Exploring and Developing Policies to "Future Proof" Washington's Workers and Businesses

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Contents

Executive Summary	2
Introduction	2
Washington in the Spotlight	2
Policy Areas for Exploration in 2019	3
Background	5
Task Force's Role: How to "Future Proof" Workers and Businesses	5
External Factors that Impact Washington	6
Environment	6
Global Trade and Interdependence	6
Demographic Shifts	6
Key Considerations	7
Workers and Technology: Different Predictions	7
Income Disparity	10
Workforce in Transition	13
Lack of Resources Leads to Regional Inequity	15
Task Force Policy Discussions	19
Initial Findings of Policy Areas for Exploration	20
Next Steps	25
What will be included in next year's report?	25
Stakeholder Engagement	25
Data for Decision-Making	27
Technology Can Help Reach More People	27
Consensus Gathering and Policy Formulation	27
Works Cited	
Appendix	

Executive Summary

Introduction

Self-driving cars. Cashierless checkout. Wireless communication devices that transfer data seamlessly. Algorithms that perform the tasks of lawyers, accountants, journalists, musicians, and personal assistants. Robots and software programs, fueled by advances in artificial intelligence (AI), are becoming increasingly proficient at performing an array of tasks more efficiently and accurately than the humans who created them. The collection and analysis of a dizzying volume of data is providing new ways to conduct business and even understand human behavior. Once the domain of science fiction, new technology is dramatically reshaping our environment, the economy, and the way we live.

So where does this leave Washington's workers and businesses? It has become apparent that we cannot afford to wait and find out what happens next and need to take tangible steps now to plan for a future that helps both our workforce and businesses prosper together.

Washington in the Spotlight

In the summer of 2018, Washington's Legislature created and funded the Future of Work project to investigate this future. It's the first of its kind in the U.S. and puts Washington in the spotlight as a thought leader. This included the creation of a Task Force made up of legislators, business, and labor leaders. The Task Force was charged with developing a set of policy recommendations that will benefit both Washington's workers and businesses.

The report you have before you is meant to outline the framework for what comes next for this project. In this report, you'll find policy areas the Task Force will explore in greater detail in 2019, along with key areas of interest. These include:

- The growth of income disparity across populations, geography, and business sectors.
- The evolution of the workforce and its changing relationship with business on issues including: workplace training, alternative work arrangements, length and nature of tenure, and employer-sponsored benefits.
- Lack of resources to support economic vitality, innovation, skills development and talent in all areas of the state.
- Identifying skills needed for workers to attain and perform quality jobs aligned with the needs of business, and how to better delineate the means to obtain these competencies.

All of this work will be conducted using an equity lens to help ensure no one is left behind from rural Washington residents to minority- and women-owned businesses to workers with disabilities.

Policy Areas for Exploration in 2019

The Task Force has provided to the Governor and the Legislature the following initial set of policy areas for the Task Force to explore in 2019. This includes a research and design proposal and the plan and methods the Task Force will use to develop a final set of recommendations. Research and analysis, along with input and feedback among individual Task Force members and Task Force staff, resulted in the development of 10 policy areas for future study. These policy areas will be explored further by the Task Force in 2019 for the purpose of developing specific policy recommendations with special consideration for equity and inclusion.¹

- 1. Some of Washington's current workforce needs to be retrained, reskilled, and upskilled to keep pace with changes in technology, the environment and business practices that have the potential to create ongoing disruptions across a wide range of industries and sectors.
- 2. Gains in business productivity, although slowing over the past decade, continue to outpace wages.
- 3. Many jobs considered "high demand" pay low wages and offer limited on-the-job training, minimal advancement opportunities, inconsistent and unpredictable schedules, and few benefits. A robust "future of work" strategy must address the fact that many of the fastest growing jobs do not provide a living wage, or opportunities for career advancement, spurring further income inequality for a growing number of workers.
- 4. Many businesses outside of the state's major urban areas do not have access to research, engineering, fabrication, testing and modeling, or the capital needed to invent or adopt new technologies, to remain competitive.
- 5. Partnerships between among businesses, workers, and the public sector can lead to advancements in workforce development, and also spur the adoption of new technology within a community, or industry sector. Washington has invested in numerous pilots and demonstrations where such partnerships have proven successful, but not sustainable.
- 6. Rural economies face different economic and workforce development challenges than urban areas.
- 7. Public infrastructure, including broadband internet access, is necessary for businesses to remain competitive and to create more quality job opportunities. It's also needed to provide access to educational opportunities for learners of all ages. However, it's unevenly distributed across the state.

¹ To view the full policy areas recommended for review and accompanying details, see the "Initial Findings of Policy Areas for Exploration" section on page 20.

- 8. Additional information is needed to more accurately and efficiently match jobseekers with employers, and jobs, across the state. Jobseekers often do not know which skills are needed for particular jobs and lack a clear pathway to obtain these skills.
- 9. Workers engaged in alternative or contingent work arrangements, including those who earn a living through independent contracting and the gig economy, lack a steady paycheck, or key employer-provided benefits, such as retirement savings, health insurance, or paid sick or parental leave.
- 10. Periods of self-employment and business ownership are becoming more prevalent for many workers, sometimes by choice, sometimes not. Washington is among the easiest places to open a business, but has a higher than national average failure rate of business start-ups.

