





be on the tasks performed in existing jobs. These changes will require workers to build new skills and be able to move more seamlessly between jobs and industries.

As wage growth stagnates and traditional jobs change or disappear, prosperity seems to recede from an ever-growing number of American workers. [The New Democrat Coalition](#) offers a set of ideas and policies designed to empower American workers to compete and thrive in the changing economy. We believe enacting these policies and others like them is critical to ushering in a new age of widespread prosperity and to rebuilding the social and political stability eroded by kitchen table economic anxiety. We are committed to making sure that the American Dream is available for all Americans. Addressing the unique economic challenges of today and tomorrow must be the next progressive advance.

### ***The Changing Nature of Work and the Economy***

Work looms large in the American imagination. Those who laid the first railroad tracks or took shifts at our first factories built the American economy into the envy of the world. But work is much more than a paycheck. A job provides meaning, a sense of belonging, status, and dignity. More than anyone else, Americans are defined by their work. As a conversation starter or an abiding point of pride, what we do is core to who we are.

Since our nation's founding, the type of work Americans do has changed dramatically. In 1776, nearly all Americans farmed or worked in small-scale cottage industries. Following centuries of evolving technology and automation, however, less than two percent of Americans work in agriculture today. Despite this, we produce significantly more food and fuel today, more than meeting our nation's needs.<sup>3</sup>

The Industrial Revolution, in tandem with strong organized labor and progressive policies like labor protections and Social Security, generated huge economic growth and shared prosperity. The American middle class was the result. However, the manufacturing industry of this era, which employed almost a third of the American workforce at its peak in 1953, has given way to a growing service sector. Today, fewer than nine percent of workers actually manufacture things.<sup>4</sup> These highly-trained, tech savvy workers and their high-tech assembly lines and shop floors would be almost unrecognizable to their lunch-pail grandfathers.

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[ployment and Migration Working Papers, No. 202, OECD Publishing, Paris](#)

3. [DeSliver, Drew \(2017\), "Most Americans unaware that as U.S. manufacturing jobs have disappeared, output has grown", Pew Research Center](#)

4. [International Labour Organization, ILOSTAT database \(Data retrieved in November 2017\), "Employment in agriculture", World Bank](#)

While adapting to the shift from manufacturing to service, the American workforce must also face the dramatic changes occurring within both sectors. The U.S. service industry enjoys some of the strongest comparative advantages in the global market, encompassing an ever-growing majority of U.S. GDP over the last few decades. Yet recent data from the Department of Labor found that from 2016 to 2017, automation displaced more service sector workers—like sales associates, financial clerks, and administrative assistants—than those who work in manufacturing.<sup>5</sup> Today, your smartphone app can summon a car that was largely built by robots to commute to your job where you scan thousands of documents in seconds with the help of artificial intelligence (AI). Each of these activities were unimaginable 20 years ago, illustrating several important forces that buffet today’s labor market:

- 1. Rapidly advancing technology and automation** are increasingly impacting the jobs and tasks of low- and some middle-skill workers as machines take on more repetitive work.
- 2. Globalization** has led to widespread opportunity and prosperity for many Americans while simultaneously displacing many workers in industries that offshored production or faced foreign competition.
- 3. Educational inertia** that maintains a legacy education system is not meeting the needs of all students and workers. The system has not kept up with technological change, nor placed the appropriate premium on adaptability, innovation, and flexible lifelong learning.
- 4. Regulatory inertia** has made it more difficult for Americans to adapt and become entrepreneurs. Access to capital is geographically and demographically uneven, many of our labor laws are stuck in the 1930s, and larger, more established firms have a distinct competitive advantage over new firms.
- 5. The economic hangover from the Great Recession** has forced some prime age workers out of the labor market, exacerbating structural economic challenges, including slow GDP and productivity growth.<sup>6</sup>

These forces have disproportionately affected low-skill, low-wage workers, and will impose the most challenges on low- and middle-skill workers in the near future. Many workers, like those in the factory who rely on their strength and ability to perform repetitive tasks, have found it harder and harder to get into and remain in the middle class. As a result, many Americans understandably feel left behind and believe that the system is rigged against them.

