

Jobenomics Chicago Direct-Care Initiative

18 November 2018

Executive Summary, The **Jobenomics Direct-Care Initiative** involves direct-care services by mainly home-based small and self-employed businesses via a community-based direct-care center. Direct-care occupations are projected to increase by many millions of new jobs, due to the need for cost-effective healthcare, social assistance, behavioral-care, elder-care, and child-care services, and the inability of traditional institutions (like hospitals and community care facilities) to service ever-growing medical, health and societal needs of American's urban and rural poor. Due to rapid advances in online technologies and the high cost of institutionalized care, medical, health and social assistance industries are evolving from centralized inpatient care, to outpatient (ambulatory) care, to delivering on-demand

care services directly to the point-ofneed.

Enabled by technology and driven by economics, on-demand direct-care to local denizens (inhabitants, residents) is rapidly augmenting outpatient and inpatient services. The Jobenomics Chicago Direct-Care Initiative provides direct-care to Chicagoans starting with financially-distressed neighborhoods in Austin and Englewood. A Direct-Care Center will train, certify, manage, deliver, monitor and mass-produce

Direct-Care Services include:

- Healthcare and social assistance, the fastest growing occupations in the USA.
- Behavioral-care includes drug addition, PTSD, obesity, spousal abuse, chronic illness, etc.
- **Elder-care** forecasts 17 million assisted-living bed shortfall by 2020.
- Child-care is the single biggest cost keeping women homebound.
- Direct-Care Center would connect service providers and clients via a call and information center. The center would start home-based firms certified to provide in-home services while connected to tele-health and other providers.







direct-care startup businesses that are linked via modern telehealth networks to more experienced practitioners in outpatient and inpatient centers. In addition to mass-producing direct-care startup businesses and jobs, a Direct-Care Center would also provide education, training, certification, quality control, ICT (information and communication technologies) and EMT (emergency medical technician) related services for the community.



Jobenomics deals with the process of creating and mass-producing startup companies and jobs. Jobenomics' principal focus is on citizens at the base of America's socioeconomic pyramid with special emphasis on minorities, women, youth, veterans and other hopefuls who want to develop a skill, career or start a business. The Jobenomics National Grassroots Movement has an estimated following of over 30 million people via media, website, blog, and lectures. Jobenomics' website receives tens of thousands of monthly page views with the majority the viewers spending a half

hour or more online, not counting time spent reviewing downloads of Jobenomics' eleven books and research on economic, community, business and workforce development. Today, Jobenomics has garnished wide-spread support for its economic, community, small business, and workforce development efforts. Two dozen U.S. communities have started Jobenomics initiatives led by local community leaders. In 2018, Jobenomics America TV, a weekly show, was launched associated with various online content providers and a national TV network.



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Direct-Care Services Overview

Jobenomics Direct-Care initiative includes healthcare, social assistance, behavioral-care, elder-care, and child-care. It also can be expanded to include addressing social issues such as caring for the homeless.

Healthcare and Social Assistance

Healthcare and Social Assistance Employment This Decade

Source: BLS CESS000000001, Seasonally Adjusted	1-Jan-10	1-Aug-18	New Jobs	% Growth	% Growth
Source. BLS CLSS000000001, Seusonany Aujusteu	Jobs (000s)	(000s)	% Growtii	Per Year
Healthcare and Social Assistance	16,696	19,932	3,236	19%	2.3%
Healthcare	13,658	16,038	2,380	17%	2.0%
Ambulatory Healthcare Services	5,885	7,503	1,618	27%	3.2%
Offices of Physicians	2,254	2,641	387	17%	2.0%
Offices of Dentists	815	947	132	16%	1.9%
Offices of Other Health Practitioners	656	928	271	41%	4.8%
Outpatient Care Centers	629	936	306	49%	5.7%
Medical and Diagnostic Laboratories	224	282	58	26%	3.0%
Home Healthcare Services	1,060	1,462	402	38%	4.4%
Other Ambulatory Healthcare Services	247	308	61	25%	2.9%
Hospitals	4,671	5,182	511	11%	1.3%
Nursing and Residential Care Facilities	3,102	3,353	251	8%	0.9%
Nursing Care Facilities	1,651	1,607	-44	-3%	-0.3%
Residential Mental Health Facilities	564	634	70	12%	1.4%
Community Care Facilities For the Elderly	<i>728</i>	942	214	29%	3.4%
Other Residential Care Facilities	161	171	11	7%	0.8%
Social Assistance	3,038	3,894	856	28%	3.3%
Individual and Family Services	1,640	2,437	797	49%	5.7%
Emergency and Other Relief Services	139	172	33	24%	2.7%
Vocational Rehabilitation Services	348	338	-10	-3%	-0.3%
Child Day Care Services	849	937	89	10%	1.2%
	Lost Jobs	Below GDP A	nnual 2.4% G	rowth Rate	Above GDP

According to the U.S. Bureau of Labor Statistics (BLS), the Healthcare and Social Assistance sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities. The industries in this sector are arranged on a continuum starting with those establishments providing medical care exclusively, continuing with those providing health care and social assistance, and finally finishing with those providing only social assistance.¹

So far this decade (the 2010s), the U.S. Health Care and Social Assistance sector added 3,858,000 jobs—the largest of any single private U.S. industry sector. As shown, of the 21 listed subcategories, nine categories have grown faster than the average 2.4% rate of yearly GDP growth (Gross Domestic Product is the best measure of the health of the U.S. economy), ten are growing at a rate below GDP and two lost jobs. Consequently, the U.S. Health Care and Social Assistance sector is not producing jobs at a rate commensurate with the health of the overall economy or meeting the demands of our population that is experiencing a rapid rise in physical health, mental health, and behavioral health issues.²

¹ U.S. Bureau of Labor Statistics, Health Care and Social Assistance: NAICS 62, https://www.bls.gov/iag/tgs/iag62.htm

² U.S. Bureau of Labor Statistics, Table B-1, https://www.bls.gov/webapps/legacy/cesbtab1.htm



Healthcare

Due to rapid advances in technologies and the high cost of institutionalized care, the Healthcare industry is evolving from centralized inpatient care, to outpatient (ambulatory) care, to delivering on-demand healthcare services at the point-of-need.

The Healthcare sector is the second largest producer of jobs of all subsectors this decade generating 2,280,000 new jobs. However, compared to 2.4% per annum GDP growth, this sector is growing at a subpar 2.0% per annum. Of the three subsectors, Ambulatory Healthcare Services employment was the star performer with an overall growth rate of 3.2% per annum. The other two subsectors, Hospitals, and Nursing and Residential Care Facilities, barely grew over this decade with per annum growth rates of 1.3% and 0.9% respectively.

Ambulatory Healthcare Services (NAICS 621). Ambulatory care or outpatient care is medical care provided on an outpatient basis, including diagnosis, observation, consultation, treatment, intervention, and rehabilitation services. This care can include advanced medical technology and procedures even when provided outside of hospitals. Outpatient Care Centers grew the fastest at 5.7% per annum growth producing 306,000 new jobs. Offices of Other Health Practitioners came in second best with 4.8% annual growth and 271,000 jobs. The Offices of Other Health Practitioners subsector includes Chiropractors, Optometrists, Mental Health Practitioners (except Physicians); Physical/ Occupational/Speech Therapists, and Audiologists who usually practice in small offices, walk-in centers or clinics. The Home Healthcare Services subsector was third, growing at 4.4% and producing 402,000 new jobs.

Home Healthcare Services is one of the primary areas of the Jobenomics Chicago Direct-Care Initiative. It comprises establishments primarily engaged in providing skilled nursing services in the home, personal care services, 24-hour home care, homemaker and companion services, physical therapy, medical social services, medications, medical equipment and supplies, counseling, occupation and vocational therapy, dietary and nutritional services, and high-tech care, such as intravenous therapy.

Nursing and Residential Care Facilities (NAICS 622). In the Nursing and Residential Care Facilities subsector, the worst performers were Nursing Care Facilities (a negative 0.3% rate of growth with a loss of 44,000 jobs) and Residential Mental Health Facilities (1.4% growth and only 70,000 new jobs). They were the worst performers largely due to the high cost of managed care facilities and government inaction on the growing mental health crisis. However, Community Care Facilities for the Elderly (assisted living, managed care, skilled care, and hospice care) grew at 3.4% per annum adding 214,000 jobs.

Elder-Care is another major focus area for the Jobenomics Chicago Direct-Care Initiative. The difference between Community Care Facilities For the Elderly and Jobenomics Elder-Care is that the former requires public or private facilities and the latter provides in-home services. In-home residential care is projected to grow exponentially over the next decade due to retiring baby boomers, the wealthiest American living generation, who can afford in-home services.



