Jobenomics: The economics of job and small business creation.



Jobenomics West Virginia Goal: Create 15,000 new jobs within the next 5-years with emphasis on citizens who want a career or start a business.

Tom Willis, Jobenomics West Virginia Managing Director Chuck Vollmer, Jobenomics Founder and President

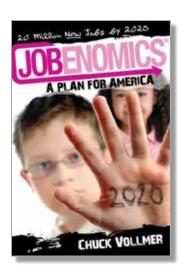
24 March 2018

Jobenomics

JOBENOMICS West Virginia

Bipartisan National Grassroots Movement

- Started in 2010, estimated following: 20 million
- Outreach via TV, radio, lectures, social media
- Website receives 30,000 monthly page views with most viewers spending a half hour or more online.



Books and Research

- Nine books on economic, business and workforce development
- Monthly reports on U.S. employment and GDP trends
- Special reports on emerging global and national issues

City and State Initiatives and Programs

- Over a dozen ongoing efforts led by local community leaders
- Two highly-scalable national turnkey programs

Primary focus: economic, community, business and workforce development in financially-distressed communities.

Research Books & E-Books





Extensive research on emerging economic and labor force trends and highly-scalable business opportunities.

Jobenomics State & City Initiatives



, , , , , , , , , , , , , , , , , , ,	West Virginia
Program Development/Implementation In Progress	Community Leader(s)
Jobenomics Erie Pennsylvania	Board Established
Jobenomics Las Vegas	Col. (R) Steve Seroka
Jobenomics Austin (Chicago)	Rev. Rob Stephenson
Jobenomics Manatee County (FL)	Mr. Rob Hartwell
Jobenomics West Virginia	Mr. Tom Willis
Initiative Discussion/Negotiation Underway	
Jobenomics Workforce Reentry Program Phoenix	Mr. Doyle Davis
Jobenomics North Carolina	Mr. Joe Magno
Jobenomics Southern Maryland	Mr. Aurelio Azpiazu
Jobenomics Cincinnati (OH)	Mr. Uche Agomuo
Jobenomics Charlotte (NC)	Mr. Bob Johnson
Jobenomics Puerto Rico	Mr. Pierre Laguerre
Jobenomics Buffalo (NY)	Mr.Ron Clayton
Currently Inactive	
Jobenomics Harlem/New York City	Rev. Michael Faulkner
Jobenomics Baltimore	Rev. Dr. Al Hathaway
Jobenomics Delaware	Mr. La Mar Gunn

Tom Willis assumed the lead for Jobenomics West Virginia.

Jobenomics WV Goal: Replace Lost Jobs



Source; U.S. Bureau of Labor Statistics, CPS (Household) Survey

December 2007

December 2017

Total Employed (Nonfarm & Farm)	made if a made is a made i		Total Unemployed
777,493	760,200	CPS	37,838
739,601	748,100	Estimates	42,251

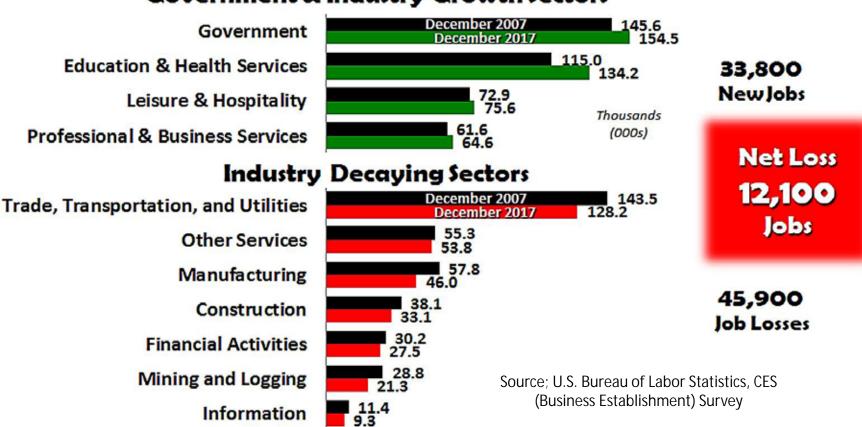
-37,892

-12,100

-25,792

-4,413

Government & Industry Growth Sectors



Initial Goal: 15,000 Jobs



Direct Care Centers

	3,500	Healthcare & Social Assistance (Fastest-growing occupational field)
•		Behavioral Care (Drug, obesity, smoking, PTSD, chronic pain, and illness care)
	Jobs	Elder and Child care (Home-based microbusiness to provide in-home care)