2018 Task Force Members:

Legislature	
Sen. Maralyn Chase	Rep. Vandana Slatter
TBD	Rep. Matt Manweller

Business	Labor
Amy Anderson	Annette Bernhardt
Association of Washington Business	UC Berkeley Labor Center
Jack Chen	Marcus Courtney
Microsoft	UNI Global Union Switzerland
Machelle Johnson	Joe Kendo
Pearson Packaging	Washington State Labor Council
Lisa Perry	April Sims
Sierra Pacific	Washington State Labor Council
Richard Rhodes	Rebecca Smith
New York Life	National Employment Law Project
Mark Smith	Stan Sorscher
Providence St. Joseph Health	SPEEA

Task Force Meetings:

- 1. October 8, 2018
- 2. October 29, 2018
- 3. November 26, 2018
- 4. December 17, 2018

The Task Force will host four meetings in 2019. For the most up-to-date meeting details, see <u>http://www.wtb.wa.gov/futureofwork_taskforce.asp</u>.

Background

Some call it the Fourth Industrial Revolution. Others consider it a digital divide. What is clear is we have entered a period of rapid technological change that is profoundly impacting the way we work and do business, and will continue to do so in ways we can't fully foresee.

The Future of Work poses pressing questions for Washington's workforce, employers, and our state. Are we preparing our workforce with the necessary skills in a rapidly changing economy? What role does the human worker play? What role does business play?

In the summer of 2018, Washington's Legislature created and funded the Future of Work project to investigate this future. The project, signed into law by Governor Inslee, included the creation of a 16-member Task Force made up of legislators, business, and labor leaders. The Task Force's tri-partite structure was designed to achieve meaningful change by advancing the goals of all participants through mutual collaboration and agreement.

Task Force's Role: How to "Future Proof" Workers and Businesses

The Task Force is charged with developing a set of policy recommendations for the Legislature and Governor by December 31, 2019 that, if enacted, would establish the conditions for Washington's businesses and workers to prosper together in the current and projected future economy.

In the simplest terms, the Task Force is responsible for "future proofing" the state's workforce and businesses by taking into account current and anticipated changes in technology, demographics, the economy, and other external factors. As laid out in the legislative mandate, these recommendations fall into three primary categories:

- 1. Establish Collaborative Applied Research opportunities between education institutions and businesses. This allows instructional staff and students to learn about new technology while at the same time helping companies adopt this technology.
- 2. Support a talent development pipeline and lifelong learning structure, from K-12 through retirement, for all workers and industries with an emphasis on ensuring:
 - Washington's young people navigate careers and workplaces of the future.
 - Workers keep their skills up-to-date or retrain for new careers when needed.
 - Education and training credentials are portable, transferable, and cost- and time-efficient.
 - Instructional staff keeps pace with changes in their disciplines and related occupations.
- 3. Enable Sustainable Industry Sector Partnerships, so employers and workers can collaborate to support their sector's growth. Support consortia of multiple employers within an industry to convene to identify common skill gaps and other issues, and work together with their workers and the public sector to find solutions.

External Factors that Impact Washington

While the Future of Work Task Force is focused on policies and practices Washington can adopt to help both businesses and workers thrive, we must be mindful of external factors and trends that affect the state's economy and workforce.

The issues of cyberattacks/cybersecurity, resistance to weather extremes, immigration, trade, and general macroeconomic conditions impact every state, every nation, and the world at large. There are actions that businesses and individuals can do to mitigate the impacts of these trends but little can be done by individuals or companies alone to stem the effects of these forces.

It is important to take into account larger national and global issues when anticipating future challenges and opportunities affecting our state. These external forces should also be considered in attempting to gauge anticipated trends, consequences and outcomes of policy recommendations.

Environment

Increased prevalence of extreme weather can have a very real impact on the state's economy as more severe weather patterns damage property, infrastructure, and agriculture products as well as alter marine and terrestrial ecosystems. At the same time, these problems represent opportunities in the development of businesses and jobs around green technology, renewable energy, agriculture and aquaculture, disaster response and mitigation, and other related fields.

Global Trade and Interdependence

Washington is a key trade and logistics hub on the West Coast and a substantial exporter of goods and services around the world. Similarly, immigration and related federal policy regulating the movement of people has a substantial impact on the state's workforce from laborers and agriculture workers to computer programmers and executives.

Demographic Shifts

Shifts in national demographics must also be taken into account when planning for the future workforce as Baby Boomers age out of the workforce and younger, digital natives enter the workforce. This is particularly true of the Millennial generation (born between 1981 and 1997), which now accounts for the largest share of our state and national workforce. These changes will have a significant impact not only on the size and capabilities of the labor force, but also on sectors such as healthcare and transportation, which will face changing demands as demographics shift over time.

Even small changes in policies related to these national and global issues have substantial ramifications in Washington. The Task Force will consider these factors when weighing future policy recommendations.

Key Considerations

The world's economy—and the role of workers— is evolving as advances in technology enhance worker capability and boost productivity. An increasing number of jobs now call for a higher level of skills to keep pace with these changes. In some cases, humans are adapting to work with new technology. In other cases, jobs are being handled entirely by machines. Many new jobs are being created that require new skillsets, many of them on a higher order than the jobs that are being eliminated. Past technological advances produced similar changes, resulting in greater productivity and fewer repetitive tasks. However, the pace of change is much faster and more widespread than in previous periods of technological upheaval.

Meanwhile, the relationship between workers and employers is shifting, as employers seek a more nimble workforce that can be deployed "on demand," while an increasing number of freelance workers appreciate increased flexibility, yet lack traditional employment benefits or a secure income stream. These shifts are having different impacts on rural and urban areas, and are challenging not only how different populations fare, but entire geographic regions.

Workers and Technology: Different Predictions

Automation and the increasing use of artificial intelligence (AI) is disrupting jobs traditionally performed by humans across a wide range of fields, including some jobs that few could imagine a robot or computer performing just a decade ago.

