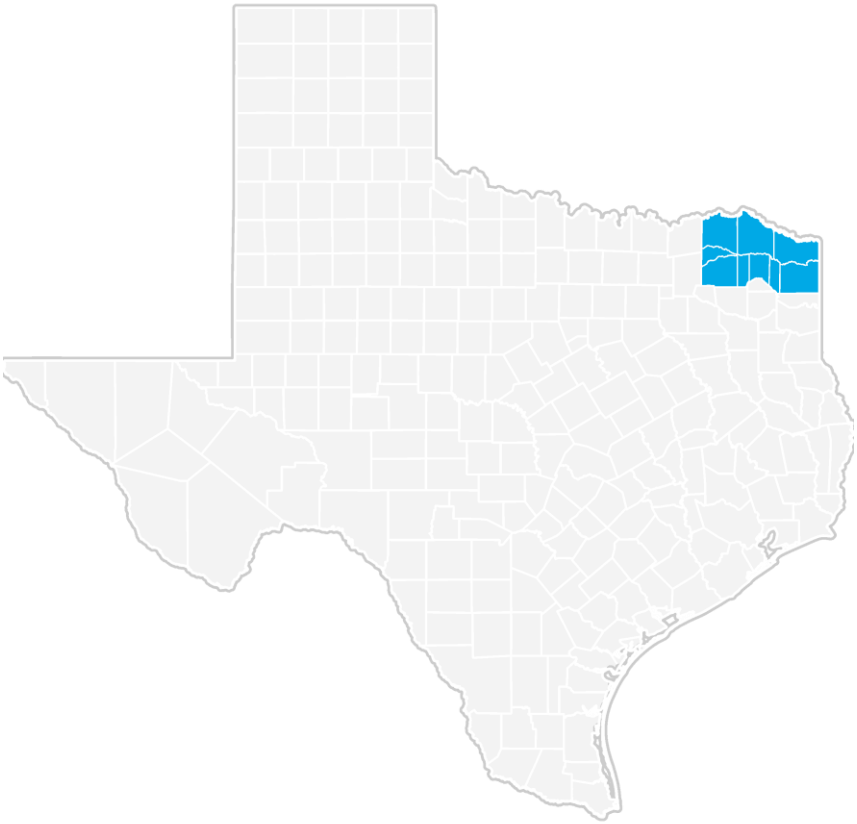
Occupation Report for
Industrial Machinery Mechanics

Workforce Solutions Northeast Texas



JOBSEQ

January 22, 2020

Definition of Industrial Machinery Mechanics, SOC 49-9041

Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. Excludes “Millwrights" (49-9044), "Mobile Heavy Equipment Mechanics, Except Engines" (49-3042), and "Maintenance Workers, Machinery" (49-9043).

