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Economic and Quality of Life Indicators for Allegheny National Forest Counties in Pennsylvania



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1. Introduction

Project Overview

Growing and maintaining a healthy recreation and tourism sector, that equitably benefits residents over the long term, requires active stakeholder engagement, a research-based robust understanding of potential challenges and opportunities, collaboration among various levels of government and landowners and a sound, research-based plan for a region's future. Research around the world has identified both rapid increases in rural tourism activity due to the COVID-19 pandemic and the challenges that rural destinations face. While the COVID-19 pandemic brought unprecedented opportunities to develop and promote tourism in rural gateway communities, rural Destination Management Organizations are faced with considerable challenges as they attempt to promote economic prosperity through tourism.

Gateway communities in the United States suffer from a lack of research-based performance indicators to measure and evaluate their strengths and weaknesses and to clearly identify where additional resources are needed to enhance the tourism and recreation economy. To this end, a multi-state, integrated project team that involves research and extension faculty from West Virginia University, Pennsylvania State University, the University of Vermont, and the University of New Hampshire was formed with support from the Northeast Regional Center for Rural Development to develop an integrated process for measuring and evaluating sustainable tourism performance indicators and competitiveness in rural destinations in the northeast United States.

By understanding the factors that make destinations resilient the project will produce policy recommendations and general guidelines for improving destination and gateway community sustainability and well-being. This project was funded through a USDA Agriculture and Food Research Initiative grant and adopts a mixed method approach that involves primary and secondary data collection for three targeted rural case study destinations in northwestern Pennsylvania, the Upper Valley region on the Vermont/New Hampshire border, and the Monongahela National Forest region of West Virginia.

The long-term goal of this project is to fully leverage the resources of the Land-Grant Universities to enhance the sustainability and resiliency of rural destinations by providing research-based information and a destination management framework for rural gateway destinations seeking to address post-COVID 19 opportunities and challenges. Project team members will work closely with destination leadership in targeted case study regions to accomplish the research activities which include:

- Visitor Preferences and Resident Attitudes Toward Tourism surveys.
- **Economic, Quality of Life, and Tourism Report**
- Inventory and Spatial Analysis of Recreation and Tourism Infrastructure and Assets

- Mobile phone data analysis to better understand visitors/tourist patterns
- First Impressions of Tourism Assessment.

This report focuses on findings from sustainable tourism indicators identified from secondary data sources in the Allegheny National Forest (ANF) region, Pennsylvania.

Sustainable Tourism Indicators from Secondary Data

Primary data provides a firsthand understanding of the opportunities and challenges impacting visitors, local businesses, and other destination stakeholders. However, collecting this data requires a significant allocation of resources, especially time. Secondary data provide a more cost-effective method for analyzing a breadth of data on the people, organizations, and place that may otherwise be difficult to collect. Government agencies often offer free data for geographies across the nation and spanning multiple years allowing local stakeholders to quickly and easily monitor change in the destination over time and compare characteristics and trends in their destination relative to other peer and aspirational places. The project team worked with local stakeholders to develop county level indicators that can be used to quantify and describe tourism demand and destinations' economic, social, and environmental characteristics, and monitor destination change especially considering recent events like the COVID-19 pandemic. To allow for comparisons across places we provide both county level estimates and data for the United States, the state of Pennsylvania, and USDA Economic Research Service recreation dependent counties, those characterized by a high percentage of employment, earnings, and seasonal housing units in the recreation, entertainment, and hospitality sectors.

Delphi process

Given the breadth of data available we worked with destination stakeholders in a participatory process to develop an indicator set rooted in the sustainable tourism literature and reflective of the data that stakeholders felt would be most relevant to measuring change in and across rural tourism destinations. Participatory approaches enable researchers to collaborate directly with stakeholders, offering a grounded understanding of problems and identifying practical solutions (McNiff & Whitehead, 2011). The Delphi method employed in this study provided a structured process to gather stakeholder opinions, summarize collective responses, and iteratively refine perspectives based on group feedback (Shang, 2023). Originally developed by the RAND Corporation in the 1950s for military planning, the Delphi method has since been applied across various fields where researcher-practitioner collaboration is essential (Kezar & Maxey, 2016; Keeney et al., 2001). It is particularly valuable for studying issues with incomplete knowledge, uncertain landscapes, or limited consensus (Kezar & Maxey, 2016), and has been identified as an effective method for selecting indicators when input is needed from diverse viewpoints (Freitas et al., 2018).

Table 1 shows the county level indicators suggested by the literature and prioritized by the Delphi process.

Table 1. Selected Indicators from Literature Review and Delphi Process

Economic	Social	Environmental
Total Employment	Population Trends	Air Quality (PM 2.5)
Employment by Industry Sector	Population Aged 25-44	Parks and Park Area
Leisure and Hospitality Employment (including arts, entertainment and recreation; accommodation and food services; select component sectors)	Educational Attainment	Water Pollution
Leisure and Hospitality Establishments	Race and Ethnicity	
Leisure and Hospitality Resilience	Income	
Visitor Spending and Spending by Category	Share of Employment	
Economic Impacts of Visitor Spending	Housing Characteristics (seasonal homes, median house value, median home age, affordability)	
Tourism Assets (including recreation features, lodging, restaurants, shopping, cultural heritage, etc.)	Violent and Property Crime	

Source: compiled by authors

Travel and Tourism in the United States

According to the U.S. Travel Association’s U.S. Travel Winter 2025 Forecast (Figure 1) (driven by Tourism Economics’ travel forecasting model), travel expenditure in the U.S. will continue to grow, driven by resilient consumer spending, sustained business investment and major events promoting international visits. For 2025, total U.S. Travel spending is projected to grow 3.9% to \$1.35 trillion, equaling 2019 levels (inflation-adjusted), with additional growth to \$1.46 trillion (inflation-adjusted) by 2028.

U.S. Travel forecasts 8.8% growth for inbound international visits in 2025 and 8.9% growth in 2026. Growth in international visits to the United States remains an important factor in re-establishing travel as one of our most important exports, with more than \$200 billion in international spending projected for 2025. Challenges include reduced visits from important regions including Asia, the risk of geopolitical tensions, policies that complicate and dissuade

potential U.S. visitation and prolonged visa wait times for visitors from significant inbound markets.

Figure 1. U.S. Travel Forecast

	ACTUAL					FORECAST				
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total # of trips	2.40 B	1.60 B	2.04 B	2.30 B	2.37 B	2.43 B	2.50 B	2.56 B	2.62 B	2.68 B
Domestic person-trips	2.32 B	1.58 B	2.02 B	2.25 B	2.31 B	2.36 B	2.42 B	2.47 B	2.53 B	2.58 B
Leisure	1.85 B	1.40 B	1.77 B	1.88 B	1.89 B	1.92 B	1.96 B	2.01 B	2.05 B	2.09 B
Business	463.9 M	181.3 M	249.5 M	370.9 M	413.1 M	436.0 M	454.5 M	467.4 M	478.7 M	488.3 M
Auto	2.13 B	1.50 B	1.88 B	2.08 B	2.12 B	2.16 B	2.21 B	2.26 B	2.31 B	2.36 B
Air	188.9 M	78.6 M	140.4 M	174.6 M	190.7 M	200.2 M	205.8 M	210.6 M	215.1 M	219.2 M
International arrivals	79.4 M	19.2 M	22.1 M	50.8 M	66.5 M	72.4 M	78.8 M	85.8 M	91.2 M	95.0 M
Canada	20.7 M	4.8 M	2.5 M	14.4 M	20.5 M	20.4 M	21.5 M	22.8 M	24.0 M	24.8 M
Mexico	18.3 M	6.8 M	10.4 M	12.4 M	14.5 M	17.1 M	18.6 M	20.3 M	21.2 M	21.7 M
Overseas	40.4 M	7.6 M	9.2 M	24.0 M	31.5 M	35.0 M	38.6 M	42.8 M	46.0 M	48.5 M

Note: Source is from U.S. Travel Association Travel Forecast Winter 2025

Travel and Tourism in Pennsylvania

According to the Economic Impact of Travel and Tourism in Pennsylvania (2022) report published by Tourism Economics, the travel sector and tourism is an integral part of the Pennsylvania economy. Travelers generate significant economic benefits to households, businesses, and government. This economic activity represents a critical driver of the state's economy. In 2022, traveler activity supported 6.1% of all jobs in the state and the increase in visitor activity in 2022 created \$420 million more in state and local governmental revenues.

Travelers and tourists spent \$45.4 billion in PA in 2022, a nearly 20% increase from 2021 and just 1.5% below 2019's pre-pandemic level. The increase was driven by growth in business and overnight travel, with increases in both the number of higher-spending travelers and international arrivals.

Pennsylvania hosted an estimated 192.4 million travelers in 2022, a 6.8%, or 12.2 million, increase from the prior year. The increase was due to the 12% increase in the number of overnight travelers, with total visitation reaching 91% of its pre-pandemic (2019) level.