In 2016, the U.S. had 31,400 industrial robots in operation, placing it fourth in the world behind China (87,000), South Korea (41,400) and Japan (38,600) (Economist Intelligence Unit,

Nearly half of total U.S. employment is at risk of automation, according to a 2013 Oxford University study

2018). These changes are impacting not only job tasks themselves, but could also produce profound effects on wages, training needs, and upward mobility among workers. At the same time, automation, along with the increased use of data and algorithms, is helping employers optimize workplace processes.

As employers invest in more productive technology, its full effects on the worker and workplace remain to be seen. Inevitably, more workers will be displaced by machines or sophisticated software, but also new jobs will be created through new technology.

But to what degree remains to be seen. Numerous studies have focused on the possible impact of automation, AI and other technologies on the workforce, particularly in terms of potential displacement of jobs. But these studies are far from uniform in their findings. Some predict huge changes in workforce participation as automation edges out human workers. Others studies have a much more optimistic outlook.

For instance, a 2011 study of the French economy by the McKinsey Global Institute concluded that the internet created 1.2 million jobs over a 15-year period while causing the elimination of only 500,000 jobs, resulting in a net increase in employment (J Manyika, 2017).

However, one often-cited 2013 study conducted by Oxford University (Osborne, Frey, 2013) projected that 47 percent of total U.S. employment is at risk of automation. Meanwhile, another 2017 study carried out by McKinsey Global (J Manyika, 2017) indicated that up to 44 percent of current work activity hours could by automated by 2030.

The OECD, an international organization dedicated to economic development that includes the U.S., took a different approach to this topic. The group looked at occupations as a unique collection of skills, rather than assuming single tasks could be automated independently.² As a result, the study estimated that only 9 percent of jobs are at risk of being completely displaced (Melanie Arntz, 2016).

Only 9 percent of jobs are at risk of being completely displaced. -OECD 2016

A wide range of sectors are being disrupted thanks to new technology and changing business practices, but their effects on workers varies widely by geographic region. Many workers must retrain, reskill, and upskill. New workers must also undergo additional training to enter certain fields. To date, this trend has produced a limited but sometimes alarming effect on employment. For example, the arrival of one new industrial robot in a local labor market coincides with an employment drop of 5.6 workers, according to a 2017 study from the National Bureau of Economic Research in Cambridge (Restrepo, 2017).

Yet these disruptions won't impact the workforce uniformly: routine-intensive occupations that focus on repetitive, easily-programmable tasks—such as cashiers, clerks, machinists, and assembly line workers— are already vulnerable to replacement by new technologies. In the future, learning machines driven by advanced artificial intelligence and algorithms connected to the physical world through an expanding network of sensors and data collection sources will be able to take over a widening array of tasks. Office support jobs (e.g., data entry and payroll clerks), predictable labor, and customer interaction jobs are expected to be hit the hardest. At the same time, jobs requiring more nuanced skill and human interaction are projected to expand, such as high-level healthcare providers (surgeons and nurses), skilled craftspeople (construction workers, electricians), and professionals (lawyers, managers, business specialists) (J Manyika, 2017). Regardless of the job description, education that goes beyond high school, along with career-focused certifications, are key indicators for how much someone will likely earn.

² For an occupation to be considered at "high risk" of automation, 70% of the tasks bundled within the occupation are automatable.





This uneven application of technology is skewed heavily towards job displacement among lower-paid, lower-skilled, and less-educated workers. This represents both a challenge and an opportunity for this socioeconomic group. Left to the status quo, this job displacement could result in increased wealth inequity and greater barriers to upward mobility as automation further depresses wages in these jobs. A more equitable alternative is that these workers are able to acquire new skills enabling them to obtain higher quality, higher-paying jobs.

Rather than fearing automation and resisting change, many successful models (often employed outside the U.S.) have embraced automation by focusing on programs which train workers to work with robots, rather than be displaced by them. This approach lends itself to creating new, higher paying jobs designing, supervising, and maintaining AI and robots as well as indirect jobs created by increased productivity and economic activity. One study concluded that the employment of AI, which has the potential to be used in a myriad of ways across nearly every industry, had potential to double annual economic growth rates in developed countries (including the United States) by 2035 (Purdy, 2016).



The question then posed to Washington's policymakers is how to prepare the workforce to keep pace with changes in technology and business practices that are creating ongoing disruptions across a wide range of industries and sectors. Technological innovation is revolutionizing the relationships among business, workers, and the government in ways unforeseen even a decade ago. While governments and stakeholders around the world wrestle with how to best address these challenges, Washington's Legislature has created a unique opportunity to lead the way in developing policy solutions which will benefit all Washington residents, now and in the future. This report is an initial step at fulfilling this commitment.

Income Disparity

Domestic productivity gains, although slowing over the past decade, continue to outpace growth in wages. The net result of this ongoing trend is that income inequality in the United States has been on the rise since the 1970s, and continues to be a major policy flashpoint across the country. Between 1979 and 2013, one research study concluded, productivity increased nearly 65 percent, while hourly compensation of production and nonsupervisory workers—who comprise 80 percent of the private-sector workforce—grew just 8.2 percent (J Bivens, 2014).

In Washington, voters in 1998 approved a higher minimum wage than the federal minimum, and required cost of living adjustments through 2016. Washington voters in 2016 approved Initiative 1433 that required a statewide minimum wage of \$11 in 2017, with incremental bumps through 2020, when it will reach \$13.50 per hour. Voters in some King County cities,

with higher costs of living, have approved even higher minimum wages. Tacoma voters also approved a higher minimum wage.

When taking into account the real value of money over time, wage levels have remained more or less static for the past four decades. According to the Pew Research Center (Desilver, 2018), "After adjusting for inflation, however, today's average hourly wage has just about the same purchasing power it did in 1978, following a long slide in the 1980s and early 1990s and bumpy, inconsistent growth since then. In fact, in real terms average hourly earnings peaked more than 45 years ago: The \$4.03-an-hour rate recorded in January 1973 had the same purchasing power that \$23.68 would today."