• Hospitals (NAICS 623). While hospitals added 511,000 jobs this decade, hospital employment grew at an insufficient rate of 1.3% per annum during a decade of positive economic growth and growing healthcare demand. Due to the rising costs of healthcare, hospitals are facing an array of financial challenges including recruiting and retaining physicians and skilled medical professionals, the challenges of maintaining profitability and caring for patients with inadequate medical insurance—the central focus of the belabored Affordable Healthcare Act. Emergency Rooms and Psychiatric Hospitals are severely overextended. Moreover, Hospital prosperity and growth could experience a major downturn if the United States experiences a medical or financial crisis in the future.

According to the Association of American Medical Colleges, the United States could see a shortage of up to 120,000 physicians by 2030, which poses a "serious threat" to patient care in a nation that will not only continue to grow but also age considerably over the next 12 years.³ To mitigate this shortage, the Jobenomics Chicago Direct-Care Initiative plans to implement proven telehealth and AI assistant apps to reduce the number of doctor visits.

Social Assistance

Social Assistance (NAICS 624) includes Individual and family services, community food and housing, and emergency and other relief services, vocational rehabilitation services and child day-care services. Social Assistance (also called safety net and need-tested programs) include the Earned Income Tax Credit and Child Tax Credit for low- and moderate-income working families, and other programs that provide cash payments to eligible individuals or households. These other programs include Supplemental Security Income for the elderly or disabled poor and unemployment insurance; various forms of in-kind assistance for low-income people (food stamps, school meals, low-income housing assistance, child care assistance); programs that help people pay home energy bills; and various other programs such as those that aid abused and neglected children.

Most Expensive Need-Tested Programs

Source: U.S. Congressional Research Service, Need-Tested Benefits: Estimated Eligibility and Benefit Receipt by Families and Individuals

FY2012 (\$ Billions)	Selected Need-Tested Programs Source: Congressional Research Service, December 2015 Report	Recipients (Millions)
\$77.8	Supplemental Nutrition Assistance Program (SNAP)	58.0
\$54.9	Earned IncomeTax Credit (EITC)	62.9
\$50.7	Federal Supplemental Security Income (SSI)	8.4
\$33.4	Housing Assistance	10.8
\$22.1	Additional Child Tax Credit (ACTC)	51.9
\$7.2	Women, Infants and Children (WIC) Nutrition Program	8.1
\$6.7	Temporary Assistance for Needy Families (TANF)	5.8
\$5.2	Child Care and Development Fund (CCDF)	1.9
\$3.5	Low-Income Home Energy Assistance Program (LIHEAP)	18.3
\$261.5		226.1

³ Association of American Medical Colleges, New Research Shows Increasing Physician Shortages in Both Primary and Specialty Care, 11 April 2018, https://news.aamc.org/press-releases/article/workforce_report_shortage_04112018/

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U.S. Congressional Research Service's 30 December 2015 report examined estimated benefit receipt by families from nine major need-tested benefit programs listed above. According to the CRS, an estimated 135 million persons were eligible for benefits, and an estimated 106 million persons (1 in 3 persons in the population) received benefits from one of these programs in 2012. The estimated median annual benefit amount from the nine programs in 2012 was \$3,300. An estimated 25% of families that received benefits from one or more of the selected programs received a total of \$9,027 or more. "Families with children who received \$9,027 or more had characteristics indicative of a more disadvantaged population: working less than full-time all year, lacking a high school diploma, being in a family headed by a single woman, being of a racial/ethnic minority (other than Asian-American), and being in a large family." ⁴

The Social Assistance sector created 856,000 jobs with Individual and Family Services subsector providing almost all the jobs (49% growth rate and 797,000 new jobs) of the Social Assistance total. Individual and Family Services include child and youth services, and services for the elderly and persons with disabilities. Vocational Rehabilitation Services was the worst performer with a loss of 10,000 jobs and a negative 3% growth rate. Vocational Rehabilitation Services includes federal-state programs that help people who have physical or mental disabilities get or keep a job, or helping people with disabilities find meaningful careers. Child Day Care Services also was a weak performer growing at a sclerotic 1.2% per year over the last 8.5 years adding only 89,000 jobs. Because approximately 70% of all households in Austin and Englewood are headed by single moms, with children under 18 years old, the lack of child-care services is one of the greatest inhibitors of upward social mobility in the City of Chicago.

Healthcare and Social Assistance Jobs and Growth Rates

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%

According to the BLS Employment Projections 2016-26 Summary, Healthcare and Social Assistance are the fastest growing U.S. occupations. 4 million new jobs, or 40% of all new jobs, are projected next decade. Most do not require a college degree. A Jobenomics Chicago skills-based training and certification programs can mass-produce home-based self-employed Direct-Care businesses.⁵

⁴ U.S. Congressional Research Service, Need-Tested Benefits: Estimated Eligibility and Benefit Receipt by Families and Individuals, 30 December 2015, https://fas.org/sgp/crs/misc/R44327.pdf

⁵ BLS, Employment Projections 2016-26 Summary, https://www.bls.gov/news.release/ecopro.nr0.htm



Behavioral-Care

Behavioral-care includes promotes well-being by preventing or intervening in mental illness such as depression or anxiety, but also prevents or intervenes in substance abuse or other addictions. Behavioral care emphasizes the individual to change or adapt to environmental factors (poverty, discrimination or abuse) that enhance the individual's ill-being.

According to the U.S. Drug Enforcement Administration, drug overdose deaths hit the highest level ever recorded in the United States last year. Preliminary figures indicate that more than 72,000 Americas died in 2017 from drug overdoses from heroin, fentanyl, and other opioids.

The City of Chicago ranks as one of the top U.S. cities with drug problems. The Drug Enforcement Administration estimates that the drug cartel has more than 100,000 agents operating in the city and is responsible for 70% of the illegal drugs on the streets of Chicago. The drug cartels use the Hispanic neighborhoods (like Little Village) as transnational shipment points and enlist well-armed Chicago gangs to market heroin and methamphetamines (to mostly black areas according to a recent Washington Post article). Per the DEA's 2018 National Drug Threat Assessment report, illicit drugs, as well as the transnational and domestic criminal organizations who traffic them, continue to represent significant threats to public health, law enforcement, and national security in the United States. Unfortunately, inner-city Chicago is ground zero for the devastation caused by such nefarious activities.

The Jobenomics Chicago Direct-Care Initiative is designed to provide early intervention and prevention services to prevent drug addiction from claiming more deaths and provide face-to-face counseling at the point-of-need with emphasis on Englewood and Austin neighborhoods that are predominantly (95%) African American.

According to the American Hospital Association, one-quarter of all Americans experience a mental illness or substance use disorder each year, and the majority also has a comorbid physical health condition (anxiety disorders, phobias, hypertension, obesity, insomnia, etc.). Hospitals and major health institutions provide essential behavioral and healthcare services to millions of Americans every day. However, hospitals prone to treat the most severe cases and are greatly understaffed.

The most common disruptive behavior disorders in young children include oppositional defiant disorder (ODD), conduct disorder (CD) and attention deficit hyperactivity disorder (ADHD). Typical behaviors of a child with ODD include frequent temper tantrums, abnormal angriness and argumentativeness, and low self-esteem. Children with CD often exhibit delinquent behavior, such as fighting and lying, and refusal to accept rules. Characteristics of ADHD include inattention, difficulty concentrating, impulsivity and constant restlessness and fidgeting.

In 2017, Chicago's Department of Public Health allocated \$160,914,450 for public health, a large but insufficient sum of money considering the drug epidemic, mental health, communicable diseases, and behavioral issues. Also, Chicago's Department of Community Services allocated \$397,776,963 for a wide

⁶ U.S. Department of Justice Drug Enforcement Administration, 2018 National Drug Threat Assessment, October 2018, https://www.dea.gov/sites/default/files/2018-11/DIR-032-18%202018%20NDTA%20final%20low%20resolution.pdf



range of direct-care services by promoting the independence and well-being of individuals, families, and neighborhoods by providing direct assistance and administering resources to a network of community-based organizations, social service providers, and institutions.⁷

⁷ City of Chicago, 2018 Budget Overview, https://www.cityofchicago.org/content/dam/city/depts/obm/supp_info/2018Budget/2018_Budget_Overview.pdf

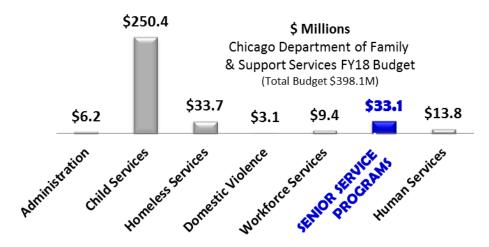


Elder-Care

By 2020 older Americans are projected to need 20 million assisted- or managed-care beds. Today, only 3 million beds are available nationwide. Unfortunately, nationwide Nursing and Residential Care Facilities grew this decade by 0.9% per annum—a growth rate grossly insufficient to care for aging baby boomers. Building new assisted-care facilities is not the answer with financially strapped senior citizens who cannot afford the typical \$10,000/per month fees. In-home services will be needed and are projected to grow at a rate of 15% per year.

