

Jobenomics: The economics of job and small business creation.

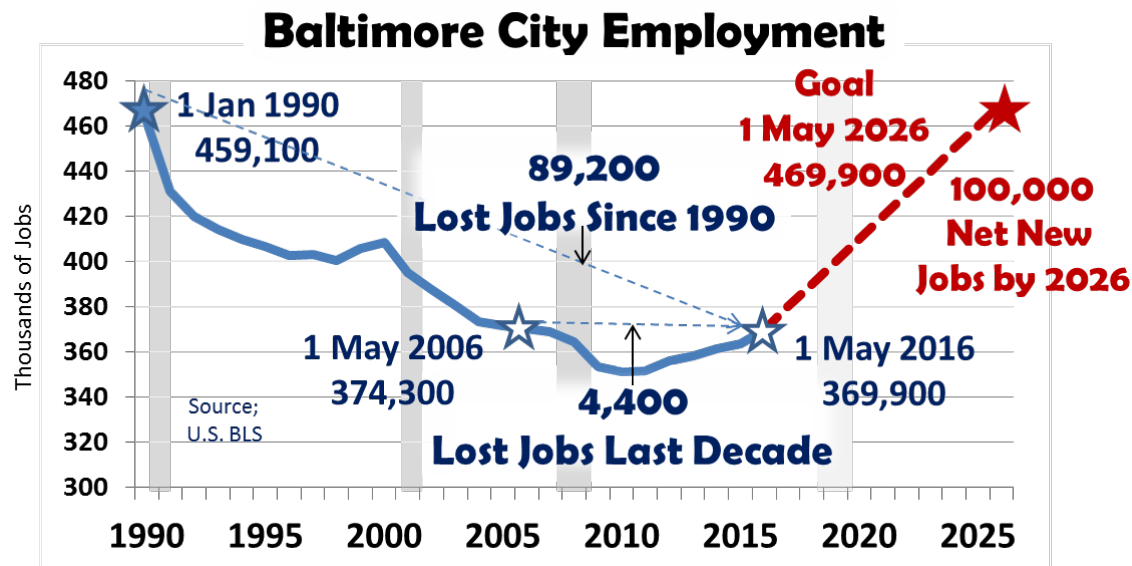


Jobenomics Baltimore City Goal: Create 100,000 net new jobs in Baltimore City within the next 10 years with emphasis on minorities, women and new workforce entrants.

Dr. Al Hathaway & Chuck Vollmer

23 July 2016

Restore Baltimore City Labor Force



- Jobenomics Baltimore City's goal is to restore the labor force.
- Baltimore City's labor force has declined compared to growing national, Maryland and Baltimore County labor forces.
- The entrepreneurial spirit of inner-city Baltimoreans can be channeled to mass-produce startup businesses and jobs to meet tomorrow's needs, create meaningful income opportunities and provide Baltimoreans a hopeful future.

Creating 100,000 net new jobs by 2026 is an achievable goal.

Presentation Outline

Baltimore Metropolitan Area Labor Force Analysis

Jobenomics Baltimore City (JBC) Overview

100,000 Net New Jobs By 2026 Framework

Baltimore Area At A Glance

Washington-Baltimore-Arlington Combined Statistical Area

National Ranking	Primary Census Location	Population	Population Density (sq mi)
4	Washington-Baltimore-Arlington Combined Statistical Area	9,625,360	N/A
26	Baltimore City	622,793	7,671
69	Baltimore County	826,925	1,346
21	Baltimore-Columbia-Towson MSA (Baltimore MSA)	2,797,407	1,039
22	Washington DC	672,228	11,011
6	Washington-Arlington-Alexandria MSA (Washington MSA)	6,097,684	1,084

Source: U.S. Census Bureau

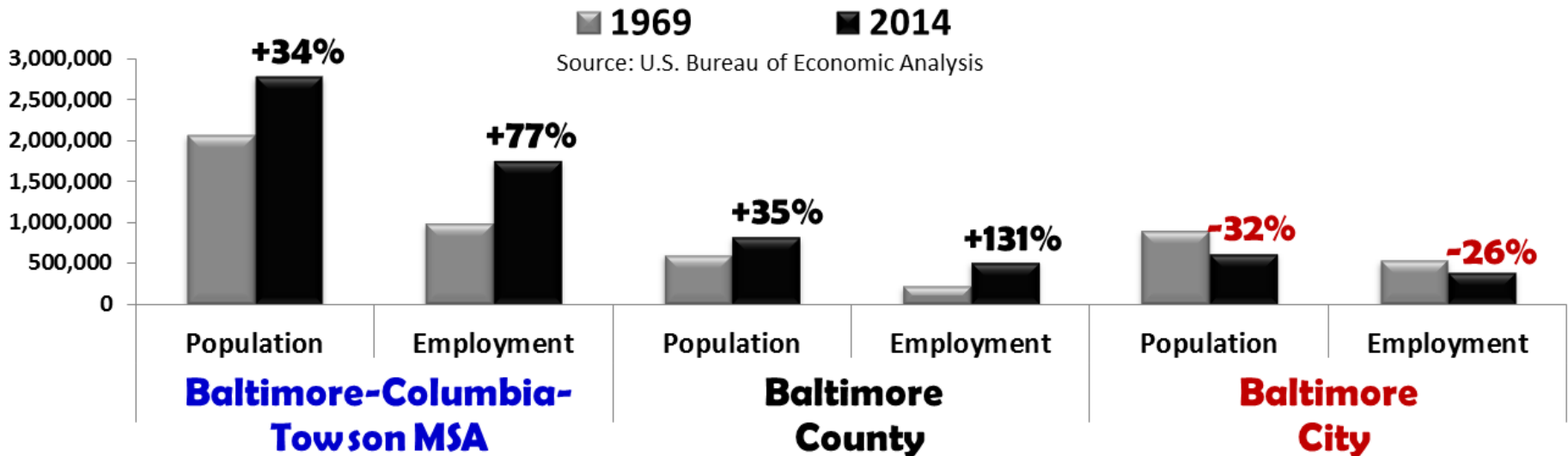
MSA: Metropolitan Statistical Area

- Baltimoreans are 29% of the Washington-Baltimore Metropolitan Region, the 4th largest in the United States.
- Baltimore City residents are 22% of the Baltimore-Columbia-Towson Metropolitan Statistical Area (MAS).
- Population Density is roughly equivalent in the region.

Baltimore City is the home of 623,000 people.

Baltimore Population/Job Trends

Historical Baltimore Population/Employment Trends



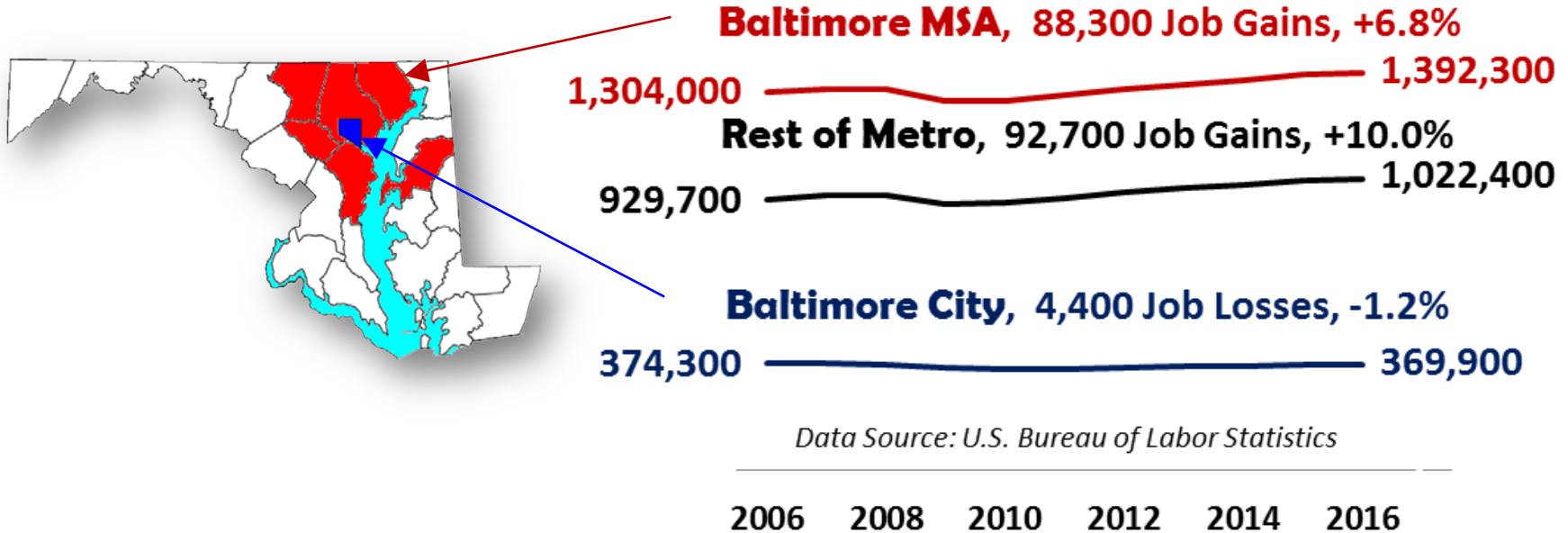
- Baltimore City is losing people and jobs to Baltimore County and local metropolitan area.
- Baltimore City's best people are leaving and the skilled labor force is eroding, all of which eventually leads to more poverty, crime, and anger, as evidenced by the 2015 Freddie Gray riots.
- Small business creation is necessary to reverse negative trends.

Baltimore City's labor force is in a state of decline.

