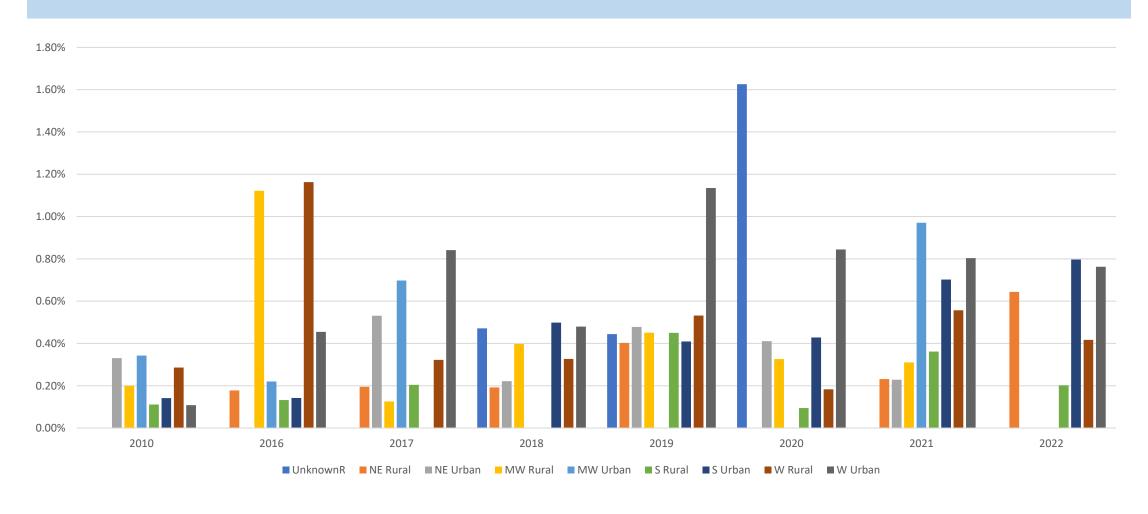
Gas on out-of-town trips: UCC 470113 Percentage of households with consumption



Vehicle rentals on out-of-town trips: UCC 620919 Percentage of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	0.00%	0.00%	0.00%	0.47%	0.44%	1.63%	0.00%	0.00%
NE Rural	0.00%	0.18%	0.19%	0.19%	0.40%	0.00%	0.23%	0.64%
NE Urban	0.33%	0.00%	0.53%	0.22%	0.48%	0.41%	0.23%	0.00%
MW Rural	0.20%	1.12%	0.13%	0.40%	0.45%	0.33%	0.31%	0.00%
MW Urban	0.34%	0.22%	0.70%	0.00%	0.00%	0.00%	0.97%	0.00%
S Rural	0.11%	0.13%	0.20%	0.00%	0.45%	0.09%	0.36%	0.20%
S Urban	0.14%	0.14%	0.00%	0.50%	0.41%	0.43%	0.70%	0.80%
W Rural	0.29%	1.16%	0.32%	0.33%	0.53%	0.18%	0.56%	0.42%
W Urban	0.11%	0.46%	0.84%	0.48%	1.13%	0.84%	0.80%	0.76%
Overall	0.18%	0.39%	0.33%	0.26%	0.52%	0.34%	0.51%	0.37%

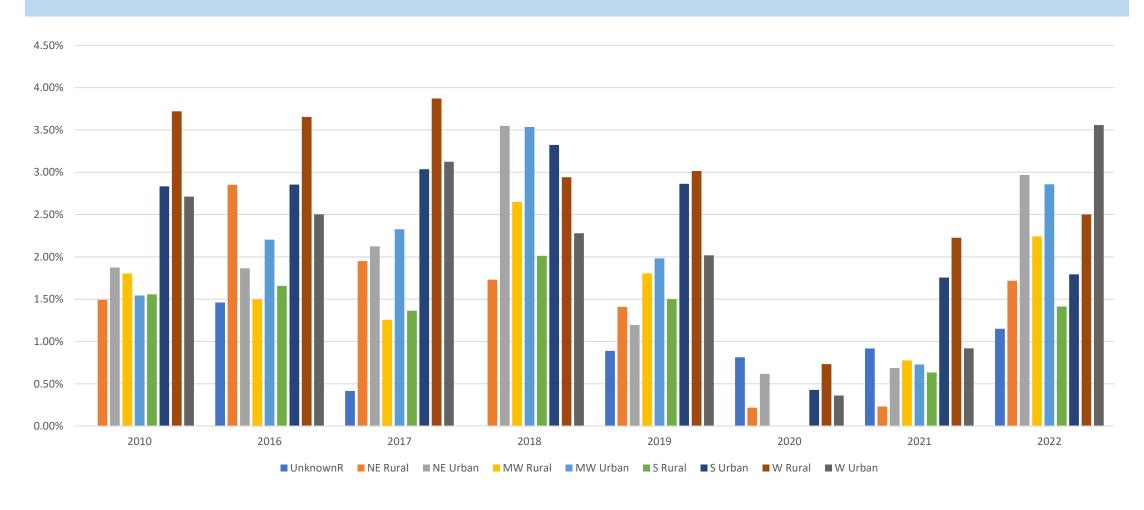
Vehicle rentals on out-of-town trips: UCC 620919 Percentage of households with consumption