Energy Technology Revolution

	Coal (Advancing Clean-coal, above-ground (Fischer-Tropsch) gasification,					
2,000	underground (in-situ) gasification, and CO ₂ sequestration technologies)					
Jobs	Marcellus Oil and Gas (exploit Administration's energy dominance program,					
	emerging CNG/LNG opportunities, and three new WV natural gas pipelines).					

Network Technology Revolution

	5,000	Digital Economy Microbusinesses for WV Digital Natives (E-Commerce, Mobile
Jobs		Commerce, Tele-Medicine, Apps/Bot/Al Economy, Shared Economy, On-Demand
	JOD2	Economy, Gig/Contingent Workforce Economy, Internet of Things Economy)

Urban Mining

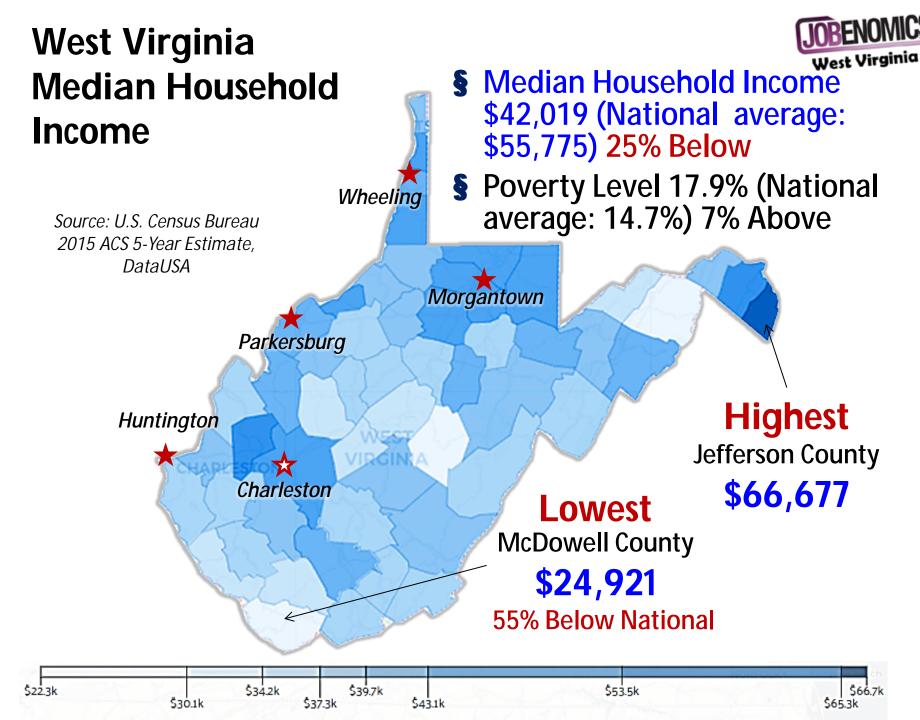
1000	eCyclingWV Electronic Waste Material Reclamation Facilities				
Jobs	Light Industrial Manufacturing Using Low-Cost Reclaimed Materials				

Eco-Tourism

1000	Destination Planning System (with omni-channel strategy and mobile apps)
Jobs	Glamping Adventure, Entertainment and Nature Venues

Controlled Environment Agriculture/Aquaculture

4,000	ACTS Freedom Farms Indoor Hydroponics and Vertical Farming Microfarms
Jobs	AG-Related Manufacturing & Research



Jobenomics Community-Based Business Generator (CBBG) Process



Labor Pool of People Interested In Workfare



Top Candidates Selected By Schools, Non-Profits, Churches, Sports Teams, Etc.



HUNING HUNING KHIMIT KUNING

JCBBG Candidate Interviews, Aptitude Testing and Counseling



Sent To Other
Educational and
Training Centers
for Career
Development

Federally Certified Training



JCBBG Leadership, Skills-Based Training and Certification Programs



Start Small Business



Hired by Existing
Companies
Looking For PreQualified
Employees

Every candidate that enters the Jobenomics Program will incorporate their own self-employed business (S-Corp).

