



PATHWAY 2 CAREERS
Education with Destination

Resources and Guides

LABOR MARKET EXPLORATION SYSTEM



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The mission of Pathway2Careers is to promote education with destination through the creation of high-quality tools and resources that enhance the intersection of educational practices with high-value career opportunities.

The P2C system provides straightforward tools that can identify high-value career destinations, as well as effective resources and materials that can sustain progress on the pathway to career-readiness.

Our goal is to assist students in becoming career-ready, career-wise, and career-engaged.





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.

Career Cluster	Career Pathway	Career Cluster	Career Pathway
 <p>Agriculture, Food and Natural Resources</p>	<ul style="list-style-type: none"> • Agribusiness Systems • Animal Systems • Environmental Service Systems • Food Products & Processing Systems • Natural Resources Systems • Plant Systems • Power, Structural & Technical Systems 	 <p>Hospitality and Tourism</p>	<ul style="list-style-type: none"> • Lodging • Recreation, Amusements & Attractions • Restaurants & Food/Beverage Services • Travel & Tourism
 <p>Architecture and Construction</p>	<ul style="list-style-type: none"> • Construction • Design/Pre-Construction • Maintenance/Operations 	 <p>Human Services</p>	<ul style="list-style-type: none"> • Consumer Services • Counseling & Mental Health Services • Early Childhood Development & Services • Family & Community Services • Personal Care Services
 <p>Arts, Audio/Video Technology and Communications</p>	<ul style="list-style-type: none"> • A/V Technology & Film • Journalism & Broadcasting • Performing Arts • Printing Technology • Telecommunications • Visual Arts 	 <p>Information Technology</p>	<ul style="list-style-type: none"> • Information Support & Services • Network Systems • Programming & Software Development • Web & Digital Communications
 <p>Business, Management and Administration</p>	<ul style="list-style-type: none"> • Administrative Support • Business Information Management • General Management • Human Resources Management • Operations Management 	 <p>Law, Public Safety, Corrections and Security</p>	<ul style="list-style-type: none"> • Correction Services • Emergency & Fire Management Services • Law Enforcement Services • Legal Services • Security & Protective Services
 <p>Education and Training</p>	<ul style="list-style-type: none"> • Administration & Administrative Support • Professional Support Services • Teaching/Training 	 <p>Manufacturing</p>	<ul style="list-style-type: none"> • Health, Safety & Environmental Assurance • Logistics & Inventory Control • Maintenance, Installation & Repair • Manufacturing Production Process Development • Production • Quality Assurance
 <p>Finance</p>	<ul style="list-style-type: none"> • Accounting • Banking Services • Business Finance • Insurance • Securities & Investments 	 <p>Marketing, Sales and Service</p>	<ul style="list-style-type: none"> • Marketing Communications • Marketing Management • Marketing Research • Merchandising • Professional Sales
 <p>Government and Public Administration</p>	<ul style="list-style-type: none"> • Foreign Service • Governance • National Security • Planning • Public Management & Administration • Regulation • Revenue & Taxation 	 <p>Science Technology, Engineering and Mathematics</p>	<ul style="list-style-type: none"> • Engineering & Technology • Science & Mathematics
 <p>Health Science</p>	<ul style="list-style-type: none"> • Biotechnology Research & Development • Diagnostic Services • Health Informatics • Support Services • Therapeutic Services 	 <p>Transportation, Distribution and Logistics</p>	<ul style="list-style-type: none"> • Facility & Mobile Equipment Maintenance • Health, Safety & Environmental Management • Logistics Planning & Management Services • Sales & Service • Transportation Operations • Transportation Systems/Infrastructure Planning, Management & Regulation • Warehousing & Distribution Center Operations

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

Programs of Study

Programs of study are a critical component of career pathways. They provide a more focused and comprehensive outline of courses and trainings that lead to a specific career. Successful completion of a program of study typically results in certification or a degree that provides entry into a field of work. Where career pathways provide insight into various educational options and goals within a career field, programs of study target individual careers and specify the particular courses and trainings, as well as the sequence, needed to meet basic job requirements.

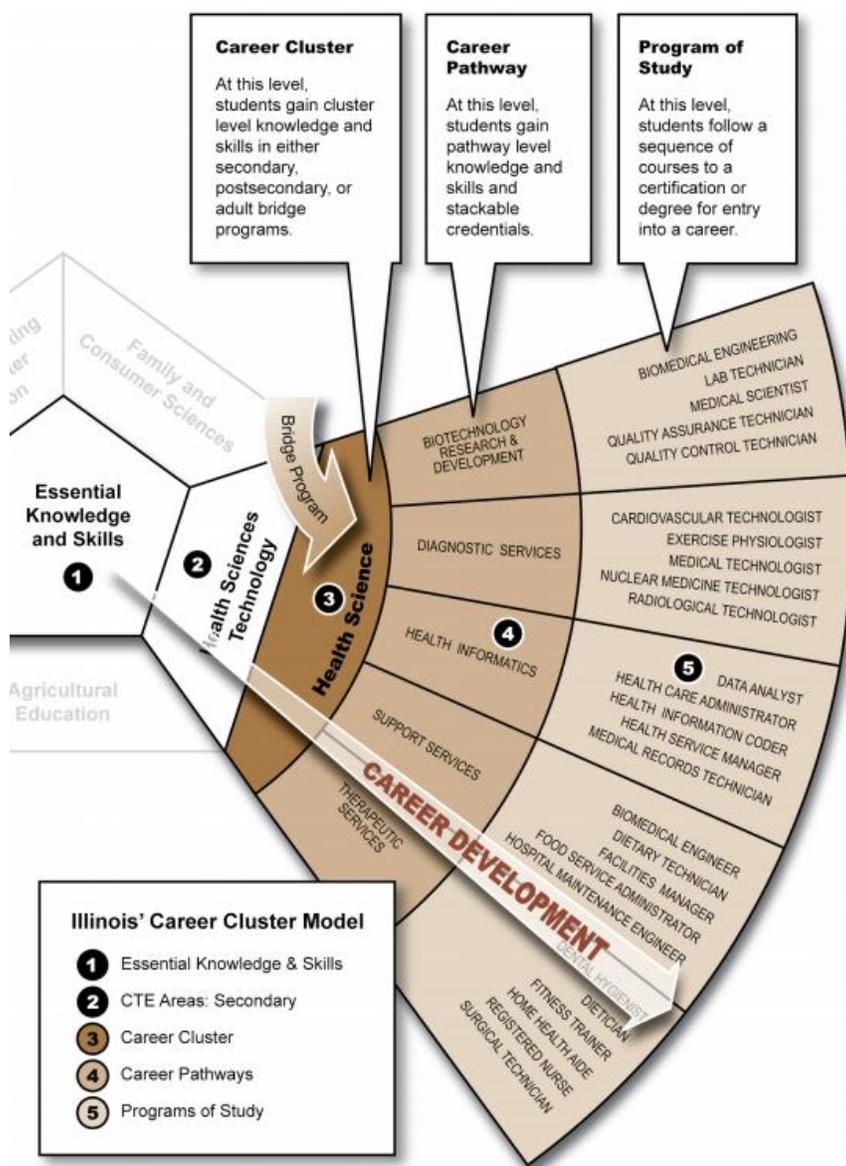
Detailed descriptions of various programs of study can be found at: <https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>

How does it all fit together?

