



# Credentials of Opportunity

Better jobs, better employment &  
better outcomes for Indiana



## Executive Summary

**A**t a time when Indiana faces the need to educate its workforce to fill the skills gap, sub-baccalaureate credentials can have a powerful impact. Credentials, often in the form of certificates or certifications earned through community colleges, give students the skills necessary to compete for high-demand jobs that Indiana employers have a hard time filling. By providing critical supports for credential programs, Indiana would be poised to become a national leader and provide better jobs, better employability and better outcomes for the state.

In order to achieve Lumina Foundation’s “big goal” of increasing the percentage of Americans with high-quality degrees and credentials to 60 percent by the year 2025, Indiana must provide students with access to credential programs, which not only create access to self-sustaining careers, but also can provide pathways to further post-secondary education and degrees.

In this report, we examine current research and policies related to credentials and financial aid, throughout all 50 states, and put forth a set of best practices that Indiana can use to best tap into the opportunities that credentials can have for the state.

Our original research for this report includes data about credential programs collected from each public institution in the state. We connected each credential to the jobs they lead to, as well as data regarding financial aid eligibility, and industry and education-related outcomes.

Our findings include illuminating information about the powerful impact that credentials can have for students, employers and their communities. Dozens of credentials lead to jobs with entry-level wages that are at or above the median for the state. Hundreds more credentials lead to jobs on the high-demand ‘Hoosier Hot 50’ list and/or lead to career-boosting state licenses and industry-recognized exams. Surprisingly, though, some of the most high-impact credentials requested by employers are not currently eligible for financial aid. This report breaks down these and other results from our data research.

### Acknowledgements

- Carl Davis, Senior Policy Analyst at the Institute on Taxation and Economic Policy
- Markus Kolb, Program Officer at Lumina Foundation for help with Methodology
- University partners at Indiana University, Indiana State, Ivy Tech, Purdue, University of Southern Indiana and Vincennes University
- Indiana Chamber of Commerce for help linking credentials with job outcomes for methodology
- Lora Olive for the graphic design of the report
- Indiana Institute for Working Families Advisory Committee for their time and valuable feedback
- Indiana Community Action Association’s Board of Directors and Staff, who provide support for the Institute and its work

## Introduction

To best compete in an increasingly competitive global economy, Indiana must assure employers that our state has a skilled workforce that can meet the current and future needs of businesses. In part to help meet those needs, the Lumina Foundation for Education has set a “big goal” of increasing the percentage of Americans with high-quality degrees and credentials to 60 percent by the year 2025. The Indiana Commission for Higher Education has adopted this same goal in their strategy for the state. Both organizations hope that by 2025, the state will have doubled the amount of degrees it awards each year and that 60 percent of Hoosier adults will have a postsecondary credential. While the state will have to increase all levels of educational attainment if it hopes to reach the “big goal” by 2025, Indiana would be poised to become a national leader and provide better jobs, better employability and better outcomes by providing critical supports for credential programs.

**“Certificates can position graduates for immediate workforce success, while establishing solid foundations for future academic achievement.”—Certificates Count <sup>1</sup>**

Credentials are becoming increasingly valuable to attain in our current labor market. Credentials also serve as an important entry point to the postsecondary education system for many nontraditional students. And yet, until very recently, little was known about sub-baccalaureate credentials: in fact few could define what they were, and little data was being collected regarding their enrollment numbers, completion rates, or workforce outcomes.

In the last few years several studies have attempted to define and categorize sub-baccalaureate credentials and to better understand their outcomes and evaluate their value to the students who attain them. This study will distinguish credentials from certificates and other post-secondary programs and labor and industry-related terms. We will explore definitions later in this report, but support the following understanding that certificates are the “completion of a course of study based on a specific field, usually associated with a limited set of occupations” and “take place in the classroom, mainly in public, two-year schools or private, for-profit, non-degree granting business, vocation, technical, and trade schools.”<sup>2</sup>

The main focus of this study is to determine which sub-baccalaureate credentials hold the most value for Indiana’s students, and therefore are good investments for state support. For these purposes, it is also helpful to talk broadly about what type of sub-baccalaureate credentials should be sought by Hoosier students. According to the definition established by the Federal, Employment and Training Administration’s Training and Employment Guidance Letter No. 15-10 (TEGL), the term ‘credential’ is used as an umbrella term to include postsecondary degrees, diplomas, licenses, certificates, and certifications. For the purposes of state investment, all credentials that meet this letter’s guidance as a “Career-Enhancing Credential” should be eligible for financial aid and other forms of state investment. The attributes for credentials recommended by the TEGL are also endorsed by this report and will be discussed in greater detail later in this report.

While not listed in the TEGE, certificates and certifications - especially those funded with state investment - should lead to a family-sustaining wage as Indiana faces its highest poverty rate in five decades. In this study, the wage for self-sustainability has been set at Indiana's median individual earnings, calculated for 2011 by the U.S. Census Bureau's American Community Survey. This annual wage is \$27,618.

This study will review the current wealth of research regarding the attributes of sub-baccalaureate credentials. Additionally the study will examine the public credential programs in Indiana and evaluate what value they might hold for students who earn them. They will be evaluated based on:

- the jobs they lead to;
- the wages that can be earned;
- whether they are stackable to higher postsecondary degree attainment, and;
- whether they lead to an industry-recognized exam or a state licensure, and are therefore portable.

Finally, this study will make recommendations regarding both the study of Indiana's certificate and credential programs and the most effective ways that state investments can support the attainment of sub-baccalaureate credentials.

## The Challenge: Filling the Skills Gap with Self-Sustaining Jobs

Like much of the nation, Indiana finds itself with a pair of challenges that must be met in order to complete its economic recovery. In a climate where far fewer than 60 percent of Hoosiers have a post-secondary degree or certification that can help put them in a self-sustaining career, so too do employers face a shortage of workers who hold the necessary skills to close the 'skills gap'.

In the Institute's 2010 report, *Indiana's Forgotten Middle Skill Jobs*, "we found that middle-skill jobs—those that require more than a high school diploma, but less than a four-year degree—represented the largest share of jobs in Indiana, and would continue to make up a substantial share of future openings. In fact, more than 487,000 "middle-skill" job openings are projected for the state by 2016. In 2009, middle-skill jobs made up 55 percent of all jobs in the state, however only 49 percent of our workforce had the skills necessary to fill those positions."<sup>3</sup> Indiana's employers feel the skills gap acutely as well. As we'll discuss in length later in this report, employers are actively seeking workers for middle-skill jobs.

The need for middle-skill jobs in Indiana has roots stretching back for decades. As we reported in 2009, "Historically, Indiana was economically competitive – despite low educational attainment levels – due to the fact that manufacturing was once, and continues to be, a leading industrial sector of the state's economy. However, manufacturing jobs are no longer as plentiful in the state and as a result a high school diploma is no longer a sufficient credential to find and maintain a job that pays a self-sufficient wage. In 1950, 80 percent of all jobs were classified as "unskilled," requiring minimal education, meaning a high school diploma or less. Today, it is estimated that 85 percent of all jobs are classified as "skilled" and require education or training beyond a high school diploma."<sup>5</sup>

While the purpose of this report is not to recommend certificates and certifications over longer-term post-secondary options (such as associate or bachelor degrees), we do want to explore the possible benefits of this specific set of credentials. And while we would not discourage students from pursuing those longer-term degrees, we want to make a clear case for the role of sub-baccalaureate credentials in the spectrum of post-secondary education.

By tapping the potential of sub-baccalaureate credentials, Indiana has a key opportunity within reach to match the needs of middle-skills jobs and fill the skills gap. However, the opportunity will not fall into place automatically. Employers, educators and policymakers must first understand what makes for high-quality, high-return credentials and then proceed to utilize this opportunity.

## Literature Review: defining credentials and their benefits

### Definitions

Evidence is building regarding the value of credential programs. In the past few years, numerous studies have been published that provide analysis on various aspects of credential quality or value in the labor market. In this section, we will utilize contemporary research to seek the best definitions of certificates and other sub-baccalaureate credentials and to discuss the criteria that make those credentials valuable for students and states.

Pinning down the definition of exactly what is a sub-baccalaureate credential can be a challenging and elusive task in itself. There are many terms that are thrown around seemingly interchangeably, each of which may mean something different depending on the audience. *Certificates, Certifications, Credentials, Apprenticeships and Licenses* are the most common of these terms that are mistaken for one another.

### Certificates:

This study finds the definition of certificate put forth by the recent Georgetown study “Certificates: Gateway to Gainful Employment and College Degrees” to be the most apt. The study makes the distinction between certificates and certifications.

