

Practice and Application



Incorporating LMI into Career Exploration, Planning, and Policy

Preparing Students for Careers

Supporting students' path to employment success can be challenging. The journey requires multiple steps, including opportunities to explore careers, develop focused career plans, and engage in learning experiences that support the acquisition of valued workplace skills. Within each of these steps, there are multiple factors that contribute to employment success. Labor market information (LMI), as one of these factors, has the ability to inform students, parents, and educators of the realities of the current and future labor market, which can help frame student career decisions and planning. LMI can also inform education policy and encourage the practice of career-focused learning that is aligned with workforce needs. When LMI is part of career exploration, planning, and policy, students benefit from a more comprehensive and complete career preparation experience that acknowledges job trends and helps students position themselves for high-value careers.

Incorporating LMI into Career Exploration

Traditionally, career exploration has centered around two main components: (1) discovery of personal work-related attributes (e.g., interests, values, goals, skills, etc.) and (2) browsing job descriptions and videos available in online databases (e.g., O*NET, Occupational Outlook Handbook, etc.). In recent years, there has been increased emphasis on providing students with firsthand experiences with careers through CTE programs, apprenticeships, volunteer opportunities, and school-related encounters with local employers. Ultimately, the goal of career exploration is to develop informed career decisions. Whether these decisions focus on a specific occupation or general career field, they provide a critical direction for career planning.

Labor market information is rapidly becoming an additional factor in the career exploration process. Knowledge of local job markets can significantly enhance employment success through the revelation of high-demand, high-wage jobs. Armed with this information, students can make informed decisions about careers that may be more plentiful and that provide wages consistent with their lifestyle goals. Assisting students in accessing and understanding labor market information can facilitate a stronger alignment of career aspirations with the realities of the local economy.



Information to Share with Students

To maximize understanding of their local labor market, the following information can be shared with students as part of the career exploration process.

Career Clusters and Pathways: Career clusters and pathways provide framework for organizing career information and can serve as a guide for in-depth career exploration, as well as educational planning.

Basic LMI Terms and Definitions: Exposing students to basic terms, such as “annual openings” and “median wages” can help simplify labor market information and enable independent exploration of LMI.

Overview of Local High-Value Careers: Informing students of local high-value career opportunities within each career cluster can promote awareness of their local job market and connect students with good jobs in their area.

Communication Methods

There are numerous straightforward methods for communicating LMI and related information with students. The simplest approach is to incorporate LMI into existing career exploration materials and sessions. Handouts/flyers that introduce basic concepts and summarize local high-value career opportunities can be a valuable addition to career exploration packets. Likewise, brief online information pages that illustrate helpful LMI facts and findings can be added to tools and resources on school websites. Simple labor market overviews can also be inserted into existing career presentations that highlight important LMI terms and reveal local high-demand, high-wage careers. Finally, LMI can be discussed in career advising sessions to help students see connections between their personal interests and valuable career opportunities in their area. More in-depth communication methods (e.g., standalone learning guides and education sessions) can also be established. The more students know about in-demand jobs in their area the better prepared they will be to access these jobs.



Online Information Pages



Career Presentations



Advising Sessions

Using LMI to Make Career Decisions

LMI is best viewed as a companion to career exploration. It works best alongside other critical resources and opportunities that inform career decisions. When used as starting point, students can explore information about high-value careers in their area and use additional tools and resources to refine their career selection. For example, students may choose to begin their search with a summary of local high-value careers provided in their career exploration materials. To narrow their selection, information about their interests, values, and goals can be used to identify a high-value career cluster, pathway, and occupation that meets their needs. The benefit of this approach is that students begin and execute a majority of the search process focused on occupations that have high employment probability and provide the opportunity to earn a living wage or better.