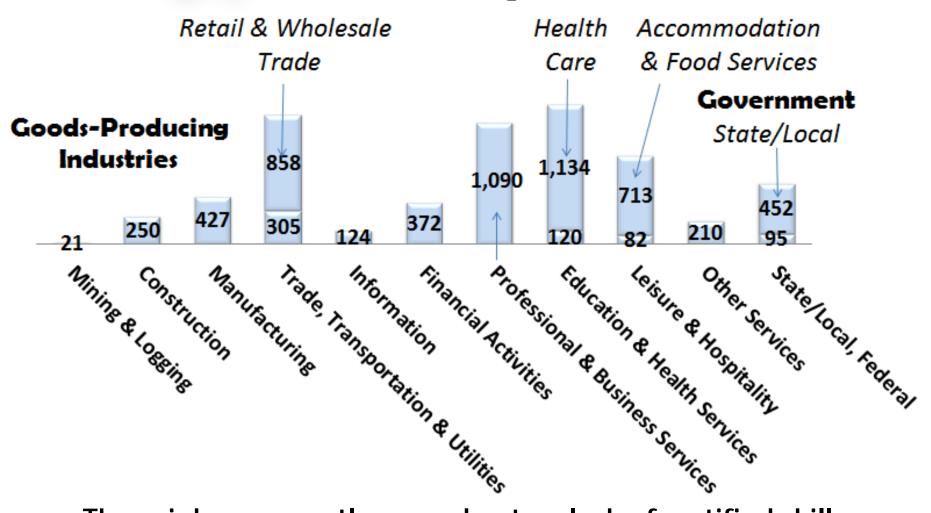
Top Priority Is To Fill Current Open U.S. Jobs





6,252,000 Unfilled Jobs

Service-Providing Industries



These jobs are mostly open due to a lack of certified skills

Digital Economy Training & Certification





- Standard economy growing at 1.2%/per versus digital economy's 15%/year. Total global economic impact \$124 trillion by 2025.
- Digital economy is ideal for West Virginia's Generation Z digital natives—most of whom want to start a self-employed business.

Digital Economy:

- E-Commerce Economy
- Sharing Economy
- On-Demand Economy
- Apps/Bots/Al Economy
- Platform Economy
- Gig Economy
- Data-Driven Economy
- Internet of Things Economy



In order to stop the population and brain drain, West Virginia must retain their digital-savvy youth via digital economy jobs.

Direct-Care

JOBENOMICS West Virginia

- Direct-Care services include:
 - Healthcare and social assistance services, the fastest growing occupation in the USA.
 - Behavioral-care includes drug addition, PTSD, obesity, spousal abuse, chronic illness, etc.
 - Elder-care forecasts 17 million assisted-living bed shortfall by 2020.
 - Child-care is the single biggest cost keeping women homebound.



Direct-Care Center would connect service providers and clients via a call and information center. The center would start home-based firms certified to provide in-home services while connected to tele-health and other providers.



Jobenomics Community-Based Business Generators would certify employees and small businesses for the Direct-Care Center.

Healthcare and Social Assistance



Healthcare and Social Assistance are the fastest growing U.S. occupations. 4 million new jobs, or 40% of all new jobs, are projected next decade. Most do not require college degree.

College Degree	Occupation	Number of U.S. Jobs In 2014	Number of New Jobs	Growth Rate
No	Personal care aides	1,768,400	458,100	26%
Yes	Registered nurses	2,751,000	439,300	16%
No	Home health aides	913,500	348,400	38%
No	Nursing assistants	1,545,200	267,800	17%
No	Medical assistants	591,300	138,900	23%
No	Medical secretaries	3,976,800	118,800	3%
No	Licensed practical and licensed vocational nurses	719,900	117,300	16%
Yes	Physicians and surgeons	708,300	99,300	14%
Yes	Physical therapists	210,900	71,800	34%
No	Childcare workers	1,260,600	69,300	5%
No	Dental assistants	318,800	58,600	18%
No	Emergency medical technicians and paramedics	241,200	58,500	24%
No	Medical and health services managers	333,000	56,300	17%

Jobenomics skills-based training and certification programs can mass-produce home-based self-employed Direct-Care businesses.