**“Certificates are recognition of completion of a course of study based on a specific field, usually associated with a limited set of occupations. Certificates differ from other kinds of labor market credentials such as industry-based certifications and licenses, which typically involve passing an examination to prove a specific competency, completing an apprenticeship or attending company or government training programs. Certificate programs take place in the classroom, mainly in public, two-year schools or private, for-profit, non-degree granting business, vocation, technical, and trade schools.”<sup>2</sup>**

## Certificate by Program Length.

Certificates with value vary in length from a few months to several years. Most often, certificates are classified by the amount of instructional time re-quired to complete a program of study:

- **Short-term certificates** require less than one year of instructional time.
- **Medium-term certificates** require one to two years of instructional time.
- **Long-term certificates** require two to four years of instructional time.<sup>2</sup>

### *Certification*

When workforce-development certification training occurs through a community college, it tends to be offered for no college credit, or is “non-credit” bearing. Ivy Tech Community College, Indiana’s largest community college network, does provide a substantial amount of non-credit workforce training. In addition, Ivy Tech has created ‘crosswalks’ that allow students to be awarded credit toward a credit-bearing program of study if they have attained certification through a competency-based examination.

### *Licenses*

are usually awarded by state agencies to professionals in a variety of fields and occupations, among practitioners with varying levels of post-secondary educational attainment. The requirements for these licenses are usually determined by a state board of professionals and experts in the field. Not all professions require state licensure. One can be a certified welder, and not necessarily licensed, if the state that person received certification does not *license* welders. Additionally, professionals with advanced or graduate degrees may be required to attain and maintain state licensure. Due to this ambiguity in scope and level of educational attainment, state licensure should not be used as a proxy or synonym for the attainment of certificates or certifications. However, as will be discussed in the section dealing with Indiana-specific data, a licensure requirement can be useful when discussing the value of certificates in Indiana.

### *Apprenticeship*

The Department of Labor describes an apprenticeship as “a training system that combines job related technical instruction with structured on-the-job learning experience.” “The ‘Earn and Learn’ training model of Registered Apprenticeship provides a unique combination of structured learning with on-the-job training from an assigned mentor. Related instruction, technical training or other certified training is provided by apprenticeship training centers, technical schools, community colleges, and/or institutions employing distance and computer-based learning approaches.” “Upon completion of a Registered Apprenticeship program, participants receive an industry issued, nationally recognized credential that certifies occupational proficiency, is portable, and can provide a pathway to the middle class. In many cases, these programs provide apprentices with the opportunity to simultaneously obtain secondary and post-secondary degrees.”<sup>4</sup>

### *Credentials*

are the most ambiguous of the terms, often used as an umbrella term for a variety of different levels of educational attainment. According to the Federal, Employment and Training Administration's Training and Employment Guidance Letter No. 15-10, the term credential "refers to a verification of qualification or competence issued to an individual by a third party with the relevant authority or jurisdiction to issue such credentials (such as an accredited educational institution, an industry recognized association, or an occupational association or professional society)" and includes such educational attainment as, postsecondary degrees, diplomas, licenses, certificates, and certifications.<sup>5</sup>

Note: our Findings and Recommendations section will discuss how these characteristics were incorporated as variables into the Indiana-specific data. However, this study is only concerned with credentials that are "sub-baccalaureate degree" meaning certificates, certifications, and apprenticeships. From this point in this study, the term credential only refers to these sub-baccalaureate degree levels of attainment. We will henceforth use the term 'certificate' and 'certification' only when referring to those specific sub-divisions of the umbrella term 'credential', or when specifically quoting other reports.

The TEGL goes on to create classifications which they call "Career-Enhancing Credentials." The attributes of these credentials are; **industry-recognized, stackable, portable, and accredited.** We find the attributes assigned to "career-enhancing credentials" to be useful in terms of their usefulness to students and employers and to what degree they are worthy of public investment. The Department of Labor describes these attributes as follows:

### ***Industry-Recognized***

An industry-recognized credential is one that is either developed and offered by, or endorsed by, a nationally-recognized industry association or organization representing a sizeable portion of the industry sector. An industry-recognized credential can also be one that is sought or accepted by companies within the industry sector for purposes of hiring or recruitment. The hundreds of certifications that exist within the information technology (IT) industry are a very good example. There are multiple industry associations, and there are multiple product vendors that offer personnel certifications. The workforce investment system operating in a local area needs to interface with employers to determine what IT credentials are in demand by local employers that are hiring.

### ***Stackable***

A credential is considered stackable when it is part of a sequence of credentials that can be accumulated over time to build up an individual's qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs. For example, one can stack a high school diploma, an associate's degree, and then typically obtain two more years of appropriate postsecondary education to obtain a bachelor's degree. An individual can also stack an interim career/work readiness or pre-apprenticeship certificate, then complete an apprenticeship, and later earn a degree or advanced certification.

### ***Portable***

A credential is considered portable when it is recognized and accepted as verifying the qualifications of an individual in other settings - either in other geographic areas, at other educational institutions, or by other industries or employing companies.

### ***Accredited***

The goal of accreditation of educational programs is to ensure that the education provided by institutions of higher education meets acceptable levels of quality. The U.S. Department of Education maintains a website on "Accreditation in the United States" that provides lists of regional and national accrediting agencies recognized by the U.S. Secretary of Education as reliable authorities concerning the quality of education or training offered by the institutions of higher education or higher education programs they accredit. Students using federal financial aid must enroll in institutions or programs that are accredited by the appropriate regional or national accrediting agency.<sup>5</sup>

## What makes a credential valuable?

Credentials have overlapping value to individuals, businesses, and states. These values can be measured through increased wages, improved skills, filled job vacancies, and increased economic participation and state tax revenue.

Recent research has attempted to quantify what types of credentials provide the best return for students. In the case of certificates, several studies have found that long-term certificates have greater value in the labor market than do short-term certificates. The Certificates Count study found that certificates of a year or more are consistently linked to increased earnings. Also, a study in Kentucky found income increases for those that completed a certificate of at least one year were almost the same as for those that completed an associate's degree.<sup>1</sup>

The most recent study on this issue, 'Certificates: Gateway to Gainful Employment and College Degrees' (Gateway) found that whether or not a certificate holder is employed in the same field of work as their field of study has a greater impact on future earnings than the length of the program itself. Certificate holders who work in fields related to their certificate earn 31 percent more than those who do not. Nursing, allied healthcare, technology, construction trades, and mechanic/repair trades yield better returns on investment than those in service occupations or the humanities.<sup>1</sup>

### Certificate Holders Who Work In-Field Receive An Earnings Premium

Field of Study	Share of certificates	Share in field	In-field earnings	In-field earnings premium
All		44%	\$40,420	37%
Computer and Information Services	9%	15%	\$70,400	115%
Aviation	1%	40%	\$65,642	73%
Police/Protective Services	2%	46%	\$55,499	68%
Business/Office Management	17%	62%	\$40,000	66%
Electronics	6%	42%	\$61,668	60%
Drafting	1%	44%	\$59,592	56%
Transportation and Materials Moving	5%	58%	\$44,336	38%
Healthcare	21%	54%	\$30,577	35%
Auto Mechanics	9%	46%	\$45,586	30%
Construction Trades	8%	42%	\$50,989	25%
Refrigeration, Heating, or Air Conditioning	4%	38%	\$53,850	18%
Cosmetology	11%	23%	\$25,217	9%
Agriculture/Forestry/Horticulture	1%	20%	\$47,800	8%
Metalworking	4%	49%	\$45,040	2%
Food Service	2%	31%	\$17,600	-41%

Source: Survey of Income and Program Participation (SIPP), Certificates: Gateway To Gainful Employment and College Degrees p. 23

## The Benefits of Certificates

Questions regarding the benefits of sub-baccalaureate credentials and certificates should be dwindling. Recent studies have highlighted the benefits of attaining a credential in today's labor market. Credentials lead to **better jobs, better employability, and better revenue and outcomes**. These benefits positively impact workers and their families, employers and their communities, and the state and its long-term finances. Credentials provide a quick educational turnaround, they can lead to good paying careers, and they can promote continuance onto higher levels of postsecondary education when stackable into a degree. Some state-level studies have found that “overall, high quality certificate programs can significantly boost the likelihood of student academic and career success.”<sup>1</sup>

## Better Jobs

The Gateway study referred to earlier, is the most comprehensive review of the benefits of certificate achievement on a national level. According to the study high school graduates who attain a certificate earn 20 percent more than those who do not. While data is not available to concretely track the value of this wage increase over the course of one's working life, estimates suggest that certificate holders could earn as much as \$240,000 more over their lifetime, than those with only a high school diploma.<sup>1</sup>

Translating these returns into dollar amounts (2008 dollars) suggests that the annual earnings return to ‘diplomas’ (the term used in Kentucky for certificates of one year or more) in the Kentucky Community & Technical College System was about \$8,000 per year for women and \$7,000 per year for men.<sup>1</sup>

Over the long term, credentials and the gateway to other post-secondary degrees that they bring can have a major impact on lifetime earning potential. While high school graduates have estimated lifetime earnings of \$1,767,025 those with “some college” earn \$2,239,548 and those with associate's degrees earn \$2,254,765. Certificates can also put students on the path to a bachelor's degree, which increases the lifetime earnings to \$3,380,060.<sup>1</sup>

The Gateway report also found “certificate holder's field (or program) of study can also influence earnings, especially if they work in an occupation related to their training.” A striking example of this effect is “computer and information services, [in which] men working in field earn \$72,498 per year, which is a higher salary than 72 percent of men with an Associate's degree and 54 percent of men with Bachelor's degrees. Women with certificates in this field and working in a related occupation earn \$56,664 annually, which is greater than 75 percent of women with an associate's degree and 64 percent of women with a bachelor's degree.”<sup>2</sup>

While many factors impact the wages of workers with certificates, it is clear that certificates can pay off, sometimes as much as, or more than, a degree. These results are influenced by whether students work in the field of their certificate program. Wages can also be affected by gender, as men not only earn more than women with the same certificates but also gain a larger wage premium over a high school diploma.