The organizational structure of the Career Clusters Framework moves from general to specific. Career clusters are the largest category, where jobs are classified according to foundational level knowledge and skills. Career pathways further delineate occupations within clusters by grouping jobs based on common courses and training programs. Finally, programs of study are more refined components of career pathways that focus on individual careers and specify the particular courses and sequences needed to obtain necessary certificates and/or degrees.

There are several career cluster models and diagrams available that illustrate the organizational structure of the Career Clusters Framework. One model that incorporates the major components of the framework is the Illinois' Career Cluster Model. This model effectively demonstrates the increasing specificity as transitions are made from clusters, to pathways, to programs of study.

Overall, the Career Clusters Framework provides a basis for understanding the fundamental knowledge and skills required for various careers. This can facilitate a more direct alignment between educational program offerings and occupational opportunities.



Source: [Illinois' Career Cluster Model](#)

Helpful Resources

Several online resources are available that provide detailed descriptions of individual career clusters and pathways. Below is a list of government and state guides that can assist in further exploration of career clusters and their use.

Bureau of Labor Statistics

<https://www.bls.gov/careeroutlook/2015/article/career-clusters.htm>

O*NET Browse by Career Cluster

<https://www.onetonline.org/find/career>

North Carolina Career Clusters Guide

<https://www.nccareers.org/careerguide/index.html>

[https://www.nccareers.org/careerguide/print/Career Clusters Guide 2018.pdf](https://www.nccareers.org/careerguide/print/Career%20Clusters%20Guide%202018.pdf)

Nebraska Career Education Model and Resources

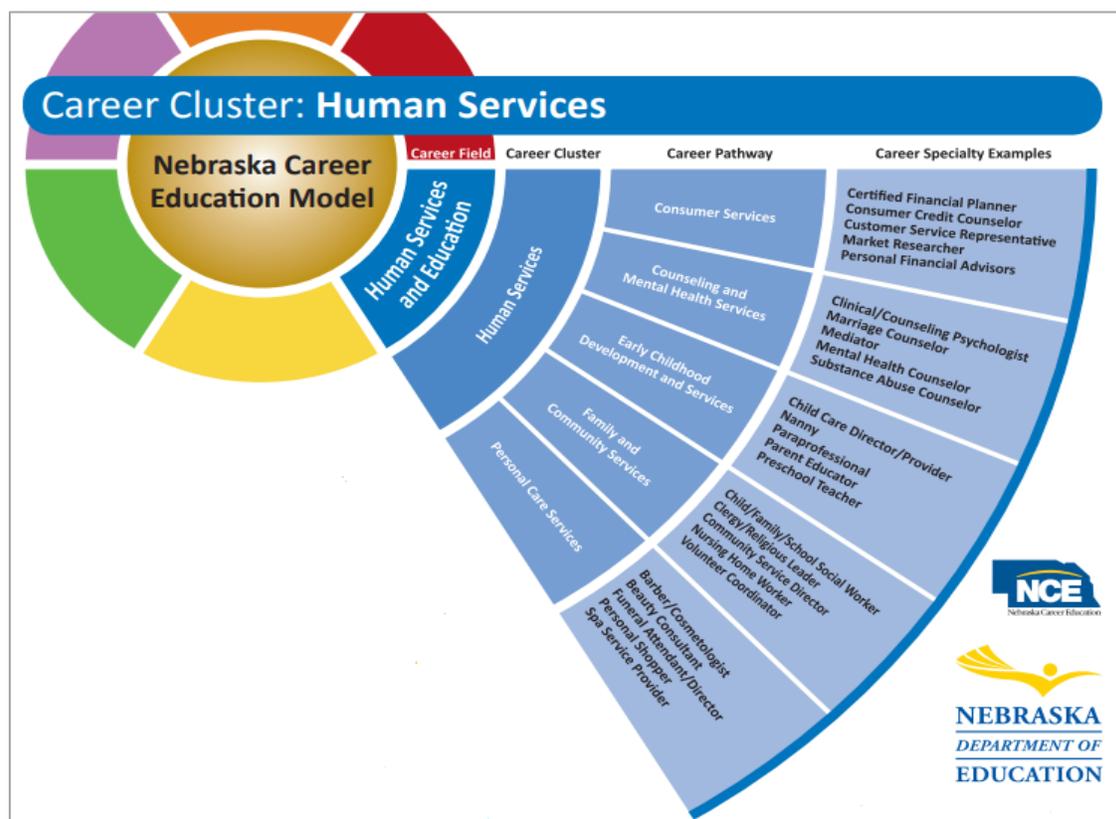
<https://www.education.ne.gov/nce/career-clusters/>

Illinois Career Clusters, Pathways, and Programs of Study Guide

https://ocrl.illinois.edu/docs/librariesprovider4/prc/career-cluster-guide.pdf?sfvrsn=24b9bc89_6

Minnesota State CAREERwise Education

<https://careerwise.minnstate.edu/careers/clusters.html>



Source: [Nebraska Career Education Model and Resources](https://www.education.ne.gov/nce/career-clusters/)



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.