Baltimore Job Creation

Baltimore Employment History

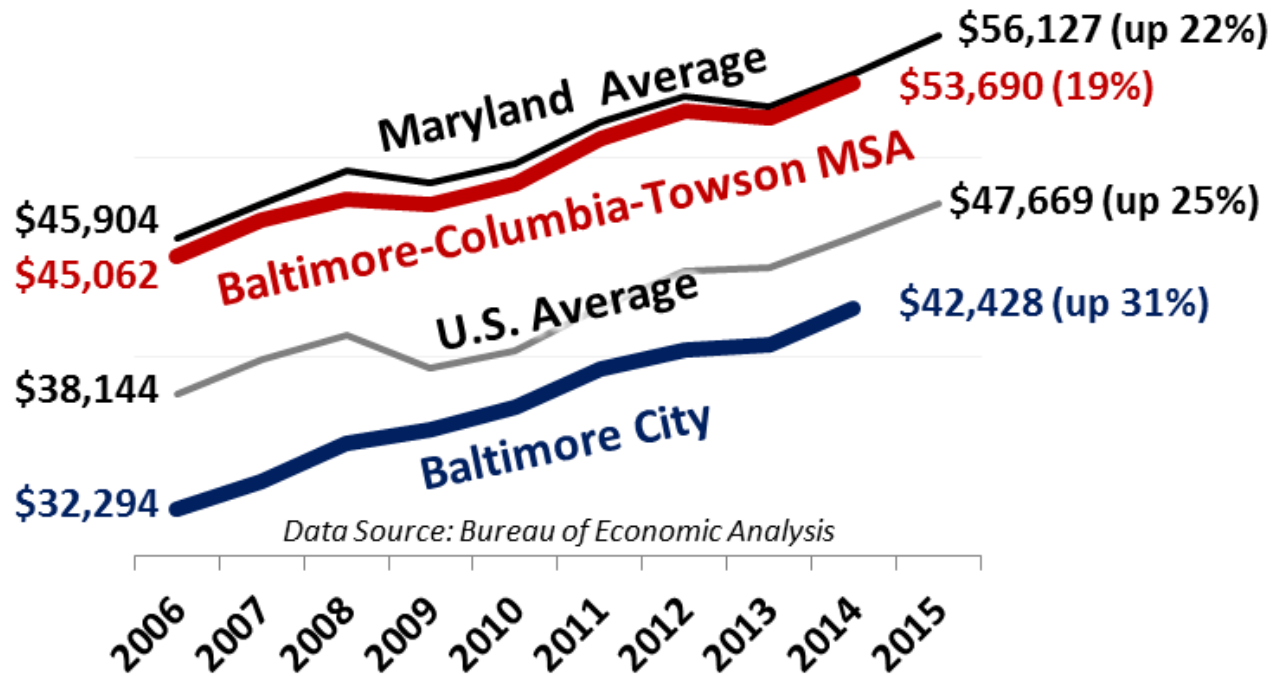
Last Decade: 1 May 2006 to 1 May 2016



- Baltimore City lost 4,400 jobs over the last decade compared to upward trends for neighboring Columbia and Towson.
- The decline of the City has negative consequences on the region.
- Emphasis needs to be on City micro and small business creation.

Other Baltimore Metro communities created jobs almost twice (10.0%) the national average (5.5%) over the same period of time.

Per Capita Personal Income



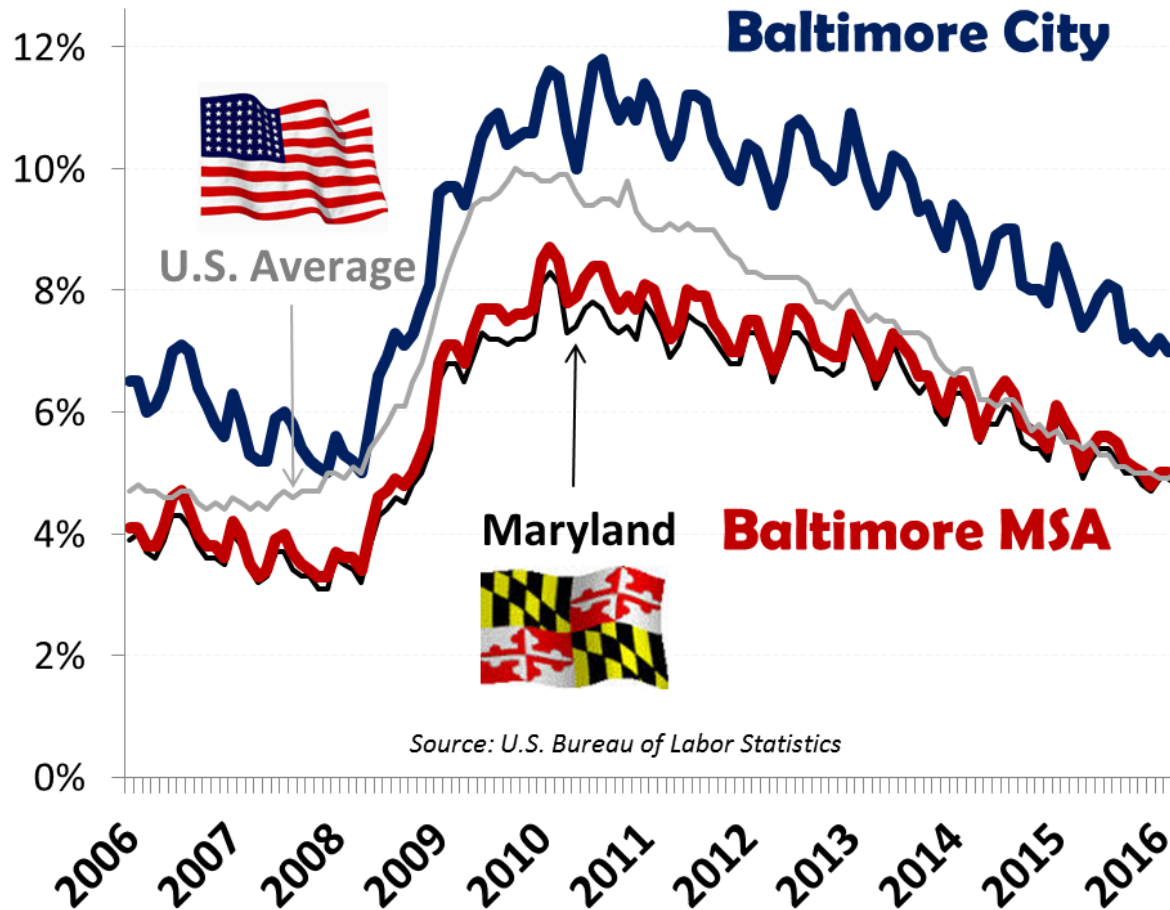
- Maryland citizens and non-City Baltimoreans make well above average per capita personal income.
- Baltimore City residents make \$3,621 less than the average American and \$11,748 than the average Marylander per year.
- Baltimore City income is increasing faster (up 31%) but not fast enough to close the gap anytime soon.

Income inequality and income opportunity are major regional issues.

Baltimore Unemployment: Mixed Picture

Unemployment Rate (U3) Comparison

January 2006 to March 2016

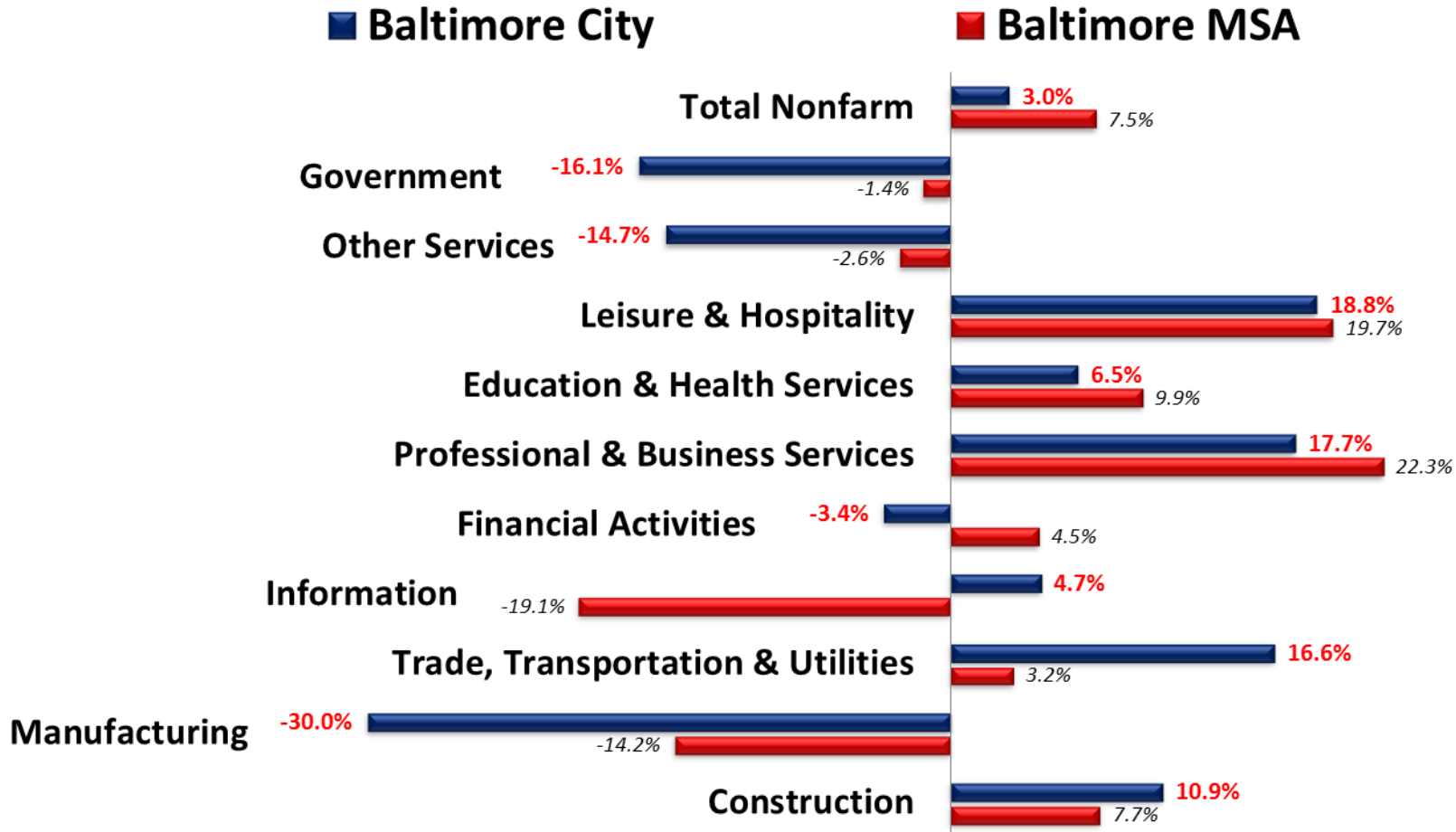


Unemployment is 26% higher for Baltimore City but relatively good for the metropolitan area and Maryland in general.

