PATHWAY 2 CAREERS
Education with Destination

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**

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

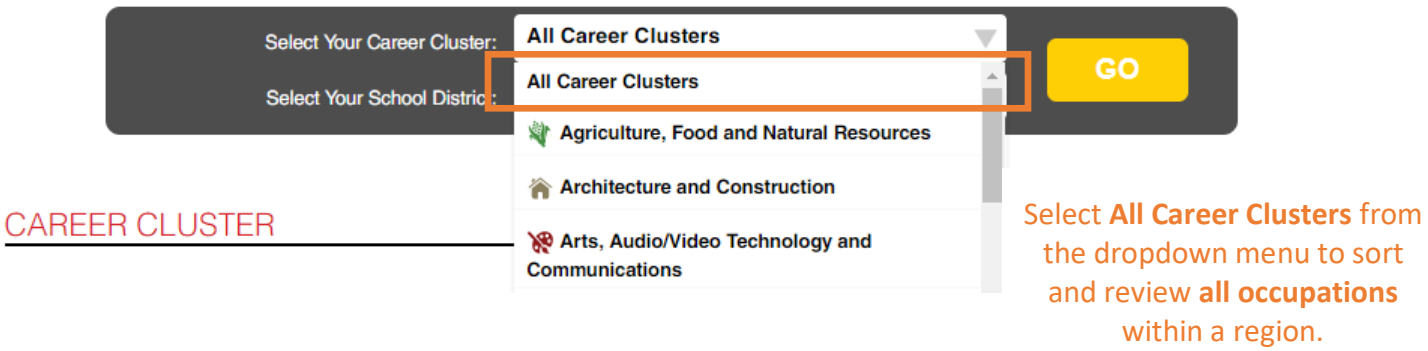
One method for identifying high-demand jobs in a particular region is to sort occupations by annual openings. In the P2C system this is accomplished by simply clicking the column heading for annual openings. When annual openings are sorted from highest to lowest, occupations that are in highest demand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

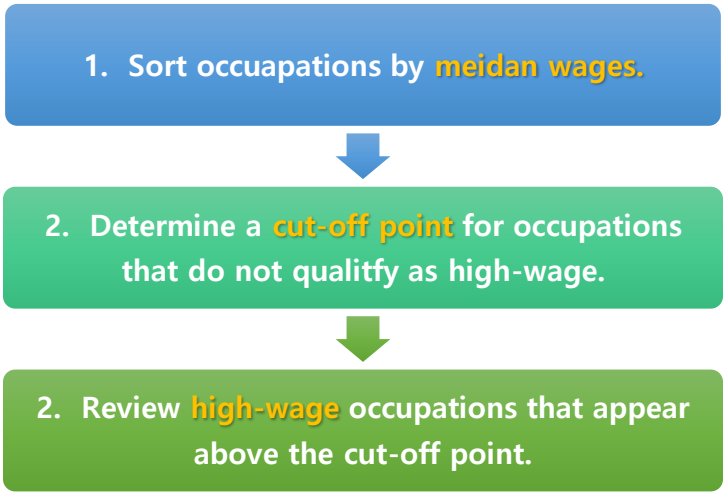
Median wages can be sorted for **all occupations** within a region or for occupations within **specific clusters**. Sorting wages for all occupations provides insight into occupations that have the highest income potential, regardless of career cluster. Sorting occupations within career clusters provides 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.

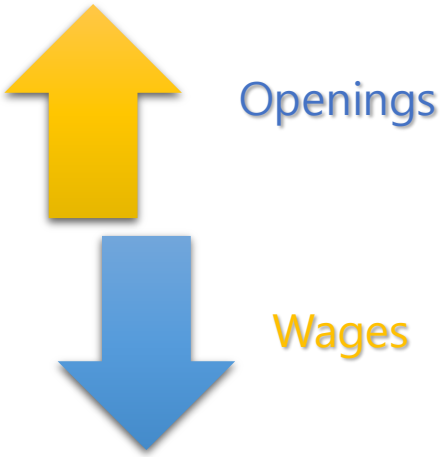
Suggested Strategy for Identifying High-Wage Careers

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 with negative growth (i.e., declining opportunity) may need to be excluded. Moving to median wages, this information will need to 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.

1. Sort occupations by annual openings.
2. Examine job growth information and consider excluding occupations with negative growth.
3. Examine median wages and exclude occupations below the cut-off point.
4. Review the remaining high-value occupations with the highest openings, 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.