Economic and Quality of Life Indicators for Monongahela National Forest Communities

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Introduction

The recreation economy has been recognized by the United States Department of Agriculture as an emerging or priority area of national need. According to the Outdoor Industry Association, the outdoor recreation economy generates \$887 billion in spending, supports 7.6 million direct American jobs and generates \$125 billion in federal, state, and local tax revenue. Outdoor recreation is a growing and diverse economic super sector that is a vital cornerstone of successful communities that cannot be ignored, yet, many rural communities lack the capacity and resources needed to successfully support and capitalize on the recreation economy.

In response to these trends, USDA's Forest Service (FS), Rural Development (RD), and the National Institute for Food and Agriculture (NIFA) developed a Recreation Economy Resource Guide to empower RD field staff and FS district rangers to identify funding and technical assistance resources and best practices available to support small business development in the communities they serve, enhance the local recreation economy, and improve the quality of life for locals and the positive experiences of visiting recreation enthusiasts. The guide encourages both RD field staff and FS District Rangers to collaborate with the Cooperative Extension System within the Land Grant University System, which has broad educational, research and technical assistance resources that can help with planning necessary to successfully develop recreational economies.

Located in the northcentral highlands of West Virginia, the Monongahela National Forest (MNF) comprises roughly a million acres of National Forest System lands spread across eight counties (Grant, Greenbrier, Nicholas, Pendleton, Pocahontas, Randolph, Tucker and Webster) (Figure 1). The numerous rural communities that are surrounded by the Monongahela National Forest (MNF) have long had their livelihoods tied to the coal and timber industries and wood products. Over the last few decades, these industries have waned and these communities are struggling to find a new path forward. Current capacity building, design, placemaking, and entrepreneurship efforts are helping to improve the capacity of gateway communities in the MNF to undertake recreation economy projects to support community and economic development that will improve the quality of life in their communities.

Wayne
National Forest

Monongahela
National Forest

WEST
VIRGINHA

George Washington
National Forest

VIRGINHA

VIRGINHA

Figure 1. Monongahela National Forest Situated in West Virginia

By Kmusser - Self-made, based on USGS data., CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=5762567

As the MNF communities invest resources and undertake efforts to develop recreation assets it is important to measure how these projects might be impacting development goals in the community. Rural communities generally lack research-based performance indicators to measure and evaluate their strengths and weaknesses and clearly identify where additional resources are needed to enhance the recreation economy. Led by the WVU Extension Service, university faculty are working with community stakeholders to identify the indicators applicable to recreation economies and develop an integrated process for measuring and evaluating these performance indicators in the forest communities and sharing the impacts and best practice examples.

In order to determine if environmental, economic, and social conditions are being positively impacted by recreation economies initiatives, metrics including employment, unemployment, income, household earnings, educational attainment, and population change (both broadly and for specific demographics, ie. 25-44 year olds) must be tracked annually for individual counties and the larger region.

For tourism and recreation businesses/industries specifically, we will track number of establishments, employment, wages and earning, and the sectors' contribution to the local/regional economy (estimated using IMPLAN input-output modeling data and software).

In addition to secondary data, we will identify a statistically representative sample of businesses from the major NAICS categories for additional quantitative and qualitative study. This includes questions on employment, wages, and sales to ground- truth secondary data, and questions to better understand and quantify changes and challenges in the tourism sector. Specifically, changes in visitation and visitor spending; changes or anticipated changes to employment,

business spending, worker and proprietor incomes, etc.; and industry trends and local issues that should be considered by local stakeholders to encourage growth and maintain the competitiveness of local recreation and tourism businesses in the broader economy. Ideally, this sample of businesses will remain consistent over time and provide qualitative data useful for case studies of specific businesses and business sectors within the larger tourism industry.

Indicators

Employment and Industry

Like much of rural America and Appalachia, the counties that comprise the MNF have seen strong downward trends in employment led by declines in traditional economic sectors such as manufacturing and mining. Before the last recession, employment was generally trending upward. However, total employment has been in a steady and steep decline since 2007 with little evidence of recovery. Total employment in the region has declined by just over 3% since 2002 and by 8.5% from its high in 2007, to 48,671 workers (Figure 2). For comparison, the state economy grew by approximately 2% between 2002 and 2017 and declined 3% between 2007 and 2017.

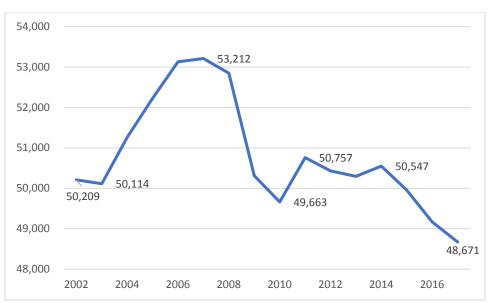


Figure 2. Private Nonfarm Employment in the Eight County Region, 2002-2017

Although total employment in the region has declined over the past 15 years, the trend varies between specific industries. For example, mining and natural resources, manufacturing, and government have all posted declines greater than 20% (Figure 3). However, service industries including education and healthcare (8%), trade and transportation (2%), and leisure and hospitality businesses (1%) have posted gains.

Figure 3 shows both industry employment changes and total employment by industry in 2017. The largest employers in the region include education and health services (30% of regional employment, 13,131 employees), trade, transportation, and utilities (20% of regional

employment, 8,902 employees), and leisure and hospitality (14% of regional employment, 6,354 employees). Sector employment by county is presented in Table 2 on the following page.