Not all students, however, will choose to begin their search within the context of local high-value careers. Many will start by evaluating their work-related interests and/or accumulating firsthand work experiences. Some will also enter into the career exploration process with long-held, pre-determined occupational aspirations. In such cases, LMI is best used as a guiding factor in making informed career decisions. Students can use their values, interests, and aspirations to examine local high-value careers and determine options that could serve as a good fit. Additionally, students can extend beyond high-value careers and explore LMI for specific career choices, which can provide a sense of how other careers may or may not support lifestyle aspirations. When used as a guiding factor, LMI is an important resource that can place career choices within the realities of the local job market.

LMI as a Starting Point



Students explore high-value careers in their area and use additional tools and resources to refine their career selection among these high-value options.

LMI as a Guiding Factor

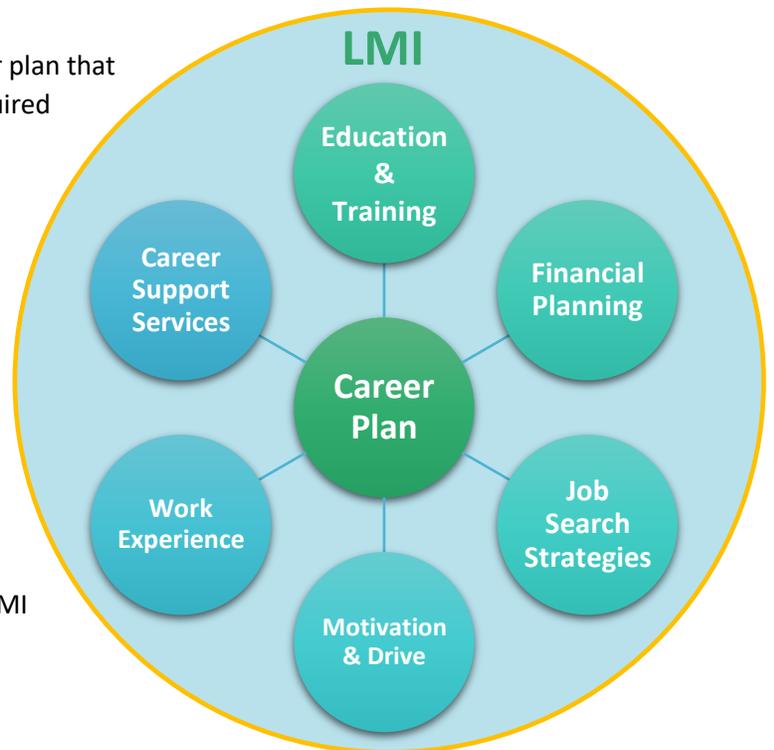


Students gain awareness of their work-related traits and aspirations. Local high-value careers are used as an additional resource for identifying viable career options that fit personal needs.

Incorporating LMI into Career Planning

After making an informed career decision, a detailed career plan that clearly maps the educational and support mechanisms required for one's career journey can significantly enhance the probability of employment success. Effective career plans clearly outline the education and training needed to obtain specific degrees or certificates for entry into a profession. The most successful plans include detailed financial plans, job search strategies, support services, and methods for maintaining motivation and drive. Students who are provided the opportunity to create career plans are significantly more likely to succeed in achieving their career goals.

Labor market information has the potential to influence almost every aspect of career planning. A basic review of LMI before developing a career plan can both simplify and strengthen the path to employment success.



Information to Share with Students

To maximize the use of LMI in career planning, the following information can be shared with students as part of the career planning process.

LMI Titles and Codes: Providing students with specific job titles and codes for their selected career(s) can assist them in linking their desired occupation(s) to a wealth of information available in online systems and databases.

Annual Openings: When students are aware of the number of job opportunities that will be available on an annual basis, they can develop strategies for entering potentially competitive markets.

Median Wage: Knowing how much they can anticipate earning in their career(s) can support key decisions about financial resources and funding accessed during and after completion of their career plan.

Communication Methods

Ideally, students will have been exposed to LMI during the career exploration process that precedes the career planning stage (see communication methods described above). If students require additional information about specific careers, they can be advised to consult school staff who have access to local LMI systems (e.g., school counselors) or they can review resources provided in their respective schools.