According to a report by the U.S. Government Accountability Office (GAO), 52% of baby boomers aged 55 and older have no retirement savings, and the remainder has meager nest eggs to support their retirement. Amongst those with some retirement savings, the median savings is about \$104,000 for households aged 55 to 64, which is equivalent to an inflation-protected annuity of only \$310. Consequently, most baby boomers will have to rely on social security that only provides necessities. Furthermore, according to the Economic Policy Institute data, pension pots for future retirees are even bleaker with median pension pots of only \$8,000 for Americans aged 50 to 55 and \$6,200 for Americans aged 44 to 49.

Chicago Department of Family & Support Services Expenditures



In 2017, the Chicago Department of Family & Support Services allocated \$397,776,963 to assist Chicago's residents, particularly those most in need, beginning at birth through the senior years. Of this amount, only 8%, or \$33,082,289, was allocated to programs for seniors. While this allocation is understandable since the bulk of the Department's (63%) went to Child-Care and Head Start program for children (542,935 children under 12 years of age), it is insufficient to cover the needs of an aging Chicago. Furthermore, the department's Senior Services Division, which serves as the Area Agency on

⁸ U.S. Government Accountability Office, Retirement Security, Most Households Approaching Retirement Have Low Savings, May 2015, https://www.gao.gov/assets/680/670153.pdf

⁹ American Equity Investment Life Insurance Company, analysis of 2016 Economic Policy Institute data (https://www.epi.org/publication/retirement-in-america/#chart1), Tipping the Scales on Retirement Savings, https://www.american-equity.com/resources/blog/a-closer-look-at-the-average-retirement-savings-by-age ¹⁰ City of Chicago, 2018 Budget Overview,

https://www.cityofchicago.org/content/dam/city/depts/obm/supp_info/2018Budget/2018_Budget_Overview.pdf



Aging for the city of Chicago, is insufficiently staffed (150 full-time equivalents) to service Chicago's 398,560 senior citizens aged 60 or older.

The combination of declining birth rates and people living longer is making elder-care a more significant challenge as age-related infirmities (Alzheimer's disease, dementia, and chronic illnesses) become more pronounced across the United States. Illinois and Chicago's elder-care problem is exacerbated by outmigration of prime-age workers (ages 25-54), a shrinking tax base, and massive debts and deficits. As a result of these issues, the City of Chicago has to find another way to care for the elderly who have limited means to care for themselves. In-home elder-care is a possible solution.

The State of Alaska is at the forefront of funding a wide-range of elder-care solutions, many of which involve direct-care services. Alaska turned to direct-care out of necessity because of its highly-dispersed and remotely-located population. While Chicago's poorer neighborhoods are highly-concentrated, in many ways, they are equally remote from the more affluent neighbors that can afford better elder-care services.

Via a Home & Community Based Senior Grants Program, Alaska's Senior and Disabilities Services Division funds non-profit agencies to provide services to

- physically frail individuals 60 years of age and over,
- individuals of any age with Alzheimer's Disease or Related Disorders (ADRD), and
- caregivers to assist these Alaskans to maintain as much independence as possible and improve their quality at home or in a community-based setting.

Alaska's Home & Community Based Senior Grants Program includes Senior In-Home Services, Adult Day Services, National Family Caregiver Support Program Services, ADRD Education and Support, and ADRD Mini-Grants. 11

From a Jobenomics Chicago Direct-Care Initiative perspective, a combination of Alaska's Senior In-Home and Adult Day services could not only provide direct-care for Chicago's underserved communities but could mass-produce vitally needed micro-businesses and jobs in neighborhoods like South Austin and Englewood. Senior In-Home services would be offered by nonemployer firms (self-employed and independent contractors) that would provide care coordination, chore, respite, extended respite, and supplemental services. Day Care services provide for adults with impairments in a protective group setting that is facility-based. Adult Day services include support, respite and education for families and other caregivers, provide opportunities for social interaction and serve as an integral part of the aging network.

In addition to direct-care services, Alaska also has a program to housing for direct-care givers. The Alaska Assistance Provider Loan Program provides "an incentive to increase the availability of housing that is occupied by a live-in care provider who assists with activities of daily living for individuals with either a physical or mental disability (the Resident). The home can provide services for seniors, mental health individuals or foster children with special needs. The property should be modest, appropriately

¹¹ Alaska Department of Health and Social Services, Senior and Disabilities Services Division, Home & Community Based Senior Grants, http://dhss.alaska.gov/dsds/Pages/hcb/hcb.aspx



sized for the number of residents and provide the necessary accessibility, equipment and therapy features." Properties may be single-family residences, duplexes, triplexes or fourplexes. At least two Residents must reside in the home with a maximum of five Residents. 12

If Illinois or Chicago would adopt a similar housing program, direct-care givers in financially-destressed neighborhoods could own and operate renovated homes and apartment buildings into mini direct-care facilities. These are the type of citizens who can best provide caregiving services to people that they know and altruistically want to serve.

¹² Alaska Housing Finance Corporation, Assistance Provider Loan Program, https://www.ahfc.us/pros/loans/prosloansassistance-provider-loan-program



Child-Care

Today, nationwide, only 8% of child-care arrangements are in a caregiver's own home. This percentage could be expanded significantly and safely if managed by a Direct-Care Center.

The City of Chicago's' Department of Family and Support Services, through the Children Services Division, is dedicated to helping Chicago's youngest residents make the most of their lives and potential. The department manages Head Start, Early Head Start, child-care and youth programs throughout Chicago.¹³

The City's FY2018 budget for Children Services is \$250,416,074 with a full-time equivalent staff of 158 people. While this prodigious amount represents 62% of the Department of Family and Support Services budget, it falls short of meeting Chicago's high rate of poverty of single mom households with children less than 18 years of age.

Single Mom Households in Englewood and South Austin

Source: Census Bureau,
Statistical Altas.com

Single Mom Households
(with children under 18)
Race
(% African American)
Household Income
(Median)

Englewood	South Austin	Chicago Metro	USA
79.7%	68.6%	34.6%	24.7%
95.0%	94.5%	17.1%	12.6%
\$18,900	\$26,100	\$61,200	\$55,775

Affordable child-care is a significant issue for predominantly African American female-headed households in Chicago, especially in Austin and Englewood that have a vast majority (70%) of single mother headed households with children under the age of 18. Despite working multiple jobs, most African American female-headed households are living in or near poverty levels.

For most single mom households in Austin and Englewood, Center-Based Providers are not an affordable option. According to Child Care Aware of America, center-based care for a single child in Illinois can cost upwards of \$15,000 a year for young children and \$9,000 for school-age, which is one of the highest amounts in the United States. In Englewood and South Austin, \$15,000 equates to 80% and 60% of median household incomes. Consequently, in-home child care appears to be the only viable option for financially-distressed households.

¹³ City of Chicago, Department of Family and Support Services, Children Services Division, https://www.cityofchicago.org/city/en/depts/fss/provdrs/child.html

¹⁴ City of Chicago, 2018 Budget Overview,

https://www.cityofchicago.org/content/dam/city/depts/obm/supp info/2018Budget/2018 Budget Overview.pdf

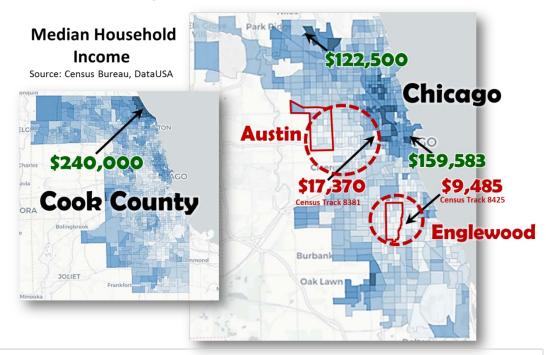
¹⁵ Child Care Aware of America, 2018 State Child Care Facts in the State of: Illinois,

https://cdn2.hubspot.net/hubfs/3957809/State%20Fact%20Sheets/Illinois_Facts.pdf

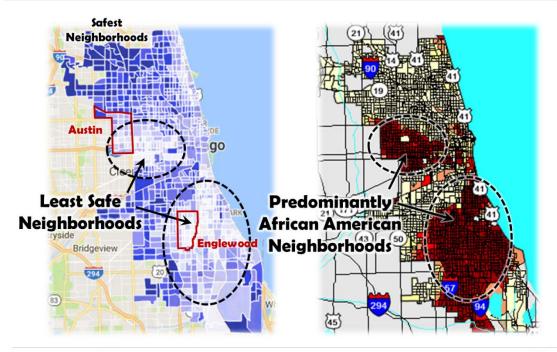


Jobenomics Chicago Initiative

Jobenomics Chicago Focus On Poorest & Least Safe Communities



Goal to reduce income inequality increase income opportunity.



