

***Jobenomics* deals with the process of creating and mass-producing small businesses and jobs.**



***Jobenomics Three Rivers* is a proposed pilot program for creating mixed-use, master-planned, locally-owned, live-work communities in under-resourced areas in the Greater Pittsburgh Region.**

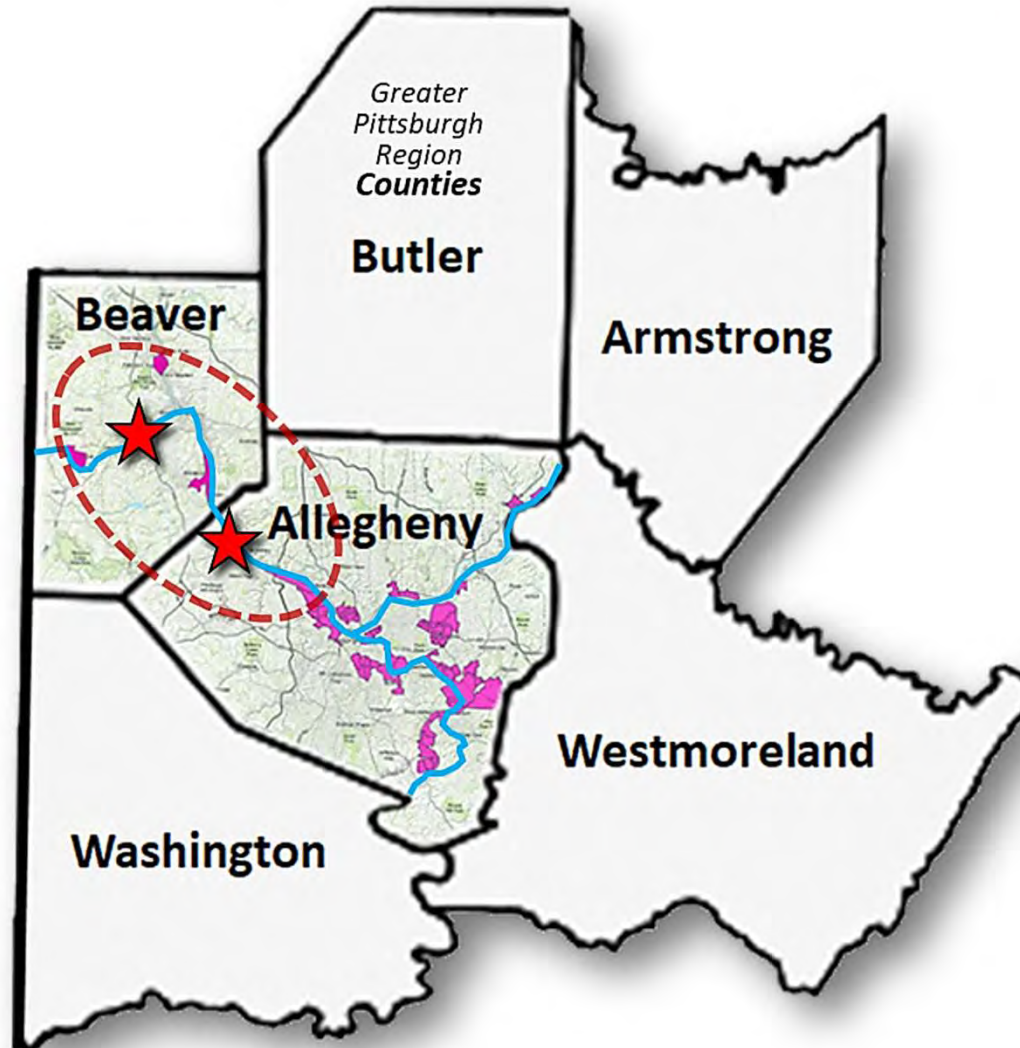
By: Chuck Vollmer, Jobenomics Founder & President
25 February 2020

Three Rivers Pilot Program

*Three Rivers:
Ohio, Allegheny,
& Monongahela*

**Pilot
Program
Area**

*Qualified
Opportunity
Zones*



The pilot program will be the model for other Jobenomics Three Rivers initiatives in the Greater Pittsburgh Region.

Jobenomics



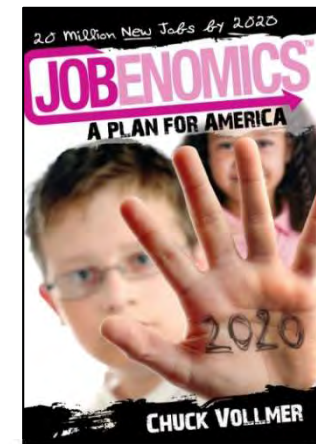
Bipartisan National Grassroots Movement

- Since 2010, estimated audience of 30 million
- Website averages 30,000 monthly page views
- Jobenomics America TV launched in 2018



Books, Research & Special Reports

- Focus on economic, community, small business and workforce development.
- First book established published 2010.
- Ten e-books and ninety special reports.



City and State Initiatives and Programs

Jobenomics.com

- Two dozen chapters led by local community leaders.
- Numerous startup programs implementable within 12-months.

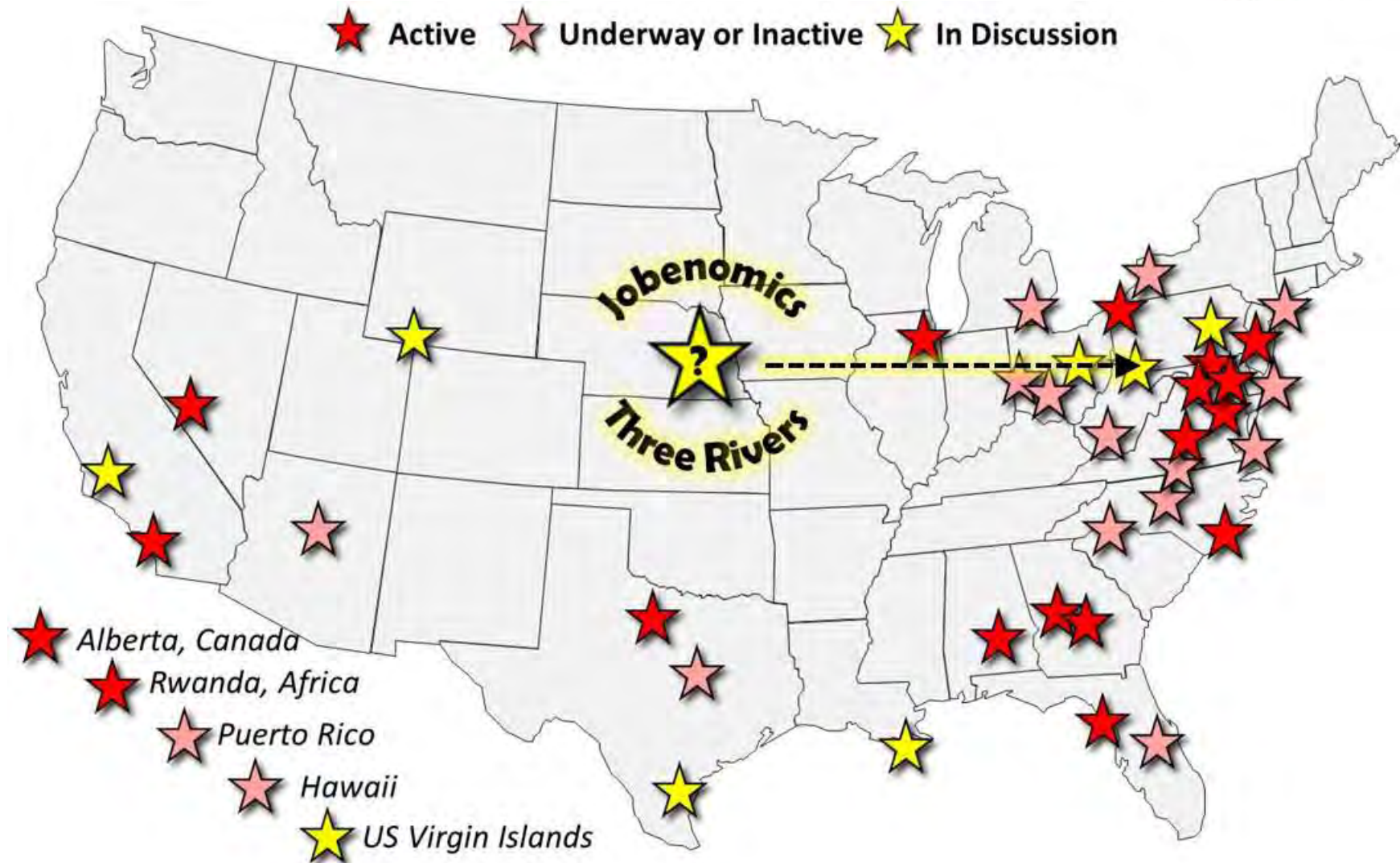
Primary focus: economic, community, small business and workforce development at the base of America's socio-economic pyramid.

Free E-Books in Jobenomics Library



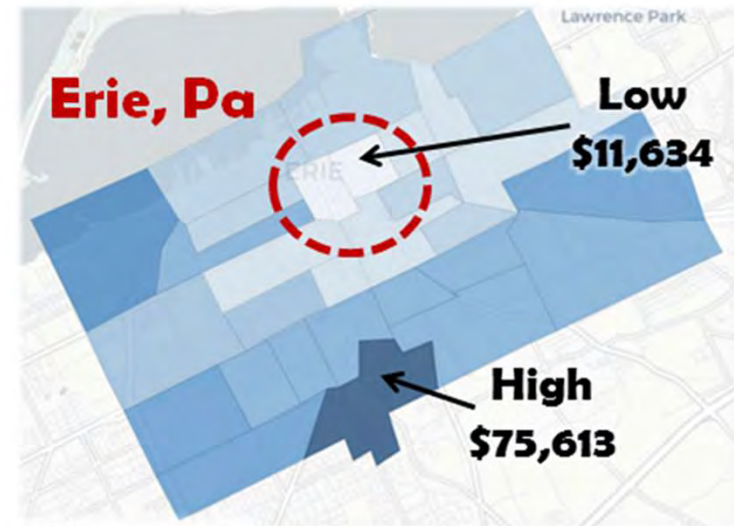
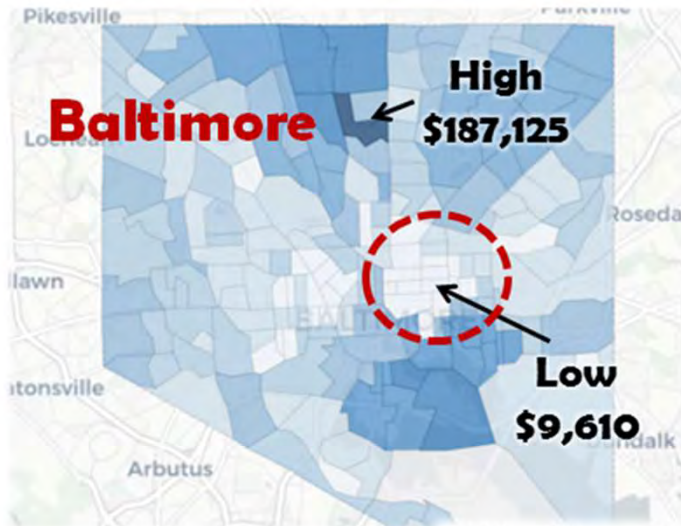
Extensive research on the economy, policy-making, labor force situation, emerging technologies, and community renewal initiatives.

