Economic and Quality of Life Indicators for the Upper Valley Counties of New Hampshire and Vermont

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1. Executive Summary

Economy

Employment in the Upper Valley region has experienced long-term structural change shaped by the Great Recession, the COVID-19 pandemic, and shifting industry composition. Total nonfarm employment grew steadily until 2007, declined during the recession, and rebounded strongly between 2014 and 2019 before experiencing a sharp pandemic-related contraction in 2020. Employment has since recovered, though totals remain just below pre-pandemic peaks. Education and health services anchor the regional economy, driven by institutions such as Dartmouth-Hitchcock Medical Center and Dartmouth College, and remain the largest employment sector in Grafton, Merrimack, and Windsor counties. Manufacturing shows continued long-term decline, while professional and business services and leisure and hospitality have expanded since 2000.

Tourism Assets

The Upper Valley's tourism economy reflects strong assets across counties. Windsor and Grafton counties lead the region in arts, entertainment, and recreation establishments per capita, with Windsor substantially exceeding state, national, and tourism-dependent benchmarks. Accommodation and food service establishments are a notable strength in Grafton—which far surpasses national and tourism-dependent averages—and strong in Windsor and Merrimack as well.

Short-term rental listings have expanded dramatically across the region since 2019, indicating substantial visitor demand.

Quality of Life

The rate of population growth in the Upper Valley has outpaced the nation since just before the pandemic, though overall levels remain below national trends. Merrimack and Grafton counties are the most populous, while Orange has fewer than 30,000 residents. The share of residents aged 25–44—all below the national mean—highlights regional demographic challenges related to workforce sustainability. Educational attainment in the region is comparatively strong: high school completion rates exceed national and tourism-dependent benchmarks in all counties, and bachelor's degree attainment is particularly high in Grafton (43%) and Windsor (41%).

Income patterns vary with Merrimack leading in median household income, while Grafton leads in per capita income. Orange and Sullivan counties consistently fall below regional, national, and tourism-dependent averages.

Housing and Infrastructure

Housing markets reflect both affordability and pressures associated with tourism and seasonal residency. Median home values are below comparison geographies across the region, and most counties exhibit relatively low rates of rental cost burden—except Sullivan, where more than half of renters pay over 30% of income toward housing. Seasonal homes constitute a significant share of the housing stock, particularly in Grafton (over 25%) and in Sullivan and Windsor (around 20%), highlighting the region's longstanding appeal as a recreation and second-home market.

Crime

Violent crime rates are low across all counties and below national, New Hampshire–Vermont, and tourism-dependent averages. Windsor is the only county slightly above regional comparators but still shows crime rates well below the U.S. average. Property crime is more variable with Merrimack County showing higher rates relative to other Upper Valley counties and comparison geographies, while others maintain low levels.

Environment

Air quality across the region is strong, with particulate matter levels consistently below national and tourism-dependent averages and trending downward from 2001 to 2020. Parkland resources vary widely. Grafton County is a clear outlier with nearly one-third of its land area protected, positioning it as a major outdoor recreation hub.

2. 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 Upper Valley region of Vermont and New Hampshire.

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 states of New Hampshire and Vermont, 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	
Full-service restaurants; Breweries, wineries, distilleries; Arts, Entertainment, and Recreation; Accommodation and Food Services per 100K population	Share of Employment	
Short term rental listings	Housing Characteristics (seasonal homes, median house value, median home age, affordability)	
	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 Vermont

Tourism has played a key role in Vermont's economy for over a century, with visitors historically drawn to its scenic landscapes, charming rural villages, mountain resorts, and outdoor recreation opportunities. Today, tourism remains one of the state's most vital economic sectors. The Vermont Department of Tourism and Marketing (VDTM) identifies tourism as a major contributor to the state's economy, welcoming over 13 million visitors annually who generate approximately $3 billion in direct spending (VDTM, 2023a; VDTM, 2023b).

Vermont's tourism efforts are organized around distinct regions that reflect the state's geographic and cultural diversity, including the Green Mountains, the Champlain Valley, the Northeast Kingdom, and the Connecticut River Valley (VDTM, 2023c). The state's image is strongly associated with nature, outdoor recreation, and a slower-paced, authentic lifestyle. Activities such as hiking, skiing, cycling, and fall foliage viewing are among Vermont's most popular draws, though the state is also known for its farm-to-table food scene, maple syrup, artisan producers, and local arts and crafts. Consumer perception studies suggest that Vermont maintains a well-established brand identity, often perceived as more clearly defined than neighboring states (SMARInsights, 2022). Even so, many rural communities in Vermont have opportunities to further leverage tourism as a strategy for economic revitalization and increased regional visibility.

Travel and Tourism in New Hampshire

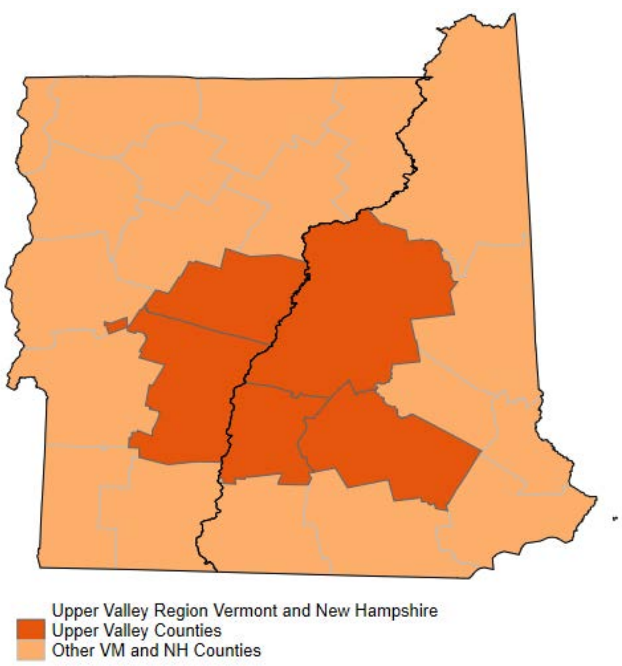
Tourism has been an important part of New Hampshire's economy going back to the early 1900s, when grand mountain resorts, lake cottages, seaside communities, and "snow trains" attracted visitors from Boston, New York, and other urban areas. Many similar traditions continue today, and tourism continues to be economically impactful statewide. It is considered the New Hampshire's second largest industry (NH BEA, 2025a), with the state attracting an estimated 14.6 million visitors annually who generate around $7.5 billion in total spending (NH BEA, 2025b).

The New Hampshire Division of Travel and Tourism Development utilizes the regional structure adopted by the NH Department of Business and Economic Affairs to define seven tourism regions in the state. These regions highlight the state's varied natural assets, including seacoast, mountains, rivers, and lakes (NH BEA, 2025c). Nature and outdoor recreation tend to be perceived as the state's main tourism draws, although consumer perception research suggests that New Hampshire's public image may be less clear or less well-known than for the neighboring states of Vermont and Maine (SMARInsights, 2022). Historical and cultural attractions, agritourism, quaint towns, and vibrant small cities offer additional draws for visitors. With some destination regions much better known than others, there are opportunities for many rural and/or post-industrial cities and towns to consider how tourism development may be a strategy for local or regional economic improvement.

3. Geographic Context

The five counties encompass more than 4,800 square miles, forming a significant portion of the rural landscape along the New Hampshire–Vermont border. Population density varies from 165 persons per square mile in Merrimack County to just 43 in Orange County. Together, these counties include substantial tracts of protected lands. Protected lands range from 9 percent of the total land area in Orange County to 42 percent in Grafton County. These protected areas, which include lands actively managed for biodiversity as well as those managed for multiple uses, play a central role in shaping the region's natural resource base and tourism economy. Grafton County alone contains 742 square miles of protected land, while Merrimack County, despite its higher population density, maintains nearly 200 square miles under conservation management.