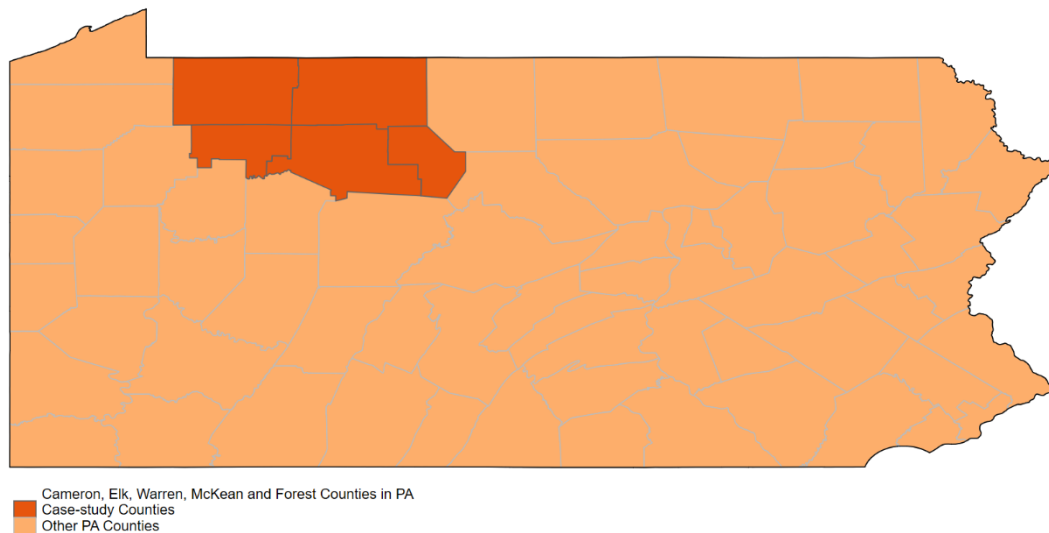
Survey data indicate that domestic travelers spent an estimated \$45 billion in Pennsylvania in 2022, a \$9.3 billion increase from 2021. The combined spending by overnight business and leisure travelers totaled an estimated \$24.2 billion, accounting for close to 55% of total domestic traveler spend. The increase in the number of overnight travelers helped overnight traveler spending outpace that of the day-trip segment, with overnight visitor spending up 30% in 2022 compared to the 22% increase in day-trip visitor spending.

2. Geographic Context

The five counties form a contiguous block in northern Pennsylvania (Figure 2). The counties cover more than 3,500 square miles and represent a significant portion of the state's rural landscape (Table 2). Population density ranges from 44 persons per square mile in Warren County to less than 12 persons per square mile in Cameron County. As shown in Figure 2, these

counties are strategically positioned in the northern tier of Pennsylvania, sharing borders with each other and creating a unified regional tourism economy. This area is known for its natural attractions, including the Allegheny National Forest, state parks, and outdoor recreation opportunities, which contribute significantly to their tourism-based economy. Nearly half (45%) of the region is actively managed for biodiversity protection and natural resource extraction. In Cameron and Elk Counties nearly two-thirds of the counties' land area is in protected lands.

Figure 2. Locations of Cameron, Elk, Warren, McKean and Forest Counties in PA



Note: Authors' mapping from US Census Bureau Tiger shape files.

Table 2. Land Area, Population Density, and Protected Lands

	Size (Miles ²)	Pop. Density per Miles ² 2020	Protected Land (Miles ²)	% of Total Area Protected as GAP 1-3*
Cameron	396	12	253	64%
Elk	827	38	502	61%
Forest	427	16	213	50%
McKean	980	41	317	32%
Warren	884	44	306	35%
PA	44742	291	8098	18%
U.S.	3533038	94	1159265	33%
*GAP 1-2 are actively managed for biodiversity; GAP 3 are managed for multiple uses including both conservation and extraction				

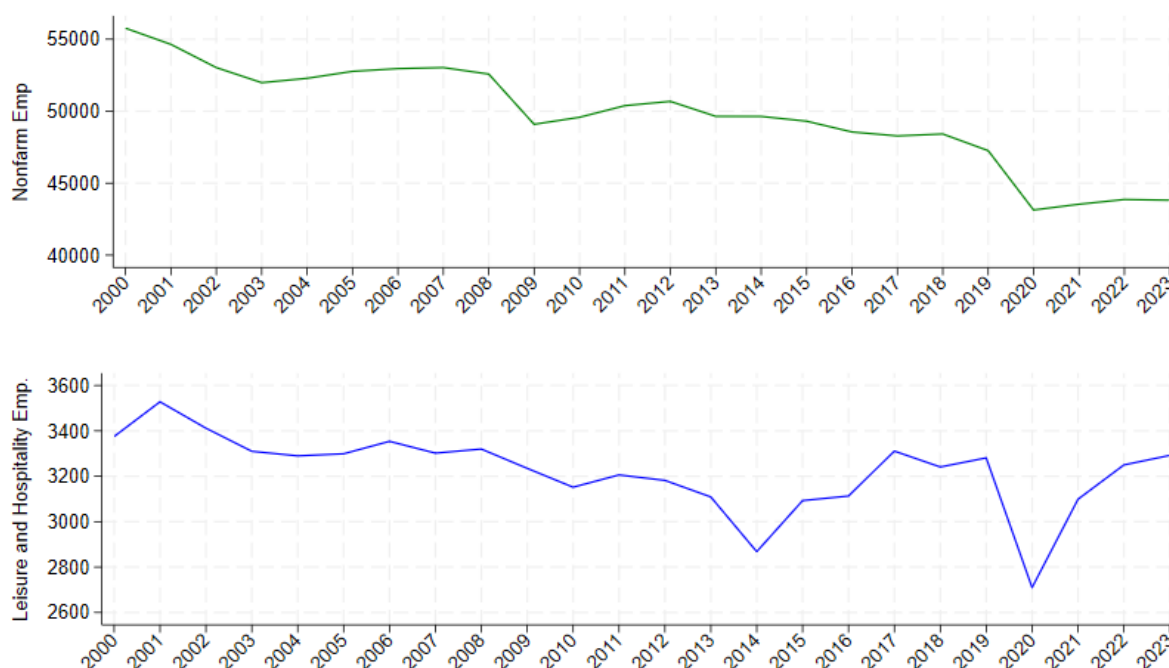
Note: Source is from U.S. Census QuickFacts and U.S. Geological Survey (USGS) Gap Analysis Project (GAP), 2024, Protected Areas Database of the United States (PAD-US) 4.0.

3. Employment and Industry Analysis

Overall Employment Trends

The region's employment trends can be examined using complementary data from Quarterly Census of Employment and Wages (QCEW). As shown in Figure 3, total employment has declined since 2000, with significant impacts from the 2008-2009 recession, limited post-recession recovery, and sharp declines during the COVID-19 pandemic followed by partial recovery. Also shown are Leisure and Hospitality employment.

Figure 3. Non-farm and Leisure and Hospitality (L&H) Employment in the Five Counties



Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Industry Composition

Analysis of current employment distribution (Table 3 and Figure 4) reveals distinct patterns across industries in these counties. The manufacturing sector maintains dominance in Cameron (46.5%) and Elk (42.6%) counties, while education and health services represent the largest employment sector in Forest County (36%). Trade, transportation, and utilities employ significant portions of the workforce in Warren (19.6%) and McKean (19.0%) counties.

Long-term employment changes from 2000 to 2023 (Figure 4) show varying trajectories for different sectors. The natural resources sector displayed distinctly different patterns from other industries, showing significant growth periods that do not align with general economic cycles. Manufacturing experienced the largest decline over this period, while education and

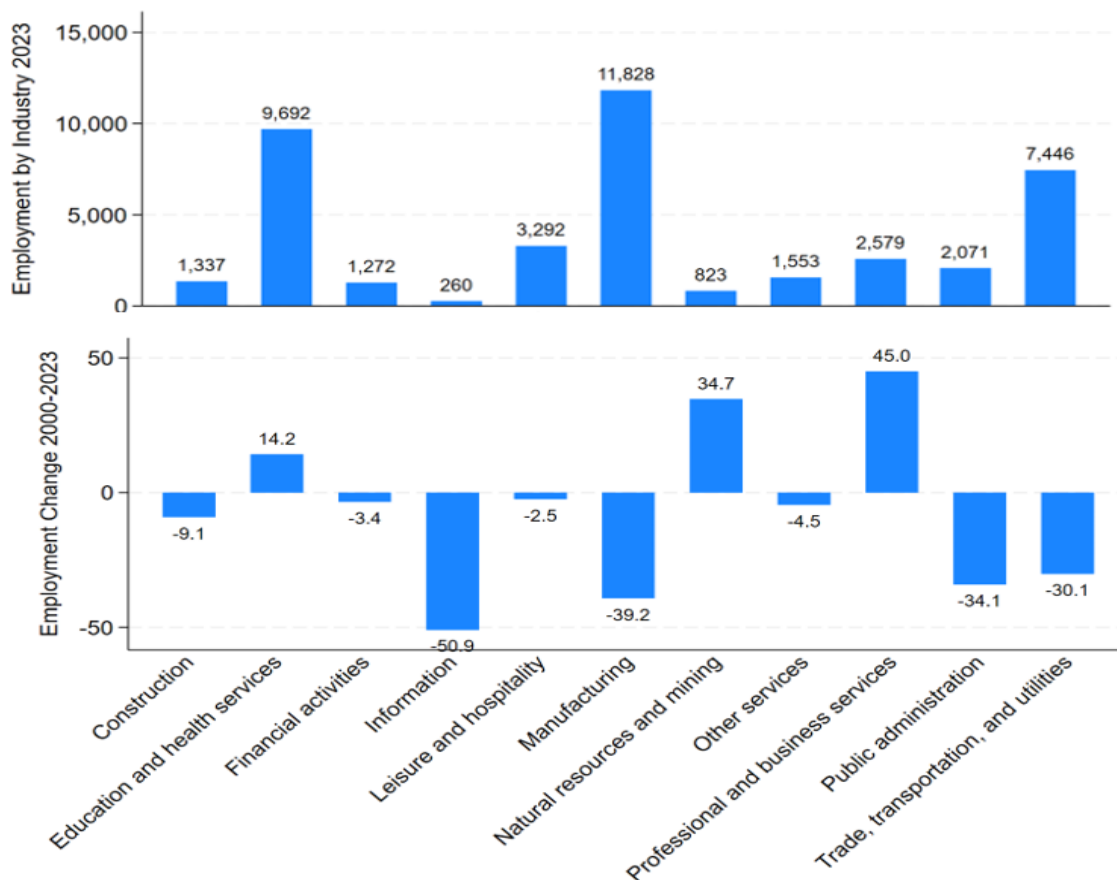
health services showed the most growth. The natural resources sector experienced substantial growth between 2008 and 2012, primarily due to increased natural gas extraction activities in the region, demonstrating a trend that was countercyclical to the general economic downturn.

