

2013

The economic development case for increased funding to education and workforce training in Iowa for middle skills jobs: A policy recommendation

Jasmine Almoayed
Iowa State University

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**The economic development case for increased funding to education and workforce
training in Iowa for middle skills jobs: A policy recommendation**

by

Jasmine Almoayed

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Political Science

Program of Study Committee:
Mack Shelley, Major Professor
Larry Ebbers
David Peterson

Iowa State University

Ames, Iowa

2013

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ACKNOWLEDGEMENTS

I would like to thank my graduate committee for their flexibility and guidance through the process of this thesis. Dave Peterson for his willingness to serve as the policy expert in reviewing my work without having had me as a student. Larry Ebbers for serving as both a mentor and expert in community college policy and especially Mack Shelley for two years of above and beyond support. From start until finish, Professor Shelley has invested an incredible amount of energy in helping me through everything from my application process to Iowa State University, assisting me through the many challenges of being a working distance education student, and several hours of email and phone correspondence. Without Professor Shelley's support, I would have never been successful in my pursuit of this degree.

My deepest appreciation to both Dr. Kim Johnson and Steve Ovel from Kirkwood Community College for their assistance in gathering information for my research and supporting my interest in the field. Also to both Steve and Dave Palmer of Des Moines Area Community College for serving as both role models and mentors in the field of government relations and their expertise, advice, and willingness to allow me to spend time with them to see how education policy is truly formed.

My parents Raif and Ismeta Kenjar for sacrificing so much as immigrants to this country to make a better life for their children, and instilling in me the meaning of hard work, integrity, and modesty. No challenge I will ever face will be a fraction of what they overcame, and I will always be grateful for the wonderful life they provided. My sister

Fatima Kenjar, for the hours listening to me vent, taking me on numerous coffee/sanity breaks, and your words of encouragement.

Last but certainly not least I would like to thank my wonderful husband Andrew Almoayed for all his support for the last two years. Being married to a working graduate student is a thankless job. For all the burdens of taking care of our household, dealing with mood swings and stress, the lack of attention, the additional financial burden of tuition, and for the proofreading of hundreds of pages of writing over the last two years you deserve credit as much as I do for completing this Master's. Without your support I never would have made it through, and the testament to a strong marriage is finding someone who will put your interests and goals before their own happiness. Your sacrifice has not gone unnoticed and I am eternally grateful for finding someone who believes in me and pushed me to keep going even when I didn't always believe in myself.

ABSTRACT

In recent years there has been a growing dialogue on the middle skills gap in the United States. Federal and state legislators have been tasked with examining policies as they relate to education and workforce training and the impacts they have on workforce shortages in key industry clusters.

With a large number of impending retirements across the country, these discussions have a new sense of urgency. For states like Iowa that have already begun to experience the decline in skilled workforce, this has become a serious problem for both current and future economic growth.

Funding to education and training programs targeted at raising the skill level of workers for middle skills jobs has been on the decline in a time when it is arguably most needed. With fierce competition for federal and state support, it has been difficult for community colleges and workforce development offices to attain the funding levels needed for programming to address skilled worker shortages.

The purpose of this study is to create the case for a policy recommendation on increased funding to education and workforce training programs in the state of Iowa. It addresses current and future demographics for the state of Iowa as it compares to workforce needs, as well as looking at the implications for current and future economic growth if we maintain the status quo.

Based on projected patterns of the contracting workforce due to the large number of retirements versus replacement workers, the findings illustrate that in order to remain globally competitive, Iowa must invest in a variety of education and workforce training programs.

Traditional K-12 to post-secondary graduates will not cover the anticipated workforce shortage, so programs aimed at enhancing the skill level of our current workforce will be necessary in order to simply maintain existing business. The findings also illustrate how the return on investment in education and workforce training programs will better position Iowa for future economic development competition.

CHAPTER ONE: INTRODUCTION

1.1 Background

The economic health of any community, ranging from the smallest city to the whole of the United States, is comprised of several moving parts each of which must work successfully in order to maintain stability and drive future prosperity. New business attraction, innovation, and job creation captures news headlines for both national and local audiences. In every comprehensive economic development plan, there is a new business strategy: How will we as a country, a state, a region, be competitive in attracting the next creator of high-quality jobs?

What attracts less attention is the retention of existing business: How do we keep the jobs we currently have? How do we assist in the success of our current employers and ensure that when and if they do expand, they keep their business in our backyard?

The vast majority of the national dialogue on these issues has historically centered on the cost of doing business. Nationally we tend to hear about wage and benefits: the “competitiveness” of the American worker versus the comparable worker in countries like Mexico, China, or India in terms of dollars and cents. At a state level it could be real estate, tax incentives, or labor costs. But what if the question for employers looking at their own capacity for success is less about hourly wages, and more about their ability (or inability) to find employees to do the work?

It is not a secret among economic development strategists that the “majority of job creation and new capital investment is created from existing businesses” (Mair & Canada, 2012, p. a). The Economics 101 definition of the potential for economic growth is based on real gross domestic product, where output potential is defined by production at full

employment. Thus, in order to drive economic growth, the available workforce must have the skills needed to fill those production demands; if not, the private sector cannot function at full capacity and becomes less competitive.

Businesses must maintain a competitive advantage against industry rivals in order to survive, so when workforce skills gaps become the barrier to growth, the solution is more complex than simply updating equipment or processes.

A skills gap is a significant gap between an organization's skill needs and the current capabilities of its workforce. It is the point at which an organization can no longer grow and/or remain competitive in its industry because its employees do not have the right skills to help drive business results and support the organization's strategies and goals (Homer & Griffin, 2006, p. 5).

When organizational growth is vulnerable because of a lack of qualified workforce it threatens not only the financial success of the business itself, but also the overall economic health of the larger community. If the local laborshed¹ cannot produce the workers to meet production demands, it makes relocation of that industry a sobering possibility and the likelihood of new business attraction highly improbable.

The aftershock of a failed organization has an economic impact on communities that lasts long after the business itself closes its doors. In most cities across the United States, a handful of employers may make up the vast majority of available jobs. If one major employer leaves, it can devastate that community's entire economy. While it may seem far-fetched to imagine industry closing because of a lack of workers, if the available labor force²

¹ A laborshed in this study is defined as the area which makes-up the available workforce for an employment center

² Labor force is the total number of those currently employed and those actively seeking

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does not support the production demand it slows the economic growth of the company. If that company sees the opportunity to increase revenues elsewhere, it is not unheard of that organizations will relocate to areas more favorable to their bottom line.

Though the global recession of 2007-2009 is technically behind us, unemployment remains high across much of the country, yet employers struggle to fill certain vacancies. “There are more than 12.3 million unemployed U.S. workers and nearly 3.6 million job openings waiting to be filled. Despite an unemployment rate that remains above 8%, employers say everyday they cannot find workers with the right skills” (National Skills Coalition, 2013).

“Middle skills” jobs, such as those in health-care, manufacturing, information technology, and construction and trades, are not only becoming harder to fill, but in coming years will become larger in number. Technological advancements, certain offshore jobs returning to the United States, and, perhaps most significant, the impending retirements of a large percentage of baby-boomers³ in the current workforce, will all contribute to a growing need for middle skills workers. By the year 2020, “the 55–years-and-older age group will total 97.8 million, composing 28.7% of the 2020 resident population, compared with 24.7% in 2010” (Toosi, 2012, p. 45).

For places like Iowa who have also experienced a contracting workforce due to the migration of the younger generation out of the state, this is even more concerning. The most active population of the workforce are those individuals aged 16-64, but, as described in a recent study by Iowa State University Economist Dave Swenson, there are two distinct

³ Baby-boomers are defined as persons born between 1946 and 1964.

groups within this broad spectrum of age demographics that must be present in order to support a growing economy.

“It must have a ready supply of comparatively young workers possessing a very wide range of skills and abilities. That young adult workforce further breaks into two distinct components: those ages 24 to 34 and those ages 35 to 44. The youngest group can be considered the skill - acquiring work force, and the latter, older group can be considered the skill - applying work force. Combined this component of the labor force contributes greatly to growth in regional and household incomes, and regional economies must have a stable supply of these workers to maintain stability” (Swenson, 2013, p. 2).

The sum of these contributing factors has caused economic development groups, government agencies, educators, and the private sector to come together in search of manageable solutions to otherwise uncontrollable realities.

Although there is no silver bullet to solve the middle skills gap, public/private partnerships have formed across the country to find solutions that will address skilled labor shortages. While legislators remain divided on the effectiveness of funding to certain workforce development programs, community colleges across the country have taken the lead in organizing coalitions at state and local levels to address workforce needs.

1.2 Significance

The state of Iowa has a unique set of circumstances that makes these needs even more significant. Figure 1 shows the current demand for skilled workers in Iowa. While the vast majority of jobs in our current economy are “middle-skill,” only 33% of Iowans are thought to have the appropriate skills and credentials to fill those positions. According to the Iowa Skills2Compete Coalition, by 2020, 85% of available jobs will fall into the middle skills category.

Not unlike the rest of the country, Iowa also expects retirements to impact the labor force. Nationwide the decline in birthrate in the late 1960's is responsible for an overall contracted workforce. In Iowa, this was compounded by an outmigration of young workers in the 1980's due to the national recession and the farm crisis. The sluggish return of jobs to the state of Iowa caused a number of these workers to move to states that had experienced faster economic recovery. According to Swenson, the period between 1980 and 1990 led to a contraction in the state's population of 4.3%. Not only did those individuals leave, but also any children born of those individuals left the Iowa labor force. So while the national percentage of workers in the 34-44 age cohort contracted by 9%, in Iowa the percentage was exacerbated to twice that in metropolitan areas, and almost three times greater in rural areas.

Figure 2 illustrates that in the year 2025, 66% of Iowa's workforce will have already been part of the laborshed since 2011. With only 34% of the workforce joining after 2011, this could mean even greater problems long term, particularly by 2020 when the largest gap will exist between retirements and the available workforce as illustrated in Table 1. In fact there is a decrease in available workforce for every age classification across gender, race, and ethnicity except those in the 65 and over category by 2020 (Table 2). If employer feedback suggests that the current labor force is inadequate, these types of changes mean we will not only be unable to support additional economic growth, but also that we cannot sustain the jobs we have today.

Barring an influx of skilled immigrants moving to the state of Iowa, which is both highly unlikely and would come with an entirely different set of challenges, other solutions must be explored. The most obvious solution is to expand the existing labor force by arming

those individuals currently employed and looking for work with the appropriate skills and credentials to fill these positions.