Figure 2 Locations of Upper Valley Counties



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*
Grafton	1,709	53	742	42%
Merrimack	933	165	186	19%
Sullivan	538	80	98	18%
Orange	687	43	62	9%
Windsor	969	60	175	18%
NH	8,954	154	3,030	32%
VT	9,217	70	2,086	22%
U.S.	3,533,038	94	1,159,265	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.

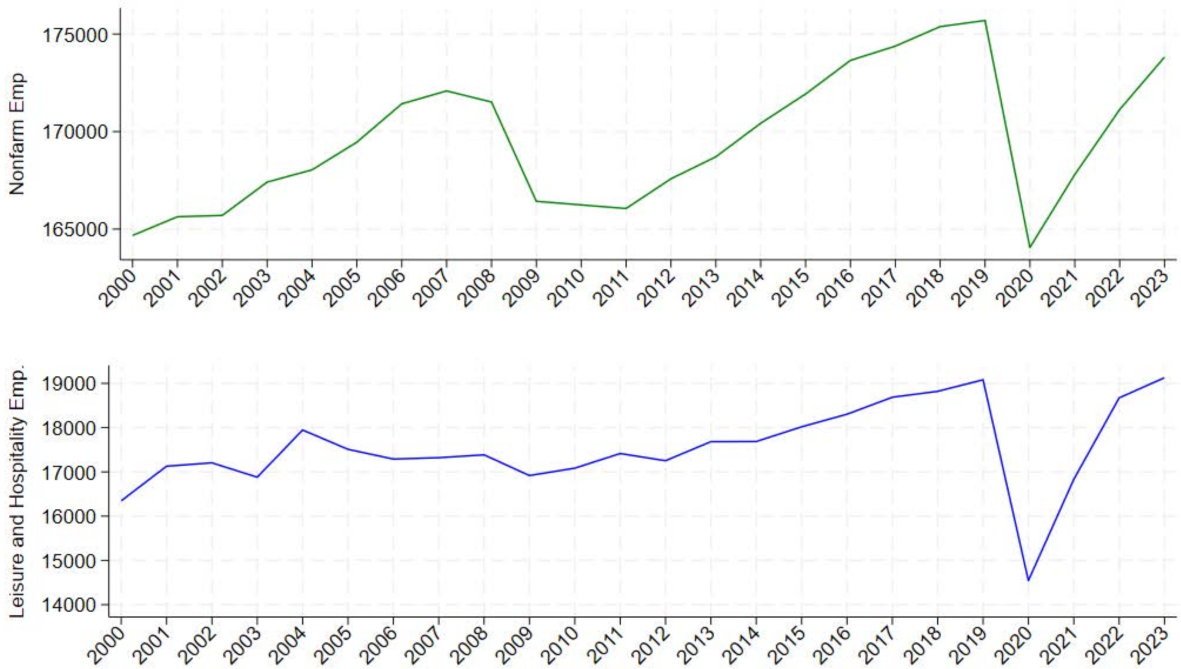
4. Employment and Industry Analysis

Overall Employment Trends

The region's employment trends can be examined using complementary data from Quarterly Census of Employment and Wages (QCEW). Total nonfarm employment grew steadily from 2000 to 2007, followed by a decline during the Great Recession. After a slow recovery through the early 2010s, employment rose sharply from 2014 to 2019, reaching its highest level just before the pandemic. In 2020, employment dropped dramatically, driven in large part by declines in leisure and hospitality employment, before rebounding quickly from 2021 onward. Despite the rebound, total employment remains below its 2019 peak.

The bottom graph, showing leisure and hospitality employment, follows a similar long-term pattern but with more pronounced pandemic impacts. Employment was relatively stable from 2000 through 2019, peaking just before 2020. The sector experienced a sharp collapse in 2020, losing roughly one-quarter of its jobs, followed by a rapid rebound in 2021–2023 that pushed the sectors employment to its highest level.

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



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

Industry Composition

Analysis of 2023 employment distribution (Table 3 and Figure 4) reveals notable differences in industry composition across the five counties. Education and health services represent the largest employment sector in Grafton (21,365 jobs), Merrimack (18,256), and Windsor (6,876) counties, reflecting the concentration of hospitals (Dartmouth-Hitchcock Medical Center), educational institutions (Dartmouth College; Plymouth State University), and related services in these areas. Trade, transportation, and utilities employ substantial portions of the workforce in Merrimack (15,468 jobs) and Grafton (8,838), while manufacturing (FUJIFILM Dimatix; Progressive Manufacturing, Inc), remains a key employer in Sullivan (3,147 jobs) and Grafton (4,775). Leisure and hospitality also account for a significant share of employment, particularly in Grafton (6,714) and Windsor (3,922), underscoring the region's tourism economy.

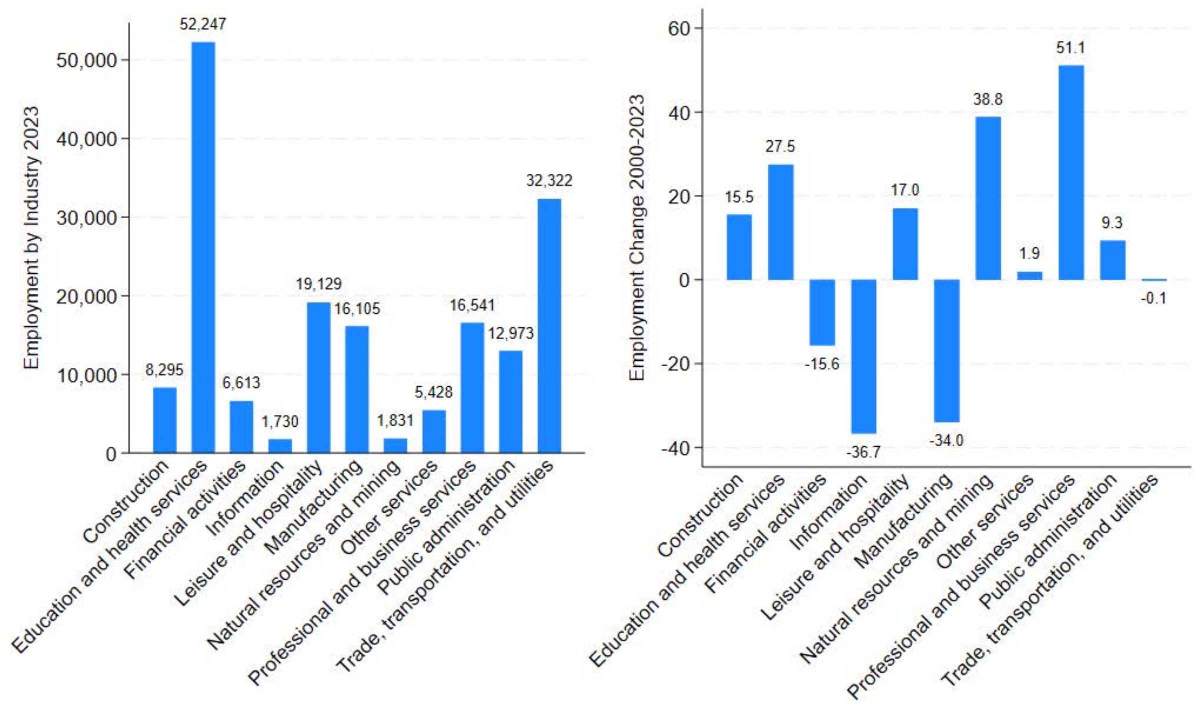
Table 3 Employment by Sector for Eight Upper Valley Counties 2023

	Grafton	Merrimack	Sullivan	Orange	Windsor
Natural resources and mining	354	681	211	315	270
Construction	1738	4061	609	623	1264
Manufacturing	4775	5784	3147	673	1726
Trade, transportation, and utilities	8838	15468	3014	1269	3733
Information	530	614	79	47	460
Financial activities	1351	3837	441	238	746
Professional and business services	4025	8567	1035	606	2308
Education and health services	21365	18256	2974	2776	6876
Leisure and hospitality	6714	6917	981	595	3922
Other services	998	3225	305	108	792
Public administration	2120	9069	768	NA	1015

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

Long-term employment changes from 2000 to 2023 (Figure 4) show changing patterns across industry sectors. The leisure and hospitality sector grew 22% over the period, despite a sharp 2020 pandemic-related decline, and by 2023 had exceeded its pre-pandemic peak. Education and health services expanded by 54%, reinforcing their growing role as the region's dominant employment base. Professional and business services also posted strong gains, increasing 38%. By contrast, manufacturing employment declined by 35%, continuing a long-term downward trend seen nationwide. Natural resources and mining employment fell by 12%, though this sector's small size means the absolute change was limited.

