



Jobenomics Erie Program

Executive Summary

22 March 2017

Jobenomics Erie's focus is on mass producing micro-businesses and jobs with emphasis on inner-city Erie minorities, veterans, women, new workforce entrants and other hopefuls who want a job, career and those who are entrepreneurial enough to start their own small or self-employed business. Over the next 5-years, Jobenomics Erie program goal is to create hundreds of micro-businesses that will produce **3,500 new direct jobs** (not including indirect and induced jobs) with livable wages and viable long-term career opportunities over the next five years. Jobenomics Erie can offer **9,000 online skills-based training and certification programs** to "create careers within a year". If each direct new job generates two or three times as many indirect and induced local jobs, the total employment impact would equate to a total between 10,500 to 14,000 new jobs for Erie. 10,500 new jobs, at an average annual salary of \$50,000, **would equate to an economic impact of \$525 million per year** for Erie and Erie's metropolitan area.

Jobenomics Erie Program	Direct Jobs (5 Years)	% of 3,500 Job Goal
Community-Based Business Generator	1,550	44%
Urban Agriculture	650	19%
Urban Mining	550	16%
Workforce Re-Entry Center	750	21%
Total	3,500	100%

Jobenomics Erie will be built on a two existing and well-respected Erie programs that serve inner-city Erie's most socially and financially challenged communities. The Total Change Re-Entry Program, developed by Climate Changers, a 501c3, addresses the challenges ex-offenders, gang members and at-risk youth by providing comprehensive skills and reentry programs. Veterans Miracle Center Erie, a 501c3, serves veterans by providing counseling, services, new clothing, products, housewares to those in need free of charge. In partnership with the Jobenomics National Grassroots Movement, The Hope Collection, ACTS Freedom Farms and eCyclingUSA, the Jobenomics Erie Program will introduce four new initiatives to accelerate these programs as well as expanding their outreach to other Erie demographics with the greatest need and highest potential.

The four new Jobenomics initiatives include: (1) a Jobenomics Community-Based Business Generator to identify, train, certify high-potential candidates for existing employment opportunities and mass-producing new micro-business in direct-care, digital economy, renewable energy and technical trades, (2) a Jobenomics/ACTS Freedom Farms Urban Agriculture initiative that will employ advanced indoor hydroponics and vertical farming technology to produce 150 one-acre urban micro-farms and a large 100,000 square foot indoor controlled agriculture complex using state-of-the-art hydroponic and vertical agriculture technology, (3) a Jobenomics Urban Mining initiative based on proven eCyclingUSA technology for reclaiming high-value material from electronic waste and using the profits to fund ongoing and additional Jobenomics Erie programs, and (4) a Jobenomics Workforce Re-Entry Program to create micro-businesses and jobs for formerly incarcerated, gang members and at-risk youth in order to reduce crime, deter social unrest and provide meaningful career opportunities to those who are often shunned, excluded or isolated from mainstream society. Community leadership and support will be paramount. The Jobenomics Erie team plans to roll-out our program by April 2017, see www.JobenomicsErie.com for more information and regular updates.



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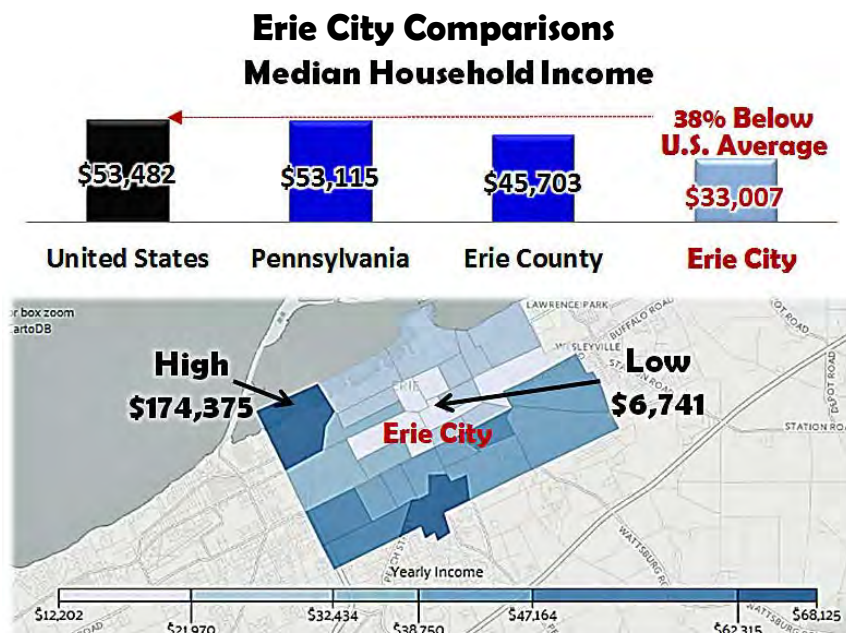
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Jobenomics Erie Synopsis

Jobenomics Erie's focus is on mass producing micro-businesses and jobs with emphasis on inner-city Erie minorities, veterans, women, new workforce entrants and other hopefuls who want a job, career or those who are entrepreneurial enough to start their own small or self-employed business. Jobenomics Erie can offer **9,000 skills-based training and certification programs** to create careers within a year. As described in this document, the Jobenomics Erie team is committed to creating hundreds of micro-businesses over the next five years that will produce **3,500 net new direct jobs** with livable wages and viable long-term careers for these demographics. If one assumes that each direct new job will produce two to three times (3-times is the national average for service-providing industries and 5-times for goods-producing industries) as many indirect and induced jobs, the total employment impact could equate to a total between **10,500 to 14,000 new jobs** for Erie. This amount of job creation is highly dependent on the level of community fervor, involvement and support rendered to the fledgling Jobenomics Erie Program. 10,500 new jobs, at an average annual salary of \$50,000, **would equate to an economic impact of \$525 million per year**, which would transform inner-city Erie and greatly benefit the entire metropolitan area economically as well as reducing poverty and crime levels that depress Erie's overall quality of life.

Jobenomics Erie Program

Jobenomics deals with the economics of business and job creation. The Jobenomics National Grassroots Movement's goal is to facilitate creation of 20 million net new U.S. jobs within a decade. The Movement has a following of over 20 million people. Jobenomics produces a series of books and comprehensive quarterly employment and unemployment reports on economic, business and workforce development. Jobenomics.com blog and website had 6 million hits last year, a growth rate of 400% over the previous year. Jobenomics also provides advice and timely data to policy- and decision-makers on business and job creation. Today, over a dozen cities and states have started Jobenomics initiatives led by local community leaders. These initiatives focus on people at the base of America's socioeconomic pyramid with emphasis on women, minorities, youth, veterans and citizens who want to work or start a business.



Over the last several years, Erie members of the Jobenomics National Grassroots Movement started building momentum for a Jobenomics Erie initiative. On 24 January 2017, a long-time and enthusiastic Jobenomics supporter, Tim Tassick, hosted a Jobenomics conference at the Seibenbuerger Club in Erie with Chuck Vollmer as the keynote speaker. Per Vollmer's Seibenbuerger Club presentation, compared to the United States, Pennsylvania and Erie County, Erie City is falling further and further behind in terms of wealth, income, jobs and population growth. According to U.S. Census Bureau median household income data, the average Erie family makes 38% below the average America. In Erie's inner-city, the average family makes an earned income of a measly \$6,741, which is 87% below national income. As a result of these disparities, the inner-city is experiencing increasing blight, unemployment, crime and homelessness.

Over one hundred community leaders, concerned citizens and news media attended the Seibenbuerger Conference. The response to a potential Jobenomics Erie initiative was extremely positive and a number of community leaders volunteered to champion a potential Jobenomics Erie initiative. These volunteers included not only Tim and his team, but another long-term Jobenomics supporter and serial entrepreneur, Kim Burney, an Erie resident. Kim volunteered to be a Jobenomics Erie coordinator and build the Jobenomics Erie website and social media platform. She also brought the principals of Climate Changers, Inc. (Bishop Curtis Jones and Fred Williams) into the fold. Likewise, Tim engaged John Kowalezyk, the Founder and Director of the Veterans Miracle Center Erie. Meetings also ensued with other community groups that pledged conditional support. As a result of these meetings, this Jobenomics Erie Program was created. This Program is a "living program" subject to modification by Erie community-leaders, decision-makers and investors. Community support is essential to implementation.

Jobenomics Erie Intends to Reverse the Employment Decline

Employment Trends

Erie Metropolitan Statistical Area (MSA)



The Erie Metropolitan Statistical Area labor force decreased 5.5% from peak employment in August 2008 and experienced no-growth over the last 5-years. While comparable Census Bureau data is not readily available for Erie City and inner-city neighborhoods, anecdotal evidence suggests that the employment decline is much worse.

While Jobenomics supports big business and government job creation efforts, its principal focus is on highly-scalable startup and self-employed businesses. The reason is straight forward. Existing economic, business and workforce development organizations are focused mainly on attracting big business or major infrastructure development projects as the principle source of job creation. Jobenomics Erie supports these important endeavors but believes that small businesses are the engine of any economy. Today, 80% of all Americans are employed by small businesses that produced nearly 80% of all new jobs so far this decade. Since the beginning of this decade, micro businesses with less than 19 employees created 1.4-times more jobs than very large institutions with over 1,000 employees, or 3,863,000 versus 2,739,000 new jobs respectively.

Moreover, startup businesses are the seed corn of the U.S. economy. Without the planting and fertilization of these seedlings the fields of American commerce will remain fallow. According a Kauffman Foundation analysis and study of the BLS/Census Bureau Business Dynamic Statistics data, net job growth occurs in the U.S. economy only through startup firms, and, counter to conventional wisdom, existing firms are net job destroyers. Furthermore, during recessionary years, job creation at startups remains stable, while net job losses at existing firms are highly sensitive to recessionary business cycles. The Kauffman study also stated that most city and state government policies that look to big business for job creation are doomed to failure because they are based on unrealistic employment growth models. "It's not just net job creation that startups dominate. While older firms lose more jobs than they create, those gross flows decline as firm's age. On average, one-year-old firms create nearly 1,000,000 jobs, while ten-year-old firms generate 300,000. The notion that firms bulk up as they age is, in the aggregate, not supported by data."

Erie Metropolitan Area Job Gains/Losses by Industry

Job Lossers and Gainers			
Metropolitan Statistical Area Nov 2006 to Nov 2016			
10-Year Employment Change		10-Year Percentage Change	
-4,500	Manufacturing	-48%	Information (Non Internet)
-2,100	Professional and Business Services	-18%	Manufacturing
-1,000	Information (Non Internet)	-17%	Professional and Business Services
-500	Construction, Mining, Logging	-10%	Construction, Mining, Logging
-500	Government	-3%	Government
-300	Trade, Transportation, Utilities	-2%	Other Services
-100	Other Services	-2%	Financial Activities
-100	Financial Activities	-1%	Trade, Transportation, Utilities
2,200	Leisure and Hospitality	15%	Education and Health Services
3,800	Education and Health Services	19%	Leisure and Hospitality

-3,100 Net Loss

As shown above, recent U.S. Bureau of Labor Statistics data supports Kauffman's claim that "existing firms are net job destroyers" in Erie. Of the ten private sector industries in Erie, 8 out 10 had job losses over the last decade. The only two Erie industries that had employment gains were in low-wage industries of Leisure and Hospitality (that mainly consists of food services and bars) and Education and Health Services.

In order for Erie to grow, it must look at startups in emerging industries in energy, agriculture and the digital economy. Erie must also establish a routinized process to mass-produce and sustain startup businesses. Jobenomics is working with numerous communities and national organizations regarding implementing Jobenomics Community-Based Business Generators to mass-produce small and self-employed businesses for women, minorities, new workforce entrants (Gen Y/Z), veterans and other socioeconomically-challenged citizens.

Jobenomics Erie Goal: 3,500 New Direct Jobs within 5-Years

Jobenomics Erie Program	Direct Jobs (est. 5 Years)	% of 3,500 Job Goal
Community-Based Business Generator	1,550	44%
Staffing	50	1%
Direct-Care	600	17%
Digital Economy	500	14%
Renewable Energy & Technical Trades	400	11%
Urban Agriculture	650	19%
Micro-Farms (150)	450	13%
Controlled Agriculture Center	200	6%
Urban Mining	550	16%
eCyclingErie	50	1%
Light Industry	200	6%
Transportation & Logistics	300	9%
Workforce Re-Entry Center	750	21%
Ex-Offenders	300	9%
Would-Be-Offenders	300	9%
Disabled (PTSD) & Homeless Veterans	150	4%
Total	3,500	100%

Jobenomics contends that the antidote to declining job growth is mass-producing startup businesses. Mass production of startup business is central to the Jobenomics Erie Program, which focuses on business development in the most blighted inner city neighborhoods where it is most needed and impactful. The ultimate goal of the Jobenomics Erie program is to create hundreds of micro-businesses that will generate 3,500 new direct (not including indirect and induced jobs) employment opportunities with livable wages and viable long-term careers for these demographics over the next five years. Direct employment refers to employment directly related to the production of Erie goods and services. As a result of direct employment, indirect employment is also generated in the businesses that supply goods and services to the direct workforce, such as administrative and logistics jobs indirectly supporting the direct workforce. Induced employment occurs when peripheral jobs (e.g. food, accommodation, entertainment, etc.) are created by the spending of the direct and indirect workforce. If one assumes each direct new job will produce two to three times as many indirect and induced jobs, the total employment impact would equate to a total of 10,500 to 14,000 new jobs for Erie and the Erie Metropolitan Area. The national average direct-to-indirect/induced ratio is 3-times for service-providing industries and 5-times for goods-producing industries.

Jobenomics Erie will be built on a two existing and well-respected Erie programs that serve inner-city Erie's most socially and financially challenged communities. The Total Change Re-Entry Program,

developed by Climate Changers, a 501c3, addresses the challenges ex-offenders, gang members and at-risk youth by providing comprehensive skills and reentry programs. Veterans Miracle Center Erie, a 501c3, serves veterans by providing counseling, services, new clothing, products, housewares to those in need free of charge. The Jobenomics Erie Program will introduce four new initiatives to accelerate these programs as well as expanding their outreach to other Erie demographics with the greatest need and highest potential.

The four new Jobenomics initiatives include: (1) a Jobenomics Community-Based Business Generator to identify, train, certify high-potential candidates for existing employment opportunities and mass-producing new micro-business in direct-care, digital economy, renewable energy and technical trades, (2) a Jobenomics/ACTS Freedom Farms Urban Agriculture initiative that will employ advanced indoor hydroponics and vertical farming technology to produce 150 one-acre urban micro-farms and a large 100,000 square foot indoor controlled agriculture complex using state-of-the-art hydroponic and vertical agriculture technology, (3) a Jobenomics Urban Mining initiative based on proven eCyclingUSA technology for reclaiming high-value material from electronic waste and using the profits to fund ongoing and additional Jobenomics Erie programs, and (4) a Jobenomics Workforce Re-Entry Program to create micro-businesses and jobs for formerly incarcerated, gang members and at-risk youth in order to reduce crime, deter social unrest and provide meaningful career opportunities to those who are often shunned, excluded or isolated from mainstream society. Each of these four new Jobenomics initiatives will be presented in detail in this document. Additional, documentation and detailed business and financial plans are also available. The Jobenomics Erie team plans to roll-out our program by April 2017, see www.JobenomicsErie.com (in development) for information and updates on our progress.

Community leadership and support will be paramount to the success of Jobenomics. Jobenomics is currently servicing a dozen similar initiatives in other cities and states. What makes Jobenomics Erie special is the fact that Climate Changers Inc. and Veterans Miracle Center are both established and highly-respected organizations. Both organizations stepped up to lead Jobenomics Erie, not as a peripheral endeavor, but as a primary mission. Both organizations deal with the financially-distressed and under-served members of the Erie community. They understand that even the most disenfranchised and disheartened people at the bottom of America's socioeconomic pyramid can accomplish get things if they have hope, a clear path, proper mentoring and support.

This carousel crafted from discarded Legos was made by a young Florida boy with a little mentoring from his father. It was sold for \$1,700 to an elderly man located in the Outback region in Australia for his wife's birthday present. With a little help and encouragement, Jobenomics asserts even the most unskilled and unlikely candidates in the Jobenomics Erie program will discover their God-given gifts are worth something to somebody in some way, much in same way that the little boy did with the elderly Australian. Inner-city Erie has vast amounts of untapped talent that needs to be directed in a way to create careers that satisfy community needs.