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5. [Brown, David and Bhandari, Ryan \(2018\), “New Data Show Job Disruption is Not Job Destruction”, \*Third Way\*](#)

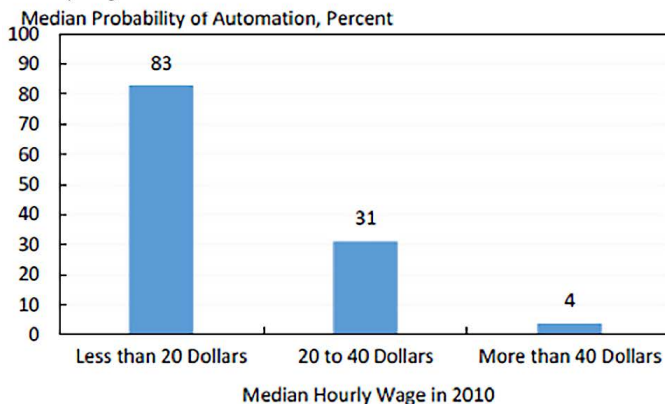
6. [Council of Economic Advisers \(2016\), “Artificial Intelligence, Automation, and the Economy”, the Executive Office of the President \(Obama Administration\)](#)

Meanwhile, high-skill Americans with the training and education to handle adaptive, creative, and international work in fields like engineering, biotechnology, and finance have done exceedingly well in recent decades. These workers are also best equipped to adapt to today’s changing economy. Some research suggests that in the short term, 83 percent of jobs occupied by low-wage workers and 31 percent of middle-wage workers face a high probability of automation, while just four percent of high-wage jobs face a high chance of automation.<sup>7</sup>

Educational attainment is another key factor. The more you educate someone, the more you increase their resilience to economic change and automation. Forty-four percent of jobs occupied by workers with less than a high school degree are highly susceptible to automation. The probability of automation drops significantly as educational attainment levels increase.<sup>8</sup>

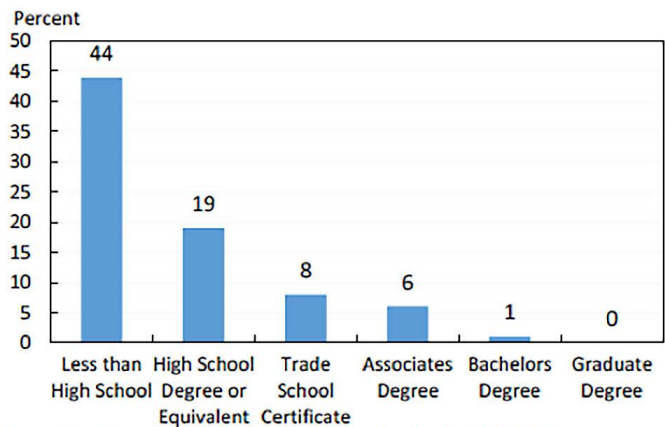
The following graphic illustrates this challenge:

**Share of Jobs with High Probability of Automation, by Occupation’s Median Hourly Wage**



Source: Bureau of Labor Statistics; Frey and Osborne (2013); CEA calculations.

**Share of Jobs with Highly Automatable Skills, by Education**



Source: Arntz, Gregory, and Zierahn (2016) calculations based on the PIAAC 2012.

Above: [Council of Economic Advisers \(2016\), “Artificial Intelligence, Automation, and the Economy”, the Executive Office of the President \(Obama Administration\)](#)

In the short term, these challenges are most intense for low- and middle-skill workers like metal workers and secretaries, but high-skill workers will not be exempt from automation in the long term. President Obama’s National Science and Technology

7. [Council of Economic Advisers \(2016\), “Artificial Intelligence, Automation, and the Economy”, the Executive Office of the President \(Obama Administration\)](#)

8. [Council of Economic Advisers \(2016\), “Artificial Intelligence, Automation, and the Economy”, the Executive Office of the President \(Obama Administration\)](#)

Council found while “it is very unlikely that machines will exhibit broadly-applicable intelligence comparable to or exceeding that of humans in the next 20 years, it is to be expected that machines will reach and exceed human performance on more and more tasks.”<sup>9</sup> No one should be comfortable with the tiger that eats them last. We believe technological advancements can create opportunity and prosperity. The question is whether the opportunity and benefits will be widely shared.