Table 3. Employment by Sector for Five PA Counties 2023

Sector	Cameron		Elk		Forest		McKean		Warren	
	No.	%	No.	%	No.	%	No.	%	No.	%
Natural resources and mining	14	0.9	80	0.6	37	3.6	439	3.2	253	2.0
Construction	22	1.4	491	3.7	28	2.7	540	3.9	256	2.0
Manufacturing	721	46.5	5,657	42.6	184	17.7	2,875	20.9	2,391	19.1
Trade, transportation, and utilities	150	9.7	2,081	15.7	144	13.8	2,619	19.0	2,452	19.6
Information	11	0.7	98	0.7	0	0.0	82	0.6	69	0.6
Financial activities	22	1.4	249	1.9	14	1.3	261	1.9	726	5.8
Professional and business services	49	3.2	614	4.6	11	1.1	885	6.4	1,020	8.1
Education and health services	281	18.1	2,165	16.3	375	36.0	3,524	25.6	3,347	26.7
Leisure and hospitality	126	8.1	925	7.0	176	16.9	1,156	8.4	909	7.3
Other services	54	3.5	485	3.7	22	2.1	502	3.6	490	3.9
Public administration	99	6.4	428	3.2	50	4.8	881	6.4	613	4.9
Total	1,549	100	13,273	100	1,041	100	137,64	100	12,526	100

Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Figure 4. 2023 Employment by Industry (top) and Industry Employment Change 2000-2023 (bottom), five counties combined



Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics. The top panel shows number of employment and the bottom panel shows percentage changes from 2000-2023.

4. Tourism Economy

Travel and Tourism in the Allegheny National Forest Region of Pennsylvania

Tourism and leisure activities play vital roles in the economic landscape of Pennsylvania's rural counties, particularly in the northern region of the state. The five counties of Cameron, Elk, Warren, McKean, and Forest represent a significant rural tourism cluster that has experienced various economic challenges and transformations over the past two decades. This report examines the employment trends in these counties' Leisure and Hospitality (L&H) sector from 2000 to 2023, providing insights into the sector's resilience and vulnerabilities during major economic or other shocks.

Tourism Spending and Economic Impacts

Visitor spending across the five counties totaled \$493.5 million in 2022, showing strong recovery from the pandemic-induced low of \$346.4 million in 2020 (Table 4). Warren and

McKean counties consistently lead in visitor spending, each generating over \$170 million in 2022. The recovery has been uneven across counties, with Forest County showing remarkable growth, to 148% of its 2019 levels, while Warren and McKean counties remained slightly below their pre-pandemic spending levels at 92.9% and 94.5% respectively.

Table 4. Visitor Spending for Five PA Counties 2016-2022 (\$millions)

	2016	2017	2018	2019	2020	2021	2022	relative to 2019
Cameron	\$10.1	\$10.1	\$10.0	\$10.4	\$8.8	\$11.0	\$12.60	120.8%
Elk	\$78.0	\$80.2	\$79.2	\$82.5	\$62.1	\$79.1	\$89.10	108.1%
Forest	\$26.3	\$27.2	\$27.1	\$26.1	\$29.8	\$35.1	\$38.70	148.%
McKean	\$172.9	\$180.0	\$183.4	\$182.6	\$121.0	\$155.5	\$172.60	94.5%
Warren	\$182.3	\$186.8	\$190.2	\$194.1	\$124.7	\$162.2	\$180.50	92.9%
Total	\$469.6	\$484.3	\$489.9	\$495.7	\$346.4	\$442.9	\$493.5	105.1%

Note: Source is from Economic Impact of Travel and Tourism in Pennsylvania – 2022 prepared by the Pennsylvania Tourism Office.

Analysis of spending categories in 2022 (Table 5) reveals transportation as the largest spending category at \$169.3 million, followed by food and beverages at \$108.4 million. Lodging, while essential to the tourism infrastructure, generated the smallest share at \$39.8 million. This spending pattern reflects the region's role as a drive-to destination with significant day-trip activity.

Table 5. Visitor Spending by Category for Five PA Counties 2022 (\$millions, nominal)

	Lodging	Food & beverages	Retail	Recreation	Transportation	Total
Cameron	\$1.0	\$2.4	\$2.0	\$3.4	\$3.8	\$12.6
Elk	\$9.7	\$21.6	\$16.8	\$17.3	\$23.6	\$89.1
Forest	\$6.9	\$7.7	\$6.8	\$7.7	\$9.5	\$38.7
McKean	\$14.9	\$38.4	\$26.9	\$30.3	\$62.1	\$172.6
Warren	\$7.3	\$38.3	\$32.4	\$32.1	\$70.3	\$180.5
Total	\$39.8	\$108.4	\$84.9	\$90.8	\$169.3	\$493.5

Note: Source is from Economic Impact of Travel and Tourism in Pennsylvania – 2022 prepared by the Pennsylvania Tourism Office.

The Tourism Satellite Accounts shows total tourism demand reached \$522.1 million in 2022, with visitor spending comprising the vast majority at \$493.5 million. Government spending and investment/PCE (Personal Consumption Expenditure) contributed an additional \$26.8 million to the tourism economy.

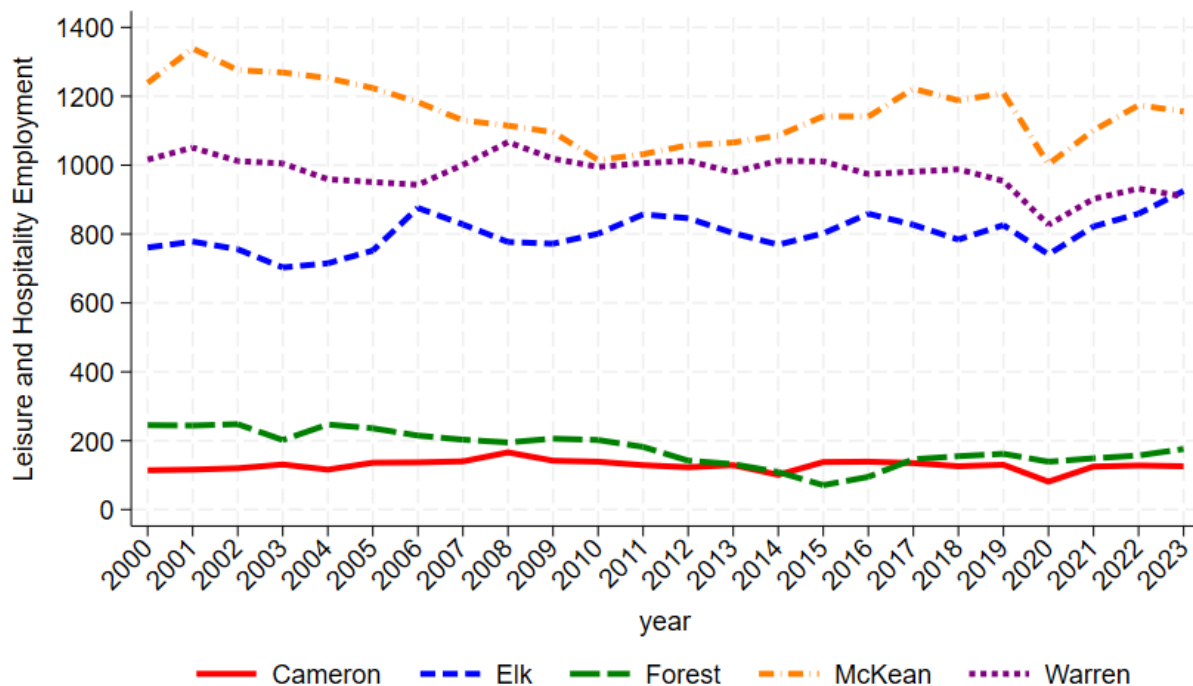
Leisure and Hospitality Employment Trends

As shown in Figures 5 and 6, the L&H sector demonstrated notable volatility in both employment and establishment numbers from 2000 to 2023. Total L&H employment across the five counties declined from 3,375 jobs in 2000 to 3,292 jobs in 2023, with significant fluctuations throughout this period. During the 2008 financial crisis, the L&H sector experienced

a sharper initial decline than most other industries but also showed a relatively quick recovery by 2010, returning to near pre-crisis levels by 2012.

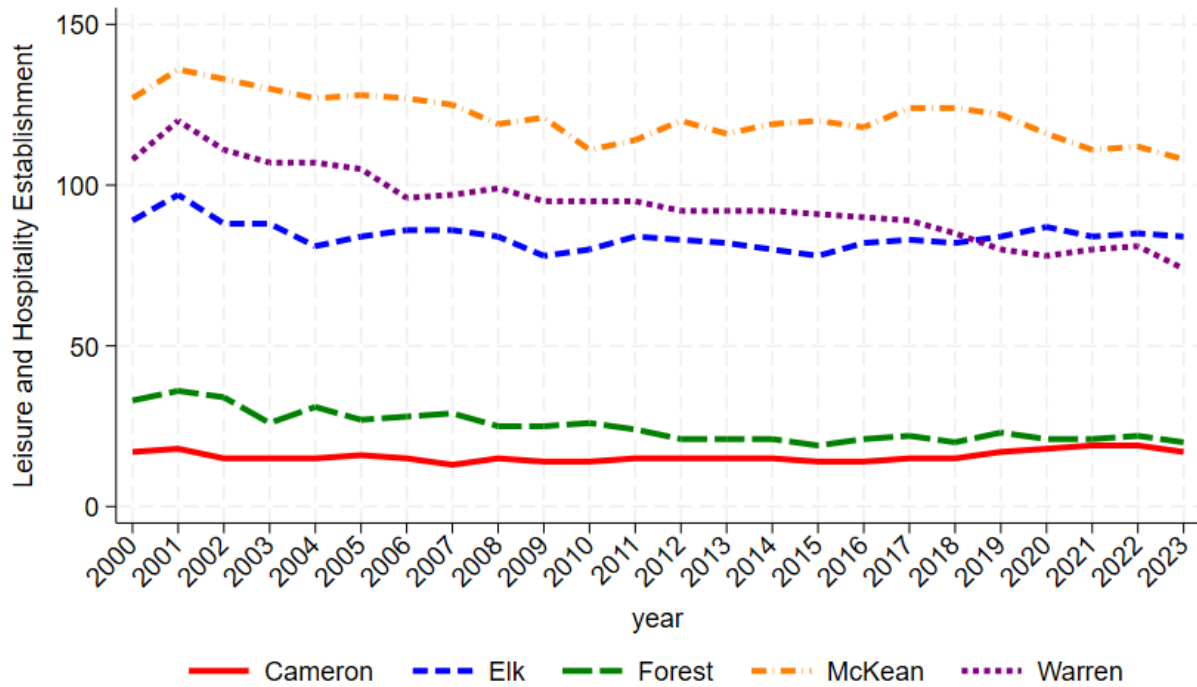
The COVID-19 pandemic in 2020 had a particularly severe impact on the L&H sector, causing employment to drop to 2,710 jobs, the most dramatic decline in the observed period. Figure 7 illustrates that this decline of over 15% from pre-pandemic levels significantly exceeded the impact of the 2008 financial crisis. However, employment data shows signs of resilience post-2021, with recovery to 3,292 jobs by 2023. This recovery pattern is further supported by Figure 6, which tracks the number of L&H establishments over time, showing a decline from 374 establishments in 2000 to 303 in 2023.