Iowa's community college system has created several comprehensive programs to address the middle skills gap including extended adult basic education programming, career pathways programs, state funding for workforce training, and additional financial assistance for students seeking education in fields experiencing worker shortages. Funding for community colleges remains insufficient and has still not returned to the pre-recession levels.

Final reports for the 2007 and 2008 Iowa legislative sessions show that during times of economic certainty, appropriations to community colleges trend upward. However, the 2010 Legislative Session Summary Report shows a net decrease of 7.6% for 2011 and an additional decrease of 0.04% the following year.

Understandably the weak economy meant a decrease for all government-funded programs, but economic downturns are also when community colleges see drastic increases in enrollment in education and job retraining programs. Without the skills to return to gainful employment, individuals remain on unemployment insurance for significantly longer periods of time or may accept lower-paying jobs. Employers who may have had a reduction-in-force take longer to ramp back up when business begins to recover and the positions are needed again but the skilled workers are not readily available. These factors all contribute to a more sluggish economic recovery. Additionally the lack of abundance in skilled workers impacts our competitive advantage for corporate relocation projects by site selectors⁴.

⁴ Site Selectors are individuals or firms utilized in economic development to assist corporations in determining the ideal location for expansion and location/relocation projects. The site selection process takes into consideration a variety of factors, including financial incentives, taxes, real estate, infrastructure, talent, educated workforce, and community.

Explaining the broader impact of the middle skills gap to policy makers remains a critical task for community college advocates.

1.3 Goals of the Study

Supporters of federal and state workforce development programs believe that enacting policy recommendations for funding to education and training will allow states to realize their full economic potential by ensuring the qualified workforce is available to meet production demands. The community college system in Iowa has long been the provider for cost-effective solutions to skill enhancement through these programs.

While the importance of community colleges continues to grow for state and local economies as well as the individuals they serve, funding has declined rapidly over the last decade. This funding shortage is further exacerbated by a sharp increase in enrollments. The federal government has recently received criticism for duplicative programs funded through the Workforce Investment Act and other programs administered by the Departments of Labor, Education, and Health and Human Services. In fact the Government Accountability Office found that in fiscal year 2009 “9 federal agencies spent approximately \$18 billion to administer 47 programs—an increase of 3 programs and roughly \$5 billion since [the] 2003 report” (U.S. Government Accountability Office, 2011).

However, for all of the money being funneled to employment and training programs, the contribution the federal government makes to programs that support community colleges is limited. Community colleges have historically received the vast majority of funding through state appropriations rather than these federal programs, which is why it is so important for policy makers at the state level to understand the importance of their role.

Over the last two decades, a decline in state funding versus operational costs has meant higher tuition and enrollment fees to offset the gaps. While community colleges have long been seen as “important sources for the state and their communities ... their effort is hobbled by insufficient state funding. Moreover, inadequate state funding may put higher education and vocational training further out of reach of many Iowans young and old” (Iowa Fiscal Partnership, 2012).

While those in the field appreciate these realities, getting legislators to comprehend the whole picture can be challenging. It is important for advocates to arm legislators with a global understanding of how their votes on education and training dollars impact the long-term economic health of Iowa.

1.4 Objectives

The purpose of this study is to provide a case for policy recommendations to state legislators that encourages an increase in funding to Iowa’s community colleges for support of programs aimed at the Middle Skills Gap. This research is intended to provide the context for how investment in education and training programs translates into a larger economic investment to the state of Iowa. Likewise it will explore the potential negative impact of maintaining the status quo.

Results will be based on a review of existing data for industry cluster workforce gaps in the state of Iowa from 2012-2021, and data from the Bureau of Labor and Statistics for employment projections from 2010-2020. It will look at research of current and past programs and funding, and finally will offer suggestions for further research.

CHAPTER TWO: LITERATURE REVIEW

2.1 The Widening Middle Skills Gap and Funding Decreases

The middle skills gap refers to a lack of qualified workforce to fill job demand in key industry clusters. Middle-skill jobs are those that require education or training beyond a high school diploma, but less than a four-year degree. These jobs make up the largest part of the U.S. and state of Iowa's labor market; however, they also represent an area that has seen a decline in enrollment and financial assistance, particularly over the last decade.

At the federal level, appropriations to education and workforce training programs have been under fire for their lack of effectiveness, and legislators are pushing to consolidate programs to cut down on waste (which will be discussed later on). While the focus is to further lean-up these programs, funding from the federal government towards skills attainment has steadily declined.

The National Skills Coalition (formerly the Workforce Alliance) is a broad consortium of business, labor, community colleges, foundations, and community-based organizations that formed after several federal policies began to disinvest in workforce training and education at the same time skill gaps were growing in key industries. This coalition has a shared belief that growing America's economy starts with an investment in workforce, giving both people and industries the skills needed to compete.

According to the National Skills Coalition labor market realities are not aligned with investments made in skills attainment.

“Between 2002 and 2008, funding for education and training programs under the Department of Labor had been cut by almost 30%, and workforce funding at Department of Education has not even kept up with inflation. The U.S. spends only .04% of its Gross Domestic Product on job training, ranking 21st out of 25 countries in the Organization for Economic Cooperation and Development internationally and

far behind countries like Great Britain, Germany, France, and Canada” (National Skills Coalition website, *A Strong Economy*. 2012) (see Figure 3).

In addition to the normal decline in federal appropriations, a further setback could occur due to federal sequestration that, if left unchanged, is set to last until 2021. For the state of Iowa sequestration further exacerbates a growing problem.

Though at 5% Iowa’s unemployment rate in December of 2012 remained lower than the national unemployment rate, there are still 79,000 Iowans out of work, while many employers say they sit on open requisitions for months on end. Anecdotal stories from employers who claim to have regained enough business to add additional shifts to production but cannot find skilled workers dominate industry sector board⁵ discussions. Cuts by sequestration will further contribute to that dilemma.

“Iowa’s workforce development programs will be deeply impacted by these cuts. By the most conservative estimate, Iowa job training programs will lose \$3.2 million in 2013 and will serve 9,000 fewer people. If these cuts remain in place until 2021, Iowa would lose \$44.1 million in funding for workforce development programs and 126,000 fewer people will have access to critical education and training services” (National Skills Coalition, 2013, p. ?) (Table 3).

With or without sequestration, federal funding cuts mean that state funding is often left to fill the gaps needed to support education and training programs offered through community colleges and workforce development offices.

These programs provide a range of job training options to address the shortfalls that will continue if the current demographic trends hold and students transitioning from the K-12 system into traditional college classrooms fall short of the need for skilled workers.

⁵ Industry sector boards are business consortiums assembled by community colleges to serve in advisory roles for the creation and direction of curriculum for credit and non- credit courses. These boards represent key industry clusters such as healthcare, manufacturing, construction, and Information Technology.

Educators and administrators in K-12 and higher education must work together to create more seamless transitions from high school to career and technical education programs. However, even if successful, training the existing labor force will be essential to meet the demand for middle skills workers.

2.2 Middle Skills Jobs and Their Impact on Iowa's Economic Development

In Iowa, middle-skill jobs made up over 50% of available positions in 2010, with only 33% of the available workforce qualified to fill these positions (Iowa Workforce Development, 2012). According to a report published by Kirkwood Community College, in relation to the Eastern Iowa Region:

“The middle skills gap between worker readiness and job requirements is widening, and more than 75% of the region's new and replacement jobs require postsecondary education beyond high school” (Skills 2014 Report, 2011, p. 3).

Advocates of increased funding to workforce education and training programs see this as problematic not just for job seekers and employers, but also for state economic development. Workforce is an important component in any state's economic development toolkit.

For states like Iowa who offer very limited direct financial assistance to new and expanding business, workforce is a large part of what regions throughout the state can highlight as their competitive advantage. Competitive wages, along with a highly skilled workforce, can give one state an edge over another that may have lower commercial tax rates, more robust financial incentive packages, less expensive real estate, or shovel-ready properties. Many other states in the Midwest have opted to be aggressive with the more

tangible financial incentives, which has put Iowa at a disadvantage according to many in the field of economic development.

Advocates of the Iowa Chamber Alliance (ICA) argue that we should be putting more funds into direct assistance. ICA's 2013 Legislative Priorities urges lawmakers to increase tax credits and reduce individual, corporate, and state income taxes. They argue that Iowa is at a distinct disadvantage in business attraction due to its rank as 42nd in state business tax climate. Yet, data suggest that this is not the main concern of the employers themselves.

In October 2012, Blane Canada Research released the Business Expansion and Strategic Trends of Iowa (BEST of Iowa) Report, which outlines Iowa's Competitive Capacity Scorecard for 2012. This study consisted of 1,221 executive interviews in 62 Iowa counties and 160 Iowa communities over the course of a 12-month period, and compared the results to National Key Performance Indicators (KPI). These KPI come from the analysis of 26,000 interviews from the United States and Canada called the North American Data Study (NADS).

According to BEST of Iowa Report findings, workforce availability and recruiting present the largest barriers to growth for business in Iowa. These top executives named availability of skilled labor as their top reason for not expanding in Iowa.

“Iowa continues to have a competitive weakness in availability... Following the economy's easing in 2010, the national KPI for workforce availability has trended downward slightly. As noted in last year's study, Iowa has trended down at an accelerating rate.... The trend suggests a greater mismatch between available and needed workforce in Iowa. Access to workers remains a critical issue in Iowa. 638 employers or 52% of the executives interviewed now report difficulty recruiting workers. This is up from 45% in the 2011 Study” (Mair & Canada, 2012, p. h).

The data shown in Table 4 indicate that labor makes up the second- and third-highest executive-level concern on the list of Iowa's weaknesses. The combination of a lack of

skilled workforce availability and problems recruiting means it becomes even more crucial to up-skill the available laborshed. The report also indicates that a large percentage of Iowa employers invest in the training of their own employees to help offset these challenges, which only further indicates the need for job training dollars as an incentive.

Furthermore, national research in the field of economic development suggests that the climate for economic development following the “Great Recession” is focused far more on entrepreneurial endeavors. Also referred to as “Economic Gardening,” relying on homegrown business for job creation requires local talent for growth.

Moreover, site selectors say more businesses report an educated workforce and the local talent pool or “local firms that have decent talent and a higher education group that they can work with to create career tracks (management and technical) for their people” (Overmoyer, 2012, p. ?) as two of the most important pieces for consideration in business location and expansion.

These data would indicate that rather than direct financial incentives, funding to education and training programs should be the primary consideration for appropriations targeted at economic development.

2.3 The Need for Increased Funding to Iowa’s Community Colleges

According to the Iowa Department of Education, state support for community college funding has steadily declined since the 1990s and currently makes up only 29% of revenues. Furthermore, local support has already reached an all-time low of 4.7%.