Intercity Train Fares: UCC 530510 Percentage of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	0.00%	1.46%	0.41%	0.00%	0.89%	0.81%	0.92%	1.15%
NE Rural	1.49%	2.85%	1.95%	1.73%	1.41%	0.22%	0.23%	1.72%
NE Urban	1.87%	1.86%	2.12%	3.55%	1.20%	0.62%	0.69%	2.97%
MW Rural	1.80%	1.50%	1.26%	2.65%	1.80%	0.00%	0.78%	2.24%
MW Urban	1.54%	2.20%	2.33%	3.54%	1.98%	0.00%	0.73%	2.86%
S Rural	1.56%	1.66%	1.36%	2.01%	1.50%	0.00%	0.63%	1.41%
S Urban	2.83%	2.85%	3.04%	3.32%	2.86%	0.43%	1.75%	1.79%
W Rural	3.72%	3.65%	3.87%	2.94%	3.01%	0.73%	2.23%	2.50%
W Urban	2.71%	2.50%	3.13%	2.28%	2.02%	0.36%	0.92%	3.56%
Overall	2.11%	2.23%	2.17%	2.49%	1.87%	0.28%	0.98%	2.29%

Intercity Train Fares: UCC 530510 Percentage of households with consumption



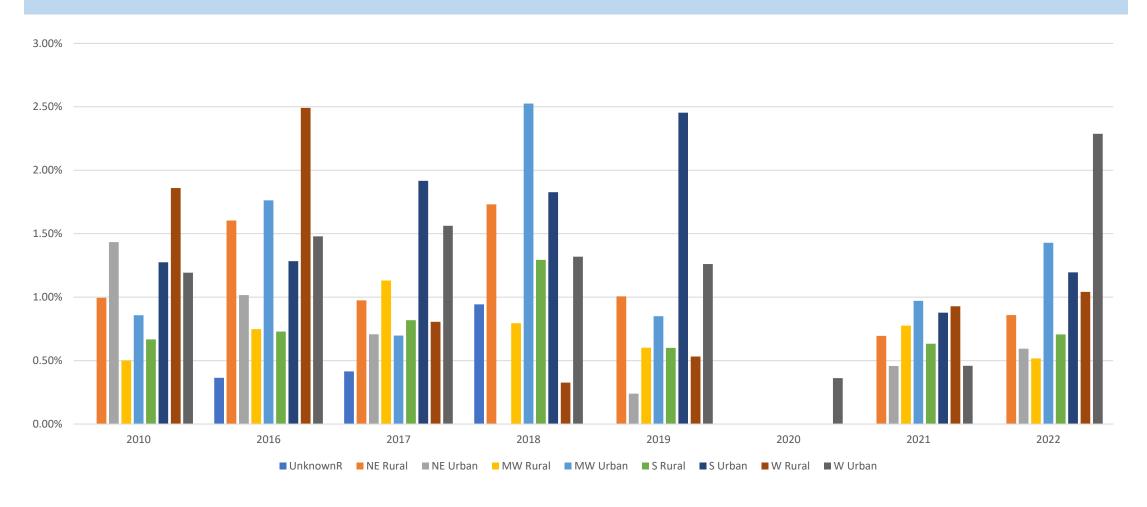
Intercity Train Fares: UCC 530510 Total Survey Spending

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	\$0.00	\$5,280.00	\$120.00	\$0.00	\$372.00	\$348.00	\$456.00	\$24.00
NE Rural	\$3,048.00	\$16,296.00	\$10,536.00	\$34,836.03	\$14,263.97	\$600.00	\$12.00	\$5,040.00
NE Urban	\$23,831.96	\$14,927.99	\$15,408.00	\$34,340.00	\$9,272.00	\$4,080.00	\$29,520.00	\$9,464.00
MW Rural	\$35,004.06	\$10,716.00	\$18,132.00	\$56,136.00	\$25,116.00	\$0.00	\$8,148.00	\$12,204.01
MW Urban	\$32,472.00	\$7,800.00	\$8,292.00	\$15,796.06	\$6,264.02	\$0.00	\$1,164.00	\$24,048.00
S Rural	\$38,340.12	\$37,140.00	\$54,156.00	\$33,071.92	\$38,376.00	\$0.00	\$6,216.00	\$30,084.04
S Urban	\$27,468.00	\$12,024.00	\$57,251.94	\$42,144.00	\$35,700.00	\$1,128.00	\$4,620.00	\$13,068.00
W Rural	\$28,871.96	\$30,191.92	\$33,084.00	\$22,548.06	\$17,471.92	\$1,308.00	\$20,952.00	\$13,380.00
W Urban	\$33,072.00	\$40,236.02	\$37,436.10	\$31,920.00	\$27,408.00	\$9,012.00	\$6,288.00	\$38,508.12
Totals	\$222,108.10	\$174,611.93	\$234,416.04	\$270,792.07	\$174,243.91	\$16,476.00	\$77,376.00	\$145,820.17