Using LMI in Career Planning

Education and Training: As part of the career planning process, many students will need to outline a strategy for achieving the educational requirements necessary for entry into their desired profession. Knowledge and use of LMI titles and codes can simplify this process. When students use specific LMI job titles in researching occupations, they are using clear markers that are recognized in several career databases. As a result, they can access more reliable and consistent information related to education and training for their career choice. Specific job titles are particularly useful in databases, such as the Occupational Outlook Handbook or O*NET, that present information from the Bureau of Labor Statistics and provide in-depth descriptions of job duties, responsibilities, and requirements. Specific titles also simplify exploration of the National Career Clusters Framework where knowledge and skill sets for particular career clusters and pathways can be located. Once information about basic educational requirements has been gathered, an educational plan can be generated that includes options for obtaining necessary degrees or certificates from local institutions.

Financial Planning and Support Services: One of the most critical areas for which LMI can have an impact is in the realm of financial planning and support services. As students make decisions about how they will pay for school, it will be critical for them to evaluate their “return on investment.” If their future occupation is anticipated to provide moderate to low wages or is expected to have limited job openings, they will want to carefully consider amount of loan money they accept. This may mean seeking more affordable education options. Support services may also need to be accessed to help minimize student debt. Reviewing LMI for selected occupations has the power to guide key financial decisions both during and after completion of the career plan.

Job Search Strategies: In developing job search strategies, LMI can be used to assess potential competition in the market. For careers that are expected to have limited job openings, students may need to obtain experience or advanced skills that will help set them apart. They may also need to be prepared to relocate when jobs become available. For careers that are expected to be more plentiful, this may be less of an issue. LMI can also be used to review median salaries and negotiate reasonable pay rates.

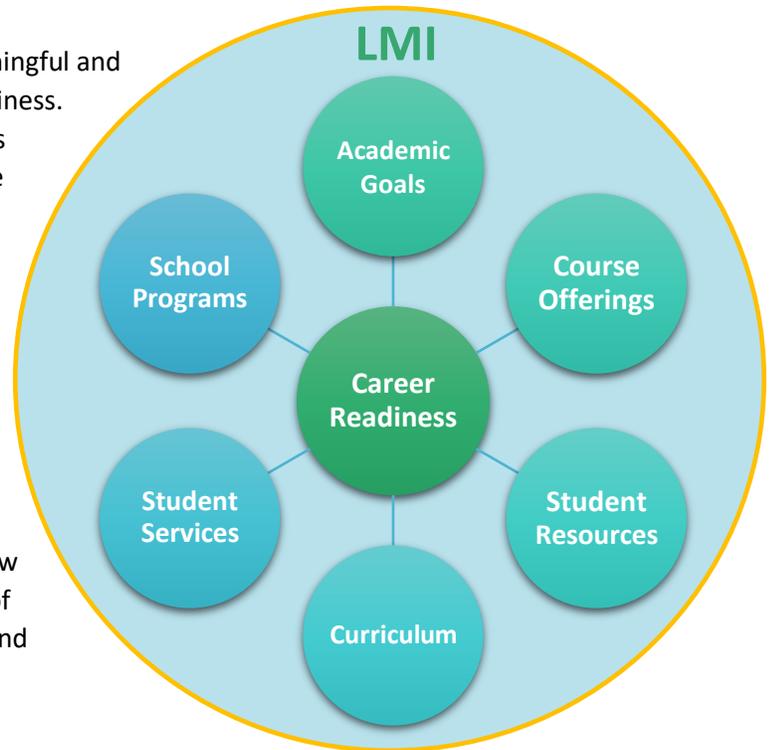
Motivation and Drive: The ability to persevere and persist in achieving career goals can be a significant obstacle for many students. Keeping focused on the future can motivate students to maintain progress toward their goals. Knowing their anticipated salary and job availability can encourage students to stay the course, especially for high-value jobs.