Figure 3. Industry Employment Changes from 2002-2017 (top) and 2017 Employment by Industry (bottom)

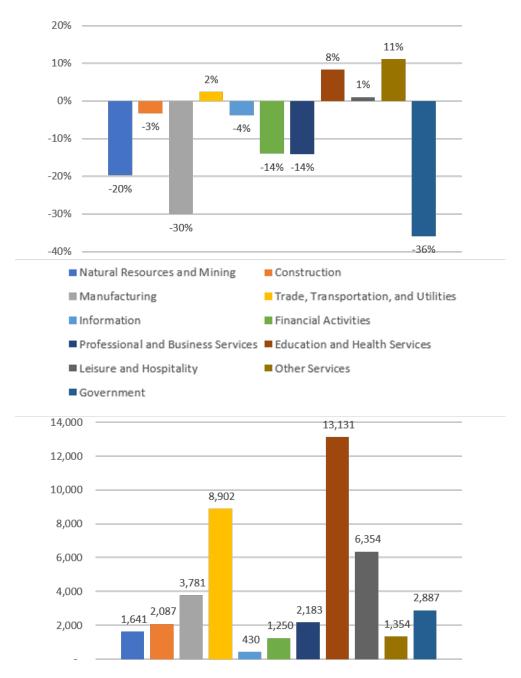


Table 2. Employment by Sector for MNF Component Counties, 2017

	Grant		Greenbri	er	Nichola	as	Pendle	ton	Pocaho	ontas	Randolp	h	Tucker	ı	Webst	er
Natural Resources and Mining	69	2%	374	3%	331	5%	80	5%	64	2%	356	3%	237	9%	130	7%
Construction	308	9%	627	5%	255	4%	65	4%	120	4%	448	4%	179	7%	85	5%
Manufacturing	229	7%	823	6%	693	10%	74	5%	278	9%	1,184	10%	248	9%	252	14%
Trade, Transportation, and Utilities	852	25%	2,395	18%	1,812	25%	339	23%	484	16%	2,354	21%	310	12%	356	20%
Information	21	1%	140	1%	47	1%	27	2%	39	1%	123	1%	17	1%	16	1%
Financial Activities	120	4%	337	3%	145	2%	67	5%	103	3%	350	3%	98	4%	30	2%
Professional and Business																
Services	138	4%	897	7%	408	6%	41	3%	177	6%	407	4%	72	3%	43	2%
Education and Health Services	1,126	34%	3,693	28%	2,136	30%	500	34%	607	20%	3,892	34%	525	20%	652	37%
Leisure and Hospitality*	219	7%	2,882	22%	840	12%	123	8%	753	24%	957	8%	508	19%	72	4%
Other Services	86	3%	421	3%	204	3%	64	4%	95	3%	323	3%	120	5%	41	2%
Government	187	6%	568	4%	286	4%	100	7%	365	12%	962	8%	320	12%	99	6%
Total	3,355	100%	13,157	100%	7,157	100%	1,480	100%	3,085	100%	11,356	100%	2,634	100%	1,776	100%
*The state rate of employment in	the Leisu	re and H	lospitality	sector is	10.8%											

Tourism

The expansion of recreation and tourism services in MNF communities will support the local economies and contribute resources to the respective counties as their economies transition from traditional export base activities to economies built around service sectors.

From 2008 to 2017, travel expenditures in the MNF Counties have remained stable at approximately \$500 million. However, individual years have seen volatility. In most cases these swings were the result of changes in spending in one or two of the larger, and more leisure and hospitality dependent counties, namely Greenbrier and Nicholas (Table 3).

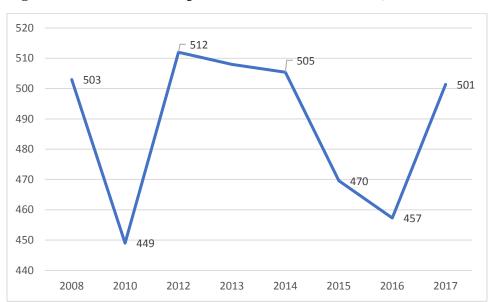


Figure 4. Direct Travel Expenditures in MNF Counties, 2008-2017 (millions of dollars)

Table 3. Direct Travel Expenditures by County, 2008-2017 (millions of dollars)

	Grant	Greenbrier	Nicholas	Pendleton	Pocahontas	Randolph	Tucker	Webster	TOTAL
2008	17.0	215.0	62.0	9.0	102.0	45.0	43.0	10.0	503.0
2010	16.0	183.0	61.0	8.0	86.0	46.0	40.0	9.0	449.0
2012	18.0	239.0	67.0	9.0	80.0	48.0	41.0	10.0	512.0
2013	17.0	230.0	63.0	9.0	86.0	51.0	42.0	10.0	508.0
2014	16.9	225.5	61.9	8.7	88.6	49.9	44.2	9.7	505.4
2015	14.4	215.3	52.6	7.9	80.2	46.3	44.8	8.1	469.6
2016	13.7	199.4	49.7	7.7	87.4	47.1	44.7	7.6	457.3
2017	14.4	232.5	54.0	8.7	92.9	44.9	46.0	8.0	501.4

Travel spending in the region supports local communities and the state fiscally. Local travel related tax revenue totaled \$6.1 million in 2017 and state revenue was \$36.7 million (Figure 5). These collections have been essentially flat over the past 10 years.

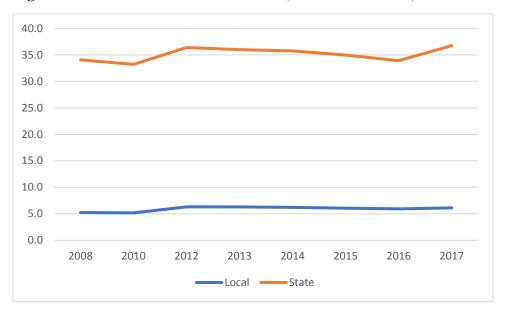


Figure 5. Travel Related Tax Revenues (millions of dollars)

In most cases, local taxes from tourism in West Virginia are limited to lodging establishments. Table 4 shows hotel/motel tax collections for the component counties of the MNF region.