Baltimore Job Dynamics: Wild Swings

Post-Recession Baltimore Jobs Growth Per Industry Sector

January 2010 to March 2016

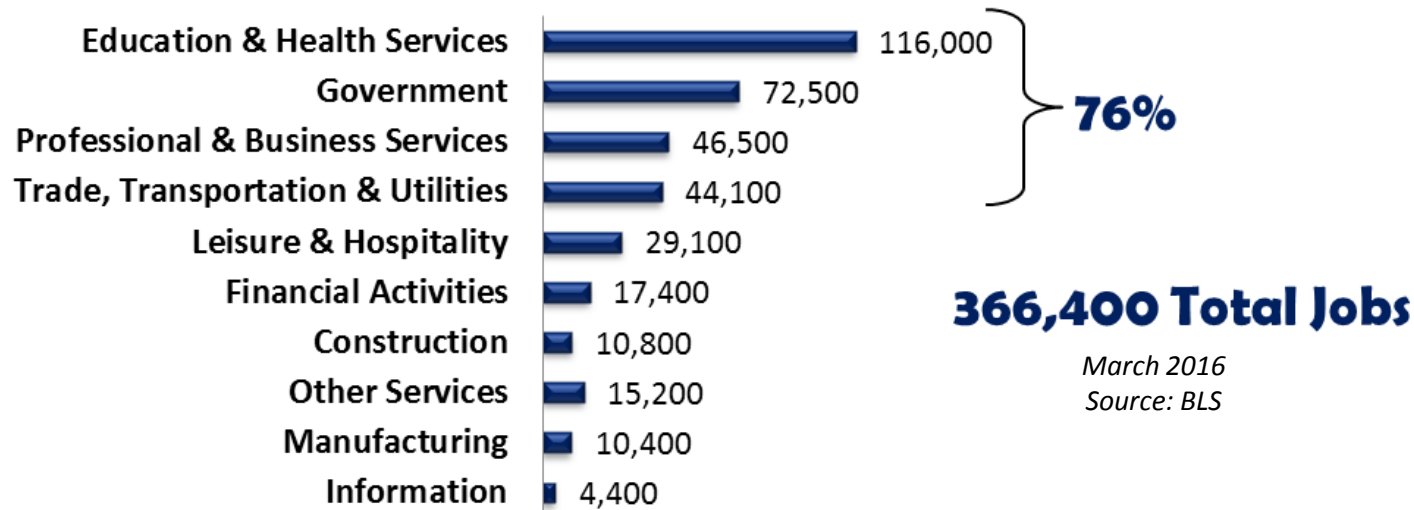


Source: U.S. Bureau of Labor Statistics

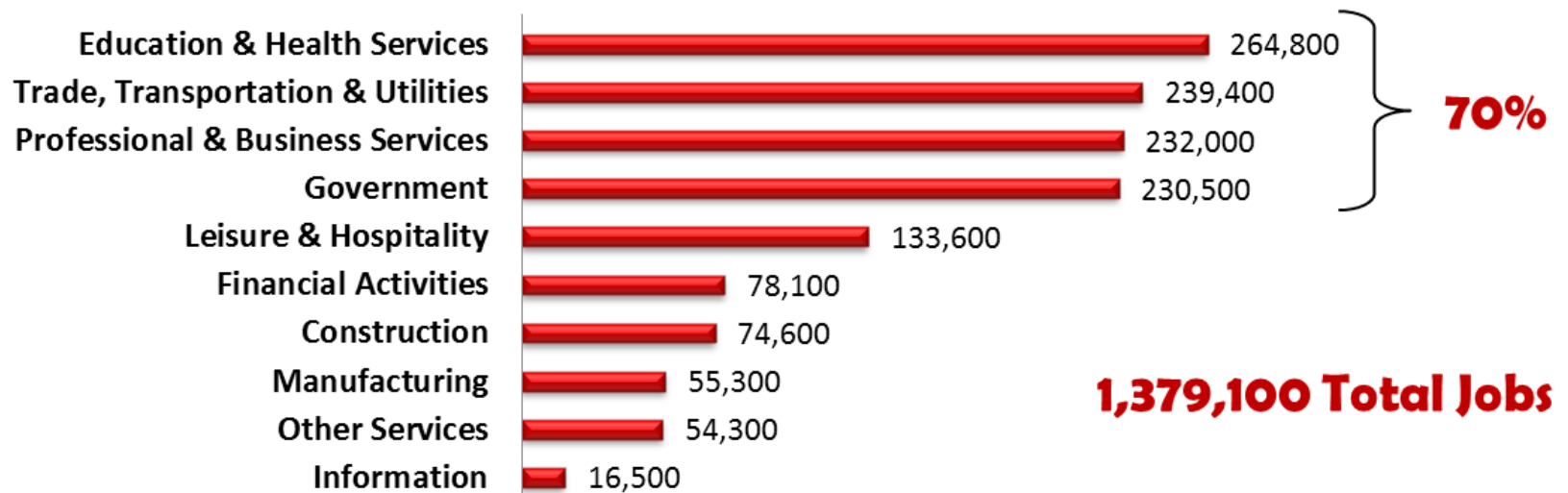
Jobenomics Baltimore will examine each of these industries for lost as well as emerging opportunities.

Where The Jobs Are By Industrial Sector

Baltimore City



Baltimore MSA

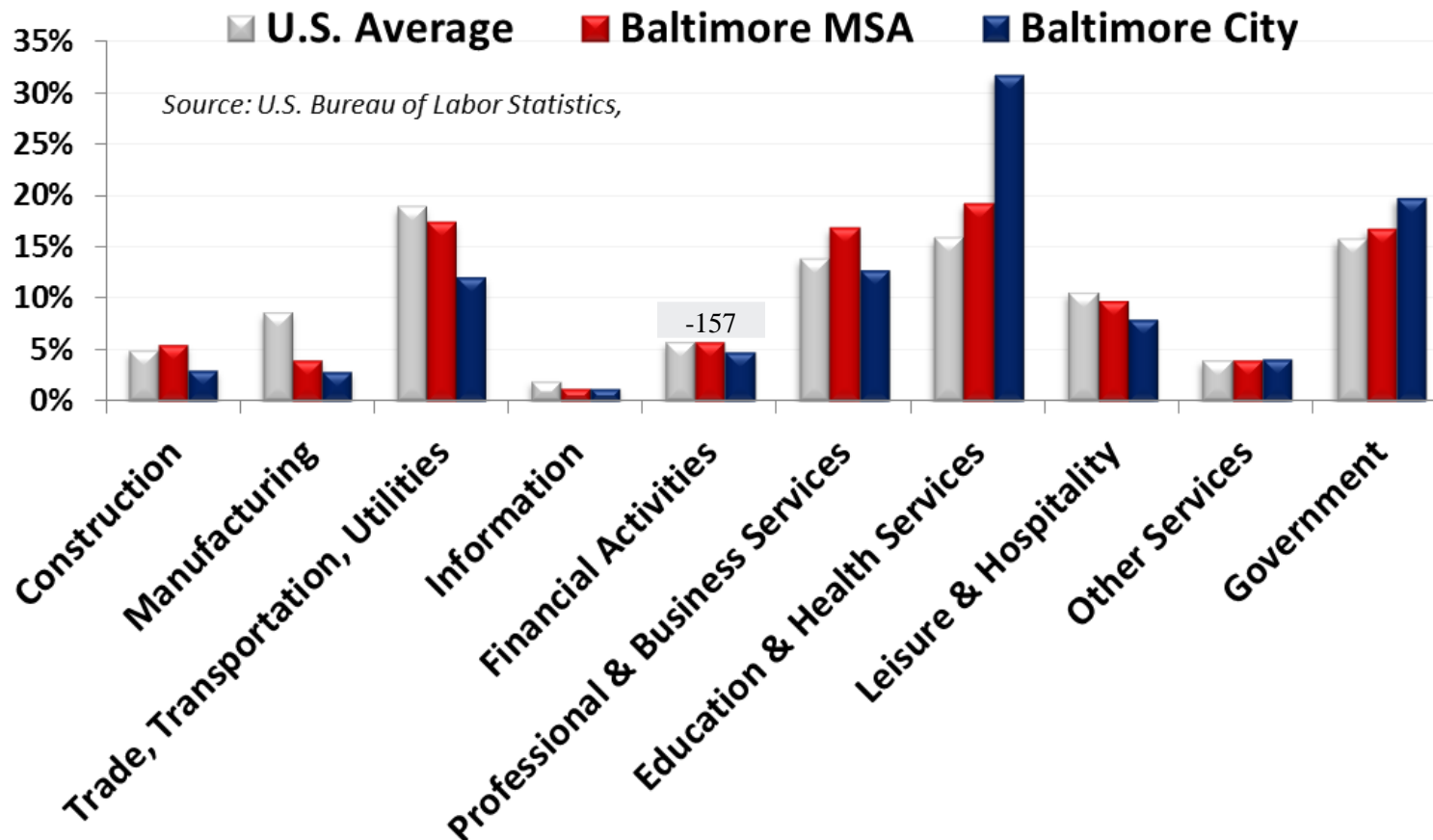


Baltimore employs 1.4 million people.