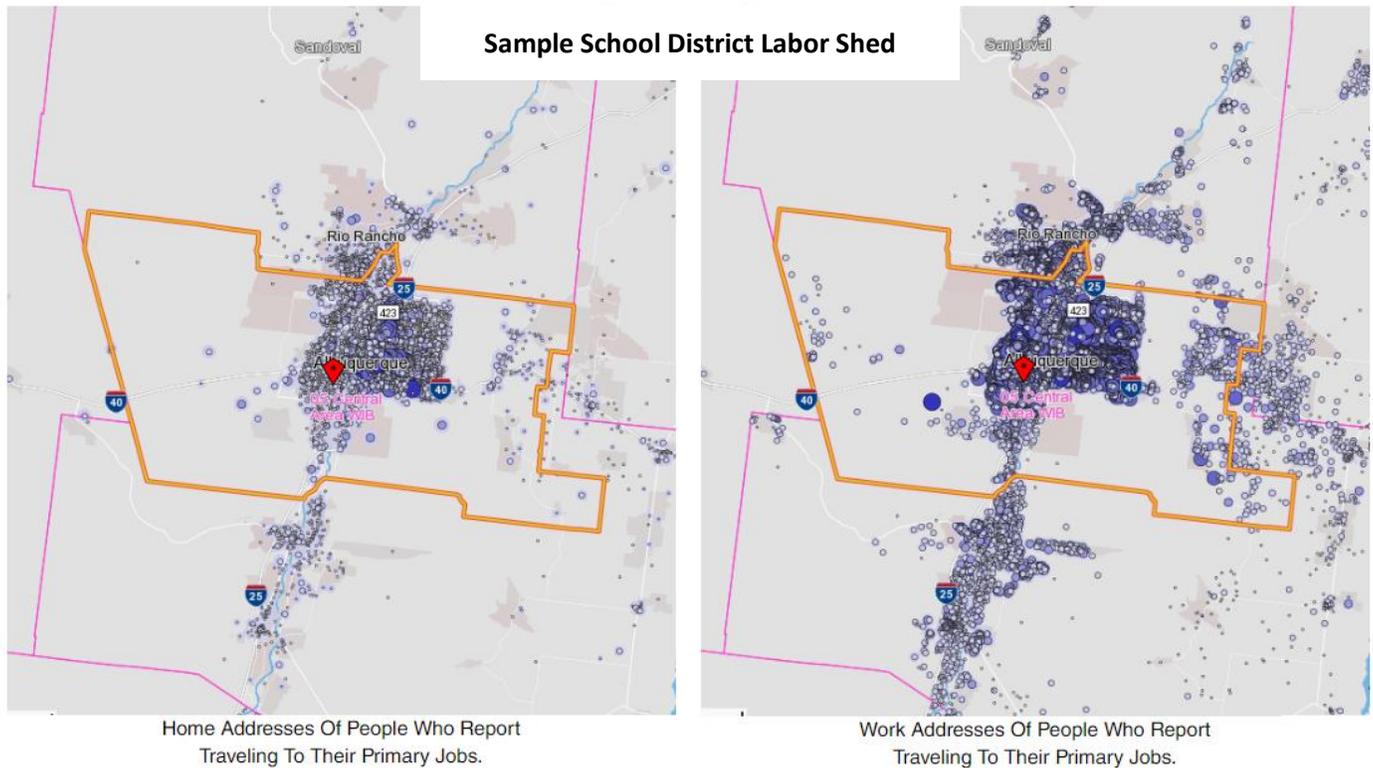
Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,220	264	8.93%	Information Support Services	1
Computer Programmers	36	\$103,200	-238	-16.23%	Network Systems, Interactive Media, Programming and Software Development	3
Network & Computer Systems Administrators	35	\$70,820	121	6.88%	Network Systems, Programming and Software Development, Information Support Services	3
Software Developers, Applications	35	\$77,590	162	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	188	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.

Labor Shed

A labor shed is simply defined as the geographic region that represents the area where individuals live and work. A labor shed analysis can aid in understanding where a labor market draws its commuting workers. From an educational perspective, labor sheds identify areas where individuals may be seeking learning opportunities to develop advanced skills and prepare for local careers.



Annual Openings

The term “annual openings” refers to the average number of job openings projected for each year. For example, in the table below, an average of 64 job openings are expected each year for Computer User Support Specialists in the local workforce region. Openings can represent expanding job opportunities, as well as jobs that open up when individuals retire or move into a different career.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Software Developers, Applications	35	\$77,590	162	12.16%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3

Median Wages

Data listed under “median wages” indicates the median annual income associated with specific occupations. For those who need a reminder (don’t worry, most of us have forgotten), the median is the middle value in a sorted list of numbers. This means that the median wage is the wage at which half of the people working in a particular occupation earned more and half earned less. Medians tend to be preferred over means in analyzing wages because means can be heavily influenced by extreme numbers (like the random millionaire that happens to strike it big in the marketing industry).



Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Projected New Jobs

As the economy shifts and changes, occupations grow and decline. The “projected new jobs” data (also referred to simply as “employment change”) indicates the projected numerical change in job openings over a period of time (typically ten years). In some cases, the expected employment change is negative, indicating an occupation with diminishing opportunity. For example, in the table below, the number of openings for Computer Programmers is expected to decrease by 238 jobs over the ten-year projections period.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Growth Rate

The growth rate is related to projected new jobs. It is the percent change in employment expected over a period of time (typically ten years). Using the table below, the demand for software developers in the local workforce region is projected to grow 12.16%.

The growth rate is calculated by dividing the projected number of new jobs by the number of current jobs and multiplying by 100 → $(162/1332) \times 100 = 12.16\%$. (Note: The number of current jobs is not provided in the table below, but it can be determined, if needed, with a little help from algebra).



Percentages can be deceiving. A small percentage suggests small growth. But, in a large occupation, even a 2% growth rate can mean numerous additional job openings. Likewise, a large percentage can suggest large growth. But, in a small occupation (say with only 50 jobs), a 50% change could amount to only handful of additional job openings.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,220	264	8.93%	Information Support Services	1
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Pathways

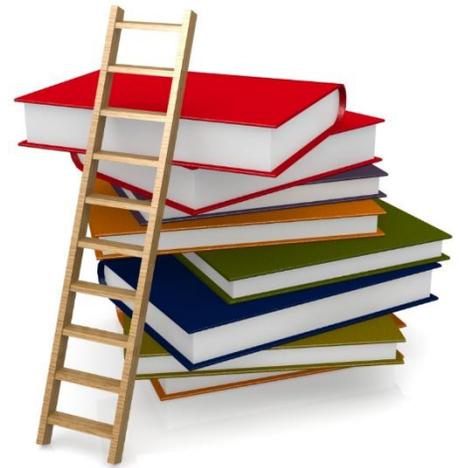
The pathways information listed in the P2C tables shows the career pathway linked to each occupation. Career pathways outline courses, trainings, and resources that can guide students as they develop and maintain progress toward career goals.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Job Zone / Education

Job zones were developed by O*NET (Occupational Information Network) as simple indicators of the amount of education, training, and experience needed for a given occupation. Lower numbers signify less preparation and higher numbers signify more preparation.

- Job Zone 1: Little or No Preparation Needed
- Job Zone 2: Some Preparation Needed
- Job Zone 3: Medium Preparation Needed
- Job Zone 4: Considerable Preparation Needed
- Job Zone 5: Extensive Preparation Needed



Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Bringing Everything Together

These basic terms and definitions serve as a foundation for labor market exploration. With an understanding of labor shed analyses, perspective can be gained on the location and size of labor markets surrounding districts, towns, and cities. Knowledge of openings, projected new jobs, and growth rates can help identify jobs with high demand and increasing opportunity. Additionally, median wage information can be used to determine high-wage occupations that can sustain quality-of-life-goals. Finally, pathway and job zone information offer insight into educational and training requirements that individuals need to gain entry into particular careers. As a whole, this information unlocks high-value career destinations and provides information on where and how individuals can achieve employment success.





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
YOUR
AREA

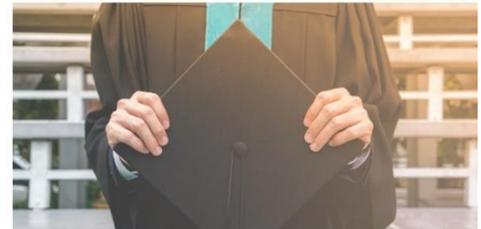
GET STARTED

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
CAREER
CLUSTERS

GET STARTED



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.