For every 1% increase in startup businesses, poverty is reduced by 2%.

The Jobenomics Chicago Initiative focuses on mass-producing startup micro-businesses and job located in the most impoverished neighborhoods starting in neighborhoods (South Austin and Englewood) where community-leaders have expressed interest in a Jobenomics initiative.



Statistical Profiles for Englewood and South Austin

Source: U.S. Census Bureau, Statistical Altas.com	Englewood	South Austin	Chicago Metro	USA
Population	30,654	47,631	9.5M	328M
Household Income (Median)	\$18,900	\$26,100	\$61,200	\$55,775
Race (% African American)	95.0%	94.5%	17.1%	12.6%
Education (No High School Diploma)	27.9%	26.7%	13.4%	14.0%
Employed (Working-Age Men 35-44)	41.4%	43.7%	84.1%	82.3%
Unemployment Rate	17.1%	68.6%	7.5%	3.8%
Single Mom Households (with children under 18)	79.7%	68.6%	34.6%	24.7%
Poverty Rate (Less Than \$20,000)	53.7%	38.9%	15.6%	18.0%

There are wide economic and social disparities in Chicago. As shown, Englewood and Austin statistics (from household income, race, education, employment and unemployment, single mom households to poverty) indicated significant imbalances and inequalities. These disparities lead to deprivation, hopelessness, abuse, and crime.

The Jobenomics Chicago Initiative is more about future opportunity than past inequality. Inequality represents a pessimistic rearward view on how much a person possesses at a given time. Opportunity represents an optimistic forward view of upward social and economic mobility. Jobenomics recognizes inequality as a starting point, but focuses on opportunity, via business and job creation, to create favorable conditions to attain advancement or success.

Income opportunity and socio-economic mobility are closely related. Socio-economic mobility is the movement of an individual or group from one income level to another and can be upward or downward. With a few exceptions, mass upward socio-economic mobility has been the general trend since the creation of the United States.

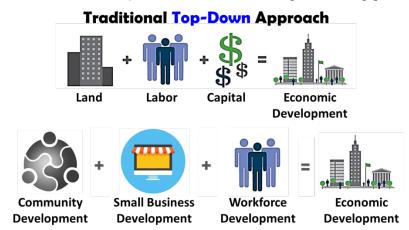
Most people who enter the U.S. workforce from high school or college move from initial lower paying jobs to higher paying careers. Those who drop out of school or society are likely to entrench themselves in the lowest income quintile with much lower mobility. While welfare and unemployment payments provide a safety net for those in the lowest quintile, these payments tend to trap these same individuals in low quintiles by eroding their socio-economic mobility. The longer a person is out of the workforce, the harder it is for that person to get a meaningful job.

The traditional top-down approach to economic development (a land, labor and capital model) in most metropolitan areas involves highly-visible mega real estate projects. For example, 258 cities/counties competed for the lucrative prize of Amazon's second headquarters. These cities/counties spent between hundreds of millions of dollars to get into the competition. The top ten finalists spent between \$50 million (Raleigh, North Carolina) and \$8.5 billion (Montgomery County, Maryland) in tax and



infrastructure incentives.¹⁶ Via the Illinois Economic Development for a Growing (EDGE) Tax Credit Program¹⁷, Chicago's proposal included \$1.32 billion of the personal income taxes paid by its workers annually.¹⁸ ¹⁹ EDGE lets a corporation keep the income tax dollars that its employees would normally pay to the state. Long Island (New York City) and Crystal City Virginia (Washington) equally split the prize by collectively offering around \$4 billion in tax credits, rebates and other incentives to Amazon.

Jobenomics Chicago Economic Development Approach



Jobenomics Bottom-Up Approach

Rather than spending huge amounts of money to attract big businesses with large financial incentives that could last a decade or longer, the Jobenomics' bottom-up economic development approach is a community, small business, and workforce development model. A central Jobenomics premise is that jobs do not create jobs, businesses do, especially small businesses that created three-quarters of all U.S. jobs this decade. Jobenomics also advocates mass-production of startup businesses at the base of Chicago's socio-economic pyramid where the need and economic impact are the greatest.

In socio-economically depressed communities, like Englewood and Austin, competing against more prosperous and higher-skilled communities for big business operations is a losing proposition. Rather than focusing on big business home runs, poorer communities should focus on mass-producing a string of small business bunts and singles. Mass-producing 1,000 micro-businesses (1-19 employees each) earning \$100,000 per year each is equivalent to attracting one large \$100 million per year enterprise.

To mass-produce this number of inner-city micro-businesses, Jobenomics asserts that the following actions are needed:

¹⁶ Business Insider, Cities are throwing hundreds of millions at Amazon to land HQ2 — here's how they stack up, 4 April 2018, https://www.businessinsider.com/amazon-hq2-cities-developers-economic-tax-incentives-2017-10

¹⁷ Illinois Department of Commerce & Economic Opportunity, Economic Development for a Growing Economy Tax Credit Program (EDGE), https://www2.illinois.gov/dceo/expandrelocate/incentives/pages/edge.aspx

¹⁸ Business Insider, Chicago wants to give over \$1 billion in taxes from workers at Amazon's new headquarters back to Amazon, 27 November 2018, https://www.businessinsider.com/amazon-headquarters-hq2-city-incentives-taxes-2017-11 ¹⁹ Chicago Reader, Chicago's Amazon HQ2 bid offers money for nothing, TIFs for free,

https://www.chicagoreader.com/chicago/chicagos-amazon-hq2-bid-money-for-nothing-tifs-for-free/Content?oid=33535992



- Institute Community-Based Business Generators, Entrepreneurial Centers and Digital Academies
 using federally certified skills-based training programs that can mass-produce jobs within months
 and careers with a year.
- Create city-wide business initiatives suitable for startup business using entry-level employment skills.
- Tailor business and job creation to local demographics.
 - Focus on empty-nester female head-of-householders who are single mothers (and grandmothers) who have management (household management) and maternal (caregiving) skills essential to creating self-employed direct-care businesses.
 - View ex-offenders/returning citizens and gang members as entrepreneurs that can transition from crime to legal enterprise owners. Jobenomics initiatives in Washington DC, Phoenix, and Erie, are led by ex-offenders/returning citizens interested in implementing Jobenomics Urban Agriculture and Urban Mining turnkey programs.
 - Motivate inner-city Screenagers (Generation Z) and Millennial (Generation Y) to incorporate single-person independent contractor businesses that are ideally suited to meet the needs of the emerging digital economy.

Micro-businesses employ between I (the owner) up to 19 employees. The easiest micro-business to mass-produce is a "nonemployer" business. "Nonemployer" is a term used by the U.S. Census Bureau and the U.S. Small Business Administration, which is "a small business that has no paid employees." Nonemployer businesses are generally small incorporated or unincorporated firms that often operate out of homes, on-site or in affordable offices. Nonemployer businesses are also highly repeatable (if you can create one, you can create many) and often highly-scalable (capable of growing from 1 to many).

Jobenomics Chicago Emphasis: Mass-Producing Single-Person "Nonemployer" Micro-Businesses



Mass-producing startup nonemployer businesses is a viable way to revitalize financially-distressed and beleaguered Chicago communities where big businesses fear to go, and small businesses struggle to compete against nearby big box stores. The following list gives examples of a wide variety of nonemployer businesses and occupations:



- **Independent contractors** (accountants, authors, actors, bookkeepers, engineers, masons, real estate agents, teachers, and many more),
- Consultants (human resources, financial, information technology, management, etc.),
- **Freelancers** (administrative support, design, legal, journalists, tutors, marketing and sale, web and apps developers, etc.)
- **On-Demand Workers** (home health aides, Uber and Lyft drivers, nurses and doctors, delivery services, operations support, IT and security analysts and services, physical therapists, etc.)
- **Flex Workers** (analysts, dental assistants, loan officers, engineers, x-ray technicians, EMT, educational assistants, community support assistants, etc.)
- **Gig Economy Workers** (ride sharing, delivery driving, selling crafts, coding and programming, handyman, photography, babysitting, dog walking, renting, chef, etc.)
- Contingent Workers (non-permanent workers hired on a per-project basis.)
- **Self-Employed Workers** (earn income directly from one's own business, trade, or profession rather than as a specified salary or wages from an employer.).
- **Part-Timers** (who work less than 40 per week out of necessity or choice and workers who work full-time via multiple part-time jobs.)