In a report by the Education Commission of the States, Iowa ranked as one of seven states where there was an ever-increasing dependence on tuition and fees, and Iowa was

highlighted as a state where “tuition and fees are rising as a percentage of the total operating funds for community colleges, while state general aid and federal support are declining” (State funding for community colleges: A 50-state survey, 2011, p. 15). The same report shows Iowa as one of the states placing a high priority on the need to improve inadequate state funding in the workforce and economic development category for non-credit programs.

By fiscal year 2009, Iowa’s community colleges were already 60% higher in tuition and fees than the national average. Table 5 illustrates that increase from 1980, when only 24.39% of the general operating fund was made up of tuition and fees, climbing to 53.98% by 2010. Throughout that same timeframe, state funding fell from 49.51% to only 28.62%. In a time where resources are scarce and competition is high, it has never been more important for advocates of workforce training and education to highlight the return on investment.

Programs aimed at addressing the middle skills gap need to be validated as true economic development tools. Direct financial assistance is a one-time incentive that generally impacts one organization, and does little to establish a long-term investment. In order for direct financial assistance to be the deciding factor for a new business, the incentive needs to be sizable, meaning substantial amounts of money must be dedicated to these programs. While direct assistance may help attract new business, it does little for business retention and the incentive itself will not guarantee future growth.

Dollars spent on workforce training and education programs, on the other hand, are both a short-term and long-term investment with broader impact. Without a robust and qualified workforce, site-locators will overlook Iowa communities, and both new businesses and expansion of existing business is less likely.

Several recommendations have been made to policy makers, including allocation of funding for the following initiatives. 1.) Adult Basic Education (ABE) and General Educational Development (GED) programs that provide remediation for low-skilled workers (in Iowa there is currently no state funding allocated to ABE programs). 2.) An increase in funding for a number of short-term training programs that include a growing number of nationally recognized technical credentials. 3.) Expanding the amount of money used to subsidize employers for training incumbent workers. 4.) Creating additional incentives to steer students to credit programs focused on skill shortage areas.

Legislators may not see the ties between funding these programs and the long-term implications if they do not. Funding these various programs is intended to impact diverse populations of Iowa's potential workforce very intentionally. Each of these demographics will be crucial to Iowa's future laborshed and without targeting all areas we can anticipate impeded growth.

2.4 Iowa's Current and Future Laborshed

According to the Iowa Skills2Compete Coalition,

“... at least 60% of [Iowa's] workforce, ages 25-65 should have a postsecondary degree by 2025 for the state to remain globally competitive. This means that Iowa will need to produce an additional 108,807 degrees to meet this threshold. Yet more than 289,280 working aged Iowans have not completed high school or obtained a GED, and only 2% (5,536) of this target population took the GED test in 2011” (Iowa Skills2Compete Coalition, 2013, p. 4).[This quotation needs to be checked.]

This is a serious concern for Iowa, which ranks 46th out of the 50 states for the amount of degree holders needed to fill this gap. Figure 4 illustrates the projected age population between 2012 and 2020 nationwide. The difference between those aging out of the workforce versus those entering the workforce is staggering. The trend for the state of Iowa

has an even greater disparity. Without investing in the current laborshed, Iowa will continue to fall further behind.

Conversely, if Iowa begins to invest in post-secondary education at the rates of the top-performing states, “Iowa can produce about 91,000 bachelor’s degrees, 110,000 associate degrees and 44,000 certificates by 2025” (Center for postsecondary and economic success, 2013) versus continuing under the status quo as illustrated in Figure 5. Likewise, if Iowa maintains the status quo in postsecondary investment, annual personal per capita income will decrease by \$37 by 2025, while simply attaining the 60% goal would increase personal per capita income by \$1,100 (Figure 6).

In the 2012 legislative session, Iowa State Senator Jack Kibbie introduced Senate File 2024 (SF 2024). SF 2024 established the Skilled Workforce Shortage Tuition Grant Program, which allocated additional funds to the Gap Tuition Assistance Fund and funding for the National Career Readiness Certificate. This act appropriates funding to community colleges to assist Iowa residents with established financial need in obtaining vocational-technical or career option education for industries identified as those with skilled worker shortages (Legislative Services Agency, 2012, pp. 17-18).

Though a great starting place, even this added investment does not shore up the aperture between demand for skilled workers and the investment that gap would require. The funding necessary to train even an additional 5% of Iowa’s workforce would

“ Require a new investment, beyond existing state and federal programs, of at least \$356 million or 3.4 times Iowa’s current federal funding for all job training, adult education, vocational education, and financial aid for community college students” (National Skills Coalition website, 2012).

2.5 Federal Funding to Education and Workforce Training Programs

Although this has been identified as a national jobs crisis, it is unlikely that increased federal appropriations will close these sizeable shortfalls in funding. According to an August 2012 article from the *Wall Street Journal*, “The federal government spent about \$18 billion on training and job-search programs, running 47 separate programs offering training, in the year ended September 2009, the most recent tally by the Government Accountability Office” (Dugan & Scheck, 2012).

Critics of job training funds point out a lack of accountability in tracking the effectiveness of these programs. Even though data may be collected on an individual’s success in completing the program and attaining employment, whether or not those positions are in the fields for which they have received the training goes unmonitored. Additionally, most programs stop collecting data after three months, meaning job retention is also largely unknown.

There have also been questions regarding the government’s ability to correctly identify “in demand” jobs. Many of those jobs funded by the Workforce Investment Act (the largest federally funded job-training program) were in Wind Energy or other “Green Jobs,” which were negatively impacted with recent economic conditions.

[In] “June 2011, 78% of the 110,776 who went through the dislocated-worker training program said they wound up with jobs within three months, according to Labor Department surveys. Only about 38% told the Labor Department they landed the kind of jobs for which they were trained” (Dugan & Scheck, 2012).

With these types of issues, it is difficult to truly measure the return on investment at the federal level, and as a result many Republicans have called for an overhaul of federally-

funded job training programs. Though fewer job-training programs exist now than in the early 1990's, it is expected that federal funding for such programs will decline.

In the 2013 legislative session, congressional House Republicans introduced H.R. 803, The Supporting Knowledge and Lifelong Skills Act, which aims to streamline “35 ineffective and duplicative programs, including 27 identified in a 2011 report by the nonpartisan Government Accountability Office.”

H.R. 803 states that it will create a more effective source of support through a single Workforce Investment Fund. This fund will be administered at the state and local levels and allows for locally elected officials to appoint workforce board representation with the stipulation that employers must occupy two-thirds of the board seats. The rationale is that at the local level, boards will have a better sense of the community's needs and that “America's job creators” should have their roles reinforced through this representation.

According to the bill's supporters, a single source for funding and control at the state and local levels will improve accountability and transparency, and it grants governors the additional capability of consolidating additional statewide programs into their workforce development plans to the federal government to allow for “greater administrative flexibility and reducing overly burdensome paperwork requirements.”

Consolidating federal programs into one overarching Workforce Investment Fund sounds like a practical solution to the grievances of those who see the current system as ineffective and wasteful, but comes with its own set of complications. Those who lobby for increased appropriations to workforce training and education programs know that historically consolidating funds usually means a cut to overall funding. When the funds are diversified, it allows for a greater number of program eligibilities and impacts a wider variety of

recipients. During good economic times and the start of these overarching programs, funding may be stable. Nonetheless, with every economic downturn or change in government, the fund is threatened ; whereas in the past specific programs would be cut, this legislation impacts all programs across the board.

If House Republicans successfully pass H.R. 803, an almost immediate cut to education and training programs can be expected, and over time this fund will almost inevitably decline. This leaves the lion's share of future funding to these programs on the shoulders of the state.

2.6 Return on Investment of Increased State Funding to Education and Workforce Training Programs

Though budgets are tightening at the state level and it becomes increasingly difficult to maintain even current funding for education and training programs, a strong case can be made for the state's incentive to invest in education.

While perhaps less impactful at an individual level, policy makers may find the bigger picture far more ominous. The impact of maintaining the status quo versus attaining the 60% goal of postsecondary degree attainment means either a decline in state revenues of \$14 million or generating a projected \$465 million in revenues by 2025 (Figure 6). If we look at purely the return on investment, Iowa's revenues could decline to \$8 million below postsecondary costs (status quo) or exceed those costs by \$320 million by 2025 (Figure 7). The return on investment for attaining the 108,807 degrees needed to meet that 60% threshold is illustrated in further detail in Figure 8.

Research regarding government-subsidized employer-led training programs has also shown a positive return on investment. A 2011 study of a United Kingdom government-

funded pilot program intended to increase the qualification levels of low-skilled workers through employer-based training indicates a return in higher personal income levels for programs targeted at middle skills jobs. “Train to Gain now provides some financial incentives toward level 3⁶ qualifications, where there is stronger evidence of returns in the form of higher wages” (Abramovsky et al., 2011). The findings go on to recommend that the national policy continue to fund level 3 qualifications where the program delivers benefits.

Back at home; some private sector employers have taken the reigns in creating their own workforce pipeline. Major manufacturers such as Siemens in the U.S. have partnered with community colleges to begin piloting job-training programs based on the success their companies have had overseas. While Germany in 2005 experienced 11% unemployment (much higher than other parts of Europe or the U.S.), major restructuring and government/corporate investment in apprenticeship programs made them much more competitive in the global market.

“Manufacturing exports started soaring and during the global recession, unemployment actually went down in Germany while everyone else's went up. Germany's apprentice system, providing a wealth of high-skilled workers, had a lot to do with that success” (Zakeria, 2012, p. ?).

Subsidies in the state of Iowa such as the Iowa New Jobs Training Program (260E) and the Iowa Jobs Training Program (260F) are vital to incentivize more employers to participate in job training programs such as these.

The Iowa New Jobs Training Program provides a reimbursement for training expenses to employers adding new positions to baseline employment numbers. Community

⁶ In this study a level 3 position is defined as that which would be received after high school at age 18, and level 4 required a university degree; in other words level 3 translates to a “middle skill” job requirement.

colleges issue bonds based on a calculation of the wages paid to those positions over a ten-year period. This bond is then paid off by diverting a percentage of state withholding taxes determined by comparing the new jobs wages to the average laborshed wage for the city in which the positions will be added to the community college. The funds are then split 50/50; half to cover wages during an 8-week on the job training period and the other half can cover up to 100% of expenses associated with investment in training for those employees. The Iowa Jobs Training program will reimburse 50% of qualified training costs for incumbent workforce training as a forgivable loan program through the Iowa Economic Development Authority.