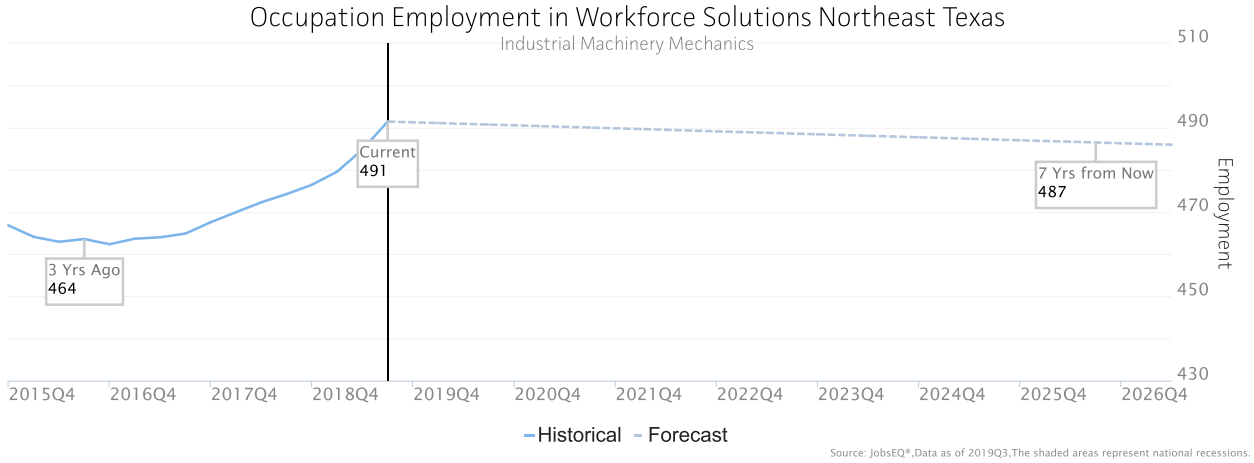
Occupation Snapshot

As of 2019Q3, total employment for Industrial Machinery Mechanics in the Workforce Solutions Northeast Texas was 491. Over the past three years, this occupation added 28 jobs in the region and is expected to decrease by 5 jobs over the next seven years, or at an annual average rate of -0.1%.

Industrial Machinery Mechanics in Workforce Solutions Northeast Texas, 2019q3[1]

Current						3-Year History		7-Year Forecast				
Empl	Avg Ann Wages[2]	LQ	Unempl	Unempl Rate	Online Job Ads[3]	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
491	$54,300	1.63	6	1.1%	4	28	2.0%	288	116	177	-5	-0.1%

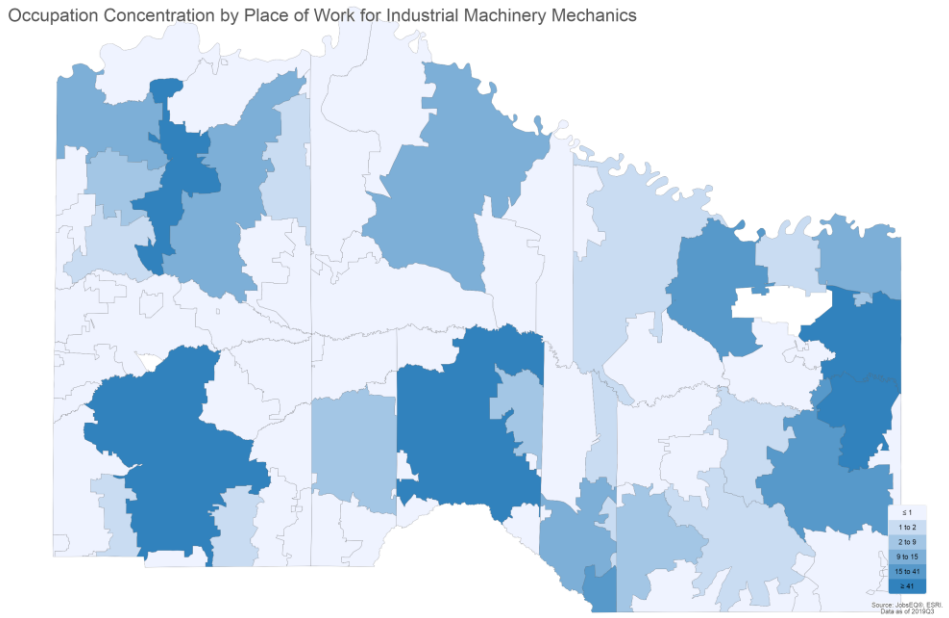
Source: JobsEQ®
Data as of 2019Q3 unless noted otherwise
Note: Figures may not sum due to rounding.
1. Data based on a four-quarter moving average unless noted otherwise.
2. Wage data are as of 2018 and represent the average for all Covered Employment
3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).



Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2019Q1, imputed where necessary with preliminary estimates updated to 2019Q3. Wages by occupation are as of 2018 provided by the BLS and imputed where necessary. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns. Occupation unemployment figures are imputed by Chmura.