Table 4. Hotel/Motel Tax Collections, 2018 (millions of dollars)

Grant	
Greenbrier	
Nicholas	
Pendleton	\$0.03
Pocahontas	\$1.69
Randolph	\$0.52
Tucker	
Webster	
Total	\$2.24

In addition to direct travel spending through food, lodging, recreation, and shopping which supports local businesses, this travel spending also supports job growth in the region. According data from the Bureau of Labor Statistics, 6,338 jobs existed in the MNF region because of leisure and hospitality employment in 2017 (Figure 6). While overall employment has failed to rebound to pre-recession levels, leisure and hospitality employment has shown much stronger growth and is only 3% below pre-recession levels (vs 8.5% for the region's economy as whole). However, when looking at accommodations specifically (Table 6), it is clear the industry has not fully recovered to pre-recession levels.



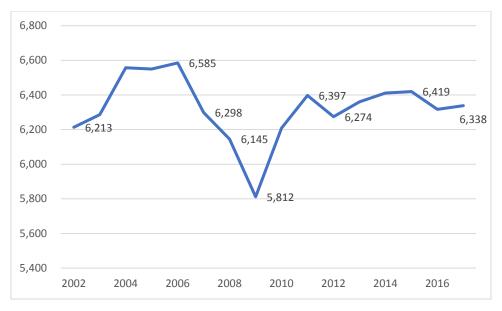


Table 5. Leisure and Hospitality Employment in the MNF Component Counties, 2002-2017

	Grant	Greenbrier	Nicholas	Pendleton	Pocahontas	Randolph	Tucker	Webster	Total
2002	202	2,651	798	127	1,005	909	577	82	6,351
2003	211	2,724	782	137	1,005	925	551	89	6,424
2004	205	2,730	806	141	971	1,008	607	89	6,557
2005	204	2,732	797	139	974	987	630	87	6,550
2006	205	2,794	802	166	910	1,014	603	91	6,585
2007	228	2,690	779	138	865	949	558	91	6,298
2008	237	2,553	784	126	846	937	566	96	6,145
2009	243	2,323	792	117	782	913	534	108	5,812
2010	255	2,778	792	110	786	876	504	108	6,209
2011	271	2,986	809	113	753	861	507	97	6,397
2012	232	2,887	804	113	757	878	519	84	6,274
2013	252	2,811	820	117	771	944	569	76	6,360
2014	230	2,850	815	103	767	986	583	77	6,411
2015	224	2,864	854	124	757	955	559	82	6,419
2016	215	2,796	848	126	727	962	560	83	6,317
2017	218	2,880	838	117	752	953	506	74	6,338

Table 6. Leisure and Hospitality Employment in the MNF Component Counties, 2002-2017

	Gr	ant	Green	brier	Nich	olas	Pend	leton	Pocah	ontas	Rand	olph	Tuc	ker	Web	ster	Tot	al
	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.	Estab.	Emp.
2002	8	66	19	1739	11	137	3	50	12	806	15	138	7	379	(ND)	(ND)		
2003	8	66	18	1803	12	126	3	53	13	823	13	129	7	369	(ND)	(ND)		
2004	8	67	18	1718	10	125	3	49	12	776	12	138	8	413	(ND)	(ND)		
2005	7	61	18	1710	10	126	3	36	13	763	12	120	9	433	2	23	74	3,272
2006	7	62	18	1699	11	126	4	34	11	716	12	130	11	445	2	23	76	3,235
2007	8	66	18	1555	11	126	4	35	12	669	13	133	10	388	2	23	78	2,995
2008	7	70	18	1461	12	136	4	42	11	678	14	124	9	382	2	23	77	2,916
2009	7	69	19	1269	11	135	4	29	9	624	13	116	9	345	2	23	74	2,610
2010	8	73	18	1705	11	131	5	29	10	623	11	111	9	329	2	28	74	3,029
2011	9	78	17	1848	11	140	4	34	10	599	11	116	8	323	2	27	72	3,165
2012	8	54	18	1725	10	146	4	32	10	604	11	114	8	321	2	27	71	3,023
2013	7	48	18	1670	10	140	4	31	10	622	12	128	8	359	2	25	71	3,023
2014	5	47	18	1762	10	139	4	27	9	607	12	146	7	366	2	24	67	3,118
2015	5	51	16	1732	10	143	4	26	10	573	12	160	7	345	2	24	66	3,054
2016	6	55	14	1648	10	141	4	28	10	561	13	140	7	318	2	25	66	2,916
2017	6	52	13	1657	10	144	4	28	9	596	14	144	7	305	2	22	65	2,948
% Change 2006 to 2017	-14%	-16%	-28%	-2%	-10%	14%	0%	-17%	-15%	-16%	17%	12%	-44%	-32%	0%	-4%	-15%	-9%

While leisure and hospitality businesses are key sectors in the tourism economy spans other sectors ¹ as well, including retail, ground transportation, travel arrangement services, etc. When the sector is broadened to include these sectors, the tourism economy provides more than 10,200 jobs to the regional economy (Table 7).

Table 7. Employment and Earnings by IMPLAN Category

			Avg. Wage per
IMPLAN Category	Employment	Total Wages	Job
Food and Beverage Stores	964	21,413,049	\$22,213
Gasoline Stations	909	16,788,021	\$18,469
Clothing and Clothing Accessories Stores	107	2,196,522	\$20,528
Sporting Goods, Hobby, Musical Instrument, and Book Stores	175	3,031,187	\$17,321
General Merchandise Stores	1,392	33,353,548	\$23,961
Miscellaneous Store Retailers	202	3,630,112	\$17,971
Ground Transportation	38	944,978	\$24,868
Support Activities for Air Transportation	8	370,710	\$46,339
Residential Property Managers	54	1,481,524	\$27,436
Passenger Car Rental	22	498,754	\$22,671
Travel Arrangement and Reservation Services	41	1,032,126	\$25,174
Performing Arts, Spectator Sports, and Related Industries	76	1,807,206	\$23,779
Museums, Historical Sites, and Similar Institutions	14	218,154	\$15,582
Amusement, Gambling, and Recreation Industries	280	3,604,484	\$12,873
Accommodation	2,951	88,773,143	\$30,082
Food Services and Drinking Places	3,033	44,552,739	\$14,689
Total	10,266	\$223,696,257	\$21,790

Table 8 shows the contribution of the tourism sector to the region's economy. The 10,200 jobs generate \$437.4 million in total value added (income, taxes, and payments to capital) and provide \$255.6 million in labor income (wages and proprietors' income). Subsequent rounds of spending between businesses in the region support an additional 1,170 jobs and generate \$44.5 million in labor income. Induced spending by local households generates an additional 1,200 jobs and supports \$43.2 million in local income. In total, the local tourism industry and subsequent spending by businesses and households contributes nearly 12,700 jobs, \$605.5 million in total value added, and \$343.2 million in labor income to the region.