Figure 5. Leisure and Hospitality Employment for Five PA Counties 2000-2023

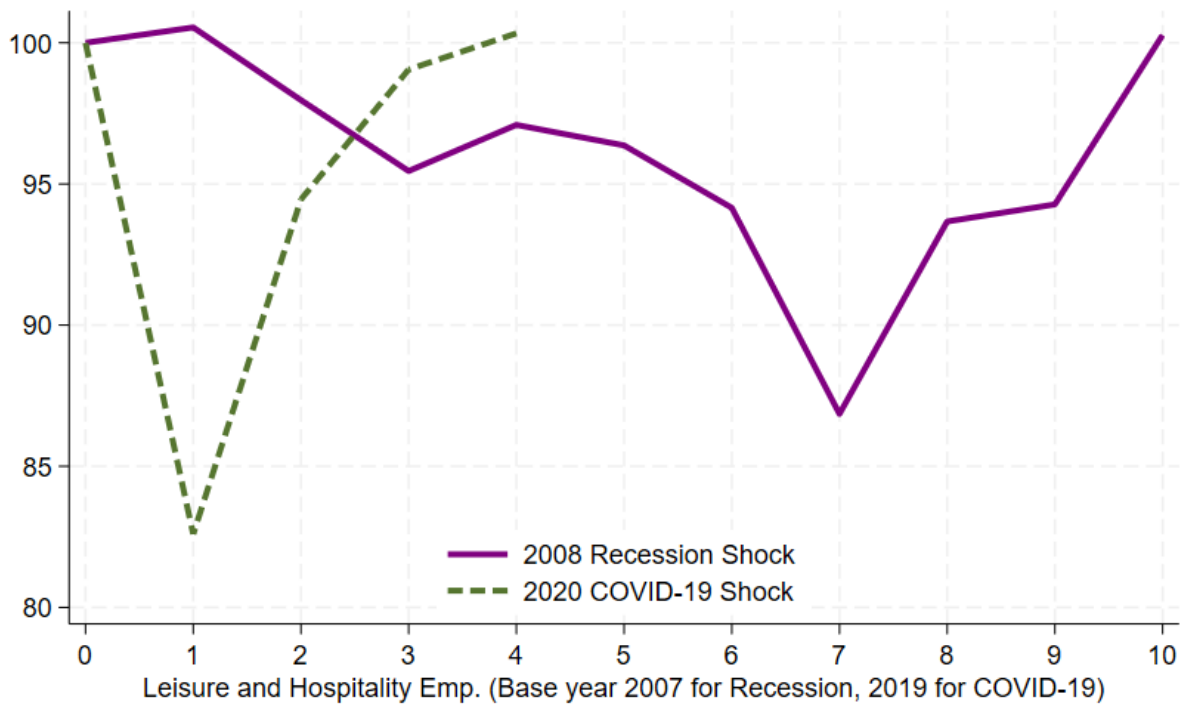


Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Figure 6. Leisure and Hospitality Establishment numbers for Five PA Counties 2000-2023



Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Figure 7. Leisure and Hospitality Resilience for Recession and COVID-19 Shock 2000-2023

Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Direct economic impacts (Table 6) include \$96.1 million in labor income and \$22.6 million in combined state/local and federal taxes for 2022. When considering total impacts including multiplier effects (Table 7), the tourism industry generated \$177.5 million in labor income and \$43 million in total tax revenues. This represents significant growth from 2021, with labor income increasing by \$9.2 million and total tax revenues growing by \$1.4 million.

Table 6. Tourism Industry Direct Impacts for Five PA Counties 2021-2022 (\$millions)

2022				
	Visitor Spending	Labor Income	State/Local Taxes	Federal Taxes
Cameron	\$12.6	\$1.7	\$0.5	\$0.5
Elk	\$89.1	\$17.0	\$4.2	\$4.3
Forest	\$38.7	\$5.2	\$1.6	\$1.6
McKean	\$172.6	\$37.7	\$8.2	\$9.1
Warren	\$180.5	\$34.5	\$8.1	\$8.8
Total	\$493.5	\$96.1	\$22.6	\$24.3
2021				
	Visitor Spending	Labor Income	State/Local Taxes	Federal Taxes
Cameron	\$11.0	\$1.7	\$0.5	\$0.5

Elk	\$79.1	\$16.1	\$4.0	\$4.3
Forest	\$35.1	\$4.9	\$1.5	\$1.6
McKean	\$155.5	\$35.0	\$7.9	\$9.0
Warren	\$162.5	\$33.0	\$7.8	\$8.8
Total	\$443.2	\$90.7	\$21.7	\$24.2

Note: Source is from Economic Impact of Travel and Tourism in Pennsylvania – 2022 prepared by the Pennsylvania Tourism Office.

Table 7. Table 5 Tourism Industry Total Impacts for Five PA Counties 2021-2022 (\$millions)

2022				
	Visitor Spending	Labor Income	State/Local Taxes	Federal Taxes
Cameron	\$13.5	\$3.0	\$1.0	\$0.9
Elk	\$94.4	\$30.9	\$7.8	\$7.8
Forest	\$41.7	\$9.3	\$3.0	\$2.8
McKean	\$182.0	\$69.0	\$15.7	\$16.4
Warren	\$190.5	\$65.3	\$15.5	\$15.8
Total	\$522.1	\$177.5	\$43.0	\$43.7
2021				
	Visitor Spending	Labor Income	State/Local Taxes	Federal Taxes
Cameron	\$12.0	\$2.9	\$0.9	\$0.9
Elk	\$84.5	\$29.1	\$7.5	\$7.6
Forest	\$38.3	\$8.9	\$2.9	\$2.8
McKean	\$165.3	\$65.0	\$15.2	\$16.2
Warren	\$172.6	\$62.4	\$15.1	\$15.9
Total	\$472.7	\$168.3	\$41.6	\$43.4

Note: Source is from Economic Impact of Travel and Tourism in Pennsylvania – 2022 prepared by the Pennsylvania Tourism Office.

Tourism Assets

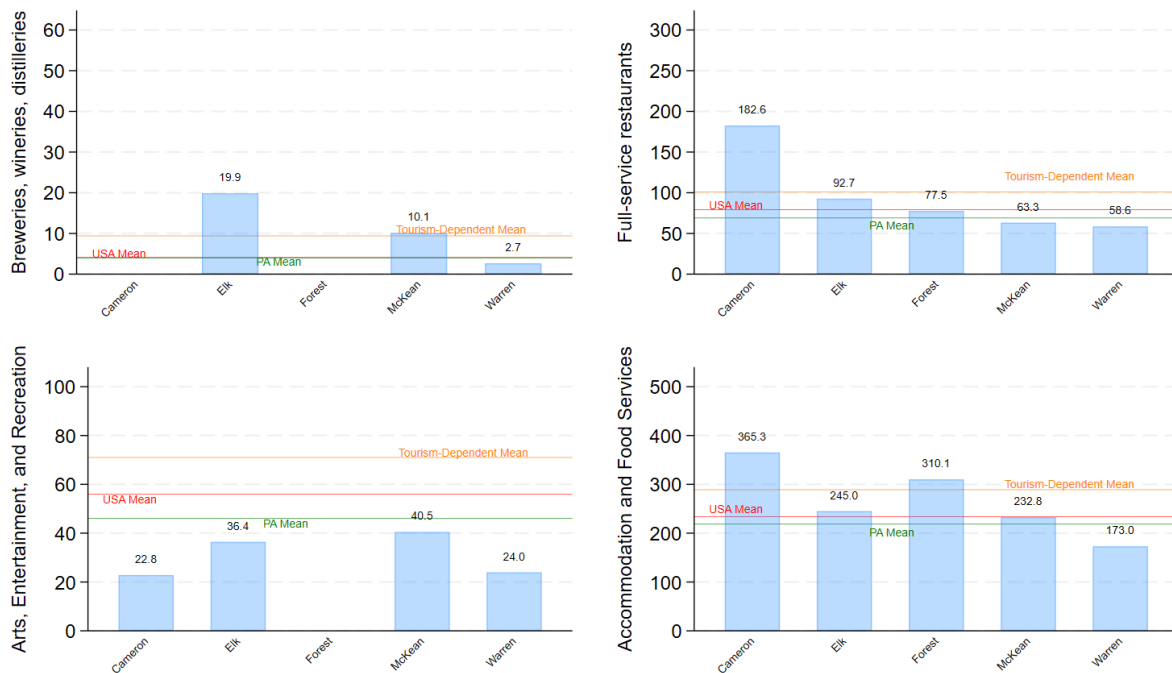
While the number of arts, entertainment, and recreation establishments per 100,000 population is lower than all of the comparison regions, the study region does have a well-developed accommodation and food service sector. With the exception of Warren County (173 establishments per 100k population) all counties in the region were equal to or greater than the state and national averages, and in Forest and Cameron Counties (310 and 356, respectively) greater than the average for tourism dependent counties.