Overall, median real hourly wages rose 9.5 percent between 1979 and 2017, but grew by just 4.4 percent for 10th percentile workers (that is, workers earning the lowest 10 percent of wages), according to a 2017 Economic Policy Institute study (Gould, 2018). Conversely, the top 1 percent of earners saw cumulative gains in annual wages of nearly 150 percent between 1979 and 2016.

As the majority of U.S. workers have faced stagnating wages, top earners have enjoyed significant pay increases. An analysis of U.S. Bureau of Labor Statistics data by the non-partisan Pew Research Center found that among those in the top tenth of all U.S. wage earners, real wages increased 15.7 percent from 2000 to 2018, topping out at \$2,112 per week. By contrast, real wages for the lowest decile of earning distributions increased by 3 percent over the same time period to \$426 (Desilver, 2018).

This trend is consistent in Washington state, as real median earnings for the lowest 80 percent of individual workers remained flat from 2000-2017, remaining well below \$50,000 during that time period, according to data from the U.S. Census Bureau. At the same time, real median individual earnings for the top 20 percent of earners increased from \$53,000 to \$91,000 while median earnings for the highest 5 percent of earners increased from \$98,000 to \$170,000.



By any measure, the wage gap is real and expanding, but it is important to note that earnings are not the only measure of compensation. Other factors which contribute to a worker's total compensation include health insurance, retirement-account contributions, transit and parking subsidies, tuition reimbursement, paid family leave, and other benefits. These can all boost the value of compensation to an employee. Total benefit costs to employers for civilian workers increased by an inflation-adjusted average of 22.5 percent since 2001 (Survey, 2018), leaving companies with less money for wage increases. Other studies question the metrics used by the U.S. Bureau of Labor Statistics to measure unemployment, resulting in a larger labor force than is currently estimated, which can slow wage growth as well (Daly, 2016).

Even as compensation costs rise, employee participation in retirement programs is in decline. Roughly half (52 percent) of private sector wage and salary earners aged 25-64 had access to employer-sponsored retirement plans in 2011, the lowest level dating back to 1979 (Rhee, 2013). Furthermore, 45 percent of working-age households do not own any retirement account assets. This trend is even more pronounced for persons of color, with 62 percent of Black and 69 percent of Latino working-age households holding no assets in a retirement account (Rhee, 2013).

If left unchecked, the combination of increasing non-traditional work arrangements without benefits or regular earnings, along with automation and AI utilization could give rise to a job market increasingly segregated into "low-skill/low-pay" and "high-skill/high-pay" segments,

which in turn could exacerbate existing economic inequality and social tensions. The result is a job market characterized by strong demand at the high and low ends, but a hollowing out of the middle. Certainly, automation and increased application of robotics and artificial intelligence are responsible for some level of worker displacement. But another important issue is how the existing regulatory framework is allowing some segments of the workforce to bear far more of the burden, with fewer benefits.

In lieu of a complete restructuring of state and federal tax structure to address this inequality, one part of the solution might be promoting employee ownership strategies. The most common form of this in the U.S. is through the creation of an Employee Stock Ownership Plan (ESOP), which is a qualified defined contribution plan that provides a company's workers with retirement savings through their investments in their employer's stock, at no cost to the worker.

Studies of these ESOP models suggest that that they can play a role in transferring a greater amount of wealth from current shareholders to workers. Employee-owners in the 28-34 age range when compared to their non-owner counterparts were found to have 92 percent higher median household wealth, 33 percent higher income from wages and 53 percent longer median job tenure (National Center for Employee Ownership (NCEO), 2017). A separate study by the Employee-Owned S Corporations of America found that ESOPs reduced the concentration of high-end wealth by 2.5 percentage points, and low-end wealth by one percentage point (Bernstein, 2016).

Workforce in Transition

While the impact of technology-driven changes upon the global economy cannot be understated, of equal importance are the broader social implications of the shifting relationships and mutual obligations between business, labor, and government. The employer-employee relationship forged in the wake of the first industrial revolution is evolving as the modern, mobile, globalized marketplace extends beyond its original parameters.

In the period following World War II, the employment association between business and employee was more tightly enmeshed. Employers hired entry-level workers, and invested in on-the-job training and lifelong learning. Employees could expect to advance their careers working for the same employer. In this relationship, workers and employers shared the gains from innovation, technology, and globalization.

By the mid-70's the employment relationship changed, leading to the current work environment. Employers now are more likely to rely on the labor market for specific skills. In many cases, communities provide publicly funded training programs as an incentive to attract and retain employers. This shifts the costs for career development and lifelong learning from employers to workers and communities. In this relationship, workers' real wages are decoupled from gains in productivity and introduction of new technology.

This shifting of roles, along with the adoption of new technology, has paved the way for alternative or contingent work arrangements, with employees working as freelancers, or independent contractors. There are significant challenges in addressing this issue, starting with establishing common definitions and obtaining an accurate picture of the demographic size and composition of this alternative workforce. To date, numerous studies have attempted to measure the size of this contract workforce, which lacks the stability of regular paychecks and benefits, such as health insurance, traditionally associated with full-time work. Even so, a definitive consensus on the composition of this growing slice of the American workforce remains elusive. Current research indicates that the amount of workers engaged in this type of work arrangement as their primary source of income has remained relatively stable for at least the past two decades.