Employment: Health, Education and Government Are the Major Employers

Baltimore Employment By Industry Sector

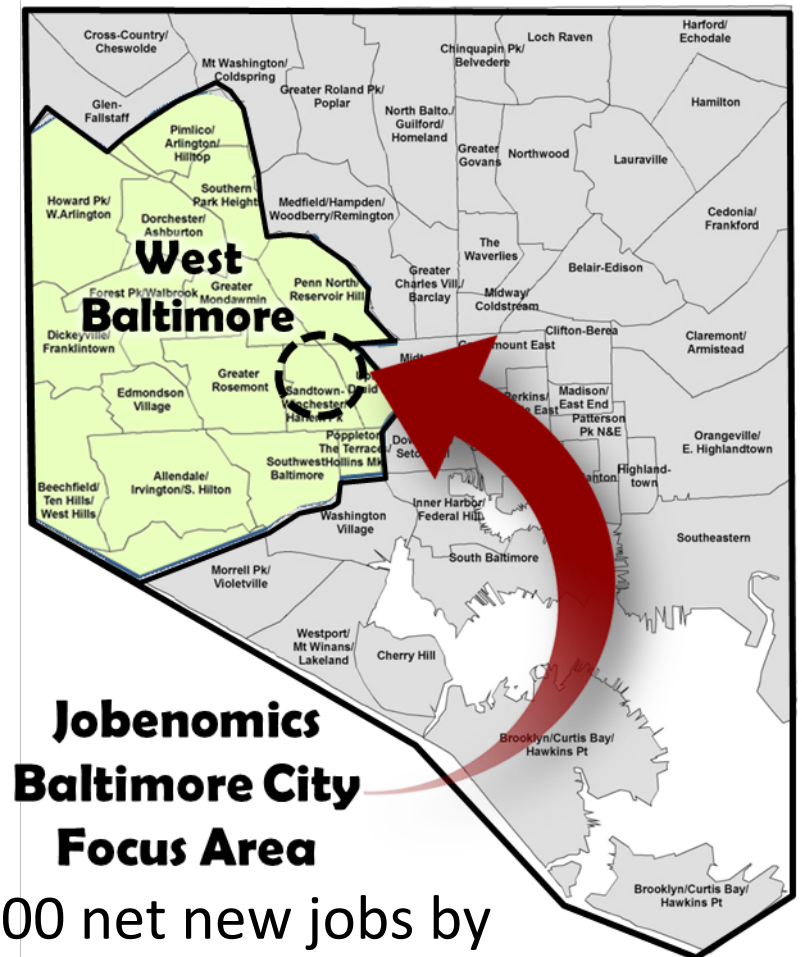
March 2016



Baltimore has a number of stable employers. However, much more needs to be done to diversify the employment base.

Baltimore City & West Baltimore

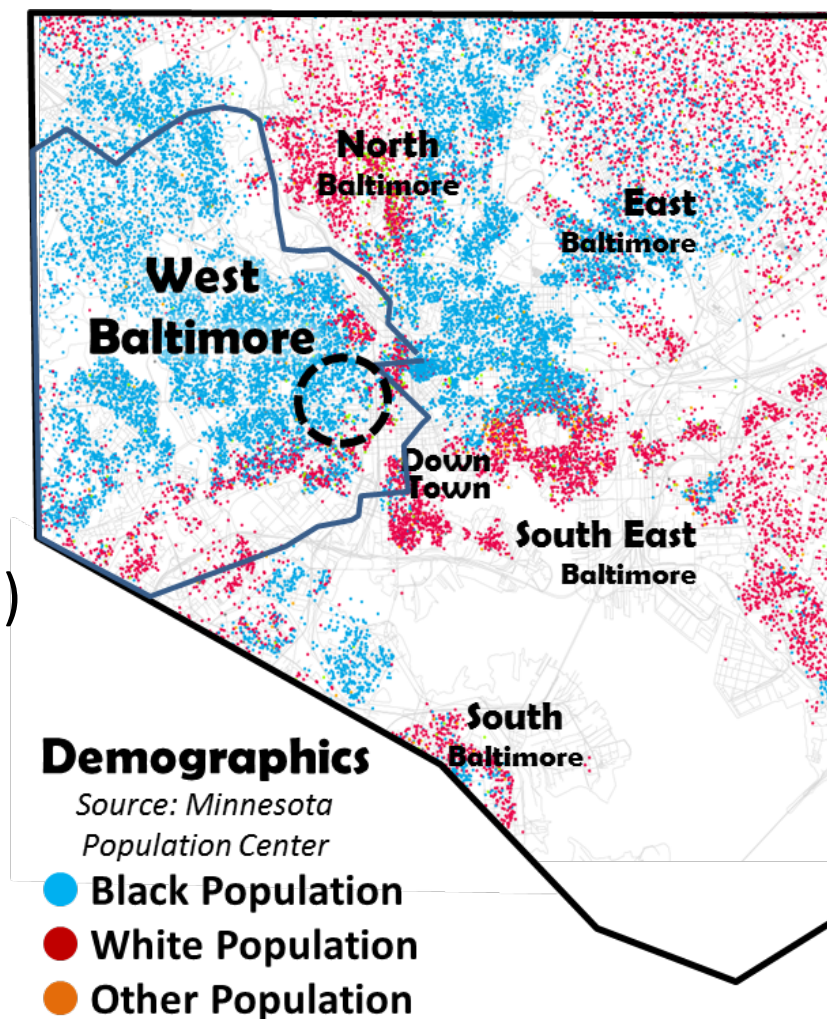
- Maryland and Baltimore County are performing above the U.S. average. Baltimore City is not. A 2015 Harvard Study ranks Baltimore City dead last of 100 U.S. cities in upward income mobility and the bottom quintile of average income.
- Jobenomics Baltimore City will focus initial operations in the poorest areas in West Baltimore.
- Jobenomics goal is to create 100,000 net new jobs by 2026 via small business creation at the base of the city's economic pyramid in most depressed and high crime neighborhoods where rioting erupted after the death of Freddie Gray in police custody.



West Baltimore is the community with the greatest need.

Baltimore City Demographics

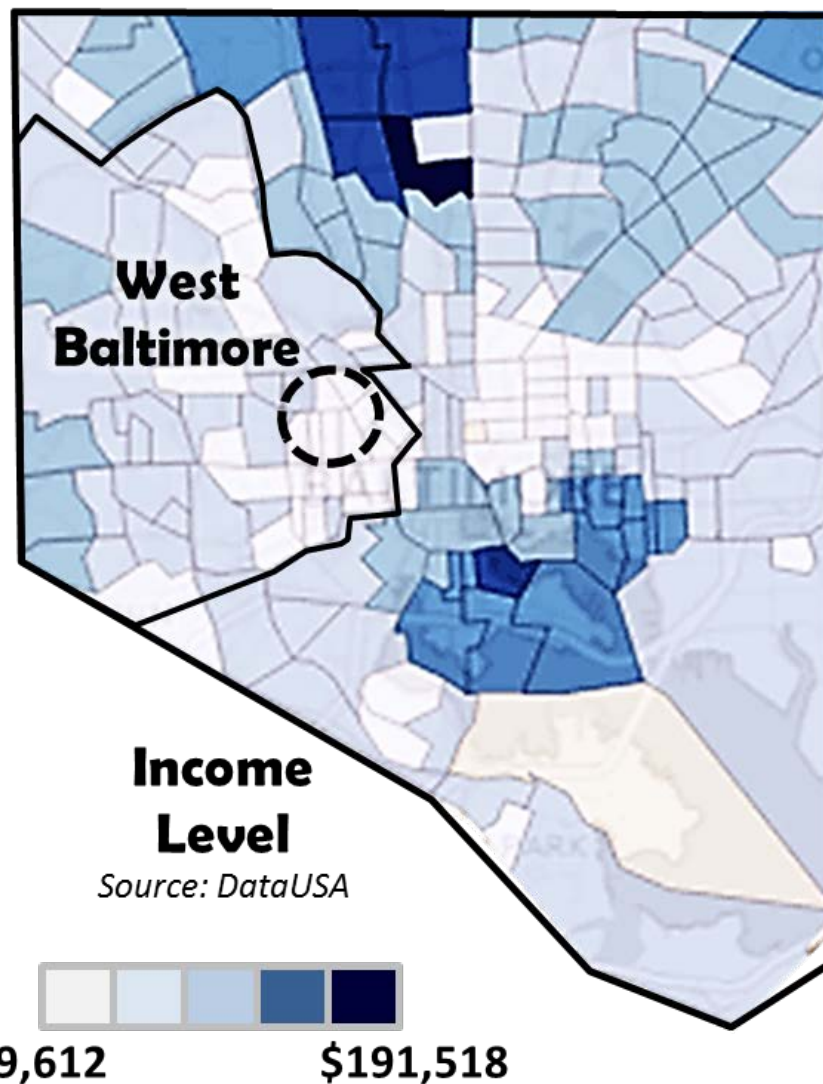
- Baltimore City is 64% Black, 30% White and 6% Hispanic/Other.
- North, South and Southeast and Down Town Baltimore are predominantly White or mixed.
- West Baltimore's population is 213,000 and overwhelmingly Black. 9 of its 14 neighborhoods are over 90% Black. The only mixed race (46% Black, 39% White) neighborhood was where Freddie Gray was killed in police custody.
- Jobenomics Baltimore City's goal is to increase income equality and promote upward mobility for minorities, women and youth.



Baltimore's community leaders pledge to champion diversity, education, safety, economic development and jobs .