Ship Fares: UCC 530901 Percentage of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	0.00%	0.36%	0.41%	0.94%	0.00%	0.00%	0.00%	0.00%
NE Rural	1.00%	1.60%	0.97%	1.73%	1.01%	0.00%	0.69%	0.86%
NE Urban	1.43%	1.02%	0.71%	0.00%	0.24%	0.00%	0.46%	0.59%
MW Rural	0.50%	0.75%	1.13%	0.79%	0.60%	0.00%	0.78%	0.52%
MW Urban	0.86%	1.76%	0.70%	2.53%	0.85%	0.00%	0.97%	1.43%
S Rural	0.67%	0.73%	0.82%	1.29%	0.60%	0.00%	0.63%	0.71%
S Urban	1.27%	1.28%	1.92%	1.83%	2.45%	0.00%	0.88%	1.20%
W Rural	1.86%	2.49%	0.81%	0.33%	0.53%	0.00%	0.93%	1.04%
W Urban	1.19%	1.48%	1.56%	1.32%	1.26%	0.36%	0.46%	2.29%
Overall	1.02%	1.22%	1.05%	1.20%	0.86%	0.06%	0.68%	1.09%

Ship Fares: UCC 530901 Percentage of households with consumption



Ship Fares: UCC 530901 Total Survey Spending

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	\$ -	\$ 1,140.00	\$ 1,788.00	\$ 20,856.00	\$ -	\$ -	\$ -	\$ -
NE Rural	\$ 7,992.00	\$ 41,580.00	\$ 3,528.00	\$ 78,372.00	\$ 3,108.00	\$ -	\$ 11,160.00	\$242,400.00
NE Urban	\$137,580.04	\$ 40,488.00	\$ 24,000.00	\$ -	\$ 1,512.00	\$ -	\$ 7,908.00	\$ 6,684.00
MW Rural	\$ 3,576.00	\$ 49,140.00	\$ 60,455.97	\$ 16,044.00	\$142,320.00	\$ -	\$ 21,744.00	\$ 3,396.00
MW Urban	\$ 7,200.00	\$ 19,356.00	\$ 12,480.00	\$ 28,260.00	\$ 1,116.00	\$ -	\$ 4,728.00	\$ 1,512.00
S Rural	\$ 55,164.00	\$260,999.97	\$150,828.00	\$ 78,971.94	\$ 19,212.00	\$ -	\$ 29,400.00	\$ 32,832.03
S Urban	\$ 11,531.97	\$ 39,251.97	\$ 36,648.00	\$121,296.01	\$155,748.00	\$ -	\$ 4,368.00	\$ 28,524.00
W Rural	\$135,071.95	\$ 65,028.00	\$ 39,780.00	\$ 1,092.00	\$ 4,248.00	\$ -	\$ 10,068.00	\$ 25,980.00
W Urban	\$ 21,935.98	\$228,696.00	\$ 17,700.02	\$112,812.04	\$ 11,820.00	\$ 708.00	\$ 12,960.00	\$ 82,008.00
Total Survey Spending	\$ 380,051.94	\$745,679.94	\$347,207.99	\$457,703.99	\$339,084.00	\$ 708.00	\$102,336.00	\$423,336.03

Airline Fares: UCC 530110 Share of households with consumption

Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	0.00%	2.19%	1.24%	1.89%	2.67%	1.63%	1.83%	2.30%
NE Rural	2.99%	3.92%	2.92%	3.85%	3.62%	0.44%	2.31%	5.79%
NE Urban	3.97%	4.41%	5.13%	7.76%	3.11%	0.82%	4.35%	4.75%
MW Rural	3.20%	3.74%	4.02%	5.30%	3.61%	1.47%	3.88%	5.34%
MW Urban	4.12%	6.17%	7.44%	7.32%	3.97%	1.24%	6.31%	5.71%
S Rural	3.39%	2.65%	3.61%	4.67%	3.90%	0.95%	3.07%	3.73%
S Urban	6.09%	5.71%	8.31%	9.30%	9.20%	1.28%	5.79%	5.78%
W Rural	9.01%	8.47%	7.26%	9.48%	7.98%	1.83%	5.38%	7.92%
W Urban	6.83%	7.85%	10.10%	6.95%	7.94%	2.29%	7.12%	9.78%
Overall	4.73%	4.90%	5.67%	6.32%	5.25%	1.35%	4.69%	6.05%

Closing Remarks

- The pandemic changed the way individuals travel and the products and services that they consume.
- Total survey spending on ship fares has increased to pre-pandemic levels. NE Rural and West Urban consumers appear to be driving this increase.
- Although the percentage of households with train fare consumption has increased since 2020, the amount of survey spending has not rebounded as quickly. Why is this the case and how can we further explain?
- Examining the data provides us with many directions for future research.
- Lastly, we thank the BLS staff for the opportunity to present at this workshop.