**“Some certificate holders earn as much as or even more than workers with college degrees. Among male certificate holders, 39 percent earn more than the median male with an Associate’s degree, and 24 percent earn more than the median male with a Bachelor’s degree. Among female certificate holders, the numbers are comparable: 34 percent earn more than female Associate’s degree holders, and 23 percent earn more than female Bachelor’s degree holders.”<sup>1</sup> –Certificates Count**

Certain fields make especially strong payoffs for students. The National Center for Higher Education Management Systems (NCHEMS) found that at Purdue, certificates in Science, Technology, Engineering and Math (STEM) fields resulted in wages 24 percent above those of the median bachelor degrees (but below the wages of STEM bachelor’s degrees). This suggests that certain highly focused certificates in high-demand fields are a viable option that can even compete with the payoffs of four-year degrees. Far from discouraging students from seeking longer-term degrees, credentials that have pathways to these degrees have additional value beyond what is described in this section.<sup>6</sup>

## **Better Employability: jobs and increased demand for skilled labor**

Credentials make those who hold them more employable, and help match workers to jobs that employers are trying to fill. In general, credentials and certificates of longer duration have the greatest impact on employability. The Certificates Count report found that two-year certificates in Kentucky can result in even greater employability gains than do associate’s degrees. And while shorter-term certificates have a less pronounced effect on employability, they nonetheless have a positive impact on their holders’ ability to find jobs. “This research was also able to draw important conclusions about the impact of community college awards on the probability on employment. It estimated that associate’s degrees are associated with a 10.8 to 12.5 percent increase in employment for men and a 16.7 to 18.2 percent increase for women but diplomas had an even more positive effect – 13.7 to 15.4 for men and 16.6 to 20.1 for women. [One-year certificates] were found to contribute positively to the probability of employment – 3.9 to 5.2 percent for men and 5.9 to 7.2 for women – but not at all to the same degree as [two-year certificates] and associate degrees.”<sup>1</sup>

While official labor statistics consistently underestimate the demand for post-secondary education and training, national and state business leaders are specifically asking for more applicants with credentials to supply needed skills. The Indiana Chamber of Commerce has provided a powerful testament to the demand for certificate-holders in the labor market. In their list ‘Top 10 Certifications Requested by Indiana Employers’, employees sought out certificates in nine of the ten entries most-requested in job ads, with the only exception being Registered Nurses (which requires an Associate’s Degree). In total, over **70 percent of job ads in the Chamber of Commerce’s Top Certifications list ask for a certificate.**<sup>7</sup>

## Top 10 Certifications Requested by Indiana Employers

Certification	Number of Requests in Job Ads (January 2010 - October 2011)
Registered Nurse	7,904
First Aid CPR AED	3,744*
Commercial Driver's License	3,409*
CDL Class A	2,496*
Certified Nursing Assistant	2,211*
License Practical Nurse (LPN)	2,193*
Forklift Operator Certification	1,810*
Automotive Service Excellence Certification (ASE)	1,524*
Basic Cardiac Life Support Certification	736*
Phlebotomy Certification	610*

\*=job ads requiring a certificate (source: Indiana Chamber of Commerce via [www.indianaskills.com](http://www.indianaskills.com))

## The Changing Labor Market Demand

There can be no doubt that the demand in the labor market for higher skills is permanent. Not only has there been an overall increase in demand for more education and skills, but that demand is especially concentrated in areas that did not previously require post-secondary education. The 'Help Wanted' study found that "[o]ver the past several decades, about 70 percent of the increase in requirements for postsecondary training has stemmed from upgrades in skills demanded by occupational categories that previously did not require higher education." The study goes on to describe job titles and categories, such as manufacturing foremen, once rarely required post-secondary education, but now employers increasingly demand more than just a high school diploma. The study goes on to report that the percentage of workers with post-secondary education increased from 28 percent in 1973 to 59 percent in 2007, and that the "share of workers with an Associate's degree, certificate, or some college has more than doubled from 12 percent to 27 percent of the workforce."<sup>7</sup>

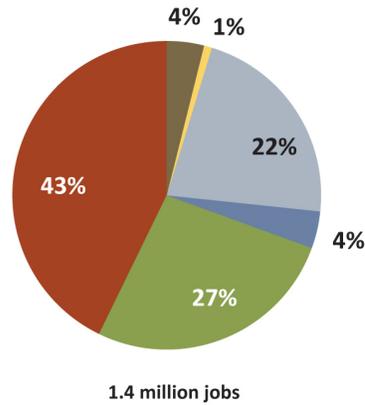
**The demand for increased skills and education will continue to rise in the future. Between 2008 and 2018, there will be 8.2 million job openings that require at least "some college", the category that includes certificates and credentials.<sup>7</sup>**

## Outlook & demand for Indiana

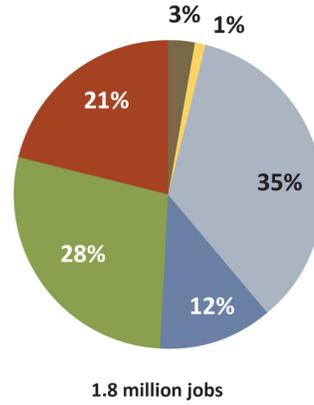
Indiana's employers are also increasingly demanding additional education and demonstrated skills, and this trend will continue in the future. The 'Help Wanted' model forecasts a demand for 337,000 jobs requiring certificates in Indiana by 2018. These opportunities will not be as numerous for those with lower levels of education. The forecast continues: "[j]obs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education."<sup>7</sup>

The forecast of increased demand for educated and skilled workers (and lesser demand for less-educated workers) is consistent across a variety of important labor markets. The Georgetown study "Career Clusters: forecasting demand for high school through college jobs" (Career Clusters) found that Hoosiers with some post-secondary education will have 400,000 more jobs available to them in 2018 than do workers with only a high school education. In addition, more jobs in Indiana will require certificates in fields including business management and administration, health sciences, human services and industrial and engineering technology.<sup>8</sup>

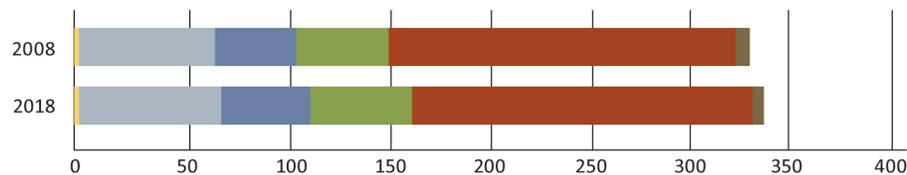
**High School Jobs in Indiana, 2018**



**Postsecondary Jobs in Indiana, 2018**



**Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)**



- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

(source: 'Career Clusters' Indiana state data p.36)

## Better Revenue and Outcomes

Credentials not only lead to better jobs and employability, but also to increased wages which lead to increased revenue for families' states and communities. The Gateway study found that certificate holders earn 20 percent more than high school graduates without any postsecondary education. This finding can be used to model the economic impact for state income & sales taxes.<sup>2</sup>

In Indiana, this would mean that each household that experiences a 20 percent annual raise in income as a result of the addition of a certificate will also contribute an additional \$422 in income and sales taxes each year.

Considering the 1.5 million Hoosiers that currently have only high school education or less, the opportunity of increased credential attainment for the state is large. If only half of those Hoosiers were to earn a certificate and see the 20 percent increase in income, the state would stand to gain \$316.5 million in increased revenue each year.

## Certificates and Financial Aid

### Review of Current State and National Financial Aid policies concerning credentials

In an atmosphere where each state has different policies concerning credentials and certificate programs, Indiana has an opportunity to become a leader in terms of offering a cogent set of policies regarding financial aid, administration and data collection regarding credentials.