Jobenomics Chapters

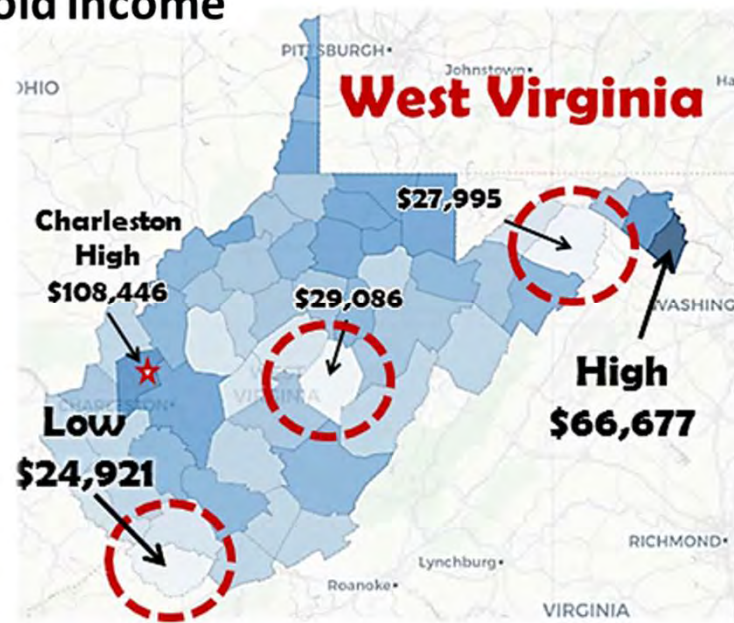
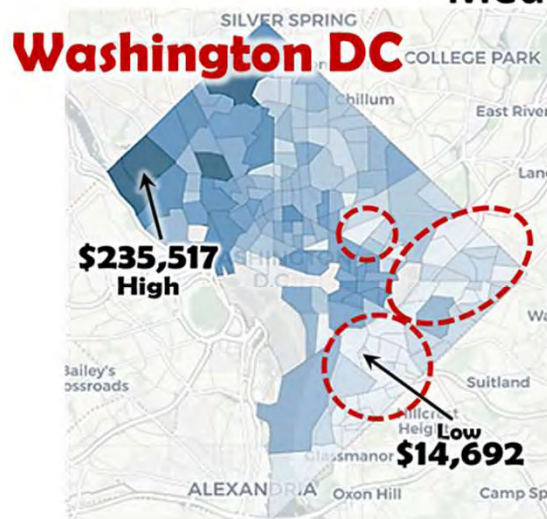


Since 2016, dozens of communities started Jobenomics chapters that are in various stages of development.

Jobenomics Underserved Community Emphasis



Median Household Income



Urban renewal and rural programs
for underserved communities.

Economic Development Conundrum



Traditional **Top-Down** Approach

Attract 1 Large
\$100,000,000/year
Enterprise



Jobenomics **Bottom-Up** Approach

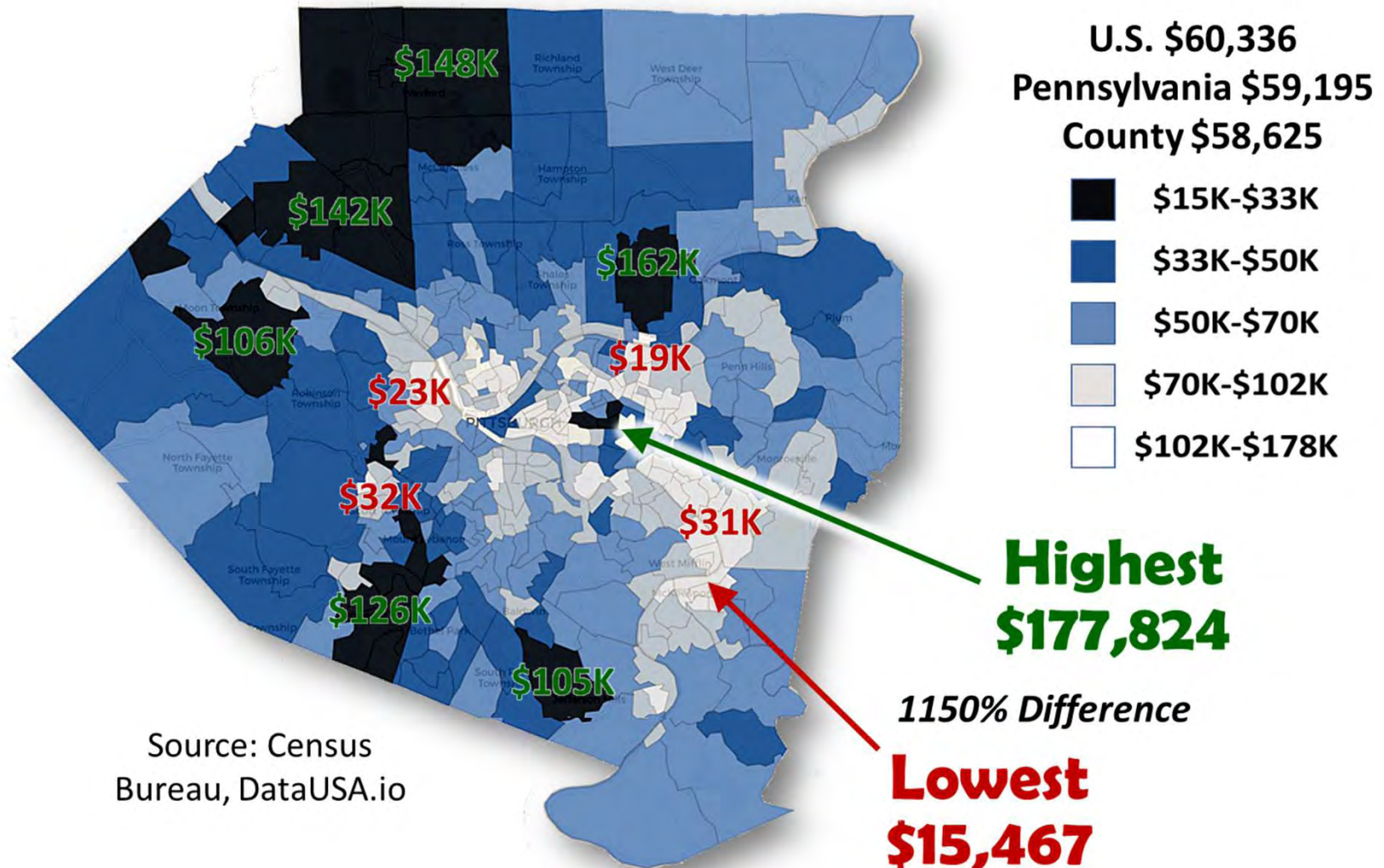
Start 1,000
\$100,000/year
Micro Businesses



Under-resourced communities have difficulty attracting big companies
but can mass-produce **micro** and **nonemployer** businesses.

Allegheny County Income Inequities

Median Household Income 2017

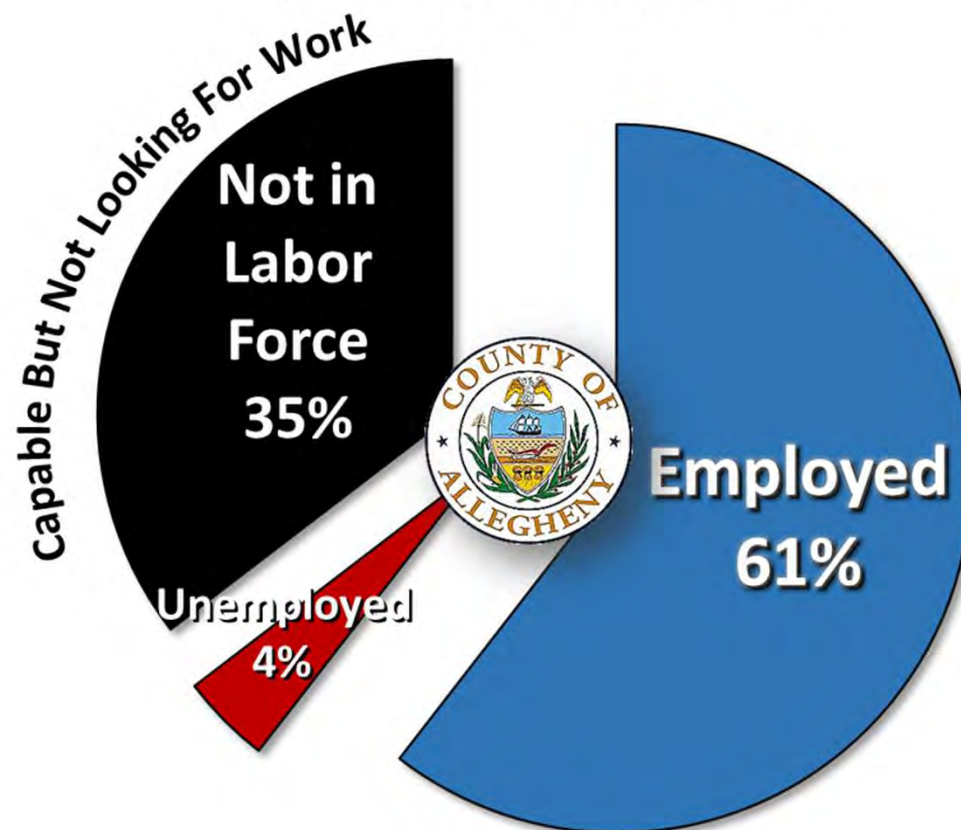


J-Three Rivers will provide income opportunities for citizens who want to start a business or a sustainable career.