Select Your School District:

INTRODUCTION

Strong relationships between schools and industry and taking a long-term view toward building these relationships often make the difference for successful programs. How can other states develop their own career pipeline programs that focus on region-specific labor-market needs?

Bring employers in. In regions where industries such as health care, information technology, or advanced manufacturing are emerging, Pathways to Prosperity engages with employers in these sectors to develop academic programs and curricula or participate in mentoring or training initiatives for high school students. The engagement of industry leaders is essential because they see value in preparing high school and community college students for careers in their industries.

Employers “often see value in partnering with a two-year institution, even if the students don’t feed directly into their company,” said Sheila Jackson, program manager at Jobs for the Future. They don’t see their investment necessarily as a talent pipeline for new employees, but they understand that the IT field, for example, is changing at such a rapid pace and there is a need for more employees at all levels of the industry,” said Jackson.

Select a school
district.

After selecting a district, an overview page will be shown that provides a summary of basic district facts, as well as population information (age, gender, race, etc.).

The population information is **specific to each individual school district**. If district level information is not available, a notice will appear at the top of the profile and information will be displayed for the county in which the district resides.

DISTRICT OVERVIEW

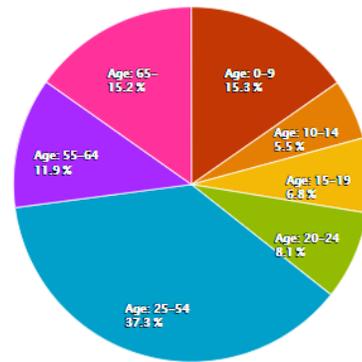
[Download/Print](#)

PUBLIC SCHOOLS	Classroom Teachers: 241
Total Schools: 13	Student/Teacher Ratio: 16.12
Total Students: 3,885	

DISTRICT PROFILE

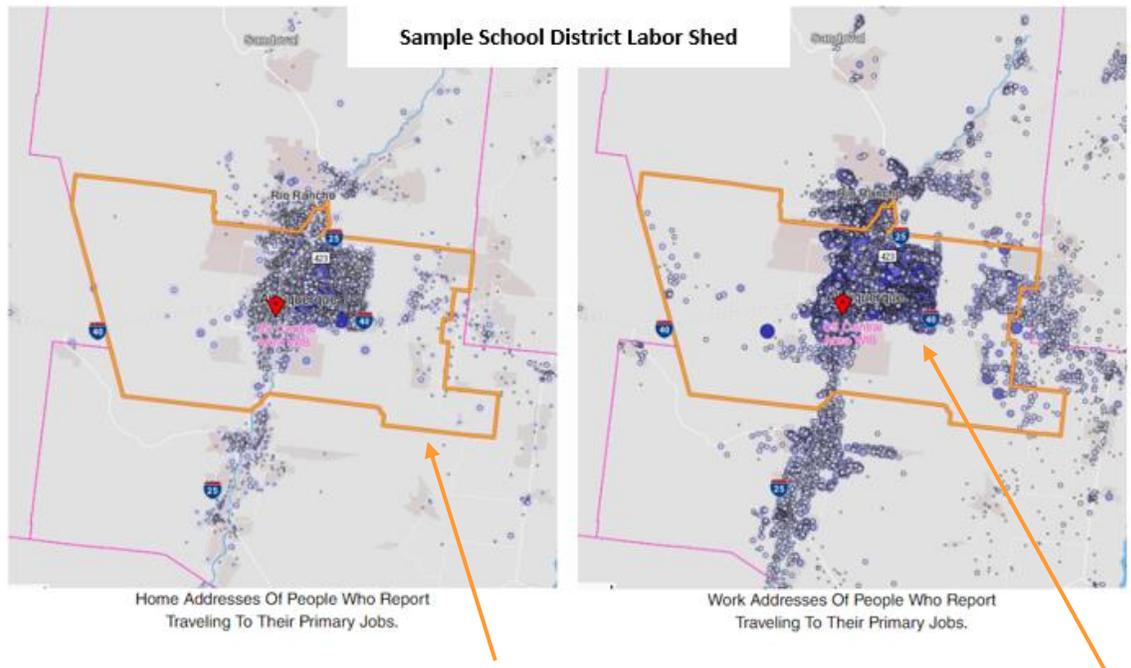
POPULATION BY AGE
Median Age: 35.10

Population	Level	Percentage	Chart
<i>Total</i>	<i>10,159</i>	<i>100%</i>	
0-9	1,550	15.3%	
10-14	558	5.5%	
15-19	694	6.8%	
20-24	825	8.1%	
25-54	3,783	37.3%	
55-64	1,208	11.9%	
65+	1,541	15.2%	



Included in the district overview are images and a detailed description of the local labor shed for each school district.

A **labor shed** is simply defined as the geographic region that represents the area where individuals live and work. A labor shed analysis can aid in understanding where a labor market draws its commuting workers.



The orange outline indicates school district boundaries.

Each blue point represents the home or work address for each working individual living near the school district.

The district overview will conclude with a summary of the top five career clusters for the district’s **workforce region(s)**. The top five clusters are sorted by annual openings, median wages, and projected new jobs.

It is recommended that all three indicators (openings, wages, and growth) be taken into account when determining high-value career clusters. Growing clusters with multiple annual openings, as well as a living wage, offer the most viable career opportunities for individuals seeking employment.

TOP FIVE CAREER CLUSTERS

TOP FIVE CAREER CLUSTERS BY MOST ANNUAL OPENINGS

In This Workforce Region

[See More ▶](#)

Cluster	Annual Openings	Median Wages	2014 Jobs	Projected New Job
Marketing, Sales and Service	613	\$22,170	14645	1047
Hospitality and Tourism	528	\$18,010	9909	2079
Health Science	397	\$66,430	9636	1704
Human Services	390	\$19,560	7876	3256
Business, Management and Administration	270	\$29,720	9001	483

TOP FIVE CAREER CLUSTERS BY HIGHEST WAGES

In This Workforce Region

[See More ▶](#)

Cluster	Annual Openings	Median Wages	2014 Jobs	Projected New Job
Health Science	4	\$185,260	91	15
Architecture and Construction	37	\$146,490	1202	-1
Science Technology, Engineering and Mathematics	9	\$143,250	248	17
Education and Training	42	\$128,620	1060	228
Information Technology	29	\$107,640	1164	-194

TOP FIVE CAREER CLUSTERS BY LARGEST PROJECTED GROWTH

In This Workforce Region

[See More ▶](#)

Cluster	Annual Openings	Median Wages	2014 Jobs	Projected New Job
Human Services	390	\$19,560	7876	3256
Hospitality and Tourism	528	\$18,010	9909	2079
Health Science	397	\$66,430	9636	1704
Marketing, Sales and Service	613	\$22,170	14645	1047
Business, Management and Administration	270	\$29,720	9001	483

A Note About Workforce Regions

Most states are divided into workforce regions (also referred to as Local Workforce Development Areas – LWDAs) where local workforce needs are monitored and supported through region-specific programs and services. For each workforce region, labor market information is collected to determine economic demand and workforce supply. This information provides a critical foundation for identifying methods of supporting employee needs and stimulating economic development.