Nonemployer occupations often provide low barriers for entry for new workforce entrants. Single-person nonemployer occupations are also suited for urban and rural poor wanting to escape the confines of welfare dependency, people with children, disabled, elderly and individuals who simply want to top-off their low earnings or retirement income.

Today, nonemployer businesses are easier to start than ever before due to the revolution in network and digital technologies. According to James McQuivey, a leading analyst tracking the development of digital disruption, as compared to the traditional economy, digital startups are at least 100-times easier to create and have 10-times the number of innovators that can innovate at one-tenth the cost than traditional startups.²⁰

The reason for such a provocative assessment is due in part to the network-effects (connecting customers to providers) of new digital platforms (Amazon, Apple, Alphabet/Google, Microsoft, Facebook, etc.) mobile apps (Waze, Deliveroo, Uber, Lyft, Airbnb, Handy, PeopleHour, Task Rabbit, Expert360, Craig's List, Mechanical Turk, and thousands more) and online back-office support systems (Amazon Prime, Legal Zoom, PayPal, and numerous others).

According to the Census Bureau's Nonemployer Statistics (NES) database, there are 24,813,048 single-person nonemployer establishments that earned \$1,165,668,336,000, or \$1.17 trillion in receipts, for an average of \$46,978 per establishment in 2016.

²⁰ James McQuivey, Digital Disruption: Unleashing the Next Wave of Innovation, Figure 1-1: Digital Disruption Creates One Hundred Times the Innovation Power, Page 11.



Nonemployer Statistics: 2016

Source: U.S. Census Bureau, American Factfinder, NS1600A2

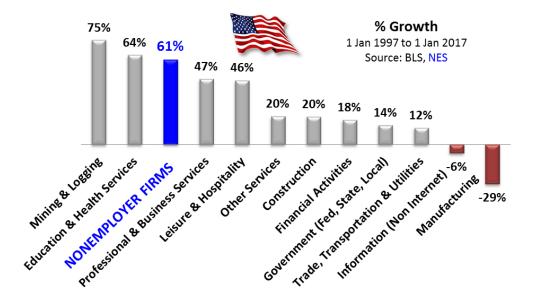
All Nonemployer Establishments
Individual Proprietorships (Unincorporated)
Partnerships (Single-Member LLCs, etc.)
S-Corporations (Pass-Through Entity)
C-Corporations (Profit and Not Profit)

Establishments	%	Receipts (Bs)	%	Receipts Per Establishment
24,813,048	100%	\$1,166	100%	\$46,978
21,490,556	87%	\$731	63%	\$34,026
1,830,055	7%	\$258	22%	\$141,194
1,113,365	4%	\$132	11%	\$118,122
379,072	2%	\$45	4%	\$117,446

Single-person nonemployer establishments include incorporated (Partnerships, C-Corporations, and S-Corporations) and unincorporated Individual Proprietorships (also known as a sole proprietorship owned by an individual). As defined by the Census Bureau, nonemployer receipts include gross receipts, sales, commissions, and income from trades and businesses, as reported on annual business income tax returns.²¹

Rapid Rise of Nonemployer Business Over the Last Decade

Source: Bureau of Labor Statistics (traditional industries), Census Bureau NES (nonemployers)



Compared to the fastest industry sectors (including government) over the last decade, the growth rate of nonemployer firms outperforms nine major employment sectors as shown above. Nonemployer firms are also growing much faster than traditional business and population growth in almost every major U.S. metropolitan area, including Chicago.

According to The Stephen S. Fuller Institute (SFI), nonemployer firms play a sizable role in the major metropolitan areas. The 2017 SFI report, entitled Working Without a Job: Trends in Non-Employer

 $^{^{21} \} U.S. \ Census \ Bureau, \ Nonemployer \ Definitions, \ https://www.census.gov/epcd/nonemployer/view/define.html$



Establishments, provides insight on the economic impact of non-employer establishments that are likely to "continue to outpace traditional wage and salary employment." Non-employer establishments have no paid employees, have annual business receipts of at least \$1,000, and are subject to federal income tax. Non-employer businesses "include a mix of solopreneurs, freelancers, passive businesses, hobby businesses, and even corporations" as well as some gig economy workers and independent contractors.

According to the 2017 SFI report, Chicago's nonemployer statistics were mid-range compared to other major U.S. metropolitan areas:

- As measured by Rate of Nonemployer Establishment Growth, Chicago ranked 8th out of the 15 largest U.S. metros. From 1997 to 2015, U.S. rate of nonemployer growth was 59%, Miami's 142% growth rate was the highest, Chicago's rate grew at 61%, and Boston was the lowest with 31%.
- As measured by Nonemployer Receipts per Establishment, Chicago ranked 12th out of the 15 largest U.S. metros. In 2015, San Francisco took the top spot with an average of \$59,000 per nonemployer establishment, Chicago's average was \$45,600, and Atlanta was last with \$41,000.²²

The 2018 SFI report, entitled *Earnings Without a Salary: Trends in Proprietors' Income in the Washington Region*, examines how nonfarm proprietor (owner) earnings "outside of wages and salary employment" contributed to the Washington region economy.²³ According to this report:

- As measured by Change in Nonfarm Proprietors' Income and Wage & Salaries, Washington ranked 1st out of the 15 largest U.S. metros. On an inflation-adjusted basis, Washington's total nonfarm proprietors' income increased 133% from 1997 to 2016, while wage and salary income increased 62%. Chicago came in last with nonfarm proprietor income and employer wage and salary increases of around 25% each.
- In 2016, nonfarm proprietors' income in the Washington region exceeded \$33 billion, which was more than Department of Defense procurement or earnings from state and local government employment, or 10% of all earnings by place of work in the Washington region. Out of the 15 largest metropolitan areas, Washington 10% ranked 11th with Houston's 16% ranked 1st.
- Average nonfarm proprietors' income varied widely across the region. The District of Columbia
 was the highest with an average 2016 income of \$66,970, followed by adjacent Montgomery
 County (MD) with \$66,660 and adjacent Arlington County (VA) with \$34,803. The remaining
 fifteen outlying counties ranged from \$31,348 to a low of \$11,381.

²² Schar School of Policy and Government at George Mason University's The Stephen S. Fuller Institute, Working Without a Job: Trends in Non-Employer Establishments, 15 November 2017, http://sfullerinstitute.gmu.edu/wp-content/uploads/2017/11/SFI Non-Employer Trends 111517.pdf

²³ Schar School of Policy and Government at George Mason University's The Stephen S. Fuller Institute, Earnings Without a Salary: Trends in Proprietors' Income in the Washington Region, 30 April 2018, http://sfullerinstitute.gmu.edu/wp-content/uploads/2018/04/SFI_Proprietors_Income_043018.pdf



6,000 Potential Jobenomics Chicago Jobs In 5-Years

Business Initiative	Jobs	2-years	5-years
Community-Based Business Generator,	Direct	100	300
Digital Academies & Entrepreneur Clubs	Indirect	100	300
Urban Agriculture	Direct	50	250
(Indoor Hydroponics Aquaponics)	Indirect	150	750
Urban Mining	Direct	25	200
(eCycling)	Indirect	75	600
Renewable Energy	Direct	100	300
(Solar Installation/Maintenance)	Indirect	100	300
Direct Care	Direct	300	750
(Health, Elder, Child, Behaviorial)	Indirect	300	750
Digital Economy	Direct	300	750
(eCommerce, eSports, Apps)	Indirect	300	750
	Direct	875	2,550
	Indirect	1,025	3,450
	Total	1,900	6,000

Jobenomics Chicago Initiative's goal is to produce 6,000 new jobs within 5-years by mass-producing local startup businesses anchored in Austin and Englewood. 25% of these jobs involve single-person owned nonemployer direct-care businesses.

Is 6,000 New Jobs Realistic?