Incorporating LMI into Education Policy and Practice

Preparing students for employment success requires meaningful and relevant educational experiences that support career readiness. LMI can assist in developing effective policies and practices that support learning experiences that are aligned with the economic realities of local labor markets. This alignment can bring student programs, services, and resources into focus, ensuring students are provided with the foundational skills necessary to access viable career opportunities in their area.

In preparing students for careers, most elements of the education process can benefit from LMI and its ability to direct efforts toward high-value career destinations. Providing policymakers and educators with a basic overview of local LMI can help familiarize them with the landscape of local careers and contribute to informed policy decisions and educational practice.



Information to Share with Policymakers and Educators

To maximize understanding of the local labor market, the following information can be shared with policymakers and educators as part of the policy and practice process.

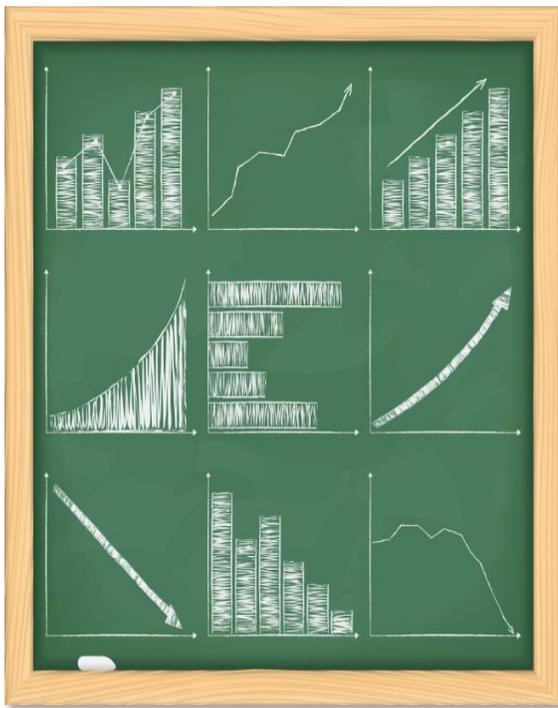
Overview of Local High-Value Careers: Supplying policymakers and educators with a basic chart-based overview of local high-value careers for each cluster can offer valuable insight into promising career opportunities for students. Including information pertaining to annual openings, median wages, and growth rate for each occupation is recommended. Furthermore, organizing this overview with the top clusters that present the greatest opportunity appearing first, can help focus attention on career fields where student preparation may be needed most.



Depending on the knowledge base of the audience, the following basic background information may also be helpful.

Introduction to Career Clusters and Pathways: A brief summary of career clusters and their use can provide framework for organizing career information. This can assist policymakers and educators in understanding relationships between careers and create a foundation for discussing career similarities and differences.

Basic LMI Terms and Definitions: Presenting basic LMI terms to policymakers and educators can help simplify labor market information and enable a deeper understanding of charts and tables summarizing local high-value careers.



Communication Methods

The primary objective in communicating with policymakers and educators is to create awareness of the local labor market and direct attention to career fields where strong employment opportunities are projected to be in-demand. The intention is to encourage informed policy decisions and educational practices that best prepare students for employment success.

Sharing LMI with policymakers and educators can be relatively simple. A brief chart-based document that summarizes local high-value careers for each cluster can be created and distributed. Listing top career clusters with the greatest opportunity first can help focus attention on occupations that may be highest in demand for students. Finally, adding a short summary page describing the top career clusters, along with possible program ideas, can help communicate local needs and highlight recommendations for meeting those needs.

When meeting with policymakers and educators, presentations can include similar chart-based summaries, with emphasis on career clusters that offer the greatest opportunity for students. Short one-page summary documents that list top clusters and occupations can be created to accompany these presentations. Keeping talking points focused on high-value occupations and their corresponding clusters can help drive the focus toward areas of educational need. Supplied with this information, policymakers and educators can begin to identify educational goals that align more closely with students' future career destinations.