Workforce regions are typically the smallest areas from which labor market information is collected. Gathering information from specific counties or districts is often too restrictive and noninformative, especially for rural communities and small towns where employment data is limited. Furthermore, a regional level of analysis can more accurately reflect the full-range of employment opportunities available to individuals who are able to commute beyond their immediate areas.

In the Pathway2Careers labor market exploration system, LMI for career clusters (annual openings, median wages, etc.) is displayed for the workforce region(s) in which each district is located. The specific workforce region for each school district is specified in the labor shed summary available in the district overview (see Explore My Area). This is helpful to note when reviewing the career cluster information displayed for each district.



New Mexico's Workforce Regions

DISTRICT PROFILE

Albuquerque Public School District is situated in Bernalillo County, which is a component of the Central Workforce Area of New Mexico. More than 76% of workers in the area commute less than 10 miles per day to work. Outside of the city of Albuquerque, the most common destination for commuters is the city of Rio Rancho. In this profile, the labor shed associated with the Albuquerque District is defined as an amalgamation of Bernalillo and Sandoval Counties. Both counties lie in the Central Workforce Area of New Mexico, and employment projections from the New Mexico Department of Workforce Solutions for that region will be used to estimate occupation-driven demand.

Explore Career Clusters

In the “Explore Career Clusters” section, a page will appear with the opportunity to select a specific career cluster. Selecting a cluster will focus the labor market information on a particular cluster. This provides the opportunity to explore high-value occupations within individual clusters.

Select a Career Cluster to explore.



A Note About Career Clusters and Classification of Occupations

- The sixteen career clusters displayed in the P2C system are consistent with the National Career Clusters Framework (the classification system most commonly used in schools and state agencies). For more information about the National Career Clusters Framework, please visit careertech.org/career-clusters.
- There are different methods of classifying occupations into career clusters. In the P2C system, occupations are classified into clusters using the Perkins IV Crosswalk Table 6. This crosswalk can be downloaded at careertech.org/crosswalks.

Once a cluster is selected, a page will appear that presents labor market information for that cluster. The geographic region the information applies to will depend on the school district that is selected.

When **All School Districts** is selected, the information will apply to the entire state.

When a **specific school district** is selected, the information will apply to the district's workforce region(s).

CAREER CLUSTER



HEALTH SCIENCE

Career Cluster Description: Planning, managing, and providing therapeutic services, diagnostic services, biotechnology research and development.

All School Districts = LMI is displayed for the entire state

Specific School District = LMI is displayed for the district's workforce region(s)

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Registered Nurses	661	\$64,710	2761	16.90%	Therapeutic Services	3
Home Health Aides	347	\$20,730	2219	40.18%	Therapeutic Services	1
Nursing Assistants	222	\$25,880	635	9.07%	Therapeutic Services	2
Medical Assistants	182	\$28,230	816	17.00%	Diagnostics Services, Health Informatics	2
Cooks, Institution & Cafeteria	109	\$21,270	199	5.94%	Support Services	1
Medical Secretaries	95	\$30,960	555	15.07%	Health Informatics	2
Social & Human Service Assistants	93	\$32,480	363	12.54%	Therapeutic Services	2
Medical & Health Services Managers	90	\$87,810	339	15.30%	Therapeutic Services, Diagnostics Services, Health Informatics	3
Dental Assistants	89	\$32,230	312	13.32%	Therapeutic Services	2
Licensed Practical & Licensed Vocational Nurses	77	\$46,620	136	6.15%	Therapeutic Services	2

There are various interactive functions available in the tables that allow searches to be customized around key focus areas and questions of interest. Simply clicking on dropdown menus or table headings will focus and sort the information around specific search needs.

Select Your Career Cluster: **Health Science** GO

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

Easily move between clusters by selecting different clusters from the dropdown menu.

Access LMI for a specific district's workforce region by selecting the district in the dropdown menu.

CAREER CLUSTER



Career Cluster Description: Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Registered Nurses	661	\$64,710	2761	16.90%	Therapeutic Services	3
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Identifying **high-wage, high-demand, and high-skill** occupations within clusters can be accomplished by sorting information displayed in the tables. Clicking on column headings will sort the data from highest to lowest.

CAREER CLUSTER



Career Cluster Description: Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
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Medical Assistants	182	\$28,230	816	17.00%	Diagnostics Services, Health Informatics	2

High-Demand

Click on the **Annual Openings** heading to reveal occupations with the most openings expected each year.

High-Wage

Click on the **Median Wages** heading to reveal occupations with the highest wages.

High-Skill

Click on the **Job Zone/Education** heading to reveal occupations with the most advanced educational requirements. Higher numbers signify more preparation needed.

Occupations can also be identified as **high-growth**, which can be an additional indicator of **high-demand**. The number of projected new jobs and growth rates are common statistics used to assess job growth.

Projected New Jobs = the projected numerical change in job openings over a period of time (typically ten years)

Growth Rate = percent change in employment expected over a period of time (typically ten years)

Note: Growth rates can be deceiving. A small percentage suggests small growth. But, in a large occupation, even a 2% growth rate can mean numerous additional job openings. Likewise, a large percentage can suggest large growth. But, in a small occupation (say with only 50 jobs), a 50% change could amount to only a handful of additional job openings.

CAREER CLUSTER



HEALTH SCIENCE

Career Cluster Description: Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate
Registered Nurses	661	\$64,710	2761	16.90%
Home Health Aides	347	\$20,730	2219	40.18%
Nursing Assistants	222	\$25,880	635	9.07%
Medical Assistants	182	\$28,230	816	17.00%

High-Growth

Click on the **Projected New Jobs** or **Growth Rate** to reveal occupations with the highest projected growth.

Career pathways can also be sorted alphabetically. This will **group similar pathways together**, allowing for occupations associated with specific pathways to be explored. Demand, wages, and growth for pathways can also be examined.

CAREER CLUSTER



HEALTH SCIENCE

Career Cluster Description: Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Registered Nurses	661	\$64,710	2761	16.90%	Therapeutic Services	3
Home Health Aides	347	\$20,730	2219	40.18%	Therapeutic Services	1
Nursing Assistants	222	\$25,880	635	9.07%	Therapeutic Services	2
Medical Assistants	182	\$28,230	816	17.00%	Diagnostics Services, Health Informatics	2

Career Pathways

Click on the **Pathway** heading to sort pathways alphabetically and group similar pathways together.

Below the cluster table is a list of career pathways that correspond to the selected cluster. A description of each pathway is provided, along with a detailed list of secondary CTE courses associated with the pathway.