Though both of these programs are marketed as government subsidies for employer training, as illustrated in the examples of the UK and German programs, employer training actually has a positive economic impact for the community. By increasing the qualifications of workers, Iowa becomes more attractive to new business because of its skilled labor force while also increasing personal income for the population.

Also emerging are programs like that created by Siemens, but more generalized to fit a specific industry cluster, called industry sector partnerships. These groups are comprised of multiple employers within a given industry along with community-based organizations, labor unions, community colleges, and workforce boards to leverage expertise and combine resources. These groups collaborate to create customized training programs targeted at specific needs for industries important to local economies. According to the Iowa Skills2Compete Coalition, “a return on investment study conducted for industry sector partnerships based in Philadelphia found that employers affiliated with these partnerships

reported 407-469% bottom line gains as a result of the partnership” (Iowa Skills2Compete Coalition, 2013, p. 7).

CHAPTER THREE: RESEARCH METHODS AND DATA ANALYSIS PROCEDURES

3.1 Rationale for Research Methods

I originally made the decision to do my research on community college funding and middle skills jobs after a practicum during the 2012 legislative session with Steve Ovel, Vice President of Government Relations at Kirkwood Community College.

The overarching goal of the 2012 legislative session was to secure additional funding for various programs intended to address skilled worker shortages such as the Workforce Training and Economic Development Fund and the Iowa New Jobs Training Program. Also included were additional funds for career pathways and Gap Tuition Assistance, as well as the new Skilled Workforce Shortage Tuition Grant program.

My role at Kirkwood Community College at the time was serving as a business liaison to the college in the Training and Outreach Services Division. Due to the nature of my position, I was able to collect anecdotal cases on the business impact felt by Iowa employers to help persuade legislators to support appropriations to education and training funds. Throughout the process I saw a growing need to create a business case for funding to education and training programs. I became very involved in piloting short-term worker retraining programs, and in the creation of various industry sector boards, which allowed me to see the immediacy of the impact these dollars had on an employer's ability to fill positions.

While my initial thoughts were to create a survey instrument, I realized from my time spent talking with legislators that the primary issue was not that data did not exist regarding the worker shortage in Iowa, skills shortages nationwide, or college funding decreases. The

real issue was that there are few places where this information is compiled. I hoped to show each metrics impact on the other, and how the aggregate of these issues influence the economic growth potential for the state of Iowa. Rather than recreating the wheel, I was determined to pull existing data to make the case for why legislative action (or inaction) will have a broader impact than what legislators may have realized.

3.2 Data Collection

All of the data for my research are contained in reports available for public consumption, primarily through the Bureau of Labor Statistics (BLS), Iowa Workforce Development (IWD), and the Iowa Association of Community College Trustees. Because forecasted data have a tendency to change, I looked for reports published around the same time that projected for the same period of time, starting around 2010 and extrapolating data through no later than 2025. I chose to use studies that included information that I could readily access for verification purposes, and those that I knew were shaping current policy recommendations.

The BLS and IWD data are demographic information by specific occupational classifications. The BLS website includes a section with databases, tables, and calculators by subject. The data found in the studies about labor force that I was able to validate came from files containing projections for 2010-2020 for labor force participation rates and the civilian non-institutional population by age, gender, race, and ethnic groups.

The IWD website also contains spreadsheets of current and historical labor force data. These files include information taken from the Labor Force Tables publication and include data on labor force, employment, unemployment, and unemployment rate for each

Metropolitan Statistical Area (MSA), county, and city in the state of Iowa. All information is produced monthly and is completely revised yearly.

Some data used in this study are part of a multi-year skills study that has been conducted by the Corridor Alliance⁷. Since 1998 this consortium has been conducting skills assessments to look at ongoing workforce needs for the Kirkwood Community College Region. While specific to Kirkwood's region, this information has been used at the state level to illustrate the types of skill shortages that exist in order to gain funding for all of Iowa's fifteen community college regions.

The first report collected in 1998 supplied information for the Skills 2000 Report. From that point, every 4 years a Skills Report for the Kirkwood Community College seven-county region has been published. The initial report was based on a survey of top-level executives at 33 mainly Cedar Rapids, Iowa-based companies, with a focus on determining workforce skill needs. The Skills 2006 survey replicated the information in the Skills 2000 survey, but added additional employers to the sample size with a larger geographical scope. The Skills 2010 study again added to the employer sample size and added additional questions to the quantitative skills assessment.

The Skills 2014 survey consisted of two components that included both qualitative and quantitative questions consistent with those from the previous Skills 2010 study. The study used a stratified purposeful sampling method to identify employers in twelve industry

⁷ The Corridor Alliance consists of representatives from Kirkwood Community College and the economic development organizations in their region. The economic development organizations include Benton Development Group, Cedar County Economic Development Commission, Iowa City Area Development Group, Iowa County Economic Development Commission, Jones County Economic Development Commission, Marion Economic Development Company, Priority One, and Washington Economic Development Group.

clusters (Figure 10) that were selected based on business retention and expansion strategies of the participating economic development groups. Within these industry sectors, 399 employers were selected across the seven-county region with the intent of getting a cross-section of small, medium, and large employers. These 399 were invited to participate in a two-part questionnaire. The first piece asked employers to provide quantitative information on current employment figures, projections for replacement positions that included normal attrition from turnover and anticipated retirements, and new job growth. 132 employer questionnaires were returned.

The second component was a phone-based “Training and Workforce Climate” survey conducted by a third party that asked employers about both satisfaction levels and skill needs for current employees and applicants. A combination of qualitative information was collected including utilization and methods of work-based training programs, a 5-point Likert scale that asked about perceptions of applicant skills, and asking employers to prioritize missing basic skills. Of the 399 employers asked to participate in this section, 272 responded.

Another important data source I was able to access were five years’ worth (2007, 2008, 2010, 2011, and 2012) of legislative session final reports from the Iowa Association of Community College Trustees (IACCT) and Iowa Association of Community College Presidents. The 2009 report was not omitted intentionally; the IACCT office was unable to locate a copy. These reports contain the specific appropriations given to programs, appropriation history, program descriptions, and a summary of appropriations that discusses how the legislative session went overall.

This information was valuable in that it illustrates not only the actual appropriations given to all 15 Iowa community colleges, but also how the legislative priorities changed for the community colleges pre- and post-recession.

In the 2007 report there is a long-term request (\$40 to \$60 million) to support workforce-training programs in order to ensure the competitiveness of Iowa's skilled workers. The other "asks" were far more generalized including local tax support, state general aid, and unrequested support for faculty salary.

By 2012, after a series of significant cuts, the requests were far more targeted and all were geared towards programs aimed at resolving skilled worker shortages. The request for state general aid support indicates that, while higher than the prior years' appropriations, funding remained significantly lower than the FY 2009 level. The other requests were for protecting funding to the Iowa New Job Training Program, establishing funds for new student assistance programs for both credit and non-credit programs in skilled workforce shortage areas, and increasing infrastructure and job training support.

Lastly, I used information from the Iowa BEST report to gather the most up-to date information available about economic development in the state of Iowa. The Iowa BEST Report aggregated Synchronist™ data from 1,221 executive interviews conducted over a twelve-month period of 2011-2012. Synchronist™ is a tool created by Blane-Canada Research that is used by economic developers across that state of Iowa. The tool uses a standardized set of questions meant to identify business expansion opportunities as well as companies that may be at risk. The questionnaire also focuses on community strengths and weakness as they relate to infrastructure, services, and workforce.

These data were then combined with aggregate data for prior interviews in Iowa dating back to 2006, and national Key Performance Indicators from the 2012 North American Data Study Analysis of 26,000 interviews from the U.S. and Canada.

3.3 Data Analysis

One of my main criteria was to look for data sources that could be replicated. Both the IWD and BLS websites allow you to access data sets that can be manipulated and analyzed in reports. The majority of demographic information provided in most research reports on the middle skills gap is provided by these two sources.

The Center for Postsecondary Success also allows for the manipulation of data to run charts and graphs on return-on-investment scenarios. Because I was making a case based off of reports done by others, it was important to have the ability to verify that the information they provided was accurate.

As noted above I looked for projections from a variety of sources that followed the same general timeframe (2010-2025) and found that any difference in the percentage would not be considered statistically significant ($p \geq .05$). I did this by comparing the data found in reports, for example, the information in Table 2 that was referenced in the *Middle Skills Jobs in Iowa* report to data found on the IWD website.

The BLS also allows users to create custom reports or pull “top picks” for data that are commonly requested. The amount of information can be overwhelming, so where

possible I replicated exact variables using the multi-screen data search⁸ for what was listed in cited reports to see if the information remained consistent.

Perhaps more difficult than simply verifying the information was finding sources that could link together the issues presented in the various reports to tell one unified story. Many of these reports present information on one particular set of variables. While most, if not all, studies on workforce projections discuss the potential impact on economic growth, there is limited information that ties all of the various components—skilled labor shortages, education and training, funding, and population decline—together. By analyzing the information for a given timeframe as a whole, I hoped to create a stronger case for a policy recommendation to increase state appropriations.

⁸ Figure 11 shows a fraction of the various options for reports and data available on the BLS site. The Multi-Screen Data Search tool is a form-based query application providing BLS time series data for select variables.

CHAPTER FOUR: RESULTS AND DISCUSSION

The results of this study show that in comparing the information provided by the BLS and IWD on workforce projections for the state of Iowa and need for skilled workers through research on middle skills jobs and employer feedback, Iowa needs to act now to avoid crisis.

The goal was to use these data to provide a policy recommendation for why investing in education and training programs translates into a larger economic investment in the state of Iowa. While anecdotal cases can be useful when seeking legislative support, creating a picture with verifiable data of the larger-scale implications has a greater impact. There is no question that if action is not taken to close the gap, Iowa will not remain globally competitive. In fact the research indicates we would not only be unable to grow our economy through business attraction and expansion, but we would lack enough skilled workers needed to fill the positions currently serving in the workforce.

4.1 Summary of Results

According to the information provided in this study, in 2010 middle-skill jobs made up over 50% of available positions in Iowa with only 33% of available workforce qualified to fill these positions. By 2020, 85% of available jobs will fall into the middle skills category, while at the same time there will be a decrease in the available workforce for every age classification across gender, race, and ethnicity except those in the 65 and over category.

With gaps of that magnitude, the state of Iowa is susceptible to difficulties with business retention, and business expansion or new business will be virtually impossible if we maintain the status quo. Iowa's working age population is dangerously low in comparison to

the number of anticipated retirements, and there are no data that indicate migration of skilled workers to the state of Iowa.