Using LMI in Policy and Practice

In developing policy or engaging in educational practices, LMI can serve as a compass that provides additional direction for decisions and planning. Awareness of the local labor market sets the stage for preparing students to achieve one of the principle goals of education – employment success. Because LMI outlines the landscape of current and future job opportunities, reports, reviews, and presentations that summarize labor market realities are a critical first step in policymaking activities and education practices.

Achieving awareness, however, is only part of the equation. Knowledge of high-value careers has its greatest use in supporting informed decisions about curriculum, programs, and services that are offered to students. Having strong career destinations as a point of focus for policy and practice promotes a stronger alignment between educational processes and local employment opportunities. This shift in focus can be used to encourage programs and services that foster the acquisition valued career-relevant skills and concepts. Educators can design curriculum around the realities of the local job market. In addition, learning opportunities can be offered that provide hands-on experience in high-demand careers. The ultimate result of informed policy and practice can be empowered students who are armed with valued, career-relevant knowledge and skills.



Supporting Resources and Tools

Collecting and Sharing LMI

The following resources are available to support efforts to collect and share LMI with students, parents, counselors, educators, and policymakers.

Select Your Career Cluster: **Agriculture, Food and Natural Resources** **GO**

Select Your School District: **All School Districts**

CAREER CLUSTER

AGRICULTURE, FOOD AND NATURAL RESOURCES

Career Cluster Description: This Career Cluster focused on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Occupation - Cluster	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Farmers, Ranchers & Other Agricultural Managers - Agriculture, Food and Natural Resources	152	\$45,190	216	2.84%	Agribusiness Systems	2
Landscaping & Groundskeeping Workers - Agriculture, Food and Natural Resources	138	\$23,310	176	2.63%	Plant Systems	1
Farmworkers & Laborers, Crop, Nursery & Greenhouse - Agriculture, Food and Natural Resources	130	\$18,590	-124	-2.54%	Plant Systems	1
Recreation Workers - Agriculture, Food and Natural Resources	62	\$19,450	200	8.80%	Natural Resources Systems	2

P2C Labor Market Exploration System

This system provides simple, straightforward access to state and local labor market information.

[Click Here](#) or access the system at Pathway2Careers.com

Resources and Guides

How to Use the P2C Labor Market Exploration System

Overview

The Pathway2Careers labor market exploration system is divided into two main sections: 1) Explore Your Area and 2) Explore Career Clusters. Each section presents specific information related to local labor market exploration.

Explore Your Area

- The purpose of this section is to provide an overview of each school district, including basic district facts, local population information, and top career clusters.

Explore Career Clusters

- This section offers detailed labor market information for each career cluster. The data presented for each cluster pertains to the local workforce region for each district.

Explore Your Area

In the "Explore Your Area Section," an introduction page will appear that gives a brief summary of the purpose and function of the LMI reports generated in P2C. Use the dropdown menu to select a district and then click "GO."

Note: The option to select multiple school districts is available with multi-district access.

INTRODUCTION:

Strong relationships between schools and industry are being a key element in building these relationships often have the ability to create projects that can offer students their own career paths programs that focus on major specific labor market needs.

Being prepared to explore and explore local and state and national workforce information and data is essential for students to be successful in the workforce. The purpose of this section is to provide students with information on how to use the system to explore and explore local and state and national workforce information and data.

Students who are not familiar with the system should use the system to explore and explore local and state and national workforce information and data. The system is designed to be user-friendly and easy to use. The system is designed to be user-friendly and easy to use. The system is designed to be user-friendly and easy to use.

Select a school district.

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How to Use the P2C Labor Market Exploration System

This guide outlines simple instructions on how to navigate the P2C system.

[Click Here](#) or access this guide in the Resource Center at Pathway2Careers.com

Helpful LMI Terms and Definitions

These engaging PowerPoint slides introduce basic LMI terms and definitions. They can be downloaded and modified as needed.

[Click Here](#) or access these slides in the Resource Center at Pathway2Careers.com

Helpful LMI Terms and Definitions

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Resources and Guides

Introduction to Career Clusters

What are Career Clusters?