Figure 4 2023 Employment by Industry (left) and Industry Employment Change 2000-2023 (right)



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.

5. Tourism Economy

Travel and Tourism in the Upper Valley Region of Vermont and New Hampshire

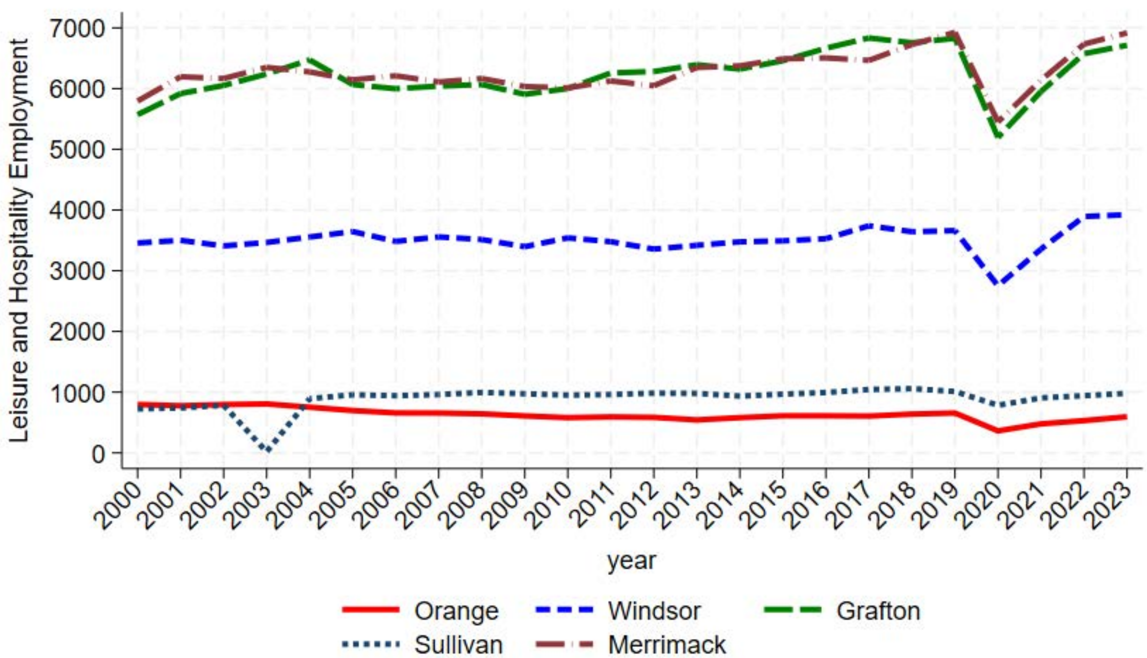
The Vermont side of the Upper Valley region is included in the state's broader "Crossroads of Vermont" and "Woodstock-Quechee" areas. This section of the state features small towns and rural landscapes along the Connecticut River, with a blend of cultural institutions, historic sites, outdoor experiences, and easy access via Interstates 89 and 91. The proximity to institutions like Dartmouth College and regional health centers contributes to cross-border tourism and visitor traffic.

New Hampshire's portion of the Upper Valley Region falls within the state's "Dartmouth-Lake Sunapee" region (which extends beyond the Upper Valley). This largely rural part of the state is comprised by a variety of towns and one small city, nestled alongside the Connecticut River, which also serves as the state border with Vermont. Dartmouth College and its affiliated hospital system attract many regional and out-of-state visitors to this part of New Hampshire. Interstate highways 89 and 91 intersect in the Upper Valley Region of NH and VT, creating ease of access as well as opportunities for the region to attract more visitors who might otherwise just pass through.

Leisure and Hospitality Employment Trends

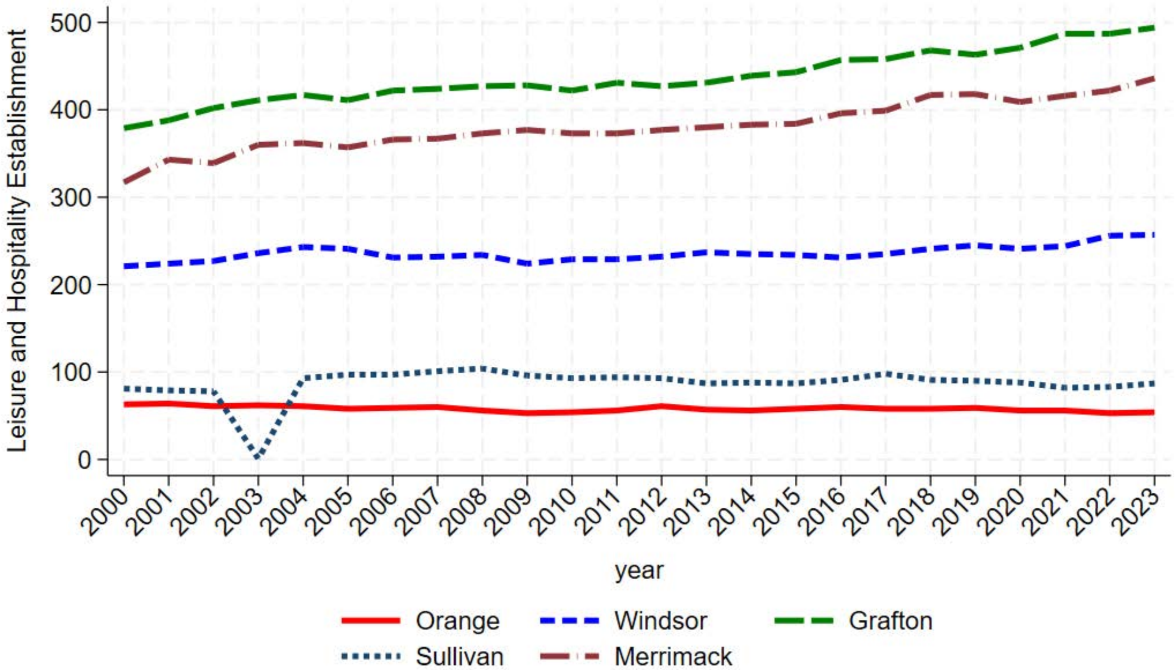
As shown in Figures 5 and 6, the L&H sector has remained relatively stable, and in Merrimack, Windsor, and Sullivan demonstrated employment gains. Across the region, L&H employment increased 17% between 2000 and 2023. While volatility is noticeable during the pandemic (declining nearly 25% from pre-pandemic levels (Figure 7)), employment made a quick recovery (Figure 5) and establishments remained steady or increased throughout most of the region (Figure 6).