Baltimore City Income Statistics

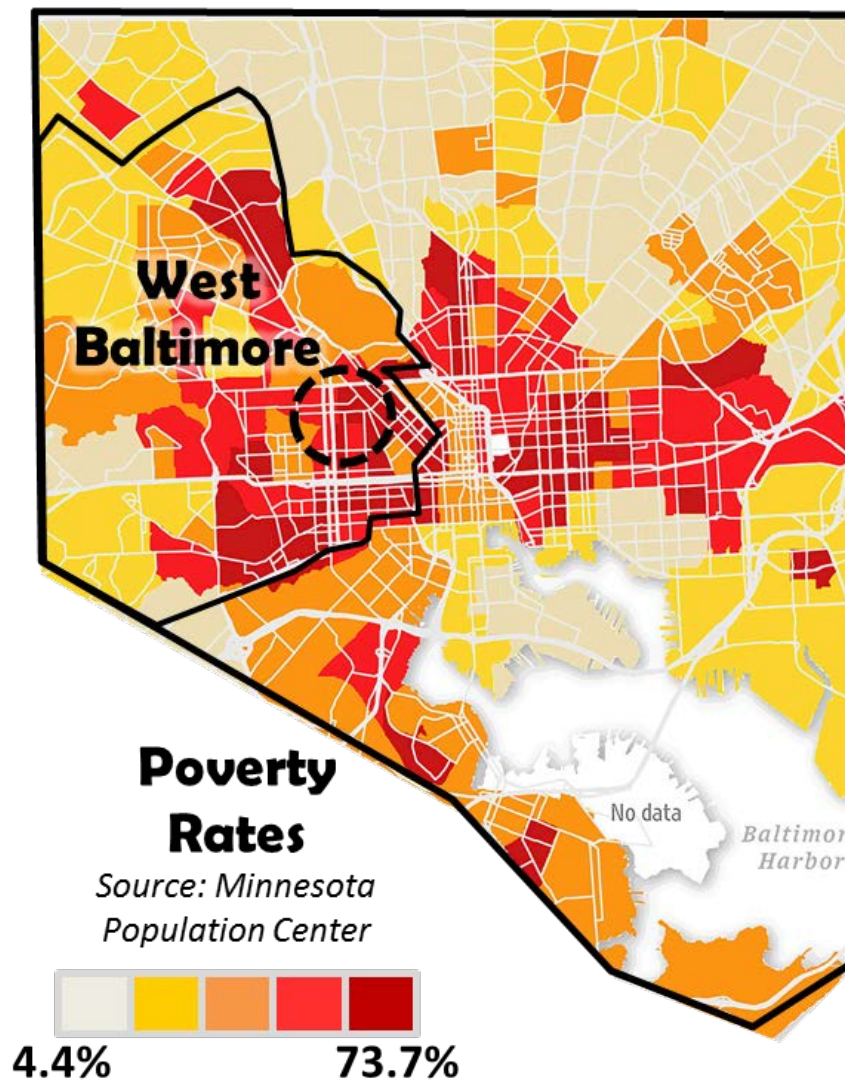
- United States per capita income is \$47,669.
- Maryland per capita income is \$56,127.
- Baltimore City's per capita income levels by neighborhood range from a low of \$9,612 to a high of \$191,518.
- Jobenomics focus area starts with the poorest neighborhoods and expands outward.
- Jobenomics plans to locate its operations center in Druid Hills.



Success in poor areas will benefit all Baltimoreans and Marylanders.

Baltimore City Poverty Rates

- United States' average poverty rate is 14.8% and varies by family size.
- Maryland's average poverty rate is 10.0%.
- Poverty rates in West Baltimore neighborhoods range from as low as 4.4% to high of 73.5%.
- The Jobenomics Baltimore City areas will emphasize neighborhoods with the highest levels of poverty.



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100,000 Net New Jobs By 2026 Framework



Plan for America (Book, Research, Initiatives & Blog)

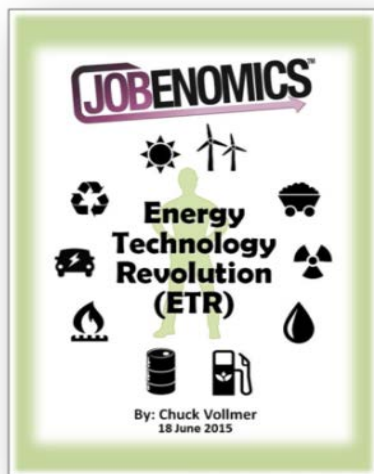
- Focused on the economics of small and self-employed businesses and job creation for women, minorities, new workforce entrants and other hopefuls who want to work.
- Provides detailed plans for American business and jobs creation

Bipartisan National Grassroots Movement

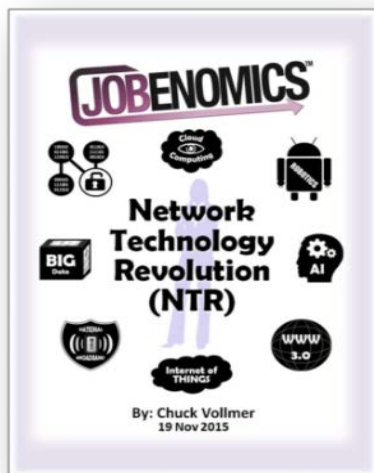
- Following of 2 million people
- Highly scalable business generation projects underway

U.S. Goal: 20 million new US private sector jobs every 10 years.

Massive Emerging Employment Trends



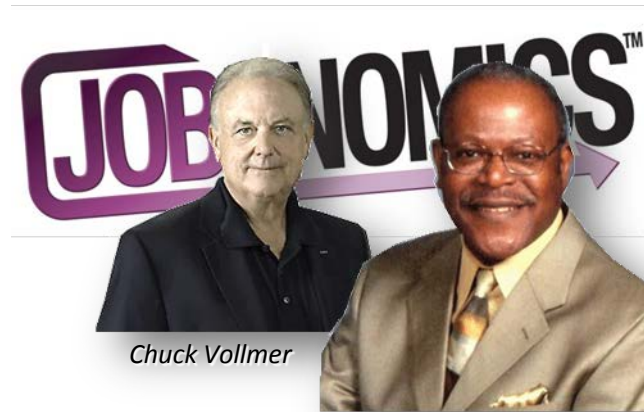
The **Energy Technology Revolution (ETR)** involves emerging energy technologies, processes and systems that will transform the global energy mix and create hundreds of millions of new jobs around the world. Communities that have an ETR strategy will claim the bulk of these jobs and can reengineer their communities to be much more energy efficient.



The **Network Technology Revolution (NTR)** is the next generation in network and digital technology 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 jobs.

A Baltimore ETR and NTR strategy is needed to maximize labor force gains and minimize labor force losses.

Jobenomics Baltimore City (JBC)



Chuck Vollmer

Dr. Hathaway

Leadership

- Dr. Alvin C. Hathaway, Commissioner of the Maryland Governor's Workforce Investment Board, and Chuck Vollmer, Jobenomics Founder and President.
- Develop Jobenomics Baltimore Movement with active participation of community leaders and decision-makers.

Goal: 100,000 Net New Baltimore City Jobs

- Start in West Baltimore and expand outward.
- Implement Jobenomics Community-Based Business Generators to mass-produce startup businesses.

Current status: Developing strategic plan and determining interest

JBC's Conceptual New Job Framework

Industry/Occupation	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
		Direct (Est.)	Indirect (Est.)		
Manufacturing	1-5	5,750	28,750	34,500	35%
Under Armour	1-5	3,000	15,000	18,000	18%
Foreign (EB-5)	1-5	1,000	5,000	6,000	6%
Urban Mining	1-3	750	3,750	4,500	5%
Light Industrial	1-3	1,000	5,000	6,000	6%
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Personal Care Aids	1-2	2,000	6,000	8,000	8%
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Direct-Care Center	1-4	375	1,125	1,500	2%
Demolition and Construction	1-4	6,000	18,000	24,000	24%
Demolition Labor	1	1,500	4,500	6,000	6%
Construction Labor	1-2	1,500	4,500	6,000	6%
Live-Baltimore/Retire-Baltimore	1-4	1,500	4,500	6,000	6%
Renewable Energy Initiative	1-4	1,500	4,500	6,000	6%
Digital Economy	1-5	4,000	12,000	16,000	16%
E-Commerce Self-Employed	1-4	2,000	6,000	8,000	8%
On Demand Work (e.g., Uber)	1-3	1,000	3,000	4,000	4%
E-Business Consultants	4-5	500	1,500	2,000	2%
Independent Contractors	3-5	500	1,500	2,000	2%
Total	1-5	22,125	77,875	100,000	100%

This conceptual framework will mature with community input.

JBC Focus On Entry-Level Job Skill “Zones”

- A Job Zone is a group of occupations that are similar in education, experience and on-the-job-training. Financially-depressed areas in Baltimore City usually produce lower job zone candidates.
- Equally important is an individual’s drive and desire to work.

Skill Level	Zone 1	Zone 2	Zone 3	Zone 4 & 5
Preparation	Little or none	Some	Medium	Considerable or extensive preparation needed. The J-CBBG will fast track these individuals who want to start a business.
Education	None, GED, High School	GED, High School	Vocational school, on-the-job experience, or associate degree	
Experience	Little or no previous skill or knowledge	Some previous work-related skill or knowledge	Previous work-related skill or knowledge	
Job Training	Few days to a few months	One to two years on-the-job experience or apprenticeships	Several years of work-related experience, on-the-job training, and/or vocational training	
Examples	<i>Taxi drivers, waiters, clerks</i>	<i>Electricians, food service managers, assistants</i>	<i>Accountants, sales managers, database administrators, teachers</i>	

JBC will emphasize certification processes that take a few weeks or months to get candidates into the workforce as soon as possible.

JBC Focus On Upward Income Mobility For Minority, Women and Entry-Level Workers

2014 U.S. Labor Force Income Earnings

By Gender, Race, Ethnicity & New Workforce Entrants

Source: U.S. Census Bureau 2015 Annual Social and Economic Supplement, Jobenomics Analysis

U.S. Workers With Earnings		Below Mean Income >\$55K	Population Millions	Above Mean Income >\$55K	Population Millions	Total Population Millions
By Gender	Both Sexes	72%	115.2	28%	44.9	160.1
	Males	65%	54.8	35%	29.7	84.5
	Females	80%	60.4	20%	15.2	75.6
By Race & Ethnicity	White Non-Hispanic	68%	70.7	32%	33.6	104.3
	Black	82%	15.4	18%	3.4	18.8
	Hispanic	85%	21.7	15%	3.8	25.5
	Asian	60%	5.0	40%	3.3	8.3
Entry	15-24 Year Olds	96%	21.4	4%	0.8	22.2

Minority-Owned, Women-Owned and Generation Y/Z-Owned Businesses will be a high priority for the JBC plan to address income opportunity and inequality issues.