Jobenomics Erie Team

Principal Jobenomics Erie Organizations

Jobenomics. Jobenomics deals with the economics of business and job creation. The Jobenomics National Grassroots Movement's goal is to facilitate creation of 20 million net new U.S. jobs within a decade. The Movement has a following of over 20 million people. Jobenomics produces a series of books and comprehensive quarterly employment and unemployment reports on economic, business and workforce development. Jobenomics.com website/blog had 6 million hits over the last year, a growth rate of 400% over the previous year. Jobenomics also provides advice and timely data to policy and decision-makers on business and job creation. Today, over a dozen cities and states have started Jobenomics initiatives led by local community leaders. These initiatives focus on people at the base of America's socioeconomic pyramid with emphasis on women, minorities, youth, veterans and citizens who want to work or start a business. Climate Changers Inc., a highly respected local 501c3 non-profit organization was selected by Jobenomics to lead Jobenomics Erie's inner city related programs. Veterans Miracle Center (VMC, also a 501c3) was chosen to lead Jobenomics Erie's veterans-related programs. Alongside these organizations and new organizations as appropriate, the Jobenomics Erie Program will introduce four major community-based business and job creation initiatives. For more information on Jobenomics see <https://jobenomicsblog.com/about/>.



Climate Changers, Inc. The Total Change Re-Entry Program is a broad assistance program for former inmates, indigent persons, and others who are struggling to re-enter productive society; through education, health and human services, local business and agency support collaboration, and community awareness outreach. The Total Change Program includes three phases that supply the individual with the most comprehensive set of tools to give them the greatest chance of successfully navigating life using a combination of evidence-based programs. Phase 1 consists of a Pre-Release Program at the institution of incarceration that prepares the incarcerated for re-entry, employment opportunities, basics tasks and necessities (driver's licenses, etc.), problem solving, coping skills and dealing with rejection. Phase 2 is a 6 to 12 month Intense Residential/Non-Residential component that emphasizes continued education involving family values, personal adjustments, internal/external situational awareness, decision making and overcoming perceived notions. Phase 3 involves Aftercare and its tools remain accessible to all participants to assist them in living as law abiding productive citizens. For more on Climate Changers and their Total Change Re-Entry Program see <http://totalchangeprogram.com/>.



Veterans Miracle Center Erie. The Veterans Miracle Center (VMC)'s mission is to offer veterans and active-duty military personnel real solutions that will enhance their lives. VMC provides veterans clothing, personal care and hygiene products, houseware items, furniture, appliances, electronics, ambulatory equipment, toys for their children and more. VMC also makes referrals and collaborates with local agencies to connect vets with specialists and counselors for personal needs, jobs, housing or financing. All goods and services are available free-of-charge to veterans and their immediate household. It isn't solely Veterans Miracle Center Erie assisting



veterans. VMC collaborates with local businesses, individuals, unions, non-profits and various veteran organizations to help provide basic life necessities to our men and women veterans. Many are low income veterans who are struggling to provide for their families, or are disabled and in need of someone to offer a helping hand. For more on the Veterans Miracle Center see <http://vmcerie.org/about-us/>.

Jobenomics Erie Management Team

Jobenomics Erie Leadership Team



Curtis Jones



Fred Williams



John Kowalczyk



Chuck Vollmer
Architect



Kim Burney
Coordinator

Bishop Curtis Jones, Sr. (Erie, PA) is the Jobenomics Erie Co-Team Leader for inner city programs and Co-Founder/CEO Climate Changers, Inc., an Erie-based non-profit organization. As Senior Pastor of New Life and Spirit Revival Center, Curtis helps individuals in “need of the spiritual and natural healing of God”. In fulfilling his calling, Bishop Jones, along with his **co-pastor and wife, Vickie Jones**, established and implemented numerous faith-based initiatives that have transcended the traditional institutional boundaries of the religious community. The combined power of ecclesiastical and nonprofit communities harnesses human, financial and information resources in the fight against, human offenses, homelessness and other social diseases. For more see: <http://totalchangeprogram.com/about/>.

Fredrick Williams (Erie, PA) is the Jobenomics Erie Co-Team Leader for inner city programs and Co-Founder/COO Climate Changers, Inc., an Erie-based non-profit organization. Fred is an author of several books and the creator of the successful prevention program Our Energy Within, teaching at risk students how to tap into their energy within to prevent risky behaviors. As a certified Behavioral Specialist Fred has taught Drug, Alcohol, Violence and Gambling Prevention in schools and counseled many students and families. Fred has over 25 years’ experience as a counselor and career guide for reentry and is currently working with the Erie correctional facilities (men, women and juvenile) using his Total Change reentry program to reduce recidivism. Fred utilizes his own ex-offender experience as an ex-offender to work with individuals who are ready to change their lives and prepare to return to society as productive citizens. Fred is a certified welder and a former U.S. Army Military Police Officer. For more see: <http://totalchangeprogram.com/about/>.

John Kowalczyk (Erie, PA) is the Jobenomics Erie Team Leader for veteran's related programs, and Founder and Director of the Veterans Miracle Center Erie, an Erie-based regional non-profit (501c3) humanitarian aid organization. VMC Erie was replicated from Veterans Miracle Center Albany, New York. John has over 20 years in business; mostly notably was the founder of Covenant Builders, a residential real estate development company and D&J Imports, a wholesale company. He also was the Founder of the Isaiah 61 Ministries in Erie, Pa. which ministered emotional healing to victims of trauma and abuse, in conjunction with the local counseling community for over 25-years. He serves on a number of boards, most recently serving on the MyVA Community Engagement Board. The U.S. Department of Veterans Affairs' MyVA Communities model enables Veteran advocates, service providers, veterans, and stakeholders to have a voice in identifying their community goals and work to resolve issues at the local level to improve service delivery for Veterans, Service members, and their families.

Charles D. (Chuck) Vollmer (Vienna, VA). In addition to being a man of faith and highly-decorated combat fighter pilot, Chuck Vollmer is one of America's foremost economic, business and workforce development experts. Over the last four decades, he excelled in developing national and international initiatives with senior government and business officials around the world. He held senior positions in the corporate world and is a serial entrepreneur who started hundreds of programs and businesses. As a researcher and analyst, Chuck authored six books on the U.S. economy, workforce development, and small business and job creation. The key elements of his Jobenomics Plan for America include Jobenomics (the book), Quarterly Employment & Unemployment Reports on the fastest growing occupations and labor force trends, Energy Technology Revolution Plan, Network Technology Revolution Plan, Urban Mining Program and an Urban Agricultural Program. Today, over a dozen cities and states have started Jobenomics initiatives led by local community leaders under Chuck's tutelage. Chuck is the lead architect for Jobenomics Erie, which is Jobenomics' latest inner-city initiative. Chuck is also the CEO of eCyclingUSA, Vice Chairman of the ACTS Freedom Farm Advisory Board, and a Strategic Advisor to the Founder of The Hope Collection. For more see: <https://jobenomicsblog.com/about/>.

Kim Burney (Erie, PA) is an entrepreneur who has successfully owned and operated several businesses; from publishing to physical products with global distribution. Kim has a degree in Computer Science and uses her technology skills to help businesses grow. In the hospitality industry, Kim broke the glass ceiling in the 80's running 15 restaurants, overseeing 2500 employees with a budget of 22 million per year, Kim's diverse background makes her uniquely qualified to consult with clients to automate their systems and remove bottlenecks. Kim's strength is in entrepreneurial training, connecting resources, clarifying opportunities for monetization of assets, building teams to execute projects and business development. Kim loves helping the community and is certified as an ELI Ice House Entrepreneurship facilitator. The Entrepreneurial Learning Initiative (ELI) is a social enterprise dedicated to expanding human potential through its entrepreneurial mindset education programs and the Ice House program is all about understanding the mindset of successful small business owners and entrepreneurs. As an Ice House facilitator, Kim (1) teaches inmates to use their entrepreneurial mindset to create a life beyond prison; (2) is a certified prevention specialist (drug, alcohol, bullying and gambling) and (3) is a certified "miracles" coach. As the Founder/Owner Attraction Center Publishing, Kim will build and be the webmaster for the www.JobenomicsErie.com website and social media platform.

Joel Griffing (Orlando, FL), a former mathematics teacher and basketball coach, has risen to international prominence as the founder of The Hope Collection (a 501c3, <http://thehopecollection.org/>). The mission of The Hope Collection is to identify and supply resources supporting projects that will provide “substantial and sustainable social and economic growth” in the fields of Health & Wellness, Performing and Fine Arts, Family Issues, Development & Housing, Technology/Energy/Communications, Faith Based Leadership, Education, Food & Nutrition. As principal partner in the Jobenomics National Grassroots Movement, Joel will personally bring his international staff to Erie to train the Jobenomics Erie’s management team and Erie trainers how to access The Hope Collection’s **9,000 skills-based training and certification programs**, in the areas listed above, in order to create “careers within a year.”

R. Michael Buehler (Los Angeles, Ca) is the CEO/Founder at ACTS Freedom Farms of America (www.ACTSFFA.com). As the son of a mid-western "sharecropper," he provides a first-hand prospective and understanding of land-ownership versus tenant-farming practices, as well as the power and benefits of Co-Operative participation for securing lower costs with higher yields for all forms of farming. He has recognized the long term complicating factors surrounding mass corporate no-till farming, the impact of genetically altered seed, the deteriorating nutritional value of today’s food crops, and the lack of natural replenishment of soil nutrients. In November 2016, Michael was the recipient of World Safe's 2016-2017 Visionary Award for his efforts to create master-planned, live-work, agricultural communities throughout the United States, which specifically offers American Veterans opportunities to achieve home ownership and establish meaningful and sustainable careers as Agricultural Specialists in ACTS Freedom Farms of America's high-tech agriculture program to create to produce over 100 sites (locations), each with an average of 250 highly-scalable micro-farms. Jobenomics Erie Freedom Farms is envisioned to be one of the first five locations with an estimated 150 veteran-owned micro-farms and a central 100,000 square controlled agriculture center in inner-city Erie.

Peter Hessler (Karlstadt, Germany), CEO of UNTHA Recyclingtechnik (URT, <http://www.urt-recycling.com/seite/en/disposal/04/-/Home.html>) is Jobenomics eCyclingUSA’s German engineering and manufacturing partner for electric and electronic scrap, and for the disposal of waste refrigerators according to the latest state-of-the-art technology and the applicable U.S. EPA regulations. Peter designed and installed hundreds of advanced technology material’s reclamation facilities (MRF) around the world and leads an engineering team of over 150 direct employees familiar with the latest state-of-the-art MRF systems and technologies. With the support of Steve Grueber and Tim Tassick, URT will manufacture and install a turnkey electronic-waste processing facility within 12-months (after contract award) for eCyclingErie.

Steve Grueber (Youngstown, OH) is a Jobenomics Principal and eCyclingUSA EVP Engineering & Development and is Jobenomics’ lead person for eCyclingErie and ACTS-Erie Freedom Farms (hydroponic and vertical farming) efforts. He has over 35 years’ experience in facilities management services to municipal, industrial, commercial and private sector complexes. As Founder and Co-owner of ODYSSEY Environmental, LLC., he provides professional industrial cleaning services and waste management field services to municipal, industrial, commercial and private sector clients. Mr. Grueber has extensive experience in project management and leading environment and materials reclamation efforts. He has been active in all aspects of environmental services, including numerous recycling initiatives. He has worked with numerous companies on projects including: Equifax, Atlantic

Electric, Cleveland Illuminating, Columbia Gas, Equitable Gas and Transmission, Peoples Gas, Philadelphia Power and Light, Consul Energy, Chesapeake Energy.

Tim Tassick (Erie, PA) is a Partner at SST Eco Inc. (an Erie-based firm specializing in green technology business and job creation for medical, energy, food and recycling industries) and an entrepreneur who helped develop patents for a variety of applications over the last two decades. Tim was instrumental in gifting a total of over \$1 million in wound-care products to troops overseas. His background led him to the Erie City Mission where he is a mentor for the less fortunate, offering a direction and finding them a job and careers. In 2012, Tim was awarded Man of the Year for the Leukemia and Lymphoma Society for Erie, PA. Tim was responsible for spearheading the initial Jobenomics meeting in Erie in January 2017 and for bringing the Veterans Miracle Center to the Jobenomics Erie team. Along with Steve Grueber, Tim will lead the Jobenomics implementation efforts for eCyclingErie and Jobenomics Erie Freedom Farms.

Alan R. Kugler (Erie, PA) is the principal at PA Futures LLC, a Pennsylvania state-wide civic and governmental affairs consulting organization that assists the public, local officials, and community leaders to improve the vitality and quality of life of communities through civic and governmental cross-jurisdictional coordination and collaboration. Toward this end, Alan provides goal directed project management, research, writing, analysis, facilitation, coordination, consultation and technical assistance for a wide range of activities. Alan is also a co-founder and director of the Pennsylvania Electronic Government Consortium (PAeGovC), a not-for-profit organization providing local governments and organizations with technical assistance, information, educational opportunities and services to attain the benefits of state-of-the-art data management, collaboration and programming. He is also the co-founder of Government Data Aggregation Tools (GovDats.online) a start-up business consisting of a digital library of state, county and local government documents, and non-governmental public documents, that includes records, information, publications, reports and data from across the United States. It is coupled with keywords, high-level searching technologies, and advanced analytics for the user to rapidly, systematically and effectively locate and organize what is needed for research, analysis, visioning, planning, policy development and other purposes.

Nicole Washington (Los Angeles, CA) Founder and CEO of the highly successful Micro Biz Coach (<http://www.micro-biz-coach.com/>) enterprise in Los Angeles and Jobenomics partner will lead the initial digital economy business creation effort and will train Erie trainers for subsequent efforts. Micro Biz Coach is a small business and minority-owned business advocate that is a one-stop-shop for people seeking to establish a startup business. Micro Biz Coach specializes in helping startups create, develop and enhance their business products and services through the integration of web-based technology into their business processes. Ms. Washington is also skilled with incorporating turnkey self-employed businesses, establishing merchant accounts, websites, social networking, affiliate marketing, and business ownership, management and operations training and online tutorials.

Joe Sarubbi (Boca Raton, FL) is a Jobenomics member with over 37 years of experience, specializing in technical education, training, and workforce development. Under Joe's leadership, a team of nine Regional Training Providers partnered with nearly 500 community colleges, and over 1,000 instructors received training. Currently, Joe is consulting for the Interstate Renewable Energy Council (IREC), serving as Project Manager for two national Department of Energy initiatives – the Solar Instructor Training Network (SITN), and Grid Engineering for Accelerated Renewable Energy

Deployment (GEARED). Mr. Sarubbi was the main architect of TEC-SMART, the country's first totally integrated Training and Education Center for Semi-Conductor Manufacturing and Alternative and Renewable Technologies, and in 2009 was honored by the visit of President Obama in which the President recognized his work as a "model program" for other institutions (like Erie) to emulate.

Michael F. (Mike) Chevalier (Erie, PA) after completing his BA and MEd at Gannon University, Mike worked in the field of drug and alcohol counseling for several social service employers before starting his own business, Preferred Systems, Inc. in 1996. Preferred Systems is a provider of national continuing education programs and certification for 44 different professions. Preferred Systems also strives to improve our community by providing At Risk Behavioral Prevention Programs locally in Schools and provides minority adults with employment opportunities by providing recruitment, assessment and placement services to the building trades to place qualified individuals in their apprenticeship training programs. Preferred has developed and designed programs to enhance the employability of disconnected individuals and give them practical exposure to future career paths. Over the past 12 years they have been involved with several large construction projects, successfully recruiting, training and placing minority adults to work on various projects. Mike serves Erie through his participation on numerous boards and organizations. He has been active on The Martin Luther King Community Center Board since 2009 and served as Board President from 2011 through 2015. Most recently, he served on the Northwest Pa. Workforce Investment Board, Regional Center for Workforce Excellence, Erie County Truancy Coalition, United Neighborhood Facilities Health Care Corporation, National Council on Problem Gambling, Erie County Heroin Task Force, Erie Together and Destination Erie. He has been an instructor for Family Services of Northwest PA, is a Certified Problem Gambling Trainer, Prevention Ethics and Ice House Entrepreneurship Facilitator. Mike is a supporter and avid mentor for Climate Changers and will help bring Jobenomics Erie to the attention of local leaders through his extensive connections and board positions.

Scott Bonnell (Erie, PA) is the Owner Bonnell's Auto Group (<http://www.bonnellsauto.com/>), a company that employs 80 people in Erie. Scott strongly believes in giving back to the community. Scott is a community activist and philanthropist to many Erie organizations and charities, including Climate Changers, Africa 6000, The Erie City Mission, The Women's Care Center, EUMA, Relay for Life, Serve Erie, Auto Racers for Kids and Community Country Day School. He currently serves as the Executive Chairman 2014 Rock the Lakes Franklin Graham Festival, Executive Board member Manufacturer's & Business Association and Vice President Auto Racers for Kids. His reason for being on the Jobenomics Erie team is that he has had a passion to help bring unity among church, business and city leaders. Born and raised in Erie, Scott has a vision that "one day we can all work and live together in unity regardless of race, religion and culture."