Figure 5 Leisure and Hospitality Employment for Upper Valley Counties 2000-2023



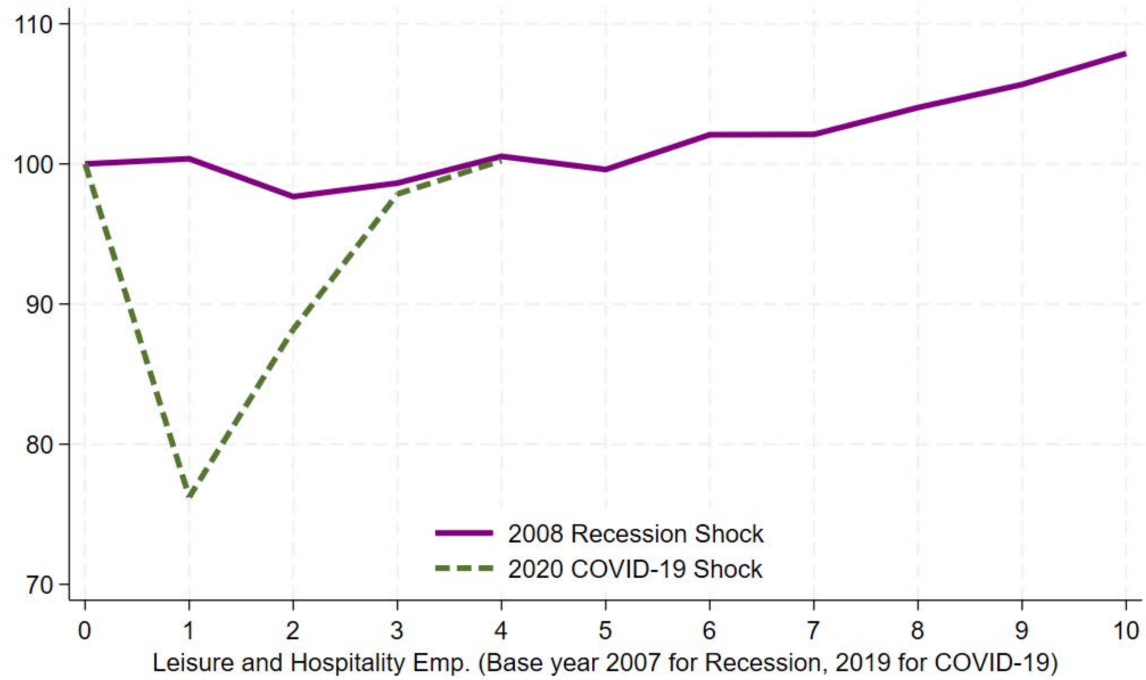
Note: Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Figure 2. Leisure and Hospitality Establishment numbers for Upper Valley Counties 2000-2023



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

Figure 3. Leisure and Hospitality Resilience for Recession and COVID-19 Shock 2000-2023



Note: The graph shows the percentage change in employment in the leisure and hospitality sector over the 10-year period following the Great Recession (purple) in 2008 and 4-year period following the COVID shock (green, dashed). Source is from Quarterly Census of Employment and Wages from U.S. Bureau of Labor Statistics.

Tourism Assets

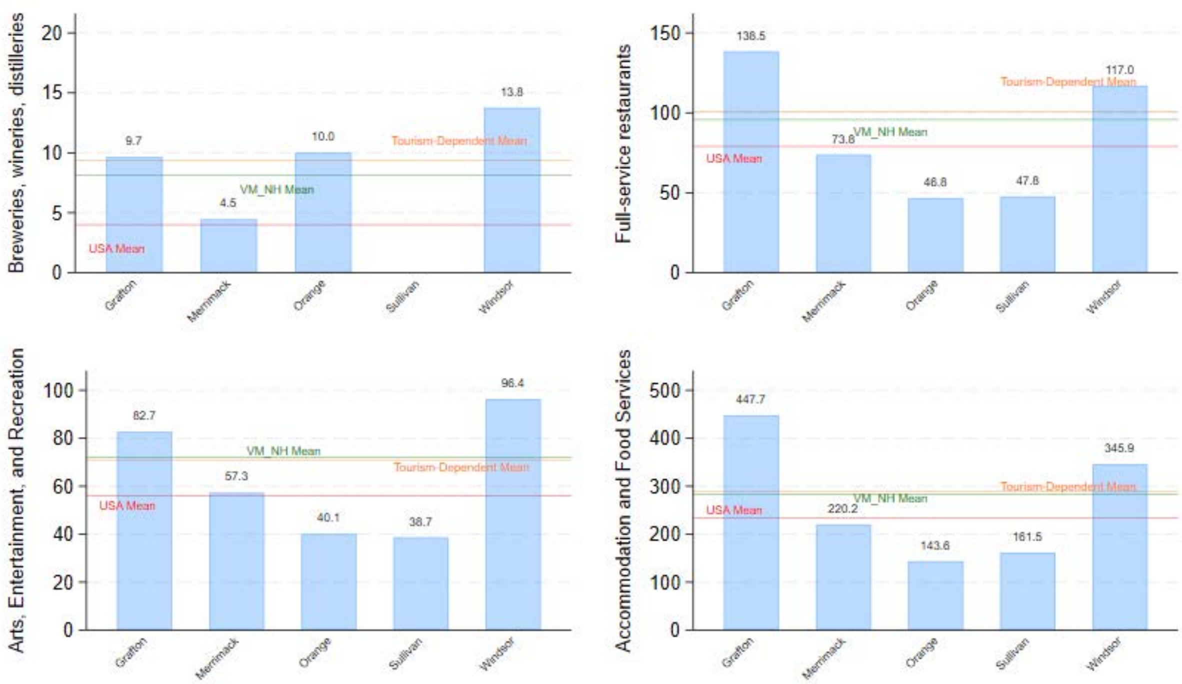
The region's arts, entertainment, and recreation establishments per 100,000 population are generally below the tourism-dependent mean of 69.2, but show variation across counties. Windsor leads with 96.4 establishments, exceeding both the Vermont/New Hampshire mean (~70) and the U.S. average (~55). Grafton follows with 82.7 establishments, also above the national average, while Merrimack (57.3), Orange (40.1), and Sullivan (38.7) fall below these benchmarks.

Accommodation and food service establishments are a strong asset in the region. Grafton County has the highest concentration at 447.7 establishments per 100,000 population, well above the U.S. mean (~280) and tourism-dependent mean (~300). Windsor (345.9) and Merrimack (220.2) counties also perform robustly, while Orange (143.6) and Sullivan (161.5) lag behind.

Full-service restaurants vary significantly, with Grafton again leading at 138.5 per 100,000 population, surpassing the tourism-dependent average (117) and U.S. average (approximately 80). Windsor (117.0) matches the tourism-dependent mean, while Merrimack (73.8), Sullivan (47.8), and Orange (46.8) counties have fewer full-service restaurants relative to national and tourism benchmarks.

Craft beverages can play a significant role in tourism, attracting visitors seeking unique, local experiences. Local breweries, wineries, and distilleries are located in four of the five regional counties. Windsor County has 13.8 per 100,000 population, exceeding the tourism-dependent mean (~9.5) and U.S. average (~4). Orange County (10.0) also surpasses these averages, while Grafton (9.7) closely approaches the tourism-dependent mean. Merrimack County (4.5) falls below state and national averages, and Sullivan County has none.

Figure 4. 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.