By 2025, 66% of Iowa's workforce will have already been part of the laborshed since 2011, and 60% of Iowa's workforce ages 25-65 will need a postsecondary degree for the state to remain globally competitive. In order to reach that threshold Iowa will need to produce an additional 108,807 degrees, yet between 2002 and 2008 funding for education and training programs under the Department of Labor had been cut by almost 30% and federal funding could potentially decline under new proposed resolutions. If H.R. 803 is enacted, there is concern by education and workforce training advocates that in time funding to programs necessary to meet these goals will be more susceptible to cuts.

Without federal funding to offset tuition and fees, costs of education and training will continue to climb and become further out of reach for many Iowans. The percentage of state funding versus out-of-pocket expense for tuition has completely reversed over the last two decades. In 1980 operating funds for community colleges consisted of 24.39% tuition and fees and 49.51% in state assistance, versus 53.98% in tuition and fees and 28.62% in state assistance in 2010 (Table 5). This trend will likely only continue to increase as state appropriations were cut in recent years and have yet to return to pre-recession levels. This trend, compounded by the greater cost associated with increased enrollments due in part to the recent economic recession, has created a greater financial gap to bridge.

Creating an even greater possible financial loss, federal sequestration could cost Iowa job-training programs an additional \$3.2 million in 2013, serving 9,000 fewer people. If unresolved by 2021, Iowa would lose \$44.1 million in funding for workforce development programs and 126,000 fewer people would have access to education and training services.

When considering the number of additional degree holders needed during this same time, the impact of sequestration alone could devastate Iowa's ability to meet that goal.

Current survey results from the Iowa BEST report indicate that two of the top three concerns of employers in the state of Iowa are related to labor. 52% of Iowa executives currently report difficulty in recruiting workers, up from 45% the year before, and that access to skilled workers is the number one reason businesses cite for not expanding in the state.

New economic development research indicates that states with access to an abundance of skilled workers will have a competitive advantage in the post-recession economy for relocating corporations and for entrepreneurial growth.

Prior to the final revisions of this report, I attended the SMART Economic Development Conference in Des Moines, Iowa on May 2, 2013. In a session about marketing to site selectors, the president of Maccallum Sweeney Consulting, a leading economic development site selection firm, shared a concrete example of this possibility. An Idaho-based mining company of Coeur d'Alene, Idaho relocated its corporate headquarters and 100 jobs to Chicago in order to access a deeper talent pool in March 2013. According to Maccallum Sweeney⁹, current research is beginning to indicate that financial incentives are less important than access to robust qualified talent pools. While these data are just beginning to emerge as retirements begin contracting workforce availability across the country, states like Iowa are already in a vulnerable position.

Iowa currently ranks 46th out of the 50 states for degree holders needed to fill the middle skills gap. While that number impacts our appeal from corporate investment, it also

⁹ This information was not shared as part of a formal presentation, but as part of a question and answer session regarding the importance of workforce programs versus financial incentive packages.

has negative implications for personal earning potential of our citizens and state revenues from taxes. If we maintain the status quo in postsecondary investment, annual personal per capita income will decrease by \$37 and will net a decline in state revenues of \$14 million by 2025. At the rate we are currently investing, Iowa's revenues could decline to \$8 million below postsecondary costs. While that number could be even lower if we don't at a minimum maintain the current levels of funding, simply continuing to appropriate funds as we are today is unacceptable and irresponsible.

If Iowa begins to invest in post-secondary education at the rates of the top-performing states, it could produce 91,000 bachelor's degrees, 110,000 associate degrees, and 44,000 certificates by 2025. Simply attaining the 60% goal would increase personal per capita income by \$1,100, generate a projected \$465 million in revenues, and have a return on investment exceeding \$320 million by 2025. While it is understandably difficult for legislators to choose areas to make additional cuts in order to expand funding to education and training programs in the short term, the long-term payoff is palpable.

The concern for Iowa's economy has created unique partnerships between business owners, educators, workforce development agencies, and community organizations determined to create solutions to the skills gap. The government's role in supporting these initiatives is crucial to the success of these programs. It is the responsibility of elected officials to listen to the needs of their constituents and to make legislative decisions based on the long-term benefit of the citizens. There is no questioning the necessity of acting with urgency to avert a possible economic crisis caused by skill shortages and working to create a stronger Iowa economy. Based on the data in this study, the most logical way to reach those goals is through increased funding to education and workforce training programs.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

5.1 Policy Recommendations Based on Conclusions

Based on the findings of this study, it is apparent that there is an observable return on investment for appropriations made to education and training programs.

For Iowa to remain a global competitor, we cannot maintain the status quo of funding education and workforce training programs. With a contracting workforce because of a disproportionate amount of retirements to new workers entering the labor force, simply increasing enrollments from K-12 to career and technical education programs will not be enough.

To meet demands of current employers, and to remain a viable candidate for additional economic growth, the state needs to increase the skilled workforce by at least 60%. This will require not only additional funding for credit programming to in-demand fields of worker shortages, but also an increased funding to adult basic education career pathways and workforce training programs including the creation of industry sector partnerships.

Without a substantial increase to all of these areas, the state of Iowa risks not only its competitive advantage for future economic development opportunities, but also losing current industry. In a post-recession economy, workforce is the primary concern for employers large and small, and if the workforce is not readily available in one region it can easily relocate those positions to areas that can meet production demands.

5.2 Limitations of This Study

While a growing number of researchers are addressing the middle skills gap, there remains a shortage of data on the direct impact these workforce shortages have had on state and local economies. Though we can see the number of positions currently held by middle skill workers and those that will be vacant in coming years, some argue that the skills gap crisis could be an exaggeration.

According to some interpretations of the same BLS data, although baby boomer retirements could imply skill shortages, some of the industries most heavily dominated by middle skills jobs are anticipated to decline while low skill jobs (such as those in food services) are expected to rise.

Policy changes can also impact forecasting. The gap in percentage of retirees versus new employees could be impacted by immigration reform or changes in Social Security that could impact retirement decisions of baby boomers. Changes in education policy are often slow, so even as changes were made to address the skills gap, it may not happen soon enough. Changes in gas prices or trade could impact offshoring or the return of jobs. And perhaps the most difficult variable to measure is that of exponential growth of advances in technology and the impacts it may have on labor needs, both in number of workers and in skill level required to meet production demands.

Another limitation is that state programs for education and workforce training contrast to a large degree, so there are few comparisons that can be made between states.

Lastly but perhaps most daunting is the inability to truly know what our future economy holds. While we currently anticipate the need for skilled workers in advanced

manufacturing, a number of economists believe we will by that time move into a more service-based economy. They believe that, due to global competition, the U.S. vying for manufacturing jobs and increasing made in the U.S.A. campaigns is counterproductive and protectionist in nature. Proponents of this argument believe that U.S. economic growth will come from investment in entrepreneurs and not manufacturing. Just as we moved from an agrarian to an industrial economy, we will see another shift in the near term if we are to remain the global economic superpower.

When dealing with any type of research that is focused more on extrapolation of data than assessment of historic and current information you poke just as many holes into an argument as you can prove. While currently there tend to be few detractors to the middle skills gap conversation some are beginning to emerge and as time goes on and competition for resources continues to be an issue, it is only natural to assume counter-arguments will begin to arise.

5.3 Recommendations for Future Research

For this particular study it will be important to continue to collect data on the success of increased participation in education and workforce training programs as they relate to business growth. While employers currently say that workforce is the primary barrier to economic growth, and economic developers highlight workforce as one of the chief components of competitive advantage, this requires more concrete evidence. If these programs are supported and workforce continues to be a challenge, lurking variables that may not be seen as part of the equation must be considered and other traditional factors like operating costs must be ruled out.

One area that would require significant data collection over the course of several years would be to compare the interaction effect between funding to education and workforce training on a state-by-state basis to growth or loss in jobs in targeted industry clusters. Another comparison could be funding to Gross State Product.

As these Career Pathways and Industry Sector Partnerships are established, it will also be critical to measure the success of these programs in terms of their economic impact. While a company not leaving an area because workforce needs were met as a result of these training programs is a counterfactual that cannot truly be measured, new business growth can be monitored for industry clusters in relation to those jobs.

Another area for research would be to focus on the decline in enrollments that have occurred in career and technical education programs. The current dialogue still focuses largely on programs targeted at funding current programming for career and technical education and training. What has been left out, possibly because of the difficulty in information gathering, is ensuring that K-12's are instilling the appropriate academic skills in students or presenting middle skills jobs as viable career options.

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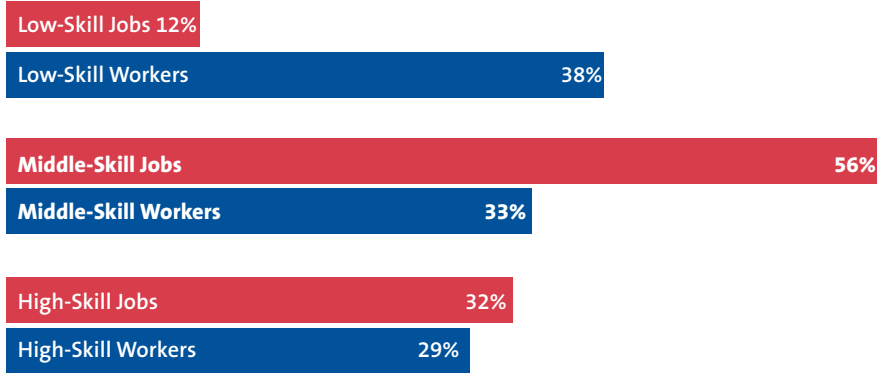
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APPENDIX

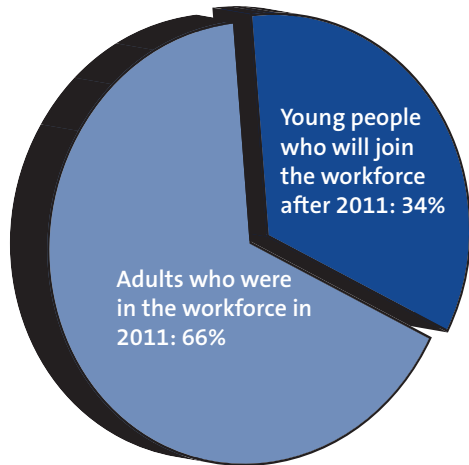
Figure 1: Iowa's Jobs by Skill Level, 2011



Source: Labor Force and Occupational Analysis Bureau, Iowa Workforce Development

Source: Iowa's Skills to Compete Coalition

Figure 2: Iowa's 2025 Workforce



Source: Prepared by Labor Force and Occupational Analysis Bureau, Iowa Workforce Development
Note: Population projections were obtained from Woods and Poole Economics, Inc.