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¹ These industries are the same sectors used by Dean-Runyan in their annual reports for the state of West Virginia

Table 8. The Contribution of the Tourism Economy to Employment, Income, and Output (Sales) in the MNF Region

Impact type	Employment	Labor income (\$)	Total Value Added (\$)	Output (\$)
Direct effect	10,266	255,570,574	437,402,908	822,628,702
Indirect effect	1,170	44,465,725	81,547,099	159,185,058
Induced effect	1,222	43,191,422	86,546,040	150,009,410
Total effect	12,659	343,227,722	605,496,048	1,131,823,171

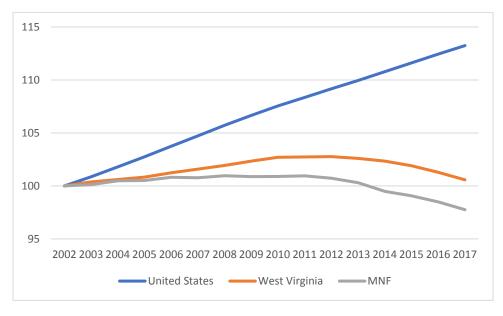
Quality of Life

Ideally, increases in direct employment in tourism related businesses will translate to growth in other sectors of the local economy and improvements in local quality of life. Research shows that places with quality of life assets, like outdoor recreation opportunities, see higher employment, income, and population growth than those without such assets.

Population

The population in the MNF region has declined by 2% since 2002 (Figure 7). Over this same period, the state population grew by 1% and the U.S. population grew by 13%. Counties reporting the largest declines in population over the 15-year period were Webster (-1,228), Nicholas (-1,117), and Pendleton (-1,034). Only Greenbrier (666), Grant (360), and Randolph (298) Counties reported gains in population. The average population of the MNF component counties over the 2013-2017 period is presented in Figure 8.

Figure 7. Population Change in the MNF and Comparison Geographies, 2002-2017

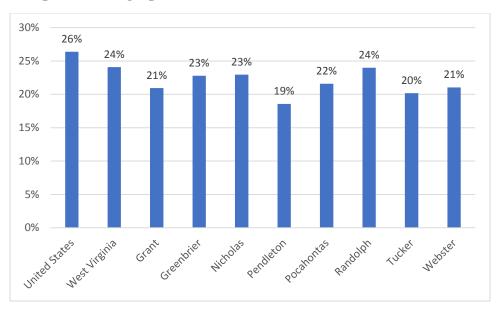


40,000 35,523 35,000 29,152 30,000 25,496 25,000 20,000 15,000 11.673 8.574 8,637 10,000 7,138 7,035 5,000 Webster

Figure 8. Population in MNF Component Counties, 2013-2017

In line with previous research, a key indicator of quality of life is the change in the young, educated population. For all counties, the share of the population aged 25-44 was lower than the national average of 26% (Figure 9). Additionally, all counties except for Randolph County were below the state average of 24%. Counties with the smallest share of population in this demographic were Pendleton County (19%) and Tucker County (20%).

Figure 9. Share of the Population Aged 25-44 in the MNF Component Counties and Comparison Geographies, 2013-2017

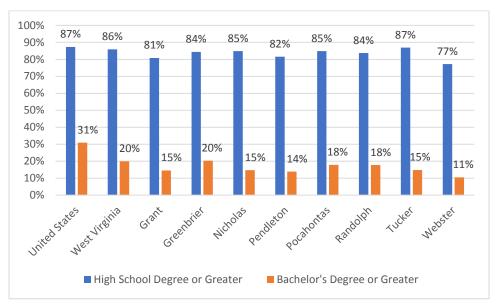


Education

Although West Virginia still lags the nation in educational attainment, rates have increased in previous years. For high school degree attainment especially, the state and MNF region report

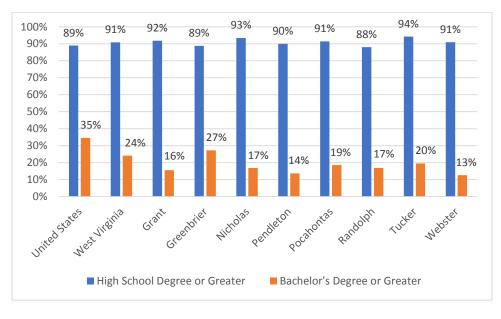
attainment rates comparable to the national average of 87% (Figure 10). For bachelor's degrees, attainment rates averaged between 11% and 20% below the national average of 31%.

Figure 10. Educational Attainment for the Population 25 Years and Older in the MNF Component Counties and Comparison Geographies, 2013-2017



For the population aged 25-44, educational attainment rates were noticeably higher, and with the exception of Randolph County (88%), all counties reported high school degree attainment equal to or greater than the national average (89%). However, bachelor's degree attainment remained low; all counties except Greenbrier (27%) reported attainment rates below the state average (24%), and all counties were well below the national attainment rate (35%).

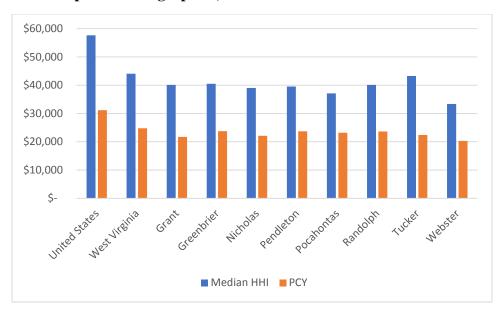
Figure 11. Educational Attainment for the Population 25-44 Years and Older in the MNF Component Counties and Comparison Geographies, 2013-2017



Income

Educational attainment is strongly correlated with lifetime earnings. Not surprisingly, all counties reported median household and per capita incomes below the state (\$44,061; \$24,774) and national rates (\$57,652; \$31,177) (Figure 12). Median household income was lowest in Webster County (\$33,390) and highest in Tucker County (\$43,294).