Dr. Gae Anderson-Miller (Erie, PA) is the President of Anderson-Miller Consulting (<http://AndersonMillerConsulting.com>). As a former teacher, principal and professor at the University of Pittsburgh, Norfolk State University (an HBCU), Mercyhurst University and Edinboro University, her doctorate in Instruction, Learning and Creativity helps to guide her life's work. She currently trains government managers, directors and elected county officials in teamwork, communication and collaboration skills. Gae also teaches female inmates at the Erie County Prison for the Total Change Program. As a successful grant writer, gaining federal funds from NASA, NSF, The Erie Community Foundation and PA DCED, Gae is also trained as an ELI Ice House Entrepreneurial Program facilitator. Serving as a board member of the Upper Room Homeless Shelter, Dr. Anderson-

Miller obtained funding for major improvements to the facility. Gae will help lead the Jobenomics Erie education and training efforts. She will also lead Jobenomics Erie's federal, state and local grant writing efforts to help fund Jobenomics Erie programs.

Kathi Danielson (Erie, PA) is the Founder/President of Performance & Event Management, LLC. (<http://PerformanceAndEventMgt.com>). Since 2004, Kathi has owned and produced the largest BBQ party in the region, the Erie's Wild Rib Cook Off & Music Festival, which is the main summer kick-off event for Erie. She has always made it her mission to attract local non-profit groups and area businesses to be a part of the excitement offering them an opportunity to showcase their products or services. Now entering its 27th season, this signature event attracts over 50,000 visitors to Erie's downtown providing an economic boost to the area. Kathi has produced numerous projects regionally. She also organizes corporate meetings and produces private and corporate functions. Kathi has an entrepreneurial spirit and epitomizes "think big and make it happen." Kathi will use her expertise in event management to set up and manage events for Jobenomics Erie.

Tyrone L. Clark, "TLC" (Erie, PA) is the Pastor, Christ Temple Church of Erie and sits on several boards including the Northwest PA Workforce Investment Board (WIB). TLC is also the founder and principle of MGC-ERIE, a marketing communications consulting firm for fortune 500 companies including General Electric, ALCOA, Westinghouse, Morris & Knudsen and Bristol Meyers Squibb. Regionally the company works with large and small engineering firms to help them meet their business development and public relations needs. Locally, MGC-Erie consults with a variety of businesses including the Erie Regional Airport Authority on the \$83 Million Runway Improvement Program. In 1997, he and his associates founded the Urban Erie Community Development Corporation (UECDC). In 2008 he founded the Youth Literacy Project, Inc (YLP). The YLP assists young people in grades K-8 in becoming more proficient in reading. His wife Mari Anne currently serves as Project Coordinator. Recently, he instituted the Great Lakes Community Chaplaincy for the sick and shut-in, the elderly and others in need of special care and/or guidance. As an officer of the City Wide Crusade (CWC) a nonprofit faith based organization, TLC uses his public relations background to manage conferences that hosts such notables as Bishop T. D. Jakes.

Greg Smith (Erie, PA) is an attorney, a former prosecutor in New Jersey, and legal counselor to Climate Changers and Jobenomics Erie. Greg is a former pastor and will help counsel (pastoral and legal) Jobenomics Erie members and candidates.

Jobenomics Erie's Business Generator and Technical Training Programs

Jobenomics Erie Program	Direct Jobs (est. 5 Years)	% of 3,500 Job Goal
Community-Based Business Generator	1,550	44%
Staffing	50	1%
Direct-Care	600	17%
Digital Economy	500	14%
Renewable Energy & Technical Trades	400	11%

Jobenomics Community-Based Business Generator Concept

Jobenomics Community-Based Business Generators mass-produce startup businesses by: (1) working with community leaders to identify high-potential business owners and employees, (2) executing a due diligence process to identify potential high quality business leaders and employees, (3) training and certifying these leaders and employees in targeted occupations, (4) creating highly repeatable and highly scalable “turn-key” small and self-employed businesses, (5) establishing sources of startup funding, recurring funding and contracts to provide a consistent source of revenue for new businesses after incorporation, and (6) providing mentoring and back-office support services to extend the life span and profitability of businesses created by the Jobenomics Community-Based Business Generators.

The process starts by using community leaders to identify high potential job seekers. Churches, non-profit institutions, schools, sports teams and veterans groups are a great source for identifying talent, desire and fortitude. These organizations provide the first phase of the triage process by screening and assessing high performance people who are known to them. The second stage is accomplished during onboarding that involves Jobenomics screening and assessing. The third stage uses aptitude and personality tests to determine potential career paths.

Once completed, candidates will be separated into a business leader group or a high potential employee group for training. The leader group will undergo management and startup business training. The employee group will undergo skills training based on the role that they will assume in the startup business (operational, technical, mechanical, financial, marketing, administrative, etc.). After the training is completed and certifications awarded, the team will commence startup operations under the guidance and assistance of the Jobenomics Community-Based Business Generator team. Jobenomics contends that Community-Based Business Generators could vastly improve the rate of startups and expanding businesses, and reduce the rate of contracting and closing businesses.

Starting with a pool of thousands of candidates, Jobenomics will work with local civic organizations (churches, non-profits, sports teams, etc.) to identify and nominate the top 30% to 50%, who they know, for the Jobenomics Community-Based Business Generator program. This is the first stage of the due diligence process to separate the proverbial wheat from the chaff.

These nominees will then be subjected to standard aptitude and attitude tests in order to identify and assist (1) those that should be sent to other educational (GED and postsecondary) or training

(vocational) centers for career development, (2) those that are qualified and suitable for immediate employment with existing companies, and (3) those that desire and have an aptitude for starting a small or self-employed business. Jobenomics Community-Based Business Generator will help all people who enter the program to find meaningful employment and career paths.

Jobenomics Community-Based Business Generator Process



A Unique Community-Based Business And Workforce Development Process

Jobenomics envisions that 25% of the nominees would seek a traditional education and training path, 25% would be hired directly by existing business who are looking for quality workers, and 50% would seek a more independent and self-sufficient route offered by a small business startup or self-employment.

Of the 50% that choose the Jobenomics Community-Based Business Generator training and certification process, Jobenomics anticipates that approximately 25% will eventually implement a small business startup or incorporate as a self-employed business. The 75% that undergoes but does not complete the Jobenomics Community-Based Business Generator process will be certified (with empirical data by professional testing and evaluation) as high-quality candidates for immediate employment or traditional education/vocational training.

The overall objective is to mass-produce small and self-employed businesses, which makes the Jobenomics Community-Based Business Generator process unique as a traditional business and workforce development center. Traditional workforce development processes focus on preparing potential workers for employment by existing businesses—usually large corporations. For marginalized individuals at the base of the American economic pyramid (especially those in depressed urban and rural areas) the odds of employment at existing businesses are slim as evidenced by the long lines at traditional job fairs versus the low percentage of people hired.

The Jobenomics process focuses on preparing workers for starting a business, whether they actually start one or use the experience to be more competitive to get a job. In today's world, gainful

employment is difficult and oriented to those that are currently employed, credentialed or high-skilled. Conversely, a common complaint that Jobenomics often hears from companies is that they have a very hard time (1) finding good people who want to work, (2) who have the right attitudes and aptitude for work, and (3) who have workforce credentials, experience or related skills.

Every nominee that enters the Jobenomics process will setup a self-employed business, which can be incorporated in a matter of days, and undergo elementary business training. The reason for setting up a small business is to make them more competitive in today's job market. Many employers prefer to "try before they buy." An incorporated self-employed individual can position themselves for subcontract or contingent work (1099) as a prelude to standard full-time work (W2). Even if a self-employed individual never receives an income as a self-employed business, that individual can present themselves with credentials (Employer ID Number, website, business card and skills resume) that align with the business community. In addition, Jobenomics will provide additional credentials regarding the individual's workforce aptitude, skills and suitability tailored to the specific hiring opportunity. Jobenomics credentialing, along with letters of recommendation from the nominees' sponsoring organization, will greatly distinguish the individual from the masses of unemployed or new or returning workforce entrants.

Skills-Based Training and Certification Programs

Current Erie Metropolitan Area Employment

Largest to Smallest Employers		
Metropolitan Statistical Area Nov 2016		
%	Jobs	Industry
23%	29,700	Education and Health Services
17%	21,600	Trade, Transportation, and Utilities
16%	20,300	Manufacturing
13%	16,500	Government
11%	14,200	Leisure and Hospitality
8%	10,200	Professional and Business Services
5%	6,300	Financial Activities
5%	6,000	Other Services
3%	4,500	Construction, Mining, Logging
1%	1,100	Information (Non Internet)
130,400 Total Nonfarm Employment		

The Erie metropolitan area currently employs 130,000 citizens. 55% of all Erie jobs are concentrated in three industrial sectors: Education and Health Services; Trade, Transportation and Utilities; and Manufacturing. These areas will receive special attention. While only 3% of the overall employment picture, Construction will also receive attention inasmuch as many of the Jobenomics Erie programs, such as Jobenomics Erie Freedom Farms (described next), will produce significant amount of construction jobs associated with building homes and assembling large greenhouses (6,000 square feet) as well as demolition of derelict homes and building on the new micro-farm sites.

Many of the initial candidates are likely to prefer working for existing companies rather than going through the Jobenomics process. Anticipating this, Jobenomics will implement a "pipeline" to connect these individuals who have undergone some level of due diligence to companies that are

hiring. Consequently, the Jobenomics management team includes a nationally recognized leader who developed such a pipeline system that has matched 250,000 veterans with companies. This system is ideally suited for matching Jobenomics candidates to local employment vacancies.

Erie County Top 50 Employers, Q2 2016

Rank	Employer	Rank	Employer
1	General Electric Company	26	Wegmans Food Markets Inc
2	Erie Indemnity Co	27	Voices for Independence
3	UPMC Hamot	28	Lakeshore Community Services Inc
4	State Government	29	Erie Homes for Children & Adults
5	Wal-Mart Associates Inc	30	Saint Mary's Home of Erie
6	Saint Vincent Health Center	31	McDonald's Restaurants of PA Inc
7	Federal Government	32	Infinity Resources Inc
8	School District of the City of Erie	33	Dr. Gertrude A. Barber in Home Services
9	Erie County	34	Scotts Dev Co/Scotts Splash Lagoon
10	Dr. Gertrude A Barber Center Inc	35	Waldameer Park Inc
11	Presque Isle Downs Inc	36	Welch Foods Inc
12	Millcreek Township School District	37	Port Erie Plastics Inc
13	City of Erie	38	Pleasant Ridge Manor
14	Lord Corporation	39	Stairways Behavioral Health
15	Country Fair Inc	40	Associated Clinical Laboratories LP
16	Plastek Industries Inc	41	C A Curtze Company
17	Pennsylvania State University	42	Lowe's Home Centers LLC
18	YMCA of Greater Erie	43	Northwest Bank
19	Gannon University	44	Lake Erie College of Osteopathic Medicine
20	Regional Health Services Inc	45	Harbor Creek School District
21	Millcreek Community Hospital	46	Career Concepts Staffing Services Inc
22	PA State System of Higher Education	47	Parker White Metal Co Inc
23	Mercyhurst University	48	Presbyterian Homes Inc
24	Saint Vincent Med Ed & Research Inst	49	Fort LeBoeuf School District
25	The Tamarkin Company	50	Sarah A Reed Children's Center

According to the Pennsylvania Department of Labor & Industry, these are the top 50 Erie County employers in 2016. Jobenomics Erie will approach each of these companies and attempt to arrange a technical training program based on their needs. In many cases, these companies will provide their own trainers to train highly-screened, high-potential and endorsed candidates by the Jobenomics Erie Community-Based Business Generator. Equally important to prospective hiring companies, candidates will have their own incorporated business, which will give the prospective hiring company a choice to subcontract them as 1099 contingency workers (depending on IRS rules) or to employ them as full-time standard W-2 workers. As mentioned, many employers prefer to try before buy. The recent growth in 1099 workers (IRS Form 1099-MISC used by independent contractors) suggests a massive transition from full-time to contingent work this decade.

America's labor force is in a state of transition from a standard full-time work force to a contingent workforce that consists of part-time, temporary, contract labor, independent contractors, consultants

and free-lancers who are called “contingency workers”. Today, 40% of all American workers are in the “contingent workforce.” In the inner-cities across America, the percentage of contingency workers is much higher due to depressed industries and low-skilled workers.

The Department of Labor Bureau of Labor Statistics (BLS) defines the contingent workforce as the portion of the labor force that has “nonstandard work arrangements” or those without “permanent jobs with a traditional employer-employee relationship.” The ever growing non-standard contingent workforce will consist of over 50% of the U.S. labor force overcoming today’s standard full-time workforce during the next decade. According to a recently released Harvard study, from February 2005 to November 2015, almost all employment growth (9.7 million) in the U.S. labor force occurred in the contingent workforce (9.4 million) as opposed to the standard labor force.

The contingent workforce is comprised of two categories: “**Core**” and “**Non-core**” **Contingency**. Since anecdotal evidence suggests that the vast majority of inner-city Erie residents are contingency workers, Jobenomics Erie will endeavor to minimize the core contingent workforce and maximize the non-core workforce.

Core contingency workers include part-time workers, agency temps, direct-hire temps, on-call workers and laborers and contract company workers. Core contingency workers are often low wage earners that have nonstandard work arrangements out of necessity (involuntary workers) and are often subject to exploitation. Government generally views core contingent workers as a fiscal liability since these workers often receive lower wages compared to “standard workers” and are not entitled to traditional employer-provided retirement and health benefits. Consequently, core contingent workers rely on government retirement, health benefits and other means-adjusted assistance programs to a much greater degree than the standard workforce. Low wage earning core contingency workers are the group most likely to become discouraged, quit looking for work and voluntarily depart the labor force.

Non-core contingency workers include independent contractors, self-employed workers and standard part-time workers who work fewer than 35 hours per week. Non-core contingency workers generally seek nonstandard work agreements as a matter of choice (voluntary workers). Jobenomics views the non-core workforce as a positive and growing economic force. Most next-generation workforce entrants (Generation Z’s digital natives) are not seeking traditional employer-employee relationships and prefer self-employment in the so-called “digital” economy. It is also important to note that the number of incorporated self-employed businesses has grown by 35% since year 2000, giving credence to the notion that non-core contingent businesses are an important faction of the U.S. labor force and overall economy—a faction that is neither well reported nor understood.

According to many labor force experts, new workforce entrants (e.g., Generation Z “Screenagers” and Generation Y “Millennials”) prefer contingent work over standard work for a number of reasons including self-direction, variety, flexibility and skill development. In addition Screenagers and Millennials exhibit a general disillusionment with traditional corporate social compacts and promises that have proven to be short-lived with older generations. Screenagers and Millennials also understand that traditional workforce growth is highly dependent on a robust economy, whereas contingent workforce growth is more resistant to economic fluctuations.

The rise of the contingent workforce is not unique to the United States. Furthermore, contingent work is being embraced by foreign policy-makers to a greater extent than in America. Japan serves as a good example. Japanese contingent workers (called non-regular workers) accounted for up to 50% of younger Japanese workers and 40% of the total Japanese labor force in 2014, up from 10% in 1990.

The Jobenomics-Hope Skills-Based Training and Certification Portfolio

From a Jobenomics perspective, understanding the difference between education and training is fundamental to U.S. labor force development. Education is foundational and generally measured by tenure. Training is specific and measured by what one can do once completed. Educational degree-oriented programs are measured in years and are usually expensive. Training programs are often as short as weeks or months, and are relatively inexpensive. For people seeking careers, degree-oriented programs are usually the best choice. For the underprivileged, unskilled and poorly educated segment of society, certificate-oriented technical skills-based training provides the most effective way to getting a good job, the first step towards a meaningful career.

The Hope Collection is a strategic partner in the Jobenomics National Grassroots Movement. Together the Jobenomics-Hope team is focused on providing skills-based training and certification programs for those at the bottom of America's socio-economic pyramid with special emphasis on inner-city contingency workers.

To reiterate, 40% of all American workers are in the contingent workforce. In the inner-cities across America, the percentage of contingency workers is much higher due to depressed industries and low-skilled workers. Jobenomics Erie estimates that Erie's inner-city workforce is overwhelmingly contingent workers. While empirical data is not available, inner-city Erie's contingent workforce could be as high as 90% based on the fact that inner-city household income is 87% below the national average (\$6,741 versus \$53,482). While Jobenomics-Hope training prepares and supplies workers to standard full-time employers, which are in short supply in Erie, the main emphasis has to be on preparing workers for higher-paying non-core contingent work as skilled part-timers, consultants, free-lancers, self-employed businesses and independent contractors.