Source: Census Bureau, Statistical Atlas.com		Working Employed	Non-Work Unemployed	ing Capable Not-in-Labor-Force	
Statistical Atlas.		6.004			
South Austin	Male	6,334	1,844	8,164	
Jouth Austin	Female	9,173	1,745	10,000	
		15,507	3,589	18,164	
			21,753	Labor Pool	
	Male	5,227	2,991	8,139	
Englewood	Female	7,767	3,536	9,385	
		12,994	6,527	17,524	
			24,051	Labor Pool	
		Total Employed	Total Availal	ole Labor Pool	
			45,	804	
	Joben	omics Chicago	Goal: <mark>6,000</mark> Nev	w Jobs Within 5	-Year
		34,501	39,	804	
		Increase 21%	Decre	ase 13%	

Chicago would only have to decrease unemployed and sidelined workers by 16% (about 3% per year) which is very achievable. South Austin and Englewood employ 28,501 citizens. Conversely, 45,804 denizens (inhabitants or residents) are either unemployed or sidelined citizens who are capable of working. To create 6,000 new jobs, the Jobenomics Chicago Direct-Care Initiative only needs to move 13% of the 45,804 capable non-working South Austin and Englewood denizens into the labor force, or provide local jobs to the 95% of South Austin and Englewood's commuters who work outside of their place of residence. Another alternative is to attract skilled workers from outside the community. Many college grads, especially those from historically black colleges and universities, would embrace the chance to be involved in community-building efforts in South Austin and Englewood.



Jobenomics Chicago Direct-Care Initiative

The Jobenomics Chicago Direct-Care Initiative is part of a larger Jobenomics Chicago Initiative that features five additional business and job creation initiatives for Austin and Englewood.

Proposed Jobenomics Chicago Direct-Care Program

- Direct-Care Services include:
 - Healthcare and social assistance, the fastest growing occupations in the USA.
 - Behavioral-care includes drug addition, PTSD, obesity, spousal abuse, chronic illness, etc.
 - Elder-care forecasts 17 million assisted-living bed shortfall by 2020.
 - Child-care is the single biggest cost keeping women homebound.
- Direct-Care Center would connect service providers and clients via a call and information center. The center would start home-based firms certified to provide in-home services while connected to tele-health and other providers.







The **Jobenomics Direct-Care Initiative** involves direct-care services by mainly home-based small and self-employed businesses via a community-based direct-care center. Direct-care occupations are projected to increase by many millions of new jobs, due to the need for cost-effective healthcare, social assistance, behavioral-care, elder-care, and child-care services, and the inability of traditional institutions (like hospitals and community care facilities) to service ever-growing medical, health and societal needs of American's urban and rural poor. Due to rapid advances in online technologies and the high cost of institutionalized care, medical, health and social assistance industries are evolving from centralized inpatient care, to outpatient (ambulatory) care, to delivering on-demand care services directly to the point-of-need (the central focus of the Jobenomics Direct-Care Initiative).

Enabled by technology and driven by economics, on-demand direct-care to local denizens (inhabitants, residents) is rapidly augmenting outpatient and inpatient services. The **Jobenomics Chicago Direct-Care Initiative** will provide direct-care to Chicagoans starting with financially-distressed Englewood and Austin neighborhoods. A Direct-Care Center will train, certify, manage, provide, monitor and mass-produce direct-care startup businesses that are linked via modern telehealth networks to more experienced practitioners in outpatient and inpatient centers. In addition to mass-producing direct-care startup businesses and jobs, a Direct-Care Center would also provide education, training, certification, quality control, ICT (information and communication technologies) and EMT (emergency medical technician) related services for the community.

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.



Examples of the types of direct-care service businesses that would be created include (from lower skilled jobs to higher skilled occupations): visiting, cleaning/janitorial, maintenance, food services (delivery, cooking), shopping, transportation, counseling, paralegal, med-techs, physical therapy, social and wellness assistance, nursing, and au pairs services and other various in-home and remote services.

The Jobenomics Chicago Direct-Care Initiative includes the creation of one or more Direct-Care Centers. These centers 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, telehealth, real-time teleconferencing, voice tech and mobile phone direct-care apps.

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 denizens who cannot afford the price of current caregiving services.

The principal role for government agencies in the City of Chicago would be to provide proper oversight of the Direct Care Centers; quality control of the center's practitioners; fast-track policies, regulations and licensing arrangements conducive to direct-home care; and help the Center's management team pursue funding from various federal, state, local and private sector partnerships.

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

There is no shortage of female talent in Austin and Englewood that would be interested in starting a self-employed home-based business to provide in-home or remote direct-care services to those in need. As stated earlier, approximately 70% of households with children under 18 in Austin and Englewood are headed by single mothers or grandmothers. Most of these women have demonstrated that they possess the household management and care-giving skills appropriate to this Direct-Care Initiative.

Female Workforce in South Austin and Englewood

Source: Census Bureau, Statistical Atlas.com

South Austin
Englewood

Working Employed	Non-Working Capable			
Working Linployeu	Unemployed	Not-in-Labor-Force		
9,173	1,745	10,000		
7,767	3,536	9,385		
16,940	5,281	19,385		
	24,666 Labor Pool			



Also, Chicago's female labor pool is quite large with approximately half of the female labor already working. As of July 2018, female workforce in South Austin and Englewood consists of 16,940 employed



women and 24,666 women who are currently looking for work (unemployed) or capable of working (sidelined in the Not-in-Labor-Force category). Many of these employed women are serving in lower-level or menial jobs and would relish the opportunity to change their career paths or to start their own business. Many of the non-working women have the expertise as the head-of-household and caregiving skills to be ideal direct-care business owners or employees of a direct-care business.

Micro and self-employed businesses are ideally suited to provide direct-care, either on a full-time or part-time basis. These businesses are relatively easy to start. Micro and self-employed businesses are ideally suited for direct-care occupations, either on a full-time or part-time basis. These businesses are easy to start and are the types of business that will provide opportunities for job seekers with personal care skills, especially those with maternal skills.

In the absence of workfare, discouraged workers will seek welfare, especially if it provides generous benefits with few strings attached. However, work of any kind makes a huge difference alleviating poverty and promoting self-sufficiency. According to the Census Bureau, in 2016, only 2.2% of U.S. full-time workers are below the poverty level. Even part-time work makes a significant difference. Only 13.0% of part-time workers are below the poverty level, compared with 21.6% of work capable adults who did not work during the year. ²⁴

While there is no evidence that people on welfare are immune to work, there is evidence that many recipients often lack the skills necessary to obtain the types of jobs that pay above-average wages, which, in turn, makes welfare and means-adjusted social benefits attractive. To address the skills deficit conundrum, Direct-Care Centers provide federally approved skills-based training and certification programs oriented to Lifelong Applied Learning with certifications in weeks, jobs in months and careers within a year. Direct-care centers would also use principles associated with time-banking as a way to transition individuals from welfare to workfare or a system to allow welfare recipients keep benefits and use their time and talents to build caring community economies through inclusive exchanges.

Time-banking is not a new concept. TimeBanks USA is a 38-year old registered 501C3 non-profit organization headquartered with a network in 9 countries 34 states with over 200 active independent TimeBanks across the United States. ²⁵

Time banking is an opt-in system with members earning time credits by providing services such as elder care, child care, home care, and various other forms of community outreach and mentoring. Typically, time credits are created by exchanging skills for services that are recorded using time banking software. The IRS has ruled on two occasions that Time Banks are not commercial barter exchanges and create no contractual rights. The IRS has ruled that there will be no taxable consequences to volunteers who earn credits as reimbursement for services rendered.

²⁴ U.S. Census Bureau, Historical Poverty Tables—People, Table 25, Work Experience and Poverty Status for People 16 Years Old and Over: 1987 to 2016, http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html

²⁵ TimeBanks USA, http://timebanks.org/about/



The Digital Economy and On-Demand Direct-Care Services



The digital economy (also known as the web economy, internet economy, network-centric economy, or the new economy) is an economy that based on digital and networked technologies, which is increasingly intertwining and preempting today's traditional economy. In addition to NTR technologies, processes, and systems, the digital economy consists of various components including government (policy and regulation), infrastructure (internet, networks, telecom, and electricity), and providers (digital service, content, information and knowledge workers).

The Digital Economy is an economy based on digital and networked technologies, which is increasingly intertwining and preempting today's traditional economy. The E/M Economy consists of electronic and mobile commerce that is transforming economies, government, business and cultures via emerging network and digital technologies, systems, processes and services. The **Sharing 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 **On-Demand Economy** is a business model where consumer demand is satisfied by near real-time provisioning of goods and services. The App/Bot/Al Economy refers to the range of economic activity surrounding intelligent web-based applications. (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 can do things normally done by people. The Platform Economy encompasses NTRenabled social, business and government activities. A platform (network) business model creates value by facilitating exchanges between two or more interdependent groups, usually consumers and producers. Retail (pipe model) stores are giving way to e-retailing (platform model). For example, Healthcare is now emphasizing outpatient and telemedicine (platform) services in addition to inpatient (pipe) care. 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 On-Demand Economy is a business model where consumer demand is satisfied by near real-time provisioning of goods and services built on top of a technology infrastructure that brings the online and offline world together either instantaneously or scheduled. The rise of the on-demand economy is changing consumer habits, supply chains, regulations, competition, and investment. The most popular forms of on-demand are ground transportation, **healthcare**, retail/shopping, business-to-business (B2B), and food/grocery delivery service. Home, lodging, parking, health and beauty, logistics and financial services are also on the rise.



