Google

Opportunity For Everyone:

Reimagining our approach to programs, philanthropy, and public policy in a changing U.S. economy

Table of Contents

Introduction

"Opportunity for everyone" is the foundation of the American dream. It is also one of our core beliefs at Google. Our continuing mission — to organize the world's information and make it universally accessible and useful — stems in part from a belief that access to information is intimately connected with access to opportunity. We believe that people can accomplish extraordinary feats when they have the information and the tools they need.

In fact, it is more clear than ever that technology has had a positive impact on the economy. It puts knowledge at your fingertips, makes daily life more efficient, and has driven growth. To give just a glimpse of the impact, 6% of U.S. GDP, the equivalent of $1.12 trillion, was generated by the Internet industries in 2016. Their contribution has more than doubled since 2012, growing at five times the average American GDP growth rate.[1] Meanwhile, 10.4 million jobs were created across all 50 states by the Internet in 2016. Eighty-six percent of those jobs are outside major tech hubs.[2]

But despite these trends, there is intense concern that rapid innovation and technological change may not actually be benefiting everyone.[3] How can we ensure that new technology helps workers and improves people's economic well-being? How do we help people prepare for the jobs of the future? And how can we make sure that people from every community can access opportunity?

At Google, we are optimistic about the many ways that digital technologies will create economic opportunity. Digitization of physical industries such as manufacturing, agriculture, transportation, housing, and distribution could create new opportunities to make goods more affordable and drive job growth.[4] A recent study found that "the ability to 'rent' IT as needed – in particular, via cloud computing – was associated with significantly higher survival and growth among young [manufacturing] plants."[5] One-third of all online sales are made by manufacturers, and U.S. manufacturers are now the leading exporters of products and services online, with $86.5 billion in exports.[6]

What's more, the development of machine learning technologies — and more generally artificial (or "augmented") intelligence (AI) — holds great promise in improving standards of living. We're seeing examples of doctors using AI to find breast cancer tumors,[7] detect skin cancer,[8] and diagnose diabetic retinopathy[9] and we've seen farmers use AI[10] to keep crops and animals healthy and increase yields. These advances are just the tip of the iceberg.

Missouri Star Quilt Company, Hamilton, MO

Grow with Google Training in Lansing, MI

But being optimistic does not mean that we shouldn't look closely at the challenges. It is clear that some have been left behind despite technological advances. The reasons for this are complex and varied - the impact of globalization and global trade continue to reshape markets, as do major shifts in demographics and labor force participation. Rapid innovation and the growth of automation are also a part of the story.

We know that no one entity or industry can tackle these challenges alone. Instead, it's a shared responsibility, one that will require public policy solutions as well as efforts on the part of business, communities, and civil society groups. At Google, we are committed to doing our part.

One way we can help is by piloting and testing — launching and iterating, in our jargon — different approaches to key challenges with new and sometimes unexpected partners. And as this research and development reveals promising solutions, we can work with policymakers to help them scale. We are approaching this issue with a great deal of humility and recognize that though we can contribute technology tools, not everything lends itself to a technological solution. It would be a mistake to take a "not invented here" approach and try to develop entirely new solutions ourselves, rather than embracing some of the most promising ideas from communities, nonprofits, educators, social innovators, policy experts, and more.

That is why alongside our innovation in products and services, we are investing in a variety of initiatives with great partners to help enhance economic opportunity for everyone. We hope our investments in programs and philanthropy will catalyze larger and more scalable community investments in this space.

We have also started to work with policy experts who are identifying public policies that can help successful approaches to grow across the country. We have found that there is actually a lot of agreement about where the challenges lie, and many ideas about how to update and develop policy solutions to tackle them.

While we are engaged on issues around economic opportunity globally, this report focuses on our work in the U.S. and on three areas that stand out to us as key to ensuring economic opportunity. The ideas are not meant to be a holistic solution to the challenges we face, but rather areas where we think focused change and investment can have a big impact. This report reflects some of what we have learned so far.