Geographic Distribution

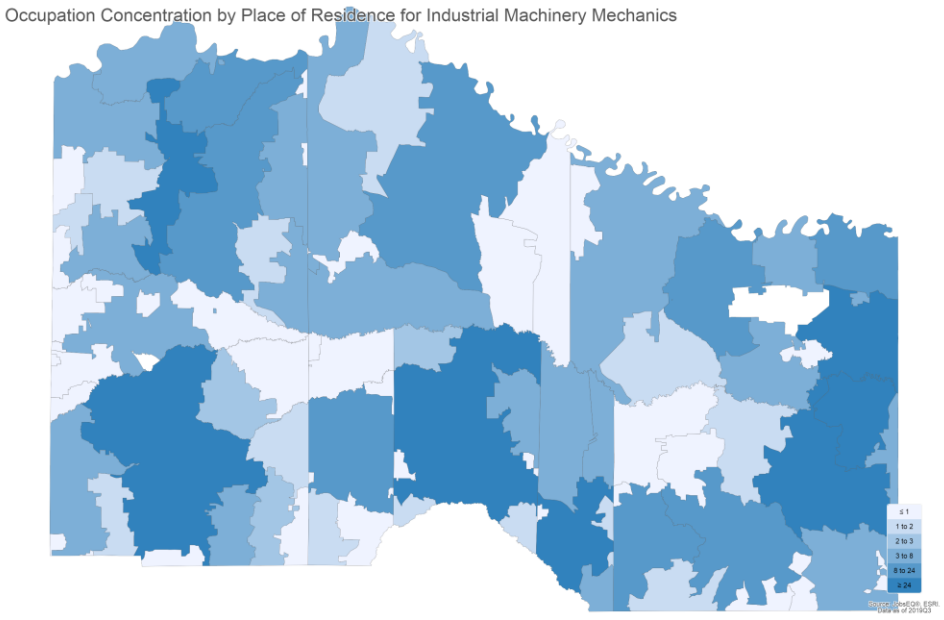
The below maps illustrate the ZCTA-level distribution of employed Industrial Machinery Mechanics in the Workforce Solutions Northeast Texas. Employment is shown by place of work and by residence.



Top ZCTAs by Place of Work for Industrial Machinery Mechanics, 2019Q3

Region	Employment
ZCTA 75455 (Titus County, TX portion)	98
ZCTA 75460	93
ZCTA 75572	44
ZCTA 75482	42
ZCTA 75501	42
ZCTA 75668 (Morris County, TX portion)	37
ZCTA 75551	27
ZCTA 75570	15
ZCTA 75638 (Morris County, TX portion)	12
ZCTA 75462	10

Source: JobsEQ®
Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2019Q1, imputed where necessary with preliminary estimates updated to 2019Q3. Occupation by residence data are derived from the same in addition to commuting pattern data.



Top ZCTAs by Place of Residence for Industrial Machinery Mechanics, 2019Q3

Region	Employment
ZCTA 75455 (Titus County, TX portion)	70
ZCTA 75460	58
ZCTA 75501	46
ZCTA 75482	39
ZCTA 75551	26
ZCTA 75572	25
ZCTA 75638 (Morris County, TX portion)	25
ZCTA 75462	17
ZCTA 75570	12
ZCTA 75473	11

Source: JobsEQ®
Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2019Q1, imputed where necessary with preliminary estimates updated to 2019Q3. Occupation by residence data are derived from the same in addition to commuting pattern data.

Employment by Industry

The following table illustrates the industries in the Workforce Solutions Northeast Texas which most employ Industrial Machinery Mechanics. The single industry most employing this occupation in the region is Animal Slaughtering and Processing, NAICS 3116. This industry employs 70 Industrial Machinery Mechanics—employment which is expected to increase by 5 jobs over the next ten years; furthermore, 62 additional new workers in this occupation will be needed for this industry due to separation demand, that is, to replace workers in this occupation and industry that retire or move into a different occupation.