Table 3. Short-Term rental listings 2019-2024 (AirBnB, VRBO)

County	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	% change 2019-2024	growth rate 2019-2024
Grafton	3265	4953	5268	6318	7184	7908	142%	2.42
Merrimack	707	979	1029	1219	1399	1474	108%	2.08
Sullivan	364	540	653	787	874	925	154%	2.54
Orange	390	562	584	642	709	729	87%	1.87
Windsor	2704	4113	4419	5136	5872	6302	133%	2.33

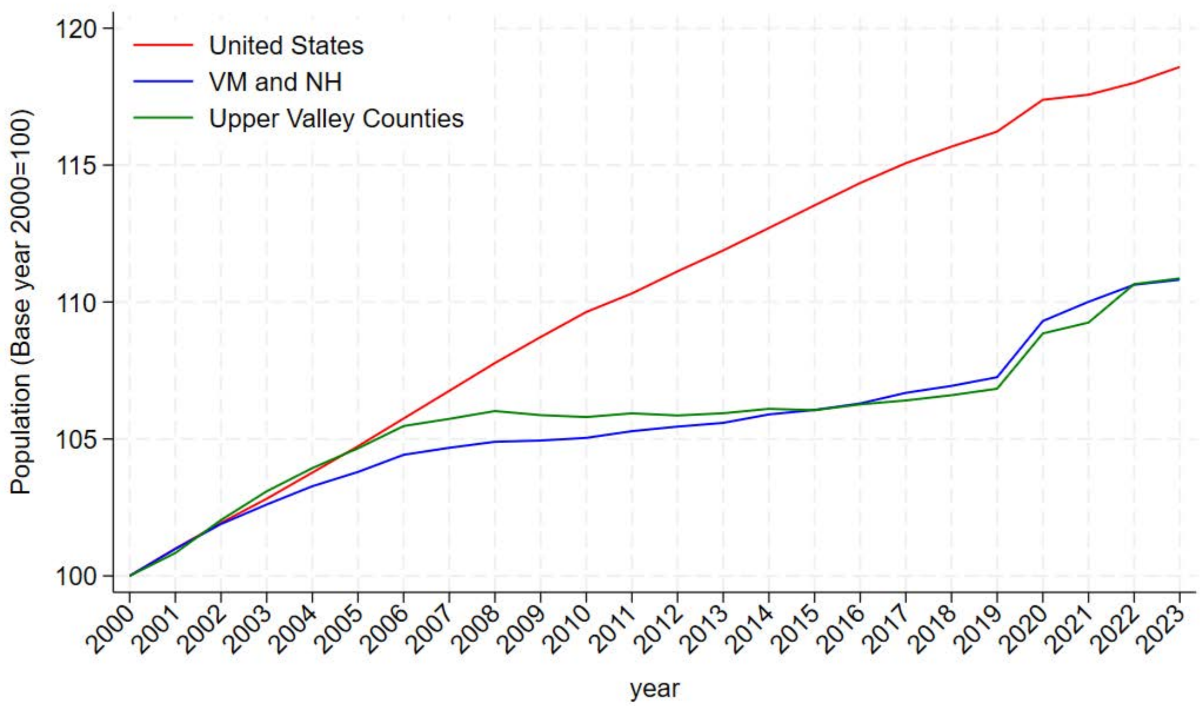
Note: Source is from KeyData

6. Quality of Life Indicators

Population and Demographics

Population trends across the five counties show lower growth than the U.S. average; however, the region saw rapid growth beginning before and continuing through the Covid-19 pandemic (Figure 9). As shown in Figure 10, Merrimack County has the largest population among the five counties at approximately 154,000 residents, followed by Grafton County with nearly 91,000 residents. Orange County has a notably smaller population, with less than 30,000 residents.

Figure 9 Population Trend for Eight Upper Valley Counties and Comparison Geographies



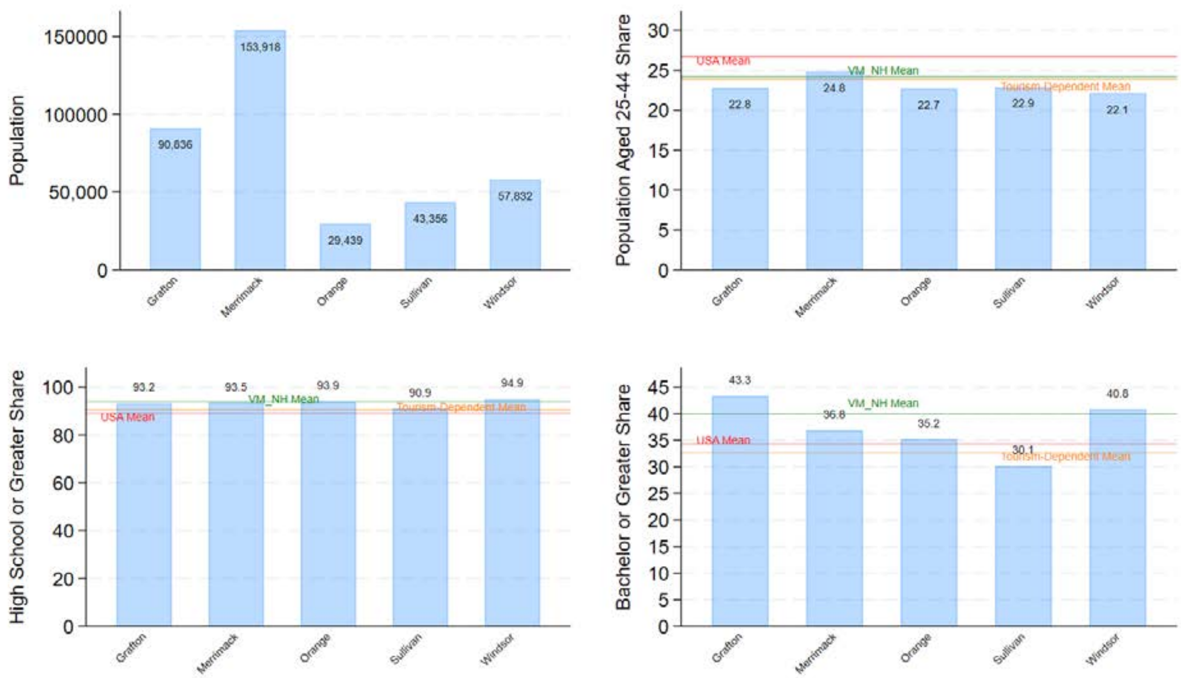
Note: Source is from the US Census Bureau.

Figure 10 shows various demographic indicators including the percentage of the population aged 25-44, a crucial working-age demographic. While Merrimack County shows a population share for this demographic comparable to the state and tourism dependent county means, the remaining counties all fall below these means. All counties are below the national mean of 27%.

Education and Workforce

Educational attainment patterns show variation across the region (Figure 10). High school completion rates generally range from just under 91% in Sullivan County to 95% in Windsor County. All counties exhibit higher rates of high school attainment than either the U.S. or tourism dependent benchmarks; all but Grafton and Sullivan Counties are above the state thresholds. Bachelor's degree attainment is highest in Grafton (43%) and Windsor (41%) and lowest in Sullivan County (30%). The national average of population with a bachelor's degree is 23.5%. Four of the five counties (all but Sullivan) are above the national and tourism dependent average; however, only Grafton and Windsor are above the state averages.

Figure 10 Population and Educational Attainment in Upper Valley Counties, 2018-2022