In order to better understand policies concerning credentials and financial aid throughout the states, we reached out to representatives of each state's higher education and/or financial aid authorities. We asked:

- 1. How does your state define post-secondary certifications? Is a distinction made between short and longer-term certificates? How are your definitions and distinctions made?**
- 2. Are post-secondary certificates eligible for state-based financial aid in your state?**
- 3. Is there a policy structure or rubric for granting financial aid for certificate programs in your state? Please explain the structure, rubric or alternate aid policy used.**
- 4. What are the criteria for student eligibility for certificate programs in your state (e.g. minimum credit hours, etc.)? Do these criteria differ from other post-secondary education financial aid eligibility?**
- 5. Are there any distinctive practices or policies regarding certificates in your state that might be useful in assembling national 'best practices' recommendations?**

The responses were striking in their diversity, and demonstrate the lack of a national consensus that exists about policies for credentials and financial aid. Out of the 50 states surveyed, only three of 25 state responses indicated a thorough definition of credential programs and detailed and extant financial aid policies. More frequently, states deferred to the policies of individual schools to determine eligibility of credential programs. While this position gives latitude to individual institutions, it can also let useful credential programs fall through the cracks and prevent students from accessing them.

Several states responded that they defer to federal guidelines, and that financial aid for credential programs depends solely on whether those programs qualify for Title IV funding. Other states, particularly in the nation's west, responded that their states have very little post-secondary financial aid, and therefore little to no state aid available to students for credential programs.

This summary and the results of our survey of states reinforce the opportunity Indiana has to be a national leader in providing clear policies and consistent access to credential programs. A representative sample of state responses to our survey can be found in Appendix A.

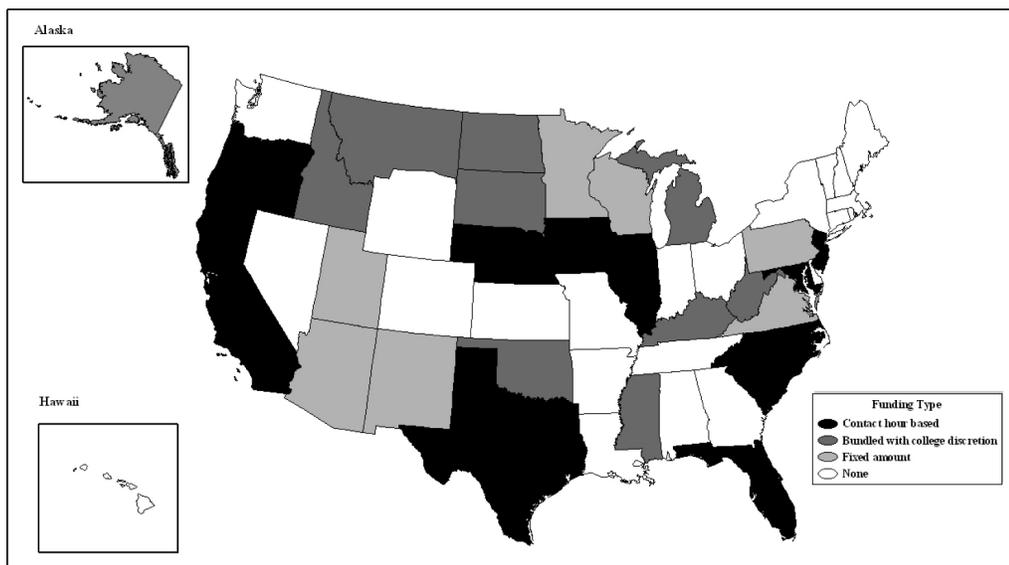
## Certifications and Other State Investments

**A**nother aspect of the murky mix of policies affecting sub-baccalaureate education is the treatment of non-credit workforce education, which often encompasses credential programs. As opposed to for-credit coursework typically associated with programs that lead to associate or bachelor degrees, many programs in sub-baccalaureate certification programs does not award or track credits earned. Non-credit education has grown sharply in recent decades, and as the Landscape study finds, “at many community colleges, noncredit education enrolls more students than credit programs.” Because much of this coursework is related to workforce development and training, states must be careful both to match the non-credit offerings with employer needs, and also to balance state investment of resources to meet the needs of students.<sup>9</sup>

Because students in non-credit education, including credential programs, are typically older and more driven by the desire to gain valuable skills, Indiana can specifically tailor policies to meet the needs of these students and their future employers. One of the most powerful steps can be to provide a pathway from non-credit into credit-bearing programs. The Landscape study recommends that “colleges use a variety of program features, such as recruiting noncredit students to credit programs and developing linkages between noncredit and credit programs.” “Aside from facilitating workforce development, noncredit workforce education can also serve as a bridge to the credit side of the college. It can be a point of entry into college for those who do not have a degree but are not yet ready to enroll in a credit program (Grubb et al., 2003).”<sup>9</sup>

Perhaps the most important lesson from Landscape’s study is the finding that more than half of states provide general funds to support non-credit education, but not Indiana. These funds can help ensure that vital non-credit programs sustain the support they need to serve students and employers. An example of a best practice, used by 10 states is when general funds are “bundled with college discretion, that is, the state provides general funding to the colleges, and allows them to decide whether or not to use some of the funds to support noncredit workforce education... State funding can help colleges support access for individuals by maintaining lower levels of tuition and supporting entry-level training.”<sup>9</sup>

### Funding from State General Funds for Noncredit Workforce Education



Source: Landscape p.18

Neglecting to support non-credit programs results in decreased access for students and, therefore, fewer skilled workers to fill demands by employers. Without state support, colleges typically must pass the costs for more expensive workforce training courses on to students, despite their value to the state. Although these cost-intensive non-credit courses can lead to self-sustaining jobs, “the higher cost could pose a barrier for disadvantaged students who cannot afford the tuition, which is not eligible for federal financial aid.”<sup>9</sup>

The Landscape authors declare that general fund support for non-credit education can “provide an important indication of the state’s vision for noncredit education.” Indiana should strongly consider joining the majority of states in supporting workforce-building non-credit programs with general funds and employ the best practice of ‘bundling’ funding with college discretion.<sup>9</sup>

## Review of Currently Published Data

### National and State Level Data Regarding Certificates

**A** national review of state certificate programs in the Certificates Count study found “clear agreement” across all states that even “one year of study after high school results in earnings above the level of those with no postsecondary participation”. While data limitations prevent one-to-one comparisons amongst certificate programs, the study found that programs of less than a year have little economic return. The study concludes that “long-term certificates for programs of one year or more have good economic returns while certificates for shorter-term programs of study do not.”<sup>1</sup>

At the state level, most states do not routinely analyze labor market returns to postsecondary credentials awarded by institutions in their state. If they do, states often do not make the data available publicly. Despite these limitations, these examples of state certificate policies and outcomes can serve as models (and warnings) for Indiana.

## CALIFORNIA

“Research in the 1990s (Friedlander, 1996) of a large sample of 173,523 students from 18 California community colleges who either completed a degree or certificate or stopped attending (in 1991 or 1992) found that the wages of those students who received either a degree or a certificate from an occupational program were significantly higher than those who left their program without completing a degree or certificate and even higher than those who completed a “non-occupational” program and did not continue on to a four-year college. (Presumably those would have been only associate degree programs since California did not award certificates for non-occupational programs.)

Subsequent research in California (Sanchez and Laanan, 1997) employed similar methodology to examine UI wage records of all the students (700, 564) enrolled in 1992-93 in all 106 of the California community colleges, comparing completers with leavers and comparing median annual earnings in the last year in college, the first year out of college, and the third year out of college, by attainment level. It found small gains at all levels for those students of all ages who left without gaining a certificate but significantly larger gains both for those completing certificate and for those completing a degree. Over all, those with degrees made more money but those with certificates increased their wages just as much as degree holders in those three years after completing their programs.”

## KENTUCKY

“Jepsen, Troske and Coomes (2009) examined labor market returns to certificates and diplomas and degrees, drawing on a large administrative data set for all community and technical college students in Kentucky. This research found, focusing directly on the sub-associate level, significant and consistent earnings returns to diplomas and less significant but still consistent returns to certificates for all those who gained those credentials as opposed to those who did not receive those awards. In fact, overall returns to diplomas were found to be nearly the same as returns to associate’s degrees – for women nearly 40 percent and for men around 20 percent. Men who completed their certificate programs (that’s the shorter-term program in Kentucky) earned about 10 percent more than those who did not complete, but the earnings advantage for women who completed certificate programs was only about 3 percent over non-completers.”

## WASHINGTON

“In 2005, the Washington State Board students Community and Technical Colleges tracked employment outcomes for 35,000 adults who entered community/technical colleges in Washington in 1996-97 and 1997-98. The research found that late starters – age 25 plus students – who completed at least one year’s worth of college (in Washington, 45 quarter credit hours) in a credentialed program of study earned over \$4,000 more annually than those who either did not complete the same amount of credits or failed to gain a credential.”