Allegheny County's Economic Challenge Is Reengaging Its Sidelined Workforce

Beaver County's Working Age Population

Age 25 to 64 Years Old

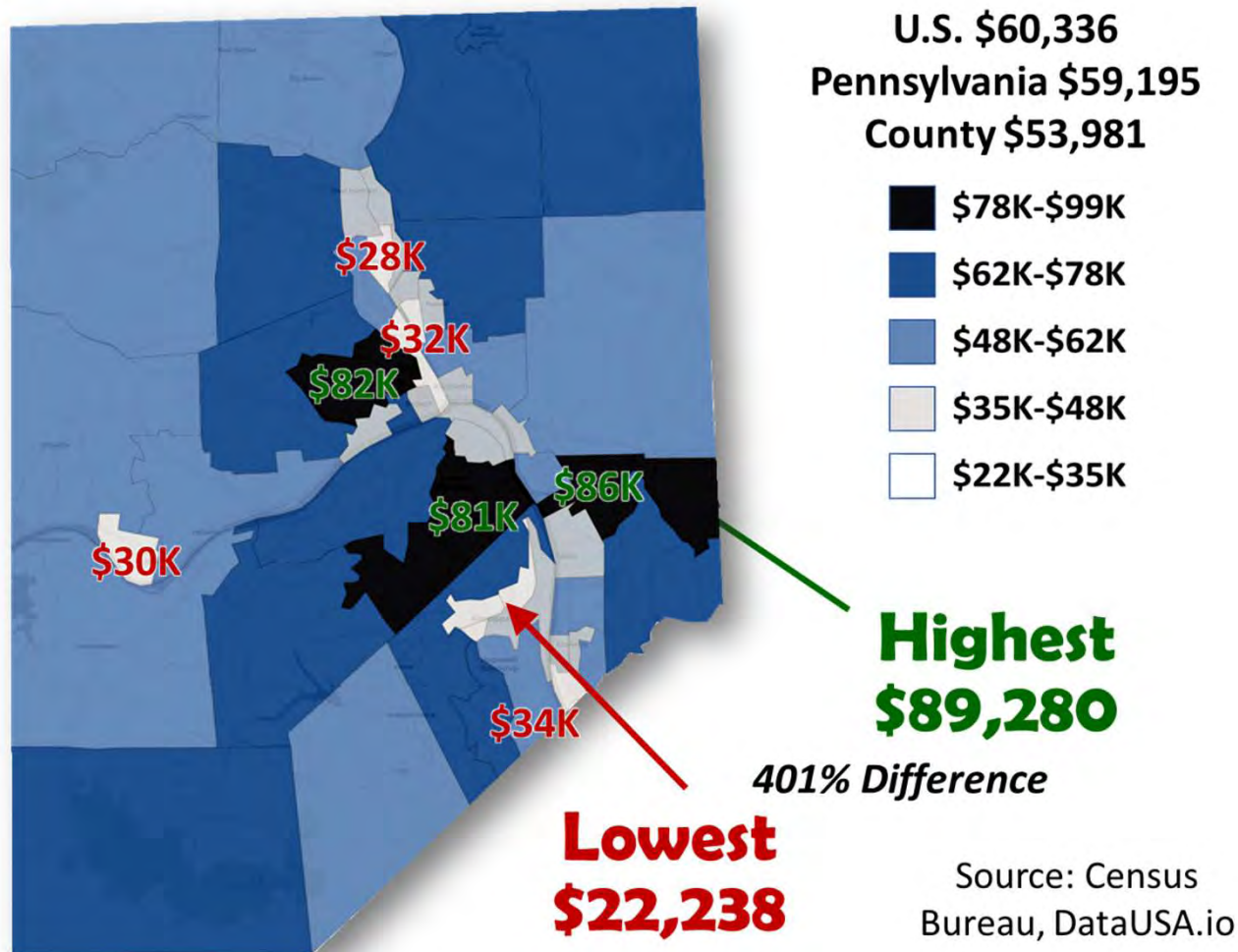


Source: Census Bureau,
StatisticalAtlas.com

39% of Allegheny's working age population is either looking for work (4% unemployed) or capable of working but no-longer looking (35%).

Beaver County Income Inequities

Median Household Income 2017

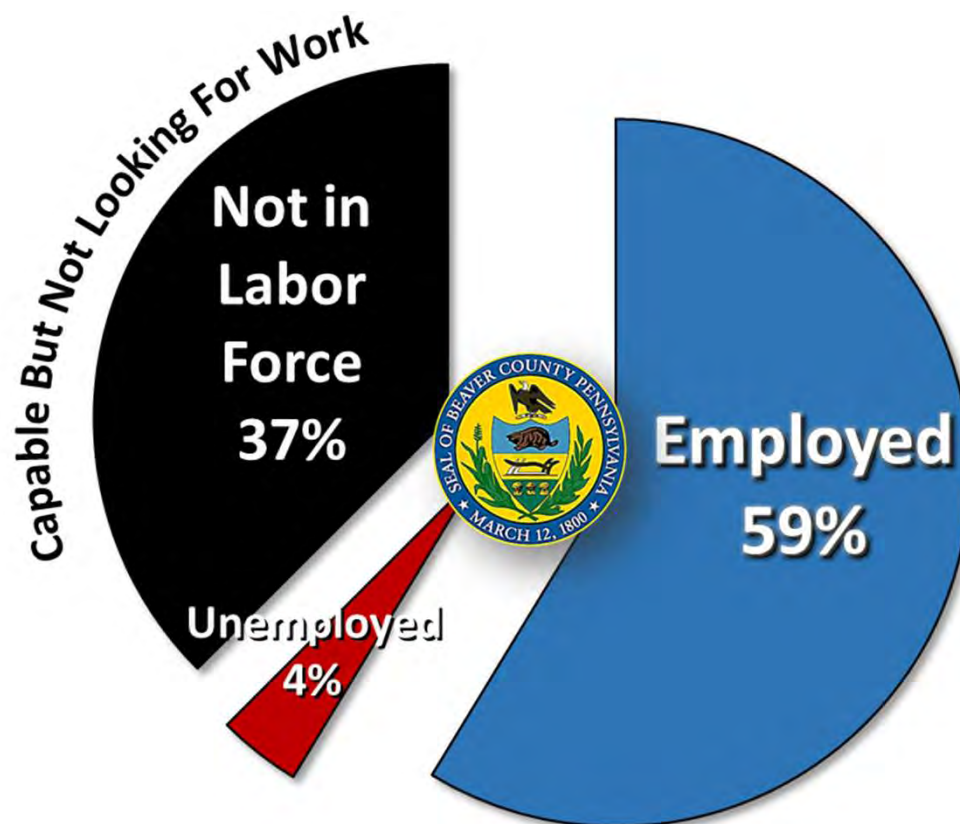


By increasing the rate of startup businesses by 1%, communities reduce poverty and crime rates by 2% each.

Beaver County's Major Economic Challenge Is Reengaging Its Sidelined Workforce

Beaver County's Working Age Population

Age 25 to 64 Years Old



Source: Census Bureau,
StatisticalAtlas.com

41% of Beaver's working age population is either looking for work (4% unemployed) or capable of working but no-longer looking (37%).