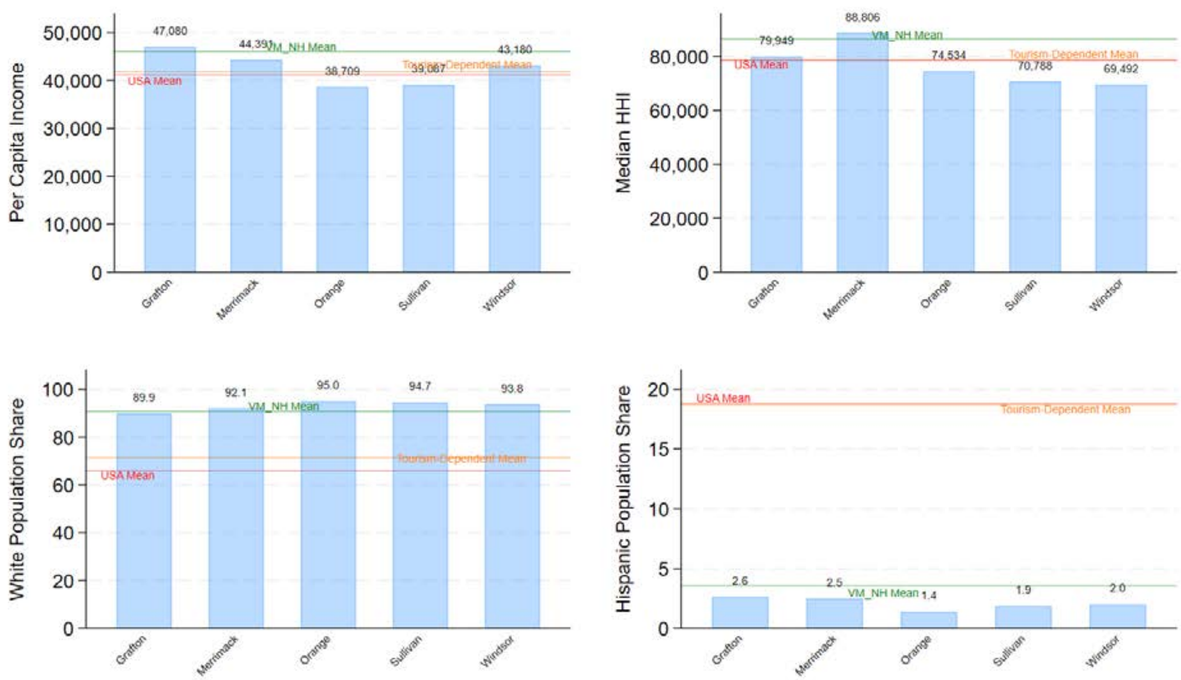
Note: Source is from 2018-2022 5-year American Community Survey. The population includes both persons in housing units and persons in group quarters. The bar for VM_NH shows the average of the states over all the counties. The bar for USA shows the average of the nation over all the counties. The bar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

Income

Income metrics reveal the diversity of economic circumstances impacting Upper Valley counties (Figure 11). While per capita income was highest in Grafton County, median household income, which shows a more realistic picture of typical household income, was highest in Merrimack County. Similarly, while per capita income in Windsor County, VT was the third highest in the region ($43,180) the county ranked last in median household income ($69,492), below the average for all comparison geographies. Orange and Sullivan counties consistently ranked lower on income measures than other counties in the region and reported both per capita income and median household incomes below the comparison geographies.

Also, in Figure 9, is the population composition of the five counties with the averages of New Hampshire-Vermont, the nation, and tourism-dependent counties indicating that the population is largely white with little racial and ethnic diversity.

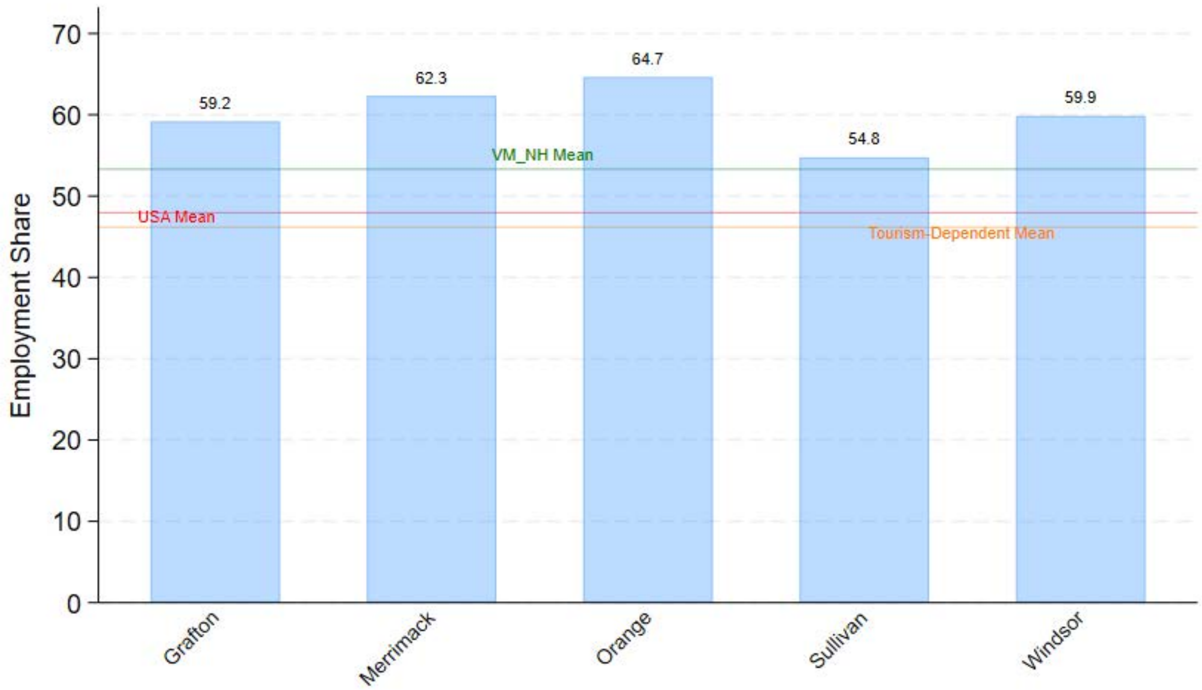
Figure 11 Income and Population Composition in Upper Valley Counties, 2018-2022



Note: Source is from 2018-2022 5-year American Community Survey. The bar for Vermont-New Hampshire 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. Orange County shows the highest employment rate, while Sullivan County exhibits the lowest.

Figure 5. Share of Employment in Grafton, Merrimack, Orange, Sullivan, and Windsor Counties, 2018-2022



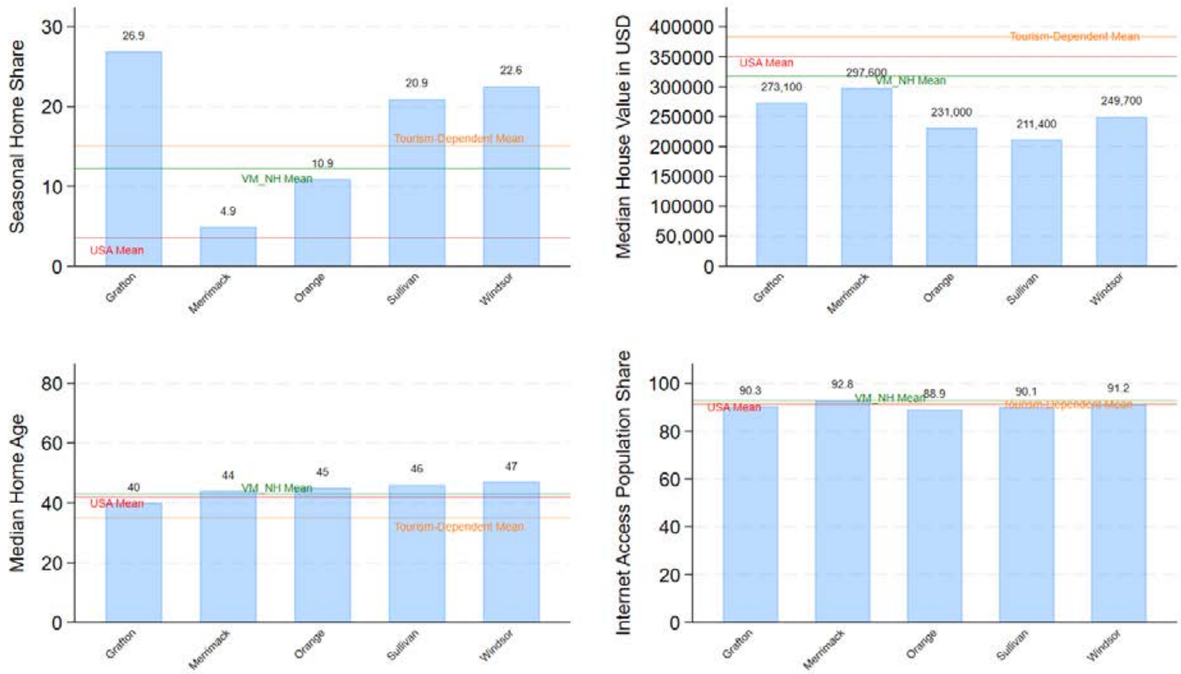
Note: Source is from 2018-2022 5-year American Community Survey. The Figure shows the percentage of population that are employed. The bar for Vermont-New Hampshier shows the average of the states over all the counties. The bar for USA shows the average of the nation over all the counties. The bar for 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 across counties; however, values were below the averages for comparison regions suggesting a relatively affordable housing market.