Source: Iowa's Skills to Compete Coalition

Table 1: Projected Iowa Population Changes Ages 16 and Over, 2010 to 2020

	2010	2020 Projection	2010 to 2020 Difference
Age 16 to 24	389,705	375,805	-13,900
Age 25 to 44	747,131	804,092	56,961
Age 45 to 64	812,476	695,273	-117,203
Age 16 to 64	1,949,312	1,875,170	-74,142
Over Age 65	452,888	559,628	106,740
Total Age 16 and Over	2,402,200	2,434,798	32,598

Source: Dave Swenson

Table 2: Civilian labor force participation rates by age, gender, ethnicity 1990-2020

Group	Participation rate				Percentage-point change			Annual growth rate		
	1990	2000	2010	2020	1990-2000	2000-2010	2010-2020	1990-2000	2000-2010	2010-2020
Total, 16 years and older	66.5	67.1	64.7	62.5	0.6	-2.4	-2.2	0.1	0-4	-0.3
16 to 24	67.3	65.4	55.2	48.2	-1.9	-10.2	-7.0	-3	-1.7	-1.3
16 to 19	53.7	52.0	34.9	26.5	-1.7	-17.1	-8.4	-3	-3.9	-2.7
20 to 24	77.8	77.8	71.4	65.9	.0	-6.4	-5.5	.0	-.9	-.8
25 to 54	83.5	84.0	82.2	81.3	.5	-1.8	-.9	.1	-.2	-.1
25 to 34	83.6	84.6	82.2	80.6	1.0	-2.4	-1.6	.1	-.3	-.2
35 to 44	85.2	84.8	83.2	82.6	-.4	-1.6	-.6	.0	-.2	-.1
45 to 54	80.7	82.5	81.2	80.8	1.8	-1.3	-.4	.2	-.2	.0
55 and older	30.1	32.4	40.2	43.0	2.3	7.8	2.8	.7	2.2	.7
55 to 64	55.9	59.3	64.9	68.8	3.4	5.6	3.9	.6	.9	.6
55 to 59	67.0	68.9	73.3	76.3	1.9	4.4	3.0	.3	.6	.4
60 to 64	44.8	47.2	55.2	60.9	2.4	8.0	5.7	.5	1.6	1.0
60 to 61	55.1	57.1	62.5	64.2	2.0	5.4	1.7	.4	.9	.3
62 to 64	38.0	40.2	49.8	58.5	2.2	9.6	8.7	.6	2.2	1.6
65 and older	11.8	12.9	17.4	22.6	1.1	4.5	5.2	.9	3.0	2.6
65 to 74	16.7	19.2	25.7	31.0	2.5	6.5	5.3	1.4	3.0	1.9
65 to 69	21.0	24.5	31.5	37.8	3.5	7.0	6.3	1.6	2.5	1.8
70 to 74	11.3	13.5	18.0	22.8	2.2	4.5	4.8	1.8	2.9	2.4
75 and older	4.3	5.3	7.4	10.0	1.0	2.1	2.6	2.1	3.4	3.1
75 to 79	6.1	7.5	10.9	15.2	1.4	3.4	4.3	2.1	3.8	3.4
Men, 16 years and older	76.4	74.8	71.2	68.2	-1.6	-3.6	-3.0	-.2	-.5	-.4
16 to 24	71.8	68.6	56.8	50.6	-3.2	-11.8	-6.2	-.5	-1.9	-1.1
16 to 19	55.7	52.8	34.9	27.9	-2.9	-17.9	-7.0	-.5	-4.1	-2.2
20 to 24	84.4	82.6	74.5	69.4	-1.8	-8.1	-5.1	-.2	-1.0	-.7
25 to 54	93.4	91.6	89.3	88.1	-1.8	-1.9	-1.6	-.2	-.2	-.2
25 to 34	94.1	93.4	90.3	86.9	-.7	-3.1	-3.4	-.1	-.3	-.4
35 to 44	94.3	92.7	91.5	91.3	-1.6	-1.2	-.2	-.2	-.1	.0
45 to 54	90.7	88.6	86.8	86.0	-2.1	-1.8	-.8	-.2	-.2	-.1
55 and older	39.4	40.1	46.4	47.3	.7	6.3	.9	.2	1.5	.2
55 to 64	67.8	67.3	70.0	71.1	-.5	2.7	1.1	-.1	.4	.2
55 to 59	79.9	77.1	78.5	78.6	-2.8	1.4	.1	-.4	.2	.0
60 to 64	55.5	55.0	60.0	63.2	-.5	5.0	3.2	-.1	.9	.5
60 to 61	68.8	66.0	67.4	62.9	-2.8	1.4	-4.5	-.4	.2	-.7
62 to 64	46.5	47.0	54.6	63.4	.5	7.6	8.8	.1	1.5	1.5
65 and older	16.3	17.7	22.1	26.7	1.4	4.4	4.6	.8	2.2	1.9
65 to 74	21.4	24.6	30.4	35.1	3.2	5.8	4.7	1.4	2.1	1.4
65 to 69	26.0	30.3	36.5	41.4	4.3	6.2	4.9	1.5	1.9	1.3
70 to 74	15.4	18.0	22.0	27.0	2.6	4.0	5.0	1.6	2.0	2.1
75 and older	7.1	8.1	10.4	12.8	1.0	2.3	2.4	1.3	2.5	2.1
75 to 79	9.5	10.7	14.5	18.2	1.2	3.8	3.7	1.2	3.1	2.3
Women, 16 years and older	57.5	59.9	58.6	57.1	2.4	-1.3	-1.5	.4	-.2	-0.3
16 to 24	62.9	63.0	53.6	45.7	.1	-9.4	-7.9	.0	-1.6	-1.6
16 to 19	51.6	51.2	35.0	25.2	-.4	-16.2	-9.8	-.1	-3.7	-3.2
20 to 24	71.3	73.1	68.3	62.3	1.8	-4.8	-6.0	.2	-.7	-.9
25 to 54	74.0	76.7	75.2	74.6	2.7	-1.5	-.6	.4	-.2	-.1
25 to 34	73.5	76.1	74.7	74.2	2.6	-1.4	-.5	.3	-.2	-.1
35 to 44	76.4	77.2	75.2	74.0	.8	-2.0	-1.2	.1	-.3	-.2
45 to 54	71.2	76.8	75.7	75.7	5.6	-1.1	.0	.8	-.1	.0

See notes at end of table.

Table 2: Continued

Group	Participation rate				Percentage-point change			Annual growth rate		
	1990	2000	2010	2020	1990–2000	2000–2010	2010–2020	1990–2000	2000–2010	2010–2020
55 and older	22.9	26.1	35.1	39.3	3.2	9.0	4.2	1.3	3.0	1.1
55 to 64	45.2	51.9	60.2	66.6	6.7	8.3	6.4	1.4	1.5	1.0
55 to 59	55.3	61.4	68.4	74.1	6.1	7.0	5.7	1.1	1.1	.8
60 to 64	35.5	40.2	50.7	58.8	4.7	10.5	8.1	1.3	2.3	1.5
60 to 61	42.9	49.0	58.0	65.4	6.1	9.0	7.4	1.3	1.7	1.2
62 to 64	30.7	34.1	45.3	54.1	3.4	11.2	8.8	1.1	2.9	1.8
65 and older	8.6	9.4	13.8	19.2	.8	4.4	5.4	.9	3.9	3.4
65 to 74	13.0	14.9	21.6	27.5	1.9	6.7	5.9	1.4	3.8	2.4
65 to 69	17.0	19.5	27.0	34.5	2.5	7.5	7.5	1.4	3.3	2.5
70 to 74	8.2	10.0	14.7	19.2	1.8	4.7	4.5	2.0	3.9	2.7
75 and older	2.7	3.6	5.3	8.0	.9	1.7	2.7	2.9	3.9	4.2
75 to 79	3.9	5.3	8.2	13.0	1.4	2.9	4.8	3.1	4.5	4.7
Race:										
White	66.9	67.3	65.1	62.8	.4	-2.2	-2.3	.1	-3	-4
Men	77.1	75.5	72.0	69.0	-1.6	-3.5	-3.0	-2	-5	-4
Women	57.4	59.5	58.5	56.9	2.1	-1.0	-1.6	.4	-2	-3
Black	64.0	65.8	62.2	60.3	1.8	-3.6	-1.9	.3	-6	-3
Men	71.1	69.2	65.0	63.1	-1.9	-4.2	-1.9	-3	-6	-3
Women	58.3	63.1	59.9	57.9	4.8	-3.2	-2.0	.8	-5	-3
Asian	65.4	67.2	64.7	63.1	1.8	-2.5	-1.6	.3	-4	-3
Men	75.0	76.1	73.2	71.0	1.1	-2.9	-2.2	.1	-4	-3
Women	57.4	59.2	57.0	56.1	1.8	-2.2	-0.9	.3	-4	-2
All other race groups ¹	-	-	63.2	61.4	-	-	-1.8	-	-	-3
Men	-	-	68.7	63.4	-	-	-5.3	-	-	-8
Women	-	-	58.0	59.5	-	-	1.5	-	-	.3
Ethnicity:										
Hispanic origin	67.4	69.7	67.5	66.2	2.3	-2.2	-1.3	.3	-3	-2
Men	81.4	81.5	77.8	75.9	.1	-3.7	-1.9	.0	-5	-2
Women	53.1	57.5	56.5	56.1	4.4	-1.0	-4	.8	-2	-1
Other than Hispanic origin	66.4	66.7	64.2	61.7	.3	-2.5	-2.5	.0	-4	-4
Men	75.9	73.9	70.0	66.5	-2.0	-3.9	-3.5	-3	-5	-5
Women	57.9	60.2	59.0	57.3	2.3	-1.2	-1.7	.4	-2	-3
White non-Hispanic	66.8	66.9	64.6	62.0	.1	-2.3	-2.6	.0	-3	-4
Men	76.5	74.6	70.7	67.2	-1.9	-3.9	-3.5	-3	-5	-5
Women	57.8	59.8	58.9	57.2	2.0	-0.9	-1.7	.3	-2	-3

¹ The "all other groups" category includes (1) those classified as being of multiple racial origin and (2) the racial categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

NOTE: Dash indicates no data collected for category. Details may not sum to totals because of rounding.
SOURCE: U.S. Bureau of Labor Statistics.