Energy Technology & Training Center (ETTC)



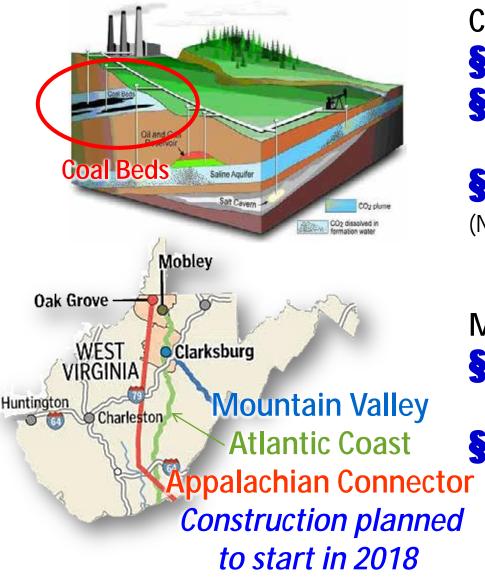


- The Energy Technology Revolution is creating millions of new jobs and small businesses.
- West Virginia, an energy-State, needs to create a collaborative (community, industry, academia) Energy Technology & Training Centers.
- The focus of these centers is to mass-produce startup businesses and jobs related to emerging energy technologies.
 - Coal including clean coal and other coal-related technologies
 - Natural Gas (Marcellus) LNG, CNG, GTL and supply chain jobs.
 - Energy Services (energy's third rail): Energy Efficiency (Energy Audit, Weatherization), Conservation, Assurance, Security, Energy-As-A-Service, and Energy Disaster Preparedness and Recovery.
 - Renewables with emphasis on mass-producing installation and maintenance businesses.

Federal funding is available to retrain idle coal miners.

Other Energy Opportunities





Coal Programs/Research

- Clean coal research
- Coal bed methane and in-situ coal gasification testbeds
- § CO2 sequestration

(Note: USG supports 300,000 jobs with corn to ethanol and biodiesel programs)

Marcellus Pipeline Businesses

- Tens of thousands of direct jobs, 3-times more indirect jobs
- Construction, transportation, logistics, accommodation, hospitality, food service, etc.

ETTCs would train and certify people for these jobs.

ETTC Startup



SETTC energy training and certification programs will be designed and initially led by Jobenomics' Joe Sarubbi, a project manager for several national Department of Energy initiatives.





Mr. Sarubbi was the main architect of New York State's TEC-SMART, America's first totally integrated Training and Education Center for Semi-Conductor Manufacturing and Alternative and Renewable Technologies as shown.

ETTCs will collaborate with Community-Based Business Generators to mass produce energy-related micro-businesses.

Eco-Tourism & Glamping





Eco-Tourism entails "responsible travel to natural areas that conserves the environment and sustains the wellbeing of local people." The International Eco-Tourism Society

- Eco-tourism, called "experimental" tourism, offers time to unwind in peaceful places (often rural) untouched by mindless commercialization.
- Captures \$77 billion of the global market and experiencing double-digit gains that are likely to accelerate as concern about global warming rises.



Glamping (glamorous camping) is an outdoor hospitality industry more luxurious than traditional camping—often associated with festivals, nature preserves and sports.

- § \$3 billion/year industry.
- Popular with millennials.
- 💲 Typical accommodations 🗋

Ideal for West Virginia.







Omni-Channel Destination Planning System



Typical menu 🗕

Concierge

Lodging

Transportation

Restaurants

Shopping

Entertainment

Sports/Hiking

Medical

Services

Parks

Tours/Guides

Affordable Getaways



Destination planning systems orient travelers and tourists to local attractions, restaurants and accommodations via mobile apps.

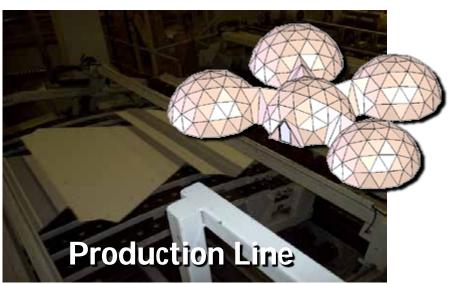
Deployable Dome Manufacturing Equipment











Applications: eco-tourism, pipeline facilities, Boy Scout Jamboree, hunting camps; refugee, humanitarian and disaster relief operations,

Jobenomics ACTS Freedom Farms



Initial cadre will be mostly veterans (vetting and financing considerations) but will also include non-veterans.