Many of the counties reported a high proportion of seasonal homes, as shown in Figure 13. In Grafton County, more than a quarter of the county's housing stock is classified as seasonal or recreational, higher than other counties or the comparison regions. In counties including Sullivan and Windsor, the share of seasonal homes was approximately 20% of the housing stock, although both counties were also above the averages for the comparison geographies including the tourism dependent mean. This high seasonal occupancy rate reflects the region's role as a recreation and tourism destination while potentially also affecting local housing markets and community dynamics.

Figure 13 Home and Internet in Upper Valley Counties, 2018-2022



Note: Source is from 2018-2022 5-year American Community Survey. The bar for Vermont-New Hampshire shows the average of the states 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.

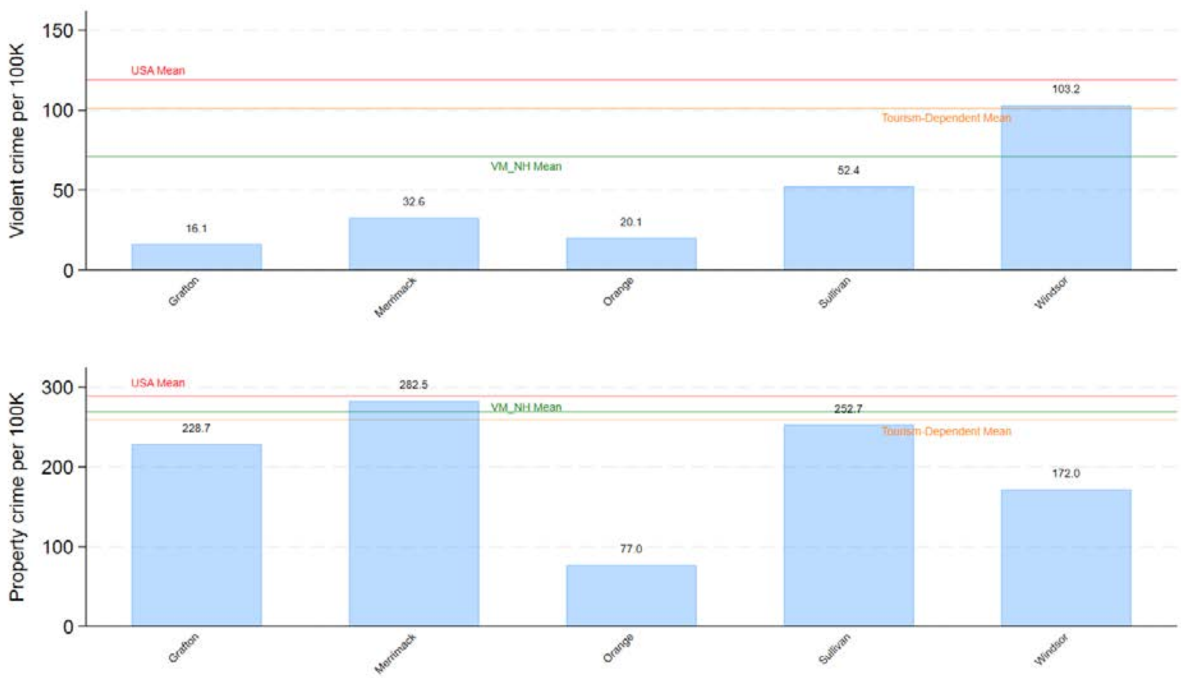
Figure 14 shows housing affordability, indicating both housing rent and ownership are generally affordable in the five counties when compared to the state, the nation, and tourism-dependent counties. The ratio of median household income relative to housing prices was lower than all comparison geographies. Similarly, the share of cost burdened renters (those paying more than 30% of their income toward housing costs) was lower than all comparison geographies. The exception was Sullivan County, where more than half of renters are classified as cost burdened.

Figure 6. Home Affordability in Grafton, Merrimack, Orange Sullivan, Windsor Counties, 2018-2022

Note: Source is from 2018-2022 5-year American Community Survey. The bar for VM_NH 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 shows violent and property crime rates in the component counties. Outside of Windsor County, violent crime rates were lower than all comparison geographies, and even Windsor was below the national average violent crime rate. Property crimes were high in some counties, notably Merrimack County, which recorded 283 incidents per 100,000 people, a value greater than all of the regional counties or the comparison region averages.

Figure 15 Violent and property crime 2022 per 100K population for Upper Valley Counties

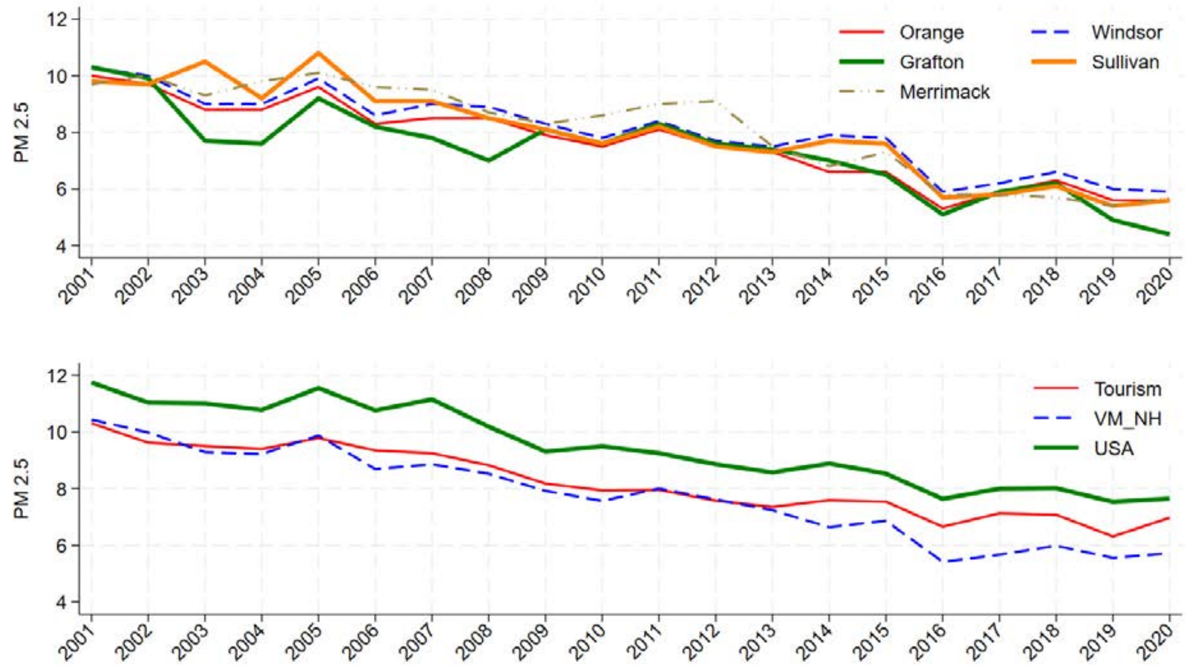


Note: Source is from Inter-university Consortium for Political and Social Research (ICPSR).

7. 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 remained within acceptable ranges and is below the averages recorded in comparison geographies like tourism dependent counties and the nation as a whole.