The Hope Collection (<http://thehopecollection.org/>) team includes the leading, nationally-accredited, skills-based training and certification institutions in the United States. The Hope Collection's **9,000 online skills-based training and certification programs** are oriented to creating "careers within a year" in Health & Wellness, Performing and Fine Arts, Family Issues, Development & Housing, Technology/Energy/Communications, Faith Based Leadership, Education, Food & Nutrition.

Today's changing global marketplace produces employees who can be business owners at the same time. Such an environment turns costs to cash, equity and donations that support the causes of their choice and pay for a government to secure and facilitate the environment for the common good. Through its high-tech virtual incubator and high-touch community centers, Hope is providing both a virtual and hands on network to facilitate the process. Each Jobenomics Erie member will have access to proven tools to build their estates in concert with others who are doing the same, while funding the support systems to facilitate and sustain the community.

To deliver its skills-based training and certification programs, The Hope Collection developed a cloud-based Virtual Value Interactive Network (VVIN, a data base management system) used by tens of millions of people around the globe, managed by the Hope Resource & Research Center (www.RRCenter.org) and accessed free by Jobenomics Erie members via Optimize My Life (<http://www.optimizemylife.org/>). Optimize My Life also provides a myriad of other free programs and coaching, education and marketplace services.

The Hope Resource & Research Center (HRRC) is a for-profit subsidiary of The Hope Collection that is supported by the VVIN data base, project management system that organizes and sustains “affinity groups” such as business owners, workers, veterans, first responders, extended families of each group, generational population groups (Baby Boomers, Millennials etc.), marginalized groups (ex-offenders, disabled, abused etc.) as well as geographical groups (e.g., Jobenomics Erie). The HRRC will provide both initial training as well as “lifelong applied training” that will update worker and business skills throughout their lifetime. The Jobenomics Erie Community-Based Business Generator will provide local ICT (information, communications and technical) and hands-on support to the HRRC.

The Jobenomics Hope concept for lifelong applied learning, continuous career advancement and micro-business development incorporates a “duplex” micro-financing economic model for the contingent workforce and family members of the standard (full-time employed by corporations) workforce.

A duplex micro-financing economic model provides skilled-based training in multiple arenas that can then be incorporated for individuals and their family into an “S” Corporation/Family Limited Partnership structure. An S Corporation is a special type of corporation frequently used by self-employed and micro-businesses that allows shareholders to avoid double taxation by the IRS. Family Limited Partnership (FLPs) is type of partnership designed to centralize family business or investment accounts, and frequently used to move wealth from one generation to another. FLPs pool together a family's assets into one single family-owned business partnership in which family members own shares. As part of the Duplex, each person/family member's S Corp can use the HRRC's “e-Pantry in the Cloud” online shopping to convert purchases into a double digit tax-sheltered investment account. This investment account can be then reinvested into other equity-building opportunities (stock market, IRA/Keogh funds, insurance and charitable trusts, etc.) to build net worth as well as retirement and education accounts. To see a short video on the duplex micro-financing economic model narrated by Joel Griffing can be accessed by clicking [here](#).



In other words, Jobenomics Erie will create micro-businesses built around an incorporated family structure where each individual will have multiple skills and part-time occupations. As describe in more detail in the Jobenomics Erie Freedom Farm section of this document, the micro-farm represents the core occupation where the S Corp owner can earn an annual salary of \$65,000 on a part-time basis (20-hours per week after operations are established) and the owner and family

members can create multiple peripheral income earning opportunities to boost household income to over \$100,000 per year. The Jobenomics Direct-Care Program is ideally suited for online HRCC skills-based training and certification programs dealing with part-time to full-time contingent workforce healthcare, daycare, eldercare and behavioral care occupations.

Direct-Care Program

Jobenomics Erie also calls for creation of a Direct-Care Center as part of an overall Direct-Care Initiative focused on healthcare, behavioral care (mental health, chronic diseases and lifestyle changes such as dealing with obesity and drug abuse) eldercare and childcare. A Direct-Care Initiative would provide in-home services from local small, micro and self-employed businesses managed by community-based direct-care centers equipped with the latest information systems connected to a network replete with remote sensing, tele-health, real-time teleconferencing and mobile phone direct-care apps.

A number of factors are expected to lead to job growth in direct-care technology development as well as direct-care business and job creation: (1) growing population, (2) longer life expectancy, (3) chronic and age-related disease growth, (4) improved service-providing technology and (5) increasingly generous healthcare, social assistance and welfare programs.

Today, direct-care jobs are primarily funded through public funds. A direct-care initiative, designed around a community information and coordination center, could be largely paid by clients who need some assistance to retire at home or working families who can't afford the high cost of daycare.

According to the Bureau of Labor Statistics, in-home personal care service sector is projected to increase by 1.3 million jobs (a 70% growth rate compared to 14% for all U.S. occupations) from 2010 to 2020 with a median pay of approximately \$20,000. While \$20,000 is well below the \$33,000 median pay for all occupations, it is attractive to new workforce entrants, retirees who need supplemental income and contingent workers who often work multiple part-time jobs as a matter of choice. By incorporating home-based, self-employed businesses, Erie residents can take advantages of tax breaks offered to businesses as well as operating multiple part-time businesses to increase annual and family income.

Community-based direct-care centers will also help establish and manage home-based healthcare, eldercare and childcare businesses. By 2020, assisted-living facilities are projected to have a 17 million bed shortfall for aging and disabled baby boomers—in-home eldercare services by home-based caregivers could solve the assisted-living shortfall. Today, only 8% of childcare arrangements are conducted in a caregiver's own home. This percentage could be expanded significantly and safely if managed by a Direct-Care Center. Affordable childcare is a major issue for female-headed households in inner-city Erie, suburbs and the region.

Mass-producing self-employed, home-based childcare businesses that are safely managed could have significant impact on homebound mothers. More mothers could have home-based childcare businesses to supplement their income. More mothers could be emancipated from the home to pursue other occupational pursuits. The requisite childcare skills are natural for mothers who are or have raised children. Jobenomics believes that mothers should be afforded the opportunity to

monetize these skills. Micro and self-employed businesses are ideally suited to provide direct-care, either on full-time or part-time basis. These businesses are relatively easy to start.

In addition to training and certifying basic caregiving skills, a Direct-Care Center would provide proper regulatory oversight and quality control. The Direct-Care Center would also work with larger established businesses that provide services higher up the skills chain. Small and self-employed businesses can provide basic services at a lower cost than larger businesses, which is extremely important to the elderly and parents who cannot afford the price of current caregiving services.

Digital Economy Program

Jobenomics focuses on producing businesses and jobs related to the fast-growing digital economy as opposed the slower-growing traditional economy. The traditional economy is advancing at a sclerotic 2% annual rate compared to the digital economy's 15% and 20% growth rate. Consequently, Jobenomics Erie's Community-Based Business Generator will provide education, training and certification programs in the fastest growing elements (communities) within the emerging digital economy with emphasis on Erie's Generation Y (Millennials, ages 22 to 37) and Generation Z (Screenagers, age 21 and younger)—Erie's "digital natives".

The global digital economy will be shaped mainly by the digital generation and the ideology of their mentors. Generation Z, called Screenagers by Jobenomics due to the excessive amount of time online screen time that youngsters absorb, are true digital natives. These digital natives will shepherd Erie and Pennsylvania into the Digital Economy. Currently voting age and younger, Screenagers will soon be the fast growing segment of the U.S. labor force, standing aside their digital compatriots, the Millennials, who became the largest generation in the workforce in 2015 and the largest living American generation in 2016.

From a Jobenomics perspective there are at least seven unique but intertwined economic communities within the Digital Economy. The **E/M Economy** consists of electronic and mobile commerce that is transforming economies, government, business and society via network and digital technology, systems, processes and services. The **Sharing/On-Demand Economy**, is a new wave of peer-to-peer, access-driven businesses that are characterized by the ability of individuals to rent or borrow goods rather than buy and own them, or to quickly fulfill consumer demand via the immediate provisioning of goods and services. The **App/Bot/AI Economy** refers to the range of economic activity surrounding intelligent web-based applications. Apps (applications) are the digital interface through which we live, work and play and the primary way we engage with media, brands and ultimately with each other. A bot, also known as a web robot, an internet chatbot or simply bot, is an interactive, artificial intelligence-driven software application that runs automated tasks or simulates a conversation to deliver text-, voice- or video-based information to a user via a networked device. Artificial intelligence (AI) is the intelligence exhibited by machines or software that is able to do things normally done by people. The **Platform Economy** encompasses NTR-enabled social, business and government activities. Currently the platform economy is defined by the major players in the industry such as Apple, Google, Facebook and other major network-centric corporations. A **Gig/Contingent Workforce Economy** is an environment in which temporary positions are common and organizations contract with independent workers for short-term engagements. A **Data-Driven Economy** involves accessing and exploiting information and knowledge contained in big-data pools to

maximize operational efficiencies and reduce costs. The **Internet of Everything Economy** brings together people, process, data, and things to make networked connections more relevant and valuable than ever before—turning information into actions that create new capabilities, richer experiences, and unprecedented economic opportunity for nations, businesses and individuals.

The goal of the Jobenomics Erie's Community-Based Business Generator Digital Economy program is to identify, educate, train, certify startup small and self-employed business that will be well positioned for Erie's digital natives that are interested in pursuing a career in the areas like E/M-Commerce Economy, Sharing/On-Demand Economy and the Gig/Contingent Workforce Economy.

As compared to the traditional economy, according to digital economy experts, the digital economy is at least one hundred times easier to create and has ten times the number of innovators that can innovate at one-tenth the cost. In addition, digital startups are much faster than traditional startups, which can create an exciting opportunity for those that can capitalize on the momentum of the emerging digital economy.

Half the top quartile of highest paying jobs in America involves coding skills, a skill that often takes less than a year to get trained and certified. Over the last five years, demand for data analysts (a relatively easily certified skill involving evaluating sales figures, market research, logistics, or transportation costs) has increased by almost 400% in almost every industry. Within the data analyst field, data visualization (any effort to help people understand the significance of data by placing it in a visual context) has zoomed by over 2,500%.

Renewable Energy and Technical Training Programs

Renewable energy is one of the highest growth areas in today's economy. Jobenomics' 160-page Energy Technology Revolution Report is a unique energy technology report inasmuch as it looks at the U.S. energy ecosystem from a business and job creation perspective. Jobenomics asserts that the Energy Technology Revolution is likely to produce millions of small and self-employed businesses and tens of millions of net new U.S. jobs.

Jobenomics Erie initial skills-based training and certification efforts will focus energy surveys, energy audits (assessment of the energy needs and efficiency of a building or buildings), and weatherization (the practice of protecting a building and its interior from the elements and building modifying the building to reduce energy consumption and optimize energy efficiency).

Pennsylvania Power and Light (PPL) has a has generous Home Energy Assessment & Weatherization rebate program that makes these occupations viable for relatively low-skilled Jobenomics Erie Community-Based Business Generator candidates that are interested in the trades-related jobs. Jobenomics is also working with a number of investment institutions that are willing to provide micro-business loans that would equip a trained and certified candidate with the right tool and a truck necessary to start a business.

Jobenomics Erie Renewable Energy and Technical Training Program will also evaluate Erie's renewable energy employment potential across the renewable energy spectrum with initial emphasis on solar installation and maintenance services. Note: in addition to renewables, Mr. Steve Grueber is

an expert in fracking and energy waste management and will evaluate Erie's employment potential in these industries considering Erie's central location to the Marcellus Shale formation. Other examples of renewable energy services include: energy efficiency, energy conservation, Energy-as-a-Service (EaaS), energy assurance, energy security, and disaster preparedness and recovery. Energy efficiency serves as an excellent example as a potential Jobenomics Erie training program. Energy efficiency is one of the fastest growing American service industries.



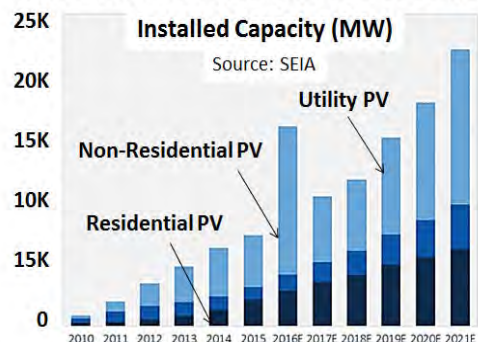
Today, energy efficiency is a multi-billion dollar industry with the potential to grow much higher. According to the American Council for an Energy-Efficient Economy, "robust investment in energy efficiency could save \$1.2 trillion by 2020, and the United States could create 1.3 to 1.9 million jobs by 2050 through the deployment of energy efficient technologies." Similarly, the Alliance to Save Energy projects 1.3 million jobs by 2030."¹ According to The Solar Foundation, the solar industry is creating jobs nearly 20-times faster than the overall U.S. economy.

Distributed and dispersed electrical generation installation services are likely to provide a significant percent of the number of future jobs and startup businesses created by Jobenomics Erie. Distributed and dispersed generation technologies generate electricity near the particular load they are intended to serve—at the point-of-consumption. Generating power at the point-of-consumption eliminates cost, complexity, interdependencies and inefficiencies associated with transmission and distribution.

- *Distributed generation* generally entails using many medium-sized solar, wind or natural gas generators that provide power to local (as opposed to long-distance) consumers in cities, towns, universities, industrial parks and government buildings. These medium-sized generations can be used on-grid or off-grid.
- *Dispersed generation* refers to small generating units that serve individual homes or businesses. These units (fossil fuel turbines, fuel cells, small wind and solar PV generators) are small enough to fit in garages or on rooftops and are usually off-grid unless connected to net-metering systems. Dispersed generation includes micro-units that are embedded components of other systems from electronic devices, water heaters, traffic cameras, cell towers and even electric cars. These micro-units are often off-grid.

The most feasible distributed and dispersed electrical generation installation services are likely to involve solar photovoltaics (PV). According to the U.S. Solar Market Insight Report 2015 Year in Review, published in conjunction with the Solar Energy Industries Association (SEIA), the U.S. is on the verge of the 1-millionth solar installation milestone. As shown, anticipating a threat of the federal Solar

U.S. Solar PV Installation Forecast



Investment Tax Credit (ITC) expiring at the end of 2016, developers and EPC (Engineering, Procurement, and Construction) companies filled their pipelines with projects that caused a large bump in installed capacity in 2016. Now that this threat is largely abated, SEIA forecasts robust growth through 2021. In addition, the SEIA projects that the solar installation industry will add “hundreds of thousands of well-paying solar jobs will be added in the next few years benefiting both America’s economy and the environment.”

Solar PV devices use semiconducting materials to convert sunlight directly into electricity. There are currently two solar PV technologies in production: crystalline silicon and thin film. Almost 90% of the world’s photovoltaics today are based on some variation of crystalline silicon. Crystalline solar panels are the most commonly used silicon for residential and small-scale applications. Crystalline panels are more expensive than thin film but are space-efficient and long-lasting. Thin-film solar cells are less expensive since they are mass produced, whereas crystalline panel production is more labor intensive. In comparison to crystalline silicon panels that are hard, opaque and heavy, thin-film technology is flexible, lightweight and translucent, which makes it ideal for customized applications.

1st generation silicon solar panels and 2nd generation solar thin-film technologies are restrained by the Shockley-Queisser limit of 34% power efficiency (the amount of sunlight power turned into electricity), whereas 3rd generation multi-layer solar cells may be able to approach efficiencies near 86%. Consequently, next-generation solar systems are likely to be much more efficient and significantly cheaper than current 1st generation solar panels. From a Jobenomics standpoint, each next generation of new solar technologies will produce significant number of new small installation businesses and jobs as more and more commercial and residential buildings adopt new technologies to replace older less efficient systems. More importantly, more efficient 2nd and 3rd generation solar is likely to make solar PV viable in less-sunny locations, like Erie.

Solar PV technology is evolving to the point that it can be embedded in roof shingles, or peel-and-stick thin-film solar cells. This will allow easy applications to buildings and structures, such as windows, without the cost of cumbersome mounting mechanisms. One-third of today’s PV generation is owned by third-party private companies that provide solar electricity or equipment to generate electrical power to building-owners and tenants, typically with little or no upfront costs. With net-metering, every building owner would constitute a micro-business that provides supplemental or emergency power to the grid as needed. Millions of renewable power micro-businesses would embody a “virtual grid” that could alleviate America’s multi-trillion dollar national grid modernization headache.

Initial Jobenomics Erie Renewable Energy and Technical Training Programs will be designed and led by Mr. Joe Sarubbi who is a national trainer-of-trainers expert. Joe Sarubbi is a project manager for two national Department of Energy initiatives, the Solar Instructor Training Network (SITN), and Grid Engineering for Accelerated Renewable Energy Deployment (GEARED).