## OKLAHOMA

Oklahoma saw positive results: “(u)sing this methodology, the Oklahoma researchers concluded that certificate completer gained very significant returns to their earning. The lifetime income gains estimate for the average adult certificate completer was calculated to be \$324,309. That represents all fields of study since the methodology used in this Oklahoma study does not permit comparison of completers by program area or individual field of study.”<sup>1</sup>

## Trends in sub-baccalaureate and non-credit programs

As discussed in the previous section, this type of education is growing but is not being adequately invested in by the state either through financial aid or through state general investment. The number of students enrolled in non-credit programs “grew from 90 percent of the credit student headcount in 1995 to exceed the credit student headcount by more than eight percent in 1999 (National Center for Education Statistics [NCES], 1998, 2003).”<sup>9</sup>

While Indiana doesn’t provide state general funds for non-credit programs, the state does provide support as part of the workforce development system. This system is separate from for-credit programs. However, poor data collection on non-credit programs hampers colleges and state agencies’ efforts to provide coordination on these programs. Indiana is one of only 12 states that don’t require data collection of some sort.<sup>9</sup>

## Limitations of Data Regarding Certificates

The current limitations of collecting data on credential and certification programs are a serious liability in effectively administering these programs to meet the needs of students and employers. Important limitations to a robust analysis of credential programs are spelled out in the ‘Certificates Count’ study, including that most national studies on the effects of education on earnings center on bachelor’s or associate’s degrees, with very little attention to sub-baccalaureate education. And even this limited data on sub-baccalaureate certificate programs are “almost certainly distorted by the wide (and growing) variation in the length of programs of study that lead to the certificate.”<sup>1</sup>

Furthermore, while many education-related studies focus solely on degree-seeking programs, at the same time much labor-market research also neglects certification programs. This is not a small blind spot, and the omissions affect millions: “close to 60 million people, or 42 percent of the workforce, need some form of occupational certification, registration, or licensure to perform their jobs. Some 45 million of these certifications are test based.”<sup>7</sup>

While these data limitations exist nation-wide, there are state-specific opportunities that Indiana can take to best position their administration of credential programs. Currently, Indiana is one of only 12 states that don’t require data collection of some sort for non-credit certification programs.<sup>9</sup> Our recommendations spell out specific steps to alleviate this problem.

## Indiana’s Public Certificates

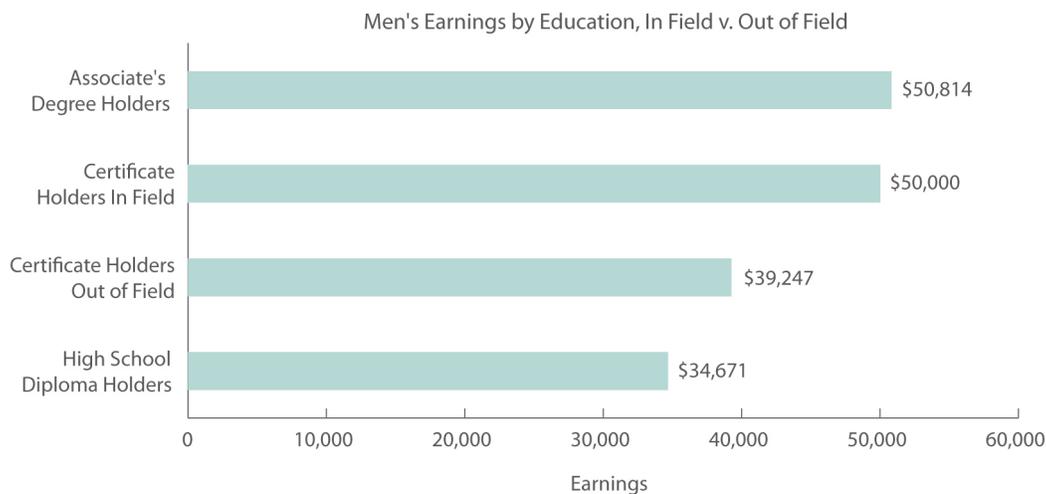
Contemporary research demonstrates the state of Indiana’s public certificate programs, and suggests areas where there is opportunity for increased effectiveness and efficiency. For example, according to the Gateway study, 54.7 percent of Indiana’s certificates “have significant economic value, i.e., provide workers with a significant earnings premium”, ranking 17th in the nation.<sup>2</sup>

As discussed previously, perhaps the single most significant factor on the economic value of a credential is whether the student goes on to work in the field of their credential. The Gateway study found ample evidence for this effect in Indiana:

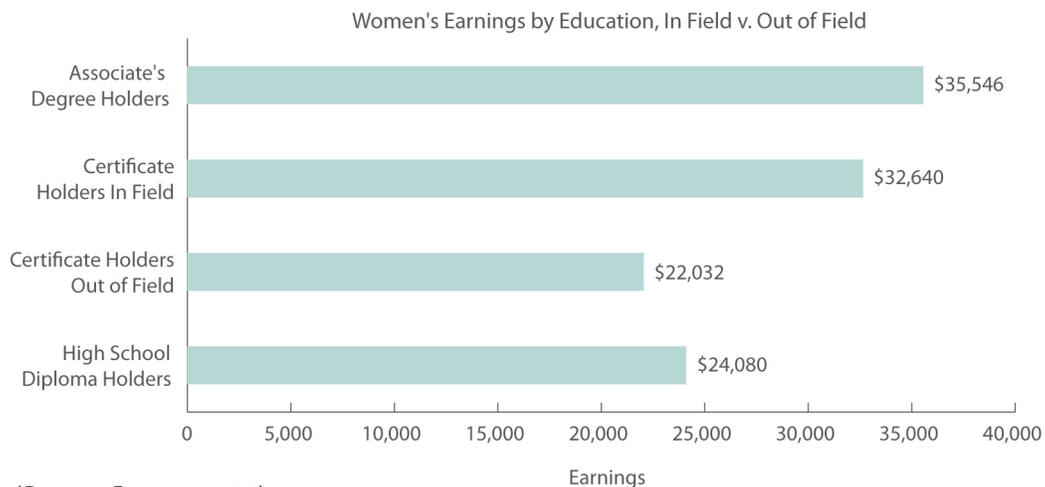
**Working in an occupation that is closely related to one’s training is the key to leveraging a certificate into substantial earnings returns.**

Among certificate holders, 44 percent have occupations related to their certificate, and these occupation matches earn 31 percent more than those who aren’t in a related occupation. The share of certificate holders who work in field varies from 62 percent in business and office management to 22 percent in cosmetology, agriculture, forestry and fishing. Certificate holders who work in-field earn 37 percent more than those with just a high school diploma and are within 4 percent of workers with an Associate’s degree. Certificate holders working out of field earn 1 percent more than workers with a high school diploma and no postsecondary education.

**Figure 15. Men with certificates who work in field earn approximately as much as men with Associate’s degrees.**



**Figure 16. Women with certificates who work out of field earn less, on average, than women with high school diplomas.**



(Source: Gateway p. 22)

**Table 2. Certificate holders who work in their field of study get a significant earnings premium.**

Field of Study	Share of certificates	Share in-field	In-field earnings	In-field earnings premium
All	44%	\$40,420	37%	
Computer and Information Services	9%	15%	\$70,400	115%
Aviation	1%	40%	\$65,642	73%
Police/Protective Services	2%	46%	\$55,499	68%
Business/Office Management	17%	62%	\$40,000	66%
Electronics	6%	42%	\$61,668	60%
Drafting	1%	44%	\$59,592	56%
Transportation and Materials Moving	5%	58%	\$44,336	38%
Healthcare	21%	54%	\$30,577	35%
Auto Mechanics	9%	46%	\$45,586	30%
Construction Trades	8%	42%	\$50,989	25%
Refrigeration, Heating, or Air Conditioning	4%	38%	\$53,850	18%
Cosmetology	11%	23%	\$25,217	9%
Agriculture/Forestry/Horticulture	1%	20%	\$47,800	8%
Metalworking	4%	49%	\$45,040	2%
Food Service	2%	31%	\$17,600	-41%

Source: Survey of Income and Program Participation (SIPP)