[1] Hooton, Christopher "Refreshing our Understanding of the Internet Economy", Internet Association January 2017.
[2] IAB, "Economic Value of the Advertising-Supported Internet Ecosystem", March 15, 2017.
[3] See for example: The National Urban League, "Save our Cities, Powering the Digital Revolution - State of Black America 2018," May 4, 2018.
[4] Michael Mandel "The Next Ten Million Jobs: Energizing the Physical Industries in the Heartland States," Progressive Policy Institute, October 2017
[5] Wang Jin and Kristina McElheran, "Economies before Scale: Survival and Performance of Young Plants in the Age of Cloud Computing," July 12, 2017.
[6] United States International Trade Commission "Digital Trade in the U.S. and Global Economies , Part 2," August 2014.
[7] Martin Stumpe "Assisting Pathologists in Detecting Cancer with Deep Learning, " Google AI Blog, Google, March 3, 2017.
[8] Taylor Kubota, "Deep learning algorithm does as well as dermatologists in identifying skin cancer, Stanford News, January 25, 2017.
[9] Lily Peng MD PhD and Varun Gulshan PhD, "Deep Learning for Detection of Diabetic Eye Disease, "Google AI Blog, Google, November 29, 2016.
[10] Saad Ansari and Yasir Khokhar " Using TensorFlow to keep farmers happy and cows healthy," The Keyword, Google, January 18, 2019.

Beyond Code:

Expanding Learning for Everyone

Rolling Study Halls in Clarksville, TN

Beyond Code:

Expanding Learning for Everyone

Over the years, technology companies have made considerable investments in building tools for the classroom and programs that expand access to computer science and digital skills. At Google, our approach is to offer powerful software products to schools for free, to create affordable devices, and to design programs that help students become the creators, not just consumers, of technology.

We know that technology in the classroom and in communities can help to give more people access to the skills they need to do jobs throughout the economy. However, despite these investments, students in low-income or rural communities across the U.S. tend to have less access to technology, and often teachers in these areas are less prepared to use technology to positively impact teaching and learning. A recent study by Pew found that low-income households, and especially black and hispanic ones, make up a disproportionate share of the five million households with school-age children that lack high-speed internet at home.[11] And 2015 analysis done by the Education Week Research Center showed that the percentage of fourth-grade teachers who said they have received training to use technology in the classroom hasn't grown since 2009.[12] Bridging the digital divide will require more than devices and connectivity – we must also equip teachers with the skills, tools, and training they need to use that technology effectively in the classroom.

In addition, to overcome skills gaps, employers must do more to communicate what skills they require from their employees, making bigger investments in on-the-job training, establishing employer-driven alternative credentials, or partnering with educational institutions to help translate job skills into educational curricula. While many of these skills will be digital, not all will be; according to a recent McKinsey study, demand for social and emotional skills at work will rise 25% through 2030.[13]

We believe that every student, worker, and educator deserves the tools and skills that set them up to build the future they want for themselves. Through our programs and initiatives, we hope to help people across America – those who make up the workforce of today and those who will drive the workforce of tomorrow – grow their skills and gain more access to new opportunities.

[11] John B. Horrigan, "The numbers behind the broadband 'homework gap'," Pew Research Center, FactTank, April 20, 2015.
[12] Education Week, "Data Dive: Devices and Software Flooding Into Classrooms," Technology Counts 2017, Classroom Technology: Where Schools Stand, June 12, 2017.
[13] Jacques Bughin, Susan Lund, and Eric Hazan, " Automation Will Make Lifelong Learning a Necessary Part of Work" Harvard Business Review, May 24.2018.

Applied Digital Skills in Charleston, SC

Programs & Philanthropy

Google IT Support Professional Certificate

IT support, which includes jobs maintaining the machines and software that underpin technology services, is a dynamic, fast-growing field with quality jobs. Today, there are 150,000 open positions for IT support in the United States.[14] In the next ten years, these jobs are expected to grow at a faster rate than other jobs.[15] These positions are also a pathway to the middle class, with a median wage close to the median salary in America.

At Google, the challenge we faced in finding qualified candidates to join our own IT support team inspired the creation of a new training program. Building on this apprenticeship program, we developed a new online course and certificate program on Coursera that, in just eight to twelve months, can teach everything you need to be an IT support technician. No tech experience or college degree necessary.

Once someone completes the program, they can opt-in to share their information directly with top employers, including Bank of America, Walmart, Sprint, GE Digital, PNC Bank, Infosys, TEKSystems, UPMC, and of course, Google, which are all hiring for IT roles.

