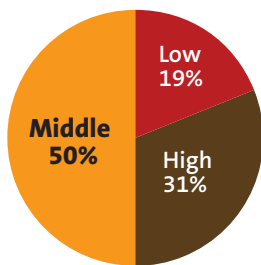


WASHINGTON'S FORGOTTEN MIDDLE-SKILL JOBS: 2009

AN UPDATED LOOK AT EMPLOYMENT AND EDUCATION PATTERNS IN WASHINGTON

Despite deeply held assumptions that a four-year college degree is the only ticket to a stable economic future in Washington, middle-skill jobs, those that require more than a high school diploma, but less than a four-year degree make up the largest portion of Washington's jobs. **In 2008, 50 percent of all jobs were classified as middle-skill** (Figure 1, Table 1).

FIGURE 1. Washington Jobs by Skill Level, 2008



Source: Calculated by TWA from the Bureau of Labor Statistics website.

TABLE 1. Washington Jobs by Skill Level, 2008

	Employment	Percent
Total, All Occupations	2,868,910	100%
Management	100,090	3.5%
Business and Financial	136,130	4.7%
Professional and Related	643,040	22.4%
Total, High-Skill	879,260	30.6%
Sales and Related	305,240	10.6%
Office and Administrative Support	466,620	16.3%
Construction	168,020	5.9%
Installation and Repair	111,740	3.9%
Production	177,440	6.2%
Transportation and Material Moving	205,080	7.1%
Total, Middle-Skill	1,434,140	50.0%
Service Occupations	540,520	18.8%
Farming/Fishing/Forestry Occupations	14,990	0.5%
Total, Low-Skill	555,510	19.4%

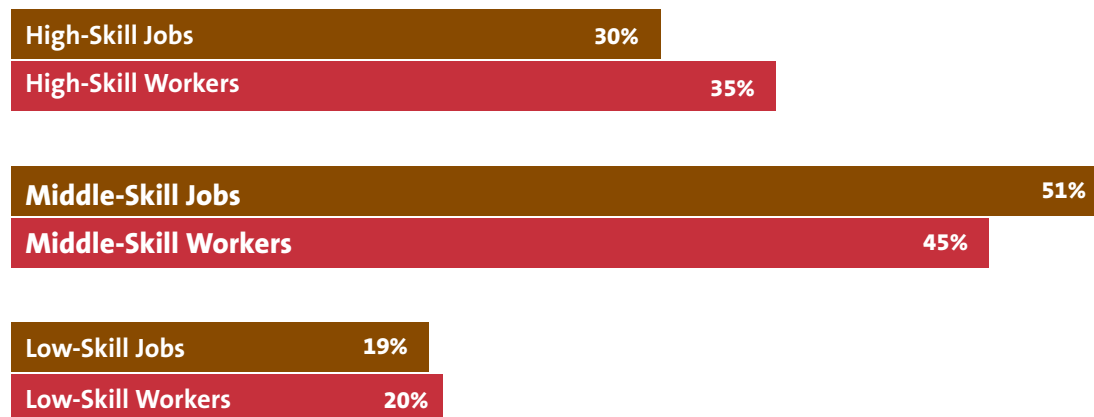
Source: Calculated by TWA from the Bureau of Labor Statistics website.

At the same time there are troubling trends in the state’s education patterns, which suggest that there may not be an adequate number of skilled Washington workers to fill these positions. A downward trend in state and federal funding for middle-skill education and training, combined with an accelerating retirement of middle-skill workers does not bode well for Washington’s workers, employers, or economy.

Washington’s Middle-Skill Challenge Today

The nation’s and Washington’s economic situation has changed dramatically in the last year. But the need to invest in the skills of Washington’s workers has not changed. When we compare the most recently available data on the educational attainment of Washington’s workers to labor market demand, we find that Washington’s skill gap is at the middle-skill level. In 2007, there was a 6 percent gap in the percentage of workers with the education and training required to fill middle-skill positions (Figure 2). **In reality, the gap was likely even greater in certain industries because many workers trained to the middle-skill level—and even those with bachelor’s degrees—did not have the specific technical skills needed.** This means that thousands of well-paid and rewarding jobs were going unfilled in the state, in industries that are and will be essential to Washington’s economic portfolio.

FIGURE 2. Washington Jobs and Workers by Skill Level, 2007



Sources: Washington State Employment Security Department & US Bureau of the Census.