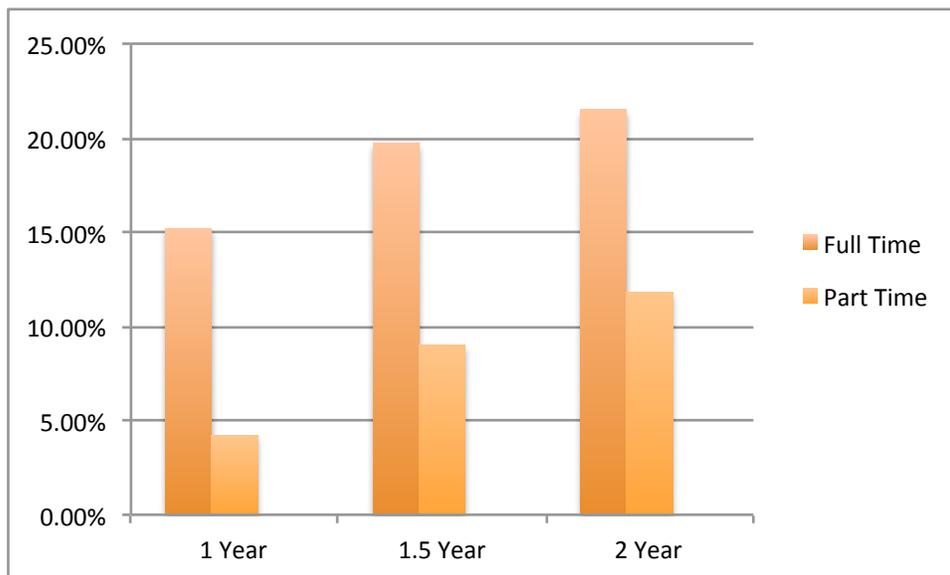
Highlighting an area for possible improvement, Indiana gets singled out for low completions of post-secondary programs in the Certificates Count report. The report studied the production of certificates “as a percentage of all sub-baccalaureate completions at state colleges and institutions. The report found that Indiana was one of the six highest in terms of production, but had harsh words about what this finding means: “however, in the case of Indiana and Louisiana, this is less because they produce so many one to two year certificates and more because they produce so few completions of any kind.” This finding in particular is a call for Indiana to focus more attention and resources on ensuring that students complete credential programs.<sup>1</sup>

Indiana also awards fewer certificates relative to the adult population in need than the U.S. average and many fewer than the other Midwestern states. “While efforts to address institutional productivity should not be limited to two-year institutions, they should certainly be focused on them.”<sup>6</sup>

## Graduation Rates

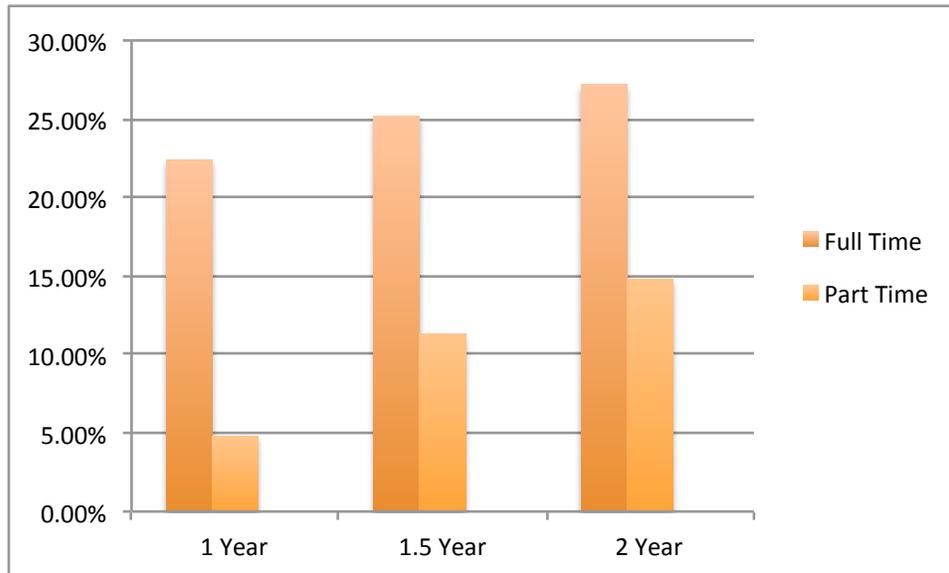
Excessive credits and time negatively impact Indiana's certificate completion rate. In 2007-08, certificate-seeking Hoosier students in a program requiring just 30 credits took 79 credits if full time and 68 credits if part time. Certificate completion is not impacted just by excessive credits, but also by excessive time. In Indiana, a "one-year" certificate takes an average of 3.4 years for full-time students and 4.7 years for part-time students. The results are startling: of Indiana students who began certificate programs in 2005, only 15.2 percent had graduated in 1 year, and only 21.5 percent had graduated in 2 years. In order to make certificates accessible means of educational and occupational advancement, the root problems must be found and eliminated to reduce the excessive time and credits taken by students.<sup>10</sup>

**Overall, graduation rates for certificates in Indiana are slightly better than for Associate Degree-seeking students, but not as good as rates for Bachelor Degree-seeking students.<sup>10</sup>**



Source: Time is the Enemy

**Certificate graduation rates for students over 25 are better, even surpassing rates for associate and bachelor degrees.**



Source: Time is the Enemy

## Rubric Methodology

To help develop a national criteria to evaluate best practices concerning sub-baccalaureate credential programs, financial aid and state policies, we have evaluated the public credential programs in Indiana according to a rubric designed to rate the programs’ economic and career value. The rubric is composed of the following criteria:

**Wages:** The credential must lead to employment that pays self-sufficient wages. A self-sufficient wage is determined by using the state’s Self-Sufficiency Standard and exceeds 200 percent of the poverty level. In this study, this wage has been set at **Indiana’s median annual wage**, calculated for 2011 by the U.S. Census Bureau’s American Community Survey. This annual wage is **\$27,618**. We examined whether credential programs led to this wage either at the entry-level or as the median wage in career paths attached to the credential.

**Career Development:** The credential must lead directly to a postsecondary degree (associate’s or bachelor’s) OR will lead to professional licensing required for employment. This determination was made using primary data from the colleges and universities and the State Licensing Board.

**Job Opportunities:** The certificate must be linked to employment in a career field that is either stable or predicted to grow in size. Forecasts from the Indiana Department of Workforce Development (DWD) and from the US Department of Labor were used in conjunction with other research reports on workforce development. Specifically, we looked for links between credential programs and jobs on the DWD’s **Hoosier Hot 50 Jobs** state and 11 regional ‘Hoosier Hot 50’ lists.

We use these criteria to create an analytic rubric to evaluate each credential based on the criteria described above. The sources that we used to provide the data required to grade each credential in each category include:

1. Credentials reported directly from each Institution along with whether or not the certificates were eligible for state financial aid funding.
2. Each credential’s eligibility for financial aid funding was then verified by Indiana’s State Student Assistance Commission staff.
3. We determined whether credentials can lead to a certification/license or an associate’s degree, based on information gathered from the Institutions.
4. With assistance from the Indiana Chamber of Commerce, all credential programs were matched to as many occupations as are applicable for the “connection to an occupation” variable using data found in Appendix B.

After compiling the data as above, we examined all credential programs by the number of checks they received, with each check representing a career benefit according to their category descriptors. For programs that provided more than one career pathway, we selected the single pathway that provided the most ‘checks’. This method allows students, employers and policymakers to consider credential programs that offer the greatest career and economic impact.

For example, if a prospective student is considering a certificate in Accounting at IvyTech, under our methodology, she could pursue a career path that has at least three ‘checks’ that lead to a self-sufficient career.

**Example: one certificate, four different career paths, six potential benefits.**

School	Name of Certificate	Financial Aid Eligible	Job	Hot 50	Entry Level Wage	Median Wage	PSE Path way	State License	I-R exam
Ivy Tech	Accounting	Yes	Bookkeeping/Accounting/Auditing Clerk	Yes	\$20,500	\$31,300	Yes	No	No
Ivy Tech	Accounting	Yes	Brokerage Clerk	No	\$26,900	\$38,200	Yes	No	No
Ivy Tech	Accounting	Yes	Payroll and Timekeeping Clerks	No	\$24,300	\$34,900	Yes	Yes	No
Ivy Tech	Accounting	Yes	Tax Preparers	No	\$17,500	\$29,300	Yes	No	No

## Findings and Recommendations

### Data Findings

Our research found that Indiana currently has some laudable overlap between credentials that give students the skills that employers demand. However, in a significant portion of cases, credential programs that meet multiple criteria for career and economic development are *currently not supported by state financial aid*, even though they provide benefits such as immediate self-sufficiency through entry level wages, industry-recognized certification, or other pathways to sustainable careers.

A striking comparison in our data findings is the potential for credentials to provide students with adequate, self-sustainable wages. The most powerful credentials can help students get jobs that pay a self-sustaining wage at the entry level. Many more credentials give students an entry into careers that pay adequate median wages, meaning that they have a ladder to a self-sustaining wage.