Student learning happens both inside and outside of classroom hours. Today, nearly 70% of teachers assign homework that requires the internet, and under-connected or disconnected youth students, especially in low-income or rural communities, are being left behind by this "digital divide."[16] By powering school buses with wifi, devices, and an on-board educator, **Rolling Study Halls** is helping students across the U.S. reclaim more than 1.5 million hours of lost learning time.

Digital literacy, problem-solving, and creativity are often cited as essential skills for jobs of the future. **Applied Digital Skills** is a free curriculum designed by Google where learners practice life and job skills while building creative projects using G Suite for Education. The project-based curriculum has been designed for middle school and high school learners as well as adults who want to learn digital skills in a blended learning environment.

Google.org is supporting nonprofits that are helping prepare people for the changing nature of work. Recently we've announced a set of startup grants for innovations in skill-building, and we partnered with the Walmart Foundation to fund nonprofits on the front lines of skilling and skill-based hiring.

- **Opportunity@Work** is launching the techhire.careers platform, a new tool that helps underserved groups validate their skills to employers and connect to opportunities. By helping employers recognize skills over pedigree, the platform helps employers consider and hire nontraditional talent. Opportunity@Work is also experimenting with Talent Equity Financing, an alternative to traditional loans that allow low-income skill-seekers to afford and access training.

-**Southern New Hampshire University** is developing the **Authentic Assessment Platform (AAP)**, a competency-based assessment for opportunity youth that measures in-demand soft skills. Those who complete the assessment will be issued a digital badge from SNHU.

- **Concourse Education** is experimenting with blending a competency-based bachelor's degree with an employer-backed vocational certificate — with the goal of making college education more job relevant.

[14] Job Market Data compiled by "Burning Glass"
[15] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, "Computer and Information Technology - Computer Support Specialists".
[16] Jessica Rosenworcel, "Bridging the Homework Gap," Huffington Post, June 15. 2015.

How Policy can help

Policy can help create an education system fit for the economy of the future by:

1

Integrating both digital skills and so-called 'soft' skills into school curricula: In addition to investing in digital skills and technological competency that will be important across the economy, it's critical to invest in teaching 'soft' skills — the attributes that enable someone to interact effectively and harmoniously with other people. In fact, it's time to set aside the 'soft' label for these skills, as that makes it seem easier to master. Instead, it's important to invest in them with the same rigor and focus that we've reserved for other skills. Several states include concepts such as resilience and perseverance in their definitions of college and career readiness.[17] It's important to build on these models – investing in identifying these types of skills and developing new strategies to both teach and master them.

2

Improving the use of technology in the classroom through teacher training: Educators today do not always have access to the training they need to use technology in effective and meaningful ways. Our Dynamic Learning pilot project matches teachers with technology coaches in underserved schools to demonstrate the positive impact that training can have for teachers and students alike.[18] Some states have implemented scholarships for computer science professional development,[19] and policymakers could fund and support similar types of programs around technology use more generally.

3

Supporting innovation in alternative learning pathways by improving the financial aid systems: Many jobs that provide a middle-class income don't depend on a college degree; instead, training can be provided through a lightweight, flexible course or program to get and demonstrate key skills. As innovation in these types of programs progress, it's important to update federal financial aid so that students can apply it to quality training programs.[20]

4

Creating more opportunities for work-based learning (e.g. apprenticeship and on-the-job training): On-the-job training can provide a strong learning environment, ensure the relevance of training, and have better odds of resulting in actual employment. Policymakers should support work-based learning initiatives.

[17] Ulrich Boser and Perpetual Baffour, "Learning Mindsets and Skills" Center for American Progress, June 23, 2017.
[18] Learn more about Google's Dynamic Learning project
[19] Learn more about state computer science education policies
[20] See: Joseph V. Kennedy, Daniel Castro, and Robert D. Atkinson, "Why It's Time to Disrupt Higher Education by Separating Learning From Credentialing," Information Technology & Innovation Foundation (ITIF), August 2016. ; Jobs for the Future, "Building Pathways to Credentials, Careers, and Economic Mobility," December 11, 2017. ; Anne Kim, "Forget "free college." How about "free credentials?," Progressive Policy Institute (PPI), October 16, 2017.