The availability of restaurants and other food-away-from-home (FAFH) outlets varies across rural counties, and those that depend on natural amenities, tourism, and recreation generally have more options for dining out. Prior to the COVID pandemic, the rural counties whose economies depended on recreation had more FAFH establishments per capita than rural

counties with other leading industries.¹ Three of the five counties (Forest, McKean, and Warren) have a number of full service restaurants comparable to state and national averages; however, only Elk County (183) had more full-service restaurants per 100k population than the tourism dependent county average.

Craft beverages can play a significant role in tourism, attracting visitors seeking unique, local experiences. Local breweries, wineries, and distilleries are located in three of the five regional counties. While the number of craft beverage establishments in Warren County (2.7 per 100,000 population) is just below the Pennsylvania and U.S. mean, both McKean (10.1) and Elk (19.9) are at or above both the state, nation, and average for tourism dependent counties.

Figure 8. Full-service restaurants; Breweries, wineries, distilleries; Arts, Entertainment, and Recreation; Accommodation and Food Services per 100K population 2023.



Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Tourism and Recreation Features Inventory and Dashboard

A tourism and recreation features inventory and dashboard was developed by West Virginia University and WVU Extension from a variety of datasets (see Appendix A for detailed list of data sources) in support of a USDA National Institute of Food and Agriculture (NIFA) Agriculture and Food

¹ Source from <https://www.ers.usda.gov/amber-waves/2023/august/among-rural-u-s-counties-those-with-recreation-dependent-economies-had-most-options-per-capita-for-dining-out-in-2019>

Research Initiative (AFRI) grant to address rural community well-being using tourism indicators.

Dashboard link: <https://wvu.maps.arcgis.com/apps/dashboards/e1c763ec58984eb48ef105afc962b3c4>

Table 8. Recreation Features Inventory

Feature	Count
Hiking Areas	220
Mountain Biking Trails	169
Hunting Areas	164
Fishing Streams/Ponds	120
Boat Launch Locations	38
Snowmobile Trails	5
XC Skiing Areas	4
Rock Climbing Areas	4
Whitewater Streams	2

Table 9. Tourism Amenities Inventory

Feature	Count
Accommodations (hotels and motels)	44
Accommodations (RV parks and campgrounds)	33
Accommodations (short term rentals)	870
Restaurants/Food (chain)	79
Restaurants/Food (non-chain)	223
Shopping Facilities	44
Cultural Heritage Attractions	14
Sports (Golf Courses)	5
Entertainment Facilities	23
Transportation Providers	7

Table 10. Short-Term rental listings 2019-2024 (AirBnB, VRBO)

County	2019	2020	2021	2022	2023	2024	% change 2019- 2024	growth rate 2019- 2024
Cameron	14	19	22	31	49	55	293%	3.93
Elk	84	112	140	195	245	269	220%	3.20
Forest	31	45	53	72	97	101	226%	3.26
McKean	77	116	129	151	191	204	165%	2.65
Warren	108	163	219	268	300	323	199%	2.99

Note: Source is from KeyData

Hotel Trend Report McKean County

Table 11. Number of Establishments

Name of Establishment	City & State	Zip Code	Class	Aff Date	Open Date	Rooms
Best Western Plus Bradford Inn *	Bradford, PA	16701	Upper Midscale Class	Dec 2010	Jun 1969	112
Relax Inn - Bradford	Bradford, PA	16701	Economy Class	Mar 2022	Jun 1960	40
Econo Lodge Bradford*	Bradford, PA	16701	Economy Class	Oct 2013	Jan 1966	48
Quality Inn & Suites Bradford*	Bradford, PA	16701	Midscale Class	Jun 2021	Dec 1999	48
OYO Hotel Bradford*	Bradford, PA	16701	Economy Class	Mar 2020		93
Closed - Heritage Suites	Bradford, PA	16701	Midscale Class	Jan 2016	Mar 2008	0
Holiday Inn Express Bradford*	Bradford, PA	16701	Upper Midscale Class	Jun 2012	Jun 2012	75
The Lodge @ Glendorn	Bradford, PA	16701	Luxury Class	Jan 1982	Jan 1982	16
Kane View Motel	Kane, PA	16735	Economy Class			19
Kane Motel	Kane, PA	16735	Economy Class	Jan 1900	Jan 1900	10
Midtown Motel	Port Allegany, PA	16743	Economy Class	Nov 1957	Nov 1957	25
Closed - Canoe Place Inn	Port Allegany, PA	16743	Economy Class	Feb 2010	Jun 1926	0
Closed - Port Motel	Port Allegany, PA	16743	Economy Class	Jun 2019		0
Total Properties:					13	486

Note: Source is from Smith Travel Research (STR) Hotel Trend Report. * indicates establishments reporting monthly and daily data to STR. Other counties in the region do not provide data to Smith Travel Research.

Table 12. Annual Totals

	Occupancy (%)		ADR (\$)		RevPAR (\$)		Room Supply		Room Demand	
Year	McKean	PA	McKean	PA	McKean	PA	McKean	PA	McKean	PA
2015	57.5	61.2	87.83	117.31	50.49	71.74	153,665	50,981,801	88,341	31,178,582
2016	53.3	60.0	89.14	120.74	47.53	72.50	147,825	52,222,951	78,830	31,359,005
2017	55.6	61.1	87.96	120.17	48.94	73.43	147,825	53,387,234	82,249	32,624,167
2018	56.5	63.2	90.05	121.19	50.91	76.62	147,825	54,111,821	83,570	34,213,658
2019	54.2	62.3	88.11	122.93	47.74	76.61	145,257	54,973,237	78,712	34,262,805
2020	33.5	38.5	72.74	99.06	24.38	38.14	171,903	52,569,033	57,631	20,239,911
2021	41.0	52.5	80.92	119.49	33.16	62.78	177,390	55,197,069	72,688	28,997,689
2022	46.4	57.6	84.18	137.49	39.07	79.17	177,390	55,612,048	82,342	32,023,402

Note: Source is from Smith Travel Research Hotel Trend Report. Other counties in the region do not have data provided to Smith Travel Research.

Table 13. Percent Change for Annual Totals

	Occupancy (%)		ADR (\$)		RevPAR (\$)		Room Supply		Room Demand	
Year	McKean	PA	McKean	PA	McKean	PA	McKean	PA	McKean	PA
2016	-7.2	-1.8	1.5	2.9	-5.9	1.1	-3.8	2.4	-10.8	0.6
2017	4.3	1.8	-1.3	-0.5	3.0	1.3	0.0	2.2	4.3	4.0
2018	1.6	3.5	2.4	0.8	4.0	4.3	0.0	1.4	1.6	4.9
2019	-4.1	-1.4	-2.2	1.4	-6.2	-0.0	-1.7	1.6	-5.8	0.1
2020	-38.1	-38.2	-17.4	-19.4	-48.9	-50.2	18.3	-4.4	-26.8	-40.9
2021	22.2	36.4	11.2	20.6	36.0	64.6	3.2	5.0	26.1	43.3
2022	13.3	9.6	4.0	15.1	17.8	26.1	0.0	0.8	13.3	10.4

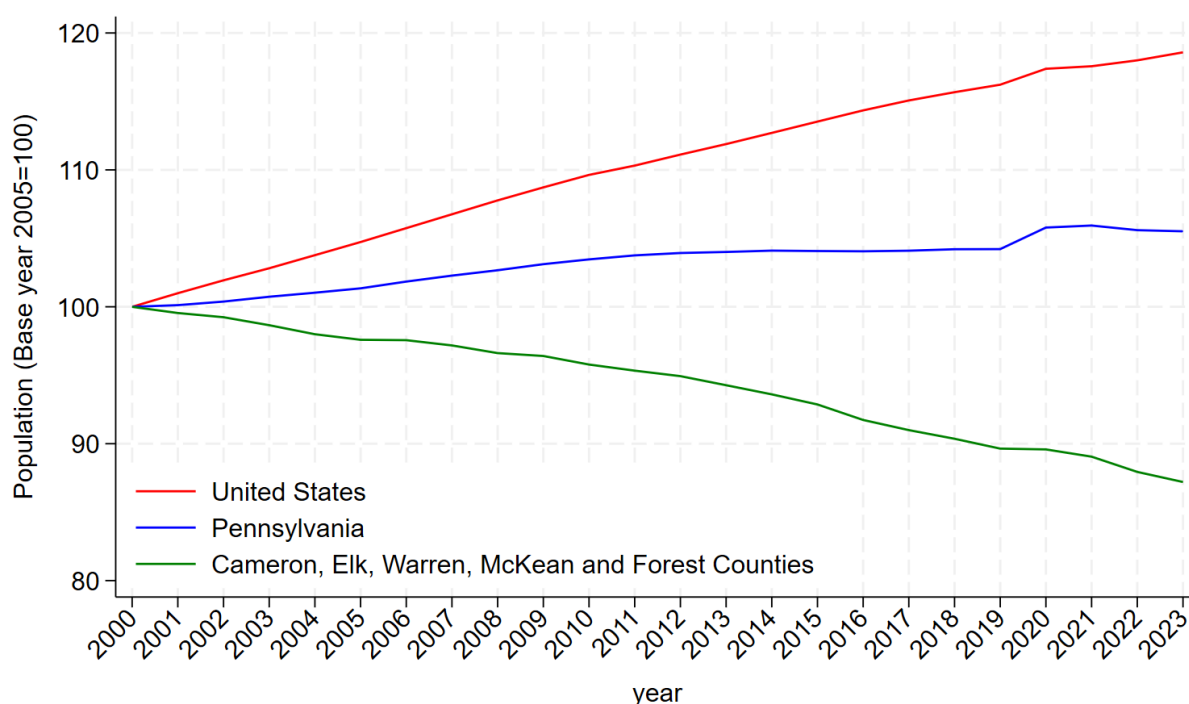
Note: Source is from Smith Travel Research Hotel Trend Report. Other counties in the region do not have data provided to Smith Travel Research.