Source: Iowa Workforce Development

Table 3: Impact of Sequestration on Funding to Iowa Workforce Development Programs

Program	FY 2012 Funding	FY 2013 Estimated Sequester	Fewer People Served
Workforce Investment Act (WIA) ⁱⁱ	\$14,029,292	\$715,494	1,320
Career and Technical Education (CTE) ⁱⁱⁱ	\$11,963,946	\$0	0
Adult Basic Education (ABE)	\$3,679,858 ^{iv}	\$240,230 ^v	268 ^{vi}
Vocational Rehabilitation (VR)	\$31,435,956 ^{vii}	\$1,944,723 ^{viii}	520 ^{ix}
Wagner-Peyser Employment Services ^x	\$6,439,570	\$328,418	7,311
TOTAL	\$67,548,622	(\$3,228,865)	(9,419)

Source: National Skills Coalition, 2013

Table 4: 2012 BEST Report Findings for Iowa's Weaknesses

Community Weaknesses			Table O			
NADS	Iowa '12	Category	NADS	Iowa '10	Iowa '11	Iowa '12
1	1	Transportation	12.01%	11.13%	11.09%	11.38%
2	2	Labor – Skilled	11.30%	9.05%	7.33%	10.65%
8	3	Labor - Other	4.71%	4.68%	4.55%	7.29%
3	4	Business Climate	8.19%	3.33%	4.26%	6.31%
11	5	Quality of Life	3.30%	6.35%	6.83%	5.08%
4	6	Cost of Doing Business	6.24%	7.39%	4.46%	4.91%
10	7	Community Leadership	3.71%	3.54%	2.28%	3.44%
5	8	Location	5.33%	4.89%	4.26%	3.19%
7	9	Government Services	4.95%	2.29%	2.87%	3.03%
14	10	Labor - Unskilled	2.06%	1.66%	1.78%	2.95%
6	11	Infrastructure Poor	5.06%	3.95%	2.38%	2.29%
13	12	Customer Supplier Access	2.42%	1.77%	2.87%	1.88%
17	13	Affordable Housing	1.73%	1.46%	1.29%	1.47%
9	14	Education System	3.79%	1.46%	1.19%	1.31%
12	14	Business Services	2.85%	1.77%	2.18%	1.31%
15	16	Cost of Living	1.85%	0.52%	0.69%	1.15%
15	17	Community Services	1.85%	0.62%	2.38%	0.90%
18	18	Labor - Employee Work Ethic	1.44%	0.42%	0.40%	0.82%
20	19	Land Availability	1.04%	1.14%	1.09%	0.74%
19	20	Building Availability	1.26%	0.83%	0.50%	0.41%
21	21	Residential Encroachment	0.32%	0.10%	0.10%	0.08%
		Other	30.05%	24.66%	22.28%	31.29%

Source: Blane Canada Research 2012

Table 5: General Operating Fund Revenues by Source and Percentage

Fiscal Year	Tuition & Fees	Local	State	Federal	Other Income
1980	\$57,850,572	\$28,665,727	\$117,446,861	\$26,458,299	\$6,803,100
1985	\$80,270,403	\$27,747,076	\$117,698,326	\$15,946,093	\$11,516,076
1990	\$100,491,244	\$25,164,426	\$149,650,961	\$16,409,135	\$14,678,294
1995	\$128,004,802	\$22,218,902	\$166,473,741	\$14,020,106	\$15,966,774
2000	\$155,124,828	\$23,343,945	\$181,741,604	\$13,605,955	\$26,589,343
2001	\$156,535,362	\$23,480,794	\$182,627,668	\$13,636,781	\$25,065,792
2002	\$176,096,822	\$24,022,217	\$168,340,080	\$14,111,176	\$23,016,680
2003	\$188,306,210	\$24,104,846	\$165,270,860	\$14,570,406	\$24,150,249
2004	\$202,768,423	\$24,070,687	\$160,163,632	\$15,034,606	\$35,819,105
2005	\$218,173,385	\$22,694,764	\$158,827,192	\$14,085,380	\$29,059,100
2006	\$216,276,057	\$22,276,578	\$163,450,506	\$13,452,433	\$33,311,200
2007	\$222,086,584	\$22,944,193	\$170,830,110	\$12,791,154	\$38,829,871
2008	\$226,513,407	\$22,506,128	\$176,530,318	\$12,026,996	\$39,776,556
2009	\$243,503,827	\$23,753,701	\$185,051,063	\$12,251,098	\$26,198,052
2010	\$280,576,464	\$24,287,204	\$148,754,233	\$34,904,942	\$31,257,259

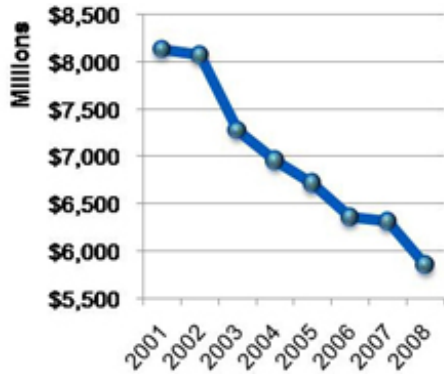
Fiscal Year	Tuition & Fees	Local	State	Federal	Other Income
1980	24.39%	12.08%	49.51%	11.15%	2.87%
1985	31.71%	10.96%	46.49%	6.30%	4.55%
1990	32.80%	8.21%	48.84%	5.36%	4.79%
1995	36.92%	6.41%	48.02%	4.04%	4.61%
2000	38.74%	5.83%	45.39%	3.40%	6.64%
2001	39.00%	5.85%	45.50%	3.40%	6.25%
2002	43.42%	5.92%	41.51%	3.48%	5.67%
2003	45.22%	5.79%	39.69%	3.50%	5.80%
2004	46.31%	5.50%	36.58%	3.43%	8.18%
2005	49.27%	5.12%	35.87%	3.18%	6.56%
2006	48.19%	4.96%	36.42%	3.00%	7.42%
2007	47.51%	4.91%	36.54%	2.74%	8.31%
2008	47.45%	4.71%	36.98%	2.52%	8.33%
2009	49.62%	4.84%	37.71%	2.50%	5.34%
2010	53.98%	4.67%	28.62%	6.72%	6.01%

Source: 1980 through 2009 data taken from the 2010-2011 Academic Year, Iowa's Community College Tuition and Fees Report issued September 2010 (source: AS-15E's Fund 1). Annual Report Fiscal Year 2010 (AS-15E) Unrestricted General Fund, Fund 1.

Note: Amounts Are Adjusted for inflation to 20120 levels using July from the Consumer Price Index-Urban Revenues for unrestricted funds only.

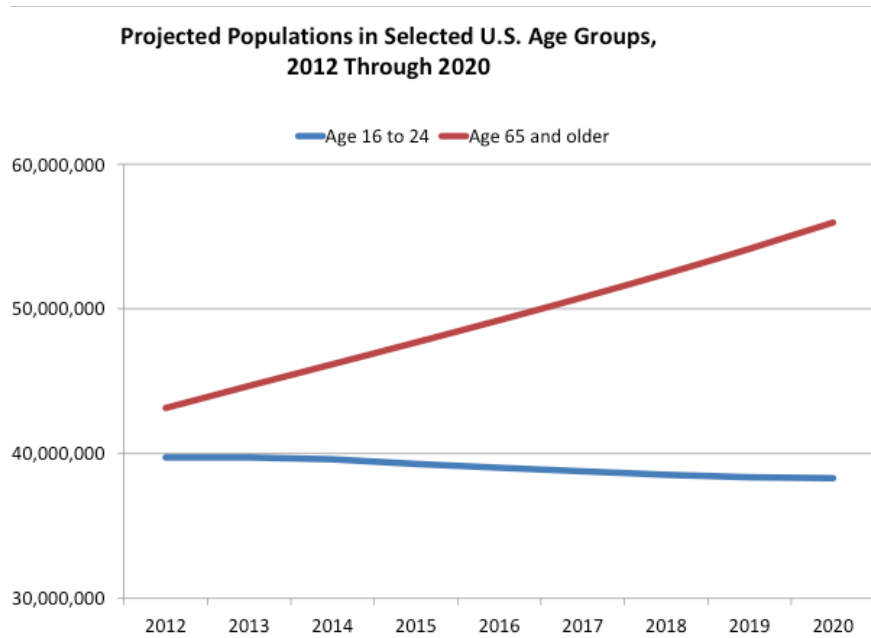
Source: Iowa Department of Education Fees and Tuition Report

Figure 3: Federal Funding for Training Programs in Millions (USD)



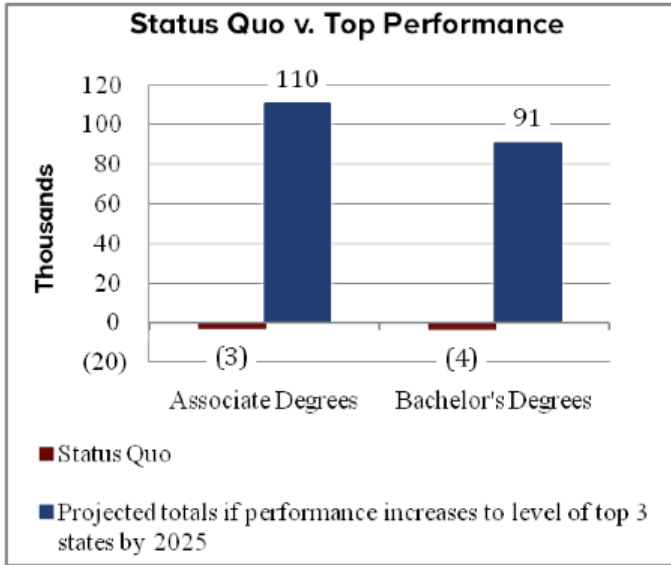
Congressionally enacted funding for key Department of Labor training programs, adjusted for inflation
 Source: National Skills Coalition