HEALTH SCIENCE PATHWAYS

- ▼ **Therapeutic Services**
- ▼ **Diagnostic Services**
- ▼ **Health Informatics**
- ▼ **Support Services**
- ▼ **Biotechnology Research and Development**

Click the arrow next to the pathway to see the pathway description and secondary CTE courses.

HEALTH SCIENCE PATHWAYS

▲ **Therapeutic Services**

Pathway Description: Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients; they may provide care, treatment, counseling and health education information.

SECONDARY CTE COURSES

Health Science I: Introduction to Health Science: Instructional content will focus on healthcare communications, leadership and teamwork, and reinforce, expand and enhance biology content specific to human structure and function. Instruction will use interest inventories and observations to introduce students to careers in healthcare and will incorporate project- and problem-based healthcare practices and procedures to demonstrate the criticality of these knowledge and skills. This course will build an understanding of the academic, communication, and technical skills in all aspects of the industry. Students will learn how healthcare workers fit within the overall health care environment and will identify how key systems affect quality of care and other services they perform.

A comprehensive list of programs of study related to the selected career cluster appears under the pathways. The corresponding **CIP code** for each program is listed next to the program title. Descriptions of each program can be found at the [National Center for Education Statistics \(NCES\)](https://nces.ed.gov/ipeds/datacenter/ipedsdatacenter/).

PROGRAMS OF STUDY

- | | |
|---|---|
| 19.0501 Foods, Nutrition, and Wellness Studies, General. | 51.3501 Massage Therapy/Therapeutic Massage. |
| 19.0504 Human Nutrition. | 51.3502 Asian Bodywork Therapy. |
| 19.0599 Foods, Nutrition, and Related Services, Other. | 51.3503 Somatic Bodywork. |
| 26.1103 Bioinformatics. | 51.3599 Somatic Bodywork and Related Therapeutic Services, Other. |
| 26.1199 Biomathematics, Bioinformatics, and Computational Biology, Other. | 51.3601 Movement Therapy and Movement Education. |
| 26.1201 Biotechnology. | 51.3602 Yoga Teacher Training/Yoga Therapy. |
| 41.0101 Biology Technician/Biotechnology Laboratory Technician. | 51.3603 Hypnotherapy/Hypnotherapist. |
| 51.0000 Health Services/Allied Health/Health Sciences, General. | 51.3699 Movement and Mind-Body Therapies and Education, Other. |
| 51.0001 Health and Wellness, General. | 51.3701 Aromatherapy. |
| 51.0101 Chiropractic. | 51.3702 Herbalism/Herbalist. |
| 51.0201 Communication Sciences and Disorders, General. | 51.3703 Polarity Therapy. |
| 51.0202 Audiology/Audiologist. | 51.3704 Reiki. |
| 51.0203 Speech-Language Pathology/Pathologist. | 51.3799 Energy and Biologically Based Therapies, Other. |

Printing Reports

The P2C system generates printable PDF reports that summarize the information displayed on the screen. Simply click the Download/Print links to instantly generate documents that can be saved, printed, and shared. These links will typically be located at the top of pages or tables.

DISTRICT OVERVIEW

[Download/Print](#)

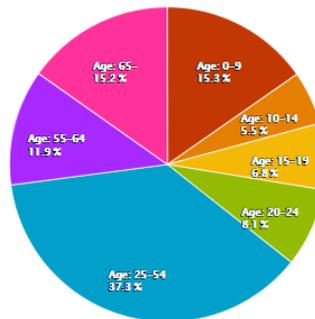
PUBLIC SCHOOLS
 Total Schools: 13
 Total Students: 3,885
 Classroom Teachers: 241
 Student/Teacher Ratio: 16.12

Click on Download/Print links to generate printable reports that summarize information presented on the screen.

DISTRICT PROFILE

POPULATION BY AGE
 Median Age: 35.10

Population	Level	Percentage	Chart
<i>Total</i>	<i>10,159</i>	<i>100%</i>	
0-9	1,550	15.3%	
10-14	558	5.5%	
15-19	694	6.8%	
20-24	825	8.1%	
25-54	3,783	37.3%	
55-64	1,208	11.9%	
65+	1,541	15.2%	



TOP FIVE CAREER CLUSTERS

TOP FIVE CAREER CLUSTERS BY MOST ANNUAL OPENINGS In This Workforce Region

Cluster	Annual Openings	Median Wages
Human Services	331	\$19,858
Marketing, Sales and Service	281	\$23,382
Hospitality and Tourism	246	\$18,870
Business, Management and Administration	136	\$80,865
Government and Public Administration	136	\$80,865

TOP FIVE CAREER CLUSTERS BY HIGHEST WAGES In This Workforce Region

Cluster	Annual Openings	Median Wages
Science, Technology, Engineering and Mathematics	5	\$179,774
Architecture and Construction	15	\$151,066
Health Science	12	\$147,216
Finance	9	\$144,866
Business, Management and Administration	3	\$120,555

TOP FIVE CAREER CLUSTERS BY LARGEST PROJECTED GROWTH In This Workforce Region

Cluster	Annual Openings	Median Wages	Count	Percentage
Human Services	331	\$19,858	6898	2747
Hospitality and Tourism	210	\$18,081	3665	825
Marketing, Sales and Service	281	\$23,382	6898	424
Government and Public Administration	136	\$80,865	4215	291
Business, Management and Administration	63	\$31,708	4893	112

DISTRICT PROFILE

The Public Schools District serves a southeastern portion of Rio Arriba County and approximately 9,650 workers live within the footprint of the district, and 64.6% of them commuted more than 50 miles. Among those that travel more than 50 miles, the majority travel all commuters, Espanola (24.8%), Santa Fe (13.2%) and Albuquerque (13%) are the most shed associated with the Public Schools District is an amalgamation of Rio Arriba, Bernalillo Counties. These New Mexico counties are components of the Northern and Central Projections from the New Mexico Department of Workforce Solutions for those regions will



JOB BY DISTANCE

Home Census Block to Work Census Block

Count	Percentage	Chart
<i>Total</i>	<i>5,911</i>	<i>100%</i>
Less than 10 miles	2,336	40%
10-24 miles	1,091	17%
25-50 miles	822	16%
50+ miles	1,844	33%

PUBLIC SCHOOLS

DISTRICT OVERVIEW

PUBLIC SCHOOLS
 Total Schools: 13
 Total Students: 3,885
 Classroom Teachers: 241
 Student/Teacher Ratio: 16.12

DISTRICT PROFILE

POPULATION BY AGE
 Median Age: 35.10

Population	Level	Percentage	Chart
<i>Total</i>	<i>10,159</i>	<i>100%</i>	
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20-24	825	8.1%	
25-54	3,783	37.3%	
55-64	1,208	11.9%	
65+	1,541	15.2%	

POPULATION BY GENDER

Population	Level	Percentage	Chart
<i>Total</i>	<i>10,159</i>	<i>100%</i>	
Male	5,097	50.2%	
Female	5,062	49.8%	

Help and Support

If you encounter difficulties or develop questions at any time while using the system, the P2C team is here to help. Simply locate links at the top and bottom of the page to contact us. Questions will be answered as quickly as possible, typically within 24 hours.