The tables on the following page demonstrate credentials that are representative of the entry-level and median wage comparison:

**Credentials that lead to adequate median wages:**

School	Name of Certificate	Fin Aid Eligible	Hoosier Hot 50	Entry Level Wage	Median Wage	PSE Pathway	State License	I-R exam
Indiana State University	Piano Pedagogy Certificate	No			✓			
Indiana University	Sports Tourism Development CRT	Yes			✓			
IUPUI	Paralegal Studies	Yes	✓		✓	✓		
Ivy Tech	Alternative Fuels Certificate	Yes	✓		✓	✓		
Purdue University	Organizational Leadership	No	✓		✓	✓		
Purdue University North Central	Carpentry	Unknown	✓		✓			
Vincennes University	Tractor-Trailer Driver Training Externship	Yes	✓		✓			

**Credentials that lead to an adequate entry-level wage (and therefore an adequate median wage):**

School	Name of Certificate	Fin Aid Eligible	Hoosier Hot 50	Entry Level Wage	Median Wage	PSE Pathway	State License	I-R exam
Indiana State University	Medical Sales Certificate	No	✓	✓	✓	✓		
Indiana State University	American Humanics Certificate	No	✓	✓	✓	✓		
Indiana University	International Business PBS	Yes		✓	✓			
Ivy Tech	Apprenticeship Technology (Electricians)	Yes	✓	✓	✓	✓		✓
Ivy Tech	Sustainable Energy	Yes	✓	✓	✓	✓		
Purdue University North Central	Web Applications Developer	Unknown	✓	✓	✓			
Vincennes University	Nursing, Practical	Yes	✓	✓	✓			



# 557 Indiana Credentials lead to 781 Job Titles.

JOBS-WAGES

## Adequate ENTRY-LEVEL Wages

**132** = **174**  
Credentials Job Titles

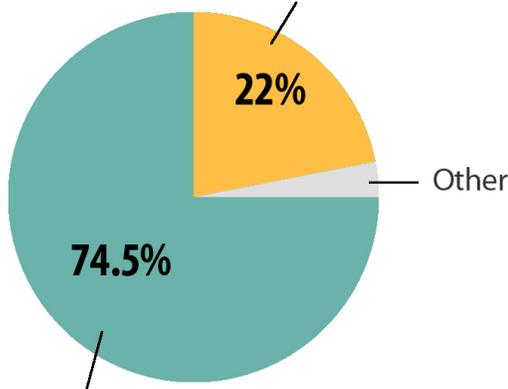
132 credentials lead to 174 jobs with entry-level wages at or above the state median (\$27,618).

## Adequate MEDIAN Wages

**412** = **582**  
Credentials Job Titles

582 jobs obtained through a credential that pay an adequate median wage.

Adequate ENTRY-LEVEL Wages



Adequate MEDIAN Wages

**311** = **406**  
Credentials Job Titles

311 credentials lead to 406 jobs that pay a low entry-level wage but lead to an adequate median wage.



# Credentials are leading to jobs on the Indiana Hot 50 Job list.

HOT 50 JOBS

## Adequate ENTRY-LEVEL Wages

**46** = **53**  
Credentials Hot Jobs

There are 53 career paths on the hot 50 (35 unique jobs on the hot 50) and that pay an adequate entry level wage. These 53 jobs can be obtained through 46 unique credentials.

## Adequate MEDIAN Wages

**181** = **220**  
Credentials Hot Jobs

There are 220 jobs on the hot 50 (74 unique entries) and that pay an adequate median wage. These 220 jobs can be obtained through 181 unique credentials.

## CAREER PATHS

Job Counts: 450 credentials could be connected to ONE career path, of the remaining 109 credentials the averages number of career paths was 3, the median was 2. 24% of credentials lead to more than one career path. There were 26 credentials that lead to more than 3 career paths each.

**450** = **One**  
Credentials Career Path

450 credentials could be connected to ONE career path

**109** = **Three**  
Credentials Career Paths

...of the remaining 109 credentials the averages number of career paths was 3

**24%** > **One**  
Credentials Career Path

24% of credentials lead to more than one career path

**26** > **Three+**  
Credentials Career Paths

There were 26 credentials that lead to more than 3 career paths each



# Credentials of Opportunity Denied Financial Aid!

## Indiana Hot 50 Jobs

**62**  **0**  
Career Paths Financial Aid

There are 62 career paths that are on the Hot 50 but the credential to obtain them is *not currently eligible for Financial Aid*.

## Adequate Entry-level Wages

**37**  **0**  
Career paths Financial Aid

There are 37 career paths that pay an adequate entry level wage, but the credential to obtain them is *not currently eligible for Financial Aid*. These 37 jobs can be obtained through 22 unique credentials.

## Leads to Post-Secondary Education/Self-Sustainability

**98**  **0**  
Credentials Financial Aid

98 credentials have a built-in pathway to further Post-Secondary education and lead to self-sustainability, but are *currently not eligible for Financial Aid*.

## Leads to Career Development Test/Self-Sustainability

**169**  **0**  
Credentials Financial Aid

169 credentials lead to an Industry-Recognized Test for career development and lead to self-sustainability, but are *currently not eligible for Financial Aid*.

## Recommendations

### 1. Remove barriers to financial aid and provide support for credentials that lead to self-sufficiency

Perhaps the single most effective step that Indiana can take is to immediately remove barriers to students seeking to improve career prospects through credential and certification programs. Not only will this access lead students to economic self-sufficiency, it will help businesses fill the middle-skill jobs that make up the skills gap.

We strongly encourage the state's Commission for Higher Education to take our data findings to heart when considering which programs are worthy of dismissing the funding ban. A credential that earns even one 'check' means that that program has a demonstrated path to economic self-sufficiency and would thus be a strong candidate for state investment. However, the state and commission would be worthy of praise for prioritizing aid for credential programs that fulfill both student needs (such as adequate entry-level wages) and employer needs (such as jobs listed on the Hoosier Hot 50).

Indiana would also be wise to consider how state investment can help community colleges provide programs that deliver the largest economic impact to students and employers. We agree with the Landscape study, which finds that "since community colleges may seek to offer noncredit workforce education to generate profit, states should support noncredit programs that are necessary but might not be offered to generate profit."<sup>9</sup>

In addition, in order to become a leader in workforce development through credentials, Indiana will likely need to join the majority of states that use general funds to help support these programs. We recommend that Indiana adopt the model of general funds 'bundled' with college discretion that has been successful in other states.

### 2. Provide comprehensive student services, from enrollment information, conducive scheduling and assistance with completion

Providing comprehensive student services, beginning with clear enrollment information through student support services and career counseling, would help alleviate the problem of non-completion. Two key strategies are to implement streamlined scheduling and institute student cohorts. Both will help older and non-traditional students adjust to educational culture, to accommodate their outside work and life responsibilities, and to encourage peer support.

We also agree with the recommendations of the National Center for Higher Education Management Systems, who called for "improvements in retention, completion, and transfer rates for Ivy Tech students would serve to more effectively meet demand for college credentials of two-years and less, and educate many more students at a lower cost per degree. In addition, increasing the number of two-year and less credentials in STEM and health fields provide great value to the recipients of the awards and to the state with respect to filling jobs in high-demand fields and increased tax revenues."<sup>6</sup>

We reiterate several recommendations from our 2009 study on financial aid: in order to better serve adult students (which include many credential seekers), the state must “increase the availability of curriculum designs, supportive services, and program offerings” – including remedial course offerings; flexible, compressed formats; and offerings during evening and weekend sessions. “Additionally, offering supportive services, such as academic guidance counseling, academic supports (i.e., tutoring, time management, and study skills trainings) and career counseling, as part of a structured curriculum for adult students should help to increase persistence.”<sup>3</sup>

### **3. Provide Pathways for Adult Learners to Re-Enter and Succeed in Higher Education**

Make it easier for older adult learners to enroll, earn credit for previous learning and complete certificate programs that can lead to higher education completion goals. Strategies include “awarding credit for prior learning and improving the delivery of remedial/developmental education. Some of the more successful efforts to improve the delivery of remedial education to adults include the provision of remedial and college level work simultaneously so adults experience immediate progress toward a credential”<sup>6</sup>

### **4. Provide schools with incentives to make certificates more stackable & portable**

Indiana colleges should be provided with incentives to make their certificate programs easier to carry over into degree-bearing programs. Make sure that all such programs count towards state attainment goals, including retroactively if students go on to complete further degrees and certifications.

Ivy Tech has provided a “crosswalk” from non-credit to credit programs since 1999, and provides a non-credit transcript upon request. Encouraging more institutions to provide crosswalks as a regular part of credential program offerings would help students know what further educational opportunities are available to them, potentially encouraging thousands of students to ‘stack’ their credentials into future degrees.

### **5. Provide consistent tracking information about credential programs and outcomes**

Consistent tracking of credential programs and outcomes throughout the state will allow a better understanding about which programs are most successful. Currently, Ivy Tech tracks enrollments and completions, but cannot track certification outcomes.

Beyond helping students, colleges and state agencies better understand the effectiveness of credential programs, a robust tracking policy would help the state enact a Cross-Agency Credential Measurement (CACM) system. CACM would “collect aggregate credential attainment data from all state education and training programs, and... analyze if these investments are collectively producing the range of skilled workers needed to meet employer demand or to otherwise fill skills gaps documented by labor market or job openings data. CACM also allows a governor to establish a baseline of credential attainment, to set new goals for increased statewide postsecondary attainment, and to regularly measure and publicly report on the state’s progress toward those goals over time.”<sup>11</sup>

In addition, we call for U.S. Census to differentiate credential attainment from their “some college, no degree” category.