The goal of the SITN was to grow the capacity of individuals with solar skills to support the rapid growth of the solar industry. Under Joe’s leadership, a team of nine Regional Training Providers partnered with nearly 500 community colleges, and over 1,000 instructors received training. During the five-year span over 30,000 individuals received solar training throughout the United States. He is also working with a large consortium of major universities and utilities to grow the technological

expertise and human capacity of Power Systems Engineers to support distributed generation and smart-grid technologies.

Joe Sarubbi with President Obama and Mrs. Biden at TEC-SMART



As a Board Member of the North American Board of Certified Energy Practitioners (NABCEP), Joe Sarubbi advises cities, states and numerous institutions regarding energy workforce development. 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, and in 2009 was honored by the visit of President Obama in which the President recognized his work as a "model program" for other states and cities to emulate.

A long-term objective of the Jobenomics Erie team is to work with municipal and Pennsylvania officials to develop a similar TEC-SMART facility in Erie as a future extension of the Jobenomics Erie Renewable Energy and Technical Training Program efforts.

Urban Agriculture

Jobenomics Erie Program		Direct Jobs (est. 5 Years)	% of 3,500 Job Goal
Urban Agriculture		650	19%
	Micro-Farms (150)	450	13%
	Controlled Agriculture Center	200	6%

Urban Agriculture Synopsis

Jobenomics Erie Freedom Farms will be part of the Jobenomics Urban Agriculture Initiative featuring state-of-the-art indoor controlled agriculture technology including hydroponic and vertical growing systems. Jobenomics Erie Freedom Farms will consist initially of one large (100,000 square foot) controlled agriculture center and 150 veteran-owned, micro-farms that can be located on as little as 1/2 acre lots. The annual gross revenues of Jobenomics Erie Freedom Farms is anticipated to be around \$30 million/year by the fifth year of operation and employing 650 people. The average salary for the micro-farmer is anticipated to be \$60,000 per year.

Urban Agriculture Overview

Urban agriculture, urban farming or urban gardening is the practice of cultivating, processing, and distributing food in or around a village, town or city. Urban agriculture can also involve animal husbandry, aquaculture, agroforestry, urban beekeeping and horticulture. Forward-thinking city planners are looking for vertical agriculture to take root in abandoned buildings, warehouses, empty lots and high rises. Urban agriculture grows fruits and vegetables year-round in facilities that are often in the same neighborhood as the restaurants and retailers they supply. The market for vegetable and fruits hydroponically grown or grown under greenhouse, mirrors the market for a broader class of agricultural products.

Urban agriculture also repurposed unused buildings and spaces occupying previously neglected warehouses, underutilized rooftops and other vacant areas. More and more cities and citizens are recognizing the important role that urban farms play in community development, economic growth, and environmental sustainability. For example, the City of Detroit believes that urban agriculture is the single-best industry to revitalize their inner-city and plans for Detroit to be the national leader in urban farming. In this regard, U.S. Senator Stabenow (D-Mich.) introduced the Urban Agriculture Act of 2016 as part of the next national five-year farm bill in 2018. Stabenow's proposal includes expansion of federal financial assistance, research, education and mentorship for urban farmers, and a new urban agriculture office within the Department of Agriculture.

The Jobenomics Erie Urban Agriculture Program will initially consist of a large indoor controlled agricultural center and a hundred or more satellite micro-farms located throughout Erie City. The center and micro-farms will use state-of-the-art vertical hydroponic growing systems as well as energy and resource saving technology systems (such as solar, wind and geothermal power) tailored to Erie based on the footprint, crop varieties, water availability, climate conditions and local energy costs.

Hydroponics is the fastest growing sector of both rural and urban agriculture. As population increases and arable land declines due to poor land management, people are turning new technologies like hydroponics to create additional channels of crop production. Hydroponics is so efficient, many believe it could move beyond a niche market and become a solution for food insecurity in the United States and Erie.

Jobenomics is partnered with ACTS Freedom Farms of America (FFA, www.ACTSFFA.com) to produce over 100 sites (locations), each with an average of 250 highly-scalable micro-farms (25,000 total) employing over 100,000 net new jobs in the next five years. Programs initiated under Jobenomics will be known as Jobenomics Freedom Farms. ACTS Freedom Farms business plan is one of the most comprehensive (thousands of pages long) business plans ever examined by Jobenomics. The business plan also includes partnership agreements with the world's largest suppliers of state-of-the-art vertical farming and hydroponic systems, technology, supplies and supply chains.

Jobenomics Freedom Farms initial projects focus on veteran-owned businesses—one of the primary focus areas of Jobenomics. Erie is being positioned to be one of the first five projects. The other four locations are sited in the state of Washington, California and Mississippi (2). The Erie site will be known as Jobenomics Erie Freedom Farms.

ACTS, Jobenomics & Jobenomics Erie Freedom Farms

Vision: Jobenomics Erie Freedom Farms is a solution to local, national and global food shortage utilizing controlled-environment agriculture including state-of-the-art vertical farming and hydroponic systems and technology.

Mission: Driven to provide a live-work environment for veterans and other diverse social groups by providing an uplifting, supportive and self-sustaining hope for the future.

Unique Value Proposition: Jobenomics Erie Freedom Farms will respond to local and regional organically-grown food shortages. In addition, Jobenomics Erie Freedom Farms will apply innovative controlled environment agricultural technologies that address the world's food shortages, which requires a 70% food production increase by 2050, incorporates best practices in natural resource allocation, responds to supply chain, food safety, food security, and food quality assurance issues while creating sustainable agricultural communities, micro-businesses, and careers.

Business Model & Strategy: ACTS Freedom Farms and Jobenomics Freedom Farms combine numerous for-profit and non-profit entities in a collaborative effort to meet demands, supply solutions, and create jobs. Both Freedom Farm programs are dedicated to re-investing the majority of its revenues to expand micro-farming across rural and urban America, and ultimately internationally, with its primary focus on providing hope and sustainable careers for individuals and families who need it the most.

Consequently, Jobenomics Erie Freedom Farms will execute a farm management strategy for (1) homeownership combined with an agricultural career, (2) corporate-owned hydroponic commercial growing operations, and (3) contracted privately-owned and privately-operated micro-farms to create high yield, high quality food production and sustainable growth.

Products & Services: Jobenomics Erie Freedom Farms live-work strategies address challenges of qualified workers, operational complexity, start-up and energy costs, and crop price volatility. Home

ownership in conjunction with sustainable jobs and state-of-the-art systems provide innovation, career development and operational excellence. Cost effective renewable energy and proprietary growing systems easily tailor crop selection to specific climate and cultural needs resulting in high yield, year-round nutritionally superior, pesticide and herbicide free, fruit and vegetables at premium prices. In contrast, grocers and farm markets offer similar products without assurance of consistent supply.

Technologies/Special Know-How: ACTS FFA is partnered with proven hydroponic manufacturers with favorable long-term lease/purchase options, on site set-up, training, ongoing support and advanced technology. ACTS FFA's commercial growing systems are simple to use, easy to maintain, and adaptable by climatic regions for optimum crop production. Solar, wind, and hydro-electric renewable energy is incorporated, reducing operating costs. Live-work micro-farm communities provide reliable labor partners committed to operational excellence. ACTS FFA offers participant's home ownership and career development setting ACTS FFA apart from other hydroponic growers in production capabilities and social impact.

Markets: ACTS FFA concept creates social appeal and global brand acceptance, enhancing international distribution opportunities. ACTS FFA serves the requirements of both the fresh and processing markets domestically and for export. Fresh market outlets include government, hotel, boutique eateries, gourmet markets, grocery, and restaurant chains. Crops grown for processing are produced under contract with processing firms. Initially, production strategies focus on the economic importance of tomatoes, potatoes, and lettuce for the U.S. market. ACTS FFA will target Canada, Japan, Taiwan, S. Korea, Mexico, and many other countries around the world as the top foreign buyers of vegetable exports.

Distribution Channels: Collective crop yields are regionally marketed through normal wholesale and retail distribution channels. Brokers/wholesalers provide access to major buyers, including government, supermarket, restaurant chains, upscale markets and fine restaurants that source continuous supplies of high quality grown produce. Retail distribution includes company owned stores and contracted vendors. Global demand for premium priced, quality produce creates unlimited international distribution opportunities.

Competition: The U.S. market's development of vertical hydroponics implementation lags considerably behind other developing countries around the world. Only 15 commercial scale vertical farms exist in the United States and none on the scale of ACTS FFA. International food production deficiency will minimize threats from competition considering the vast amount of food that will be needed. ACTS FFA partnerships with recognized global hydroponics leaders and alignments with major R&D programs assure our ability to secure the leadership role in the industry.

Outlook: The hydroponic industry expanded from \$1 billion in 2005 to \$9 billion in 2015. This rapid growth indicates that controlled-environment agriculture is poised to be a major producer in the U.S. food supply chain. Higher yields, lower inputs, improved soil and water quality, natural resource allocation, renewable energy use, and food safety are compelling forces for continued growth. A rise in organic production, birth of urban agriculture, under cover growing, growth of small operations, environmentalism and global awareness positively affect the hydroponic industry outlook.

Jobenomics Erie Freedom Farms Overview

Jobenomics Erie Freedom Farms will focus on the most blighted inner-city communities that are in need of revitalization, employment and nutrition. According to the Erie County Department of Health, “Having access to affordable, healthy food is important for physical, mental and emotional health. Erie County has 10 food deserts – areas where at least 1/3 of residents live more than 1 mile from the nearest grocery store or supermarket.”

Jobenomics Erie Freedom Farms will consist of one large (100,000 square foot) controlled agriculture center and 150 micro-farms that can be located on as little as 1/2 acre lots. There is no lack of inexpensive homes, buildings and vacant lots in inner-city Erie. As of February 2017, 400 new projected foreclosures (shown) are projected at an average cost of \$50,000 for the residence and lot. Similarly, Erie has a number of vacant 100,000+ square foot warehouses, dilapidated and underutilized buildings along major interstate highway systems, ports and railyards that could be instrumental for exporting organically-grown, pesticide, herbicide and GMO-free produce and other agricultural products (e.g., flowers) to other metropolitan areas (e.g., Buffalo, Pittsburgh, Chicago and New York City) as well as internationally.



Through a master-planned live-work agricultural community, Jobenomics Erie Freedom Farms will start with 150 veteran-owned micro-farms. The reason for starting with veterans are (1) they deserve special attention due to their service, (2) veterans have exhibited a work ethic in a team environment, (3) veteran skills and character traits have been well documented and vetted, and (4) veterans have access to Veterans Administration loans for homeownership. Once established, Jobenomics Erie Freedom Farms plans an additional 100 micro-farms to non-veterans.

master-planned live-work agricultural community will be managed and sourced by ACTS FFA The Jobenomics Erie Freedom Farms master-planned live-work agricultural community will be managed and sourced by ACTS FFA. Approximately 50% of the community will be privately-owned by the micro-farmers.



The 100,000+ square foot controlled agricultural center (AG Core) will be owned by ACTS. Jobenomics Erie Freedom Farms will receive a small percentage (TBD) of the operations. Crops grown for processing will be produced under contract with processing firms. Fresh market outlets include government, hotel, boutique eateries, gourmet markets, grocery, and restaurant chains as well as international markets.





Each micro-farm will consist of the land and home (1,500 sf to 2,500 sf owned by the veteran, estimated cost \$85,000) and a leased state-of-the-art hydroponic and vertical



agriculture 6,000 square foot greenhouse that will be equipped and supplied by AG Core along with requisite supplies and equipment for sustainable operations (estimated cost \$250,000). It is estimated that with the first year of operation, the veteran farmer will be able to earn an annual salary of \$60,000 after paying micro-farming expenses. Since it will only require approximately 20-hours per week to operate the micro-farm, the farmer will be free to pursue additional income opportunities at AG Core or other part-time businesses.

Erie Veteran-Owned Firms

Source: U.S. Census Bureau (2012)

	Erie City	Erie County
Total Firms	6,280	18,667
Men-owned firms	55%	58%
Women-owned firms	31%	30%
Minority-owned firms	16%	7%
Veteran-owned firms	8%	9%
Number of Veteran-owned firms	471	1,639

The Jobenomics Erie Community-Based Business Generator will be available for additional training and certification from not only the veteran, but their spouses and children. It is not inconceivable for the micro-farm's collective household income to exceed \$100,000 per year, which would be a dramatic increase of inner-city Erie's \$6,741 current median household income. Equally important is the dramatic effect that increased micro-farm wages will have on the inner-city indirect and induced workforce that will be able to grow accordingly.

Veterans Miracle Center (VMC) was chosen to lead Jobenomics Erie's veterans-related programs as well as Jobenomics Erie Freedom Farms. VMC has extensive relationships with national, state and regional veteran's organizations. VMC also has experience with Erie's veteran population, which is extensive. Today, both Erie City and Erie County has a robust veteran-owned business population, 471 and 1,639 respectively. Consequently, Erie has a culture of veteran-owned businesses that can nurture significant growth of other veteran-owned businesses. VMC provides, free of care, new furniture, appliances and household supplies for veterans, which will be an important addition to the Jobenomics/ACTS Freedom Farms program to provide modern, energy efficient homes for participating Jobenomics Erie Freedom Farm veteran participants.

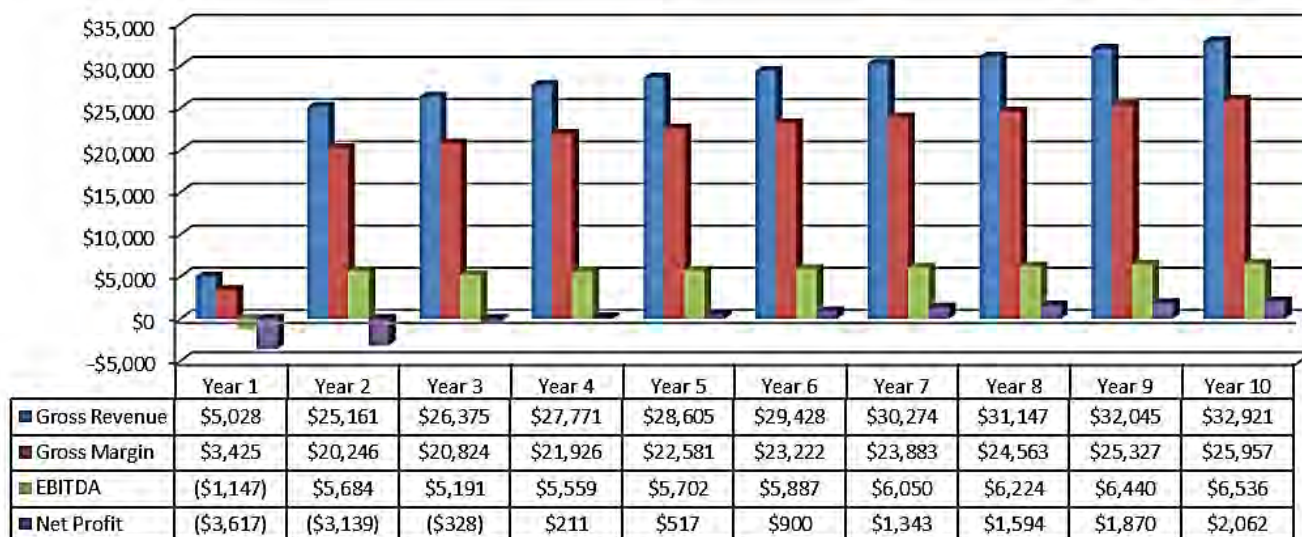
Jobenomics Erie Freedom Farms Financial Summary

The ACTS Freedom Farms of America business plan contains 100+ pages of detailed information, supported by nearly 500 due diligence documents on the cloud, which include more than 5,000 pages of industry, governmental, financial, scientific, and third party confirmation of business plan assumptions and statements. All materials will be made available to people interested in pursuing a

collaborative venture and who can show “proof of funds” capable of participating in the funding solutions sought.

Jobenomics and ACTS FFA develop a preliminary Jobenomics Erie financial plan based on an initial 100 inner-city, veteran-owned micro-farms and conversion of a 100,000 square foot building for the core controlled indoor agricultural center. This financial is available for the Jobenomics Erie leadership team’s review and modification. When complete the Jobenomics Erie leadership team will negotiate a contract with ACTS FFA to begin operations.

Jobenomics Erie Freedom Farms Estimated Financials (in 000s) **AG Core + 100 Micro-Farms**



Jobenomics Erie Freedom Farms Estimated Financials (in 000s) **For 1 Micro-Farm**



These two preliminary financial summary charts show the gross revenues, gross margins, EBITDA (Earnings, Before, Interest, Tax, Depreciation, Amortization), and net profits for AG Core (the entire

Jobenomics Erie Freedom Farms operation) and the projected sales, gross margins, shared profits and farmer earnings for one micro-farm.