Beyond Silicon Valley:

Investing in Entrepreneurship and Economic Dynamism Everywhere

Grow with Google Training in Indianapolis, IN

Beyond Silicon Valley:

Investing in Entrepreneurship and Economic Dynamism Everywhere

Every day millions of businesses, large and small, are using technology to grow their businesses - creating opportunities for families and communities across the country.[21] But while the Internet has made it easier than ever before to launch and scale a business, too many people still lack the tools and opportunity to do so. At the same time that rates of entrepreneurship are starting to rebound after a post-Great Recession hangover and technology-based start-ups are growing quickly,[22] barriers to new business formation remain. More generally, barriers persist that inhibit people shifting jobs and trying new things — which in turn impacts the ability of new businesses to hire and grow. And in too many parts of the country, affordable broadband internet — one of the basic requirements for access to today's information economy - remains out of reach.

It's critical that people in Silicon Valley invest and contribute not only in their local communities, but also beyond them. More specifically, it's important to focus on building strong entrepreneurial communities around the country. Entrepreneurship is a learnable skill, and training and mentorship can make a difference. But different communities will have different needs; the solutions to help a laid off worker in coal country become an entrepreneur will look very different from training a college student in Arizona.

Over the years, Google has invested deeply and broadly in supporting entrepreneurship, and we are working with social innovators to pilot new ideas to help people access the resources and information they need to start a business or change careers. Most importantly, we are continuing to expand our focus to help break down some of the barriers standing in the way of communities outside of Silicon Valley and the technology industry.

[21] See: Google's 2017 Economic Impact Report
[22] John Wu and Robert D. Atkinson, "How Technology-Based Start-Ups Support U.S. Economic Growth," Information Technology & Innovation Foundation (ITIF), November 28, 2017

American Underground, a Google-supported startup space in Durham, NC

Programs & Philanthropy

Google for Entrepreneurs

Helping entrepreneurs around the entire country (and the world) is one of the central reasons we started Google for Entrepreneurs. From Detroit's "Grand Circus" tech training program to Durham's "American Underground" hub for startups, we provide financial support and Google resources to startup communities that equip and nurture entrepreneurs. In our work with startup teams around the U.S., we see that the desire to work hard and build a better way to do something knows no geographical bounds. We know that when founders are successful, not only do they build great products for users, they also improve their local economies. Last year, startups in the Google for Entrepreneurs partner network created 3,017 jobs in the U.S.— up 50% from 2016. They also raised more than $300,000,000 in funding in 2017 alone.

Google for Entrepreneurs also partners with other organizations like the Rise of the Rest tour. Each stop of the tour includes visits with leading startups and ecosystem builders to better understand what helps and hinders founders in that community. This year, for example, Google for Entrepreneurs sent graphic designers and pitch coaches to help prepare entrepreneurs to deliver their pitch to Rise of the Rest investors and partners, in an effort to raise funding.

But supporting healthy startup ecosystems goes beyond supporting underserved geographies: it means helping underserved founders, no matter where they're located. From inspiration to acceleration, Google for Entrepreneurs partners with leading organizations to cultivate diverse and inclusive startup communities. In 2017, female founders across the Google for Entrepreneurs partner network raised $136 million. We're also running programming such as Google for Entrepreneurs Exchange, an immersive two week startup mentorship program for Black founders in Durham, North Carolina — last year's cohort has gone on to raise $13.8 million in venture funding. These examples represent only a fraction of the work that needs to be done and we're committed to helping entrepreneurs who need it most.

With job postings scattered across the web, newspapers and help wanted signs, it's not always easy to find ones that are a good fit based on your unique needs and skills. Google for Jobs is focused on helping both job seekers and employers, by providing access to Google's machine learning capabilities to power smarter job search and recommendations within career sites, job boards, and other job matching sites.

Digital tools and resources can play a powerful role in helping businesses evolve and grow. Google's free Primer app delivers a fast, easy way to learn business and marketing skills. Its bite-sized, jargon-free lessons are designed for time-crunched business owners and ambitious professionals. Curated by a small team at Google in partnership with industry experts, it helps small businesses stay competitive in today's ever-changing digital world.

As part of its future of work portfolio, Google.org is backing nonprofit organizations that are experimenting with new approaches to help people create dynamism and economic opportunity everywhere.

- As new platforms have lowered the barriers to entry for independent and "gig" workers, new tools are needed to help low-income jobseekers navigate these emerging types of work. Samaschool helps independent workers advance their careers and better manage their income. With support from Google.org, Samaschool is now developing a new blended learning solution that walks independent workers through the basics of finding freelance work, building their careers, managing contracts and taxes, and more.