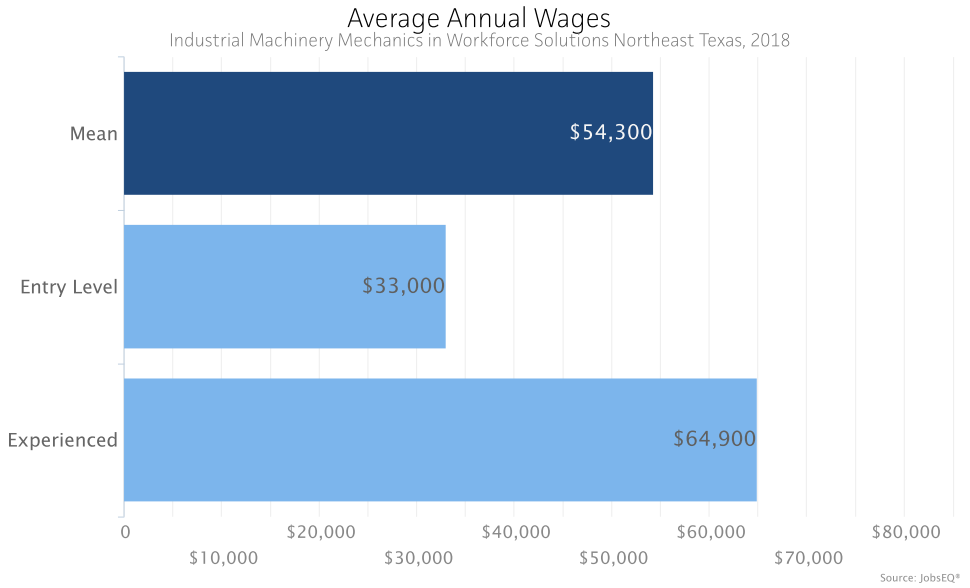
Top Industry Distribution for Industrial Machinery Mechanics (49-9041) in Workforce Solutions Northeast Texas

		Current		10-Year Demand			
NAICS Code	Industry Title	% of Occ Empl	Empl	Exits	Transfers	Empl Growth	Total Demand
3116	Animal Slaughtering and Processing	14.3%	70	25	38	5	68
3221	Pulp, Paper, and Paperboard Mills	12.3%	60	19	28	-11	36
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	8.2%	40	14	21	-1	33
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	6.7%	33	11	17	0	28
3311	Iron and Steel Mills and Ferroalloy Manufacturing	6.0%	29	9	14	-4	20
3329	Other Fabricated Metal Product Manufacturing	5.2%	25	9	13	1	23
3222	Converted Paper Product Manufacturing	4.0%	19	7	10	0	16
3362	Motor Vehicle Body and Trailer Manufacturing	3.7%	18	7	10	2	19
2211	Electric Power Generation, Transmission and Distribution	3.5%	17	6	9	-2	13
3115	Dairy Product Manufacturing	2.8%	14	5	8	2	15
3331	Agriculture, Construction, and Mining Machinery Manufacturing	2.6%	13	4	7	0	11
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	2.4%	12	4	6	-1	9
2213	Water, Sewage and Other Systems	1.7%	8	3	5	1	8
3251	Basic Chemical Manufacturing	1.4%	7	2	3	-1	5
3211	Sawmills and Wood Preservation	1.3%	7	2	3	-1	5
4862	Pipeline Transportation of Natural Gas	1.2%	6	2	3	-1	4
9281	National Security and International Affairs	1.2%	6	2	3	0	4
3241	Petroleum and Coal Products Manufacturing	1.1%	6	2	3	0	4
3254	Pharmaceutical and Medicine Manufacturing	0.8%	4	1	2	0	4
2382	Building Equipment Contractors	0.8%	4	1	2	0	4
	All Others	18.9%	93	32	49	2	83

Source: JobsEQ®
Data as of 2019Q3 except wages which are as of 2018. Note that occupation-by-industry wages represent adjusted national data and may not be consistent with regional, all-industry occupation wages shown elsewhere in JobsEQ.
Note: Figures may not sum due to rounding.
Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2019Q1, imputed where necessary with preliminary estimates updated to 2019Q3. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

Wages

The average (mean) annual wage for Industrial Machinery Mechanics was $54,300 in the Workforce Solutions Northeast Texas as of 2018. For the same year, average entry level wages were approximately $33,000 compared to an average of $64,900 for experienced workers.