5. Quality of Life Indicators

Population and Demographics

Population trends across the five counties show consistent decline since 2000 (Figure 9). All counties have experienced negative growth rates that significantly lag behind both Pennsylvania state and national averages. As shown in Figure 10, McKean County has the largest population among the five counties at approximately 40,000 residents, followed by Warren and Elk counties with populations near 38,000 and 30,000 respectively. Cameron and Forest counties have notably smaller populations, with under 7,000 residents each.

Figure 9. Population Trend for Cameron, Elk, Warren, McKean and Forest Counties and Comparison Geographies



Note: Source is from the US Census Bureau.

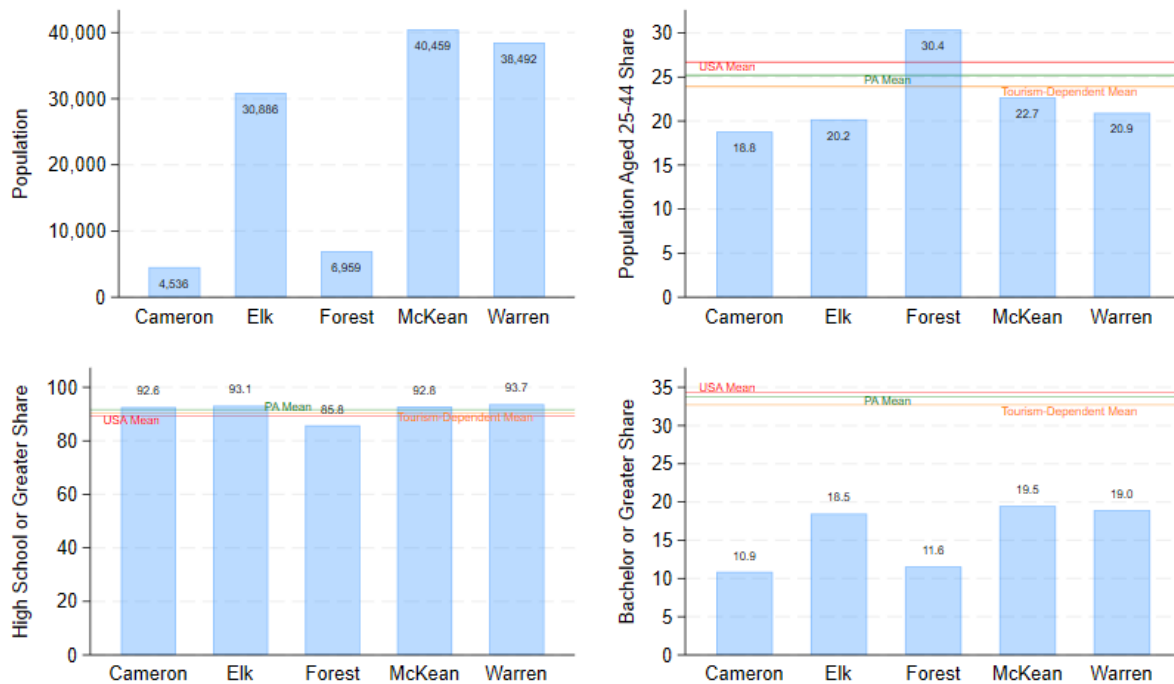
In Figure 10, the age composition of these counties reveals different demographic patterns, when compared to the nation. Figure 10 shows various demographic indicators including the percentage of the population aged 25-44, a crucial working-age demographic. The comparable number nationally is 26.7%. Counties like Cameron and Elk are significantly below the national and state averages.

Education and Workforce

Educational attainment patterns reveal mixed results across the region (Figure 10). High school completion rates generally range from 86% to 94% across the counties. However, bachelor's degree attainment presents a different picture. McKean County and Warren County

lead the region in higher education attainment at approximately 20%, while Cameron County shows the lowest rate at about 12%. The national average of population with a bachelor's degree is 23.5%. All five counties are below the national and state averages. The extremely low levels of counties like Cameron and Forest counties could be a concern.

Figure 10. Population and Educational Attainment in Cameron, Elk, Warren, McKean and Forest Counties, 2018-2022

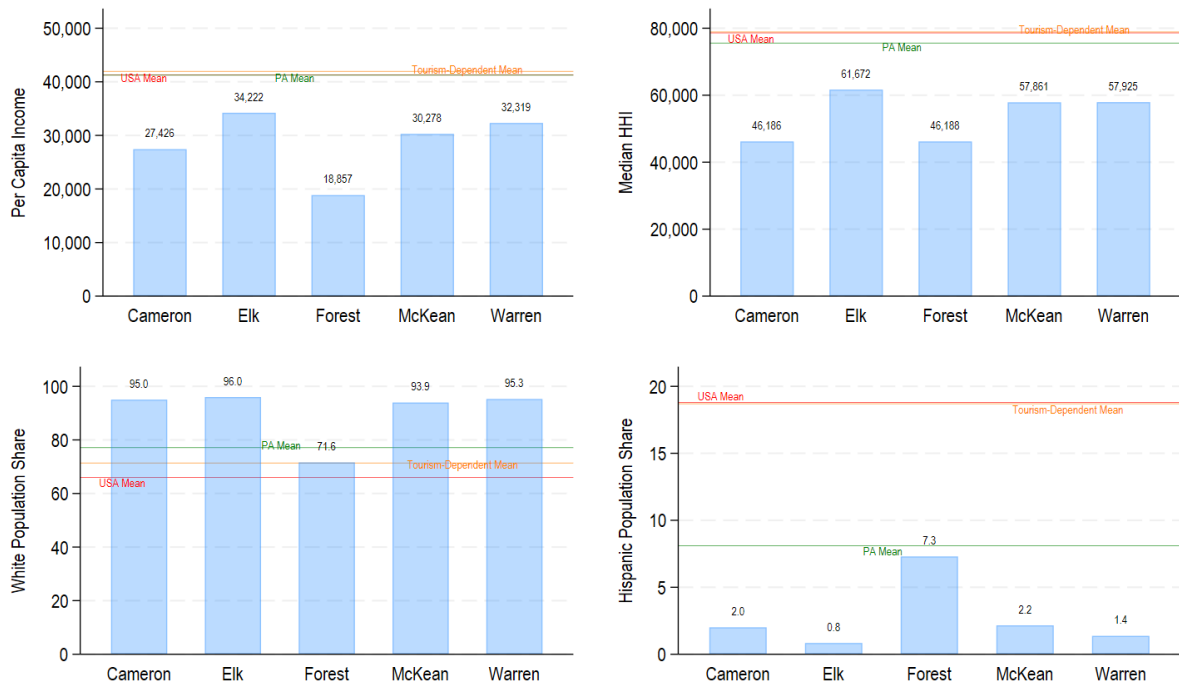


Note: Source is from 2018-2022 5-year American Community Survey. The population includes both persons in housing units and persons in group quarters. The bar for PA shows the average of the state over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for Tourism shows the average of the tourism-dependent counties. Tourism dependent counties are defined based on USDA-ERS definitions for recreation counties based on 1) tourism related jobs 2) tourism earnings 3) the share of vacant secondary homes.

Income

Income metrics reveal persistent economic challenges (Figure 11). Elk County leads in both per capita income and median household income, with median household income over \$60,000 and per capita income over \$30,000. Forest County shows the lowest income levels among the five counties. Also, in Figure 9, is the population composition of the five PA counties with the averages of PA, the nation, and tourism-dependent counties indicating that the population is largely white with little racial diversity.

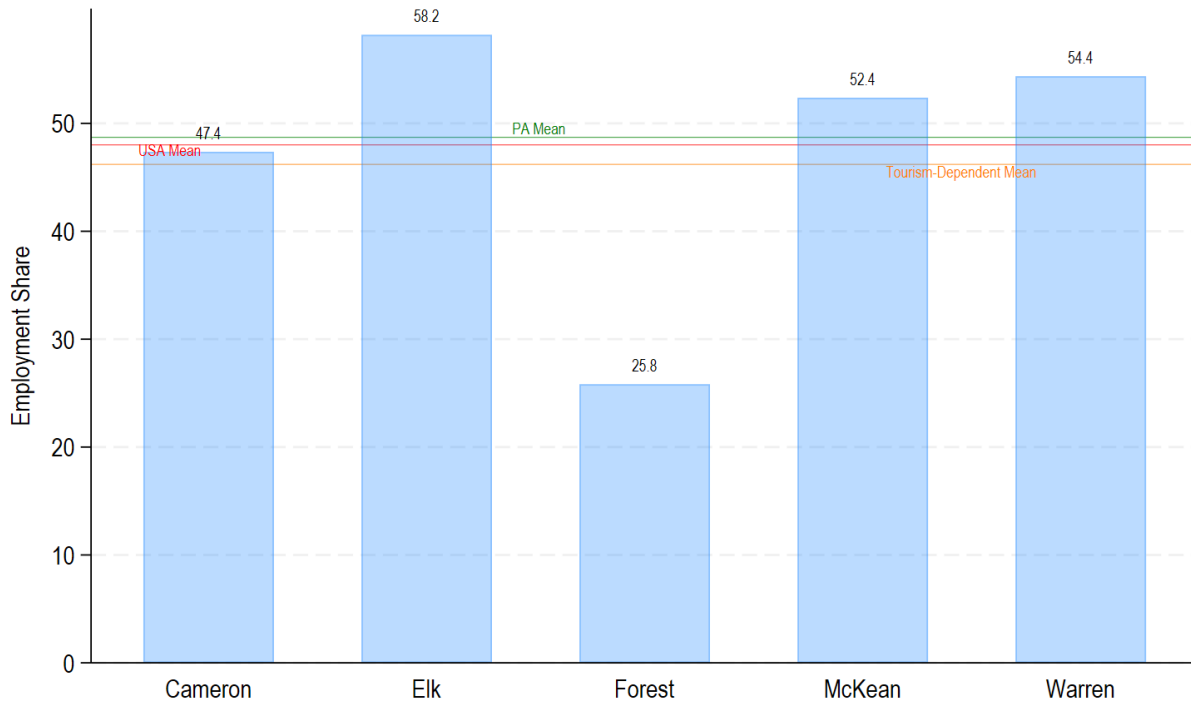
Figure 11. Income and Population Composition in Cameron, Elk, Warren, McKean and Forest Counties, 2018-2022



Note: Source is from 2018-2022 5-year American Community Survey. The bar for PA shows the average of the state over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for Tourism shows the average of the tourism-dependent counties.