- Sentral controlled agricultural center (AG Core) manage and source crop production, processing, distribution and sales to fresh market outlets (grocery, restaurants, and international).
- Each micro-farm will consist of the land, 2,500 sq. ft. home and a leased state-of-the-art hydroponic and vertical agriculture 6,000 sq. ft. greenhouse that will be equipped and supplied by AG Core.



Estimated \$60,000 annual salary per micro-farmer.

Controlled Environment Agriculture

JOBENOMICS West Virginia

- **Team:** Jobenomics is teamed with ACTS Freedom Farms (www.ACTSFFA.com)
- Mission: Provide a solution to the world's food shortage through self-sustaining and supportive live-work communities.
- Vision: Provide quality foods in harmony with the global environment, while empowering individuals to become an important partner in high-tech controlled environment agriculture.
- Strategy: 1) home ownership combined with an agriculture career, 2) corporate owned hydroponic commercial growing operations and 3) contracted privately owned and operated micro-farmers







Initial operations: 25,000 micro-farms in 5-years.

eCyclingUSA Plants



Two Line 10 Ton/Hour Plant:

(Refrigeration & eScrap Separate Lines)

- Equipment ≈ \$20 Million
- 40,000 square foot facility
- 10 to 15 acres
- **Solution 10 Ton/Hour Plant:**

(Refrigeration & eScrap Shared Post Processing)

- Equipment ≈ \$13 Million
- 35,000 square foot facility
- 5 to 10 acres
- sescrap Only 3 Ton/Hour Plant:
 - Equipment ≈ \$5 Million
 - 8,000 square foot facility
 - 1 to 2 acres





eCyclingUSA can implement a turnkey plant within 12 months.

Types of E-Waste



Household Electronics

IT-Related Products (EPA definition)

- Consumer Electronics
- Large Appliances
- Small Appliances
- Cleaning/Power Tools
- Entertainment Systems
- Toys & Other Electrical Items

Business

- Computers, Servers, Peripherals
- Hardware, Cabling, Ducting, Racks
- Vending Machines & Other Items
- **Government** (Federal, State, Local)
- 🔰 Educational, Medical & Industrial
- **Solution** Construction & Demolition Materials



eCyclingUSA can process these items quickly and cleanly.

Revenue & Profit Projections



(10 ton/hour plant operating 3 shifts)

\$ Value of e-Waste Raw Materials

For Rough Estimating Purposes Only
10 ton/hour plant operating 3 shifts per day for 300 days per year

Feedstock: Computers, Consumer Electronics, Small and Large Applicances

Metal/Material	% of Feedstock	IV.	\$s per letric Ton*	\$/Ton (2204 pounds)		·		•		(10 ton/hour v	
Iron/Steel (Fe)	40%	\$	350	\$	140.00	\$	9,660,000				
Copper (85% Recovery)	5%	\$	3,945	\$	197.26	\$	13,610,802				
Aluminum (Al)	10%	\$	1,499	\$	149.87	\$	10,341,168				
ABS Plastics	25%	\$	1,675	\$	418.75	\$	28,893,750				
Other Plastics	25%	\$	287	\$	71.75	\$	4,950,750				
Computer Components	5%	\$	2,082	\$	104.10	\$	7,182,900				
Source: Jobenomics, eCyclingUSA	110%		Revenue**			\$	74,639,370				
Cost of goods sold						\$	30,238,000				
* Scrap prices as of 12 March 2018 Operating expen					g expenses	\$	5,780,000				
**Does not include grants, tax				Net Income		\$	38,621,370				
incentives or tipping fees			EBITDA		52%						

Profits from e-Waste operations can be used for community, micro-business and workforce development.

Jobenomics West Virginia (JWV) Milestones



	16 February 2018	Initial meeting in Washington DC.
§	2 March 2018	Shepard University Business Incubator meeting
		& Jobenomics West Virginia launch.
	Mar/Apr 2018	JWV research and coordination.
§	10 April 2018	South Central JWV Town Hall in Glen Ferris.
	8 May 2018	West Virginia primary elections.
5	9 May 2018	JWV resumes regardless of election outcome.