- Communities that have been reliant on the coal industry and power sector have seen their workforces and local economies distressed by the closures of plants and mines. The Just Transition Fund partners with coal-affected communities in 12 states to help them navigate workforce transitions. With support from Google.org, they are codifying learnings from the field for community leaders around the country.

- The R Street Institute's Justice for Work Coalition aims to bring bipartisan support for criminal justice reform and to reduce barriers to employment following incarceration. For far too many, any time in prison effectively acts as a life sentence of under- or unemployment. That's due in part to public policy — for instance, state and local entities that issue occupational licenses often block formerly incarcerated individuals from getting jobs, even when there are no relevant public safety concerns. Google.org is supporting the Coalition's integrated program of research, writing, and outreach to address these challenges.

How Policy can help

Policymakers can help remove barriers to new business creation, open up new opportunities for workers and revitalize distressed communities by:

1 **Eliminating non-compete agreements:** While it's important to look beyond Silicon Valley in supporting entrepreneurship, there are some policy lessons to be drawn from the Valley's growth. A number of studies have examined the fact that California has generally not permitted so-called 'employee non-compete' agreements — which prohibit workers from switching jobs and moving to a competitor. Researchers have attributed the particularly dynamic nature of Silicon Valley's start-up ecosystem to this fluidity in the labor market.[23] This is not just an issue with respect to highly-skilled, highly-compensated workers: 14% of workers earning less than $40,000 were subject to a non-compete agreement, and 33% had been at some point in their career; meanwhile, 14% of workers without a four-year degree were subject to a non-compete agreement, and 35% had been at some point in their career. Non-competes can lock people into unfulfilling and underpaying jobs, limit workers' bargaining power, and discourage the pursuit of new opportunities across the economy.

2 **Reforming occupational licensing:** Almost one quarter of jobs require state licenses or professional certifications. Affected occupations include doctors, lawyers, drivers, manicurists, barbers, auctioneers, florists, and interior designers — to name just a few. In some cases these requirements protect consumers or can help provide employment security to vulnerable low-wage workers. In others, however, they merely limit entry and make it difficult for new entrants or people moving from other parts of the country to put their skills to work. And many occupations are licensed in only a few states, raising a question about whether licensing is really necessary. Policymakers can limit the jobs needing licenses to where there are proven benefits, streamline license eligibility, and recognize licenses awarded by other states.