Name *

Email *

Subject *

Message

Click on Contact or Help links to submit questions and resolve difficulties in using the P2C system.



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

Identifying High-Demand Careers

As our economy shifts and changes, career opportunities will increase and decrease. **High-demand careers** can be defined as careers for which there are numerous job openings. When particular jobs are abundant, this indicates a high need in the economy for employees to fill those positions. To identify jobs with numerous openings, information pertaining to “annual openings” is typically reviewed.

Annual Openings

The term “annual openings” refers to the average number of job openings projected for each year. For example, in the table below, an average of 64 job openings are expected each year for Computer User Support Specialists in the local workforce region. Openings can represent expanding job opportunities, as well as jobs that open up when individuals retire or move into a different career.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,220	264	8.93%	Information Support Services	1
Computer Programmers	36	\$103,200	-238	-16.23%	Network Systems, Interactive Media, Programming and Software Development	3
Network & Computer Systems Administrators	35	\$70,820	121	6.88%	Network Systems, Programming and Software Development, Information Support Services	3
Software Developers, Applications	35	\$77,590	162	12.16%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3

Sort and Review

One method for identifying high-demand jobs in a particular region is to sort occupations by annual openings. In the P2C system this is accomplished by simply clicking the column heading for annual openings. When annual openings are sorted from highest to lowest, occupations that are in highest demand appear at the top of the list.

Occupation - Cluster	Annual Openings	Median Wages	Projected New Jobs	Growth Rate
Retail Salespersons - Marketing, Sales and Service	1183	\$22,100	1908	6.67%
Personal Care Aides - Human Services	1081	\$19,080	9074	42.24%
Combined Food Preparation & Serving Workers, Incl. Fast Food - Hospitality and Tourism	1013	\$18,050	3997	21.07%
Waiters & Waitresses - Hospitality and Tourism	974	\$18,690	1900	11.66%
Cashiers - Marketing, Sales and Service	930	\$19,010	392	1.87%
Registered Nurses - Health Science	661	\$64,710	2761	16.90%

Click on **Annual Openings** to sort occupations from highest to lowest.

Annual openings can be sorted for **all occupations** within a region or for occupations within **specific clusters**. Sorting openings for all occupations provides insight into occupations that are highest in demand, regardless of career cluster. Sorting occupations within career clusters provides insight into demand for occupations associated with particular industries.

Sort and Review All Occupations within a Region

Select Your Career Cluster: **All Career Clusters**

Select Your School District: **All Career Clusters**

- All Career Clusters**
- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Technology and Communications

GO

CAREER CLUSTER

Select **All Career Clusters** from the dropdown menu to sort and review **all occupations** within a region.

Sort and Review Occupations within a Specific Cluster

Select Your Career Cluster: **Agriculture, Food and Natural Resou...**

Select Your School District: **All Career Clusters**

- Agriculture, Food and Natural Resources**
- Architecture and Construction
- Arts, Audio/Video Technology and Communications

GO

CAREER CLUSTER

Select a **specific cluster** from the dropdown menu to sort and review occupations within that cluster.

Exploring Job Growth

The degree to which an occupation is growing can be an additional indicator of demand. When employment opportunities for a particular occupation are expected to increase, this can signify increased need for employees for that occupation. Information pertaining to “projected new jobs” and “growth rate” is commonly used to explore job growth.

Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,220	264	8.93%	Information Support Services	1
Computer Programmers	36	\$103,200	-238	-16.23%	Network Systems, Interactive Media, Programming and Software Development	3
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Software Developers, Applications	35	\$77,590	162	12.16%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3



Projected New Jobs

The projected new jobs data (also referred to as “employment change”) indicates the projected numerical change in job openings over a period of time (typically ten years). In some cases, the expected employment change is negative, indicating an occupation with diminishing opportunity.

Growth Rate

Growth rate is related to projected new jobs. It is the percent change in employment expected over a period of time (typically ten years). The growth rate is calculated by dividing the projected number of new jobs by the number of current jobs and multiplying by 100. As with the projected new jobs data, growth rates can be negative, indicating an occupation with diminishing opportunity.

Using Job Growth to Assess Demand

Information related to job growth can be used to identify occupations that are on the rise. However, this information is not always the best indicator of demand. Large growth does not always mean large overall openings. For example, an occupation that is expected to grow by 100 openings would not compete with larger occupations that are expected to offer an average of 500+ openings annually. Similarly, a small percentage suggests small growth. But, in a large occupation, even a 2% growth rate can mean numerous additional job openings.

Bottom Line: Job growth information can be deceiving. Use caution.

Suggested Strategy for Identifying High-Demand Careers

Our recommendation for identifying high-demand careers is to focus primarily on annual openings. Information related to annual openings is the most direct indicator of expected employment need for any given occupation.

Job growth information can be used to identify occupations that may need to be excluded, due to significant negative growth. Occupations with declining opportunity could suggest a shrinking industry that would not provide long-term job stability for those entering the field now or in the future.

Result: Sorting occupations by annual openings and excluding those with negative growth will highlight occupations with high demand that are stable or growing.

1. Sort occupations by **annual openings**.



2. Review **job growth** information for the sorted list of occupations.



3. Consider excluding occupations with **negative growth**.



4. Review **high-demand** occupations with stable or increasing growth.

Identifying High-Wage Careers

Annual income is a significant factor to consider when evaluating viable career opportunities. Individuals in well-paying careers can meet basic needs, as well as devote financial resources to the achievement of personal goals and aspirations. **High-wage careers** can be defined as careers that provide an annual income that is higher than the median wage in the region of interest. When examining labor market information, data for “median wages” is most often reviewed when identifying high-wage careers.

Median Wages

Data listed under “median wages” indicates the median annual income associated with specific occupations. For those who need a reminder (don’t worry, most of us have forgotten), the median is the middle value in a sorted list of numbers. This means that the median wage is the wage at which half of the people working in a particular occupation earned more and half earned less. Medians tend to be preferred over means in analyzing wages because means can be heavily influenced by extreme numbers (like the random millionaire that happens to strike it big in the marketing industry).



Occupation	Annual Openings	Median Wages	Projected New Jobs	Growth Rate	Pathway	Job Zone/ Education
Computer User Support Specialists	64	\$43,220	264	8.93%	Information Support Services	1
Computer Programmers	36	\$103,200	-238	-16.23%	Network Systems, Interactive Media, Programming and Software Development	3
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Software Developers, Applications	35	\$77,590	162	12.16%	Network Systems, Information Support Services, Interactive Media, Programming and Software Development	3

Sort and Review

Sorting by median wage can reveal occupations that offer the highest annual wage within a particular region. In the P2C system this is accomplished by clicking the column heading for median wages. When wages are sorted from highest to lowest, occupations with the greatest income potential appear at the top of the list.