JWV Next Steps

- Commitment from community leaders to develop and support a city, county or regional JWV program.
- Develop an actionable local JWV business plan with actionable milestones and schedules (Jobenomics will write initial document).
- Sobtain local policy-makers and decision-leaders buy-in and support.
- Conduct second Town Hall meeting with citizens and media.
- § Obtain seed funding and execute business plan.

Goal: November 2018 program commencement.





Are you interested in starting a Jobenomics West Virginia program for your city, county or region?

Appendix



- § South Central Jobenomics West Virginia Key Statistics
 - Kanawha County
 - P Charleston City
 - Raleigh County
 - Nicholas County
 - Fayette County
- **Solution** Other Key City, County or Regional Statistics
 - In work
 - In work
 - In work

South Central West Virginia Median Household West Virginia Population 1.84 million: 92.3% White Income Median Household Income \$42,019 (National average: \$55,775) 25% Below Wheeling § Poverty Level 17.9% (National average: Source: U.S. Census Bureau 14.7%) 7% Above 2015 ACS 5-Year Estimate. DataUSA Morgantown Charles Town **Parkersburg Highest** Jefferson County \$66,677 Huntington *National: \$55,775* Kanawha County: \$45,882 18% Below Charleston Raleigh County: \$41,032 26% Below Nicholas County: \$39,171 30% Below Fayette County: \$36,293 35% Below Lowest McDowell County \$24,921

\$53.5k

Kanawha County

Source: U.S. Census Bureau 2016 Quick Facts, DataUSA, Chamber of Commerce



Solution: 186,241 (10.1% of WV)

Race/Ethnicity: 88.6% White

Growth Rate since 2010: -3.5%

 Elderly (65+) Growth Rate since 2010: +3%

Poverty Rate 16.8%

Business/Jobs:

All Firms: 13,653

P Ownership: Men (54%), Women (32%), Veteran (9%), Minority (7%)

Employer Establishments: 4,977

P Total Employment: 84,023

→ Total Employment % Change (2014-15): -3.2%

P Unemployment Rate: 5.1% (4.1% National)

\$41,293 Lowest \$39,446 \$18,015 \$61,190 \$38,092 \$62,321 Highest \$108,466 \$39,345 Ority (7%)

\$42,534

Household Income

Most populated WV county and home of State government.

Charleston City

Source: U.S. Census Bureau 2016 Quick Facts, DataUSA, Chamber of Commerce



- Median Household Income: \$48,442
- **Solution**: 49,138 (2.7% of WV)
 - Race/Ethnicity: 88.6% White
 - Growth Rate since 2010: -4.3%
 - Poverty Rate 20.0%

Business/Jobs:

- All Firms: 7,006
 - P Ownership: Men (50%), Women (32%), Veteran (9%), Minority (8%)
- Employment
 - P Total Employment: 23,774
 - P Total Employment % Change (2014-15): -1.4%
 - P Unemployment Rate: 5.3% (4.1% National)

Household Income

\$23,750 \$45,229

\$23,255 Lowest
\$94,327 \$18,015

Highest
\$108,466

\$42,166

West Virginia's center for government, commerce and industry.

Raleigh County

Source: U.S. Census Bureau 2016 Quick Facts, DataUSA, Chamber of Commerce



- **Population:** 78,493 (4.3% of WV)
 - Race/ethnicity: 87.3% White
 - Growth rate since 2010: -2.9%
 - Elderly (65+) growth rate since 2010: +3.3%
 - Poverty rate 17.4%

Business/Jobs:

- All Firms: 4,621
 - P Ownership: Men (53%), Women (34%), Veteran (11%), Minority (10%)
- Employer establishments: 1,829
 - P Total Employment: 29,799
 - □ Total Employment % Change (2014-15): -6.5%
 - P Unemployment Rate: 5.5% (4.1% National)

Household Income \$36,042 Lowest \$30,731 Beckley \$31,111 \$46,664 \$45,071 **Highest** \$41,031 \$54,661

Home of Exhibition Coal Mine, Winterplace Ski Resort and numerous parks, recreation and eco-tourism adventure activities. 29