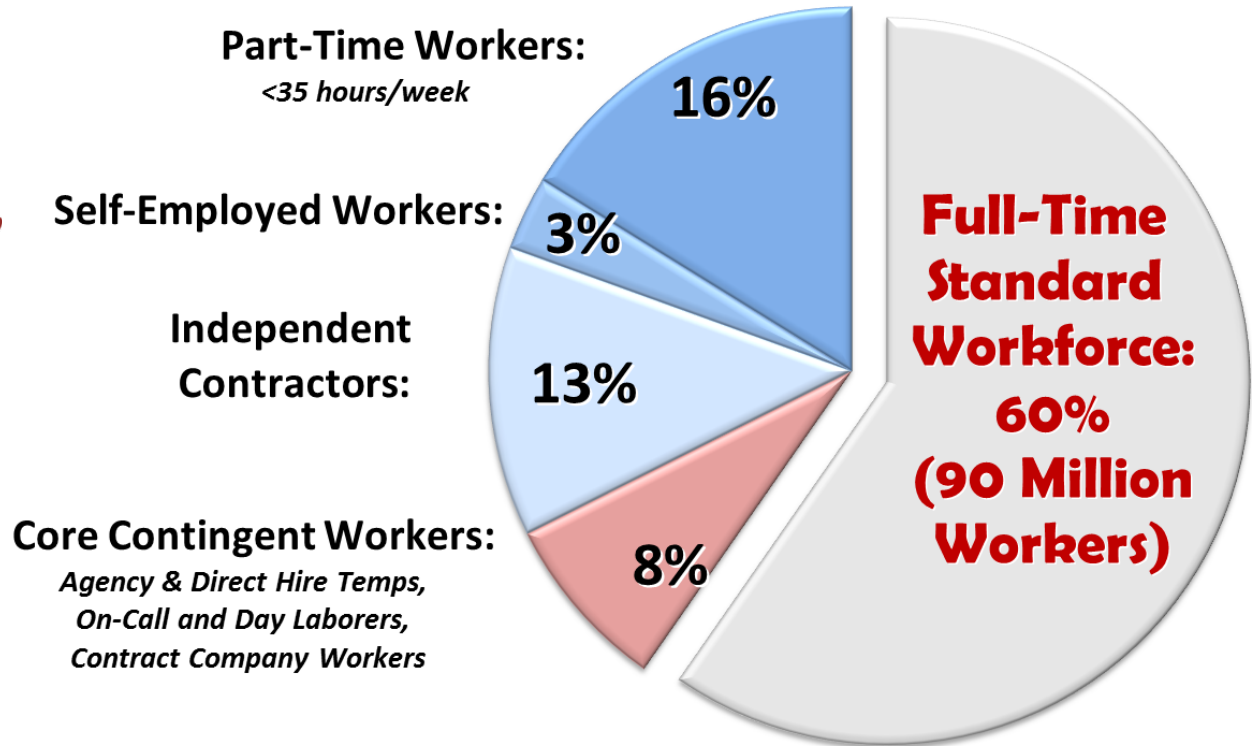
JBC Focus On Contingent Workforce

U.S. Labor Force Employed Workforce in 2016

Source: GAO, BLS, NORC, Jobenomics



Contingent Workforce: 40% (60 Million Workers)



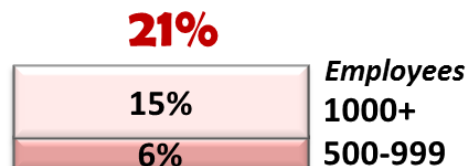
By 2030, contingent workforce will be the dominant (over 50%) form of labor in the United States. JBC will help prepare and maximize Baltimore City's labor force for this transition.

JBC Focus On Small Business Creation

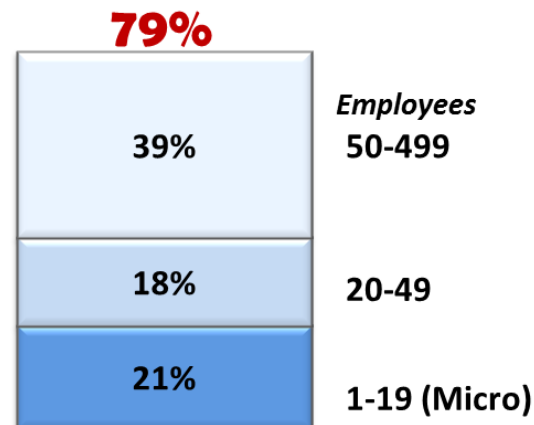


Percent of New U.S. Jobs Produced This Decade (Jan 2010 - Apr 2016)

Source: ADP, Jobenomics



Big Business



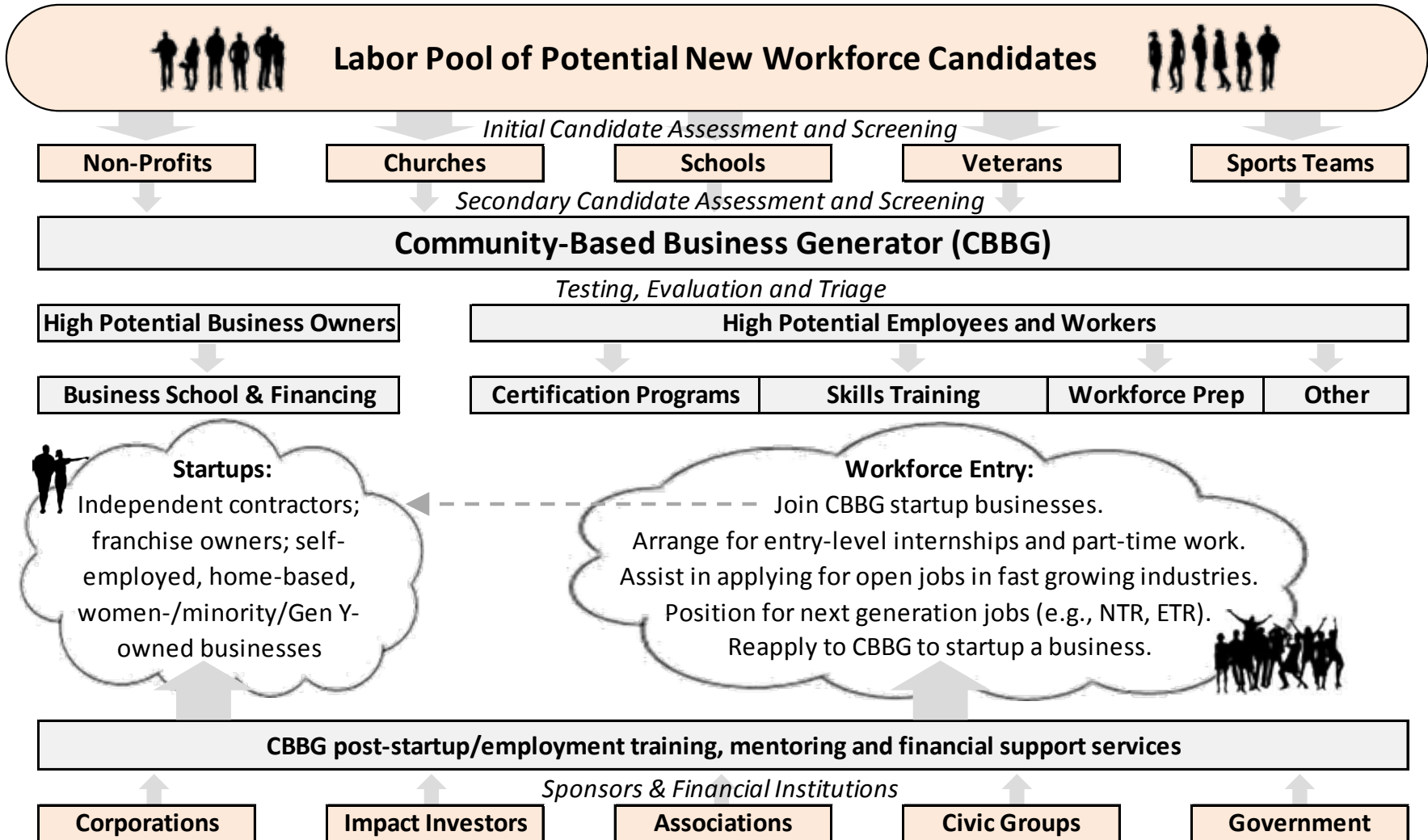
Small Business

- U.S. small businesses employ more than 5 times as many American workers than large corporations. U.S. micro and self-employed businesses (less than 19 employees) employ 69% more workers than large corporations (31.0 versus 18.3 million).
- 50% of all small business startups last five years and 30% remain in business over ten years. In addition, small business growth has outperformed medium and large businesses during the recovery from the Great Recession.

JBC will maximize small business creation that will in turn create significant numbers of new jobs.

JBC's Business Generator Concept

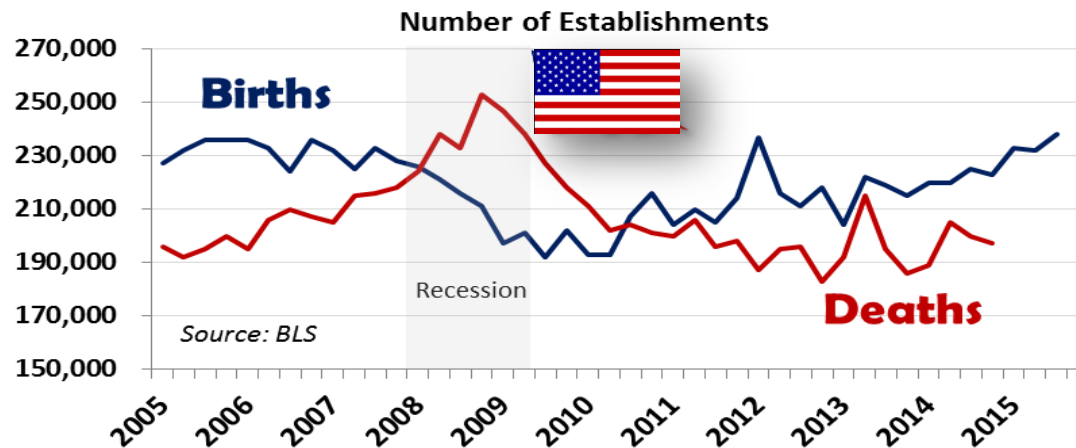
Jobenomics Community-Based Business Generator Concept



Goal: Mass-produce startup businesses with high-quality employees.

Incubators, Accelerators & Generators

- **Business incubators** focus high-tech, silver bullet innovations.
- **Business accelerators** focus on expanding existing businesses.
- Jobenomics **business generators** involve mass-producing small and self-employed businesses with emphasis on lower-tech businesses at the base of the U.S. economic pyramid.