Occupation - Cluster	Annual Openings	Median Wages	Projected New Jobs	Growth Rate
Purchasing Managers - Business Management and Administration	5	\$84,710	-1	-0.48%
Philosophy & Religion Teachers, Postsecondary - Education and Training	2	\$84,030	10	13.70%
Human Resources Managers - Business Management and Administration	18	\$83,390	38	7.97%
Psychology Teachers, Postsecondary - Education and Training	6	\$82,790	31	18.67%
Psychology Teachers, Postsecondary - Health Science	6	\$82,790	31	18.67%

Click on **Median Wages** to sort occupations from highest to lowest.

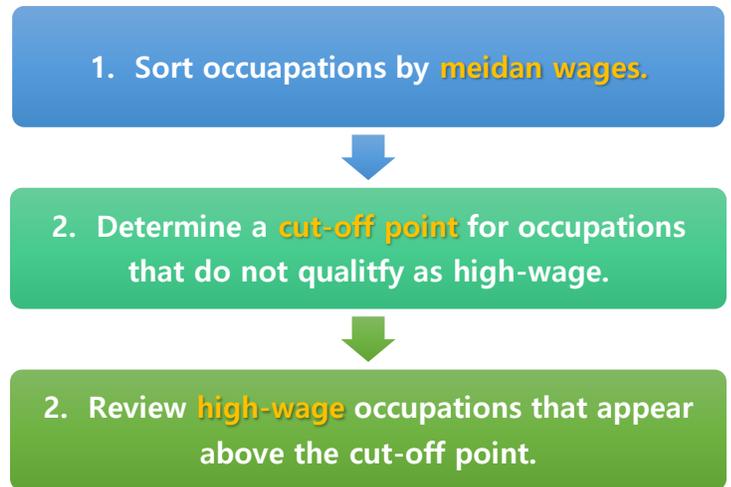
Median wages can be sorted for **all occupations** within a region or for occupations within **specific clusters**. Sorting wages for all occupations provides insight into occupations that have the highest income potential, regardless of career cluster. Sorting occupations within career clusters provides insight into wages for occupations associated with particular industries. See previous pages on how to sort for all occupations or within clusters in the P2C system.

Suggested Strategy for Identifying High-Wage Careers

Within the P2C system, it is suggested that occupations first be sorted by median wages. This will instantly produce a list in which occupations with the highest median wages appear at the top.

It is also recommended that a cut-off point be determined to exclude occupations that do not qualify as high-wage. Most often, this cut-off point is the overall median wage for all jobs in the region being explored. Jobs above this overall median are classified as high-wage, while jobs below are excluded. In some cases, the cut-off point is more subjective and dependent on the needs within a particular community. Whichever strategy is used, developing clear rationale will assist in communicating results to others.

Result: Sorting occupations by median wages and excluding those below a cut-off point will produce a list of high-wage careers specific to the region being explored.



Identifying High-Value Careers

High-value careers are simply high-demand, high-wage careers. So, we just need to look at occupations that have lots of openings and pay well. Easy enough, right? Absolutely! To begin this process, a common challenge must first be recognized in that openings and wages are often at opposite extremes. In other words, jobs for which there are numerous openings do not typically pay well and vice-versa. For example, retail salespersons and fast food workers are usually very high in demand, but these jobs have a median wage somewhere around the \$20,000 range. Likewise, nuclear engineers are often paid well, but opportunities can be limited.

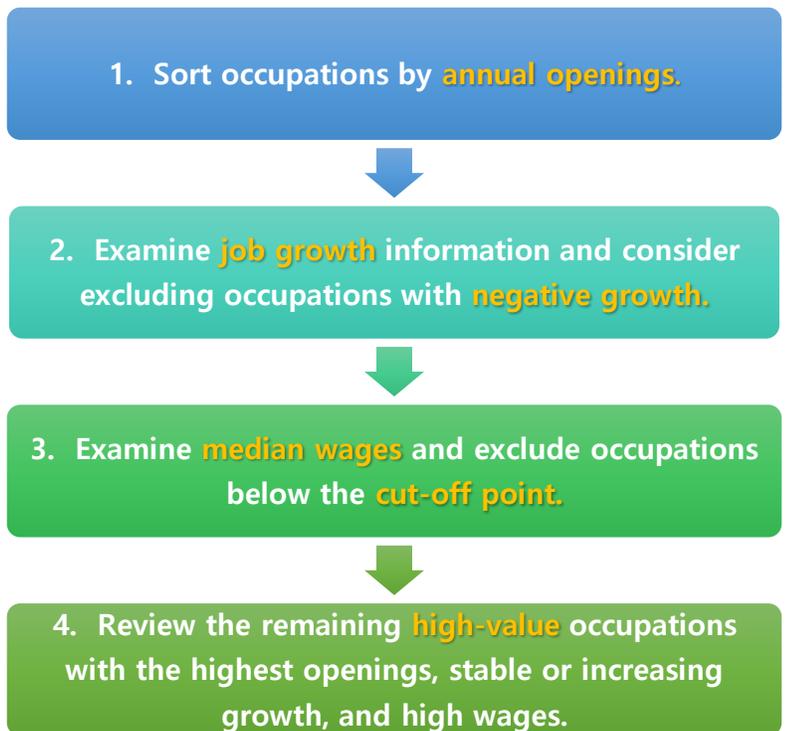
To account for this relationship between openings and wages, a well-planned search strategy is needed to capture occupations that are both high-demand and high-wage.



Suggested Strategy for Identifying High-Value Careers

To successfully identify high-value careers, search strategies for both high-demand and high-wage careers will need to be applied. Within the P2C system, it is suggested that occupations be sorted first by annual openings to reveal occupations with the highest demand for the region. Next, job growth information will need to be reviewed. Those with negative growth (i.e., declining opportunity) may need to be excluded. Moving to median wages, this information will need to be examined in relation to the predetermined cut-off point established for high-wage occupations (see information on Identifying High-Wage Careers above). Occupations below the cut-off point should be excluded to ensure only high-wage jobs are emphasized.

Result: Sorting occupations by annual openings and excluding those with negative growth and low wages will bring high-value careers into focus. These careers will have the highest openings, while also providing stable or increasing growth and high wages.



Putting it All Together

Labor market information is a powerful resource that, when effectively used, can identify high-value career destinations for students. Basic information pertaining to annual job openings, growth rates, and median wages provides valuable insight into the realities of today's job market and future changes in workforce demand. Armed with this knowledge, policy and practice decisions can be made that more effectively and efficiently promote employment success for all students.

When successful employment is a central component of the destination for learning, students and educators experience purpose and direction in their educational practices. Learning becomes centered around preparing individuals for careers and students can start to see their future take shape around viable career opportunities. Employment success can become a common reality, as opposed to an occasional coincidence.