For as many jobs automation eliminates, many more will dramatically change. Furthermore, technological advancement has always created new jobs to replace the jobs displaced. An Organization for Economic Co-operation and Development (OECD) analysis estimates that technology will eliminate only 10 percent of jobs while changing another 28 percent in some way, likely requiring workers to develop different skills to apply in their existing jobs.<sup>10</sup> Depending on the profession, artificial intelligence could either complement human skills or replace them. As policy makers, we must face the coming change and adapt to ensure Americans have the tools to seize new opportunities. If we do nothing, we risk being left behind.

### ***The Socio-Political Problem***

American workers experience the pressures of the changing nature of work in their daily lives and as they consider their prospects. Most Americans were raised to believe in the promise of the American Dream: that hard work and playing by the rules would allow them to do better than the previous generation. But now, more Americans think the rules have changed and that hard work may not always provide economic opportunity.

American entrepreneurs and workers stand on the frontlines of the changing economy. Many feel left behind by globalization, rapid technological advancements, slow economic recovery from the financial crisis, and outdated educational practices and regulations. To understand how to address these challenges, we have identified a few ways Americans are experiencing this change:

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9. [National Science and Technology Council, Committee on Technology \(2016\), “Preparing for the Future of Artificial Intelligence”, Published by the Executive Office of the President \(Obama Administration\)](#)

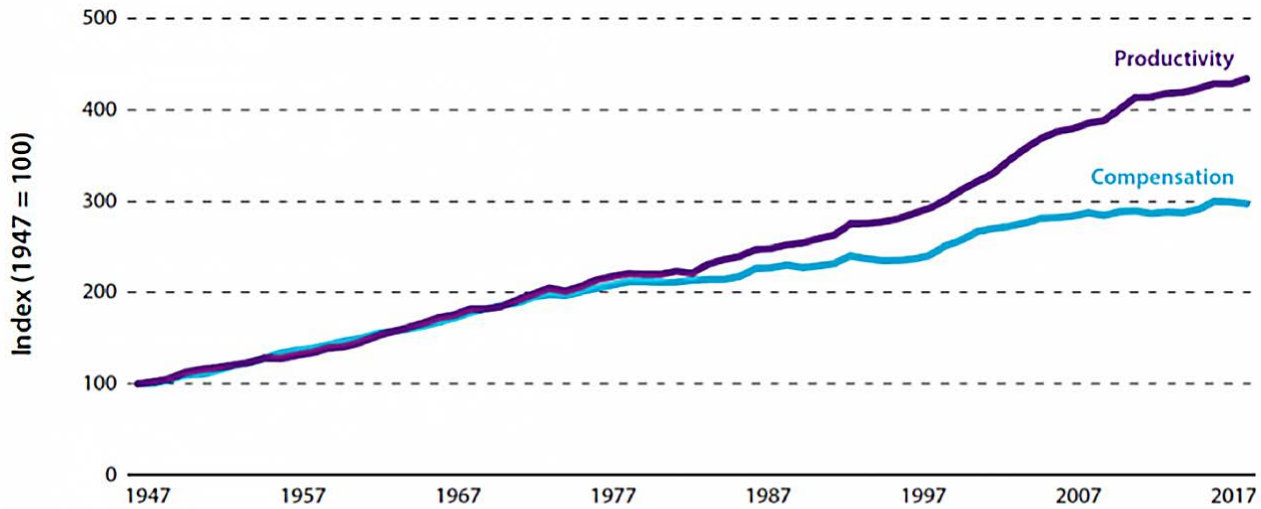
10. [Nedelkoska, L. and G. Quintini \(2018\), “Automation, skills use and training”, OECD Social, Employment and Migration Working Papers, No. 202, OECD Publishing, Paris](#)

**Wage Growth Stagnation:**

Most Americans believe they rarely get a raise and that their paychecks do not keep up with expenses. They are right. Real wage growth has been relatively stagnant for the majority of American workers over the last four decades.<sup>11</sup> Technological advancements in the 21st century have amplified this trend: according to The Hamilton Project, “Globalization and technological change are exerting downward pressure on the wages of some less-educated workers,” which could deepen existing inequalities.