As of 2017, up to 3.8 percent of the U.S. labor force were contingent workers (those who do not have an implicit or explicit contract for ongoing employment), while 9.3 percent of workers were employed in alternative arrangements (independent contractors, on-call workers, temporary help agency workers, workers provided by contract firms) according to federal data (Bureau of Labor Statistics, 2017). Taken cumulatively, the number of alternative and contingent workers has increased over time, while their combined share of the overall workforce has remained relatively stable. These workers accounted for 9.9% of the U.S. workforce in 1995, increased to 10.7% in 2005 in the wake of the Great Recession and then declined to 10.1% by 2017 (Bureau of Labor Statistics, 2017).

Using a different methodology, the U.S. Treasury Department found that 12 percent of all tax filers with earnings identified themselves as self-employed in 2015, up 32 percent from 2001 levels (Emilie Jackson, 2017). When narrowing the scope of alternative work arrangements to "electronically mediated" or "web-enabled" employment, often called "gig work," such as Uber, eBay, AirBnB or Task Rabbit, the amount of full-time participants is rather small. A 2018 study by JP Morgan and Chase found that 1.9 percent of its sample derived income from online platforms in Washington in October 2017, along with 2.4 percent in Seattle (Diana Farrell, 2018).

Although challenging to accurately quantify, the rise of non-traditional work arrangements is a hot-button topic for many of the world's largest companies. In fact, a 2017 survey by the World Economic Forum of executives from 371 leading global employers found that their toprated demographic and socio-economic driver of change was "changing work environments and flexible working arrangements (World Economic Forum, 2016)."

Regardless of the actual number of workers in this category, these workers were significantly less likely on average to enjoy benefits afforded those in traditional full-time jobs. According to the BLS data, 23.4 percent of contingent workers were eligible for—or had access to—employer-sponsored pension or retirement plans in 2017 (25 percent were enrolled). By contrast, this rate was more than double for permanent workers at 47.6 percent (50 percent enrolled) (Bureau of Labor Statistics, 2017).



While there is agreement that individuals engaged in alternative work arrangements will face a different set of challenges than their traditional counterparts, the scope of this issue remains opaque. This topic is being monitored around the world by researchers in the public and private sector, including here in Washington. The state's Department of Commerce is engaged in an initial study about workers employed as independent contractors (defined as those who perform independent contract work, regardless of their employment status or whether that work is their main or secondary source of income (Washington State Department of Commerce, 2018). The study was commissioned by the Legislature to inform members and stakeholders about workers' sources of income, the amount of income derived from independent work, and access to benefits. This study is an initial effort to gauge the size and composition of this demographic and could serve as a baseline for future data collection of nontraditional workers.

Once more clearly defined, the new, more contingent, work relationship presents challenges for public policy-makers. How do we balance the needs of employers, workers and communities? How do we manage mid-career retraining to respond to workforce demands in related and unrelated industries? What workforce strategies will attract economic development that creates good jobs, builds stronger communities, and invests in the future?

Lack of Resources Leads to Regional Inequity

In Washington, the ongoing divide between the state's most affluent citizens and its lower wage workers is often exacerbated by uneven distribution of infrastructure and other resources. Reliable transportation networks, proximity to education and skill training facilities,

and access to high-speed internet are all critical components for students, workers, and businesses yet are not uniformly available in all regions of Washington.



Source: U.S. Census Bureau, analyzed by the Washington Workforce Board

A prime example of this is the disparity in broadband internet access across the state. Washington was the 14th most connected state in the country as of December 2018 with 94 percent of the population connected to broadband (defined as at least 25 megabits per second (Mbps) upload speed and 3Mbps download) (BroadbandNow, 2018). This figure is skewed upwards by greater connectivity in metro areas such as King County, which had a broadband coverage rate of 99 percent, while rural areas such as Adams, Lewis, and Garfield counties had significantly lower coverage rates of 27 percent, 67 percent, and 11 percent, respectively.



Data from the Federal Communications Commission (FCC) paint a similar picture as 91.7 percent of Washington's rural communities had access to broadband internet (again defined as 25 Mbps up, 3 Mbps down) in 2016 compared with a 99.7 percent connectivity rate in urban areas. (Federal Communications Commission, 2018) Washington's urban areas also maintain substantially more options in terms of a choice in internet providers, resulting in a more competitive marketplace and greater consumer choice when compared to rural areas. In 2017, 94 percent of urban areas had three or more providers servicing these areas, while in rural areas this figure stood at 66 percent with 27 percent served by two or more providers and 7 percent by a single provider (Commission, Fixed Broadband Deployment, 2018). As a result of this patchy distribution of resources, rural areas face major competitive disadvantages compared to their urban counterparts. Broadband internet is as essential to

³ Fixed broadband is defined as either a fiber optic or wire landline that connects consumers to the internet at a download speed of 25 megabytes per second and an upload speed of 3 megabytes per second.

⁴ LTE is a standard for high-speed wireless communications for mobile devices.

⁵ See Table 1 in the appendix for a complete listing of urban and rural country broadband subscription rates.

modern businesses operations as electricity, and companies simply cannot operate without it. Students and job seekers similarly require this access to engage in online education and job searching.

As a result of this inequity and other challenges, rural economies face a different set of issues regarding economic and workforce development than urban areas. This has contributed to stark disparities in income and employment levels.



Per capita income in Washington increased by an average of 36 percent from 2010-2017, with metro income expanding by 37 percent and nonmetropolitan areas increasing by just 26 percent according to the Washington Workforce Development Areas Regional Economic Analysis Project utilizing data from the U.S. Department of Commerce and Bureau of Economic Analysis (Project, 2018). In 2017, per capita income in the Seattle/King County Workforce Development Area (WDA) was \$83,383 (144 percent of the state average), compared with \$42,414 in the Benton Franklin WDA (70 percent of the state average).