## **Appendix A: Survey of State Policies Regarding Credentials and Financial Aid**

In order to gauge the range of policies concerning credentials and financial aid, we sent the following five questions to representatives in all 50 states. We received responses from 25 states, with widely ranging answers. Here are several representative responses for each question:

Distinctions are made between short and longer-term certificates by way of the course requirements and other criteria.

### **1. How does your state define post-secondary certifications? Is a distinction made between short and longer-term certificates? How are your definitions and distinctions made?**

“For program inventory purposes, post-secondary certificates are identified as: Certificate (curriculum of less than one year), Certificate (curriculum of one year but less than two years), Undergraduate Certificate (curriculum is at the undergraduate level), and Graduate Certificate (curriculum is at the Graduate level)”

“I’m not aware of a definition that defines post-secondary certifications.”

“I’ve reviewed this and it seems the focus of this query is policies governing the award of state-based financial aid. Since {our state} awards no need-based financial aid (and a relatively small amount of merit-based aid) it appears to me that your survey does not apply.”

“[In response to the first question], please provide your operational definition of “postsecondary certificate programs”. Are these for-credit programs only, or do they include those offered as not-for-credit? Also, what is your definition of “Certificate” (versus “certification”) – does it align with CCA’s? Does your definition of “postsecondary” include non-degree granting programs offered by non-degree granting private vocational/career institutions?”

### **2. Are post-secondary certificates eligible for state-based financial aid in your state?**

“Yes, as long as the student is enrolled full-time (minimum 12 hours) in a certificate program at an eligible institution.”

“Yes. The type of financial aid that can be used to pay for a certificate program depends on whether the program qualifies for federal Title IV aid or not.”

### **3. Is there a policy structure or rubric for granting financial aid for certificate programs in your state? Please explain the structure, rubric or alternate aid policy used.**

“The [state] Grant and [state] programs make no distinction between certificate programs or degrees at our community and technical colleges. So there is no special policy structure geared towards certificate programs.”

“No.”

**4. What are the criteria for student eligibility for certificate programs in your state (e.g. minimum credit hours, etc.)? Do these criteria differ from other post-secondary education financial aid eligibility?**

“Students must meet eligibility criteria:

- a. Complete the FAFSA
- b. Demonstrate financial need
- c. Be a [state]resident
- d. US citizen or permanent resident
- e. Not incarcerated
- f. Not in default on a student loan
- g. Registered for Selective Service
- h. Enrolled in an approved certificate program

“Students pursuing a certificate program at an eligible postsecondary institution may be considered for state financial aid.”

“[Our state]has very little state-funded financial support for higher education.”

**5. Are there any distinctive practices or policies regarding certificates in your state that might be useful in assembling national ‘best practices’ recommendations?**

“[Our state] is heavily into local control. Our six community colleges each have their own governing board and there is no central coordinating body just for them (like a Board of Regents for a university).”

“I like the fact that we review eligible programs each year that best meet the needs of our state and that will contribute to our state economy to try and get the biggest bang out of our buck since the funding for this program is limited to about \$5 million, which is split between both components of [state aid programs].”

As these responses suggest, there is very little standardization when it comes to state policies regarding credential programs and financial aid. A select few states gave well-defined, organized responses. But in the main, even the first question regarding local definitions frequently resulted in unknowns, ad-hoc descriptions and even confusion.

Responses from the states generally support the findings regarding from ‘Certificates Count’:

“Most certificate programs are eligible for most federal and state student financial aid programs. For overall Title IV eligibility, they must be accredited by an authority approved by the Department of Education and prepare students for gainful employment in a recognized occupation. For Pell Grant eligibility, programs must be at least 16 semester hours or their equivalency but programs of at least 8 semester hours are eligible for Title IV loans. Typically, state eligibility guidelines mirror the federal requirements, but this is not always the case and sometimes certificate programs are not eligible for state awards.”<sup>1</sup>

## Appendix B

All credential programs were matched to as many occupations as are applicable for the “connection to an occupation” variable using the following data:

a. Occupation ideas for each certificate came from course catalogs, certificate profiles, the Institution’s promotional materials, and keyword searches.

b. These potential occupations were assigned its appropriate SOC code and verified with the combined data provided by:

i. The Occupational Outlook Handbook, which lists educational requirements in its “How to Become One” section. The educational requirements listed in this section of the handbook were copied into a data-gathering spreadsheet, which was used to determine the appropriate score to attribute to each occupation. Some requirements are very clear, e.g. “A bachelor’s degree is required for this position.” Other scenarios were less clear, e.g. “for most workers a high school diploma is sufficient but employers are increasingly requiring some form of post-secondary education.”

ii. National data regarding the distribution at various levels of educational attainment was collected for each occupation from O\*Net OnLine. “The O\*NET program is the nation’s primary source of occupational information. Central to the project is the O\*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O\*NET OnLine, an interactive application for exploring and searching occupations. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.” This information provides a percentage of workers currently in the particular occupation at various levels of educational attainment. The percentage of workers falling in the Some College, No Degree (SCND) category was entered into our data-gathering spreadsheet.

- 1 Bosworth, Brian 'Certificates Count: An Analysis of Sub-baccalaureate Certificates' Commissioned by Complete College America, December 2010, Retrieved November 29, 2012  
[http://www.completecollege.org/path\\_forward/certificates\\_count\\_release/](http://www.completecollege.org/path_forward/certificates_count_release/)
- 2 Carnevale, Anthony P., Stephen J. Rose and Andrew R. Hanson 'Certificates: Gateway to Gainful Employment and College Degrees' Georgetown University Center on Education and the Workforce, June 2012, Retrieved November 29, 2012  
<http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/Certificates.FullReport.061812.pdf>
- 3 Downing, Sarah, Jessica Fraser, Lisa Travis 'Investing In Indiana's Adult Workers: Increasing Financial Aid Opportunities' Indiana Institute for Working Families, June 2009 , Retrieved November 29, 2012 <http://www.incap.org/documents/iwif/2009/LuminaReport%20-090625.pdf>
- 4 "What Is Registered Apprenticeship?" last modified August 22, 2012, Retrieved November 29, 2012 <http://www.doleta.gov/OA/apprenticeship.cfm>
- 5 U.S. Department of Labor, Training and Employment Guidance Letter No. 15-10, Retrieved November 29, 2012 <http://wdr.doleta.gov/directives/attach/TEGL15-10acc.pdf>
- 6 National Center for Higher Education Management Systems, 'Crossing the Starting Line: An Examination of Productivity at Indiana's Public Colleges and Universities', October 2010, Retrieved November 29, 2012  
[http://www.achieveindiana.com/pdfs/NCHEMS\\_Indiana\\_Productivity\\_Final\\_Oct2010.pdf](http://www.achieveindiana.com/pdfs/NCHEMS_Indiana_Productivity_Final_Oct2010.pdf)
- 7 Carenevale, Anthony P., Nicole Smith, Jeff Strole 'Help Wanted: Projections of Jobs and Education Requirements Through 2018', Georgetown University Center on Education and the Workforce, June 2010, Retrieved November 29, 2012  
<http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/HelpWanted.FullReport.pdf>
- 8 Carnevale, Anthony P., Nicole Smith, James R. Stone, III, Pradeep Kotamraju, Bruce Steuernagel, Kimberly A. Green, 'Career Clusters: Forecasting Demand for High School Through College Jobs, 2008-2018', Georgetown University Center on Education and the Workforce, November 2011, Retrieved November 29, 2012  
<http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/clusters-states-complete-update1.pdf>
- 9 Van Noy, Michelle, James Jacobs, Suzanne Korey, Thomas Bailey, and Katherine L. Hughes. 'The Landscape of Noncredit Workforces Education: State Policies and Community College Practices', Community College Research Center, January 2008, Retrieved November 29, 2012  
<http://ccrc.tc.columbia.edu/Publication.asp?UID=572>
- 10 Complete College America, 'Time is the Enemy', September 2011, Retrieved November 29, 2012  
[http://www.completecollege.org/docs/Time\\_Is\\_the\\_Enemy.pdf](http://www.completecollege.org/docs/Time_Is_the_Enemy.pdf)
- 11 'Cross-Agency Credential Measurement Policy Proposal', Retrieved November 29, 2012  
<http://www.nationalskillscoalition.org/states/state-policy/cross-agency-credential.html>



**For More Information, Please Contact Us:**  
Indiana Institute for Working Families  
1845 W. 18th St., Indianapolis, IN  
Phone: 317-638-4232  
Contact: Andrew Bradley at [abradley@incap.org](mailto:abradley@incap.org)  
Web: [www.incap.org.iiwf.html](http://www.incap.org.iiwf.html)