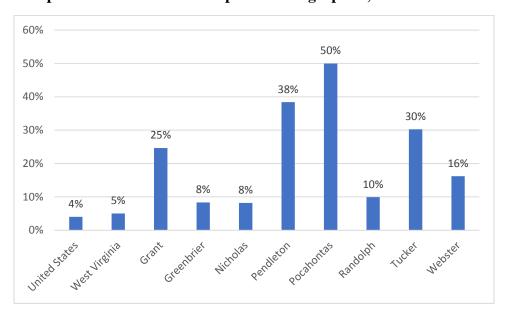
Figure 12. Per Capita and Median Household Income in the MNF Component Counties and Comparison Geographies, 2013-2017



Housing

The stock of second and seasonal use homes is a commonly cited indicator of the importance of the local recreation economy. While the West Virginia average (5%) is only slightly higher than the national average (4%), the MNF component counties report substantially higher rates of seasonal use homes (Figure 13). This rate ranges from an estimated 8% in Greenbrier and Nicholas Counties to nearly 50% in Pocahontas County. Marketing these second homes to wealthy owners in nearby metropolitan areas could bolster property tax revenue in the counties helping to maintain infrastructure and government services important to tourism businesses and local residents.

Figure 13. Share of Seasonal, Recreational, or Occasional Use Homes in the MNF Component Counties and Comparison Geographies, 2013-2017



Special Focus: Pocahontas County Business Trends and Impacts, 2018

In addition to secondary data trends we are regularly surveying tourism based businesses in individual counties to better understand the development of artistic, cultural, outdoor, and other recreational tourism attractions in the MNF component counties. This section synthesizes primary data on Pocahontas County's tourism business trends, needs, opportunities, employment, and earnings. It also presents an economic impact of the industry for more informed project prioritization, policy recommendations, and future investment decisions.

Data from Workforce West Virginia's Labor Market Information database and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages program identify 3,000 employees in Pocahontas County. Table 1 provides a breakdown of employment by industry for the county and the state.

Table 1. Employment by Industry, West	Virginia and	d Pocahontas	County, 20	17
	West '	Virginia	Pocahon	tas County
	Number	Share of	Number	Share of
	of	Total	of	Total
	Employe	Employme	Employe	Employme
	es	nt	es	nt
Total, All Industries	683,807	100%	3,085	100%
Total, Private	547,549	80%	2,720	88%
Total Government	136,258	20%	365	12%
		0%		
Goods Producing	100,890	15%	462	15%
Natural Resources & Mining	22,793	3%	64	2%
Construction	31,522	5%	120	4%
Manufacturing	46,575	7%	278	9%
Service Providing	446,659	65%	2,258	73%
Trade, Transportation, & Utilities	129,300	19%	484	16%
Information	8,615	1%	39	1%
Finance	24,123	4%	103	3%
Professional & Business Services	66,420	10%	177	6%
Education & Health Services	123,772	18%	607	20%
Leisure & Hospitality	74,275	11%	753	24%
Other Services	19,979	3%	95	3%

The share of employment in many of the county's industries is comparable to state rates. However, a significantly greater share of the Pocahontas County workforce is employed by the Leisure and Hospitality sector. Leisure and Hospitality businesses employ one-quarter of the

Pocahontas County workforce and represent one-third (33%) of all private employment in the county. The most recent data (2018) from Dean-Runyan's West Virginia Travel Impacts report² estimated that tourism generated \$92.9 million in direct spending in the county, and supported 1,130 jobs³, \$27.1 million in earnings, and contributed nearly \$7.358 million in state and local government revenue.

This study was undertaken to quantify tourism-based businesses' economic contribution to the Pocahontas County economy; encourage more effective engagement between tourism focused business and development entities through a better understanding of business's needs, motivations, and expectations; and establish a baseline to quantify the impact of tourism related policy decisions on local businesses going forward. Due to the limited scope and small sample size of the survey results should not be read or quoted as absolute. However they do indicate trends and the hopes and concerns of participating businesses.

Survey Results

Respondent Profile

Businesses in the survey population included lodging and retail establishments, real estate offices, outdoor outfitters, restaurants and food-based businesses, and other establishments (Table 2).

Table 2. Number and Share of Responding Businesses by Type

	Number	Share
TOTAL	16	100%
Lodging (Total)	5	31%
Retail (Total)	7	44%
- Retail/Gift/Specialty	6	38%
- Convenience/Grocery	1	6%
Real Estate (Total)	2	13%
Outdoor Recreation/Outfitter (Total)	1	6%
Restaurant/Café/Tavern (Total)	6	38%
Other (Total)	4	25%

² Dean-Runyan Associates. (2018). *West Virginia Travel Impacts 2000-2017p*. Available online: http://www.deanrunyan.com/doc library/WVImp.pdf

³ Dean-Runyan Associates' employment estimates include the Leisure and Hospitality sector, plus segments of the transportation, retail, and business service sectors.

The overwhelming majority of businesses are well established in the community; 75% indicated that they were in business 10 years or more (Table 3).

Table 3. Age of Business

	Less than one year	1-3 years	4-6 years	7-10 years	More than 10 years
Number	1	1	J	2	12
Percent	6%	6%	0	13%	75%

The primary market for Pocahontas County's tourism businesses were neighboring states in the region (75%) and residents of the state of West Virginia (50%) (Table 4). Businesses indicated that their most regular type of customers were families (69%) and couples (56%).