Nicholas County

Source: U.S. Census Bureau 2016 Quick Facts, DataUSA, Chamber of Commerce

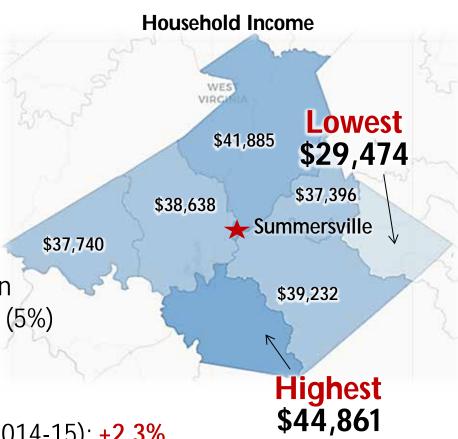


§ Population: 25,311 (1.4% of WV)

- Race/Ethnicity: 97.9% White
- Growth Rate since 2010: -3.5%
- Elderly (65+) Growth Rate since 2010: +3.9%
- Poverty Rate 21.4%

Business/Jobs:

- All Firms: 1,559
 - P Ownership: Men (53%), Women (35%), Veteran (10%), Minority (5%)
- Employer Establishments: 569
 - P Total Employment: 6,729
 - P Total Employment % Change (2014-15): **+2.3%**
 - P Unemployment Rate: 7.4% (4.1% National)



Summersville Lake and Scenic Byway are within "six to eight hours' drive of 60% of the urban U.S. population."

Fayette County

Source: U.S. Census Bureau 2016 Quick Facts, DataUSA, Chamber of Commerce



S Population: 44,323 (2.4% of WV)

Race/Ethnicity: 93.6% White

Growth Rate since 2010: -3.7%

 Elderly (65+) Growth Rate since 2010: +3.0%

Poverty Rate: 19.7%

Business/Jobs:

All Firms: 1,968

P Ownership: Men (51%), Women (34%), Veteran (12%), Minority (5%)

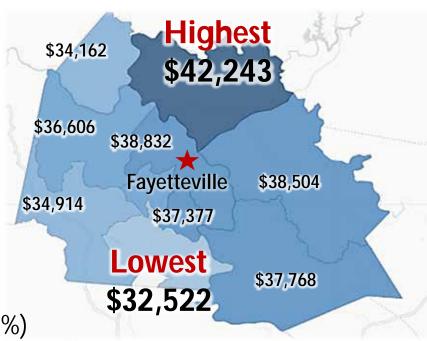
Employer Establishments: 758

P Total Employment: 8,152

→ Total Employment % Change (2014-15): -16.3%

P Unemployment Rate: 7.1% (4.1% National)

Household Income



Host of the Boy Scout World Jamboree in 2019.

West Virginia
County Health Rankings



1 - 14

15 - 28

29 - 41

42 - 55

NI PO	Highest	Sout	Lowest			
Health Outcome	Jefferson County	Kanawha	Summers	mmers Raleigh		McDowell County
Overall Health Rating (Out of 55 WV counties)	1	36	41	45	48	<i>55</i>
Length of Life	2	37	39	48	45	55
Quality of Life	2	26	44	42	45	55
Health Behaviors	4	15	14	36	51	55
Clinical Care	11	4	41	16	45	54
Social/Economic Factors	1	28	44	39	43	55
Physical Environment	53	40	12	9	36	43

Source: CountyHealthRatings.org, 2017 Ratings Green (Upper Half), Red (Lower Half)

A federally-funded/underwritten Jobenomics Direct-Care Program could provide quality care and many jobs for South Central WV.

Jobenomics South Central West Virginia



Economic Development Strengths:

- Homogeneous population of 334,000 citizens (25% urban, 75% rural) with 21,800 Businesses including 8,100 employer firms
- Women-owned (34%), Veteran-owned (10%), Minority-owned (7%) businesses have significant growth potential.
- Pristine but underdeveloped rural communities.

Examples of Potential South Central West Virginia Programs

- Jobenomics Community-Based Business Generator
- Digital Economy Training & Certification Program
- Direct Care Center
- Energy Technology & Training Center
- Eco-Tourism and Glamping Initiative
- Jobenomics-ACTS Freedom Farms
- Jobenomics-eCycling USA

Developing a coalition of community-leaders is the first step towards developing an actionable program.





Tom Willis

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