- For AG Core, revenue will ramp up from \$5M at the end of the first year of operation to \$33M by year ten. After the first year, AG Core will produce a positive EBIDTA. ACTS FFA believes these to be conservative numbers and do not include a number of ancillary income producing opportunities.
- For the micro-farmer, the second year of operations should produce annual earnings of \$39,000 rising to \$56,000 by year ten. It is important to note, that since the micro-farmer will be incorporated as an S Corporation, many of the farmers normal living expenses will be included in the cost of operations, thereby making his equivalent income much higher (estimated in the \$65,000 range).
- The veteran micro-farmers will be required to use their VA-loans to finance the purchase of land and home. The 6,000 square foot greenhouse provided by ACTS FFA can be either purchased or leased. Lease costs are likely to be the preferred method and the rates will be low and tailored to a successful start as well as follow-on operations.
- Profits from the micro-farm will be split 50%/50% between the farmer and AG Core, which will be responsible for providing the farmer with the necessary supplies and sales of the farmer's agricultural products. Similar to a franchising operation, ACTS FFA will be responsible for training, resourcing and setting actionable goals and quality standards for products produced.

According to ACTS preliminary financial models, a total of \$13.5 million will be needed to fund Jobenomics Erie Freedom Farms depending on a number of assumptions of the ACTS AG Core team with limited input from Erie. Funding will likely consist of government grants and private sector debt (loans) or equity (ownership) financing. While ACTS FFA can provide some of these investment dollars, the local community needs to shoulder the bulk of the initial investment, if for no other reason to show intent and community support. ACTS FFA has detailed plans and committed resources for four U.S. sites, which are all rural communities. Jobenomics Erie Freedom Farms is the first urban agriculture project. However, a number of other rural and urban communities have expressed interest for being one of the initial ACTS FFA projects and have shown significant local support in order to attract such an effort..

Urban Mining

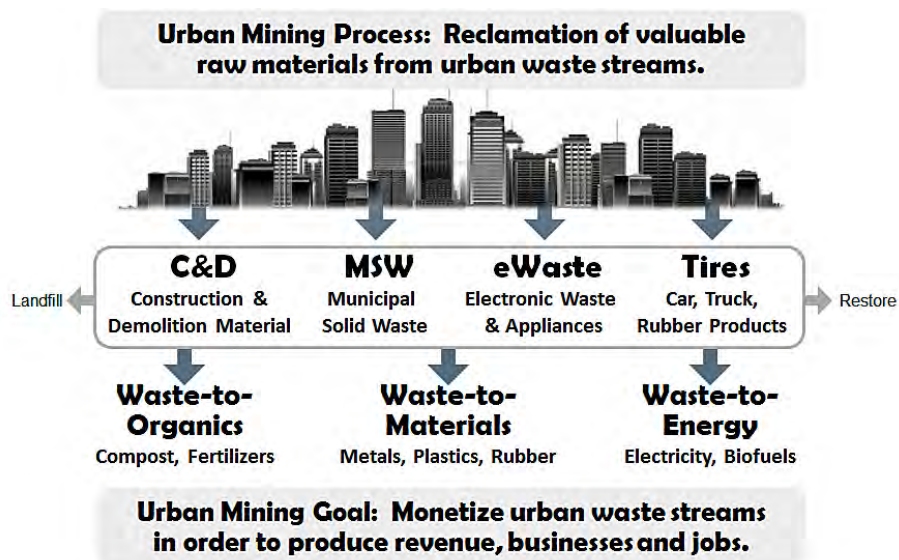
Jobenomics Erie Program		Direct Jobs (est. 5 Years)	% of 3,500 Job Goal
Urban Mining		550	16%
	eCyclingErie	50	1%
	Light Industry	200	6%
	Transportation & Logistics	300	9%

Urban Mining Synopsis

Jobenomics Erie's Urban Mining Program goal is to create 550 new jobs within the next 5-years. More importantly, Jobenomics Erie's Urban Mining Program could generate sufficient profits, which will be applied to funding other Jobenomics Erie skills-based training and certification programs.

By the end of the 2nd operational year, Erie officials and investors should have an excellent understanding of the revenue generating phase of the Jobenomics Erie's electronic waste (eCyclingErie) materials reclamation facility (MRF, pronounced "murf"). eCyclingErie is expected to be operational at the end of the Year 1, produce \$1.1 million of net income (profit) in Year 2, \$3.8 million in Year 3, and as much as \$11.9 million in Year 4. This level of profitability will cover MRF operating costs, retire a significant portion of investor debt, pay for costs of additional Jobenomics Erie skills-based training and certification programs, and provide for micro-business loans for startup businesses.

Jobenomics Urban Mining Initiative



One of the four Jobenomics national-level initiatives involves urban mining. Urban mining is defined as a process of reclaiming organic combustible and inorganic non-combustible materials from waste streams including municipal solid waste (MSW), construction and demolition material (C&D), electronic waste (e-waste), tires and other waste streams. Combustible materials are comprised of carbon-based matter that has caloric value, which can be converted to marketable products via waste-to-organic and waste-to-energy technologies. Non-combustible elements can be reclaimed via waste-to-material technology. Every U.S. community should consider urban mining to (1) reclaim

valuable raw materials and metals, (2) reduce toxic landfilling and exporting of waste, (3) mitigate environmental pollution associated with traditional surface and subsurface mining operations, and (4) produce revenue for local business and job creation.

Jobenomics' Urban Mining Initiative (UMI) helps communities monetize high value waste streams in order to create jobs and fund local small business generation efforts. As part of UMI, Jobenomics established eCyclingUSA™ (www.eCyclingUSA.com) to reclaim high value metals from electronic waste streams and use profits to fund Jobenomics Community-Based Business Generators.

Compared to other goods-producing industries (manufacturing, construction and mining), light industry is usually less capital intensive, more environmentally friendly and typically uses low cost materials to produce items of relatively higher value. Light industry is ideally suited for the ex-offender labor force. Consequently, the Jobenomics eCyclingUSA team plans to develop light industries that are associated with an advanced technology electronic waste (e-waste) materials reclamation facility.

Pictures of an Operational Advanced Technology MRF



Advanced Technology MRF Generated Raw Materials

eScrap & Electronics

Waste Electrical and Electronic Equipment



Copper Plastics Aluminum Iron Gold Silver Palladium & Other Precious Metals

Refrigerators, Air Conditioners

Containing Air Polluting Refrigerants



Copper Plastics Aluminum Iron

TV/PC Tubes

Cathode Ray Tubes



Glass Metals Plastics
Including Lead & Mercury

An advanced technology e-waste MRF is able to extract high value raw materials (plastics) and metals (copper, aluminum, and iron/steel) from appliances, computers and peripherals, electronic scrap, consumer electronics and electronic scrap from manufacturing, construction and demolition operations. Raw material is then repurposed either by selling to commodities buyers or used in new light industrial manufacturing operations, such as molded plastic products (e.g., containers, decking and other commonly used plastic products).

eCyclingUSA has partnerships with two of the world's leading electronic waste recycling and materials reclamation manufacturers for building and implementing state-of-the-art turnkey e-waste U.S. plants. Over 100 plants are operational in Europe and other countries. There are few comparable U.S. plants that shred vast amounts of e-waste raw materials into pellets in minutes and aggregate these pellets by type (copper, aluminum, iron, plastics) for sale or use in light manufacturing. eCyclingUSA processes are accomplished in a closed environment to prevent any leakage of potential pollutants or even dust into the environment.

The material reclamation industry is generally referred to as the "scrap" industry. According to the Institute of Scrap Recycling Industries (ISRI), "While many in the public-policy world talk about the need for more green jobs, the scrap recycling industry has been creating environmentally friendly jobs and other opportunities in the United States for decades...The U.S. scrap recycling industry is a major economic engine powerful enough to create 471,587 jobs and generate \$11.2 billion in tax revenues for governments across the country, all while making the old new again and helping to protect the earth's air, water, and land for future generations."

Types of E-Waste (EPA versus Jobenomics Definition)

Types of eWaste

- **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**
- **Construction & Demolition Materials**



eCyclingUSA plant can process these items quickly and cleanly.

The U.S. EPA defines e-waste as end-of-life personal computers, monitors and peripherals (printers, keyboards, mice, etc.). Jobenomics/eCyclingUSA further defines e-waste as consumer electronics (small appliances, toys, tools, etc.); discarded government, business, medical and industrial equipment (servers, racks, vending machines, hardware, etc.); and C&D scrap associated with demolished buildings (wiring, HVAC systems, water heaters, ducting, lighting, large appliances, etc.).

Compared to organic material, inorganic electronic-waste (e-waste) materials has (1) much higher monetary value, (2) greater contribution to mitigation of greenhouse gas emissions and energy conservation of virgin metals and minerals, and (3) higher business and employment potential.

eCyclingErie

The Jobenomics Erie and its eCyclingErie team will initially focus on an e-waste only (no large appliances or industrial equipment) MRF and related logistics (collection, transportation and warehousing). This initial \$4 million MRF (not including purchase or lease of a building) is designed to employ up to 50 MRF personnel and as many as 300 people involved in collection, warehousing and transportation operations. eCyclingErie can generate annual profits of up \$11.9 million per year on a 3-shift per day, 300 day per year operation.

Entry-Level 3-5 Tons Per Hour eCyclingUSA/URT Equipment & Options



For Estimating Purposes Only
12 December 2016



E-Scrap Equipment	Throughput Description	Price @ \$1 = 1.3€	Electrical Power	Sq. Ft.	Labor	Comments
URT SDA; WEEE (E-Scrap) Step I & II	3-5 tons/hr	\$2,817,433	160kW 480V 60Hz	1250	15	Without Optical Sorting Device
URT CRT, PC, Printer & Cartridge	400 pieces/hr	\$673,769	30kW 480V 60Hz	750	12	Line within Cutting Device
Cable/Wire Shredder/Separation	0.3 tons/hr	\$323,054	85kW 480 60Hz	50	2	-

URT Equipment **\$3,814,256**

25,000 Sq. Ft. Building



Truck Scale



Containers



Optional Facility/Equipment	Price	Electrical Power	Sq. Ft.	Labor	Comments
25,000 Square Foot Building with 40' Height (Building \$235,000, concrete slab \$160,000, erection cost \$505,000; buildout \$330,000, HVAC/fixtures \$30,000, architectural and engineering \$85,000, IT/telecom \$80,000, furniture/miscellaneous \$150,000). Assuming basic utilities are already available at site.	\$1,575,000	Standard	1 to 3 acres	-	Large enough for refurbishment and reuse activities, expansion room to handle future large appliances (e.g., refrigerators, etc.), classrooms, conference room and break room. Elegant enough for a showplace to attract customers and grants.
Truck Scale	\$150,000	Standard		2	-
Storage and Collection Containers (10 20-yard containers \$8,000, 10 40-yard containers \$16,000)	\$24,000	N/A		5	Can buy used or leased
Handling Equipment (Forklifts, Handling Devices, Pickup Truck, Semi-Trailer Truck & Roll-Off Trailer)	Rent	N/A		9	Can buy used or leased

Optional Equipment **\$1,749,000**

Total Labor **45** Estimated

Total Equipment **\$5,563,256**

eCyclingUSA Fee (6%) **\$333,795**

Total Cost \$5,897,051 Including New Building

Jobenomics/eCyclingUSA will provide eCyclingErie with a turnkey system using proven European technology currently operational in over 100 cities around the world. The eCyclingErie e-waste MRF can be operational within 12 months of contract award.

The MRF will be located in an inner-city industrial area in Erie that is zoned for light industrial manufacturing. The MRF does not produce any harmful emissions so permitting should not be an issue. eCyclingErie is considering a wide variety of vacant, dilapidated and underutilized buildings along the Erie railyards that could be instrumental importing electronic waste from other metropolitan areas like Buffalo, Pittsburgh, Chicago and New York City. The old Erie Mill and Press Company building is an example of the type building that could be used for eCyclingErie as well as related light industrial projects that can use low-cost raw materials from eCyclingErie (such as model plastic products and plastic trek decking) as well as the ACTS Freedom Farms Erie Controlled Agriculture Center.



An entry-level startup 3-5 tons/hour plant will cost approximately \$4 million for equipment and \$2 million for building and land, which can be leased instead of being purchased. Funding for the plant will be mainly provided by private sources with limited funding from government (building/road enhances, grants, HUD Section 3 financing, bonds, etc.). eCyclingUSA's German partner (UNTHA Recycling Technologies, URT) can arrange low-interest rate financing up to 70% of the equipment cost for accredited private sector investors via the German Export Bank's Euler Hermes program.

1-Shift Operation Feedstock Requirements



40 Tons Per Day
(2 Shipping Container Equivalents)

\$ Value of e-Waste Raw Materials

For Estimating Purposes Only

5 Tons Per Hour, 1-Shift Operation, 300 Days Per Year

Feedstock: Computers, Consumer Electronics, Small and Large Appliances

Metal/Material	% of e-Waste	\$s per Metric Ton*	\$/Ton (2204 pounds)	Total \$/Year (5 tons/hour x 8 hour/day x 300 days/year)
Iron/Steel (Fe)	20%	\$ 195	\$ 39.00	\$ 468,000
Copper (Cu)	5%	\$ 4,430	\$ 221.50	\$ 2,658,000
Aluminum (Al)	20%	\$ 1,300	\$ 260.00	\$ 3,120,000
ABS Plastics	10%	\$ 1,675	\$ 167.50	\$ 2,010,000
Other Plastics/Foam	40%	\$ 287	\$ 114.80	\$ 1,377,600
Computer Components	5%	\$ 2,466	\$ 123.31	\$ 1,479,766

Source: Jobenomics, eCyclingUSA 100%

Revenue** \$ **11,113,366**

Cost of goods sold \$ **7,327,000**

Operating expenses \$ **2,660,000**

*Scrap prices as of 3 December 2016

**Does not include grants, tax incentives or tipping fees

Net Income \$ 1,126,366

EBITDA 10%

This chart shows estimated profitability of a 1-shift operation (8 hours per day, 300 days per year) of an entry-level, 3-5 tons per hour e-waste-only MRF. A 1-shift operation is estimated to produce an annual net income (profit) of \$1,126,366 (10% EBITDA—Earnings, Before, Interest, Tax, Depreciation, Amortization). No large appliances that contain greenhouse gas chlorofluorocarbons (CFC) refrigerants or cathode ray tube (CRT) monitors are included. eCyclingUSA has processes for end-of-life CFC and CRT items that require special handling that can be added to the eCyclingErie MRF.

A 1-shift operation requires 40 tons of e-waste. While this may sound like a lot of e-waste, 40 tons equates to only two standard 40-foot shipping containers or two semi-trailer truckloads worth of feedstock. A standard shipping container and semi-trailer truck load each can carry 20 tons per load. 100 old computers and their peripherals (monitors, hard copy devices, keyboards, mice, etc.) weigh about 3 tons. 51 million PCs and 118 million peripherals are discarded in America each year. Erie has railroad access to major metropolitan areas that ship e-waste overseas for processing. Each railroad boxcar contains up to 140 tons of capacity. Erie also has significant access to seaborne shipments.

2-Shift Operation Feedstock Requirements



75 Tons Per Day
(Less Than 4 Shipping Container Equivalents)

\$ Value of e-Waste Raw Materials

For Estimating Purposes Only

5 Tons Per Hour, 2-Shift Operation, 300 Days Per Year

Feedstock: Computers, Consumer Electronics, Small and Large Appliances

Metal/Material	% of e-Waste	\$s per Metric Ton*	\$/Ton (2204 pounds)	Total \$/Year (5 tons/hour x 16 hour/day x 300 days/year)
Iron/Steel (Fe)	20%	\$ 195	\$ 39.00	\$ 936,000
Copper (Cu)	5%	\$ 4,430	\$ 221.50	\$ 5,316,000
Aluminum (Al)	20%	\$ 1,300	\$ 260.00	\$ 6,240,000
ABS Plastics	10%	\$ 1,675	\$ 167.50	\$ 4,020,000
Other Plastics/Foam	40%	\$ 287	\$ 114.80	\$ 2,755,200
Computer Components	5%	\$ 2,466	\$ 123.31	\$ 2,959,531

Source: Jobenomics, eCyclingUSA 100%

Revenue** \$ **22,226,731**

Cost of goods sold \$ **14,730,000**

*Scrap prices as of 3 December 2016

Operating expenses \$ **3,631,000**

**Does not include grants, tax incentives or tipping fees

Net Income \$ 3,865,731

EBITDA 17%

A 2-shift (16 hours per day), 5-tons/hour, 300 day/year operation requires about 75 tons of e-waste or about 4 truckloads per day. A 2-shift operation will produce a net income of \$3,865,731 (17% EBITDA), which is more than double the average U.S. stock market real return of 6.8% in 2016. This level of profitability will cover MRF operating costs, retire a portion of investor debt (if needed), and underwriting the costs of the Jobenomics Erie skills-based training and certification programs.