Task Force Policy Discussions

Comprehensive discussions on key policy area priorities took place during the first two Task Force meetings on October 8, 2018 and October 29, 2018. These initial deliberations were made within the framework required by the enabling legislation, which mandated that policy recommendations include three primary areas of focus: collaborative applied research, supporting a talent development pipeline and lifelong learning structure, and sustainable industry sector partnerships.

Task Force staff also created and distributed a survey that was sent to Task Force members on October 18, 2018. Survey results were used to capture Task Force policy priorities and further the dialogue during the October 29, 2018 Task Force meeting.

These policy discussions, along with input and feedback between individual Task Force members and Task Force staff, resulted in the development of 10 policy areas for further study in 2019. In addition to these policy areas, the Task Force also made clear the desire to include overarching areas of considerations which would guide any future policy recommendations across all policy areas. These include an emphasis on equity to ensure no one is left behind in the enactment of any future policy recommendations with an emphasis on rural development to bring infrastructure and resources in these areas up to the standards available in major metropolitan centers.

Initial Findings of Policy Areas for Exploration

1. Some of Washington's current workforce needs to be retrained, reskilled, and upskilled to keep pace with changes in technology, the environment and business practices that have the potential to create ongoing disruptions across a wide range of industries and sectors.

Key questions to be addressed through the policy exploration process in 2019:

- What mix of public policies and incentives, as well as changes to corporate cultures, can increase training for incumbent workers across occupations in Washington?
- What policies can be developed or improved to help avert lay-offs or accelerate re-employment?
- Registered apprenticeship programs and other "earn and learn" models are proven to provide a positive return on employer, worker, and taxpayer investments. Can we develop internal apprenticeship programs for incumbent workers or other models that are workplace-based, and sustain earnings during training periods?
- What policies can be developed or improved to help traditionally underserved and underemployed populations (such as low-wage workers, formerly incarcerated persons, people of color, people with disabilities, immigrants and refugees, older workers) benefit equitably from incumbent worker training?
- What kind of physical, educational, or social infrastructure needs to be in place to support incumbent worker training and upskilling?
- 2. Gains in business productivity, although slowing over the past decade, continue to outpace wages.

- What policies can help ensure income gains from increased productivity are shared?
- What policy levers can incentivize businesses to invest in greater productivity rather than relying solely on cost-cutting to achieve business goals?
- What policies or incentives can be developed to promote employee ownership, employee stock ownership plans (ESOPs) or other "co-investment opportunities" for workers/employees?

3. Many jobs considered "high demand" pay low wages and offer limited on-the-job training, minimal advancement opportunities, inconsistent and unpredictable schedules, and few benefits. A robust future of work strategy must address the fact that many of the fastest growing jobs do not provide a living wage, or opportunities for career advancement, spurring further income inequality for a growing number of workers.

Key questions to be addressed through the policy exploration process in 2019:

- What mix of public policies, programs, and investments can improve job quality for frontline workers throughout Washington's economy, especially in low-wage sectors?
- What policy levers can spur wage growth in high demand, yet low-paying jobs?
- How can these jobs become ladders to better career opportunities?
- What strategies can help ensure a path to living-wage employment for every worker?
- What enabling framework can promote the creation of "high quality" jobs?
- Is the physical and social infrastructure adequate to serve people in low-wage sectors?
- 4. Many businesses outside of the state's major urban areas do not have access to research, engineering, fabrication, testing and modeling, or the capital needed to invent or adopt new technologies, to remain competitive.

- What strategies need to be expanded or developed to support businesses and their workers in the invention and adoption of new technologies?
- What policies or incentives can be developed or improved that would better enable businesses to invest in innovation and increased productivity, while retaining their workforce and creating high-quality jobs?
- Collaborative Applied Research (CAR) supports business innovation and competitiveness, while connecting faculty, students and workers to emerging technologies through higher education-business partnership and collaboration. How could this model, widely used in other countries and in a few other states, be replicated in Washington?
- What can we learn from existing U.S. programs, such as the Manufacturing Extension Partnership, about successful strategies that enable employers to invest in modernizing their workplace in specific industries, while also focusing on skills upgrading and job quality?

5. Partnerships between businesses, workers, and the public sector can lead to advancements in workforce development, and also spur the adoption of new technology within a community, or industry sector. Washington has invested in numerous pilots and demonstrations where such partnerships have proven successful, but not sustainable.

Key questions to be addressed through the policy exploration process in 2019:

- How might we learn from WA's historical investments, and from other states and countries to establish "best practice" guidelines for effective partnerships, and a policy mechanism that ensures this strategy is utilized across the state, with appropriate performance accountability?
- What "best practices" from existing public-private partnerships can be replicated or created across the state that benefits workers and businesses in every region?
- In the context of accelerated changes in technology, what are additional elements that could be incorporated into the traditional workforce development partnership model—such as structures for worker engagement in decision-making around technology adoption and implementation?
- 6. Rural economies face different economic and workforce development challenges than urban areas.

- What policies and programs exist, or could be improved, to help rural regions prosper?
- What policies and programs exist, or could be improved, to support more effective training, development and retention of a skilled workforce and generate attractive jobs?
- Can population-based funding formulas geared toward urban areas be adjusted to accommodate rural regions?

7. Public infrastructure, including broadband internet access, is necessary for businesses to remain competitive and to create more quality job opportunities. It's also needed to provide access to educational opportunities for learners of all ages. However, it's unevenly distributed across the state.

Key questions to be addressed through the policy exploration process in 2019:

- What policies and programs exist, or could be improved, to bring universal access to critical business and education infrastructure including broadband internet to every region of Washington?
- What incentives or policy levers would create enough demand for providers to build this infrastructure in rural or hard to serve areas?
- 8. More information is needed to more accurately and efficiently match jobseekers with employers, and jobs, across the state. Jobseekers often do not know which skills are needed for particular jobs and lack a clear pathway to obtain these skills.