- The key to economic growth is to increase the number of small business births (startups) and minimize deaths (closures).

The U.S. averages 250,000 startups per quarter in an ad hoc process. The Jobenomics Community-Based Business Generator is a standardized process designed to mass-produce startups.

Community-Based Business Generators

A **Jobenomics Community-Based Business Generator (JCBBG)** mass-produces startups by:

- Working with community leaders to identify high-potential business owners and employees,
- Training and certifying owners and employees in targeted occupations,
- Creating highly repeatable and highly scalable “turn-key” small and self-employed businesses,
- Establishing sources of startup funding, recurring funding and contracts to provide a consistent source of revenue for new businesses after incorporation, and,
- Providing mentoring and support services to extend the life span and profitability of businesses created by the JCBBG as well as other local businesses that require attention as support.



Dr. Hathaway is collocating a JCBBG with his Head Start Center on Druid Hill Avenue in association with other community leaders.

Business Generation Corporate Support

- Major corporations in Baltimore City have expressed interest in supporting the Jobenomics Community-Based Business Generator (JCBBG).
- The JCBBG could supply a qualified and certified cadre of employees and independent contractors.
- The JCBBG would also work with corporations to supply a quality indirect and induced workforce.

Major Employers in Baltimore City, Maryland

Company	Number Employed	Product / Service	Industry
Johns Hopkins University	25,000	Higher education	Educational services
Johns Hopkins Hospital & Health System 1/	19,340	Medical services	Health care
University of Maryland Medical System 2/	9,830	Medical services	Health care
University System of Maryland 3/	9,111	Higher education	Educational services
MedStar Health 4/	6,027	Medical services	Health care
LifeBridge Health 5/	5,316	Medical services	Health care
Mercy Health Services	4,028	Medical services	Health care
St. Agnes HealthCare	3,267	Medical services	Health care
Exelon	2,952	Energy products & services	Utilities
Kennedy Krieger Institute	2,417	Health services for children with disabilities	Health care
Maryland Institute College of Art	2,142	Higher education	Educational services
Horseshoe Casino	2,140	Casino	Arts Entertainment and Recreation
Veterans Health Administration* 6/	2,061	Medical services	Health care
Under Armour	1,853	HQ / athletic apparel	Manufacturing
FutureCare	1,709	Nursing care	Health care
Morgan State University	1,701	Higher education	Educational services
U.S. Social Security Administration*	1,600	Income security program	Federal government
H&S Bakery	1,574	Commercial food products	Manufacturing
Broadway Services	1,538	Support services management	Administrative services
Loyola University Maryland	1,360	Higher education	Educational services
T. Rowe Price Group	1,300	HQ / financial services	Finance and insurance
U.S. Army Corps of Engineers*	1,135	Engineering services	Professional services
Marriott International	1,096	Hotels & motels	Accommodation and food services
M&T Bank	1,058	Banking services	Finance and insurance
Laureate Education	1,000	HQ / higher education	Educational services
Baltimore City Community College	907	Higher education	Educational services
Baltimore Sun	850	Newspaper publishing & printing	Information
Morgan Stanley	850	Financial services	Finance and insurance
Ports America Chesapeake	850	Marine cargo handling	Transportation and warehousing
Bon Secours Baltimore Health System	850	Medical services	Health care
Abacus	800	Security services	Administrative services
Agora	675	Newsletter & book publishing	Information

Goal: Big business sponsoring small startup businesses

JCBBG's 24-Hour Baltimore Job & Small Business Creation Television Channel

- A 24-hour Job and Small Business TV Channel should be implemented to reach, tantalize, inform and educate Baltimoreans who are interested in starting their own business or joining a startup business.



- Jobenomics is already working with Emerald Planet TV that focuses on Green Jobs creation. TV programs are simulcast to 532 stations around the United States and then overseas by the Internet and C-SPAN television from a state-of-the-art facility.

Goal: Develop a Jobs/Business Channel for local outreach.

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100,000 Jobs Is An Achievable Goal

Industry	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
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Manufacturing	1-5	5,750	28,750	34,500	35%
Healthcare and Social Assistance	1-4	6,375	19,125	25,500	26%
Demolition and Construction	1-4	6,000	18,000	24,000	24%
Digital Economy	1-5	4,000	12,000	16,000	16%
Total	1-5	22,125	77,875	100,000	100%

Four industries hold promise for Baltimore City job creation:

1. A city-wide manufacturing renaissance could happen with the planned Under Armour Headquarters in Port Covington.
2. Seven of the top ten major employers in Baltimore City are involved with healthcare and social assistance.
3. Baltimore City has up to 30,000 abandoned buildings that can be the source of new construction businesses and jobs.
4. The emerging digital economy will be a source of jobs for the growing contingent workforce and next-gen digital natives.

Note: Direct jobs are actual full-time positions created by a business. Indirect jobs are created by other businesses that come into existence due to the economic impact of the new business.

Manufacturing

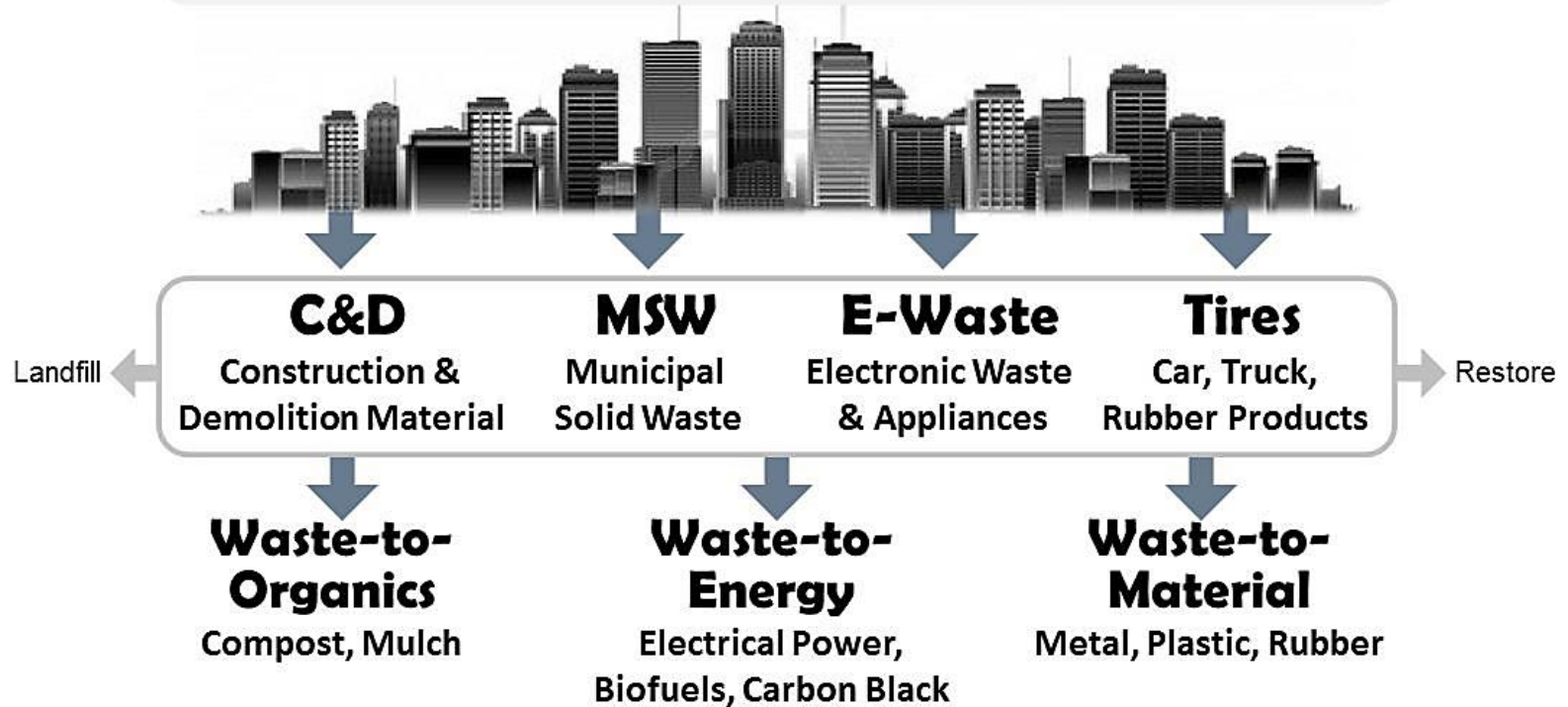
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Foreign (EB-5)	1-5	1,000	5,000	6,000	6%
Urban Mining	1-3	750	3,750	4,500	5%
Light Industrial	1-3	1,000	5,000	6,000	6%

- A total of 10,000 UA employees are expected to work at the South Baltimore campus once it is built out over two decades.
- JBC assumes a minimum of 3,000 direct jobs by 2026. While JBC will have a minimum role with direct hires, JBC will work with UA and City officials to maximize, train and implement the 15,000 indirect workforce that will entail numerous retail and services businesses as well as AU’s contingent workforce (part-timers, independent contractors, consultants, etc.)
- JBC will also work with peripheral UA businesses, with emphasis on bringing foreign investors and companies to Baltimore via the EB-5 Foreign Investment Program.

Baltimore City has numerous available manufacturing facilities.

Manufacturing (Urban Mining)

Urban Mining Process: Reclamation of valuable raw materials and metals from urban waste streams.



Urban Mining Goal: Monetize urban waste streams in order to produce revenue, businesses and jobs.

JBC is in discussion with Baltimore City non-profit organizations regarding using an e-waste materials reclamation center to monetize high value metals as a source of funding for JBC small business/job creation as well as light industrial projects.


Healthcare and Social Assistance

Industry/Occupation	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
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Healthcare and Social Assistance	1-4	6,375	19,125	25,500	26%
Personal Care Aids	1-2	2,000	6,000	8,000	8%
Home Health Aids	1-2	2,000	6,000	8,000	8%
Nursing Assistances	1-2	2,000	6,000	8,000	8%
Direct-Care Center	1-4	375	1,125	1,500	2%

- Healthcare and Social Assistance is the fastest growing occupation.
- 4 million new U.S. healthcare and social assistance jobs, or 40% of all new U.S. jobs, are projected next decade, over twice the next fastest growing occupation (Professional & Business Services).
- Maryland projects 360,000 new healthcare and social assistance jobs, second only to government growth of 500,000 Marylanders.
- 70% of Baltimore City's Top 10 employers are healthcare (John Hopkins Hospital, University of Maryland Medical System, MedStar, LifeBridge, Mercy Health, St. Agnes and Kennedy Krieger Institute).