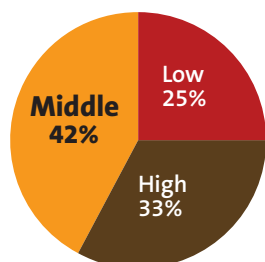
Washington’s Middle-Skill Challenge Tomorrow

When we look at new data on Washington’s future job openings, we see the challenge growing. **Middle-skill jobs will remain essential to Washington’s economy into the foreseeable future, accounting for nearly 470,000 job openings in Washington—some 42 percent of job openings through 2017** (Figure 3, Table 2).

What’s more, as the American Recovery and Reinvestment Act invests in saving and creating jobs to get the nation’s economy back on track, most of those positions in Washington will be middle-skill jobs: In construction, manufacturing, and transportation, including “green jobs” across a broad range of occupations and industries. Many new and retained jobs are being significantly restructured during the economic down turn, requiring new skills for businesses to take advantage of new opportunities. Many of the green jobs will also require additional skills related

to environmental sensitivity, installation of newer, different systems and equipment, and waste reduction. Developing the skills of Washington’s workforce to meet this demand will help the economy recover more quickly and prepare the state for better times ahead. ¹

FIGURE 3. Washington’s Total Job Openings by Skill Level, 2007-2017



Source: Calculated by TWA from Washington Department of Employment Security data.

TABLE 2. Washington Jobs and Total Job Openings by Skill Level, 2007-2017

	Employment		Job Openings	
	2007	2017	Number	%
Total, All Occupations	3,343,391	3,678,914	1,114,270	100%
Management	130,028	142,087	40,170	3.6%
Business and Financial	151,840	168,450	44,250	4.0%
Professional and Related	719,572	841,976	278,040	25.0%
Total, High Skill	1,001,440	1,152,513	362,460	32.5%
Sales and Related	351,545	381,240	136,490	12.2%
Office and Administrative Support	489,722	535,494	152,360	13.7%
Construction	231,337	238,496	50,910	4.6%
Installation and Repair	124,956	131,958	28,110	2.5%
Production	188,790	187,265	37,810	3.4%
Transportation and Material Moving	222,966	235,361	63,260	5.7%
Total, Middle Skill	1,609,316	1,709,814	468,940	42.1%
Service Occupations	642,437	725,710	260,190	23.4%
Farming/Fishing/Forestry Occupations	90,198	90,877	22,730	2.0%
Total, Low Skill	732,635	816,587	282,920	25.4%

Source: Calculated by TWA from Washington State Employment Security Department data.

¹ Mark Zandi, Chief Economist at Moody’s, projects that by the fourth quarter of 2012, stimulus spending from ARRA will substantially improve employment nationwide in several industries dominated by middle-skill jobs, including construction (802,800 jobs), manufacturing (589,700) and transportation and warehousing (129,600). Zandi, Mark. *The Economic Impact of the American Recovery and Reinvestment Act*. Available at http://www.economy.com/mark-zandi/documents/Economic_Stimulus_House_Plan_012109.pdf. (West Chester, PA, 2009).

Unfortunately Washington’s educational projections suggest that the shortage of workers to fill middle-skill jobs that our state was experiencing prior to the recession is likely to worsen in the future. During the fifteen years between 1990 and 2005, Washington saw an increase in residents with educational attainment at the high-skill level and middle-skill level. Residents with low-skill education levels fell. **But Washington will see a reversal of these education trends through 2020, when the proportion of low-skill workers in the workforce is expected to increase, while the percentage of middle-skill workers will decline, and the growth of high-skill workers will slow** (Figures 4, 5, 6 and Table 3).