In our economy, there are hundreds of occupations and numerous ways of grouping them. The classification system most commonly used in schools and state agencies is the National Career Clusters Framework. This framework groups occupations into sixteen different clusters based on similarities in foundational knowledge and skills needed to achieve career success. The core academic and technical competencies that define each cluster provide the foundation on which students develop more advanced, industry-specific skills.

Detailed descriptions of the knowledge and skills associated with each cluster can be found at: <https://careertech.org/career-clusters>

The benefit of using the National Career Clusters Framework is that occupations are grouped on the basis of shared educational and training requirements. This allows for a more direct link to be established between educational practices and careers. Curriculum and programs of study can be developed that incorporate foundational skills that are essential to success in specific fields. Furthermore, clear pathways can be established that can guide students in selecting programs of study that will support their employment goals.

What are Career Pathways?

Within each cluster, pathways have been identified that focus on smaller subsets of related occupations. Career pathways have their own knowledge and skill requirements that support success in occupations aligned with the pathway. Courses and training programs are typically outlined in career pathways that can guide students as they develop and maintain progress toward career goals. While clusters provide a broad picture of foundational skills, pathways can help students focus on specific occupations and develop clear, more informed educational plans.

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Introduction to Career Clusters

This guide provides a helpful summary of career clusters, pathways, and programs of study.

[Click Here](#) or access this guide in the Resource Center at Pathway2Careers.com

Resources and Guides

Introduction to LMI

What is Labor Market Information (LMI)?

Labor market information (LMI) is a collection of data compiled primarily by government agencies for the purpose of analyzing job trends, wages, employment status, and economic changes related to workforce development. This rich data source contains statistics on hundreds of occupations, including annual job openings, median wages, growth rates, level of education, and more. LMI is particularly useful in identifying careers that are projected to be in-demand within various occupational areas and geographic locations. For educational institutions, the ability to identify high-value jobs is essential in ensuring educational goals and strategies are aligned with current labor market needs.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,200	264	8.93%	Information Support Services	1
Computer Programmers	36	\$103,200	236	-16.23%	Network Systems, Interactive Media, Programming and Software Development	3
Network & Computer System Administrators	35	\$70,820	121	6.88%	Network Systems, Programming and Software Development, Information Support Services	3
Software Developers, Applications	35	\$73,880	152	12.16%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3
Software Developers, Systems Software	35	\$94,590	108	6.47%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3
Computer Systems Analysts	33	\$71,040	168	16.73%	Information Support Services, Interactive Media, Programming and Software Development	3

Helpful Terms and Definitions

A basic understanding of common LMI terms can open the door to this powerful resource. Knowledge of these terms can simplify the search process and enhance understanding of various types of LMI data. Charts and graphs can be demystified and numerical relationships can be understood at a deeper level. In addition, search efforts can be maximized with the ability to select and concentrate on information that is most relevant to individual search needs. Empowered with this information, labor market exploration can be quick, easy, and... dare we say it... enjoyable.

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Introduction to LMI

This guide outlines basic LMI terms with simple definitions and helpful graphics.

[Click Here](#) or access this guide in the Resource Center at Pathway2Careers.com

Communicating LMI

The following resources are available to support efforts to communicate LMI with students, parents, counselors, educators, and policymakers.

Strategies for Identifying High-Value Careers

This brief guide outlines simple steps for using the labor market system to identify high-value careers.

[Click Here](#) or access this guide in the Resource Center at Pathway2Careers.com

Resources and Guides

Strategies for Identifying High-Value Careers

What are High-Value Careers?