3-Shift Operation Feedstock Requirements



110 Tons Per Day
(5.5 Shipping Container Equivalents)

\$ Value of e-Waste Raw Materials

For Estimating Purposes Only

5 Tons Per Hour, 3-Shift Operation, 300 Days Per Year

Feedstock: Computers, Consumer Electronics, Small and Large Appliances

Metal/Material	% of e-Waste	\$s per Metric Ton*	\$/Ton (2204 pounds)	Total \$/Year (5 tons/hour x 23 hour/day x 300 days/year)
Iron/Steel (Fe)	20%	\$ 195	\$ 39.00	\$ 1,345,500
Copper (Cu)	5%	\$ 4,430	\$ 221.50	\$ 7,641,750
Aluminum (Al)	20%	\$ 1,300	\$ 260.00	\$ 8,970,000
ABS Plastics	10%	\$ 1,675	\$ 167.50	\$ 5,778,750
Other Plastics/Foam	40%	\$ 287	\$ 114.80	\$ 3,960,600
Computer Components	5%	\$ 2,466	\$ 123.31	\$ 4,254,326

Source: Jobenomics, eCyclingUSA 100%

Revenue** \$ **31,950,926**

Cost of goods sold \$ **15,417,000**

Operating expenses \$ **4,666,000**

*Scrap prices as of 3 December 2016

**Does not include grants, tax incentives or tipping fees

Net Income \$ 11,867,926

EBITDA 37%

A 3-shift (23 hours per day), 3-5 tons/hour, 300 day/year operation requires 110 tons of e-waste or 5.5 daily truckloads, which is a significantly less than the number of trucks servicing most landfills or big box store distribution centers each day.²

A 3-shift, 3-5 tons/hour operation could produce an annual net income of \$11,867,926 (37% EBITDA). This level of profitability will cover MRF operating costs, retire investor debt, pay for costs of additional eCyclingErie skills-based training and certification programs, and provide seed capital for micro-business loans. Moreover, the eCyclingErie can invest funds in new Pennsylvania MRFs and collection sites; expand the existing facility to include processing of large appliances containing CFCs and monitors with CRTs; and/or start e-waste related light industrial manufacturing, like model plastic products, using the raw material generated by the MRF. A combined e-waste/large appliance (3-shifts, 10 tons/hour) MRF can generate a net income per annum of over \$40 million and employ 200-300 direct and up to 3 to 5-times as many indirect/induced workers.

The eCyclingErie implementation team will be led by Mr. Steve Grueber, EVP of Operations for eCyclingUSA, and Mr. Peter Hessler, CEO of URT, eCyclingUSA's German engineering and

² Walmart's 150+ distribution centers are serviced by a Walmart transportation fleet of 6,100 tractors, 61,000 trailers and more than 7,800 drivers, <http://corporate.walmart.com/our-story/our-business>

manufacturing partner. Mr. Grueber has 35-years of experience in waste management field services to municipal, industrial and commercial institutions. Mr. Hessler designed and installed hundreds of MRFs around the world and leads an engineering team of over 150 direct employees familiar with the latest state-of-the-art MRF systems and technologies.

eCyclingErie Success Factors

The success of eCyclingErie depends largely on four factors, (1) adequate supply of feedstock, (2) reasonable commodity prices, (3) competitive advantage over traditional recyclers, and (4) community support.

- (1) **Feedstock Supply.** Feedstock supply should not be a major challenge since the amount available since Erie has a population supporting similar European operations. If eCyclingErie is set up as a non-profit with a powerful social benefit mission, like jobs and career paths for ex-offenders and would-be-offenders, it should be able to attract much more feedstock as opposed to for-profit organizations, like Goodwill that does not reinvest profits into the community. Since eCyclingErie is also a workforce training and job development organization, it will partner with other non-profit (churches, social-oriented institutions) and businesses as a source of tax deductible e-waste donations. State and local governments will also be a major contributor of e-waste as well as legislating tougher restrictions for exporting or landfilling e-waste. eCyclingErie can be part of the solution to Erie's e-waste challenges and opportunities.

Americans dispose of 9,400,000 tons of e-waste per year. As a percent of the U.S. population (4%), Pennsylvania produces an estimated 377,000 tons of e-waste per year, not including C&D e-scrap or major commercial items like medical and industrial equipment. Over 7 million vending machines are being replaced with smarter machines across the nation. According to the EPA, only 12.5% of U.S. e-waste is recycled and estimates that 40% of the heavy metals in U.S. landfills come from discarded electronics.

Due to the advent of cloud computing, flat panel technology (smartphones and pads) and smart devices, U.S. e-waste volumes expected to rise significantly over the next decade as consumers dispose of dumb electronics to smarter interconnected devices. From near zero in 2010, 600 million units are produced per year today. Notwithstanding the dramatic rise in smart phones and pads, desktop computers are not going away. The number of desktop units produced per year dropped from 350 million per year in 2010 to only 270 million today and is expected to remain above 200 million per year for foreseeable future. In addition, government agencies and businesses that switch to cloud computing to eliminate or reduce their back office IT systems (servers, racks, routers, and power supplies) will significantly add volume to the e-waste stream. The dawning of the Internet-of-Things era will add substantially more items to e-waste stream as analog and mechanical devices are replaced with intelligent digital devices in order to connect to the virtual world.

- (2) **Depressed Commodity Prices.** Commodity prices have dropped approximately 40% over the last few years which have caused many manually-oriented recycling operations out of business. According to Knoema, a US-based company data analysis organization, study of World Bank data, e-waste commodity prices are rebounding from recent lows. Copper and aluminum are the two highest value commodities that will be reclaimed by eCyclingErie. Copper prices peaked in 2011

at \$8,820/metric ton, dropped to a low of \$5,070/ton in 2016 and are expected to rise to \$5,910/ton in 2019. The price for copper scrap on the eCyclingErie feedstock chart is conservatively priced at \$4,430/ton based on a survey of U.S. scrap buyers as of 3 December 2016. Correspondingly, aluminum prices peaked in 2011 at \$2,401/ton, dropped to a low of \$1,625/ton in 2016 and are expected to rise to \$2,000/ton in 2019. The price for aluminum scrap on this eCyclingErie Feedstock chart is conservatively priced at \$1,300/ton.³ Forecasted upswing in commodity prices will make eCyclingErie a more attractive private sector investment.

- (3) **Competitive Advantage.** eCyclingErie will be tailored to quantity and types of feedstock available in Erie and the Central and Northeast regions at large. eCyclingErie will have the very latest and state-of-the-art processing technologies in operation as well as in research. eCyclingUSA's German partners are even working with the Chinese state-run urban mining centers to develop material reclamation processes that can reclaim minute amounts of precious metals and trace amounts of rare elements. While eCyclingErie will initially be designed to reclaim common metals and materials, growth to more refined metal processes will be available.

According to the EPA, modern MRFs provide significant environment and climate change savings: mining waste saving of 97% followed by air pollution 86%, water pollution 76%, energy 75%, and water use savings of 40% over traditional mining processes. Since eCyclingErie MRF emits no pollutants into the ground or air, it is very environmental friendly. Handling of toxic materials is very limited (batteries and CRTs have a limited amount of toxicity) and can be handled in safe and efficient manner.

Recycled metals, such as copper, are worth up to 90% of the cost of the original material. eCyclingErie will produce the cleanest and purist fractions in the industry, which is a major competitive advantage over traditional recyclers. Computer-controlled eCyclingErie sensors will allow the Erie MRF to keep track of quality and historical records of past fractions that will allow facility managers to negotiate the highest prices and loyalty from commodity buyers.

- (4) **Community Support.** Government support is important to provide a reliable and consistent source of feedstock for processing operations and investment.
- *E-Waste Mandates.* In many places in Europe, where waste processing is mandated, 10 ton/hour MRFs usually operate at full capacity (3 shifts per day) using feedstock generated by as little as 300,000 people. Erie's County's population is 278,000, which could mathematically support an advanced technology 3-5 ton/hour MRF. While state and local governments cannot mandate e-waste recycling for any individual company it can regulate the amount of landfilled or exported material. Government can also prioritize where their generated e-waste should be processed. The non-profit, socially-beneficial, anti-crime and anti-poverty establishment, like the eCyclingErie, is a defensible sole source provider. The Federal Government designed UNICOR as a sole-source collector of federal e-waste for prison industry workforce training. According to UNICOR discussion with Mr. Vollmer, UNICOR collected less than 10% of the federal e-waste. And, now they are getting out of the business.

³ Knoema, Commodity Prices, Forecast 2015-2019 | Charts and Tables, [https://knoema.com/wxgcxde/commodity-prices-forecast-2015-2019-charts-and-tables?variable=Copper%20\(US%20cents%2F1b\)](https://knoema.com/wxgcxde/commodity-prices-forecast-2015-2019-charts-and-tables?variable=Copper%20(US%20cents%2F1b))

- *Underwriting and Financial Support.* Government underwriting and financial support will be important during the 6-month startup phase and the first 2-years of operation. The eCyclingErie plans to be self-sustaining in the 3rd year of operation. The most likely form of underwriting is tax-free municipal bonds that will provide an incentive for private sector investors. Municipal bonds are debt securities issued by states, counties and cities to fund day-to-day obligations and to finance capital projects, such as building schools. Industrial Revenue Bonds (IRBs) are another form of underwriting. IRBs are tax-exempt loans issued by state or local governments to finance a private company's expansion, construction or acquisition of manufacturing facilities and equipment. Local and state governments support these projects because they can improve the economic well-being of a community. Financial support can take the form of government grants and contracted activities. Federal, state and local governments spend hundreds of billions of dollars annually on training, general welfare, anti-poverty and crime/gang/at-risk youth prevention programs.
- *Oversight, Supervision and Evaluation.* eCyclingErie needs overseers and outside supervisors to verify eCyclingErie trustworthiness, evaluate eCyclingErie results and build public confidence. This Oversight and Supervisory Board should consist of local citizens appointed by the Mayor, City Manager or other credible official, to oversee and evaluate the effectiveness of the eCyclingErie due diligence process and training programs. The Board will also work with public authorities to evaluate recidivism rates and economic impact of program graduates.

Private sector support is also vital. Jobenomics works with for-profit establishments, non-profit institutions and philanthropists for sources of feedstock and funding.

- *For-Profit Establishments.* For-profit establishments include financial and non-financial establishments. In discussions with the banking industry, Jobenomics has obtained commitments for tens of millions of dollars' worth of micro-business loans based on actionable programs like the eCyclingErie. In Baltimore, an investment group submitted in writing a framework to a major (\$50 million to \$100 million level) fund for a Jobenomics demolition/eCycling initiative, if Baltimore City government would use the 31,000 city-owned derelict homes and properties as collateral for the micro-business fund. Most major corporations expressed interest in designating the disposition of their e-waste and e-scrap to charitable and socially-worthy non-profit organizations.
- *Non-Profit Institutions.* Churches and other non-profit organizations are an excellent source of feedstock and human capital. For example, three mega-churches in North Carolina want to start "e-waste collection ministries" to gather, warehouse and distribute e-waste in the same manner as they do for clothing and food stuffs. The quid pro quo for these churches involved giving church members, and their children, priority in the Jobenomics business and job creation programs. Tipping fees were also a consideration.
- *Equity and Strategic Partners.* eCyclingErie presents an opportunity for equity and strategic partners. Equity partners would invest and share in the profits of the B-Corp with understanding that a majority of the profits would be used for enhancing the public good and public security. Strategic partners are likely to involve companies in waste management and recycling businesses.

- *Philantrocapiatlists.* High-income earners are not averse to giving but greatly prefer philanthropy over charity. Teaching a person to fish for a living is highly preferable to the daily giving of fish. Moreover, many high-income earners are philanthrocapitalists. Philanthrocapitalism applies for-profit capitalist objectives, such as private property and ownership, to address poverty and unrest. Many philanthrocapitalists told Mr. Vollmer that micro-business loans and equity financing could be readily obtained for the right initiatives and projects. Jobenomics has micro-business loan commitments for several of Jobenomics initiatives in the \$100 million range.

Jobenomics Erie Workforce Re-Entry Center

Jobenomics Erie Program		Direct Jobs (est. 5 Years)	% of 3,500 Job Goal
Workforce Re-Entry Center		750	21%
	Ex-Offenders	300	9%
	Would-Be-Offenders	300	9%
	Disabled (PTSD) & Homeless Veterans	150	4%

Jobenomics Erie Workforce Re-Entry Center (JEWRC) Synopsis

It is estimated that the Jobenomics Erie Workforce Re-Entry Center will admit approximately 50 program candidates each month, or 1,500 in five years. It is also anticipated that half will leave the program resulting in a total of 750 new jobs for former offenders, gang members, at-risk youth, and disabled and homeless veterans.

JEWRC Rationale

The Father of American Education, Horace Mann, stated that “Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance-wheel of the social machinery.” While Jobenomics agrees, the educational paradigm required for yesteryear’s workforce development may not be appropriate for many in today’s workforce. Today the U.S. labor force is increasingly characterized by income inequality, an eroding middle class and a growing contingent workforce that traditional degree-oriented educational programs have not been able to mitigate. More skills-based training and certification programs are needed.

Horace Mann also concluded that “jails and prisons are the complement of schools; so many less as you have of the latter, so many more must you have of the former.” Horace Mann, born in the 18th Century, could not have envisioned that in the 21st Century his jails and prisons quote would be as prophetic as it is today.

The United States spends approximately \$80 billion per year on incarceration, up from approximately \$25 billion in 1980. America has more incarcerated people than any other nation in the world. Approximately 2.3 million individuals are incarcerated including 1,310,000 in state prisons, 646,000 in local jails, 211,000 in federal prisons and 34,000 in youth detention facilities. The U.S. incarcerated population largely consists of the most socioeconomically disadvantaged element of American society—mostly young adult men, disproportionately minority and poorly educated. The cost of incarceration runs from \$25,000 to \$50,000 per year per inmate depending on location.

Employment opportunities for the formerly incarcerated, gang members and at-risk youth make challenges to meaningful employment and communal reentry almost insurmountable unless mentored and chaperoned by extraordinary, self-effacing ex-offenders who have honorably reunited with mainstream society. It is highly likely that these prisoners, as well the formerly incarcerated, preferred to learn short-term criminal skills as opposed to long-term educational degrees. It is also highly likely that jails and prisons excel in advanced criminal skill training and mentoring as evidenced by the high rate of recidivism (relapsing into criminal behavior). From a Jobenomics perspective,

basic skills training targeted at high demand jobs would provide viable alternatives to lives in crime. Jobenomics offers these kinds of training programs for the formerly incarcerated.

Jobenomics is often asked why we focus on ex-offenders and would-be offenders? The altruistic answer involves mitigating crime, reducing poverty and other social/moral considerations. The other answer deals simply with economics. Pennsylvania spends over \$2 billion per year in state prisons, not including federal prisons or local jails. Erie County's incarceration rate in 1970 was 57 per 100,000 residents. Today it is 362, which is above the national average of 341. Perhaps, Erie should consider another or a complementary approach to the rising costs of incarceration. Jobenomics asserts that a Workforce Re-Entry Center is worthy of consideration for two poignant reasons.

- First, criminals and would-be criminals are the some of the most entrepreneurial citizens in the United States. The alternative to high-paying, high-risk crime lies in viable careers as opposed to more degree-based educational opportunities or minimum wage jobs. Consequently, the Jobenomics Community-Based Business Generator concept and its skills-based training certification programs has garnished significant interest in dozens of blighted communities like inner-city Erie. The leading community-based ex-offender re-entry center in Erie (i.e., Climate Changers, Inc.) believes this premise to be true and has volunteered to be the lead organization for Erie's inner-city efforts. According to Bishop Jones (a former prison Chaplin) and Fred Williams (a former ex-offender) the prospect of starting a small business has great appeal to the formerly incarcerated and gang members, especially if the small business startup program is oriented to these demographics and has skills-based training and certification programs that can be accomplished in months rather than years.
- Second, successful Erie citizens need to protect their gains. Erie has spent a significant amount of money in modernizing its waterfront and has a number of wealthy neighborhoods on water (\$174,375 median household income as shown on the chart on page 2 of this document). Less than 1-mile away, the average household income is \$6,741 with a crime rate per square mile 5-times the national average. Unless these successful Erie citizens address the fundamental problems in the inner-city, their wealth will disappear in proportion to the rise in crime and hopelessness. Clearly, incarceration has not solved the problem. Mass-production of inner-city startup businesses as proposed by Jobenomics Erie might make a difference, perhaps a large difference in protecting their gains as well as lifting the economic "boats" for everyone within walking distance of Erie's Bayfront Parkway.