Traditional healthcare businesses are grappling with how to respond to shifting consumer expectations and searching for ways to improve their supply chains to deliver goods and services more quickly. Consumer demand for personalized time-saving service and innovations in digital app-based matching technologies enable the rise in direct-care services and are shifting power away from centralized inpatient and outpatient providers to consumers.

The on-demand economy's growth is nothing short of phenomenal. Quoting SAGE (a business research firm) statistics, ²⁶

- More than 280 companies now provide on-demand goods and services across 16 industries, up from 76 companies in six industries offering such services in 2014.
- More than 22 million Americans are spending nearly \$58 billion per year in the on-demand economy. 46% of on-demand consumers have an annual household income below \$50,000.
- An estimated one-third of the American workforce is engaged in contract or on-demand work.
- Fueling the growth of the on-demand market is e-commerce, which also is expanding. By 2020, global e-commerce spending will total \$4 trillion, or 14.6 percent of all consumer spending, up from an estimated \$2 trillion in 2016.
- By the end of 2017, more than 2 billion people worldwide were using their mobile devices to make a purchase.
- In the United States, approximately 27 percent of all dollars spent in retail e-commerce transactions will be via mobile devices by the end of 2018.

The healthcare services industry is a multi-trillion dollar industry. Sadly, this industry is replete with inefficiencies (poor referrals, referral leakage, medical errors, missed appointments, no-shows, long waiting times, antiquated processing systems, etc.). Accordingly, the healthcare organizations are turning to telemedicine and telehealth technology to improve delivery of services and access to specialized care in-home or remotely. On-demand healthcare apps are reinventing the way patients interact with doctors as well as delivering medicines to a patient's doorstep.

According to the American Telemedicine Association, there are currently about 200 telemedicine and telehealth networks in the United States, with 3,500 service sites. Over half of all U.S. hospitals now use some form of telemedicine. Medicare, Medicaid, and most private sector insurance plans cover approved services, and medical conditions. Common examples of telemedicine services include primary care and specialist referral services, remote patient monitoring, consumer medical and health information and medical education.²⁷

Here are a few of the on-demand business leaders involved with direct-care services:

²⁶ SAGE, The On-Demand Economy, 8 January 2018, http://businessresearcher.sagepub.com/sbr-1946-105131-2873217/20180108/the-on-demand-economy

²⁷ American Telemedicine Association, About Telemedicine, http://www.americantelemed.org/main/about/about-telemedicine/telemedicine-fags



- **Teladoc** is the nation's largest telehealth platform with 20 million members and over 3,000 licensed healthcare professionals, resolves medical issues between patients and physicians via phone or video consults. Teladoc specializes in general health, specialist services, therapy, dermatology, sexual health, and behavioral health.²⁸
- DoctorOnDemand connects patients in minutes to board-certified doctors and therapists over live video, and have prescriptions sent directly to pharmacies. Via a smartphone, tablet or computer, a healthcare practitioner can access a patient's medical history, diagnose symptoms, perform a virtual exam and recommend treatment including prescriptions and lab work. According to DoctorOnDemand, 90% of common medical and mental health treatments can be accomplished remotely at a price less than urgent care and in-pharmacy clinics.²⁹
- Go2Nurse is an on-demand nurse/caretaker application service that includes traditional nursing
 and caretaker services, at-home pregnancy care, help with newborns, eldercare and specialized
 care for dementia, Alzheimer's and Parkinson's patients.
- **referralMD**'s cloud-based web app aims to standardize referral network communication between primary care physicians and specialists. Capable of integrating across EMR platforms, the app provides real-time status updates, business intelligence, and performance measurements to complete referral exchanges quickly and efficiently.
- American Well offers software, services, and access to clinical services a complete telehealth service for healthcare companies, employers, or a delivery network. American Well's mobile and web service connects doctors with patients for live, on-demand video visits over the internet and handles all the administration, security, and record keeping that modern healthcare requires. 30
- MDLive's has more than two million people in all 50 states who take advantage of virtual care anywhere. MDLive's telemedicine system offers a patient experience, a provider experience, and a call center. A patient can come in through the mobile app, through a website or the call center. MDLive's provider network is the nation's largest and is comprised of physicians who are Board Certified in Internal Medicine, Family Practice, Emergency Medicine and Pediatrics; as well as trained, licensed mental health professionals providing counseling and behavioral health services.³¹
- **SnapMD** positions its virtual care management system as a complete true point-of-care solution with a patient interface, a provider interface and an administrative back-end that enables the healthcare staff to operate the platform and their telehealth program.³²

While these mobile apps are technologically revolutionary, they lack the critical human element—the "foot soldier." Regardless of how brilliantly led or technologically equipped, most Army's need foot

²⁸ Teladoc, https://www.teladoc.com/

²⁹ DoctorOnDemand, https://www.doctorondemand.com/

³⁰ American Well, https://www.americanwell.com/avizia-acquisition/

³¹ MDLive, https://www.mdlive.com/

³² SnapMD, https://snap.md/technology/



soldiers to ultimately win battles and secure victories. Medical, healthcare and social assistance industries are no different.

Because of this limitation, the Jobenomics Chicago Direct-Care Initiative will mass-produce direct-care

foot soldiers "enlisted" mainly from the ranks of "empty nester" female head of households who have proven maternal caregiving aptitudes and skills. Equipped with mHealth (mobile health) and eHealth (electronic health practices supported by electronic practices and communications) and other task-related technology (shown), these foot soldiers can be at the "front line" delivering on-demand triage and services while tethered to more experienced practitioners located at inpatient centers.



mHealth and eHealth technology effectively streamlines communication between patients, direct-caregivers and their direct care center to medical/health/wellness/assistance professionals. One of the most important direct-caregiver roles is to educate, equip, coach and monitor home-bound patients with personalized 24/7 mHealth management systems and preventative healthcare services.

Coaching and monitoring are paramount to successful caregiving. Given the plethora of health and wellness apps (40,000+) on the market, direct-care patients need supervision and advice. Since many of these apps could have serious consequences on patient health, Jobenomics direct-caregivers will be instructed and issued by the Jobenomics Direct-Care Center FDA-approved applications that interface with medical/health/wellness/assistance professionals and institutions.

Automation is slowly supplanting cognitive work giving rise to "centaurs" (a combination of human operators, and intelligent agents and smart machines). Healthcare and social assistance industries are integrating smart devices (that communicate with humans), intelligence agents (that learn human behavior), and voice tech (use of voice assistants powered by artificial intelligence and voice-activated devices). Today, these automated machines/agents need human support to perform most tasks. However, they can perform enough complex tasks to support direct-care givers and patients alike.

New AI (artificial intelligence) powered chatbot apps are making considerable inroads in remote patient preliminary diagnosis and care, thereby reducing unnecessary doctor visits. Voice tech (also known as a chatbot, chat robot, smart bot, talkbot, chatterbot, interactive agent, conversational interface or artificial conversational entity) is a computer program or an artificial intelligence which conducts a conversation via auditory or textual methods. While still in the early stages of adoption, Siri, Alexa, and Google Assistant are chatbots used for a variety of direct-care applications. For example, these health-care voice devices can provide information about health conditions, doctors/specialist, and other direct-care issues. According to eMarketer, 65% of consumers who used voice search for health-related topics seek advice for symptoms and treatment, 32% for doctors or specialists, 29% for information about health-care facilities and their locations, and 12% for other health-related topics.³³

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³³ eMarketer, Dr. Alexa Will Hear You Now, How Voice Technology Is Changing Healthcare, 3 December 2018, https://www.emarketer.com/content/dr-alexa-will-hear-you-now?ecid=NL1001



According to the Massachusetts Institute of Technology, Babylon Health, a London-based digital-first healthcare provider, is shifting the front line of healthcare from inpatient centers to the point-of-need. By using accessible and affordable chatbots cut in half unnecessary patient visits to doctors and hospitals. While other organizations (Ada, Your.ME and Dr. AI) have similar technology, Babylon Health is the forerunner because it is the only system integrated into a national healthcare system (the U.K's National Health Service). Around 40,000 Britons downloaded and are using Babylon's healthcare app. In 2017, 40% of the Britons who used the app elected self-treatment rather than seeking an appointment with a doctor. Babylon has also co-launched the U.K.'s first digital doctor's practice called GP at Hand that allows patients to chat with the chatbot or talk with a real doctor via a video link.³⁴