Approach to QOZs and QOFs

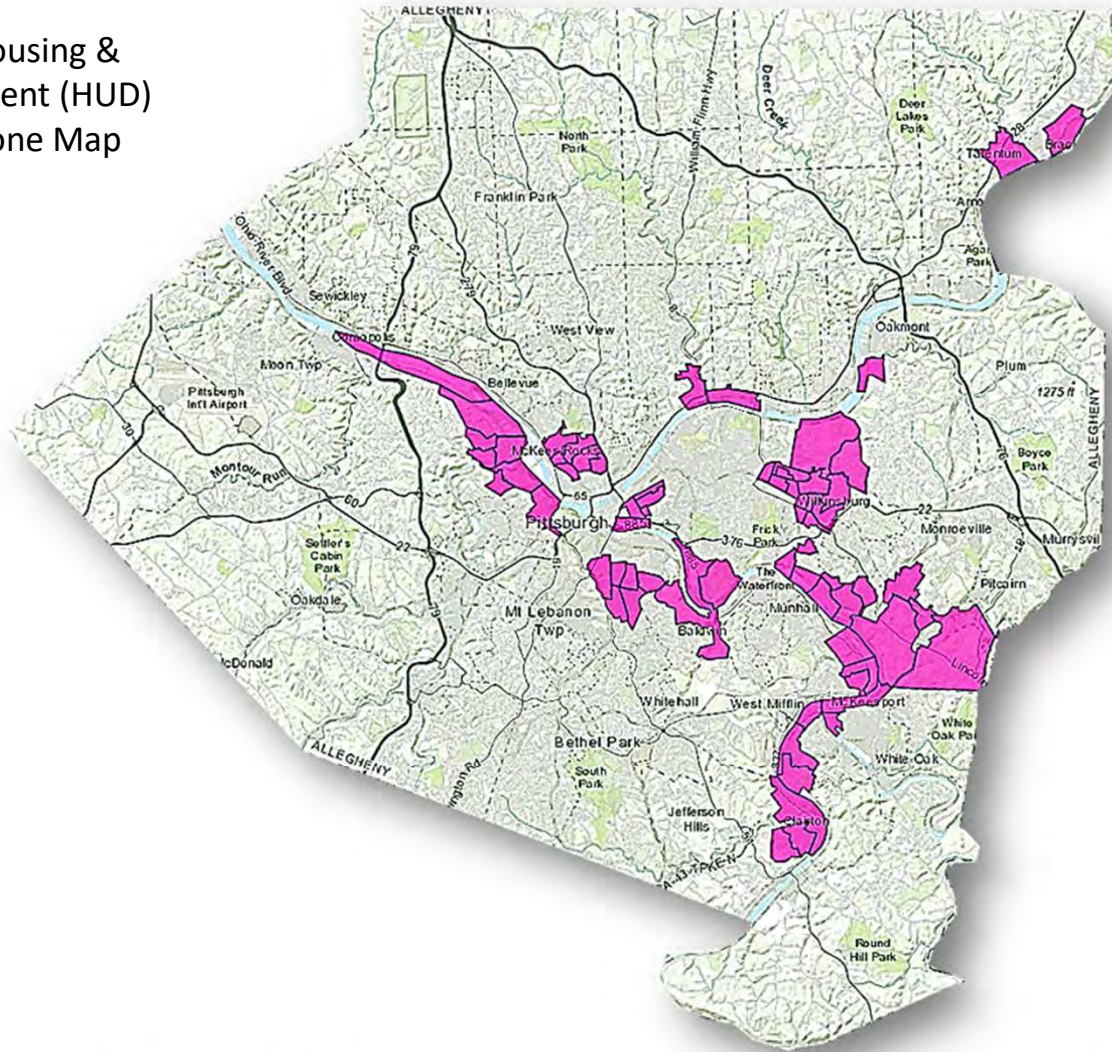


Qualified Opportunity **Zone (QO**Z**)**

Qualified Opportunity **Fund (QO**F**)**

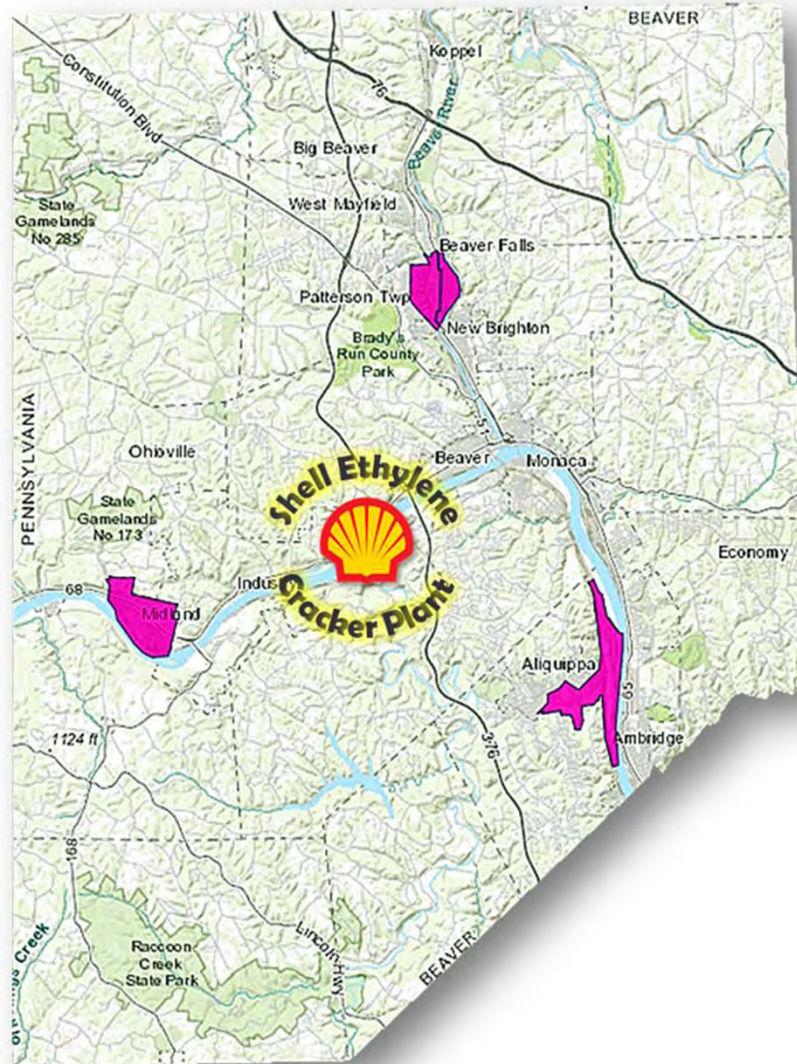
Allegheny County Opportunity Zones

Source: U.S. Housing &
Urban Development (HUD)
Opportunity Zone Map



The majority of Allegheny County Opportunity Zones are located on or near Three Rivers waterways.

Beaver County Opportunity Zones



Source: U.S. Housing &
Urban Development (HUD)
Opportunity Zone Map

The new Shell Cracker Plant is 8-miles for 3-Ozones and presents a great opportunity for J-Three Rivers collaboration.

Key Opportunity **Zone** Statistics

Source: EIG analysis of U.S. Census Bureau, ACS 2014-2018

<https://eig.org/opportunityzones/facts-and-figures>



- 10.7% of all U.S. census tracts with 31.5 million people
- 31% of working age adults are not working
- 21% lack a high school diploma versus 12% nationwide
- 57% are minorities, with Blacks being overly represented
- 27.7% residents live in poverty versus 14.1% nationally
- 49% of all U.S. persistent concentrated poverty census tracts
- 28% OZones qualify as food deserts
- 13% housing occupancy rates versus 8% nationally
- 32% (14,700) of all U.S. brownfield sites are in OZones
- 83% have a lower life expectancy than average Americans

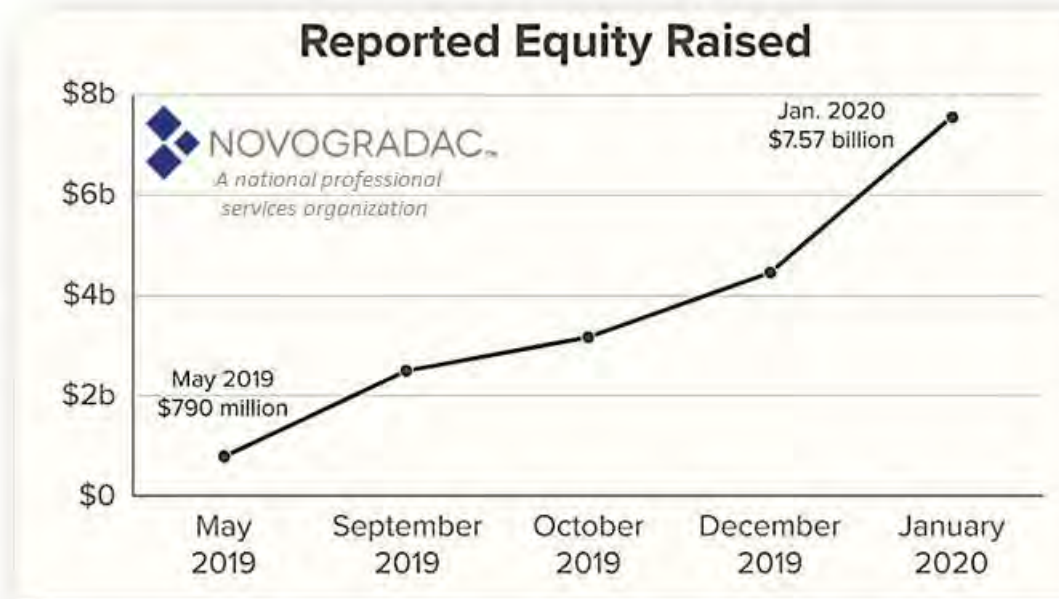
Private sector OZone funds can directly help improve the livelihoods of OZone residents and, indirectly, the prosperity of all Americans.

Qualified Opportunity **Zone** Growth

Source: Novogradac Opportunity Funds Listing Totals, 17 January 2020

<https://www.novoco.com/atom/193376>

- As of January 2020, 513 Qualified Opportunity Funds have a 2020 fundraising goal of **\$68.75 billion**.



- Fundraising soared from \$790 million in May 2019 to \$7.57 billion in 2020 (almost a 10-fold increase).

Jobenomics asserts that there is more investment money available than QOZ projects with an acceptable rate of return.

Qualified Opportunity Fund Conundrum

- QOFs are classified as “impact investors” that are challenged to balance social impact and capital gains.
- Average QOF has \$340 million and usually seek 10 big projects (\$34million range) as to opposed to 340 small projects (\$1 million range).
- Most inner-city projects are usually very small, unproven startups and risky, which are hard to fund.
- Consequently many projects involve large “gentrified” real estate deals owned by outside entities as opposed to locally owned and operated businesses.
- Most Opportunity Funds stipulate **“Mixed-Use Development”**



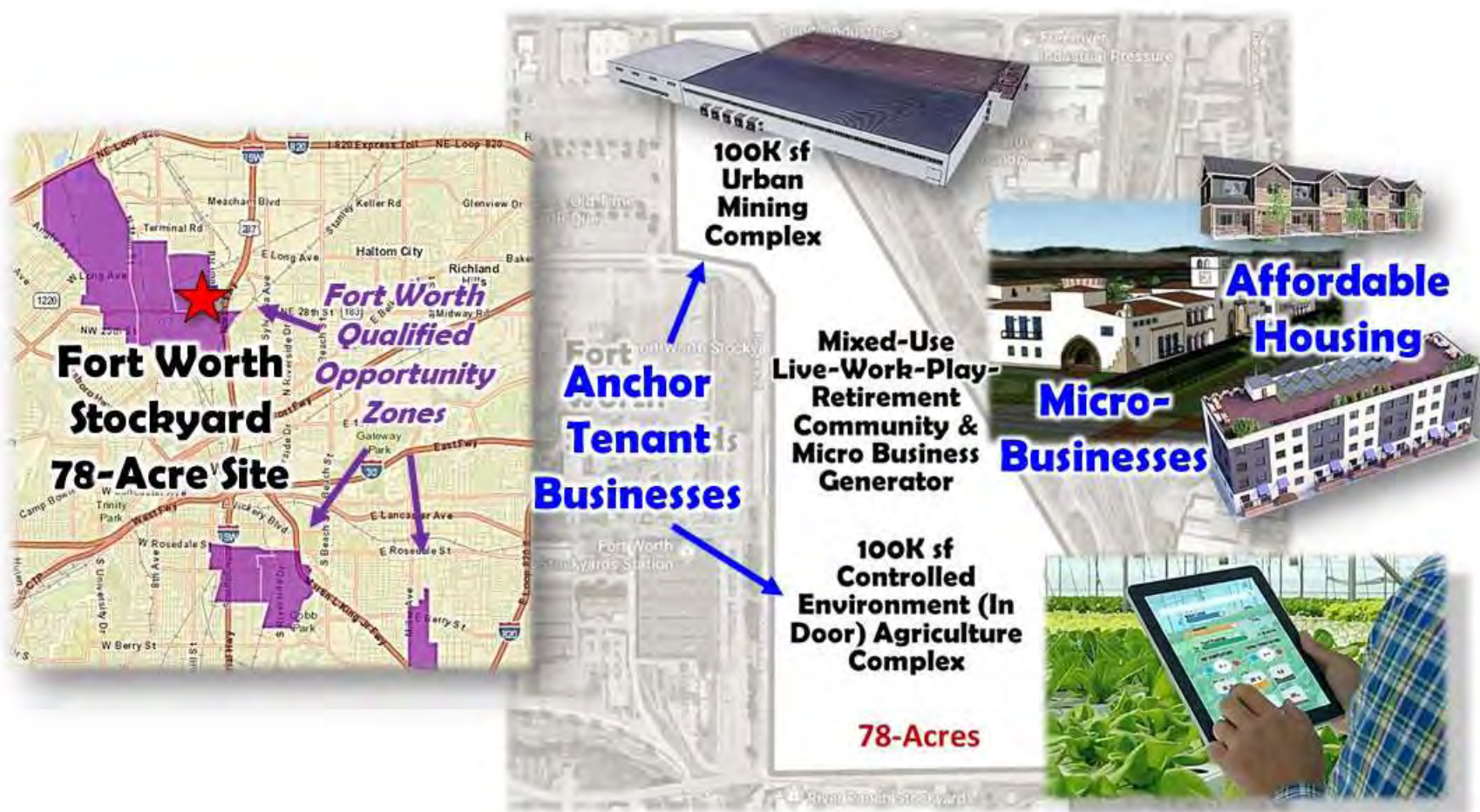
Jobenomics recommends a \$34M-level mixed-use community approach for Opportunity Fund financing.