FIGURE 4. Percentage Change in High-Skill Washington Workers, 1989-2020

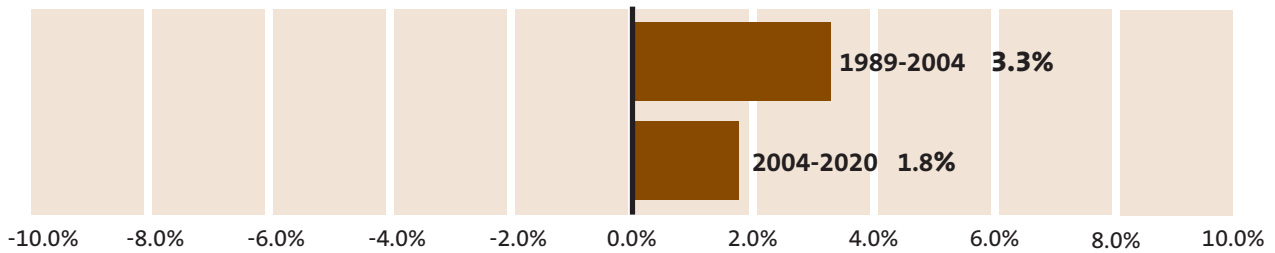


FIGURE 5. Percentage Change in Middle-Skill Washington Workers, 1989-2020

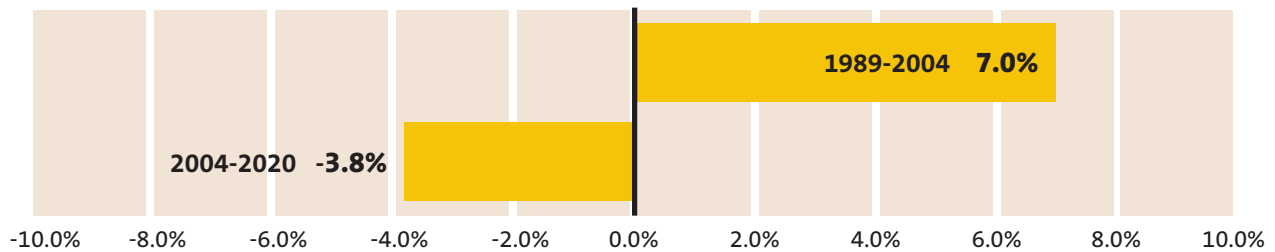
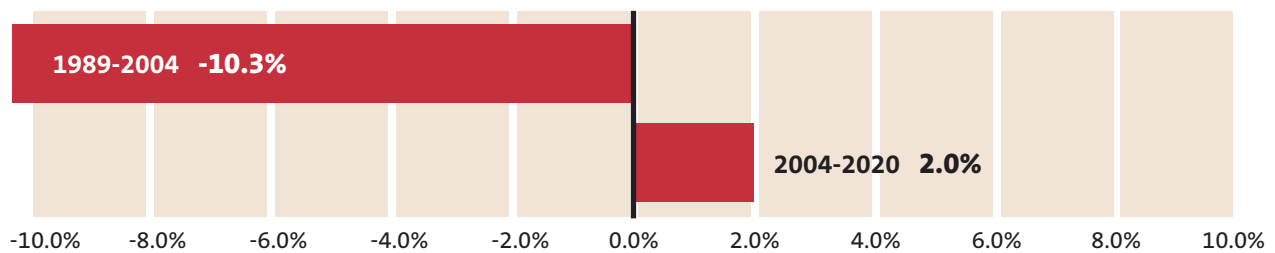


FIGURE 6. Percentage Change in Low-Skill Washington Workers, 1989-2020



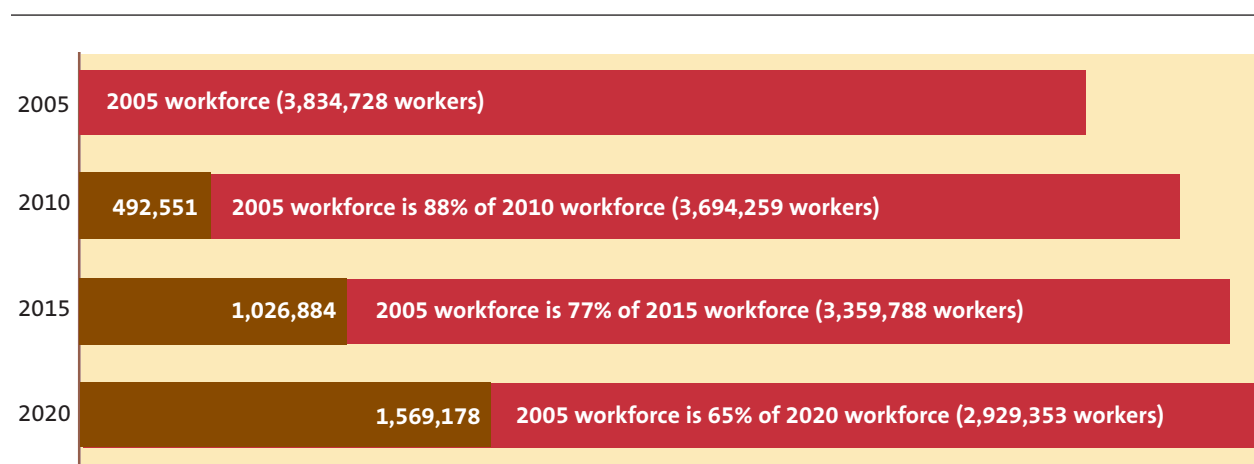
Source Figures 4-6, Table 3: Current and past attainment calculated by TWA using December 1989 and 2004 CPS data. Current and past total labor market estimated by the Office of Financial Management and the Employment Security Department of the State of Washington. 2020 attainment projected by TWA using demographic data from the December 2005 CPS data and population projections calculated by The Office of Financial Management, State of Washington.