In September 2018, Canadian-based TELUS Health and Babylon combined forces to bring advanced digital health technologies to Canada. According a TELUS press release, the new virtual health service "will complement existing healthcare services across the country for people in rural areas or living with mobility issues, those who are unable to access non-emergency healthcare on evenings, weekends or holidays, and for the five million Canadians who do not have a family physician." A study by the Canadian Medical Association, 70% of all Canadians would take advantage of virtual physician visits ³⁵

TELUS currently operates specially-equipped mobile health "clinics on wheels" into communities (Montreal, Vancouver, Victoria, and Calgary) where frontline care is urgently needed. These partner-operated mobile clinics act as a vital link between the communities and the local health authority by facilitating better continuity of care for vulnerable people (the homeless, addicted, chronically ill, and mentally ill) who do not have easy access traditional medical care but are in need of urgent care.³⁶

While it is too early to assess what types of mHealth and eHealth technologies that will be used by the Jobenomics Chicago Direct-Care Initiative, it is safe to assume that the City of Chicago could be America's direct-care leader. Since digital technology is not constrained geographically, Austin and Englewood would not only benefit from better healthcare but also by having thousands of self-new employed direct-care givers that could apply their newfound skills across the Chicago metropolitan area.

³⁴ Massachusetts Institute of Technology, MIT Technology Review, The precision medical issue (November/December 2018), Dr. Bot will see you now.

TELUS Health, Media Release, 7 September 2018, TELUS Health and Babylon to bring advanced digital health technologies to Canada, https://www.telushealth.co/news/telus-health-babylon-bring-advanced-digital-health-technologies-canada/
 TELUS Health, Media Release, 26 September 2018, TELUS commits \$5M to expand mobile Health for GoodTM program across Canada, https://www.telushealth.co/news/telus-commits-5m-expand-mobile-health-goodtm-program-across-canada/



Jobenomics Community-Based Business Generator Concept

The way that the City of Chicago can plan, manage and support small business and job creation is via community-based business incubators, business accelerators, and business generators.

Business incubators tend to focus on high-tech, silver bullet innovations that have extraordinary growth and employment potential. Business accelerators focus on expanding existing businesses to make them larger and more profitable. The Jobenomics business generator concept involves mass-producing small and self-employed business with an emphasis on lower-tech but plentiful service-providing businesses at the base of America's economic pyramid.

Jobenomics Community-Based Business Generator Concept

tabor Po	ool of Potential New	Workforce Candida	ntes	†
	Initial Candidate Assessm	ent and Screening		
Non-Profits Church	nes Schools	Veterar	ns Sp	orts Teams
+ +	Secondary Candidate Assess	sment and Screening		
Com	munity-Based Busine	ss Generator (CBBG))	
	Testing, Evaluation	and Triage		
High Potential Business Owners	Hig	h Potential Employees and	d Workers	
•			-	-
Business School & Financing	Certification Programs	Skills Training	Workforce Prep	Other
Startups:		Workforce Entry:		
Independent contractors;	Arranga for	Join CBBG startup busine		1
franchise owners; self- employed, home-based,	: 3 /2	entry-level internships ar lying for open jobs in fast	•)
women-/minority/Gen Y-	(for next generation jobs (1
owned businesses		apply to CBBG to startup a		a de
Owned businesses	Nec	apply to CDDG to startup a	business.	
			N.A.	
CBBG post-startu	p/employment training, me	ntoring and financial supp	oort services	
1 1	Sponsors & Financia	l Institutions		1
Corporations Impact Inv	vestors Association	ons Civic Gro	ups Go	vernment

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 lifespan 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 occurs during onboarding that involves Jobenomics screening and assessing. The third stage uses aptitude and personality tests to determine potential career paths.

Once completed, Jobenomics separates candidates into a business leader group and 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.

Jobenomics Community-Based Business Generator Process



Starting with a pool of tens 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 Business Generator program. This stage of the due diligence process provides an initial assessment of individuals.

Start Small Business



These nominees undergo standard aptitude and personality tests to identify:

- Those that prefer other educational (GED and postsecondary) or training (vocational) centers for career development,
- Those that are qualified and suitable for immediate employment with existing companies, and
- 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 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 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 complete 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.

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.

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 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 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 establish 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 contract 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. Also, 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.



Sources Of Funding & Support

Potential Sources Of Funding & Support

Startup Capital & Support

- Federal and State Funding
- · Government bonds and grants
- Corporate sponsorship
- Debt financing and/or equity investment (7%-9% interest)
- Special programs (e.g., HUD Section 203, 3 and 8 funding, EB-5)
- Philanthrocapitalism

Sustaining Capital & Support

- Urban mining and urban agriculture profit sharing
- · Corporate hiring and subcontracting
- New business hiring and profitability
- Mezzanine financing
- Micro-business loans

The Jobenomics Chicago team is now talking to various investor communities who may be interesting in supporting this initiative or individual projects.

Today, the government is responsible for funding most direct-care services.

- The U.S. federal government funds 126 separate programs targeted at low-income people. U.S. welfare and social program expenditures consume about 63% of mandatory spending of the U.S. federal budget. Four federal funded health insurance programs and safety net programs equate to approximately \$2.2 trillion per year. These four federally funded health insurance programs include Medicare, Medicaid, Children's Health Insurance Program, and Affordable Care Act at the cost of \$1 trillion or 26% of the federal budget. \$400 billion worth of federal safety net programs consumes about 9% of the federal budget.
- According to the most recent survey by the National Association of State Budget Officers, the 50 states 1.2 trillion in state revenues in FY17. Of this amount, welfare and social assistance programs consume approximately \$400 billion of state, county, and municipal government revenues. \$200 billion of state funding is for health insurance for low-income families through Medicaid and the Children's Health Insurance Program. These programs provide health coverage or long-term care to roughly 74 million low-income children, parents, the elderly and people with disabilities.
- In FY17, the City of Chicago's budget allocated \$640,493,185 for Community Services, which equates to 7.7% of the City of Chicago's \$8,290,570,000. 7.7% is a meager amount compared to other American cities. For example, the District of Columbia (Washington DC) allocates 23% of its budget for Human Support Services.

³⁷ Center on Budget and Policy Priorities, Policy Basics: Where Do Our State Tax Dollars Go?, 25 July 2018, https://www.cbpp.org/research/state-budget-and-tax/policy-basics-where-do-our-state-tax-dollars-go



The Jobenomics Chicago team includes Tom Bognanno, the CEO of Community Health Charities, and Stephan Jordan, the CEO of the Institute of Sustainable Development, both of whom will be actively involved with the Jobenomics Chicago Direct-Care funding and implementation efforts.

- Community Health Charities (http://healthcharities.org/) is a nonprofit that raises awareness and resources for health and wellness by connecting more than 2,000 of the most trusted health charities across the United States with more than 17 million caring employees through workplace giving campaigns, causes, wellness programs, employee engagement, and strategic partnerships.
- The Institute of Sustainable Development (http://www.isdus.org/) specializes in Long-Term Recovery, Resilience, and Transformation of communities marginalized by disasters and chronic neglect. ISD works with companies and communities on needs assessments; low-income community technical assistance and capacity building; small business, entrepreneurial base, and workforce development; community economic development policy support; gap financing; and public-private partnerships.



Next Step for the Jobenomics Chicago Direct-Care Initiative

Local community-leaders helped Jobenomics develop the Jobenomics Chicago Direct-Care Initiative. For this initiative to come to fruition, other leading community-leaders, non-profit and for-profit institutions, business executives, and government officials must become stakeholders that will help develop the final program document. Once a final document is completed, the stakeholder team will conduct a roadshow and town hall meetings to introduce the Jobenomics Chicago Direct-Care Program to the general public.

This Coalition-Building, Program Development, and Business Plan Creation Phase should take three months. A detailed proposal is under development for funding of Phase I's coalition-building, program development, and business plan creation activities. This proposal will include actionable milestones and funding requirements.

The Jobenomics Chicago Direct-Care Initiative is part of a larger Jobenomics Chicago Initiative that features five additional business and job creation initiatives for Austin and Englewood. Consequently, community-leaders might choose to integrate the Direct-Care coalition-building effort into a wider outreach and coalition-building undertaking. Should this be the case, a Direct-Care program could be implemented separately as a forerunner effort or integrated into a more comprehensive effort with some of all proposed business and job creation programs.



Questions, Suggestions and Comments Contact

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