Example of a **Local** Mixed-Use Complex



Meets community needs for affordable homes, safety, green eco-friendly facilities, and business/job creation.

Example of a Mixed-Use **Urban** Community



Jobenomics “**Shopping Mall**” approach combines real estate development, LEED Platinum construction, anchor tenant/micro-business creation, all in a sustainable and affordable **urban** ecosystem.

Examples of a Large Mixed-Use, Master-Planned, **Rural** Agrarian Communities



Rosamond, CA



Chowan County, NC



Waxahachie, TX

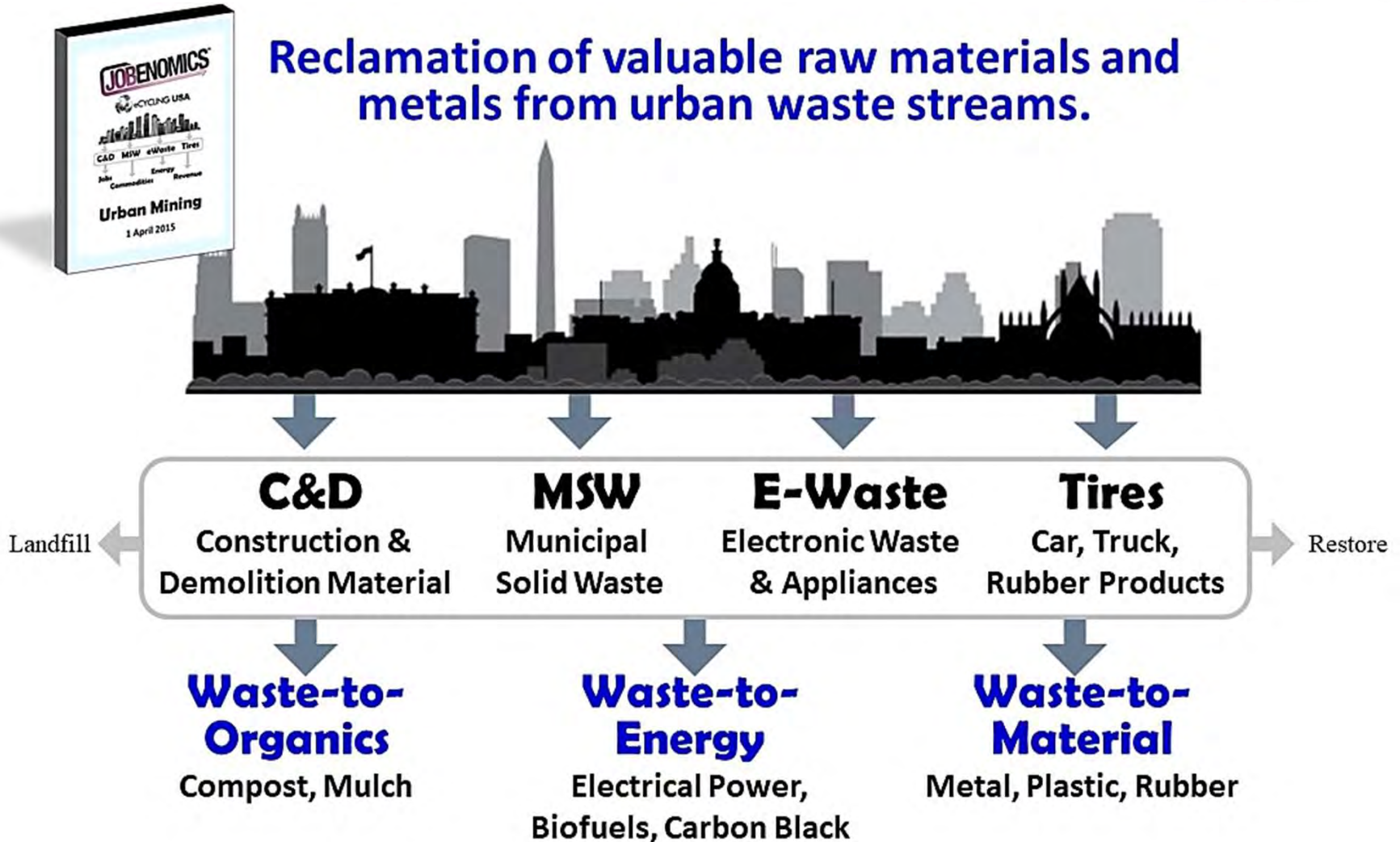
Jobenomics is working with community leaders, real estate developers and leading industry officials to build master-planned **rural** communities and business plans that are attractive to QOFs.



Quick-Start Programs Tailored for QOZs and QOFs

- Urban Mining/ Plastics-to-Fuel & eWaste Facilities
 - Controlled Environment Indoor Agriculture
 - Enhanced Water Programs
- Digital Economy Jobs & Entrepreneur Clubs
- Direct-Care/Remote-Care/On-Demand Care
 - Renewable Energy & Energy Services
 - Experiential Tourism

Jobenomics Urban Mining



Urban Mining Goal: Monetize urban waste streams to produce businesses, jobs and revenues for workforce development.

Plastics-to-Fuel System

EVP R-One Facility

Jobenomics Partner, www.evptechnology.com

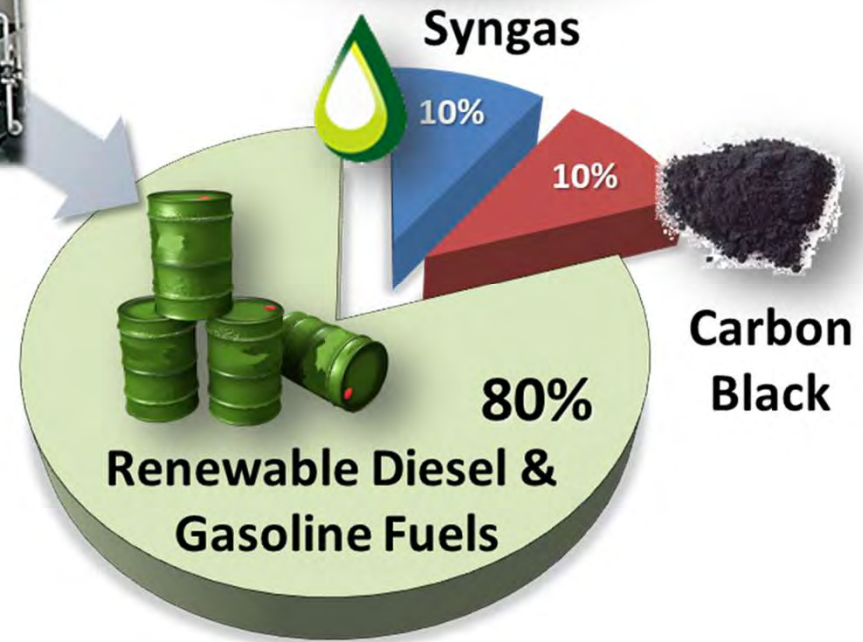


Growing Plastics Waste Problem



Imported Plastics Waste

China no longer accepting baled plastic waste



Suppling Pennsylvania with high-quality, low-sulfur fuels.

Shell/J-Three Rivers Collaboration



- \$3 billion **plastics manufacturing** plant
- Produces 3,000 tons/day of ethylene and plastic pellets
- 600 permanent jobs
- \$1.65 billion tax breaks



- \$0.05 billion (\$50M) **waste plastics processing** plant
- Produces 100 tons/day of sulfur-free biofuel or syngas
- 230 permanent jobs
- Private sector OZone Funding

By collaborating, J-Three Rivers can:

- Help mitigate environmental concerns (more fossil fuels, more unwanted plastic, climate change, etc.) regarding Shell's new operation.
 - Help develop Shell Plant's indirect workforce ($\approx 2,000$ jobs).
 - Mass-produce startup businesses and affordable housing.

There is enough plastic waste in Greater Pittsburg to start multiple **Plastics2Fuel plants with or without Shell's participation.**

Coal-to-Biofuels & Fertilizer

JOBENOMICS™
Three Rivers (PA)

**Intellectual
PATENTED
PROPERTY**

Mic ANAEROBIC BIOREACTOR 2 (R2)

Microbes From
Termite Guts

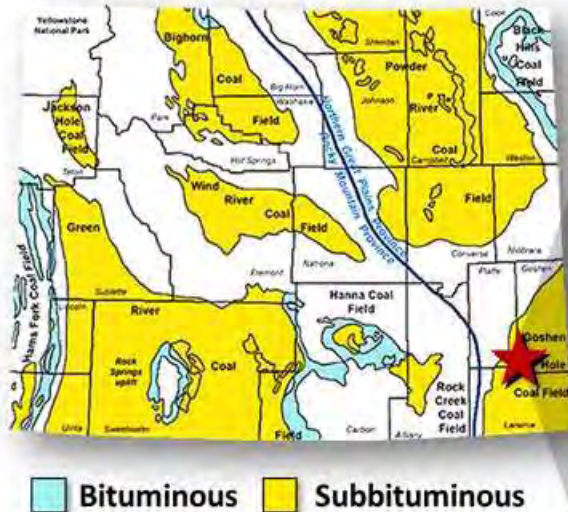
MicGAS™

International Customers

HUMAXX is produced from humic-rich **sub-bituminous** coal for soil conditioning, plant growth and biogas/fuel applications.