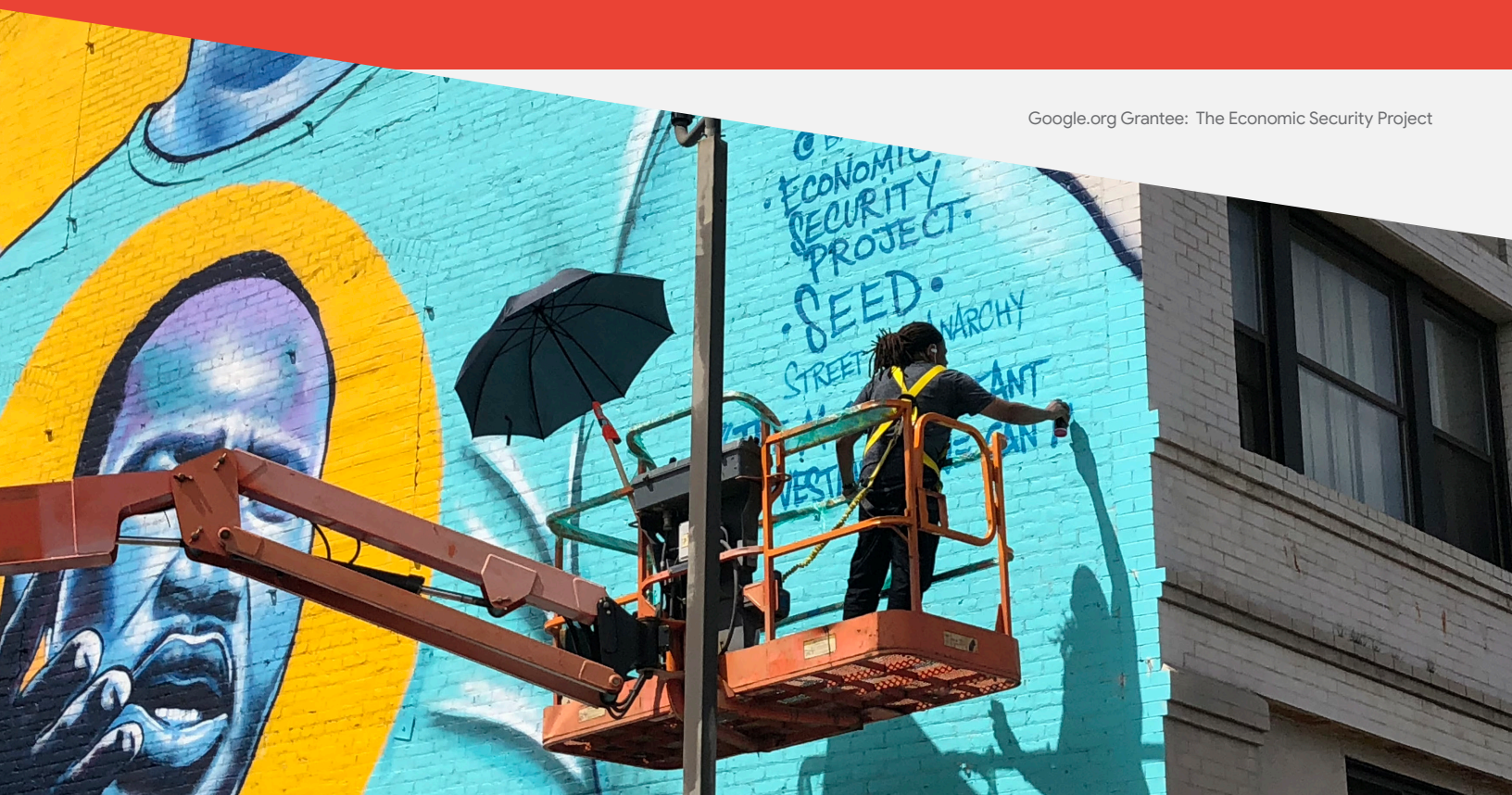
3 **Expanding broadband access, particularly in rural areas:** As of January 2016, nearly 40% of Americans living in rural areas lacked access to high-speed Internet access of at least 25 megabits per second, compared with just 4% in urban areas.[24] Policymakers at all levels can work to remove barriers to the deployment of broadband infrastructure, such as through 'dig once' and 'climb once' policies that make it easier to run wires underground and on utility poles. Federal policymakers must also expand access to the airwaves — wireless 'spectrum' — in ways that facilitate the deployment of new, competitive networks.

4 **Facilitating access to capital in distressed communities:** Access to capital can be particularly challenging outside of growing urban areas. Policy can help address this. For instance, as part of the recent federal tax changes, Congress set the foundation for investment in distressed areas. States are designating low-income urban and rural communities as "Opportunity Zones," in turn giving investors tax incentives to put their capital to work in these regions. Along with ensuring that this program is a success, policymakers should explore additional ways to drive investment.

[23] See: AnnaLee Saxenian, Regional Advantage, Harvard University Press, 1994.
[24] Federal Communications Commission (FCC), "2016 Broadband Progress Report," January 29, 2016.

Beyond Universal Basic Income:

Ensuring Economic Security



Google.org Grantee: The Economic Security Project

Beyond Universal Basic Income:

Ensuring Economic Security

As the economy rapidly changes, work is changing too. While education and retraining programs, as well as improving opportunities for entrepreneurship and job mobility, can help here, that alone is insufficient. Making sure everyone benefits from a dynamic, innovative economy takes more.

Today, far too many people still lack the basics at work. According to one study, in 2014 there were nearly two million fewer jobs in mid- and higher-wage industries than there were before the recession took hold, while there were 1.85 million more jobs in lower-wage industries.[25] Too often, these jobs not only provide insufficient income to support working families, but are also low-quality in other dimensions. They may lack critical benefits such as health coverage, for example. This is a particular concern when it comes to the growing trend of work done independently — on a freelance, contingent, or piecemeal basis.