Figure 12 presents additional workforce indicators for employment rates across counties. Elk County shows the highest employment rate, while Forest County exhibits the lowest.

Figure 12. Share of Employment in Cameron, Elk, Warren, McKean and Forest Counties, 2018-2022



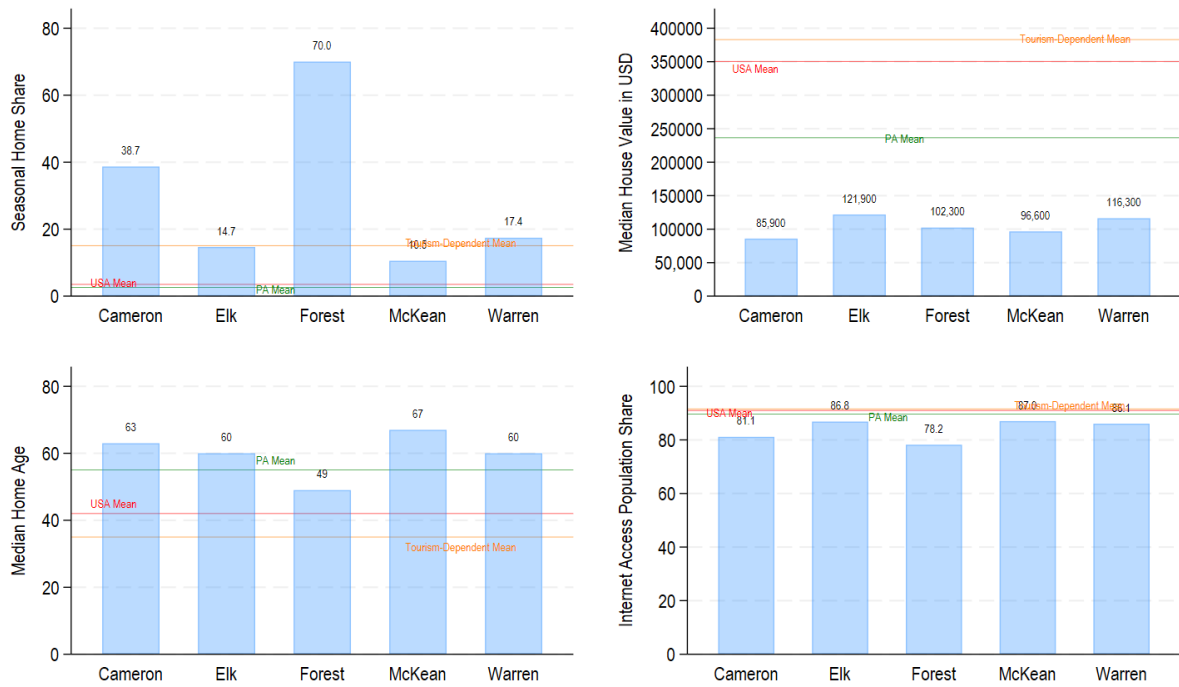
Note: Source is from 2018-2022 5-year American Community Survey. The Figure shows the percentage of population that are employed. The bar for PA shows the average of the state over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for Tourism shows the average of the tourism-dependent counties.

Housing Characteristics

Housing patterns reveal unique aspects of these rural economies (Figure 13). Median house values vary significantly across counties, with Elk County showing the highest values and Cameron County the lowest. The figure also provides important data on internet access across the counties.

A distinctive feature of these counties is their high proportion of seasonal homes, as shown in Figure 13. Forest County stands out with 70% of housing units classified as seasonal or recreational, significantly higher than other counties. This high seasonal occupancy rate reflects the region's role as a recreation and tourism destination while potentially affecting local housing markets and community dynamics. Figure 14 shows housing affordability, indicating both housing rent and ownership are generally affordable in these five counties, comparing to the state, the nation, and tourism-dependent counties.

Figure 13. Home and Internet in Cameron, Elk, Warren, McKean and Forest Counties, 2018-2022



Note: Source is from 2018-2022 5-year American Community Survey. The bar for PA shows the average of the state over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for Tourism shows the average of the tourism-dependent counties.

Figure 14. Home Affordability in Cameron, Elk, Warren, McKean and Forest Counties, 2018-2022



Note: Source is from 2018-2022 5-year American Community Survey. The bar for PA shows the average of the state over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for Tourism shows the average of the tourism-dependent counties. The top panel shows the median household income to housing price ratio and the bottom panel shows the share of renters that the rent exceeds 30% of household income.

Figure 15. Violent and property crime 2022 per 100K population for Five PA Counties

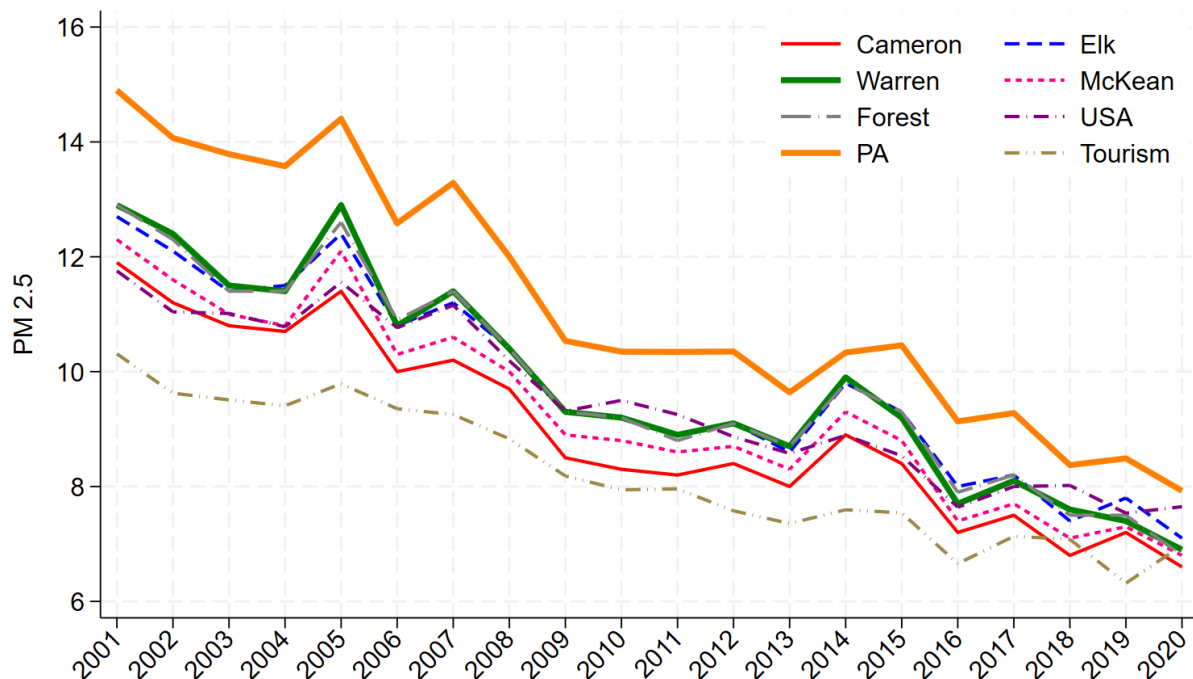


Note: Source is from Inter-university Consortium for Political and Social Research (ICPSR).

6. Environmental Indicators

The environmental quality of these counties can be assessed through several key metrics. Figure 16 tracks PM 2.5 levels from 2001 to 2020, showing generally improving air quality trends across all five counties. The data, sourced from the CDC National Environmental Public Health Tracking Network, indicates that air quality in these counties has generally remained within acceptable ranges, likely benefiting from their rural location and extensive forest cover, as well as the general national trend of better air quality overall.

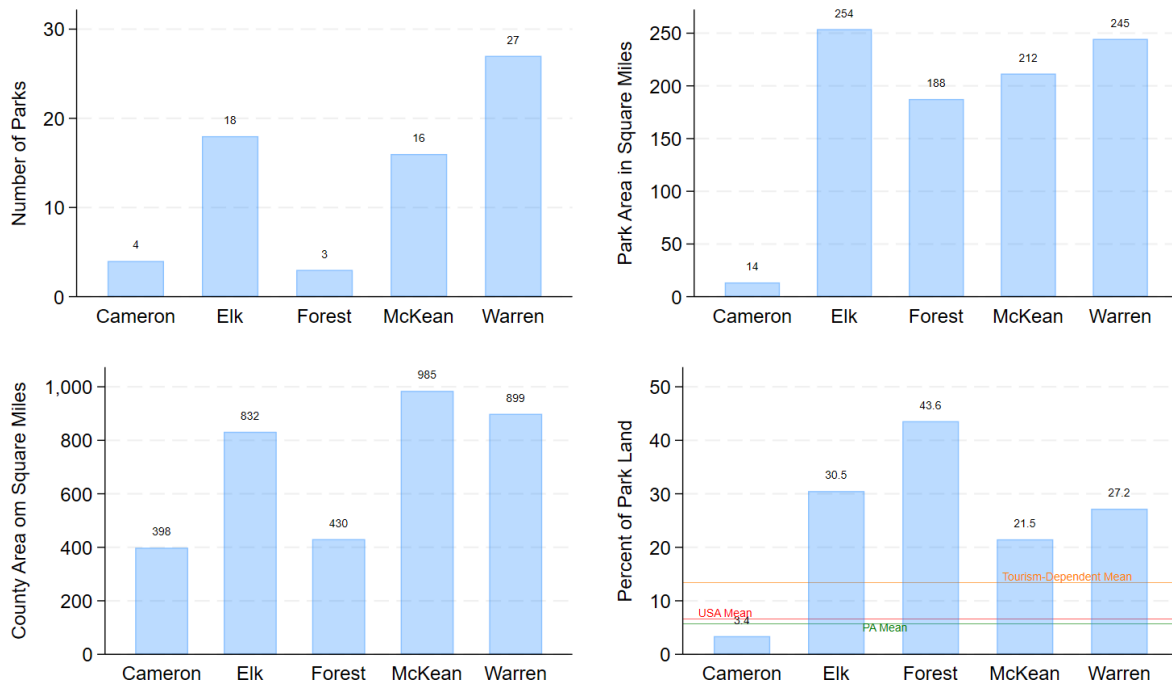
Figure 16. PM 2.5 2001-2020



Note: Source from CDC National Environmental Public Health Tracking Network with the most recent source year 2020 from <https://ephtracking.cdc.gov/DataExplorer/>

Figure 17 provides a comprehensive overview of parkland resources across the five counties, showing the number of parks, total park area, land area, and the share of park area in each county. This data highlights the significant natural recreational resources available in the region, supporting both quality of life for residents and tourism opportunities.