Repurpose Defunct Ethanol Plants

Wyoming Coal

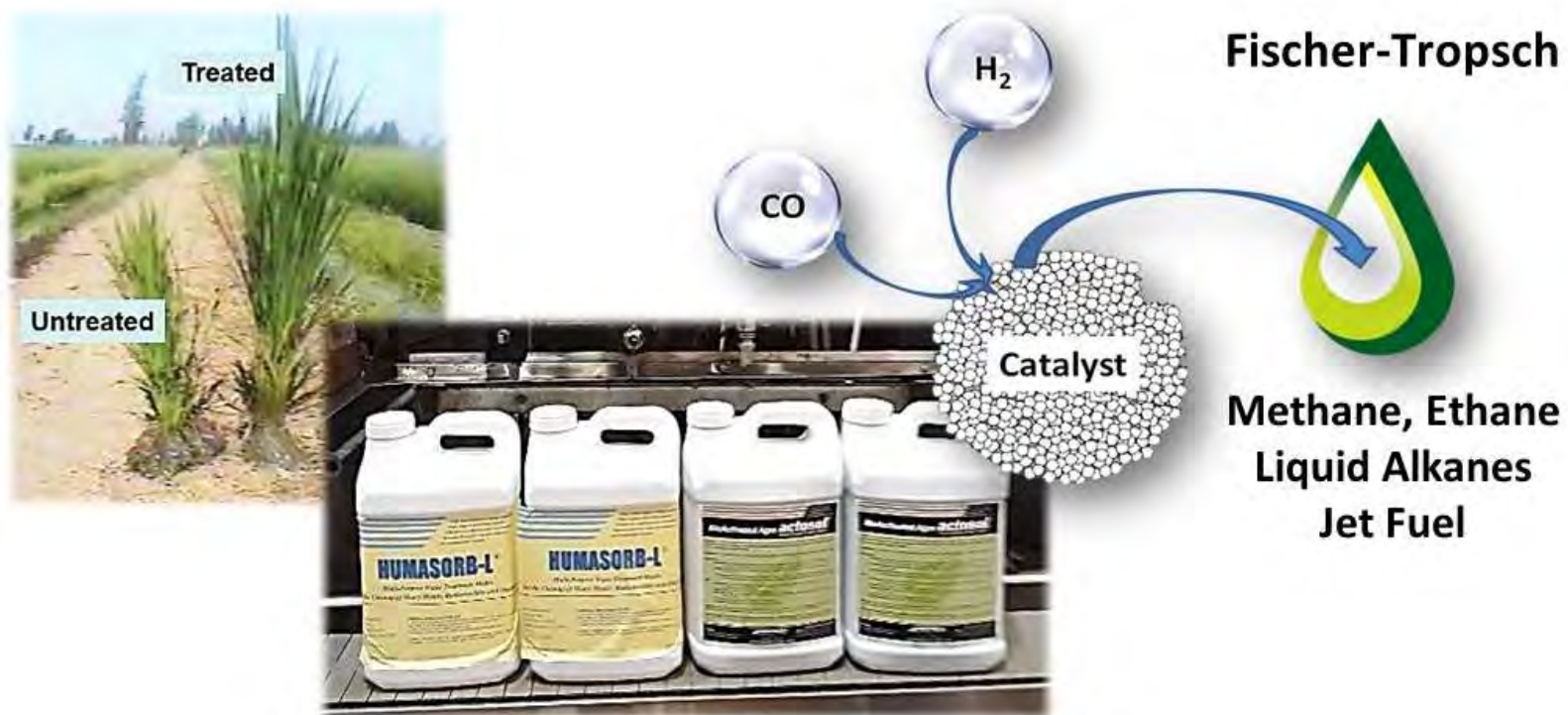


Proposed Regenerative Agriculture Complex

1. HUMAXX Biorefinery (**Pillar Program**)
2. Controlled Environment Agriculture Center
3. Field Technical, Training, Information & Tourist Center
4. Offsite Mixed-Use Employee Housing Complex

HUMAXX Biorefinery

- HUMAXX Biorefinery uses an anaerobic digester process to provide coal-derived solutions to increase crop yields, enrich farm and pasture lands, generate clean energy, bioremediate and replenish water, recycle industrial waste into fertilizers, and reduce greenhouse gas emissions.

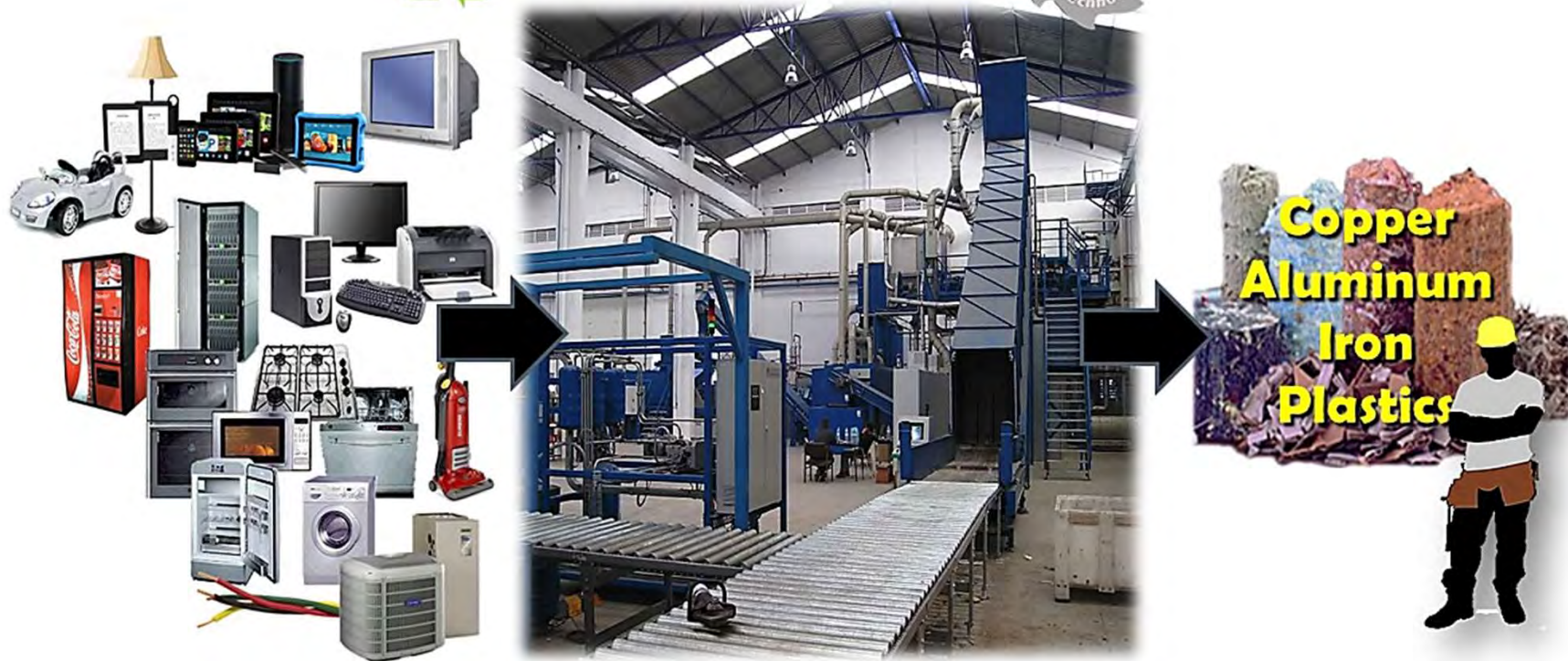


- MicGAS bioconversion creates syngas via a Fischer-Tropsch synthesis.

The HUMAXX Biorefinery will initially convert 10,000 tons/year and ramp up to 1,000,000+ tons/year depending on offtake requirements.

eWaste-to-Commodities

JOBENOMICS™
Three Rivers (PA)



100 Operational Sites Worldwide

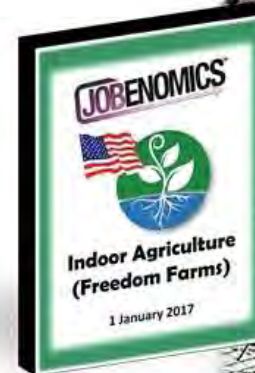
Jobenomics Partner, www.urt-recycling.com

End-of-life appliances and electronics is America's fastest growing waste stream. Our system can be operational within 12-months.

Controlled Environment Agriculture (CEA)

- CEA is the process of growing high-value plants and crops inside a grow room or greenhouse.
- CEA allows a grower to maintain **temperature, light**, carbon dioxide, humidity, water, pH levels, and nutrients to produce crops in ideal growing conditions with maximum yields.
- Jobenomics CEA program is focused on mass-producing agribusinesses, micro-farms and agricultural-related jobs.