A key piece of the puzzle is sometimes referred to as a social safety net, but we prefer a different metaphor — a trampoline. When significant economic change disrupts people's work, we should look for ways to help them bounce back and ensure no one is left behind. Among other things, we should ensure that people both inside and outside traditional employment — whether a budding entrepreneur, a freelancer, or the self-employed — have access to affordable health and other benefits. We should take care of people during major family or medical changes and emergencies. And we should find ways to support workers' incomes, particularly those affected by big economic transitions. Finally, we must ensure that the technology is making it easier, rather than harder for people to both learn about and access these programs when they need them.

At Google, our expertise is in technology, so this subject is a bit farther afield, and we have much more to learn. Some in Silicon Valley have focused on the idea of a universal basic income. We think it's a worthwhile discussion, but it doesn't define the entire universe of what is possible to both improve the quality of work and make it pay. We hope that by continuing to invest in both making our own company a better place to work and in cultivating ideas that will help address not just income, but the purpose and quality of work, we can be a part of a better future for all workers.

[25] National Employment Law Project, "The Low-Wage Recovery: Industry Employment and Wages Four Years into the Recovery," April 2014.

Google.org Grantee: The Workers Lab

Programs & Philanthropy

Since 2007, the **National Domestic Workers Alliance (NDWA)** has fought for the respect, recognition, and inclusion in labor protections for domestic workers. To address issues across the sector, NDWA established **Fair Care Labs**, an innovative technology lab that builds tools to improve work conditions for domestic workers. Google.org's funding is helping Fair Care Labs extend the reach of its products by making them available in more languages and by ensuring the most vulnerable workers know the tools exist.

The Workers Lab supports innovators to find new ways to build power for working people beyond collective bargaining. They believe that there are many ways to improve the lives of people who work and want to support those who are at the cutting edge of these solutions. With support from Google.org, The Workers Lab is prototyping new portable safety net benefits for low-earning contractors and low-wage workers.

The Earned Income Tax Credit (EITC) is one part of the social safety net that uses cash in the form of a tax credit for low- and middle-income workers. It is widely regarded as a particularly effective anti-poverty tool.[26] Yet many people still experience economic instability and struggle with the rising cost of living. Google.org is supporting **The Economic Security Project** in its effort to explore modernization of the EITC at the state and national level.

The **Aspen Institute Future of Work Initiative** is building two products with Google.org's support. The first is a new digital resource to provide researchers, policymakers, and journalists with a one-stop shop for what we know and do not know about "gig" workers and other independent workers. The second is a guide to help decision makers explore how to make portable benefits work for this group of workers.

[26] Chuck Marr, Chye-Ching Huang, Arloc Sherman, and Brandon Debot, "EITC and Child Tax Credit Promote Work, Reduce Poverty, and Support Children's Development, Research Finds" Center on Budget and Policy Priorities, October 1, 2015.

How Policy can help

In this area, policymakers can play an important role in ensuring a sufficient level of economic security for everyone, including by:

1 **Developing portable benefits fit for the future:** In a rapidly changing economy, workers are increasingly independent — e.g., entrepreneurs building a business, participating in the 'gig economy' (e.g. driving for Uber or Lyft, or getting hired to paint a room via Thumbtack), or taking time between formal jobs to acquire new skills. In general, they are at a disadvantage when it comes to getting affordable health and other benefits, relative to traditional employees. To give people a stronger sense of security in the workplace and a greater willingness to take risks, benefit systems need to be retooled so that they are portable, moving with workers themselves and not just tied to a particular employer.

2 **Expanding policies that supplement workers' incomes:** For example, as discussed above, the Earned Income Tax Credit provides money to low- to moderate-income working individuals and couples, particularly those with children. Policymakers should expand this program and fix some of the design flaws in the current system, as well as exploring other policies to support low-paid workers' incomes.

3 **Ensuring paid family leave and paid sick leave:** Currently, family leave policies in the U.S. are decided on a state-by-state basis. While some states (like California and New Jersey) have paid leave policies that apply to both mothers and fathers, the U.S. is one of only two countries in the world not to guarantee parents any cash support after birth. To put America in line with many of its economic competitors and partners, it's crucial that paid family leave be national, cover both men and women, and be available not only for childcare, but also for other forms of caregiving (spouse, parent, etc.). Similarly, while seven states and Washington D.C. currently require paid sick leave, this form of economic security should be expanded across the country. We believe that finding a solution that can work for everyone — employers and employees — is critical.