Table 4. Primary Markets by Business Type

	Local (Pocahontas Co.)	Statewide	Neighboring States	National	International
Number	4	8	12	3	2
Percent	25%	50%	75%	19%	13%

When asked about their peak sales months (Table 5), businesses identified the summer, fall, and winter. Conversely, the winter months between November and March, were identified as off-peak months. In spite of seasonality, the majority of businesses indicated that it did not significantly affect their decisions to remain open or closed throughout the year – of 16 reporting businesses, only four (25%) indicated that they were closed for more than two weeks in any given month during the year.

Table 5. Peak and Off-Peak Season Months, All Reporting Businesses

	Peak Season	Off-Peak
November - March (Winter)	53%	62%
April - May (Spring)	33%	39%
June - August (Summer)	80%	0%
September - October (Fall)	53%	7%

Employment, Sales, and Earnings

Respondents were asked to provide employment and sales data for their business. However, due to the limited response in an already small sample we used a combination of public and private data sources to generate estimates of employment and wages for the county's tourism businesses. These are described in the tables below:

Table 6. Establishments, Employment, and Wages in Pocahontas County Tourism Based Businesses

NAICS CODE*	Description	Establishments	Employment	Wages	Wage per Worker
445000	Food and Beverage Stores	7	107	\$2,434,886	\$22,756
447000	Gasoline Stations	8	68	\$1,238,059	\$18,207
451000	Sporting Goods, Hobby, Musical Instrument, and Book Stores	3	17	\$335,567	\$19,739
452000	General Merchandise Stores	3	24	\$396,861	\$16,536
453000	Miscellaneous Store Retailers	3	19	\$217,036	\$11,423
531311	Residential Property Managers	2	16	\$305,402	\$19,088
561500	Travel Arrangement and Reservation Services	1	8	\$226,478	\$28,310
713000	Amusement, Gambling, and Recreation Industries	2	6	\$196,802	\$32,800
721000	Accommodation	10	596	\$16,869,751	\$28,305
722000	Food Services and Drinking Places	16	151	\$2,342,454	\$15,513
	TOTAL	55	1,012	\$24,563,296	\$212,677

*Selected NAICS sectors follow the methodology used by Dean-Runyan Associates Travel Impacts studies.

Sources: Workforce West Virginia, Employment and Wages, http://lmi.workforcewv.org/Employment_N_Wages/EnW.html Bureau of Labor Statistics, Quarterly Census of Employment and Wages, http://www.bls.gov/cew/

MIG, 2013

Authors Calculations

The economic contribution of the tourism/recreation industry was calculated based on the data above and a county specific input-output model created in the IMPLAN data and software package.

Pocahontas County's tourism businesses generate an estimated \$95 million in annual sales (Table 7). These sales directly support 1,012 jobs in the county and more than \$27 million in employee compensation and proprietors' income. The industry contributes an additional \$21 million in taxes and property income for a combined \$49 million value-added impact.

Table 7. Economic Contribution of Pocahontas County's Tourism Industry

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,012	\$27,063,900	\$49,020,000	\$94,663,300
Indirect Effect	99	\$3,329,200	\$7,176,200	\$14,662,700
Induced Effect	83	\$2,539,900	\$6,489,000	\$11,112,500
Total Effect	1,194	\$32,933,032	\$62,685,259	\$120,438,500

Subsequent rounds of business-to-business spending (indirect effect) and employees' household spending (induced effect) stimulated by sales at tourism businesses generate additional economic impact in the local economy. The purchase of inputs and additional business-to-business spending supports 99 jobs and \$3.3 million in employee compensation and proprietor's income. Household spending by local workers supports an additional 83 jobs and \$2.5 million in employee compensation and proprietor's income. In total, the industry supports 1,194 local jobs and generates \$63 million in income and taxes, including nearly \$33 million in local wages and proprietors' incomes.

Response from local business owners suggest that tourism is, and will continue to be strong in the coming years. Two-thirds of respondents (66%) indicated that the county's tourism industry was growing, and 56% anticipated their business's sales to increase in the coming year. As a result of the industry's positive momentum, one quarter (25%) of businesses indicated that they would create new positions or add additional staff; an additional 63% indicated that staffing would remain the same in the next year.

Open ended questions asking about services that would help with the growth or expansion of local businesses included:

- Marketing, advertising.
- For people to stop fighting industry!
- Stay up to date with product and what people want.
- Time, employee, accounting management.
- More advertising exposure, CVB, newspaper.

Tourism Gaps and Opportunities

Business owners were asked what gaps they saw in the county's tourism businesses and amenities. Responses included indoor activities and shopping, affordable housing, a lack of development in downtown business districts, vacant and dilapidated buildings, a lack of zoning and land use planning, and a desire to maintain the status quo rather than expand tourism offerings. To address these gaps, businesses proposed investment incentives for small business owners or those looking to open a business, especially tourism related businesses in downtown areas, and a more active role for county officials in land use planning.

Business Costs

In addition to sales and anticipated growth, businesses were asked about their primary expenses. Only two of the responding businesses indicated that they provided benefits. Benefits included group insurance and retirement. Other leading expenses included insurance for the business (75%), supplies and inventory (63%), and labor and building costs (utilities, rent, maintenance, etc.) (56%) (Table 8).

Table 8. Highest Expenses for Pocahontas County Tourism Based Businesses

	TOTAL
Total Responding	16
Insurance	75%
Supplies/Inventory	63%
Labor	56%
Building costs (utilities, rent, maintenance, etc.)	56%
Advertising/Marketing	38%
Taxes	31%
Business Support Services	13%

Open Ended Questions

What do you think is the biggest challenge for bringing new businesses to Pocahontas County?

- Fear, finances.
- Liberals/Tree Huggers.
- Local people.
- People not knowing about potential here.
- Remote location, lack of telecommunications.
- Location.
- Finding quality employees.
- Money.
- Affordable housing and salaries.
- Lack of infrastructure Flood free locations, Internet, Cellular service.

How do you think the Monongahela National Forest could further assist in building the economy of Pocahontas County through tourism/recreation?

- Open a 4 wheel park like Hatfield & McCoy.
- More progressive instead of restrictive!
- Advertising/marketing.
- Promote bicycle and agritourism, help in maintenance of most commonly used trails.
- More jobs.