**Central Large
Growing, Processing
& Distribution
Center**

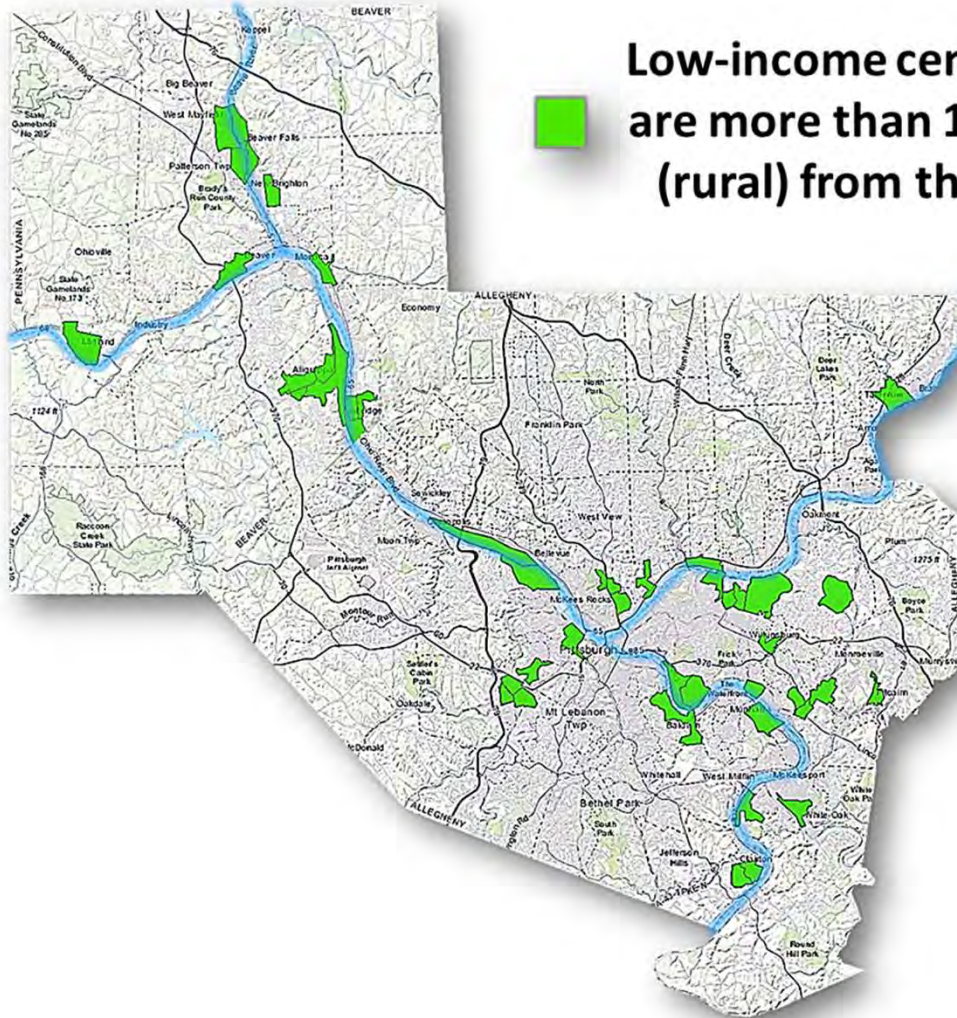


**Local Small
Growing Centers**



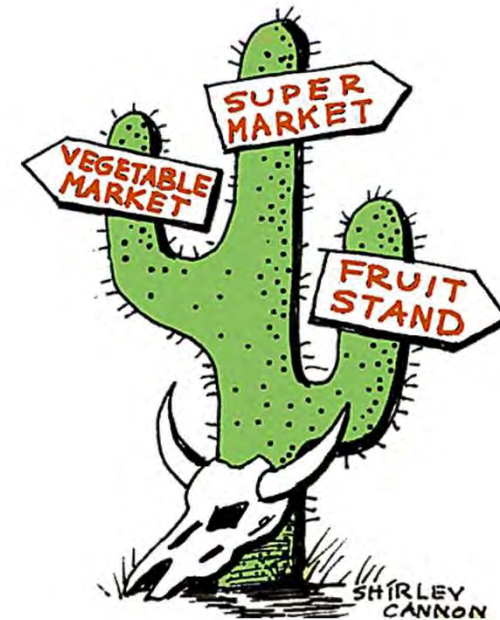
Global CEA market is projected to grow to **\$15.3 billion by 2024**, up from **\$6.5 billion in 2017**, potentially creating thousands of businesses and several million jobs in underserved rural and urban communities.

Three Rivers Food Deserts



Low-income census tracts where citizens are more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.

Source: USDA Food Desert Map
Beaver & Allegheny Counties

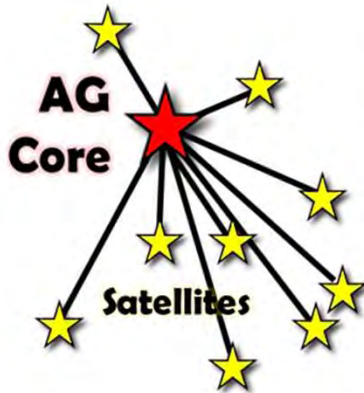


Underserved communities need fresh, organically-grown, farm-to-table food for local consumption and export to regional markets.

Jobenomics ACTSFFA CEA Program



- **AG Core** is the central operation that manages, trains, and implements satellite centers. AG Core processes and ships locally-grown food to local, regional and international outlets.

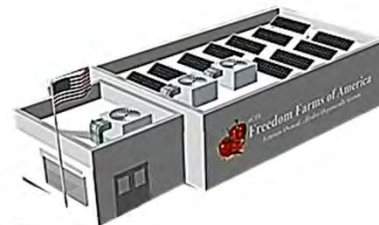


Large Grow Center(AG Core)
With Controlled Environment & Vertical Farming



Jobenomics Partner, www.ACTSFFA.com

- **Satellite** CEA-farms will first satisfy local needs and then ship remaining produce to AG Core.



Produce On Demand (POD) Greenhouse



GAP, GHP, FSMA
Compliant Greenhouses



J-Three Rivers Goal: Establish 250 to 1,000 direct jobs within grow centers, and as many as 4-times more indirect jobs.

Example of a Large Agrarian Community

1200-Acre Freedom Farm Complex designed by ACTSFFA/Oculus



Jobenomics Partner, www.oculusarchitects.com/mies_portfolio/acts-freedom-farm/



2.6 million sq. ft. of indoor controlled environment agriculture, greenhouse village, hotel, farmers market, winery, production and distribution facilities, commercial/community/education/worship centers, and hundreds of single-family homes and apartments.

Micro Farm & Farmers Market



There is high demand for organic farm-to-table vegetables and produce in under-served community “food deserts”.

Live/Work Urban Agrarian Communities



Affordable homes for Jobenomics Three Rivers participants.

SuperWater HyOx Drinking Water

JOBENOMICS™
Three Rivers (PA)

Florida Bottling Plant

Jobenomics Partner, www.superwaterhyox.com



Dr. Rey Linares, CEO



SuperWater HyOx increases water's **dissolved oxygen content** by **over 300%**, which is essential for health and well-being.

SuperWater HyOx Agriculture Applications

JOBENOMICS™
Three Rivers (PA)

Soil Improvement



Cherry Tomatoes



Sugar Cane



Limes



Coffee



Avocado

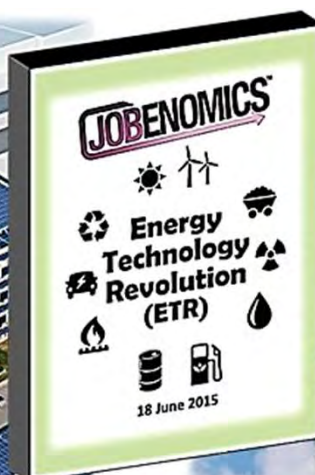


Now doubling the growth of traditional agriculture in South America, ³⁵

Renewable Energy Businesses & Green Jobs



**Net Zero Buildings &
Communities Installation &
Maintenance Businesses**

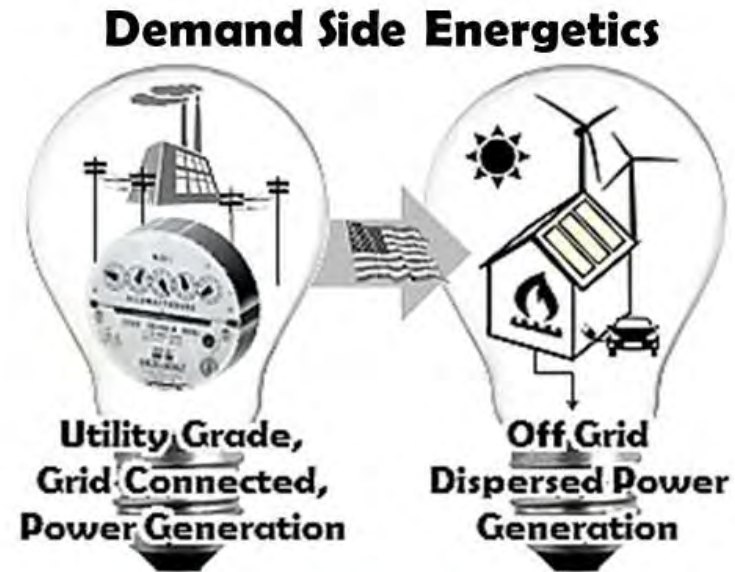


**Energy Audit, Weatherization
& Renovation Businesses**

The Energy Technology Revolution will create millions of new micro-business opportunities, such as independent contractors.

Energy Services

- Demand Side Energetics
- Net-Zero Communities/Buildings
- Services: “**Energy’s 3rd Rail**”
 - Energy Efficiency/Conservation
 - Energy Assurance/Security
 - Disaster Preparedness/Recovery
 - Energy-as-a-Service (EaaS)
- Energy Technology Center



Jobenomics' Joe Sarubbi with President Obama and Mrs. Biden

Digital Economy



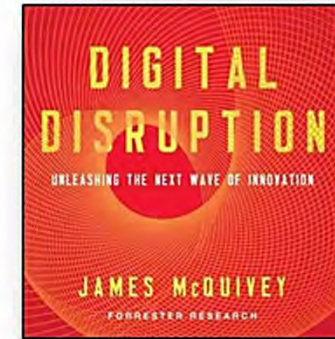
- Platform Economy
 - E/M Commerce
 - Sharing Economy
- On-Demand Economy
- Apps/Bots Economy
 - Gig Economy
 - IoT Economy



The traditional economy growing at 2% per versus eCommerce growth of 15% per year. Jobenomics' team of eCommerce experts help set up websites to selling on all major platforms; Amazon, Google, Facebook, eBay and Shopify.

Digital Economy Startup Companies

- “Digital startups are at least **100-times easier to create** and have 10-times the number of innovators that can innovate at one-tenth the cost than traditional startups.” (McQuivey)
- Top digital startup platforms:



- Jobenomics study on leading Chinese and America digital economy strategies and practices.



Every community needs a digital economy strategy to raise its overall economy and underserved citizens out of poverty.

Digital Academies



Percent Online

Source: eMarketer, March 2019



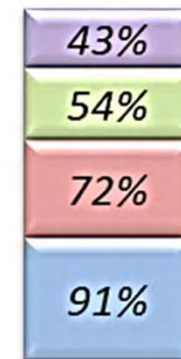
Age 6-10

97%



11-13

98%



14-18

Digital academies use a youth's online interest in social media and gaming to develop digital economy workforce and business skills.