Figure 7. PM 2.5 2001-2020



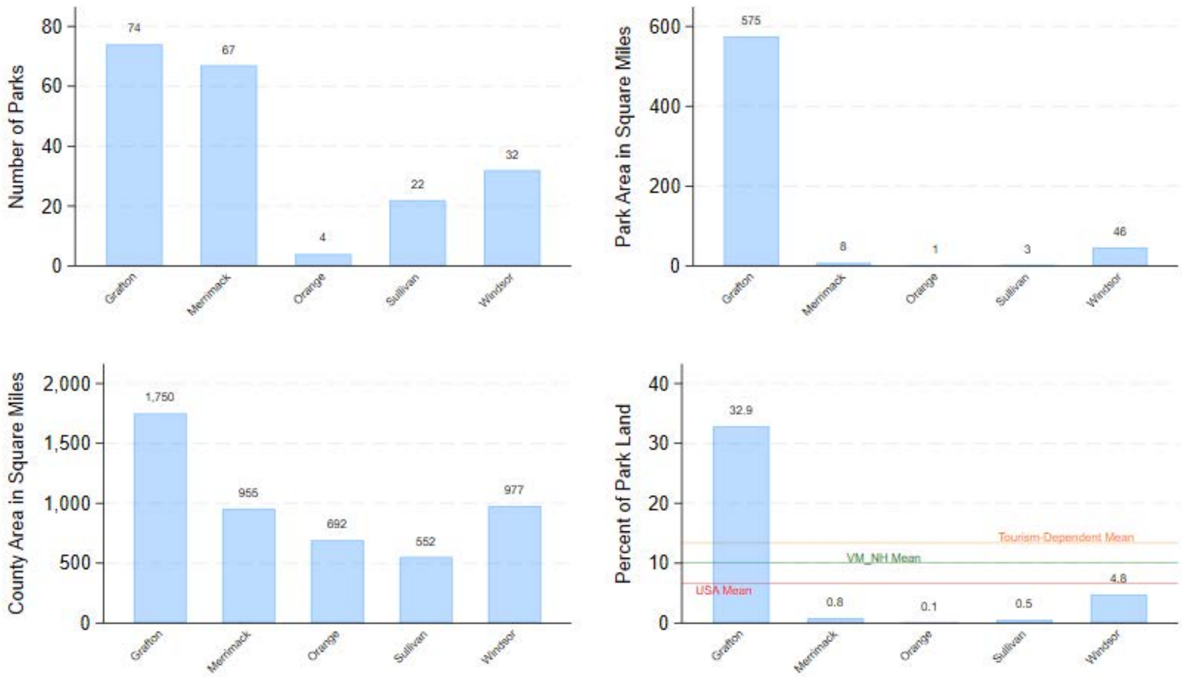
Note: Source from CDC National Environmental Public Health Tracking Network with the most recent source year 2020 from https://ephtracking.cdc.gov/DataExplorer/

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. The distribution of parks across the counties reveals stark differences in recreation and tourism potential. Grafton County is a clear outlier, with nearly one-third of its territory in park lands (575 square miles, or 32.9% of county land). This level of protected space far exceeds both national and regional averages, and may position the county as a cornerstone for outdoor recreation and nature-based tourism in the region.

Interestingly, while Merrimack County boasts a large number of parks, the county's approach appears to emphasize quantity over size. With 67 parks but only 8 square miles of total parkland, the county appears to offer a network of smaller, localized amenities rather than large destination parks. This model is advantageous for residents and community-level recreation and quality of life but may be less effective at drawing visitors from outside the region.

Sullivan, Orange, and Windsor counties all show relatively low levels of parkland; however, Windsor County, which approaches the U.S. average for the share of parkland may serve as a modest platform for developing tourism-related opportunities, particularly when paired with strategic branding or cross-county collaboration.

Figure 17 Number of Parks, Park Area, Land Area, and Share of Park Area in Upper Valley 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.

8. Recommendations and Policy Implications

The Upper Valley showcases a diverse set of environmental, social, and economic conditions that together shape its potential for rural tourism development. 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 residents and investing in year-round attractions that appeal to visitors and residents from a breadth of incomes and life-stages.

Environmentally, the region contains both nationally significant outdoor recreation assets and smaller, more community-oriented amenities. Grafton County appears to stand out as an anchor for nature-based tourism, with nearly one-third of its land protected in parks, well above regional and national averages.

High proportions of seasonal homes which are most pronounced in Grafton (over 25%) but also significant in Sullivan and Windsor (about 20%), signal the region's long-standing appeal as a recreational and second-home destination. While these patterns generate economic benefits through seasonal spending, they also place pressures on housing affordability and community cohesion, especially where rental markets are tight. Sullivan County in particular stands out as a point of concern, with over half of renters meeting the criteria for cost burden, suggesting that local residents may face displacement pressures even as the county benefits from its seasonal housing economy. For policymakers, balancing the housing needs of permanent residents with the economic gains from tourism-driven seasonal housing represents a critical challenge for sustaining inclusive community development.

Economically, the region exhibits a blend of strengths and vulnerabilities that directly influence tourism capacity. Education levels are relatively high, particularly in Grafton and Windsor counties, providing a skilled workforce that can support a diversity of enterprises including service industries. However, income disparities are notable: while Grafton and Merrimack enjoy relatively strong income levels, Orange and Sullivan lag behind regional and national benchmarks, with Sullivan showing persistent weaknesses across employment, income, and education indicators. Such variation underscores the need for policies that not only expand tourism and economic development opportunities but also ensure that benefits are broadly shared across counties and communities. The region's modest but accelerating population growth—particularly during and after the COVID-19 pandemic—suggests increasing demand for recreation and amenity-driven development.

Regional collaboration will be essential to coordinate opportunities and assets for effective tourism marketing efforts, shared workforce development efforts, and complementary economic development approaches across counties.

9. References

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Table A1 Leisure and Hospitality Employment for Upper Valley Counties 2000-2023

	Grafton	Merrimack	Sullivan	Orange	Windsor
2000	5571	5795	725	797	3457
2001	5918	6195	740	776	3500
2002	6051	6166	784	796	3409
2003	6240	6350	19	806	3466
2004	6472	6275	892	752	3556
2005	6067	6145	957	697	3645
2006	5998	6211	941	658	3483
2007	6041	6108	960	656	3557
2008	6067	6166	996	643	3514
2009	5906	6034	974	608	3396
2010	6001	6012	951	580	3541
2011	6257	6126	961	593	3479
2012	6281	6047	984	585	3356
2013	6393	6348	980	543	3419
2014	6321	6375	935	580	3476
2015	6459	6490	967	611	3492
2016	6665	6506	994	611	3528
2017	6834	6464	1044	606	3740
2018	6755	6726	1058	639	3643
2019	6828	6926	1011	656	3661
2020	5196	5451	784	362	2752
2021	5952	6139	905	478	3357
2022	6575	6733	941	531	3893
2023	6714	6917	981	595	3922

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 Upper Valley Counties 2000-2023

	Grafton	Merrimack	Sullivan	Orange	Windsor
2000	379	317	81	63	221
2001	388	343	79	64	224
2002	402	339	78	61	227
2003	411	360	76	62	236
2004	417	362	93	61	243
2005	411	357	97	58	241
2006	422	366	97	59	231
2007	424	367	101	60	232
2008	427	373	104	56	234
2009	428	377	96	53	224
2010	422	373	93	54	229
2011	431	373	94	56	229
2012	427	377	93	61	232
2013	431	380	87	57	237
2014	439	383	88	56	235
2015	443	384	87	58	234
2016	457	396	91	60	231
2017	458	399	98	58	235
2018	468	417	91	58	241
2019	463	418	90	59	245
2020	471	409	88	56	241
2021	487	416	82	56	244
2022	487	422	83	53	256
2023	494	436	87	54	257

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