TABLE 3. Actual and Projected Change in Washington Workers' Educational Attainment, 1989-2020

	1989	2004	2020	Change 1989-2004	Change 2004-2020
Low-Skill	30.6%	20.3%	22.3%	-10.3%	2.0%
Middle-Skill	39.2%	46.2%	42.4%	7.0%	-3.8%
High-Skill	30.2%	33.5%	35.3%	3.3%	1.8%
Low-Skill	749,975	651,427	895,163	-98,548	243,736
Middle-Skill	960,753	1,482,558	1,702,013	521,805	219,455
High-Skill	740,172	1,075,015	1,417,006	334,843	341,991
Total	2,450,900	3,209,000	4,014,182	758,100	805,182

Addressing the need for middle-skill workers will require attention not only to educational opportunities for young people, but also for those already in the workforce. **Two-thirds of the people who will be in Washington's workforce in the year 2020 were already working adults in 2005—long past the traditional high school-to college pipeline** (Figure 7). For this reason, to meet the demand for middle-skill workers we must target training and education to people who are working or could be working today.

FIGURE 7. Working Washington Adults Age 20-64 in the Current and Projected Population, 2005-2020



Source: Calculated by TWA using population projections from The Office of Financial Management, State of Washington.

New Education Vision Remains Crucial to Washington's Economic Future

Washington State is often cited for developing model workforce education and training programs like the state's Skill Panels, Centers of Excellence, I-BEST, and the Opportunity Grant program. In fact, even in a very tight budgetary situation during the last legislative session, Governor Gregoire found \$6.5 million in new resources to match federal investments and expand training capacity. In order to continue this trend, additional policy initiatives will be needed.

With high unemployment in the state, this is precisely the time to ensure we are training the middle-skill workforce that will be critical to our economic recovery and long-term success. It is these jobs that *Skills2Compete-Washington* wants to lift up in the state's and nation's policy debates to ensure that Washington has the workforce to compete in a 21st-century economy.



When newly trained medical researchers find cures for illnesses, we need an even larger number of laboratory technicians, pharmacy technicians, and nurses to produce and administer those remedies. When newly trained computer engineers develop advanced means to produce goods, we need an even larger number of engineering and manufacturing technicians to harness and maintain this technology on evolving production and logistics platforms. Middle-skill workers are highly skilled technical and trade workers at the heart of the state's economy.

For all of these reasons, the *Skills2Compete-Washington* campaign is re-issuing the call it put before the state in September, 2008. If we are to realize our state's full economic potential, educational access must reflect the demands of a 21st-century economy and the realities of the 21st-century workforce. The following vision can shape our state's workforce and education policies and investments to meet these 21st-century realities:

Every Washington worker should have access to the equivalent of at least two years of education or training past high school—leading to a vocational credential, industry certification, or one's first two years of college—to be pursued at whatever point and pace makes sense for individual workers and industries. Every person must also have access to the basic skills needed to pursue such education.

A number of excellent policy decisions have placed Washington State among the leaders in workforce development and education. Now businesses, labor, educators, community-based organizations and others must work together to ensure Washington makes the investments necessary to deliver on the next steps toward this ambitious goal. Policymakers must step in with strong political leadership and commitment to ensure that Washington has the middle-skill workforce we need to recover and thrive.

Washington's Forgotten Middle-Skill Jobs: 2009 was written for the Skills2Compete-Washington campaign by TheWorkforce Alliance (TWA), Washington, DC, as part of its national Skills2Compete Campaign. This brief contains updates to the data first released in the 2008 report, *Washington's Forgotten Middle-Skill Jobs*. To learn more about the Skills2Compete-Washington campaign, go to www.Skills2Compete.org/Washington. For a detailed explanation of the methodology used in this brief, please see the Appendix of the 2008 report.