Entrepreneur Clubs

- **Club E Atlanta is an entrepreneur empowerment center**
 - Public/private partnership with the City of College Park
 - Training, certification and startup business center
 - Co-working facility (hi-tech, offices, conference center, café)



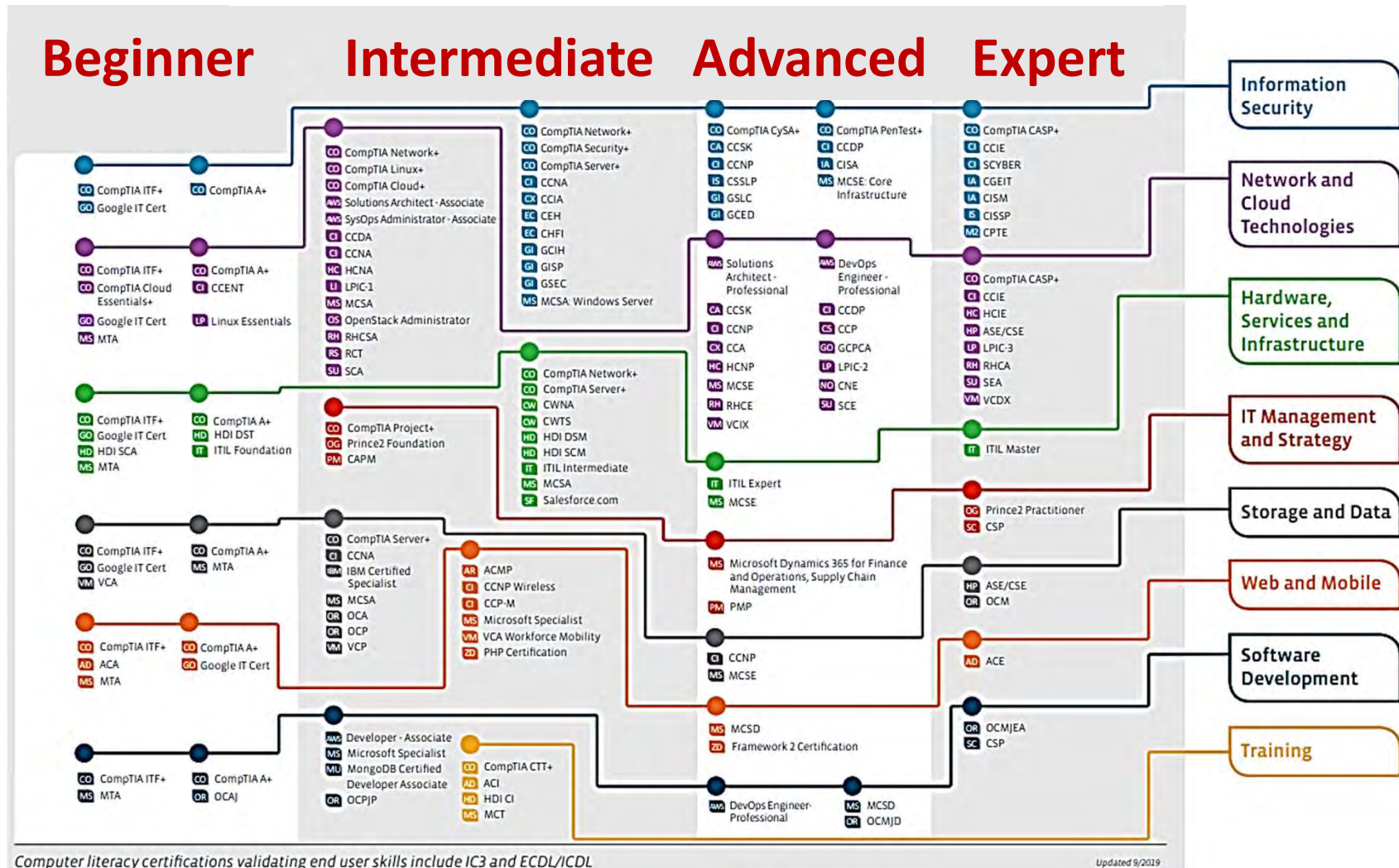
- **Club E Startups**



E-Clubs can mass-produce startup firms across Three Rivers.

Digital Economy Career Roadmap

Source: www.comptia.org/content/comptia-career-roadmap



Certified training programs are the gateway into good paying (\$50K) entry-level digital economy jobs without a college degree.



Network and Cloud Technologies

Hardware, Services and Infrastructure

IT Management and Strategy

Storage and Data

Web and Mobile

Software Development

Training

Beginner Certifications



Source: www.comptia.org/content/comptia-career-roadmap

CompTIA A+

Exams cover maintenance of PCs, mobile devices, laptops, operating systems and printers.

CompTIA IT Fundamentals

Exams focus on essential IT skills and knowledge needed to perform tasks commonly performed by entry-level IT professionals.

Microsoft Technology Associate: Security Fundamentals

Recommended entry point into IT certification and job preparation.

Google IT Cert

A hands-on training program for troubleshooting, customer service, networking, operating systems, system admin, and security.

Major Cybersecurity Locations

Source: <https://www.cyberseek.org/heatmap.html>



Pittsburgh Metropolitan Area

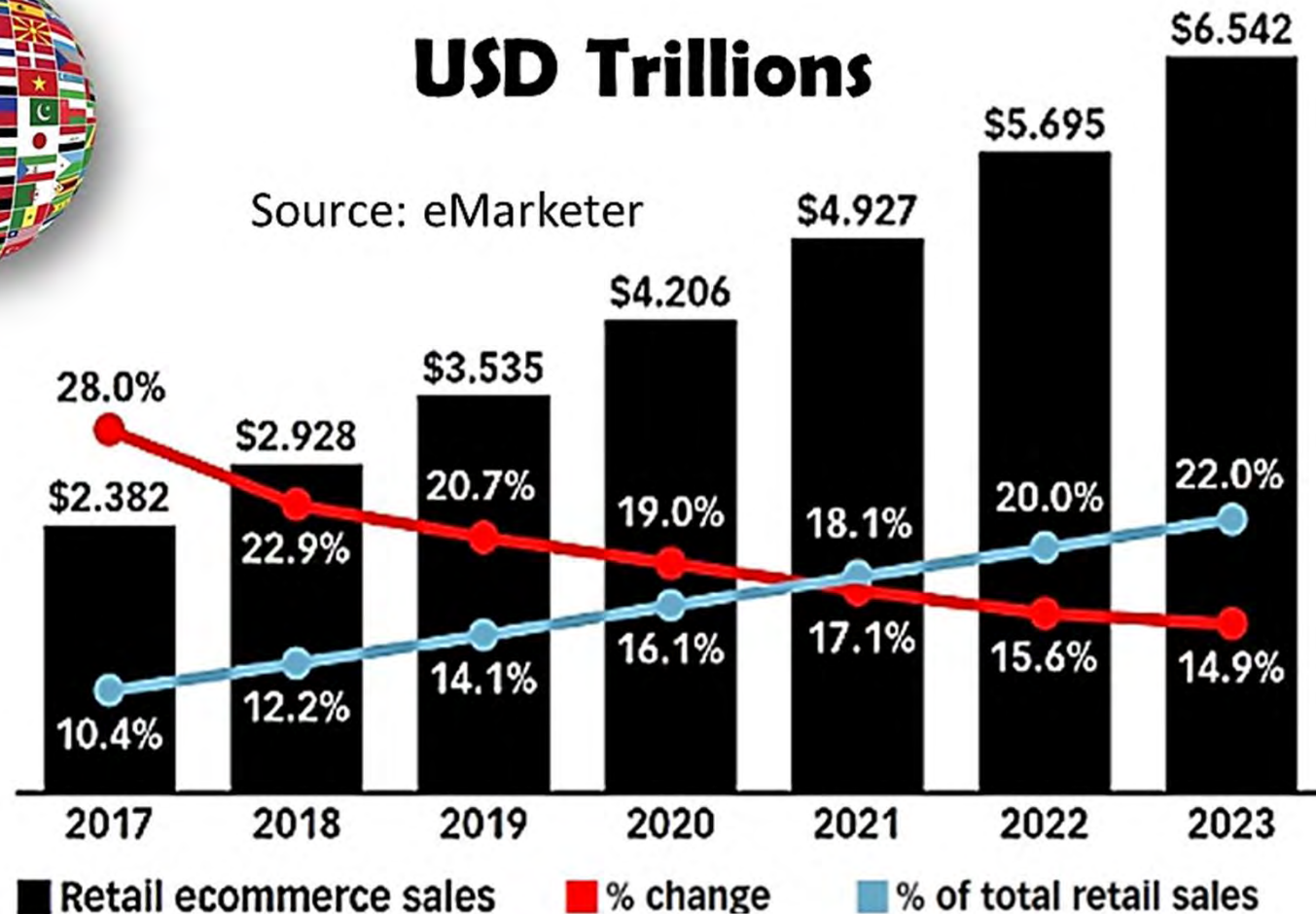
Total Employed = 6,927

93% Private Sector, 7% Public Sector

Open Jobs = 3,665

48% Support (Administrative & Maintenance)

E-Commerce Sales Worldwide



eCommerce and m-Commerce is growing rapidly as local tech start-ups and international players enter the market.

Jobenomics Direct-Care Program



Direct-Care Services

- Healthcare
- Social assistance
- Behavioral-care
- Elder-care
- Child-care



Direct-Care Center

- Information & Call Center
- Training & Certification Center
- Management and Quality Control



Former **women head-of-households** are ideal for direct-care jobs.

Examples of On-Demand Telehealth Programs



- **Teladoc** is the largest telehealth platform with 20 million members and over 3,000 licensed healthcare professionals.
- **DoctorOnDemand** connects patients in minutes to board-certified doctors and therapists over live video.
- **Go2Nurse** is an on-demand nurse/caretaker application service.
- **ReferralMD** standardizes referral network communication between primary care physicians and specialists.
- **American Well** is a complete telehealth service for healthcare companies, employers, or delivery networks.
- **MDLive** telemedicine system offers a patient experience, a provider experience, and a call center.
- **SnapMD** is a virtual care management system with a patient interface, a provider interface and an administrative back-end.

The U.S. telehealth market is expected to reach revenues of over \$13 billion by 2023, growing at a CAGR of 27%.

CLINICSTOP Micro Clinic for Diagnosis, Counseling and Remote Care

www.clinicstop.com

JOBENOMICS™
Three Rivers (PA)



**Ideal for pharmacies, churches, community centers that provide
healthcare, social assistance, and behavioral care.**

Experiential Tourism

Millennials (largest generation) prefer junkets over sightseeing.

Adventure

Adventure travel involves includes a “physical activity, a cultural exchange, or activities in nature.” *Adventure Travel Association*



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



Cultural Tourism entails a traveler's engagement with a region's culture, including the history, lifestyles and art of the indigenous and aboriginal people.

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



Cabins



Tents



Domes

Experiential tourism involves authentic, immersive, adventurous or active travel experiences, underpinned by the “**Instagram Effect**” that connects friends and family to the traveler.

Three Rivers Experiential Tourism

Pull Advertising → *Push Marketing*

Push Marketing Connects Tourists:

- **Digitally**
 - Social media-driven approach
 - Omni-channel content strategy
 - Off-grid & satellite internet
- **Socialistically**
 - Transcendental experiences
 - Environmental interests
 - Heritage & cultural insights
- **Logistically**
 - Air/ground transportation
 - Accommodation/supplies
 - Emergency assistance
 - Concierge/guide services



Traditional tourism relies on *pull advertising*.
Online *push marketing* advertises personal “**bucket list**” experiences.

Contact Information

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