- How can the state identify and work with existing data collection and data analysis systems to create a more effective worker classification system and allow for greater cross-department sharing and utilization of data?
- What currently unavailable information and relevant metrics can be identified and utilized to augment knowledge of workforce supply and demand?
- What information about jobs, occupations, skills, competencies, credentials or other resources would be valuable and more easily accessible to workers seeking new positions or new skills?
- How can the state develop a dashboard to effectively and easily convey information to both job seekers and employers related to matching skill sets with employers' demand statewide?
- How can the state develop and maintain a continuously updated database inventory of current and future trends and factors projected to drive transformation of industries and work over the next 25 years?
- How can the state create linkages between this information and the business and education networks?
- How can the state create a dashboard to track the state's success addressing future of work issues, including analysis of which data sets are readily available?

9. Workers engaged in alternative or contingent work arrangements, including those who earn a living through independent contracting and the gig economy, lack a steady paycheck, or key employer-provided benefits, such as retirement savings, health insurance or paid sick or parental leave.

Key questions to be addressed through the policy exploration process in 2019:

- What is the size and demographic profile of this workforce?
- How can we better measure and define this workforce, including its many subcategories such as "gig" workers, subcontractors, part-time employees, on-demand workers, temporary workers, agency workers?
- What policies can be developed or improved that would provide nontraditional workers with better economic security (predictable, living-wage income levels), including benefits and services afforded to many traditional workers?
- What can be done to clarify and enforce classification of work type, and the benefits and rights workers may be entitled to?
- Can current service structures, such as WorkSource career centers, be modified to serve the on-demand workforce, with an eye toward higher earnings and benefit levels?
- Are there policy levers that might encourage businesses to modify on-demand hiring practices that provide greater economic stability for contingent workers?
- 10. Periods of self-employment and business ownership are becoming more prevalent for many workers, sometimes by choice, sometimes not. Washington is among the easiest places to open a business, but has a higher than national average failure rate of business start-ups.

- What policies can be developed or improved to help entrepreneurs and selfemployed individuals succeed, and, in some cases, create new jobs?
- Are there sufficient resources to help interested Washingtonians make the transition from traditional wage earners to self-starting entrepreneurs?

Next Steps

In 2019 the Task Force will explore in depth the 10 policy areas identified in this report. The two primary means of information gathering during this phase will be through the identification and analysis of data and research, as well as stakeholder engagement across a broad economic, cultural, social, and geographic cross-section of Washington.

What will be included in next year's report?

In addition to policy recommendations, next year's report will include a description of Task Force activities throughout the year, including:

- Proceedings of Task Force meetings.
- Deliberations and actions taken by the full Task Force or the Executive Committee.
- Stakeholder engagement activities.
- Research undertaken by the Task Force.
- Other duties and responsibilities bestowed upon the Task Force, including identifying policies and practices that will help Washington's businesses, workers, and communities thrive economically while responding to rapid changes in technology, workplace practices, environmental and security issues, and global interdependence.
- An inventory of current and future trends and factors projected to drive transformation of business and work over the next 25 years.
- Research and promising practice information from state, national, and international sources, and case examples when possible.
- Input collected from employers and workers from Washington's major industry sectors, ensuring every region of the state is consulted.
- Relevant metrics identified along with a possible dashboard for tracking the state's success addressing future of work issues.
- Analysis of readily available data sets and identification of new data that should be collected and by whom.
- Consult with existing public and non-profit organizations that support business or the workforce on how to work more effectively in a transformational environment.

Stakeholder Engagement

The Future of Work Task Force is charged with an ambitious assignment and a tight time frame to complete it. During 2019, Task Force members must identify emerging issues that will impact Washington's workers and businesses, frame potential policy solutions, and ultimately, provide leadership to help the state take steps that benefit both workers and employers.

Some of our state's most able business and labor representatives, along with Legislators, sit on this fast-moving Task Force. But the Task Force cannot do it alone. Instead, the Task Force is preparing to consult with a variety of sub-populations and regions around the state to identify solution strategies that benefit each group.

They include:

- Workforce development and economic development organizations
- County and municipal governments
- Individual businesses of all types and sizes, and industry associations
- Labor unions
- Policymakers
- Community- and faith-based organizations
- Schools and colleges
- Organizations representing diverse populations, including those with disabilities
- State agencies that support various stakeholder groups

Reaching this wide range of stakeholders will be a challenge. That is one reason an Advisory Group that represents many of these interests on a smaller scale was created under the Task Force. This group of interested stakeholders will serve as a sounding board, providing on-theground feedback about current initiatives and Task Force perspectives on a wide range of ideas and policy proposals. In recent months the Task Force has reached out to others who can add more context and vision to their work.

The Advisory Group includes a wide range of representatives from state agencies, governor's and legislative staff, industry and labor organizations, workforce development councils, nonprofits in education and other disciplines, and other stakeholder organizations. Task Force staff has communicated with the Advisory Group to gauge interest levels. Right now, staff plans to provide regular information about Task Force activities to the whole group, and work more closely with those who want greater involvement. Advisory Group members are encouraged to attend Task Force meetings and provide public comment.

To date, the Workforce Board's partners from other state education and workforce agencies, state libraries, Department of Corrections, Commerce, and legislative staff have engaged with the Task Force, as have regional Workforce Development Councils. Task Force staff has reached out to encourage greater private sector participation in the discussions. As a result, parties representing the retail, construction, and healthcare sectors have expressed interest in participating. Staff will continue to reach out to business groups, Chambers of Commerce and Economic Development Councils, professional associations, and unions across the state.