Figure 4: Projected Populations



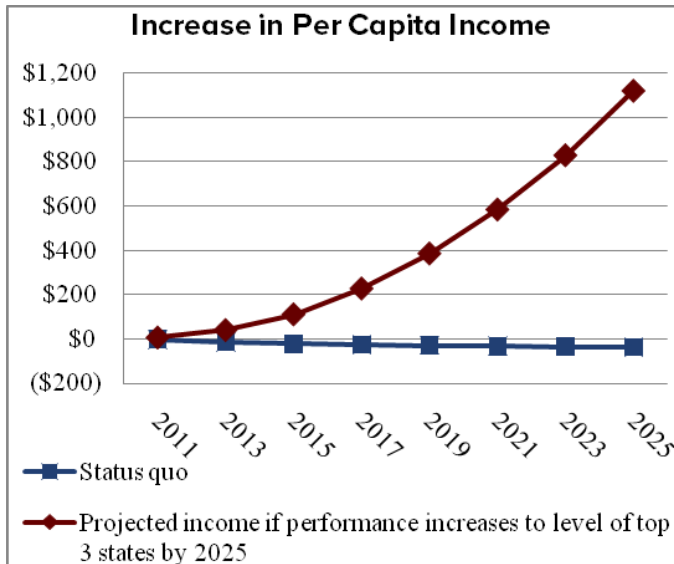
Source Dave Swenson

Figure 5: Status Quo versus Top Performance



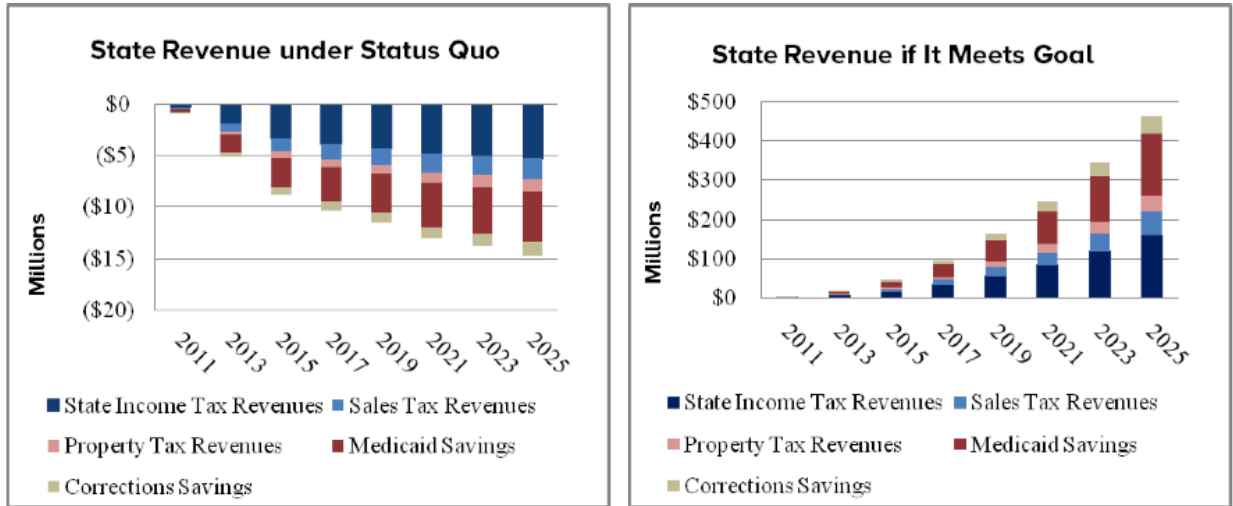
Source: Center for postsecondary and economic success [Fact sheet]

Figure 6: Increase in Per Capita Income



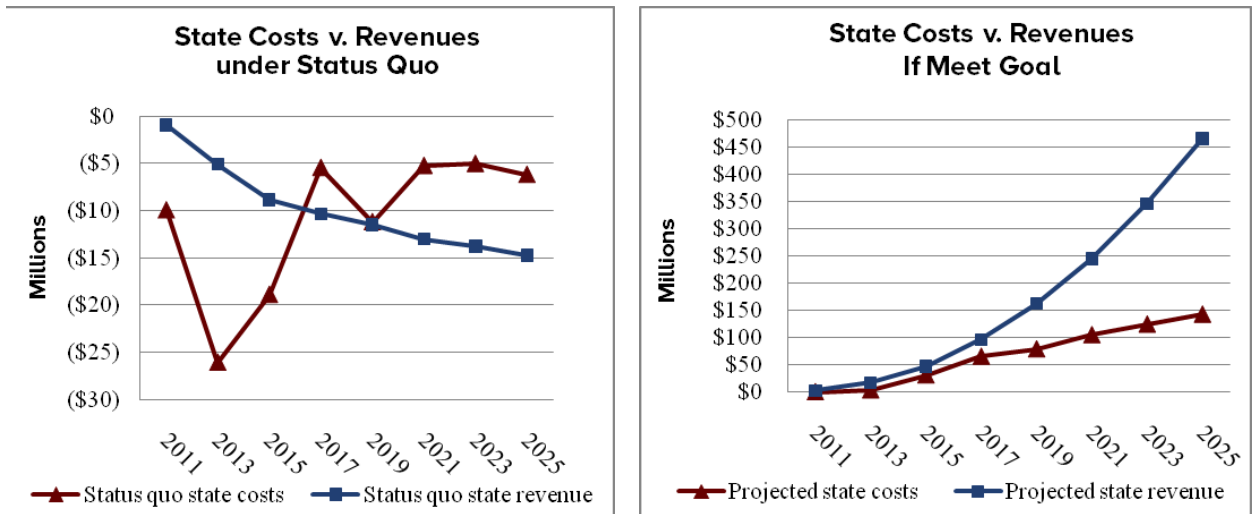
Source: Center for postsecondary and economic success [Fact sheet]

Figure 7: State Costs versus Revenue Comparison for Status Quo versus Goal



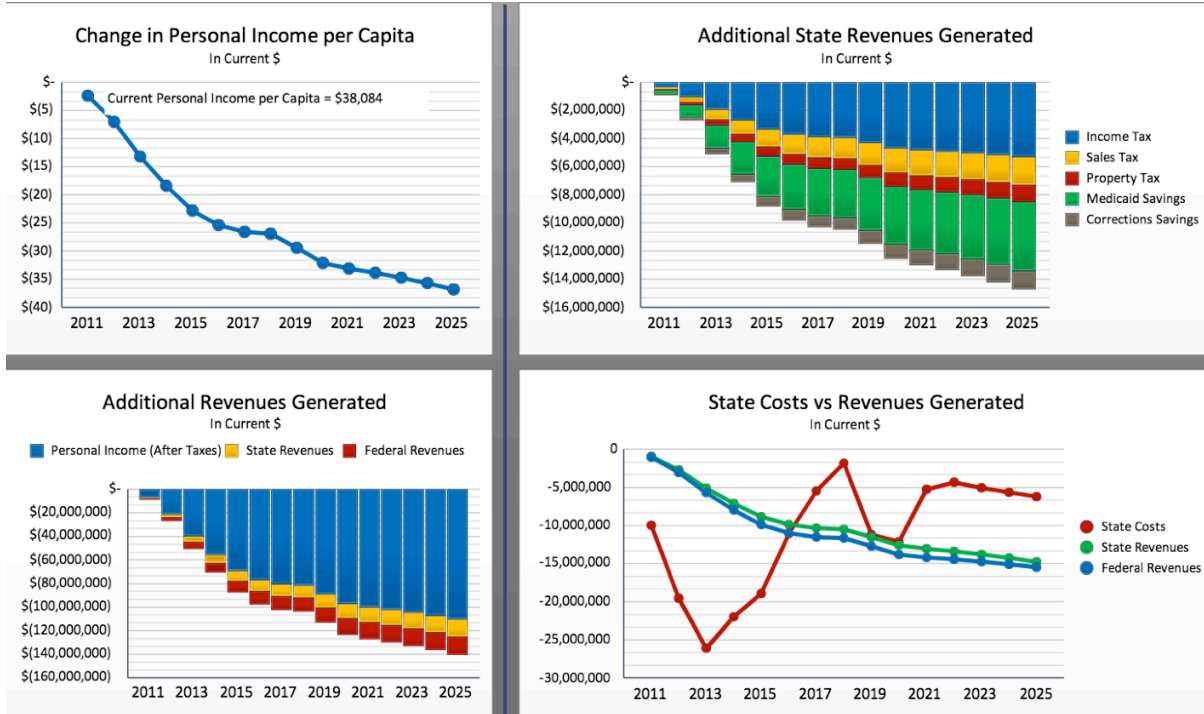
Source: Center for postsecondary and economic success [Fact sheet]

Figure 8: State Costs versus Revenue Comparison for Status Quo versus Goal ROI



Source: Center for postsecondary and economic success [Fact Sheet]

Figure 9: Returns on Investment if additional 108, 807 degrees attained








































Source Iowa: the return on investment to increasing postsecondary credential attainment [Factsheet]

Figure 10: Skills 2014 Respondents by Industry Sector

Industry Sector	Percent of Respondents
Advanced Manufacturing	25%
Bioprocessing/Biotechnology	6%
Consumer Products	8%
Education	8%
Information Solutions	16%
Government	5%
Health Care	7%
Logistics/Distribution	7%
Packaging/Plastics	6%
Printing	2%
Trades	2%
Other Selected Industries	8%

Source: Skills 2014 Report. Corridor Alliance and Kirkwood Community College

Figure 11: Bureau of Labor and Statistics Screenshot

Database Name	Special Notice	Top Picks	One Screen	Multi-Screen	Tables	Text Files
Monthly						
Employment, Hours, and Earnings - National (Current Employment Statistics - CES)	 SPECIAL NOTICE	 TOP PICKS	 ONE-SCREEN DATA SEARCH	 MULTI-SCREEN DATA SEARCH	 TABLES	 TEXT FILES
Employment, Hours, and Earnings - State and Metro Area (Current Employment Statistics - CES)	 SPECIAL NOTICE	 TOP PICKS	 ONE-SCREEN DATA SEARCH	 MULTI-SCREEN DATA SEARCH	 TABLES	 TEXT FILES
Labor Force Statistics (Current Population Survey - CPS)		 TOP PICKS	 ONE-SCREEN DATA SEARCH		 TABLES	 TEXT FILES
Job Openings and Labor Turnover Survey (JOLTS)	 SPECIAL NOTICE	 TOP PICKS	 ONE-SCREEN DATA SEARCH	 MULTI-SCREEN DATA SEARCH		 TEXT FILES
Quarterly						
State and County Employment and Wages (Quarterly Census of Employment & Wages - QCEW)		 TOP PICKS	 ONE-SCREEN DATA SEARCH	 MULTI-SCREEN DATA SEARCH		 TEXT FILES
Business Employment Dynamics (BDM)		 TOP PICKS		 MULTI-SCREEN DATA SEARCH		 TEXT FILES
Annual & Other						
Employment and Wages from Occupational Employment Statistics (OES) survey				 MULTI-SCREEN DATA SEARCH	 TABLES	 TEXT FILES
American Time Use Survey (ATUS)					 TABLES	 TEXT FILES
Union Affiliation Data (Current Population Survey - CPS)		 TOP PICKS	 ONE-SCREEN DATA SEARCH		 TABLES	 TEXT FILES

Source: US Bureau of Labor and Statistics <http://www.bls.gov/data/>