Several economic factors, including slowed productivity growth, have contributed to wage growth stagnation. In recent years, the gains of economic growth and productivity have largely gone to the highest income groups, leaving low- and middle-income workers behind. And while historically labor productivity increases have translated into wage increases, real labor productivity and total compensation growth have diverged.<sup>12</sup> Americans viscerally understand this: they are doing more for less.

**Real Labor Productivity and Hourly Compensation, 1947–2017**



Source: Bureau of Labor Statistics (BLS) 1947- 2017; authors' calculations.

Note: Productivity is the indexed value of nonfarm business real gross output per hour of all persons, and compensation is the indexed value of nonfarm business average real compensation per hour. Compensation is deflated using the Consumer Price Index for All Urban Consumers Research Series (CPI-U-RS) deflator.

Above: [Shambaugh, Jay; Nunn, Ryan; and Portman, Becca \(2018\), “Revitalizing Wage Growth Policies to Get American Workers a Raise: Introduction”, The Hamilton Project, Brookings Institution](#)

11. [Shambaugh, Jay and Nunn, Ryan \(2018\), “Revitalizing Wage Growth Policies to Get American Workers a Raise”, The Hamilton Project, Brookings Institution](#)

12. [Shambaugh, Jay; Nunn, Ryan; and Portman, Becca \(2018\), “Revitalizing Wage Growth Policies to Get American Workers a Raise: Introduction”, The Hamilton Project, Brookings Institution](#)

Furthermore, economic mobility across communities and across generations has fallen in the United States. The data is clear: America has lower intergenerational mobility today than most industrial countries. More than any other factor, parental income is a significant determinant of a child's future income.<sup>13</sup> At the same time, we know that chances for mobility vary depending on zip code.

#### **Increasing Independence at Work:**

Workers are increasingly on their own either by choice or necessity, as more jobs are becoming short-term, project based and temporary. Companies are increasingly focused on core competencies while contracting out for support services.

The contingent workforce—including the gig economy—is growing at an increasing rate, representing almost 16 percent of the total workforce in 2015.<sup>14</sup> In some cases, the increased participation in the gig economy stems from workers embracing the independence it provides; in others, it is in reaction to the uncertainty the changing economy has wrought in their lives. Many companies offer individuals the exciting prospect of monetizing time, space, and labor that might otherwise be difficult to sell. In other cases, however, firms are replacing full-time employees with contractors. This presents a particular challenge: employers are not required, and sometimes unable, to provide certain protections and benefits to these contingent workers.

Finally, the balance of power between companies and workers has shifted. Unions represent fewer workers, lowering their collective bargaining power, while companies are growing in size and influence in the labor market.<sup>15</sup>

#### **Declining Dynamism and Mobility:**

New business formation has slowed, dampening the engine that creates good middle-class jobs. The Hamilton Project found that “decline in young firms accounts for 32 percent of the decline in job creation and 26 percent of the decline in job reallocation ...from the late 1980s through the mid-2000s.”<sup>16</sup>

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13. [Furman, Jason \(2016\), “Equality and Efficiency: A Global Perspective”, World Bank Group Macroeconomics and Fiscal Management Global Practice Annual Forum](#)

14. [Katz, Lawrence F. and Krueger, Alan B. \(2016\), “The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015”, Harvard University, Princeton University and NBER](#)

15. [Krueger, Alan B. and Posner, Eric A. \(2018\), “A Proposal for Protecting Low-Income Workers from Monopsony and Collusion”, The Hamilton Project, Brookings Institution](#)

16. [Shambaugh, Jay; Nunn, Ryan and Liu, Patrick \(2018\), “How Declining Dynamism Affects Wages”, The Hamilton Project, Brookings Institution](#)



Since the bottom of the Great Recession, the private sector economy has created more jobs than lost and currently is on the longest economic growth streak in history.<sup>17</sup> However, job growth has also been geographically uneven, posing real challenges of mobility and housing for interested job seekers: Workers are relocating for work and changing jobs less than before<sup>18</sup>, in part due to restrictive housing policies and prices. Many students and workers are also geographically disconnected from educational opportunities that could connect them to good-paying jobs.<sup>19</sup>

### ***Solutions from the New Democrat Coalition***

We live in a period of innovation and economic disruption. This has created enormous opportunities for some, but a great deal of uncertainty and anxiety for others, especially given the lack of consensus on the trajectory of technological change. Some economists and technologists believe today's changing economy is a break with the past and point to the startling possibility of a future without work. Others see similarities to previous periods of technological innovation in which new jobs and opportunities more than make up for losses. Either way, anxiety and uncertainty are now hallmarks of the American workforce.