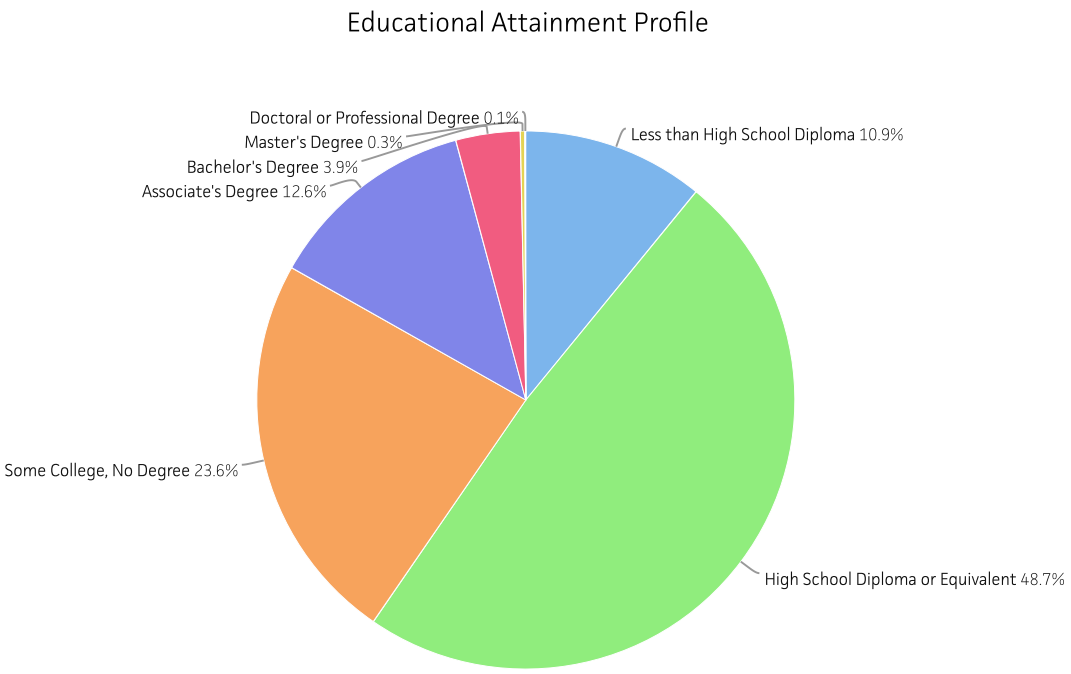
Occupation wages (mean, median, and percentiles) are as of 2018 provided by the BLS, modified and imputed by Chmura where necessary. Entry-level and experienced wages are derived from these source data, computed by Chmura.

Education Profile

Typical education and training requirements for Industrial Machinery Mechanics are described below.

Education and Training Requirements	
Typical Entry-Level Education:	High school diploma or equivalent
Previous Work Experience:	None
Typical On-the-Job Training:	Long-term on-the-job training

Source: JobsEQ®



Education and training requirements are from the Bureau of Labor Statistics (BLS); educational attainment mix are regional data modeled by Chmura using Census educational attainment data projected to 2019Q3 along with source data from the BLS.

Awards

The table below is a list of postsecondary program awards that were granted by postsecondary institutions located in the Workforce Solutions Northeast Texas in the 2018 academic year. These programs have been identified as providing training for Industrial Machinery Mechanics (for further details, see the source note).

	Annual Awards - Workforce Solutions Northeast Texas		
Title/School	Certificates and 2yr Degrees	4yr Degrees	Postgraduate Degrees
47.0303 Industrial Mechanics and Maintenance Technology			
Texarkana College	9	0	0
Total			
Total	9	0	0

Source: JobsEQ®
Data as of the 2018 academic year
Awards data are per the National Center for Education Statistics (NCES) and JobsEQ for the 2018 academic year. Any programs shown here have been identified as being linked with the occupation being analyzed. Other existing programs may also provide training in the region for this occupation but have not been so identified by the program-occupation crosswalk (see the FAQ section at the end of this report for more details). Furthermore, any programs shown here reflect only data reported to the NCES; reporting is required of all schools participating in any federal finance assistance program authorized by Title IV of the Higher Education Act of 1965, as amended—other training providers in the region that do not report data to the NCES are not reflected in the above.