Special Focus: Tucker County Business Trends and Impacts, 2018

This section synthesizes primary data on Tucker County's tourism business trends, needs, opportunities, employment, and earnings. It also presents an economic impact of the industry for more informed project prioritization, policy recommendations, and future investment decisions.

Data from Workforce West Virginia's Labor Market Information database and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages program identify 2,600 employees in Tucker County. Table 1 provides a breakdown of employment by industry for the county and the state.

Table 1. Employment by Industry, West Virginia and Tucker County, 2017					
	West	Virginia	Pocahon	Pocahontas County	
	Number of Employees	Share of Total Employment	Number of Employees	Share of Total Employment	
Total, All Industries	683,807	100%	2,617	100%	
Total, Private	547,549	80%	2,015	77%	
Total Government	136,258	20%	602	23%	
		0%			
Goods Producing	100,890	15%	629	24%	
Natural Resources & Mining	22,793	3%	233	9%	
Construction	31,522	5%	150	6%	
Manufacturing	46,575	7%	246	9%	
Service Providing	446,659	65%	1,386	53%	
Trade, Transportation, & Utilities	129,300	19%	269	10%	
Information	8,615	1%	11	0%	
Finance	24,123	4%	98	4%	
Professional & Business Services	66,420	10%	48	2%	
Education & Health Services	123,772	18%	336	13%	
Leisure & Hospitality	74,275	11%	506	19%	
Other Services	19,979	3%	118	5%	

The share of employment in many of the county's industries is comparable to state rates. However, a significantly greater share of the Tucker County workforce is employed by the Leisure and Hospitality sector. Leisure and Hospitality businesses employ one-fifth of the Tucker County workforce and represent one-quarter (25%) of all private employment in the

county. The most recent data (2018) from Dean-Runyan's West Virginia Travel Impacts report⁴ estimated that tourism generated \$46 million in direct spending in the county, and supported 780 jobs⁵, \$16.2 million in earnings, and contributed nearly \$3.8 million in state and local government revenue.

This study was undertaken to quantify tourism-based businesses' economic contribution to the Tucker County economy; encourage more effective engagement between tourism focused business and development entities through a better understanding of business's needs, motivations, and expectations; and establish a baseline to quantify the impact of tourism related policy decisions on local businesses going forward. Due to the limited scope and small sample size of the survey results should not be read or quoted as absolute. However they do describe trends and the hopes and concerns of participating businesses.

Survey Results

Respondent Profile

Businesses in the survey population included lodging and retail establishments, real estate offices, outdoor outfitters, restaurants and food-based businesses, and other establishments (Table 2).

Table 2. Number and Share of Responding Businesses by Type

	Number	Share
TOTAL	27	100%
Lodging (Total)	4	15%
Retail (Total)	7	26%
Real Estate (Total)	1	4%
Outdoor Recreation/Outfitter (Total)	5	19%
Restaurant/Café/Tavern (Total)	13	48%
Agritourism/Food Based	2	7%
Non-Profit	1	4%
Other (Total)	2	7%

⁴ Dean-Runyan Associates. (2018). *West Virginia Travel Impacts 2000-2017p*. Available online: http://www.deanrunyan.com/doc library/WVImp.pdf

⁵ Dean-Runyan Associates' employment estimates include the Leisure and Hospitality sector, plus segments of the transportation, retail, and business service sectors.

The overwhelming majority of businesses are well established in the community; 75% indicated that they were in business 10 years or more (Table 3).

Table 3. Age of Business

	Less than one vear	1-3 years	4-6 years	7-10 years	More than 10 years
Number	1	9	3	2	12
Percent	4%	33%	11%	7%	44%

The primary market for Tucker County's tourism businesses were neighboring states in the region (96%) and residents of the state of West Virginia (66%) (Table 4). Businesses indicated that their most regular type of customers were couples (80%) and families (64%).

Table 4. Primary Markets by Business Type

	Local (Tucker Co.)	Statewide	Neighboring States	National	International
Number	16	18	26	6	4
Percent	60%	67%	96%	22%	15%

When asked about their peak sales months (Table 5), businesses identified summer and fall. Conversely, the winter and spring months between November and May, were identified as off-peak months. In spite of seasonality, the majority of businesses indicated that it did not significantly affect their decisions to remain open or closed throughout the year – of 27 reporting businesses, only four indicated that they were closed for more than two weeks in any given month during the year.

Table 5. Peak and Off-Peak Season Months, All Reporting Businesses

	Peak Season	Off-Peak
November - March (Winter)	37%	53%
April - May (Spring)	26%	56%
June - August (Summer)	84%	9%
September - October (Fall)	72%	14%

Employment, Sales, and Earnings

Respondents were asked to provide employment and sales data for their business. However, due to the limited response in an already small sample we used a combination of public and private data sources to generate estimates of employment and wages for the county's tourism businesses. These are described in the tables below:

Table 6. Establishments, Employment, and Wages in Tucker County Tourism Based Businesses

NAICS					Wage per
CODE*	Description	Establishments	Employment	Wages	Worker
451000	Sporting Goods, Hobby, etc.	3	25	\$365,000	\$14,600
453000	Misc. Store Retailers	3	11	\$106,000	\$9,636
531311	Real Estate Activities	4	26	\$774,000	\$29,769
561500	Travel Arrangements	1	4	\$109,000	\$27,250
713000	Amusement and Rec.	3	11	\$180,000	\$16,364
721000	Accommodations	7	345	\$5,893,000	\$17,081
722000	Food Service and Drinking Est.	18	203	\$2,082,000	\$10,256
813000	Grant making, Civic, Orgs	5	60	\$1,828,000	\$30,467
924120	Admin. of Conservation Programs	4	138	\$3,598,000	\$26,072
	TOTAL	48	823	\$14,935,000	\$18,147

^{*}Selected NAICS sectors follow the methodology used by Dean-Runyan Associates Travel Impacts studies.