The Workforce Board's communications team, along with key staff members, uses social media and a widely read newsletter to promote agency efforts, including the Future of Work. The #futureofworkwa hashtag was created by staff and is used as part of @WorkforceWash tweets. The agency's communications team has also worked closely with TVW, the state's public affairs network, to provide televised coverage of Task Force meetings. TVW also interviewed Chicago economist Peter Creticos, a guest speaker for the Task Force, in November for "The Impact," news show.

Data for Decision-Making

Today, massive datasets from federal, state and local governments, and agencies are available to the public. The Task Force will use data to ensure their recommendations are rooted in real time information. Whenever possible, staff will provide Task Force members with data that is more easily digested through charts, graphs, and other, more interactive and easily updatable data visualization tools.

Staff are also providing Task Force members with reports, articles, and other resources that reflect on the future of work, both in Washington and around the nation, and world. These resources are being compiled on the Future of Work research and resource page: <u>http://www.wtb.wa.gov/futureofwork_resources.asp</u>

Technology Can Help Reach More People

Whenever possible, the Task Force will take advantage of technology to encourage communications through teleconferencing, webinars and other remote-technology options. For example, in 2017 the Workforce Board partnered with Governor Inslee, Washington State University Extension, and a number of other public and private organizations to augment outreach to Washington's most rural communities through a "virtual summit" that drew 1,300 people in 28 different locations around the state. The approach allowed each site to hear the same "context-setting" overview of the issues and resources available. At each location, local actors from key stakeholder groups discussed the issues and developed solutions from the perspective and context of their local region. This model could also be employed by the Task Force in 2019.

In order to maximize efforts and avoid duplication, Task Force outreach efforts will be coordinated with Workforce Board activities which align in 2019. Historically, the Workforce Board has employed a multifaceted approach to its outreach efforts. The Board partners with numerous state and local organizations that have strong relationships with key stakeholder groups. Surveys, community forums, joining existing meetings or conferences, web portal dialogue, as well as on-going meetings with subject matter experts are all part of the Board's strategy.

Consensus Gathering and Policy Formulation

After the Task Force completes its research and stakeholder engagement, the results can be combined with additional evidence-based solutions and best-practices from other states and organizations to help develop potential policy solutions.

The Task Force will then weigh the merits of these policies and reach a consensus on which policies will realistically advance the group's goals.

Ultimately, these policies will be put into action to help prepare all Washingtonians to realize economic opportunity through flexible, customizable lifelong career pathways, while ensuring our state's businesses have a skilled, adaptable, and globally competitive workforce.

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Appendix

Table 1

	Urban Areas				Rural Areas			
Area	Pop. Eval.	% with Broadband	% with Mobile LTE	% with Fixed & Mobile	Pop. Eval.	% with Broadband	% with Mobile	% with Fixed & Mobile
Washington	6,043,421	100%	100%	100%	1,225,727	92%	97%	90%
Adams	11,276	100%	100%	100%	7,878	100%	100%	100%
Asotin	20,419	99%	100%	99%	1,800	40%	90%	40%
Benton	165,786	100%	100%	100%	26,563	100%	100%	100%
Chelan	54,003	100%	100%	100%	22,037	81%	95%	79%
Clallam	46,957	92%	100%	92%	27,487	57%	99%	57%
Clark	395,445	99%	100%	99%	70,121	71%	99%	70%
Columbia	2,508	100%	100%	100%	1,403	100%	78%	78%
Cowlitz	73,680	100%	100%	100%	31,476	76%	91%	74%
Douglas	28,822	100%	100%	100%	12,379	100%	98%	98%
Ferry			•	•	7,612	100%	77%	77%
Franklin	73,378	100%	100%	100%	15,809	100%	97%	97%
Garfield			•	•	2,248	100%	98%	98%
Grant	55,635	100%	100%	100%	37,401	100%	99%	99%
Grays Harbor	43,253	100%	100%	100%	28,308	100%	97%	97%
Island	42,771	100%	100%	100%	39,663	100%	100%	100%
Jefferson	12,981	99%	100%	99%	18,128	70%	98%	70%
King	2,047,745	100%	100%	100%	95,648	100%	96%	96%
Kitsap	218,727	98%	100%	98%	45,480	92%	100%	92%
Kittitas	25,284	100%	100%	100%	19,487	100%	98%	98%
Klickitat	8,165	100%	100%	100%	13,065	100%	84%	84%
Lewis	29,575	94%	100%	94%	47,425	58%	94%	56%
Lincoln	•		•	•	10,349	100%	98%	98%
Mason	22,188	98%	100%	98%	39,960	83%	100%	83%
Okanogan	8,211	100%	100%	100%	33,221	100%	90%	90%
Pacific	7,386	99%	100%	99%	13,899	80%	99%	80%
Pend Oreille	2,200	100%	100%	100%	10,961	100%	97%	97%
Pierce	795,900	100%	100%	100%	65,172	100%	99%	99%
San Juan			•	•	16,338	100%	100%	100%
Skagit	86,037	100%	100%	100%	37,538	100%	99%	99%
Skamania	•		•	•	11,469	43%	97%	42%
Snohomish	691,659	99%	100%	99%	93,745	97%	99%	96%
Spokane	424,968	100%	100%	100%	73,165	100%	100%	100%
Stevens	8,880	100%	100%	100%	35,606	100%	95%	95%

Thurston	212,691	99%	100%	99%	61,719	94%	100%	94%
Wahkiakum	•		•		4,144	16%	96%	15%
Walla Walla	49,246	100%	100%	100%	10,950	100%	97%	97%
Whatcom	156,598	100%	98%	98%	59,756	100%	96%	96%
Whitman	33,138	100%	100%	100%	15,687	100%	97%	97%
Yakima	187,909	100%	100%	100%	60,630	100%	97%	97%