Conclusion

Debates on questions about the future of the economy are often binary: either dystopian or rose-colored. Either globalization and technology will eliminate quality jobs, or we'll adapt to change just like we always have. The public policy debate often focuses on finding a new set of silver bullet solutions that reflect those choices: from universal basic income to computer science for all. And we are sometimes guilty of this sort of oversimplification ourselves.

At Google, we don't think that the future is so binary, nor that the solution will take the form of a single silver bullet. But we do want to play our part in developing some of the many solutions. That's why, last year, we announced a commitment of $1 billion over the next 5 years to nonprofit organizations working to close the world's education gap, prepare people for the changing nature of work, and ensure that no one is excluded from opportunity.

This document represents neither the beginning nor the end of our work to identify potential ways to tackle the challenges we face today around economic opportunity in America. As we go forward, we will continue to share our learnings — both our successes and failures — as we launch, iterate, and hopefully help find scalable solutions to expand economic opportunity for everyone.

Acknowledgements and Further Reading:

This project is a combined effort by Google's public policy and government affairs team and Google.org. Throughout this process, we have been lucky to have had so many individuals and organizations share their work, ideas, and perspectives on economic opportunity with us. Below you will find some examples of their work on the topics we cover in this report.

American Enterprise Institute
"What Works: Building Skills Across America"

"Paid Family and Medical Leave: An Issue Whose Time Has Come"
by AEI and Brookings

Aspen Institute:
"Toward a New Capitalism: The Promise of Opportunity and the Future of Work"
by the Future of Work Initiative

The Brookings Insititution:
"Revitalizing Wage Growth: Policies to Get American Workers a Raise"
by Jay Shambaugh and Ryan Nunn

"Reforming Non-Competes to Support Workers"
by Matt Marx

Cato Institute:
"A License for Protection"
by Morris M. Kleiner

"Should Noncompetes Be Enforced? New empirical evidence reveals the economic harm of non-compete covenants." by Alan Hyde, Rutgers University School of Law

Center for American Progress:
"Learning Mindsets and Skills"
by Ulrich Boser and Perpetual Baffour

"The Importance of Paid Leave for Caregivers: Labor Force Participation Effects of California's Comprehensive Paid Family and Medical Leave"
by Joelle Saad-Lessler and Kate Bahn

Center for Equitable Growth:
"The Earned Income Tax Credit" by Jesse Rothstein

Council on Foreign Relations:
"The Work Ahead: Machines, Skills, and U.S. Leadership in the Twenty-First Century"
by Penny Pritzker, John Engler, Edward Alden, and Laura Taylor-Kale

Economic Policy Institute
"Recommendations for Creating Jobs and Economic Security in the U.S."
by Josh Bivens

The Heritage Foundation
"A Brief History of Occupational Licensing"
by Paul Larkin

Information Technology and Innovation Foundation
"How to Reform Worker-Training and Adjustment Policies for an Era of Technological Change"
by Robert D. Atkinson

Joint Center for Political and Economic Studies
"Innovation and Opportunity Program"

Kauffman Foundation:
"Enterpreneurship Policy Digest"

Mercatus Center:
"The Impact of Regulations and Institutional Quality on Entrepreneurship"
by Dustin Chambers and Jonathan Munemo

"The Effects of Occupational Licensure on Competition, Consumers, and the Workforce"
by Patrick McLaughlin, Matthew D. Mitchell, and Anne Philpot

National Partnership for Women and Families
"Paid Leave Works in California, New Jersey and Rhode Island"

New America Foundation
"Shift Commission Report"

"Centering the Margins: A Framework for Equitable and Inclusive Social Policy"
by Rachel Black and K. Sabeel Rahman

Niskanen center:
"The Free-Market Welfare State: Preserving Dynamism in a Volatile World"
by Samuel Hammond

Progressive Policy Institute:
"The Next Ten Million Jobs: Energizing the Physical Industries in the Heartland States"
by Michael Mandel

R Street Institute:
"How Occupational Licensing Laws Harm Public Safety and the Formerly Incarcerated"
by Jonathan Haggerty

Third Way
"A New Generation of Ideas: A Social Contract for the Digital Age"

"Mind the Gap: The State of Skills in the U.S."

Urban Institute:
"US Partnership on Mobility from Poverty"