Sources: Workforce West Virginia, Employment and Wages, http://lmi.workforcewv.org/Employment_N_Wages/EnW.html Bureau of Labor Statistics, Quarterly Census of Employment and Wages, http://www.bls.gov/cew/

MIG, 2013

Authors Calculations

The economic contribution of the tourism/recreation industry was calculated based on the data above and a county specific input-output model created in the IMPLAN data and software package.

Tucker County's tourism businesses generate an estimated \$65 million in annual sales (Table 7). These sales directly support 824 jobs in the county and more than \$15 million in employee compensation and proprietors' income. The industry contributes an additional \$19 million in taxes and property income for a combined \$35 million value-added impact.

Table 7. Economic Contribution of Tucker County's Tourism Industry

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	824	\$15,260,385	\$34,919,903	\$65,110,616
Indirect Effect	80	\$2,331,301	\$5,019,564	\$9,435,724
Induced Effect	67	\$1,779,585	\$4,063,694	\$6,677,223
Total Effect	970	\$19,371,272	\$44,003,161	\$81,223,563

Subsequent rounds of business-to-business spending (indirect effect) and employees' household spending (induced effect) stimulated by sales at tourism businesses generate additional economic impact in the local economy. The purchase of inputs and additional business-to-business spending supports 80 jobs and \$2.3 million in employee compensation and proprietor's income. Household spending by local workers supports an additional 67 jobs and \$1.8 million in

employee compensation and proprietor's income. In total, the industry supports 970 local jobs and generates \$44 million in income and taxes, including more than \$19 million in local wages and proprietors' incomes.

Response from local business owners suggest that tourism is, and will continue to be strong in the coming years. Nearly three-quarters of respondents (73%) indicated that their businesses sales have increased, and 70% anticipated their business's sales to increase in the coming year. As a result of the industry's positive momentum, half (52%) of businesses indicated that they would create new positions or add additional staff; an additional 33% indicated that staffing would remain the same in the next year.

Open ended questions asking about services that would help with the growth or expansion of local businesses included:

- More employees to draw from x3
- Marketing, advertising.
- Grants, loans, and other funding options
- Infrastructure

Tourism Gaps and Opportunities

Business owners were asked what gaps they saw in the county's tourism businesses and amenities. Responses included trail infrastructure, employee housing, restaurants, and indoor activities and/or coordinated efforts to extend tourism offerings throughout the year.

Business Costs

In addition to sales and anticipated growth, businesses were asked about their primary expenses. Only six of the responding businesses indicated that they provided benefits. Benefits included sick leave/paid time off, group insurance and retirement, retirement, and profit sharing. Primary expenses included labor (74%), supplies and inventory (70%), and building costs (utilities, rent, maintenance, etc.) (67%) (Table 8).

Table 8. Highest Expenses for Pocahontas County Tourism Based Businesses

	TOTAL
Total Responding	27
Labor	74%
Supplies/Inventory	70%
Building Costs (utilities, rent, maintenance)	67%
Taxes	52%
Insurance	33%
Business support services (accounting, legal, payroll, etc.)	30%
Advertising/marketing	22%

Open Ended Questions

What do you think is the biggest challenge for bringing new businesses to Tucker County?

- Lack of workforce, lack of workforce housing for newcomers.
- Workforce, affordable housing.
- If locals are on board.
- Not enough employee base, not enough information about the local economy, trends, etc.
- Finding good employees.
- Lack of a labor pool and affordable housing for employees in the service industry.
- Rent is increasing due to buildings being renovated and increasing property values, finding places to for staff to live.
- Lack of store fronts and lack of rental housing.
- Money.
- Space to operate.
- Employees.
- Jobs.
- The local population doesn't have extra money to spend. Need tech camp or professional services that pay well.
- Seasonal peaks and slumps.
- Inconsistent traffic, not enough affordable housing for employees.
- Lack of competent employees.
- State of WV Labor Laws.
- New blood Youth Excitement.
- Getting away from a singular focus less weather dependent.
- Employers & businesses doing proper business plans before opening.
- Housing, water & sewer.
- Workforce housing, water/sewer issues.
- Money.
- Lack of space and employees with a professional mindset.
- Enough business to make money, shoulder seasons with little money, bad weather too rainy, too far from people that have and spend money yet some feel there is just enough business right now.
- Access to fast/reliable internet, affordable housing.

How do you think the Monongahela National Forest could further assist in building the economy of Tucker County through tourism/recreation?

- Not sure if the forest is the one to bridge the information gap just one of many entities.
- Maintain your trails and maintain your staff! Turnover in staff makes continuity difficult!
- Allow trail users trail access.
- Guided tours/walks.
- Continue promotion of outdoor recreation/education.

- Tucker County is maxed out with tourism. Now we need more amenities and infrastructure for our visitors.
- Rail trail development/parking/bathrooms.
- Better trail maps and internet presence.
- More signage!
- Trails.
- Unknown.
- Yes, by having more events.
- More access to trails, better maintained popular trails, better trail maps. Lots of questions on trails and where to go. Many ask or look for "drive by" sites.
- Infrastructure: Housing, parking, signage off the corridor.
- Prevent logging and development and damage to forest.
- More emphasis on education in our forests group excursions, guided hiking & camping experience etc.!
- Trail reroutes/updates. Improve existing trails to multi abilities.
- We need to focus on our assets such as rafting, hunting, wildlife.
- I would see lots of potential in partnering with the WVMBA that has done a wonderful job in promoting the area as a destination spot for mountain biking. You could work with them to open new or expand trails or promote more festivals or races. Another possibility for winter may be to sponsor a Backcountry club for skiers, snowshoers and other "winter wanderers", maybe even develop a shelter system for use in emergencies and to promote longer stays in both winter and summer. Beyond that, partner with the community to use your resources to assist with some of the other organizational things mentioned and thus gain a better perspective on how you may best be able to assist our continued growth and prosperity.
- For Tucker County specifically our absolute main asset is our natural and authentic beauty and outdoor recreational opportunities **AND** an authentic community. Incredibly important to forge a new path that will protect, preserve, and highlight the very reason this place is so sacred and special while finding "smart" ways to grow the local economy.