Some political leaders, including the current President, have responded to this anxiety with nostalgia and empty promises to return to a supposedly more stable and familiar past. The conditions that produced the middle class of the 20th century are as distant as horse-drawn carriages and gas streetlamps, and the passage of time has masked the particular inequities and flaws of the old industrial economy.

Most Americans want to go forward, not backward. Our jobs have changed dramatically while the laws and policies governing them have not. Our nation is full of hopeful, optimistic and forward-looking people, but they are yearning for a comprehensive solution to the disruption the changing economy has brought to their daily lives.

The New Democrat Coalition believes that it is time to disrupt the legal framework for work and education. That is why we established the New Democrat Future of Work Task Force. The New Democrat Coalition is a group of forward-thinking, pro-innovation Democrats in the U.S. House of Representatives working to build policy and ad-

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17. [Center on Budget and Policy Priorities \(2018\), "Chart Book: The Legacy of the Great Recession", CBPP](#)

18. [Shambaugh, Jay; Nunn, Ryan and Liu, Patrick \(2018\), "How Declining Dynamism Affects Wages", The Hamilton Project, Brookings Institution](#)

19. [Wozniak, Abigail \(2018\), "Coming and Going: Encouraging Geographic Mobility at College Entry and Exit to Lift Wages", The Hamilton Project, Brookings Institution](#)

vance legislation for the economy of the future. We have convened public panels with workforce experts, business executives, labor leaders, and economists; held dozens of meetings with thought leaders and industry leaders; and reviewed relevant research and reports.

To make sure all Americans have the opportunity to earn a good life in the changing economy, we are unveiling a series of policy proposals throughout this year to close the skills and opportunity gaps; to rework the relationship and obligations between companies and workers; and to empower workers and spur entrepreneurship.

- 1. Closing the Skills and Opportunity Gap** – The changing economy is creating new kinds of work and opportunities, requiring policymakers to improve the role and structure of learning for students and workers. The skills needed for students and workers to achieve the American Dream have changed. Skills also have a much shorter shelf-life than in the past. Learning and training is becoming a lifelong necessity to keep up with changing technology and demands. We must implement policies to help students and workers adapt, including modernizing and expanding access to career and technical education, traditional educational institutions, and skills training to help workers upskill or change occupations.
- 2. Rethinking the Relationship and Obligations Between Companies and Workers** – Many laws and regulations governing the employee-employer relationship are obsolete. As workers change jobs or industries due to disruption, or hold multiple jobs at once, legacy employer-provided benefits and protections will likely not meet their needs. We believe that the worker safety net and benefits must follow the worker, not the employer. Reducing the dependence of workers on employers for healthcare, retirement, unemployment insurance, paid time off and other benefits could help workers regain some economic security and give them more flexibility and confidence to change careers more easily, relocate for work, or become entrepreneurs.
- 3. Empowering Workers and Spurring Entrepreneurship** – Today, many workers are at a disadvantage when negotiating with their employers or stymied by outdated regulations that hinder their ability to maximize their earning potential. We need policies that increase workers' economic security, protect workers' rights, and provide workers with the opportunity to pursue their dreams.



## CONCLUSION

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The 40-hour workweek, the establishment of a federal minimum wage, employee benefits, and the right to bargain collectively empowered workers during the post-war economic boom and built the American middle class. These advances were the foundation of the American Dream. However, our out of date laws – and leaders who do not try to fix them – keep us from competing in the changing economy. Work is about solving problems. We have enough challenges that will require creative solutions to ensure a future of work and opportunities.

The New Democrat Coalition believes that government, in partnership with the private and non-profit sectors, can fundamentally secure and improve the lives of all Americans. As the economy changes, it is our responsibility as policy leaders to make sure that every worker can find opportunity. As Democrats, we believe in expanding opportunity to give all Americans the tools for success. Failure to do so will increasingly threaten our social contract and shared democratic values.