Apprenticeships

The apprenticeable specialties associated with this occupation are:

Rapids Code	Rapids Title
0020	Maintenance Mechanic, Compressed-Gas Plant
0027	Automotive-Maintenance-Equipment Servicer
0029	Bakery-Machine Mechanic
0066	Conveyor-Maintenance Mechanic
0086	Composing-Room Machinist
0171	Electronic-Production-Line-Maintenance Mechanic
0203	Forge-Shop-Machine Repairer
0237	Hydroelectric-Machinery Mechanic
0292	Machine Repairer, Maintenance
0297	Machinist, Linotype
0302	Machine Fixer (Carpet and Rug)
0307	Maintenance Mechanic
0308	Maintenance Mechanic
0384	Overhauler (Textile)
0387	Pinsetter Adjuster, Automatic
0419	Pump Erector (Construction)
0422	Repairer, Welding Equipment
0434	Pneumatic-Tool Repairer
0435	Pneumatic-Tube Repairer
0443	Powerhouse Mechanic
0467	Stoker Erector-and-Servicer
0485	Rubberizing Mechanic
0497	Scale Mechanic
0508	Sewing-Machine Repairer
0599	Aviation Support Equipment Repairer
0610	Fuel-System-Maintenance Worker
0634	Cooling Tower Technician
0651	Hydraulic Repairer
0674	Repairer I
0691	Laundry-Machine Mechanic
0783	Hydraulic-Press Servicer
0790	Canal-Equipment Mechanic
0847	Treatment-Plant Mechanic
0933	Pump Servicer
1005	Repairer, Welding Systems and Equipment
1037	Industrial Machine System Technician

Source: JobsEQ®
Apprenticeable occupations are identified through the Department of Labor's Registered Apprenticeship program.

Region Definition

Workforce Solutions Northeast Texas is defined as the following counties:

Bowie County, Texas	Lamar County, Texas
Cass County, Texas	Morris County, Texas
Delta County, Texas	Red River County, Texas
Franklin County, Texas	Titus County, Texas
Hopkins County, Texas	

FAQ

What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 840 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 97 minor groups, and 461 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an occupation (or industry) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is training concentration?

The training concentration analysis compares local postsecondary training output compared to the national norm. Let's consider registered nurses as an example. If in the nation, one RN award is granted for every ten RNs employed, that 1:10 ratio is the national norm. If in your region your schools also grant one RN award for every ten RNs employed, then your region will be right at the national norm, or we say at 100% of the national norm which is termed a 100% training concentration. If your region grants two RN awards for every ten employed, your region would be at twice the national norm or have a 200% training concentration. Similarly, if your region grants one RN award for every twenty employed, your region would be at half the national norm or have a 50% training concentration.

What is the program-to-occupation crosswalk?

Training programs are classified according to the Classification of Instructional Programs (CIP codes). For relating training programs, this report uses a modified version of the CIP to SOC crosswalk from the National Center for Education Statistics (NCES). While this is a very helpful crosswalk for estimating occupation production from training program awards data, the crosswalk is neither perfect nor comprehensive. Indeed, it is hard to imagine such a crosswalk being perfect since many training program graduates for one reason or another do not end up employed in occupations that are most related to the training program from which they graduated. Therefore, the education program analyses should be considered in this light.

As an example of the many scenarios that may unfold, consider a journalism degree that crosswalks into three occupations: editors, writers, and postsecondary communications teachers. Graduates with a journalism degree may get a job in one of these occupations—and that may be the most-likely scenario—but a good number of these graduates may get a job in a different occupation altogether (the job may be somewhat related, such as a reporter, or the job may be totally unrelated, such as a real estate agent). Furthermore, a graduate may stay in school or go back to school for a degree that will lead to other occupation possibilities. Still another possibility includes the graduate not entering the labor market (maybe being unemployed, being a non-participant, or moving to another region).

What is separation demand?

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the "all industry" level to the 6-digit level. The first two digits define the top level category, known as the "sector," which is the level examined in this report.

About This Report