Identifying high-value careers can be challenging. A primary reason for this is the lack of consistency in labeling and defining high-value careers. These careers have been labeled as high-value, in-demand, hot, bright outlook, growing, and top careers, just to name a few. Along with varying labels, there is a myriad of definitions and criteria for identifying high-value careers. According to O*NET (Occupational Information Network), "Bright Outlook occupations are expected to grow rapidly in the next several years or will have large numbers of job openings." While this definition recognizes job growth and demand, others also mention wages as an additional criterion. In Ohio, for example, an in-demand job is defined as a job that, "has a sustainable wage and a promising future based on the projected number of openings and growth" (see [An Introduction to Ohio's In-Demand Jobs Report](#)). To further complicate matters, methods for determining what constitutes rapid growth, numerous job openings, and high wage vary considerably.

Confused yet? Let's fix that.

High-value careers can be simply defined as high-demand, high-wage careers. This simple definition captures the two most essential components of desirable jobs – they are plentiful and they pay well. Using this definition, careers can be identified that provide ample opportunity for employment, as well as wages that support quality-of-life goals. While it is recognized that this is only one definition among many, we believe it offers the most parsimonious definition that emphasizes the principal elements of what constitutes a high-value career.

High-Value = High-Demand + High-Wage

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Local High-Value Careers
High-value careers are high-demand, high-wage careers that are stable or growing in demand.

School Name _____
 School District _____
 Workforce Region _____

All Career Clusters

Occupation & Career Cluster	Annual Openings	Median Wages	Career Pathway	Information Link

 Agriculture, Food and Natural Resources

Occupation	Annual Openings	Median Wages	Career Pathway	Information Link

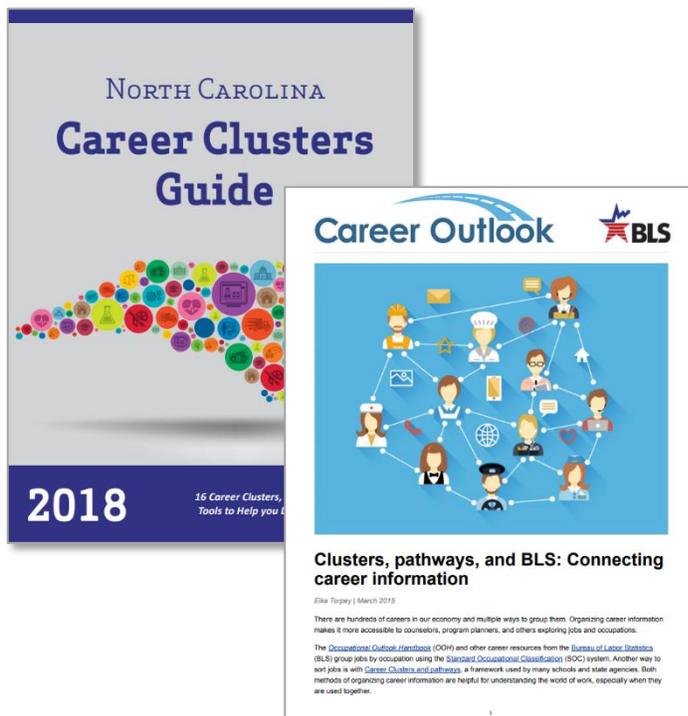
Local High-Value Careers Tables

Use this document to summarize local high-value careers. It can be downloaded, edited, and saved.

[Click Here](#) or access this table in the Resource Center at Pathway2Careers.com

Using LMI

The following resources are available to support efforts to use LMI in career exploration and planning, as well as education policy and practice.



Career Cluster Guides

Students can use career cluster guides to access detailed information about career clusters and pathways that have been identified as high-value. In-depth career cluster information is necessary to support students' ability to make informed career decisions.

Click on the images or conduct an Internet search to locate other useful guides.

National Career Clusters Framework

National Career Clusters Framework

Information on this site can be used to identify knowledge and skills associated with high-value career clusters and pathways. It can be particularly useful in outlining academic plans for students that guide their progress through educational institutions.

[Click Here](#)

Occupational Outlook Handbook

This online handbook is useful in exploring high-value occupations and their educational requirements. This can assist in developing policy and practice that supports students' ability to access high-value occupations.

[Click Here](#)