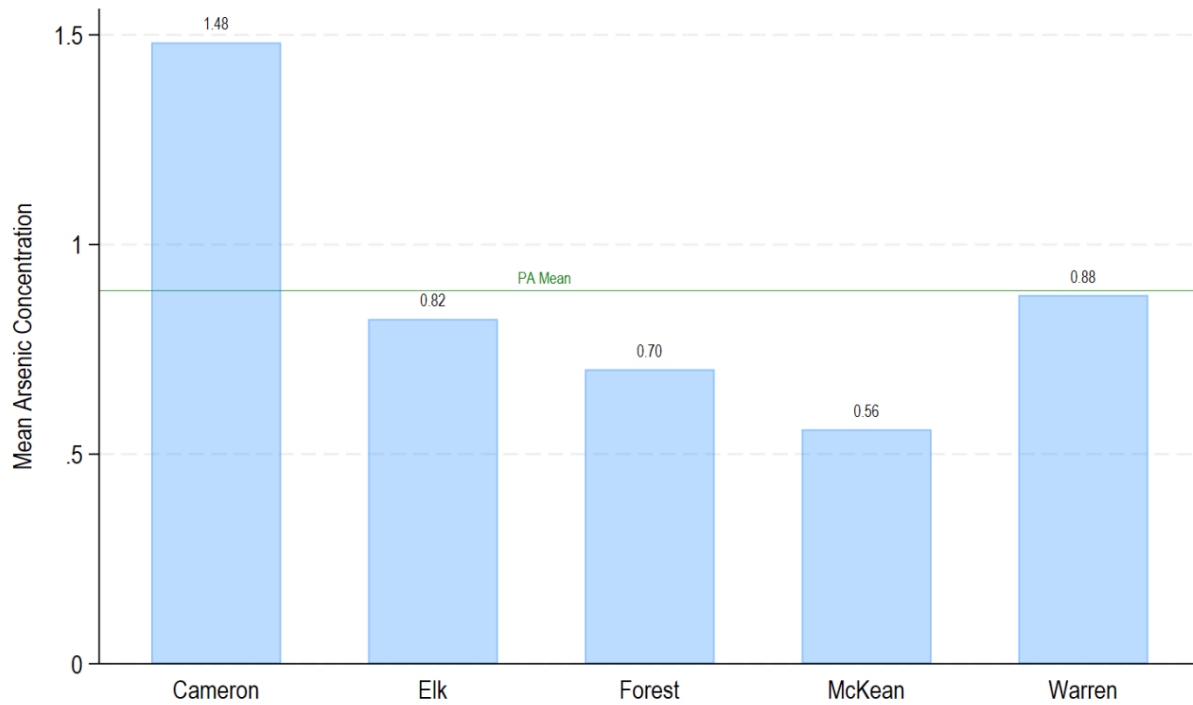
Figure 17. Number of Parks, Park Area, Land Area, and Share of Park Area in Five Counties 2022



Note: Source from National Neighborhood Data Archive. Parks refer to all the parks including public parks, some national and state parks, school and private parks w/ public access.

Water quality, another crucial environmental indicator, is examined through arsenic concentration levels as shown in Figure 18. Based on 2018 data from the PA Department of Health, the counties show varying levels of arsenic concentration, with implications for both residential water use and environmental health. This data suggests the need for continued monitoring and management of water resources across the region.

Figure 18. Water Pollution in Arsenic Concentration (ug/l) in 2018



Source: PA Department of Health with the most recent source year 2018 from <https://www.phaim1.health.pa.gov/EDD/WebForms/WaterCntySt.aspx>

7. Recommendations and Policy Implications

Economic development strategies should focus on sector diversification, supporting expansion in education and health services while investing in professional and business services infrastructure. Tourism development should be part of a diversified economic development strategy with an overall goal of improving the quality of life for local residents requiring leveraging high seasonal home ownership and investing in year-round attractions while preserving natural amenities.

Workforce development initiatives should address the aging workforce through targeted retention and attraction programs, enhanced educational opportunities aligned with growth sectors, and improved skills training for tourism and hospitality workers.

Regional collaboration emerges as a critical strategy, with opportunities for coordinated tourism marketing efforts, shared workforce development resources, and complementary economic development approaches across counties. A commitment to sustainable destination management is critical.

Environmental management deserves particular attention given the region's natural assets and challenges. The improving air quality trends demonstrate effective environmental stewardship that should be maintained, while varying water quality conditions across counties suggest the need for coordinated watershed management approaches. The significant parkland resources present opportunities for expanded outdoor recreation and tourism development, but careful planning will be needed to balance increased visitor usage with environmental preservation. Counties should consider developing integrated environmental monitoring systems and shared conservation strategies to protect these valuable natural resources.

The data suggests these counties face significant challenges but retain important assets in their natural amenities, manufacturing base, and tourism potential. Success will require balanced development that preserves natural resources while fostering economic growth and improved quality of life for residents.

8. References

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- U.S. Bureau of Labor Statistics. (2025). Quarterly Census of Employment and Wages.

Appendix: Map layers and source notes:

Layer	Source
Tourism amenities (all types)	Esri ArcGIS Online Business Analyst, extracted from SafeGraph Point of Interest database (2022)
Vacation rentals	KeyData, includes Air BnB and VRBO short-term vacation rental listings.
Recreation features – Boat launches	PA boating access points from PASDA, original source is PA Fish and Boat Commission.
Recreation features – Campgrounds	Dataset assembled from multiple sources by WVU. Includes public campgrounds only (state and federal facilities). Includes campgrounds managed by PA State Parks, US Army Corps of Engineers, and USDA Forest Service. USFS campgrounds downloaded from USDA FS website, other locations mapped by WVU.
Recreation features – Fishing	Stocked trout waters from PASDA, original source is PA Fish and Boat Commission. Each location is represented by a single centroid point.
Recreation features – Hunting	Extracted from USGS Protected Areas Database (PAD), dataset of public lands. Each area is represented by a single centroid point.
Recreation features – Hiking trails	Trails from TrailForks website and PASDA Explore PA trails layer, with extensive editing to remove duplicates and multi-segment trails. Limited to trails allowing hiking. Each trail is represented by a single point located at the centroid of the trail.
Recreation features – Mountain bike trails	Trails from TrailForks website and PASDA Explore PA trails layer, with extensive editing to remove duplicates and multi-segment trails. Limited to trails allowing mountain biking. Each trail is represented by a single point located at the centroid of the trail.
Recreation features – Rock climbing	From Mountain Project website, single point for each major climbing area location.
Recreation features – Snowmobile trail	Trail features with snowmobile access, extracted from PASDA Explore PA Trails dataset. Pennsylvania Spatial Data Access (PASDA). Each trail is represented by a single point located at the centroid of the trail.
Recreation features – Whitewater	American Whitewater, whitewater runs. Each run is represented by a single point located at the centroid of the run.
Recreation features – XC Skiing	WVU assembled this dataset based on internet searches for established cross country ski areas.

Table A1 Leisure and Hospitality Employment for Five PA Counties 2000-2023

Year	Cameron	Elk	Forest	McKean	Warren	Total
2000	114	761	245	1239	1016	3375
2001	116	778	244	1339	1051	3528
2002	120	756	248	1276	1012	3412
2003	131	703	202	1269	1005	3310
2004	116	715	247	1253	959	3290
2005	136	752	236	1224	951	3299
2006	137	876	215	1183	943	3354
2007	140	828	203	1130	1001	3302
2008	166	777	195	1115	1067	3320
2009	142	772	206	1096	1019	3235
2010	139	801	202	1015	995	3152
2011	129	857	182	1032	1006	3206
2012	123	846	142	1058	1013	3182
2013	129	803	132	1066	979	3109
2014	101	769	109	1086	1013	2868
2015	138	802	71	1142	1011	3093
2016	139	859	95	1141	974	3113
2017	135	827	146	1222	981	3311
2018	126	784	155	1188	988	3241
2019	130	826	162	1209	954	3281
2020	81	741	139	1003	827	2710
2021	125	822	149	1101	902	3099
2022	128	859	157	1174	932	3250
2023	126	925	176	1156	909	3292

Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics. Due to QCEW data disclosure requirements, the highlighted employment numbers are derived from Tapestry data.

Table A2 Leisure and Hospitality Establishment for Five PA Counties 2000-2023

Year	Cameron	Elk	Forest	McKean	Warren	Total
2000	17	89	33	127	108	374
2001	18	97	36	136	120	407
2002	15	88	34	133	111	381
2003	15	88	26	130	107	366
2004	15	81	31	127	107	361
2005	16	84	27	128	105	360
2006	15	86	28	127	96	352
2007	13	86	29	125	97	350
2008	15	84	25	119	99	342
2009	14	78	25	121	95	333
2010	14	80	26	111	95	326
2011	15	84	24	114	95	332
2012	15	83	21	120	92	331
2013	15	82	21	116	92	326
2014	15	80	21	119	92	327
2015	14	78	19	120	91	322
2016	14	82	21	118	90	325
2017	15	83	22	124	89	333
2018	15	82	20	124	85	326
2019	17	84	23	122	80	326
2020	18	87	21	116	78	320
2021	19	84	21	111	80	315
2022	19	85	22	112	81	319
2023	17	84	20	108	74	303

Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.