Jobenomics Erie Workforce Re-Entry Center

The ultimate goal of a Jobenomics Erie Workforce Re-Entry Center is to create micro-businesses and jobs for formerly incarcerated, gang members and at-risk youth in order to reduce crime, deter social unrest and provide meaningful career opportunities to this cadre of U.S. citizens who are often shunned, excluded or isolated from mainstream society and career opportunities. For depressed and disenfranchised communities, especially in many of the large metropolitan inner-cities like Erie, Jobenomics emphasizes three basic forms of skills training: tradecraft, communication and business.

- First priority is tradecraft—a skill acquired through experience in a specific trade—with emphasis on skilled services. Too few workforce entrants or discouraged workers understand how they can obtain workforce skills via short-term training programs, internships and apprenticeships.

- Second priority is communications. In a business sense, communication entails the ability to express and demonstrate one's value-proposition. Without an ability to communicate effectively, a skilled individual will have difficulty maintaining a job.
- The third priority is small business creation with emphasis on services-providing startups that can be created and implemented with short-term training and certification programs. Jobs don't create jobs, businesses do, especially small businesses. Small businesses also offer the fastest way out of poverty through employment for the unemployed and underemployed. Every city should have a community-based business generator that trains, implements and mass-produces highly-scalable small and self-employed businesses.

From a Jobenomics perspective, due diligence is a process of systematically researching and verifying the accuracy of the background of an individual, and evaluating that individual's past experience and skills as a prelude to future employment and potential business ownership.

JEWRC candidates will undergo rigorous background checks and due diligence processes before they are accepted into the program, which is designed to provide skills-based training and certification programs for high-potential aspirants. Each qualified program participant will start their own incorporated self-employment company to make them more competitive to get a job or start their own micro-business. An outside Oversight and Supervisory Board will monitor JEWRC activities, evaluate JEWRC results, and help build public trust and confidence.

JEWRC operations commence with identifying potential candidates in cooperation with local government and civic organizations that deal with at-risk youth, gangs and ex-offenders. Parole officers, police, churches, non-profit institutions, schools, sports teams and veterans groups are a great source for identifying talent, desire and fortitude. These organizations provide the first stage of the JEWRC due diligence process via screening and assessing high-potential individuals who are known to them. Each candidate must be endorsed in writing by the sponsoring organization and undergo a thorough background and criminal assessment by local authorities.

Candidates will then go through the second and third stages of the due diligence process. The second stage consists of a battery of JEWRC-administered personality, communication and skills aptitude tests. The third stage of the JEWRC process applies these aptitude tests and leadership evaluations to determine potential career paths.

The JEWRC due diligence process will be co-led by Fred William (a former offender) and Bishop Curtis Jones, both of whom co-founded Climate Changers and Erie's Total Change Program that is specifically oriented to ex-offenders and would-be-offenders (i.e., gang members and at risk youth).

Once the JEWRC process is complete, candidate will under Jobenomics Erie Community-Based Business Generator training and certifications programs. They will also be afforded opportunities in eCyclingErie, which was designed to accommodate the ex-offender community.

JEWRC and Disabled/Homeless Veterans

U.S. Department of Veterans Affairs defines PTSD (post-traumatic stress disorder) as a mental health problem that some people develop after experiencing or witnessing a life-threatening event, like

combat, a natural disaster, a car accident, or sexual assault. According to the VA, there are four types of general symptoms of PTSD (1) Reliving the event (also called re-experiencing symptoms), (2) Avoiding situations that remind you of the event (3) Having more negative beliefs and feelings, and (4) feeling keyed up (also called hyperarousal). These symptoms can last for years and can be debilitating for the veteran, family and community.

Today, millions of U.S. service men and women and recent military veterans have seen combat. There are nearly one million vets living in Pennsylvania. More than 236,000 are categorized as Gulf War vets, a category that includes the recent conflicts in Iraq and Afghanistan. Pennsylvania's 3rd Congressional District (Erie) has 60,000 veterans. The VA estimates that 31% of Vietnam vets have PTSD followed by 20% of Iraq war vets, 11% for Afghan vets and 10% Gulf War vets. PTSD in the United States is now considered an "epidemic" and new solutions are needed to help communities deal with the devastating effects (individual, social and economic) of this epidemic as America deals with other such epidemics.

From a Jobenomics perspective, returning vets, especially those suffering with mild to moderate PTSD, need a new mission that they can engage together with their peers (company/squadron mates) to create careers that build on their former military skills and culture. The Jobenomics Community-Based Business Generator concept is ideally suited for this type of new "mission".

JEWRC Live-Work Community Facility

Jobenomics Erie's Total Change Program offers broad assistance program for former inmates, indigent persons, and others who are struggling to re-enter productive society; through education, health and human services, local business and agency support collaboration, and community awareness outreach. The Total Change Re-Entry Program, developed by Climate Changers, Inc. a 501c3 addresses the challenges ex-offenders run into by providing an opportunity to change the outcome. The program includes three phases; these components supply the individual with the most comprehensive set of tools to give them the greatest chance of successfully navigating life using a combination of evidence-based programs.

Whether the resident is making the transition from incarceration, from the battlefield or from the confines of a gang or abusive family, they need a safe haven to prepare their transition back into "normal" society. The second phase of Total Change Program entails a 6 to 12 month intense residential continuing education program to help the resident deal with societal issues such as family values, personal adjustments, external situations, decision making and preconceived notions. In addition to continuing education, these residents need re-entry assistance that includes a place to live, basic necessities, health care and access to agencies (Social Security, Driver's License, Parole Office, Social Assistance and Welfare) while they are involved in the Jobenomics Erie's Community Based Business Generator, Technical Training, Urban Mining or Urban Agriculture programs.

Burton School
148 W 21st St, Erie



Jobenomics Erie Workforce Re-Entry Center plans to create 750 new jobs for ex-offenders, would-be offenders (former gang members and at-risk youth) and returning veterans who are homeless, or suffering from post-traumatic stress disorders. A facility that can house and prepare up to 300 people (residents and live-in staff) is required. Burton Elementary School served approximately 300 students (83% African American) until it was closed in 2013. Located in the heart of the inner-city in Erie and close to the majority of Jobenomics Erie programs, it is an ideal for housing and intense residential continuing education offered by second phase of Total Change Re-Entry Program. Total cost of buying, renovating and equipping the Burton School is in the \$3 million range. Jobenomics Erie is seeking government and private sector sponsors to fund this unique live-work re-entry facility. Jobenomics Erie is also open to other options such as building a state-of-art re-entry facility that can be a national model.

Getting Started

What makes Jobenomics Erie an economic, business and workforce development powerhouse is that **Climate Changers and VMC Erie have scores of inner-city and veteran candidates ready for skills-based training and certification programs.** What makes Jobenomics Erie unique from other economic, business and workforce development organizations is that **Jobenomics Erie plans to be self-funding in the third operational year.**

Rough Estimate of Startup and First 2-Years of Operations

As of 2 March 2017			Startup (6 Months)			Year 1			Year 2		
Jobenomics Erie			#	Salary Average	\$ Total	#	Salary Average	\$ Total	#	Salary Average	\$ Total
Personnel			<i>FTE (Full-Time Equivalent)</i>								
Full-Time (Staff)	3	\$50,000			\$ 150,000	4	\$60,000	\$ 240,000	4	\$60,000	\$ 240,000
Full-Time (Instructors/Counselors)						3	\$60,000	\$ 180,000	3	\$60,000	\$ 180,000
Full-Time Employee Benefits (25%)					\$ 37,500			\$ 105,000			\$ 105,000
Part-Time FTE (Instructors)	3	\$60,000			\$ 180,000	5	\$70,000	\$ 350,000	5	\$70,000	\$ 350,000
Part-Time FTE (Counselors)						3	\$70,000	\$ 210,000	3	\$70,000	\$ 210,000
Part-Time FTE (ITC Support)	1	\$60,000			\$ 60,000	2	\$70,000	\$ 140,000	2	\$70,000	\$ 140,000
Part-Time FTE (Speakers, Consultants)						2	\$70,000	\$ 140,000	2	\$70,000	\$ 140,000
Total Personnel	7					19			19		
Operational Costs											
Rent/Lease (10K sq/ft @ \$15 sq/ft)					\$ 75,000			\$ 150,000			\$ 150,000
Build Out/Construction					\$ 250,000			\$ 50,000			\$ 50,000
Utilities/Supplies					\$ 12,600			\$ 25,200			\$ 25,200
Automotive Lease (Van)	1				\$ 6,000	1		\$ 12,000	1		\$ 12,000
Other Transportation					\$ 6,000			\$ 12,000			\$ 12,000
Furniture/Appliances/Miscellaneous					\$ 12,000			\$ 6,000			\$ 6,000
Insurance (Building, Auto)					\$ 6,000			\$ 10,000			\$ 10,000
Subtotal Budget					\$ 795,100			\$ 1,630,200			\$ 1,630,200
10% Reserve					\$ 79,510			\$ 163,020			\$ 163,020
Total Budget			Startup		\$ 874,610	Year 1		\$ 1,793,220	Year 2		\$ 1,793,220

As of 2 March 2017			Year 3			Year 4		
Jobenomics Erie			#	Salary Average	\$ Total	#	Salary Average	\$ Total
Personnel								
Full-Time (Staff)	5	\$70,000			\$ 350,000	8	\$70,000	\$ 560,000
Full-Time (Instructors/Counselors)	7	\$70,000			\$ 490,000	10	\$70,000	\$ 700,000
Full-Time Employee Benefits (25%)					\$ 210,000			\$ 315,000
Part-Time FTE (Instructors)	8	\$80,000			\$ 640,000	10	\$80,000	\$ 800,000
Part-Time FTE (Counselors)	7	\$80,000			\$ 560,000	10	\$80,000	\$ 800,000
Part-Time FTE (ITC Support)	2	\$80,000			\$ 160,000	10	\$80,000	\$ 800,000
Part-Time FTE (Speakers, Consultants)	5	\$80,000			\$ 400,000	10	\$80,000	\$ 800,000
Total Personnel	34					58		
Operational Costs								
Rent/Lease (10K sq/ft @ \$15 sq/ft)					\$ 150,000			\$ 150,000
Build Out/Construction					\$ 50,000			\$ 50,000
Utilities/Supplies					\$ 27,600			\$ 27,600
Automotive Lease (Van)	2				\$ 24,000	4		\$ 24,000
Other Transportation					\$ 18,000			\$ 18,000
Furniture/Appliances/Miscellaneous					\$ 6,000			\$ 6,000
Insurance (Building, Auto)					\$ 15,000			\$ 15,000
Subtotal Budget					\$ 3,100,600			\$ 5,065,600
10% Reserve					\$ 310,060			\$ 506,560
Total Budget			Year 3		\$ 3,410,660	Year 4		\$ 5,572,160

Estimates of annual costs of operation are \$1,793,220 for the first and second year of operation with a full-time equivalent staffing of 19 staff. If successful, staffing is projected to increase to 58 in the fourth year with annual total expenses exceeding \$5,572,000. Jobenomics Erie's Community-Based Business Generator's skills-based training and certification programs will be located in the 27,000 square foot Climate Changers complex located on 314 East 11th Street in Erie.



Impact of eCyclingErie on Overall Operational Costs:

Jobenomics Erie Could Be Self-Sustaining In Year 3 Not Requiring Public Funds

As of 2 March 2017	Startup (6 Months)	Year 1	Year 2	Year 3	Year 4
Operational Costs & Expenses					
Jobenomic Erie-Training & Certification Programs	\$874,610	\$1,793,220	\$1,793,220	\$3,410,660	\$5,572,160
eCyclingErie (1-Shift Operation)			\$9,987,000		
eCyclingErie (2-Shift Operation)				\$18,361,000	
eCyclingErie (3-Shift Operation)					\$20,083,000
Revenue Projections					
eCyclingErie (1-Shift Operation)			\$11,113,366		
eCyclingErie (2-Shift Operation)				\$22,226,731	
eCyclingErie (3-Shift Operation)					\$31,950,926
Net Income					
All Jobenomics Erie Operations	-\$874,610	-\$1,793,220	-\$666,854	\$455,071	\$6,295,766

The projected net income for initial Jobenomics Erie operations, from startup through year 4, indicates a net loss for the first 2½ years and profitability thereafter. During the first 2½ years public and private financial support will be needed. In year 4 and beyond, Jobenomics Erie profitability should be great enough to retire all debt (including government debt if so desired), fund new and enhanced operations, and finance numerous micro-business startups and light manufacturing companies.

This Jobenomics Erie Program contains forward-looking statements. All statements contained in this Program other than statements of historical fact, including statements regarding future results of operations and financial position, business strategy and plans, and objectives for future operations, are forward-looking statements that are subject to a number of risks, uncertainties and assumptions. Moreover, Jobenomics Erie will operate in a competitive and changing environment. Although it is believed that the expectations reflected in the Jobenomics Erie Program are achievable, the Jobenomics Erie team cannot guarantee future results, performance or achievements. However, the team can unequivocally state that social wellness is our main objective and the profits of the enterprise will be used to the maximum extent possible for future workforce programs oriented focused on the most socioeconomically challenged citizens in inner-city Erie.



Contact Information

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Jobenomics Overview

Jobenomics (*Jobs + economics*) deals with the process of creating and mass-producing small businesses and jobs. Jobenomics National Grassroots Movement's goal is to facilitate creation of 20 million net new U.S. jobs within a decade. The Movement has a following of 20 million people. Jobenomics regularly updates its six books and numerous reports to keep its members current on the latest national and international economic, business and workforce development issues, trends and solutions. Jobenomics website (<https://jobenomicsblog.com/>) had 6 million hits in the last 12-months, a growth rate of 400% over the previous year, which is indicative of the high level of interest in a new approach to economic, business and workforce development.

Jobenomics also provides advice and timely data to policy and decision-makers worldwide. Over the last few years, Jobenomics met with over a thousand government, business and community leaders to incorporate the best of their ideas and requirements into Jobenomics initiatives and programs. Today, a dozen communities have started Jobenomics initiatives led by local community leaders. Another dozen are in the pipeline. These initiatives focus on citizens at the base of America's socioeconomic pyramid with emphasis on women, minorities, youth, veterans and other hopefuls who want to work or start a business. While Jobenomics is designed as an American business and job creation movement, there is significant interest from Asian, Middle East and African nations to start similar movements.

Key Focus Areas. While Jobenomics supports big business and government job creation efforts, its principal focus is on highly-scalable small and self-employed businesses that employ 80% of all Americans and produced 80% of all new jobs this decade. Jobenomics is working with numerous national organizations to implement Jobenomics Community-Based Business Generators to mass-produce startup businesses and provide skills-based training and certification programs to create "careers within a year." Via a strategic partnership with The Hope Collection (www.hopcollection.org), Jobenomics can offer over 9,000 online technical training and certification programs. Jobenomics partnership with EmeraldPlanet (www.EmeraldPlanet.org) includes relationships with the 1,000 best emerging green business practices but also to Emerald Planet Television Show aired weekly worldwide.

National-Level Initiatives. Jobenomics is leading four national-level initiatives; Energy Technology Revolution, Network Technology Revolution, Urban Mining and Urban Agriculture. These initiatives could create tens of millions net new American jobs and billions globally.

- The 160-page Jobenomics Energy Technology Revolution report addresses emerging energy technologies, processes and systems that will transform the global energy mix and create tens of millions of net new U.S. jobs. Communities that have an ETR strategy will claim the bulk of these jobs and to make their communities to be much more energy efficient and affordable.
- The 200-page Network Technology Revolution report addresses next generation network and digital technologies that will transform economies and the way we live, work and play. The NTR could produce tens of millions of net new U.S. jobs and millions of small businesses. On the other hand, via automation, the NTR has the potential to obsolete tens of millions of existing U.S. jobs.
- Jobenomics' Urban Mining initiative helps communities monetize waste streams to create jobs and businesses. As part of this initiative, Jobenomics established eCyclingUSA (www.eCyclingUSA.com) to implement turnkey plants to reclaim high value metals from electronic waste streams and use profits to fund Jobenomics Community-Based Business Generators. Detailed plans are available.
- Jobenomics is partnered with ACTS Freedom Farms (www.actsffa.com) produce 25,000 highly-scalable U.S. micro-farms, employing over 100,000 new U.S. jobs in the next five years. These micro-farms feature state-of-the-art hydroponic and vertical agricultural technology to grow high-quality organic agricultural products in both urban and rural communities.