Creating 6,375 direct healthcare jobs is a very small fraction of the 360,000 projected new Maryland healthcare jobs when Baltimore City is the hub for Maryland and regional medical services.

Healthcare and Social Assistance (Cont'd)

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

- The JBC's Community-Based Business Generators will identify, train and certify individuals and implement startup businesses.
- Baltimore City Community College will take the lead in training.

Most of these positions do not require a college education.

Healthcare and Social Assistance (Direct-Care Center)

- Direct-Care services include:
 - Elder-care
 - Healthcare
 - Child-care
 - Handyman services
- By 2020, assisted-living facilities are projected to have a 17 million bed shortfall for an aging US population.
- A community **Direct-Care Center** would coordinate and connect service providers and clients via call-center and web-based information center.
- The Center would also help create home-based small businesses that are certified to provide in-home services.



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

Demolition and Construction

Industry/Occupation	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
		Direct (Est.)	Indirect (Est.)		
Demolition and Construction	1-4	6,000	18,000	24,000	24%
Demolition Labor	1	1,500	4,500	6,000	6%
Construction Labor	1-2	1,500	4,500	6,000	6%
Live-Baltimore/Retire-Baltimore	1-4	1,500	4,500	6,000	6%
Renewable Energy Initiative	1-4	1,500	4,500	6,000	6%

- Baltimore’s plan to demolish 30,000 buildings could lead to tens of thousands of new jobs and businesses if properly planned. JBC has identified a dozen related certification programs.
- Baltimore City’s **Vacants to Values** (V2B) program identifies for-sale vacant homes, commercial buildings, and lots that need to be demolished or refurbished (Penn North & Druid Heights vacancies shown, red dots).



Adopt and adapt V2B as a small business/job creation program.

Demolition and Construction

(Live-Baltimore, Retire-Baltimore)

- **Live Baltimore** is a tax deductible non-profit that emphasizes Baltimore City's attractive features: sports, entertainment, low housing costs and other features of city living that's becoming the community of choice for Millennials—the largest U.S. demographic with 83 million people.
- Millennials are trending to live/work/play in urban communities replete with modern residential, entertainment, service and green space amenities. These communities would also attract new talent and businesses to rehabilitated distressed areas close to the Downtown Baltimore City and Inner Harbor amenities.
- **Retire-Baltimore** is a proposed JBC initiative to develop low-cost, high-quality assisted living and skilled-care retirement communities close to Baltimore's leading medical centers and staffed by locally trained and certified caregivers.



Make Baltimore City a live/work/play/retire community for the growing Millennial and retiring Baby Boomer generations.

Digital Economy

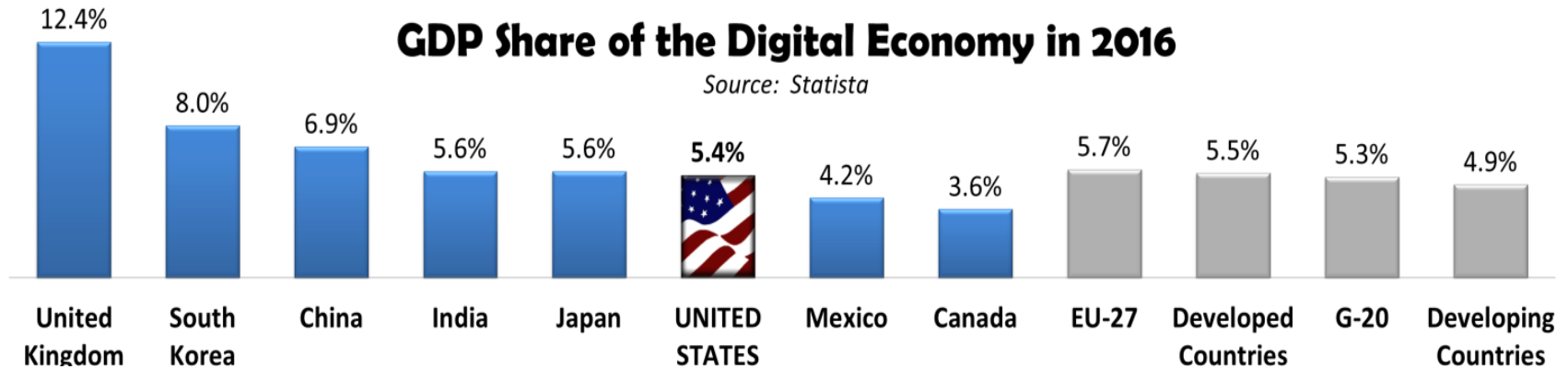
Industry/Occupation	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
		Direct (Est.)	Indirect (Est.)		
Digital Economy	1-5	4,000	12,000	16,000	16%
E-Commerce Self-Employed	1-4	2,000	6,000	8,000	8%
On Demand Work (e.g., Uber)	1-3	1,000	3,000	4,000	4%
E-Business Consultants	4-5	500	1,500	2,000	2%
Independent Contractors	3-5	500	1,500	2,000	2%

- The emerging Digital Economy, also known as the Internet Economy or New Economy, is transforming the planet via e-commerce, e-retailing, e-business and the Internet-of-Things.
- Baltimore City needs to develop the digital infrastructure, training and business development to support the emerging digital economy and the ever-growing contingent workforce that is dependent on the web for task-oriented work.
- The Digital Economy will favor an independent home-based, self-employed, flexible and task-oriented part-time workforce over the traditional corporate full-time workforce.



Today, the U.S. economy is 95% traditional and 5% digital. However, the digital economy is growing 20% per year.

Digital Economy (Cont'd)



A Perfect Storm of Network Technologies, Processes and Systems including: Big Data, Cloud Computing, Semantic Webs, Augmented and Virtual Reality, Mobile Computing, Ubiquitous Computing, 5G Broadband, Spatial Sensing, Robotics, Mechatronics, Nanobotics, Telepresence, Geo-Location, Near-Field Communications, Machine Learning, Deep Learning, Memetics, Biometrics, Blockchains, Multifactor Credentialing, Emotive Surveillance, Identity Management, Anonymity Networks, Ambient Intelligence, Artificial Intelligence (AI), Intelligent Agents.

Will Revolutionize The Baltimore Labor Force and Economy Via the: Digital Economy, New Economy, Internet Economy, Web Economy, Sharing Economy, On-Demand Economy, Gig Economy, Uber Economy, e-Commerce/ e-Business, Internet of Things/Everything, Third Industrial Revolution, Network-Centric Warfare, Intelligent Agents and Contingent Workers.

JBC will promote and implement digital businesses and jobs.

Digital Economy's Contingent Workforce

Most Desirable Companies With Flexible Jobs

Source: Flexjobs Database

Google	McKinsey & Company	Pfizer	Electronic Arts – EA
Apple	General Electric – GE	Unilever	L-3 Communications
Facebook	Johnson & Johnson	Fox	NBC Universal
Microsoft	Netflix	Sephora	Forbes Media
Nike	Bloomberg	Lockheed Martin	Hilton Worldwide
Walt Disney Company	Twitter	Samsung Electronics	Whole Foods Market
Tesla Motors	Yahoo	Boeing	IBM
Procter & Gamble	Under Armour	The New York Times	Oracle
Starbucks	Adobe	Warner Bros.	Exxon Mobil
Shell	Salesforce	Coca-Cola	Airbnb
Amazon	ESPN	Goldman Sachs	Sony Pictures

- Via modern technology, jobs will increasingly be dissected into discrete tasks and performed by contingency workers.
- Collaborative management tools will further create “contextual” contingent work environments that rapidly form, perform, and then reform to address subsequent tasks.
- Websites like Amazon Turk, Task Rabbit, Flex Jobs, Fiverr, and Micro Workers make “on-demand” contingent tasks easier to find.

A JBC Contingent Workforce Information Center will be developed.

Sources Of Funding & Support

■ Startup Capital & Support

- Corporate sponsorship
- Community volunteerism and in-kind support (e.g., facilities)
- Micro-business loans
- Government bonds and grants
- Special programs (e.g., HUD 3 Funding)
- Philanthrocapitalism and social entrepreneurs
- Debt financing and equity investment

■ Sustaining Capital & Support

- Corporate hiring and subcontracting
- New business hiring and profitability
- Self-employed and contingent workforce success
- Urban mining profit sharing
- Mezzanine financing

Funding is available if the JBC plan is viable and community supported.

Estimated Economic Impact

- **Negative \$5-\$10 million** if the Jobenomics Baltimore City proved to be unsuccessful after the initial pilot projects.
- **Positive \$6+ billion per year plus in \$2 billion development** if Maryland and Baltimore City leaders embraced the current JBC plan and supported mass-producing small business and jobs.
 - \$5 billion per year for 100,000 new jobs at an average salary of \$50,000
 - \$1-\$2 billion per year tourism, conferences, entertainment
 - \$500 million to \$2 billion for development
 - ✓ Live/Work/Play/Retire communities
 - ✓ Planned residential communities
 - ✓ Commercial construction
 - ✓ Green space
 - \$50 million to \$200 million urban mining (profit)
- **2,000 new small businesses**

Economic impact will be proportional to community support.

Conclusion: Achievable Goal

Baltimore City Employment



Industry	Job Zone Skill Level	Jobs		Total Jobs	% of 100K Goal
		Direct (Est.)	Indirect (Est.)		
Manufacturing	1-5	5,750	28,750	34,500	35%
Healthcare/Social Assistance	1-4	6,375	19,125	25,500	26%
Demolition/Construction	1-4	6,000	18,000	24,000	24%
Digital Economy	1-5	4,000	12,000	16,000	16%
Total	1-5	22,125	77,875	100,000	100%

JBC's 2026 goal is achievable only with avid community support.

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